

U.S. D.O.T. Submission
in support of
**NIST Annual Report on Federal Agency Use of Voluntary Consensus
Standards and Conformity Assessment**

In support of Section 12(d)(3) of Public Law 104-113, the “National Technology Transfer and Advancement Act of 1995” (NTTAA), the U.S. Department of Transportation submits the following list of agency initiatives related to the use of Voluntary Consensus Standards and Conformity Assessment.

- 1. Please provide a summary of your agency’s activities undertaken to carry out the provisions of OMB Circular A-119, “Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities” and the National Technology Transfer and Advance Act (NTTAA). The summary should contain a link to the agency’s standards-specific website(s) where information about your agency’s standards and conformity assessment-related activities are available**

The U.S. Department of Transportation (DOT) and its Operating Administrations rely upon a transparent and collaborative regulatory and guidance program to support the Department's strategic goals, with an emphasis on safety. We employ our infrastructure and safety grants, training programs, and regulatory authorities as effectively as possible to reduce transportation-related fatalities and serious injuries across the transportation system. DOT uses voluntary consensus standards and conformity assessment activities as potent tools in our regulatory, guidance, safety advisory, enforcement and international harmonization activities. In addition, DOT relies upon targeted standards development processes with domestic and international standards developing organizations (SDOs) to advance innovative transportation technologies, and to advance the state of practice across all modes of transportation.

Over the past year DOT has taken the following actions with respect to the use of non-consensus standards:

- The Pipeline and Hazardous Materials Safety Administration (PHMSA) amended the Federal pipeline safety regulations to incorporate by reference all or parts of more than 35 new or updated voluntary, consensus industry technical

standards. This action allows pipeline operators to use current technologies, improved materials, and updated industry and management practices.

- The Federal Railroad Administration (FRA) amended the regulations for Occupational Safety and Health in the Locomotive Cab to incorporate by reference industry technical standards.
- The Federal Aviation Administration (FAA) updated the regulations for light sport aircraft to incorporate by reference industry technical standards.

Information on the Department's regulatory and enforcement programs using standards and conformity assessment may be found at "Regulatory Information" (<https://www.transportation.gov/regulations>).

PHMSA's Standards Incorporated by Reference webpage is located here: <https://www.phmsa.dot.gov/standards-rulemaking/pipeline/standards-incorporated-reference>.

The Federal Aviation Administration's (FAA) use of standards and conformity assessment in operational activities beyond regulation and enforcement may be found at "Regulations & Policies" (https://www.faa.gov/regulations_policies).

- 2. Please list the government-unique standards (GUS) your agency began using in lieu of voluntary consensus standards during FY 2023. Please note that GUS which are still in effect from previous years should continue to be listed, thus the total number in your agency's report will include all GUS currently in use (previous years and new as of this FY): 11**

(1) Government Unique Standard 49 CFR 571.102, Transmission shift position sequence, starter interlock, and transmission braking effect (2005) [Incorporated: 2016]

Voluntary Standard SAE J915

Rationale This regulation was issued on July 1, 2005. SAE J915, "Automatic Transmissions- Manual Control Sequence," published on July 1, 1965, and updated on March 9, 2017. NHTSA has not incorporated this standard because its content currently relies on 49 CFR 571.102 and 571.114, and the SAE J915 abstract also states that some portions of the standard are unique and may not represent current common practices within the user community. NHTSA is evaluating industry standards to inform the next steps of any revisions to its regulations.

(2) Government Unique Standard 49 CFR 571.114, Theft protection and rollaway prevention (2006) [Incorporated: 2016]

Voluntary Standard SAE J2948

Rationale NHTSA published this regulation on April 7, 2006. SAE Recommended Practice, SAE J2948 "Keyless Ignition Control Design" was published on January 13, 2011. NHTSA reviewed and referenced SAE J2948 in an NPRM it issued on December 12, 2011 and is considering whether to finalize this regulatory action.

(3) Government Unique Standard 49 CFR 571.123, Motorcycle controls and displays [Incorporated: 2016]

Voluntary Standard ISO 2575

Rationale NHTSA first published this regulation on April 12, 1977. ISO 2575, "Road vehicles -- Symbols for controls, indicators and tell-tales," was published in 2004, and specifies symbols for use on vehicle controls and indicators. On November 26, 2014, NHTSA issued an NPRM proposing to allow the use of an ISO 2575 warning label for ABS failure indication. NHTSA is considering whether to finalize this regulatory action.

(4) Government Unique Standard 49 CFR 571.129 New non-pneumatic tires for passenger cars (1990) [Incorporated: 2016]

Voluntary Standard SAE J918c

Rationale This regulation was published on July 20, 1990. Although not incorporated by reference, the performance and test requirements are based upon SAE recommended practice, "Passenger Car Tire Performance," J918c, last updated on May 1, 1970. NHTSA is evaluating industry standards to inform the next steps of any revisions to its regulations.

(5) Government Unique Standard 49 CFR 571.138, Tire pressure monitoring systems (2005) [Incorporated: 2016]

Voluntary Standard SAE J2657

Rationale NHTSA published this regulation on April 8, 2005. SAE J2657, Tire Pressure Monitoring Systems for Light Duty Highway Vehicles, was published on December 16, 2004. While SAE J2657 was not incorporated in the final rule, the regulation has many commonalities. However, SAE J2657 does not contain requirements or test procedures for a malfunction indicator and requires different

levels of rigorousness. NHTSA is evaluating industry standards to inform the next steps of any revisions to its regulations.

