U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

1200 New Jersey Avenue SE.
Washington, DC 20590

September 18, 2018

The Honorable John Thune
Chairman, Committee on Commerce, Science,
and Transportation
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

This letter comprises the report required by Section 24407 of the Fixing America's Surface Transportation (FAST) Act, Pub. L. 114-94, "Improvement of Data Collection on Child Occupants in Vehicle Crashes."

Congress required the National Highway Traffic Safety Administration (NHTSA) to revise data collection on child occupants in vehicle crashes and to report on these revisions no later than December 4, 2018. Specifically, the FAST Act directed NHTSA to include information on the type of child restraint in use during a crash, the type and usage of the internal harness, and the orientation of the child restraint. NHTSA also was directed to work with law enforcement, safety advocates, the medical community, and research organizations to improve the recording of data in police and other incident reports.

NHTSA understands the importance of collecting child restraint data as motor vehicle crashes are the leading killer of children 14 years old and younger.[1] The Agency is very interested in accurately quantifying and understanding the prevalence of child restraint use by the driving public. NHTSA's National Center for Statistics and Analysis has been collecting child restraint data in its crash investigation data systems since the inception of the National Automotive Sampling System (NASS) program in 1979.

In addition to the NASS program and its successor, the Crash Investigation Sampling System, NHTSA's Special Crash Investigations program and Crash Injury Research and Engineering Network program also collect information on child restraints. These data are supplemented by the Fatality Analysis Reporting System nationwide census. As the use of child restraints has proliferated over the last three decades, the volume of data collected in NHTSA's programs has increased concurrently. Table 1 shows the detailed evolution of child restraint variables collected in the crash investigation data systems.

[1] National Center for Statistics and Analysis (2018, February). *Children: 2016 data*. Traffic Safety Facts (Report No. DOT HS 812 491). Washington DC: National Highway Traffic Safety Administration. Retrieved from https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812491.

Table 1 – Information on Child Restraints Collected in NHTSA's Data Systems

1979	1985	1988	2002
Child Restraint used in vehicle	Child Restraint used in vehicle	Child Restraint used in vehicle	Child Restraint used in vehicle
	Make/Model	Make/Model	Make/Model
	Type	Type	Type
	Orientation	Orientation	Orientation
	Harness/shield/tether available	Harness/shield/tether available	Harness/shield/tether available (added detail on type of harness/shield/tether)
		Design feature available (Harness/shield/tether)	Design feature available (Harness/shield/tether)
		How feature used (Harness/shield/tether)	How feature used (Harness/shield/tether)
			Date of manufacture
			Model number
			Placement
			Child position
			Locking clip presence/use
			Retainer clip presence/use
			Upper LATCH tether on CR presence/use
			Lower LATCH anchors on CR presence/use
			Belt routing
			How CR used
			Belt retractor type
			Latch plate type
			Upper tether in vehicle presence/use
			Lower anchors in vehicle presence/use

NHTSA also has conducted special studies on the public's child restraint usage habits. The Child Restraint Use Survey/LATCH (Lower Anchors and Tethers for Children) Use and Misuse was an observational study conducted in 2005. The National Child Restraint Usage Special Study (NCRUSS) was a statistically representative sample conducted in 2011, and the National Occupant Protection Use Survey is an annual nationwide probability-based survey that includes

child restraint use for children under 8 years old. These three studies involved on-site monitoring of child restraint use in real-world environments. Analysis of the NCRUSS data showed that estimated overall car seat and booster seat misuse was 46 percent. By car seat or booster seat type, estimated misuse rates were 61 percent for forward-facing car seats, 49 percent for rear-facing infant car seats, 44 percent for rear-facing convertible car seats, 24 percent for backless booster seats, and 16 percent for high back booster seats. A contractor is currently performing additional analysis of the NCRUSS data.

To consult regularly with other stakeholders on child restraint-related issues, NHTSA works with law enforcement, child safety advocates, the medical community, research organizations, and many other organizations to improve the overall recordation of child restraint information and to improve data uniformity. NHTSA has worked closely with medical and industry partners such as the Children's Hospital of Philadelphia to create unique studies that examine particular questions of interest on child restraint usage practices throughout the country.

NHTSA also takes an active role in the Model Minimum Uniformity Crash Criteria, along with local, State, and national stakeholders, and provides the curriculum to train the more than 40,000 actively certified Child Passenger Safety Technicians that currently advise parents across the country on proper child restraint installations in vehicles.

NHTSA feels confident that the Agency has met the requirements contained in Section 24407 of the FAST Act and continuously works to improve the reporting of child restraint data to the public. For example, NHTSA and child restraint manufacturers recommend the replacement of a child restraint if it was involved in a moderate or severe crash. Many hospitals and other parties follow this guidance and automatically discard the child restraint following a crash, restricting the ability of our crash technicians to locate and inspect the child restraint after the crash. This good safety practice has, however, led to an increase of unknown data elements within our databases, so NHTSA will seek to solve this problem in cooperation with our partners.

Similar letters have been sent to the Ranking Member of the Senate Committee on Commerce, Science, and Transportation and to the Chairman and Ranking Member of the House Committee on Energy and Commerce.

Sincerely,

Heidi R. King
Deputy Administrator