Task Force 13

March 2026
Volume IV , Issue 1

Winter Newsletter

Fall Meeting Recap– Sterling, VA

Over 2 decades later, Task Force 13 returned to the Washington, DC area, home of the FHWA's Office of Research, Development, and Technology along with George Mason University, for the second of two biannual meetings. Held October 14th-16th , the Fall meeting brought 42 in-person and 24 virtual attendees together to stay abreast on the current topics impacting the world of bridge and roadside hardware.

To get the ball rolling, members of TF13 were invited to tour George Mason University's Vehicle Modeling Laboratory, including an extensive in-house film library of crash tests, and later presented with insight into the vast capabilities of researchers and academics at the Center for Collision Safety & Analysis (CCSA).

As members reconvened on the first evening and over the course of the following two days, TF13 facilitated presentations and discussions providing a multitude of updates such as the AASHTO Technical Service Program (TSP) initiatives into solidifying future processes for certifying new roadside hardware, new additions and changes to the hardware guide and website, progress in addressing concerns related to M180-25, and the successful MASH testing of a new wooden TL-3 end terminal and modified wooden TL-3 guiderail system conducted by Calspan and Texas A&M Transportation Institute (TTI), respectively. Members also learned about VDOT's impressive endeavors in inspecting guardrail terminals on the 3rd largest state roadway network through developing a mobile app and pocket guide for identifying and addressing roadside hardware maintenance concerns with zero recorded safety incidents thus far.

Notes on these and other intriguing meeting discussions will soon be posted on the TF13 website.

Traveling to attend the next meeting not an option? No problem! Register and tune in virtually to fit your schedule.

Inside This Issue

Next TF13 Meeting

SAVE THE DATE:

April 15th - 17th 2026

LOCATION:

Lincoln, NE

ACCOMMODATIONS:

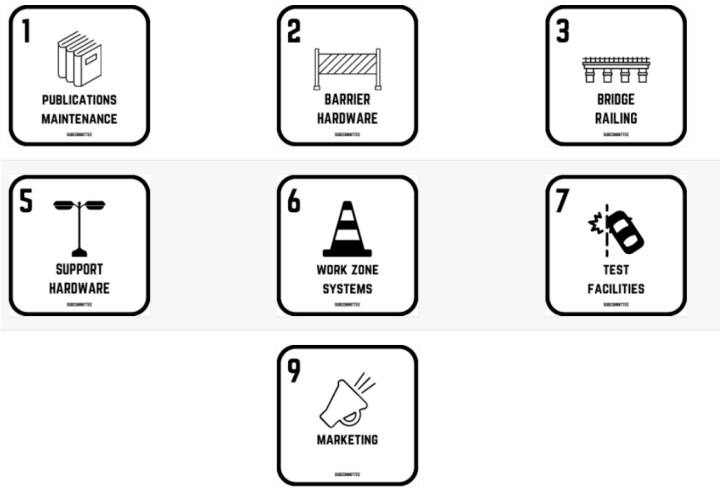
Graduate by Hilton Hotel

Requests to be added to Thursday's TF13 meeting agenda for 15-minute Technical Presentations must be made in advance of the meeting.

Subcommittees of TF13

TF13, a non-profit organization, promotes the standardization of plans and specifications for bridge and roadside hardware common along the vast U.S. highway network largely by maintaining a library of construction details in the TF13 Hardware Guides. These guides act as supplemental references for many of the systems and components mentioned in chapters 3 through 9 of the Roadside Design Guide, an AASHTO publication of current information and operating practices related to roadside design.

To properly attend to each topic, TF13 relies on the expertise, adaptability, and integrity its members, comprised of representatives from industry, academia, and state and federal transportation departments, volunteering their time to provide essential leadership for the board and seven subcommittees. It is the commitment and passion from our subcommittee co-chairs and members that help promote the lasting legacy of invaluable contributions, both big and small, that cumulatively aid in propelling the industry forward.



Subcommittee Co-Chair Updates:

⇒ SC #5: Support Hardware

Greg Kirchgesner; Xcessories Squared, Inc.

Current Vacancy:

⇒ Vice President

If you are interested in fostering a bigger impact, consider filling the role of Vice President.

Please reach out directly to John Durkos at jdurkos@roadsystems.com for more information.

Hardware Guide & Related Updates

Many new additions have hit our site!

Stay informed! Visit the "Hardware Guide – Recent Updates" TF13 webpage for a list of the most recent updates to hardware systems, components, and drawings.

https://tf13.org/guide-recent-updates/

AASHTO Roadside Design Guide Update

Completed comments from the Committee on Design are currently under review by the AASHTO Technical Committee on Roadside Safety (TCRS).

