

## Joint Meeting with Midwest Pooled Fund Program & TF13 Wednesday April 24, 2024

Ron Faller Moderator

Notable – Our joint meeting has been coming to Lincoln in Spring since 2012!

**NCHRP Project 17-43 & 17-88 Roadside Data Updates** – Luke Riexinger (IIHS) came from Va Tech – will be reporting.

- Roadside Design Guide – encroachment data was based on 1960's Hutchins & Kennedy study data and Cooper study data in 70s - New data will include motorcycles and large vehicles, additionally new data will have three encroachment severities. The new data will come from the [NCHRP 17-43](#) data & [Large truck Causation Study \(LTCCS\)](#) and [motorcycle Causation Study MCCS & NCRHP 22-26](#) and will be combined with data from the WSDOT – Crash data Maintenance Data Roadside Side Inventory data. The WSDOT was a naturalistic driving study data. The complete data set has records of over 100K encroachments which can be queried. Of note the query fields include nature of encroachment, frequency and the ability to compare encroachments with passengers' vehicles class to heavy vehicle, passenger vehicles & motorcycles, etc.
- 2020 – recorded the largest number of motorcycle fatalities in US (7000~) By vehicle class these fatalities represented 4% of the total vehicle fleet, yet 40% of all the fatalities.
- Reviewed the question: How are motorcycles reacting differently with the various other vehicle types? (Culled answers from data out of above studies)
  - [NCHRP 22-26](#)
    - 22 in-depth crash investigations
      - Gave examples of cases – went over in detail where the rider's injuries occurred on the highway hardware.
    - Noted that in reviewing Impact & Departure Angles - cumulative distribution chart – looking at 85 percentiles of large trucks had larger impact angles. All the other vehicle types followed similar distribution angles on the charts. (Vans were somewhat of an outlier)
    - Curvature – motorcycles seemed to crash more on steeper curves than other vehicles. They also have a higher level of rollover rate. (As Gomer Pyle would say... Surprise! Surprise!! Surprise!!!)
    - Noted the position of the motorcycle during the event – looked at 3 different state's data. Positions looked at were: Upright, laid down & separated from motorcycle. The majority of crashes were in the latter category.
    - Reconciliation with MASH vs Real World Impact – looking at the 85<sup>th</sup> percentile. Passenger car / pickup 25 deg – was representative. Motorcycle had a departure angle of 24 degree... majority of riders in data set were in the upright position - These angles & rider position would be the recommendations for MASH testing.
    - NHTSA will be collecting additional data on Motorcycle starting in 2025.
- Eric Emerson: asked how much different were the results from the old data set vs new data – were there changes to LON or other outcomes? *Answer: results were similar, but the new data was able to capture crashes specific to roadway curvatures.* He also asked about

runout length for TL5 barriers and bridge piers... 10-20ft area. *Answer: The answer to that specific question could be gleaned from the data, but the question wasn't specifically investigated.*

- Ron Faller: asked if data could look at roadways with higher speed impacts: *Answer: [NCHRP 22-42A](#) Impact Performance Assessment of Barrier Performance at High Speed looked at this question using the 17-88 database. There are 32 cases where higher speed impacts were recorded. Need more data before the question can be answered with confidence.*
- Fadi Tahan – asked question regarding if the data could discern impact speed of motorcycles... *Answer - info isn't available in the data set.* Follow up question asked the same question about the passenger car and pickup. *Answer – reconstructive data showed similar results to what is being tested in MASH.*
- Ron Faller- asked a question regarding - Speed and encroachment angles seen in data sets were statistically higher than those being used in MASH criteria? Do things in MASH need to change? *Short answer is that we need to watch this, but data isn't there at the moment... 3 new NCHRP studies will be looking at it.*

#### **Update on MASH activities** Eric Emersion (vice Chair TCRS)

- Some data has come in from several of the ongoing studies – updated info is currently being run up the chain of command (AASHTO Counsel on Highways and Street)
  - Technical topics –
  - Expert opinions –
  - List of Research needs – will be added to the mix of new NCHRP project suggestions. New topics will be discussed during ADK20 research needs session this summer in Orlando.

