

U.S. Department of Transportation

Vehicle Size and Weight Research Updates Brief

Spring 2023

Overview

This Vehicle Size and Weight (VSW) Research Updates Brief provides U.S. Department of Transportation (USDOT) VSW experts with recurring updates about VSW-related projects, research, news, and events. VSW research topics refer to safety, pavement, bridges, mode choice, enforcement, economics, data, technology, regulations, guidance, and other related topics.



Research

Transportation Research Record: Journal of Transportation Research Board (TRB)

- [Estimating the Tire–Pavement Grip Potential from Vehicle Vibrations](#) (2023)
- [Mechanistic Basis for Permit Fee Decision of Superloads Traveling on Low-Volume Roads Using Structural Damage Evaluation](#) (2023)
- [Modeling Vehicle Flocking in Lane-Free Automated Traffic](#) (2023)

TRB National Cooperative Highway Research Program (NCHRP)

- [Planning Freight-Efficient Land Uses: Methodology, Strategies, and Tools](#) (2022)
- [Programmatic Issues of Future System Performance](#) (2022)
- [Quantifying the Effects of Implements of Husbandry on Pavements](#) (2022)

University of California Institute of Transportation (ITS)

- [Effects of Increased Weights of Alternative Fuel Trucks on Pavement and Bridges](#) (2021)
- [Network-wide Truck Tracking and Weight Estimation](#) (in development)



USDOT Project Spotlight

Federal Highway Administration (FHWA) Guide for Preventing and Mitigating the Risk of Bridge and Tunnel Strikes by Motor Vehicles

FHWA, in coordination with the Transportation Research Board National Cooperative Highway Research Program, is developing a [Guide for Preventing and Mitigating the Risk of Bridge and Tunnel Strikes by Motor Vehicles](#). The guide seeks to identify effective countermeasures for preventing bridge strikes, including warning systems and driver training, and develop a framework for collecting and analyzing bridge and tunnel strike data. Bridge and tunnel strikes by large vehicles can have serious effects on infrastructure and supply chains, as well as pose significant safety issues. The interim version of the guide was completed in February 2022, with the completed guide due to be published in 2024.

Project Contact:

Jeff Purdy, Team Lead
FHWA Office of Freight Management and Operations
Office of Operations
Jeff.Purdy@dot.gov





Announcements and Events

- July 11, 2023, 1:00PM ET: [FHWA Talking Freight Webinar](#)
- September 19 – 21, 2023: [TRB Innovations in Freight Data Workshop](#)



In the News

- *The Journal Record*, February 2023: [Bridge hits call attention to truck size, weight limits](#)
- California State Assembly, March 2023: [Assemblymember Ward Introduces Bill to Study Relationship Between Vehicle Size and Fatalities](#)
- *US News & World Report*, March 2023: [Georgia Lawmakers Strike Deal on Truck Weight Limits](#)
- *Land Line*, March 2023: [States pursue truck platooning rule changes](#)
- *Commercial Carrier Journal*, April 2023: [Senate votes to roll back EPA emissions standard on heavy trucks](#)
- *Commercial Carrier Journal*, May 2023: [Coalition voices opposition of heavier trucks to Congress](#)



Recap of the Truck Size and Weight Subcommittee Meeting at the 2023 TRB Annual Meeting

During the TRB Truck Size and Weight Subcommittee meeting, members discussed several topics including weigh-in-motion (WIM), decarbonization of truck fleet and regulations, harmonization of oversize and overweight permitting regulations and data, and needing more information on height restrictions, curves, and pavement conditions. Additional points discussed were centered around funding, truck platooning, intelligent access policy, and communication between the industry and USDOT for current and future implementation of technologies.

One example highlighted was a short haul drayage type scenario at ports to incentivize short haul movements. A member mentioned that the Ports of Los Angeles and Long Beach are implementing pilots and some inland ports are building roads for heavier trucks, which allows freight to be transferred from the port to the warehouse and broken into domestic containers. Regarding WIM data and permits, a member explained that Kentucky uses a screening tool to automatically pull permits for trucks that are being screened, which helps increase efficiency. Attendees included members from the European Commission, US Federal Government, State DOTs, MPOs, academia, advocacy, as well as rail and maritime industries. More details on the subcommittee can be found at the [National Academies Joint Subcommittee on Truck Size and Weight website](#).

Disclaimer: Except for the statutes and regulations cited, the contents of this document do not have the force and effect of law and are not meant to bind the States or the public in any way. This document is intended only to provide information regarding existing requirements under the law or agency policies.

Keep in Touch!

For questions or suggested updates to future editions of this VSW Updates Brief, please contact **Jeff Purdy**, Jeff.Purdy@dot.gov