Next Steps:

- ◊ Balloting the proposed Roadside Design Guide by TCRS & The Committee on Design

⇒ Expected Publish Date: Mid-2027

MASH 2016 Conversion to Performance Specification

Approved by AASHTO in 2021, the Manual for Assessing Safety Hardware (MASH) will be converted into a specification, with AASHTO now reviewing the first draft and experts providing the contractor with valuable input on key items. The full draft has been delayed.

Next Steps:

- ◊ Review and balloting of the new specification estimated to start by mid-2026

⇒ Expected Publish Date: Early 2028

TF13 Guide to Standardized Roadside Hardware

https://tf13.org/guides/

Links also available via the main website:
https://tf13.org/

Hardware Categories

Bridge Railings

Crash Cushions

End Treatments/ Terminals

Longitudinal Barriers

Sign Supports

Transition Systems

Work Zone Systems

Components

Industry Contacts/ Manufacturers

How Its Modeled: Digital Simulation & Vehicle Testing

George Mason University– Center for Collision Safety & Analysis

Long before computerized crash simulation data can be analyzed, before a visual simulation can be developed, each vehicle component must first be meticulously identified and undergo digital modeling. Enter George Mason University's Center for Collision Safety & Analysis (CCSA).

CCSA, one of the many facilities and organizations contributing to the global field, graciously invited TF13 to kick off the meeting with a visit to their Vehicle Modeling Laboratory. Drawing the crowd's attention, the focal point of the center's *garage*, sat a stripped Volkswagen electric ID4 and non-electric Tiguan ready for 3D scanning. GMU scientists and engineers detailed the steps necessary to develop full vehicle simulation models suitable for crashworthiness using LS-DYNA. Material analyses, manufacturing technology assessments, and vehicle geometry scanning, utilizing small adhesive targets placed across the surface of the vehicle components, combine to produce a model that is validated against full-scale crash tests. The future aspiration: Employ crash simulations to certify new roadside hardware designs.

TF13 attendees were also granted access to CCSA's extensive in-house film library containing archived duplicate copies of crash tests, including NHSTA's collection dating back to the 1960's, research tests from FHWA, and tests conducted by the FAA. CCSA houses these films as a resource that can be requested for view and reference. (photo on page 1)

Aside from conducting impact tests and modeling vehicles to analyze collision effects and occupant safety, CCSA has developed computational models for various materials used in the engineering of hardware for the mitigation of collision forces, mined publicly available crash datasets in efforts to understand crash causation, developed models for airplane engines and infrastructure security treatments such as gates and planters for use in impact assessments, and is currently working on a model to simulate battery thermal runaway.

The passion of each expert contributing to the research conducted by GMU's Center for Collision Safety and Analysis is clearly reflected in their data and results, helping drive the industry forward.

Thank you, CCSA team members, for your impactful insight into the lucrative world of material simulation, testing, and analysis.

Big Wheels Keep on Rollin'

Whether awaiting the delivery of steel coils or anticipating a shipment of fresh fruits and vegetables, businesses across America rely on a vast network of semi-tractor trailers for transporting the majority of US goods. According to the Federal Motor Carrier Safety Association (FMCSA), upwards of 67% of domestic freight is transported via large trucks with a gross vehicle weight rating greater than 10,000 pounds. In 2022, 14% of all fatal crashes, a rising statistic, and 9.3% of non-fatal crashes on the Nation's roadways involved at least one truck or bus. While strides in the development of autonomous trucks and corridors are being made, the concern over large truck impacts and crashes still remain.

Fighting for more effective laws and regulations and to guard those already in place, the Truck Safety Coalition (TSC) is one such concerned group comprised of caring individuals and victims working to make our nation's roadways safer. A coalition that understands crashes will occur, but people don't have to die, helped educate TF13 members about ongoing efforts to aid in creating accountability and correctable actions through advancing technologies and regulations for trucks. The use of collision avoidance technology, energy absorbing underride guards, and maintaining the current tractor-trailer maximum gross vehicle federal weight limit of 80,000 pounds, of which, if increased, would not only amplify the severity of collisions but also cause more damage to our roadway infrastructure, are a few issues TSC is currently advocating.