#### **First Impressions of NHI MASH Evaluation Training** – John Durkos – Eric Emerson

Presentation: MASH-NHI-Training-Introduction.pdf - <https://tf13.org/wp-content/uploads/2024/06/MASH-NHI-Training-Introduction.pdf>

- FHWA Course number FHWA-NHI-380133 Evaluation of Roadside Safety Hardware Using AASHTO MASH guidelines. [Search for NHI course number](#)
- 6 hr. – beginner level course – target audience Transportation personnel responsible for reviewing crash test. 7 Modules. Instructional strategy– history knowledge checks, videos, etc.
- Current Status – pilot course has been completed. When the course will be available to general public has yet to be determined.
- Eric Emerson – First Impressions – wishes he had this type of thing when he started out. Recommended that you have a hard copy of MASH in hand while taking the class. Concerns were how will this course be updated as MASH is updated? Some hardware specific things that he caught which were missed from the course: considering bridge rail deck needs and recommend spacing between railing elements... some other concerns were lack of instructional info for common knowledge things that the user will need should have been included.

- Dick Albin responded to comments that were made by those who took the course. Comments came in just prior to when the contractors' contract expired so weren't all answered. Comments were categorized and will be considered in the next go round.

### **ISO 17025 Laboratory Accreditation** – Karla Lechtenberg (MwRSF)

- Oversight & List of Accredited Testing Laboratories – there was a mandate when FHWA maintained the list – it's informally fallen in to the lap of TF13 Subcommittee 7 to maintain the list.
  - Who is going to maintain the list, who is going to do oversight?
  - There is a list of labs that TF13 has where “labs says that they are accredited” but does it mean that they are currently accredited... what controls are in place for formalize accreditation?
  - Comment made by CALTRANS – they stated when they recently submitted a bridge rail for a letter – FHWA asked for their letter of accreditation (ISO 17025 documentation)
  - Ron / Karla (MwRSF) – stated that the TF13 subcommittee 7 members have been the ones who have been holding this together and acting as the de facto clearinghouse of information.
  - Eric Emerson (WIDOT) – stated that in MASH it talks about accredited labs but not any specific – He's recommended that labs write to FHWA and AAHSTO and ask them to get specific as to how lab accreditation is to occur.
  - Ron (MwRSF)– asked if TF13 wanted to maintain said list. John – said that TF13 is more a clearinghouse and isn't in the position to determine who goes on the list.
  - Bob B (MwRSF)– talked about the fact that states can accept product on their own; they can also make the call if the lab accreditation credentials are acceptable.
  - Bill Wilson (WYDOT) – brought up ODOT developed a MASH adoption policy that was mimicked by many other states.
  - Jenny (Nucor) – brought up the manufacture's perspective that the legal aspects of using a non-accredited lab creates and why it's important to insure consistence in the lab accreditation process and clarity stating if the testing was conducted at an accredited laboratory or one that was not accredited.

### **AASHTO M-180 Specification Update & Implementation**

Kathern Malusky

Presentation: TF-13-AASHTO-Update-4.24.24.pdf - <https://tf13.org/wp-content/uploads/2024/06/TF-13-AASHTO-Update-4.24.24.pdf>

- 2024 Audits – grace period comes into effect when large changes come in.
- Coil Steel Thickness – They are looking at M-180-18 not to 23. The auditors are not documenting this due to legal ramifications...
- Cross over between Audit & Guardrail Technical Committee with the COMP Technical subcommittee 4d.
- Spring 2024 survey –
- Industry is invited to join COMP Technical Subcommittee 4d – Casey Soneria [csoneira@aaashto.org](mailto:csoneira@aaashto.org). (Send her an email her to get on the committee)
- Questions were brought up about the responses to the survey as well as dates listed in the survey – stated that one producer claimed to be making material with the new thickness prior to the spec coming out.

