Thursday, April 18th, 2019
Venue - Embassy Suites, Lincoln, NE

- **8:00 a.m. Begin Task Force 13 Meeting - Introductions** Durkos
  - Announcement that Task Force 13 is now a non-profit entity, in the state of Ohio.
  - Recap of Joint Meeting activities, held the previous evening. Joint Meeting was broadcasted.
  - Quick review of the agenda for the meeting.
  - Review of Sub-Committees and vacancies of co-chairs.
  - Announcement of the execution of the Memorandum of Understanding (MOU) between Task Force 13 and AASHTO.

- **8:15 a.m.** Recap of Lakewood, CO (Fall 2018) Subcommittee Meetings Neece

- **8:30 a.m.** Approval of Minutes from Fall 2018 (Lakewood, CO) Meeting Durkos

- **8:35 a.m**. Contract for Website Services Lohrey
  - Subcommittee #1 Publications Maintenance
    - 15 new systems added to the Hardware Guide as follows: 2 Bridge Railings, 2 Crash Cushions, 2 End Treatment/Terminals, 3 Transitions, and 6 Work Zone Barriers. All have FHWA letters. TF13 draft drawing is extracted from FHWA letter and attribute data is entered, if available. All System owners/manufacturers need to review their entries and provide missing data, drawings, and photos.
    - Continued discussion on criteria for including Systems into the TF13 Guide that do not have FHWA letters. Currently, this primarily affects non-proprietary products which haven't been submitted to the FHWA, usually due to the lack of the complete MASH matrix being ran. What are the criteria for declaring a System MASH-compliant? Limited testing (not full test matrix)? Non-testing evaluation (FEA, engineering analysis, etc.)? How do we get the states to submit these products for inclusion into the TF13 Guide?
    - John Durkos suggested that the TF13 process must be changed to allow for products to be added to TF13 guide without FHWA Eligibility Letters, since the FHWA has advised no letter is needed for FHWA eligibility for funding.
    - Executive Committee tested the shared-server drawing review process, which uses Adobe Acrobat to comment on shared PDF drawings. Security issues prevented some from opening the shared drawings, but it worked fine for most reviewers.
    - Drawings for PWE01-04 Wide-Flange Guardrail Posts and FPA01 Guardrail Anchor Bracket were reviewed, revised, and posted.
    - Drawing for RER01 Bent Plate Rubrail was revised to correct various dimensions.
    - There was discussion on terminal connectors and face washers used in Thrie-beam transitions. The current drawing shows an oversized slot for splice bolts. This has caused confusion as to where square washers are used, under the head of the bolt, or the nut, or both? General consensus from labs is that on approach the washer is under the nut and on the departure end that washer is under the bolt head.
    - Revised "Anchor Type" attribute for WZ Barriers, which now has three categories: Anchored, Free Standing, and Anchored at Ends.
    - Added Archive section to all designator pages to include older TF13 drawings for user reference.
    - Added and corrected numerous links between MASH Systems and their Components.

- Most Components shown in the TF13 Guide are non-proprietary, but often standard/common components are utilized as part of proprietary systems. Links between proprietary Systems and non-proprietary Components can be done if requested by the System's owner/manufacturer.
- Future activities:
  - Obtain Guide materials (drawings, photos, etc.) from owner/manufacturers for all MASH Systems in the Guide.
  - Continue developing criteria to include state-certified hardware (no FHWA letter).
  - Add TMAs to the Guide.

- **10:10 a.m**. **BREAK**

Subcommittee Meetings - Discuss Goals, Tasks & Assignments

- **10:40 a.m.** Subcommittee - **Breakout Session A**
  - #2 - Barrier Hardware Review Groups — Smith
    - Guardrails/Median Barriers — Lechtenberg
    - Crash Cushions — TBD
    - End Treatments/Terminals — TBD
  - Discussion led by Karla on the needs and processes for drawing reviews. John asked for volunteers …
    - Volunteers for Guardrail/Median Barriers review - Don Gripne, Kurt Brauner, Jeff Lail, Tom Close, Mark Ayton, Richard Butler
    - Volunteers for Terminals review - Joe Nagy, Tom Close, Chuck Patterson
    - Volunteers for Crash Cushions review – Joe Nagy, John Durkos, Jeff Lail, JD Kinchelor
  - Stenciling of guardrail posts – Jeff Grover (Gregory Highway) presentation from last night.
    - Nine (9) states currently with requirements and all specifications are different.
    - Don Gripne (Trinity) has volunteered to assist with "standardization" of stenciling, will reach out to RG Steel, Universal, Highway Safety and also remain engaged with Grover. Will also reach-out to states to determine their willingness to standardize and purpose of stenciling.