The shared call for infrastructure and roadside hardware to further keep motorists safe is being answered by industry, research institutions and facilities across the spectrum. As one of the numerous commuters who have come to understand the danger an uncontrolled semi-tractor trailer represents, Michael Kempen, president of Impact Absorption, felt compelled to speak to TF13 about such infrastructure that can and has saved lives. On steep mountainous roadways, where failed breaks on a 6-8% grade can create a runaway truck with the momentum of a freight train, the last line of defense comes in the form of Truck Emergency Escape Ramps (TEERs). Whether it be a gravel, aggregate uphill, aggregate level, or mechanical ramps, these TEERs convert perilous motion into controlled resistance, keeping both fellow motorists and the driver safe in precarious situations.

Rick Mauer, secretary of TF13, experienced a close call with a late braking semi when traveling to this past TF13 Fall meeting. It became an unfortunate coincidence that provided further attestation during his presentation, given later the same day, advocating for the use and development of more TL-5 barriers. As 18% of total crashes are with a fixed object, crash test facilities and affiliated researchers are a vital component to the evolution of TL-5 barriers capable of containing and redirecting semi-tractor trailers.

One thing is for sure, this collective passion, felt by both individuals and establishments, will continue to lead the push towards enhanced safety when the big wheels keep on rollin'.

Updates You Care About

AASHTO M180-25

Driven largely by manufacturer concerns regarding changes to base metal thickness tolerance and galvanizing standards, ATSSA and TF13 members combined their efforts to provide AASHTO with recommended revisions to the existing M180-25 specification that would allow for streamlined manufacturing, roll out, and change over from M180-18. A letter was sent by ATSSA to AASHTO expressing producer concerns related to coil thickness.

⇒ During the ATSSA Guardrail Committee meeting at the recent Annual Convention & Traffic Expo in Houston, TX, it was reported that AASHTO leadership met to discuss the letter of concern and is currently determining the next course of action.

FHWA Eligibility Letter Delays

⇒ FHWA Office of Safety is still authoring FHWA Eligibility Letters for MASH tested products with no intent to pass the responsibility to the state level.

⇒ ATSSA and the Secretary of Transportation met to discuss FHWA submittal letters. FHWA intends to address ways to reform the process during the mid-April ATSSA Legislative Briefing and Fly-In in Washington, DC.

Build America, Buy America (BABA)

In January of 2025, FHWA published its final rule rescinding the Manufactured Products Waiver, announcing a phased implementation schedule, of which Phase 1 has now passed and is in effect.

- ◊ Phase 1: Projects obligated on or after Oct. 1, 2025

  All manufactured products permanently incorporated into the project must be manufactured in the United States (known as the “final assembly requirement”).

- ◊ Phase 2: Projects obligated on or after Oct. 1, 2026

  All manufactured products permanently incorporated into the project must both be manufactured in the United States and have the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States be greater than 55 percent of the total cost of all components of the manufactured product (known as the “55 percent requirement”).

⇒ AASHTO introduced the Domestic Materials Self Certification Form, created in coordination with FHWA and state DOTs, to streamline documentation and help ensure products used on federally funded transportation projects meet the necessary domestic material standards.

  * It is under each State’s discretion if and how the form will be used in conjunction with current practices

Where Are They Now?

Retiree

◊ Ali Hangul P.E.: *Retired from TN DOT on September 5th, 2025*

⇒ For assistance with Standard Drawings and support, please contact Tsehay.Dessalgn@tn.gov. All other questions can be directed to Laura.Chandler@tn.gov

Employment Transition

◊ Dr. Kevin Schrum: *Formerly Program Director for Sicking Safety Systems, LLC ; Currently Vice President of Engineering and Product Development for NextGen Holdings, LLC*

⇒ Dr. Schrum will continue to offer consulting and simulation services to clients worldwide. He can be contacted at kevin@nextgensafety.net

Stay Updated, Stay Connected

TF13 is on LinkedIN

Follow us for the latest information on upcoming meetings & publications.

https://www.linkedin.com/groups/15307047/

Upcoming & Recent Industry Events

⇒ TRB Annual Meeting; Washington, DC	January 11th– 15th
⇒ ATSSA Convention & Traffic Expo; Houston, TX	February 20th– 24th
⇒ ATSSA Legislative Briefing & Fly-In; Washington, DC	April 14th– 15th
⇒ TF13 Spring Meeting; Lincoln, NE	April 15th– 17th
⇒ ATSSA Mid-Year Meeting; Grand Rapids, MI	August 25th– 28th
⇒ TF13 Fall Meeting; Location TBD	Date TBD

Thank you to everyone who helped contribute and provide sources of information for this edition of the newsletter!