Manufacturers perspective

Mark McDonald

Presentation: 180-23-Presentation\_042424.pdf - [https://tf13.org/wp-content/uploads/2024/06/M180-23-Presentation\\_042424.pdf](https://tf13.org/wp-content/uploads/2024/06/M180-23-Presentation_042424.pdf)

- 2023 revision is live right now...
  - Concur from many manufactures and installers.
    - Some DOTs don't distinguish between M180 versions.
    - Some DOT think that they are getting the current M180 standard materials.
  - Recap in changes.
    - Increase in 10 & 12 gage rail thicknesses.
    - Elimination of Min/ Max ...
- Comments from David Price – agreed with what Mark stated... said that there are 5 manufactures who make 99 percent of the rail... and those are the ones who know what they are doing and see what this will affect. Someone is going to take a hit. Who will take the worst hit is unknown. Gave some scenarios of how this would likely play out. First to make the change, ladders, stuck with material should Spec. change back or not run through all your inventory of old materials...
- Ron asked about what a realistic implementation date could be - response was that ATSSA is preparing a letter with that info. (*Editor's note letter was sent to AASHTO and all 50 state DOT's on 5/14/24*)
- Dave Reese – asked why did the panel feel the need to make the change to the panel?
- Ron Faller's Outsider Perspective:
  - Discussed thoughts of what would happen to end treatments or crash cushions with the increase in thickness in materials – would likely require some testing. His concerns came more from a possible increase in OIV. Counter to this was that possibility of increase in strengths in materials is already there... because the yield strength of material has a range 50ksi or 65ksi...

## TF13 Meeting - Thursday, April 25th

Task Force 13 Meeting – Welcome & Introductions

Durkos

[Introduction-Durkos.pdf](#)

Moment of silence for Tony Capella’s daughter Ashley Webb.

- Self-Introductions – 44 in person – 27 online

Membership

[Membership-Structure.pdf](#)

Approval of Minutes from Fall 2023 meeting - Motion made to approve by Durkos. Seconded by Joe Frazzetta. Minutes were voted in and approved as written.

- Treasurer’s Report Bank account: \$39,794.11. Currently still owe the hotel bill for meeting rooms, but paid for dinner and all registrations have been collected. Should net out around \$38K. Smith

### **Subcommittee Meetings - Discuss Goals, Tasks & Assignments**

- Subcommittee Reports and Discussions

#### **Subcommittee #1 Publications Maintenance**

Lohrey

Presentation: [SC-1-Publications.pdf](#)

- Gave a review of the [FT13 website](#) & how the designators were developed.
- Reviewed new systems that have been entered into the guide and the criteria by which systems qualify to be entered into the guide.
- Discussed the drawing components that are outlined in M180 – Those drawings are more conceptual than the detail drawings within the TF13 guide?
- Discussed the debacle that occurred in 1995 when drawings were “hard” converted to metric and in subsequent updates have had to be converted back (in some cases more than decimals were lost). Today dimensions are listed in customary units with “soft” converted metric units in brackets.
- The guide has recommendation on labeling posts – discussed making the guides recommendations to match what has come out in the new M180-23.
- Gave a detailed list of all of the system drawings and components that require updating.
- Discussed the possibility of adding a recently updated / changes page to the guide that will list the system that have been changed, idea is to have a rolling update for 3 years.
- Request for Secretary to send link to TF13 Guide contact page – request that the recipient check that their companies contact, and products are updated – including photos of their systems and parts. (Editor’s note – After the meeting this task was completed by Mauer 6/17)
- Request was made to have review status listed on the guide page... not just within the individual component page – Eric stated that this could be a

feature he could add. *(Editor's note – After the meeting this task was completed by Eric Lohrey 5/24)*

- **Subcommittee #2 - Barrier Hardware Review Groups** George Eicher
  - Discussed updates to drawing - SEW33a – Short Radius Guardrail System
  - Recommendation was made to add others to their committee for reviewing the drawings (signup sheet was passed for attendees join this elite group)
  - Eric L had a question regarding drawings without a FWHA letter – there is a quandary as to who authorizes the drawing.
  - Lidos is using the TF13 drawings in their rewrite of RDG – by default of being in the TF13 guide, assumptions are made as to approval.

- **Subcommittee #3 - Bridge Railing & Transition Hardware –** Ghioldi  
Presentation: [SC-3-Bridge-Rail.pdf](#)

The guide is broken down by material type class: concrete – steel – other - they have 139 systems in the guide. 13 are in review. They are trying to review 1 system a month.