(6) Government Unique Standard 49 CFR 571.207, Seating Systems [Incorporated: 2016]

Voluntary Standard SAE J879 SAE J879B

Rationale This regulation was published on April 8, 2005. Although not incorporated by reference, the test procedures and performance requirements are based on SAE J879, “Passenger Car Front Seat and Seat Adjuster,” published on November 1, 1963, and SAE J879B, “Motor Vehicle Seating Systems,” published on July 1, 1968. NHTSA is evaluating industry standards to inform the next steps of any revisions to its regulations.

(7) Government Unique Standard 49 CFR 571.226, Ejection Mitigation [Incorporated: 2010]

Voluntary Standard SAE J2568—Intrusion Resistance of Safety Glazing Systems for Road Vehicles BSI AU 209—Vehicle Security

Rationale This regulation was published on January 19, 2011. SAE J2568 - Intrusion Resistance of Safety Glazing Systems for Road Vehicles was published on April 24, 2001 and BSI AU 209 - Vehicle Security was published in August 1995. NHTSA studied the test procedures and performance requirements in these standards but did not adopt them because they did not meet NHTSA's safety objectives and in some cases, were costlier. NHTSA is evaluating industry standards to inform the next steps of any revisions to this regulation.

(8) Government Unique Standard 49 CFR 571.302 Flammability of Interior Materials (1971) [Incorporated: 2016]

Voluntary Standard ASTM D5132 SAE J369

Rationale This regulation was published on December 2, 1971. Although not incorporated by reference, these standards are technically equivalent to the regulation: ASTM D5132, “Standard Test Method for Horizontal Burning Rate of Polymeric Materials Used in Occupant Compartments of Motor Vehicles,” published in 1994 and SAE J 369, “Flammability of Polymeric Interior Materials - Horizontal Test Method,” published on March 1, 1969. NHTSA initiated a research program in 2016 to evaluate the test procedures of the industry standards to inform the next steps of any revision to this regulation.

(9) Government Unique Standard 49 CFR 571.305, Electric-powered vehicles: electrolyte spillage and electrical shock protection (2000) [Incorporated: 2016]

Voluntary Standard SAE J1766

Rationale The standard was issued on September 27, 2000, and was based on SAE J1766, “Recommended practice for electric and hybrid electric vehicle battery systems crash integrity testing,” published on February 1, 1996. NHTSA reviewed the 2016 revision of SAE J1766 and other industry standards for electric vehicles in an NPRM it issued on March 10, 2016 and is considering whether to finalize this regulatory action.

(10) Government Unique Standard 49 CFR Part 563, Event Data Recorders (2006) [Incorporated: 2016] [Amended 2024]

Voluntary Standard SAE J1698–1 IEEE P1616

Rationale This regulation was amended on December 18, 2024. NHTSA did not incorporate either the SAE Event Data Recorder – Output Data Definition (SAE J1698–1; 2023) or the IEEE Motor Vehicle Event Data Recorder (MVEDR) (IEEE 1616-2001) because research suggested that the recommended recording duration by these standards would not capture the initiation of crash avoidance maneuvers.

The FAST Act (P.L. 114-94; Dec. 4, 2015) directed NHTSA to conduct a study to determine the amount of time EDRs should capture and record precrash data to provide sufficient information for crash investigators, and to conduct a rulemaking based on this study to establish the appropriate recording period in NHTSA’s EDR regulation. NHTSA conducted the EDR Duration Study and submitted a Report to Congress summarizing the results of this study in September 2018. This regulation exceeds the pre-crash data recording durations of the SAE and IEEE standards (i.e., SAE and IEEE recommend recording eight seconds of precrash data) based upon the new information obtained from the EDR Duration Study. The

results of the study on EDR recording duration suggest that the recommended recording duration by these standards would not capture the initiation of crash avoidance maneuvers. NHTSA declined to adopt the voluntary consensus standards because such a decision would be inconsistent with the best available information to the agency and conflict with the outcome of a study required by the FAST Act.

(11) Government Unique Standard Brake Performance, 49 CFR 393.52 - FMCSA's Performance-Based Brake Testers (PBBTs) Requirement [Incorporated: 2002]

Voluntary Standard SAE J667 - Brake Test Code Inertia Dynamometer (cancelled February 2002) SAE J1854 - Brake Force Distribution Performance Guide - Trucks and Buses

Rationale FMCSA used government-unique standards in lieu of voluntary consensus standards when it implemented its final rule to allow inspectors to use performance-based brake testers (PBBTs) to check the brakes on large trucks and buses for compliance with federal safety standards and to issue citations when these vehicles fail (67 FR 51770, August 9, 2002). The FMCSA evaluated several PBBTs during a round robin test series to assess their functional performance and potential use in law enforcement. The standard, a specific configuration of brake forces and wheel loads on a heavy-duty vehicle, was used to evaluate the candidate PBBTs and their operating protocols. The agency's rationale for use of the government-unique standards was to verify that these measurements and new technology could be used by law enforcement as an alternative to stopping distance tests or on-road deceleration tests. PBBTs are expected to save time and their use could increase the number of commercial motor vehicles that can be inspected in a given time. Only PBBTs that meet specifications developed by the FMCSA can be used to determine compliance with the Federal Motor Carrier Safety Regulations. The final rule represents a culmination of agency research that began in the early 1990s