

Department of Transportation (DOT) Fiscal Year 2021 Agency Report

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: safety, economic strength and global competitiveness, equity, climate and sustainability, and transformation. We employ our infrastructure and safety grants, training programs, and enforcement authorities for automobiles, aviation, highways, railroads, trucks, motorcoaches, maritime operators, public transit, pipelines, and hazardous materials as effectively as possible to reduce transportation-related fatalities and serious injuries across the transportation system. DOT uses voluntary consensus standards activities as a potent tool in our regulatory, guidance, safety advisory, 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 -- such as automated driving systems (ADS) and unmanned aircraft systems (UAS) -- and to advance the state of practice across all modes of transportation.

Over the past year, among other standards-related activities, DOT has taken the following actions:

- Through the Department's Non-Traditional and Emerging Transportation Technology (NETT) Council, released the "Hyperloop Standards Desk Review" (<https://www.transportation.gov/policy-initiatives/nett/hyperloop-standards-desk-review>). This document assessed the status of hyperloop standard development; provided a preliminary mapping of existing standards and regulations to specific hyperloop systems components, including a standards gap analysis; and identified stakeholder perspectives on the applicability of existing standards to domestic testing and deployment.
- In response to petition, the Federal Railroad Administration (FRA) issued a final rule of particular applicability (RPA) to establish safety standards for the Texas Central Railroad high-speed rail (HSR) system, applying Central Japan Railway Company's *Tokaido Shinkansen* technology, and its associated design and engineering principles. These standards are not intended for general application in the railroad industry. FRA incorporated by reference six Japanese Industrial Standards (JIS) and three ASTM International (ASTM) standards, along with ASTM test procedures.
- The National Highway Traffic Safety Administration (NHTSA) took two actions related to child safety. NHTSA issued a Final Rule adding design and performance specifications for a test dummy representing a 3-year-old child, to improve side impact protection. This rule incorporated revised SAE Recommended Practice J211, "Instrumentation for Impact Tests—Part 1—Electronic Instrumentation", and SAE J1733, "Sign Convention for Vehicle Crash Testing." NHTSA issued a Notice of Proposed Rulemaking to amend Federal Motor Vehicle Safety Standard (FMVSS) No. 213, "Child restraint systems," by updating the standard seat assembly on which child restraint systems are tested. The revision also updates SAE Recommended Practice J211.

- The Pipeline and Hazardous Materials Safety Administration (PHMSA) completed a significant rulemaking in response to 24 petitions, to update, clarify, or provide relief from various regulatory requirements while increasing or maintaining hazardous materials transportation safety, and harmonizing regulatory standards internationally to support safe trade. As part of this rulemaking, PHMSA incorporated or updated nine voluntary consensus standards from the American Pyrotechnics Association, American Society of Mechanical Engineers, Compressed Gas Association, Association of Energy Service Companies and Institute of Makers of Explosives; and recognized two European Union publications.
- The Federal Motor Carrier Safety Administration (FMCSA) issued a Notice of Proposed Rulemaking to amend its Hazardous Materials Safety Permits regulations to incorporate by reference the updated consensus Commercial Vehicle Safety Alliance (CVSA) handbook containing inspection procedures and Out-of-Service Criteria for inspections of shipments of transuranic waste and highway route-controlled quantities of radioactive material.
- The Federal Highway Administration (FHWA) issued a Notice of Proposed Rulemaking focused on revision to the design standards and standard specifications applicable to new construction, reconstruction, resurfacing, restoration, and rehabilitation projects on the National Highway System (NHS). The proposed rule would incorporate by reference the latest versions of design standards and standard specifications previously adopted and incorporated by reference and would remove the corresponding outdated or superseded versions of these standards and specifications.
- DOT provided significant input to the revision of the *United States Standards Strategy* by the American National Standards Institute (ANSI), affirming that the U.S. is committed to a sector-based approach to voluntary standardization activities, both domestically and globally.

2. Please list the government-unique standards (GUS) your agency began using in lieu of voluntary consensus standards during FY 2021. 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]

Voluntary Standard

SAE J1698-1

IEEE P1616

Rationale

This regulation was issued on August 28, 2006. NHTSA did not incorporate either the SAE Vehicle Event Data Interface (J1698-1) Committee or the IEEE Motor Vehicle Event Data Recorder (MVDER) working group (P1616) because both standards were developed and issued during the rulemaking process. NHTSA is evaluating industry standards to inform the next steps of any revisions to its regulations.

(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.