- Adding the manufacturer of bridge systems for proprietary bridge rails -

- **Subcommittee #11 - Delineation** Tim Lang

Presentation: [SC-11-Delineation.pdf](#)

- Product Evaluation & Audit Solutions is the new name for NTPEP.
- Cold weather testing has been taken out of the testing matrix for lack of a location to perform the tests.
- Buy America – Qualifying info thought was that it could be helpful to have added on the drawings. (Nothing definitive was concluded in discussion)
- Shur-Tite – discussed how ATSSA is working on categorizing bike lane delineation vs roadway.
- [NCHRP 22-53](#) – delineation of roadside Hardware and Obstacles
- [TxDOT 0-7171](#) Barrier Striping for Reduction of Accidents – looking at wider applications for this beyond striping on concrete.
- Durkos brought up that there have been some recent adhesion failures with sheeting being directly applied to end of terminals. Nate – stated that they weren't focusing on the mounting or installation practices.

- **M180 Discussion –**

- Durkos queried the room to see if there were State DOT's who had any additional comments to add to what was heard the previous evening during the joint committee meeting:
  - David Price – gave a lengthy detailed description of what is happening – from DOT's not being on the same page, to installers for the most part being clueless and relying on MFG to let them know what's what. Recommended:
    - Recall the specification – to correct the thickness issue... If not will likely crush some installers.
  - ATSSA letter will have a 5 year – implementation – this duration is driven by the coil change... Jointly written letter will be sent out to FHWA AASHTO and other in next couple of weeks. *(Editor's Note saying the letter was sent to AASHTO and all 50 DOT's on 5/14/2024.)*
  - If coil dimension requirements were changed back – his thoughts

were that an update to the new M180-23 spec could happen within a year.

- “Not as tested issue” was discussed. When David Price’s company sends out new components for systems, he intends to have the paper work state “that steel is not as tested.”

#### **Subcommittee #7 - Certification of Test Facilities**

Lechtenberg/Kovar

Presentation: [SC-7-Test-Cert.pdf](#)

- Inter-Laboratory Comparison (ILCs) – Laboratory’s determine testing schedule. Showed the current plan of ILCs and which lab was responsible for taking lead. Info is out on their FTP site. [Mwrsf Lab Cert](#)
  - TTI is lead on current ILC– Open issue with ILC will be resolved via a conference call later this summer.
  - Question asked by Durkos – with the conversion of MASH to a spec... was data that resulted from previous Lap ILCs taken into consideration. *Answer Yes, that is SOP.*
  - Discussion around most recent lab accreditation assessments –
    - Bob with Caltrans – stated that their accreditation review went smoothly.
  - Open question regarding Accreditation - Who will enforce, maintain the list? How are labs getting accredited? What does it take to stay on the list? Are DOT’s going to require lab accreditation? These questions kicked off a number of discussions around this topic.
  - Question arose regarding EU labs conducting MASH tests... some labs in the EU are stating that they can run MASH tests, yet they haven’t completed the soil requirements in MASH... The group’s consensus thoughts were that as long as they meet the soil curve and have repeatable results – they should be fine. But none-the-less should be doing the soil component and participating in the ILCs
  - A question came up regarding TL4 single unit trucks with flat beds vs box trucks. In 2022 the issue of usage was addressed in an FHWA FAQ – *Answer: Box trucks yes, flat beds no.*
  - As long as FHWA continues to write the letters... accreditation questions are a moot point. If they eventually get out of the business... or a state chooses to do their own review, then the issue of accreditation becomes an issue.
  - “Should” vs “Shall” discussion was had regarding pickup trucks being 4x4 vs 2 wheel drive and TL4 cab over vs engine in front - the new MASH conversion is said to be eliminating the “should” which opens up the issue of what to do with products that have previously been approved using trucks that the new MASH spec doesn’t allow for? Should those products be removed from the guides or grandfathered? Discussion- specific to this issue – arguments could be made to allow as cab over tests have higher chance of failing occupant compartment intrusion.
  - Discussion on difference between truck manufacturers and truck wheel rim types (steel vs alum) how those too could affect the outcome. What’s going to be the standard, how much of a change from OEM should be allowed?
  - Discussions were had on difference between MASH accreditation for labs vs ASTM accreditation – process was similar... basically different paperwork. Having a lab go from one type to the other is relatively easy.
  - Want to “nip in the bud” the truck track width issue – where current models are wider than MASH spec.
- **#5 - Sign, Luminaire & Traffic Signal Support Hardware** Lohrey/Jollo  
Presentation: [SC-5-Supports.pdf](#)

Presented a number of MASH sign support systems.

- Luminaires – under NCHRP 350 the pole base was the only part of the system which was considered breakaway... in MASH it's now the pole and base combination – Open question is how to handle a family of products where the poles and arms combinations are so numerous? Worst case isn't acceptable any more... How far outside of the tested conditions are going to be allowed? *Answer: No answer was forthcoming.*
- Nonstandard structures – monuments, marquee, etc. common practice was to just put them on breakaway bases... but they were never tested in these configurations... How are these items to be handled (Evaluated for MASH)?
- NCHRP 03-119 , [NCHRP 22-43](#) studies were discussed.
- AASHTO LRFDLTS-1 – wind load mapping ASCE 7-22, wind drag for variable message signs and adding provision for vibration mitigation devices.
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- **#6 - Work Zone Hardware** volunteer request for new Chair as Eric Perry is stepping down
  - Eric made a plea for a new chair. – Marc-Andre Seguin volunteered to be a co-chair –
  - Chris Brooks MI DOT – was recommended by Eric Smith as a Work Zone proponent – *(Editor's note- after accepting the position, Marc stated that he will be reaching out to Chris Brooks – will report back at next meeting)*

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#### Update from the *Midwest Pooled Fund Program Meeting*

Bob Bielenberg's Presentation

Bielenberg

Presentation: [MwRSF-Pooled-Fund-Update.pdf](#)

- The MwRSF pooled fund is now 35 years in counting... had 95 people in attendance in person and online.
- Overview and priority of funded projects in 2024 program.
  - Discussion topics included Electric vehicle, state travel, other
  - Went through proposal for 2025... and selection process.
  - Crash test that was held on Wednesday was that of a flared approach to a guardrail transition–
- Newly funded projects for research
  1. V Ditch – Phase III for the 4 cable anywhere within a 6H:1V ditch – plan to run tests 3-13 & 3-14. They will test the system 12” from the break point down the slope.
  2. Will be looking at strength requirements for concrete median anchors.
  3. Investigation of Guardrail Modifications needed to Accommodate Electric Vehicles on standard MGS
    - a. Retrofitting options to the MGS system is their first choice
    - b. Also looking at a clean sheet of paper design – completely new designs
  4. Summary report of MwRSF Q&A site (They have 20 years of data with short summaries – proverbial treasure trove of info)
  5. Annual Consulting Services – one of the services MwRSF provides to their state pooled fund members.
  6. [Midwest Pooled Funded Website](#)
  7. LS-DYNA Modeling Enhancement Support (lately doing soil modeling and steel fracturing)



## Update Subcommittee #9 - Marketing

Mauer/ Perry

- The marketing committee was quiet for the last year, looking for new chair – The Powell Group was spoken about as possibly ones to take this over. *(Editor's note: Conversation started with Stephanie Poyner Story Lumber - about taking over position – will have motion made during next meeting to vote into position)*

## Road Sentinel - Using 3D cameras to classify, locate and detect roadside damage of guardrails

Scott Kroeker

Presentation: [Sentinel-ISPE-Update.pdf](#)

- Venture backed tec startup – AI computer vision –
- Problem statement... road inspection. Sed
- LiDAR systems cost around \$750k. Looked for an alternat vision-based system that could detect damage.
- Used cell phone and software to come up with system that was proof of concept.
- Used Intel Nvidia jetson edge device – built a system to test if it could pick up the end of a system...
- Now have a 3D mapping version of the system that could be done with \$600 off the shelf camaras.
- RoadSentinel.net
- WOW the capability of the system is amazing...
- Cost per mile to inspect. Or base on a fee per model (detection type)

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## Task Force 13 Executive Meeting

Executive Meeting –

Registration – firm cutoff date – Surcharge should be added for last minute registrants; \$100 suggested.

Speaker registration promo codes – vs honor system. Need to get codes out to attendees sooner, or state a date and time that they should be expected to receive them.

New locations for Fall 2024 meeting –

Suggestions – Safe Roads, Calspan, Caltrans,

Finished early both in the morning and afternoon – reduced some of the times – ½ hour brakes were good.

Generate content – paying DOTs to come in and be a speaker.

Split out Subcommittee 2 into longitudinal barriers & components vs terminals & cushions – there is a lot of work to be done on de-metrification of the components. Recommendation was to make a sub-committee 2A and 2B.

WZ letters – Are in the guide under guide. Survey of Major manufacturers of work zone (WZ) letters to do a survey – if they be interested in the guide - **TO DO ITEM. Assigned to Subcommittee 6.**

Lab Accreditation- [Perry Johnson Laboratory](#) is who the labs are using to get their A2LA – accreditation.

Security Barrier testing is done to a standard – crash test labs have to be 17025 accreted

The is plan to expand the list of Laboratories Accredited to Crash Test Roadside Safety Hardware to show their status of accreditation with the American Association for Laboratory Accreditation (A2LA), 17025 Accredited Laboratory. The TF13 web page is going to show their dates of participation in the SC7 Interlaboratory Comparisons (ILC's) that were conducted as well as the list of the Comparison Tasks with the Lead Lab.

The co-chair of Subcommittee 7 (Karla) will generate a list of labs that are participating in Subcommittee 7 activities and their attendance will be posted on the MwRSF web & TF13 site. Intend to have a list of participation dating back to 2022. Eric Smith will look at attendance sheets to come up with who's been attending the meeting.

Question regarding – status of drawings – in review – for proprietary product. In essence, the drawings have been reviewed by the manufacturer... “As Submitted” *(Editor's Note: Eric Lohrey completed this task after the meeting 5/24)*

**Friday, April 26, 2024**

**Affiliated Committee/Activity Reports**

**Update on status of Task Force 13 Membership and Structure**

- Website is getting one Hit a month on website requesting information and adding to our contacts.
- TF13 remains the go to source for standards and specifications for products featured in the RDG – goal is to uphold our “gold standard” and this tradition.
- Formal 501C organization –
- AASHTO – Memo of Understanding – commitment to AASTHO
- Went over structure of TF13

Discussion – Butler asked if industry could review the RDG prior to it being published. Eric Emerson recommended that TF13 or ATSSA send a formal request to AASHTO making the request to review the RDG prior to it being released. Joe Jones stated that they are stacked up with the publication and recommended that we get that letter out to them sooner than later. *(Editor’s Note: on June 3rd, ATSSA wrote a letter to AASHTO, co-signed by TF13, requesting ATSSA and TF13 have an opportunity to review the RDG before being published.)*

Butler also recommended that the review process include industry for both the New MASH Spec and the FHWA training course as our members have a vested interest.

**American Traffic Safety Services Association (“ATSSA”)**

Perry

Presentation: [ATSSA-Update.pdf](#)

- Gave a synopsis of GR committee task force on M180 –
- Described the Roadway safety Revitalization campaign.
- 2025 expo call for proposal – will open in late May
- Years ago, OH DOT had partnership with Ohio ATSSA Chapter and made outreach in rest areas that gave good exposure to HW Safety.

**TRB Committee AKD20 Roadside Safety** [Kristin Schuster](#) / John Donahue OR DOT

Presentation: [AKD20-TF13-Spring2024-1.pdf](#)

- *John spoke off the cuff but supplied presentation of what he was speaking on.*
- The new AKD20 committee chair will be announced in a couple of weeks. *(Editors Note: Jim Kovar of TTI was announced as the new AKD20 Chair)*
- They are currently working on a triennial strategic plan
  - Topics include – Motorcycle, Safe System Approach, Higher Operating Speeds, Low Volume Roadway, Finite Element Analysis
- Went over the 5 proposals that were submitted for research.
- Midyear meeting will be held after the [2<sup>nd</sup> International Safety Conference](#) concludes
  - Wednesday afternoon June 26<sup>th</sup> Research needs –
  - Thursday 27<sup>th</sup> – review roadway safety conference – Subcommittee reports - (Go to website to look for more info)
- Rob Ritter, FHWA Associate Administrator for Safety will be one of the key speakers. Possibly Kristin Shuster too.

### **AASHTO Technical Committee on Roadside Safety (TCRS) –**

Emerson

- All of the research proposals that were submitted by the group were accepted. There was an additional one on trees that was accepted as well.
- Discussion about the word MASH in project's titles. There is some scuttlebutt that MASH had to be removed from the titles of some of the projects / research to avoid an "issue." That issue was never defined.
- Updates of various guides
- RDG Update:
  - TXT is currently being reviewed and will go before committee.
  - Joe Jones – LIDOS and their group are redoing the drawings in the RDG. (This work wasn't initially budgeted for in the original scope of the update project)
- TTI – Working on completing the MASH conversion to a Spec Document
- They have been reaching out for professional opinions.
- Discussion on needed research – proposals will be worked at the summer meeting.
- Went over the approval process and various committees that will be reviewing the documents before it goes out.
- HW Safety manual – is also due to be published at the same time... over 1000 pages so the review process is going to be clogged for some time.

### **Update of ongoing research projects related to Roadside Safety and/or Safety Hardware**

#### **NCHRP Projects Update – Roberto Barcena –**

Presentation: [TF13-NCHRP-Update-April-2024-Rbarcena.pdf](#)

- In general, there were some delays in the project due to a software update that occurred at the National Academy of Science. They have worked through the issue.
- Gave a recommendation on how to write problem statements.
- Gave overview on panels, selection process.
- 202 334 2544 -

#### **Texas A&M Transportation Institute Current Research**

Nathan Shultz

Presentation: [TTI\\_Update.pdf](#)

MASH TL3 Evaluation of median guardrail transition to a Median F-Shaped Barrier

- Range of configurations –
- Crash test passed all the OIV and ride down criteria but failed the Occupant compartment intrusion – 11.5" of deformation.
- Fence Mounted on TL-4 Roadside Single Slope Barrier
  - Passed
- MASH Crashworthy Pedestrian Small Traffic Signals
  - Ran demo tests... at high speed. Will be looking at running compliance testing.

#### **CCSA/George Mason University**

Tahan

Presentation: [GMU\\_CCSA-Research.pdf](#)

- Gave an update on the work that they are doing to for the park system and the stone wall transitions.

## Midwest Roadside Safety Facility

Lechtenberg

Presentation: [MwRSF-Research-Update-TF13-2024April\\_R0.pdf](#)

- Cable Terminal for NY DOT (Roadside placement only – level terrain only)
  - 4 cable 10ft post spacing 38” top cable 17” bottom.
  - When using S3 x 5.7 post in the end terminal that system failed 3-10.
  - To correct they move to a HSS 3x2x1/8” 78” post with two 3/4” holes at ground line.
  - End terminal was constructed of 12 HSS posts – Re-ran tests and system worked.
  - Project is complete just needing to finish up the report.
  - Hardware in the impact zone in the end terminal failed the system... they moved the hardware out of the system.
- MGS Buried in backslope (for HI DOT) on 6:1 slope.
  - Initial testing Failed small car – a-pillar damage and snagging issues.
  - Modified system passed both small car and pickup.
  - Next up will be testing that system in reverse direction.
- SARM TL-2 Bridge Rail (WSP Global Canada)
  - System was constructed of Steel Tube and Steel posts.
  - Will be testing TL2.
- Develop a Thie Beam Bullnose Installation Manual (MNDOT)
  - MNDOT is currently reviewing the draft Manual.
  - MnDOT will share Manual with other DOTs for their use.

## TraFFix - Field Data from Sentinel Impact Tracker”

Geoff Maus

Presentation: [TrafFix-Sentinel-ISPE-Update.pdf](#)

Went over products features. They gave real life story of an incident in CA where the tracker was triggered by an accident and Caltrans workers were able to come to the scene prior to the Emergency personnel and were able to save those that were trapped in the vehicle.

## New/Old Business

John Durkos

- Location/Dates of Various 2024 Industry Meetings.
  - 2<sup>nd</sup> International TRB Meeting June 23-27 Orlando, FL
  - Aug 20-23 ATSSA Midyear Philadelphia, PA
  - Jan 5-9 TRB – Washington, DC
  - ATSSA Annual Expo Feb 28-March 4 – Orlando, FL
  - Next TF13 Meeting – *(Editor’s Note: Is currently scheduled to be the first week of October in Buffalo, NY at Calspan offices)*
- *Executive Committee Summary.*
  - Online registration will have a deadline for registration – Will add a late fee.
  - FHWA WZ letters – SC #6 will be looking and possible survey of MFGs.
  - Current list of test houses.
  - Drawing reviews – changing drawing status for proprietary products to being “as submitted.”
- Review of Task Force 13 “To Do List”, generated from meeting.

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