- **11:00 a.m.** Subcommittee - **Breakout Session B**
  - #3 - Bridge Railing & Transition Hardware — Brauner
    - Currently 120 bridge rail systems in guide, 23 listed as review complete. 12 are MASH.
    - A quick review was made between the online database of MASH tested systems being maintained by the Texas Transportation Institute through the Roadside Safety Pooled Fund group, which has several bridge rails that do not appear in the Task Force 13 (TF-13) guide. The subcommittee agreed that these additional rails should be imported into the TF-13 guide despite the fact that some of them do not have an FHWA eligibility letter.
    - Discussed the relevance of NCHRP Report 20-07, Task 395 which assigned a MASH equivalency to bridge rails previously tested under NCHRP Report 350. This equivalency was determined analytically and not crash tested. Disclaimer is needed to alert users. Brauner indicates …
      - There are sketches but no photographs
      - No supplemental information, except 20-7
      - Would need a new field in TF13 Guide, to note the disclaimer.
    - Karla noted that TF13 goal is to be a clearinghouse for information, not a decision maker of what is approved and what isn't. Therefore, we should allow ANY bridge railing into

the guide – be it state certified/specified, crash tested, analysis only, FHWA letter, etc. Simply noting the status of the bridge railing.
  - Bligh notes the bridge railing guide has been a "catalogue" from the beginning of the guide. If someone is shopping for a system, they will need to contact folks who designed the product to obtain information.
  - MASH 09 vs MASH 16 – is there a difference in Bridge Railing? Bligh notes there is a difference in the TL5 vehicle only. Suggestion to combine all into "MASH".
  - Is there clarification needed on Combo Traffic/Pedestrian Railing? The group decided to use the definition found in Chapter 13 of the AASHTO LRFD Bridge Design Specifications and to make a note in the guide stating this.

- #11 – Delineation Gentry/Schulz
  - Paul Gentry is stepping down from co-chair.
  - Discussion on merging subcommittee #11 with subcommittee #6 or completely disbanding subcommittee #11
    - Delineators are a very small subset of roadside safety
    - Delineators well covered under NTPEP
  - Discussion on other state DOTs processes with delineator specs
    - What do they require for getting delineators on QPL?
    - Gentry goes over survey from state DOTs
    - Gentry reviews survey regarding specific state delineator requirements
      - Example: Colorado requires 2 year field test – what does this include?
    - 12 states requiring flexible delineators
    - 5 states stating no requirement for flexible delineators
  - Review of FDOT MASH implementation plan
    - Category I, II, III, IV devices and their implementation plan
      - Category I continue with self-certification
      - Category II – full MASH test matrix
        - What is the full matrix? All device variations?
    - Other states have developed this implementation plan but it's not public. Internal document. Not helpful to manufacturers.
    - Manufactures not CHIMING in enough!
  - State response is available publicly
  - Riker not much to discuss on delineation.
  - Gentry – Florida DOT all things go through product evaluation
  - Testing not cheap
  - Conway - Separate work zone categories – too much to include all devices – separate between temporary and permanent – separate between delineators and channelizers –
  - NTPEP angle – less MASH and more durability
  - Safety angle for other devices
  - Matrix considered or adopted for certain devices
  - Is there a single technical person for AAHSTO to direct technical testing requirements?
    - ATSSA best group for now – having lots of discussion
    - TCRS answers some MASH questions – slow process – backlog of questions
  - No decision yet for writing letter to Congress from ATSSA. Nobody pursuing it yet.

        - Editor Note: ATSSA Board of Directors advised ATSSA to NOT write letter at this time.
    - Schulz – only the product approved is the one that can receive a letter – no using supporting letters
    - Conway – no family of devices covered
    - Summary - very frustrated with FHWA

- **12:15 a.m. LUNCH – Provided in cost of registration**

- **1:15 p.m.** Subcommittee - **Breakout Session C**
  - #6 - Work Zone Hardware Shewmaker/Perry
    - 28 attendees
    - Eric Perry led the introductions and covered a bit of history and the objectives of SC6.
    - The only Certainty is that there is vast uncertainty.
    - Eric Lohrey discussed the review process and layout of the barrier committees.
    - Volunteers were asked to do reviews, hoping for 10-12 people and for five responses.
    - 6 volunteered from the sign-up sheet.
    - Eric asked that if you commit to reviews that you will at least acknowledge you looked at a drawing.
    - Agreed that one reviewer from each of the manufacturer would be ideal.
    - Discussion of how the MASH implementation plan is working in the CA, NC, FL and PA.
    - All DOT's have submitted some type of MASH implementation plan and not all public.
    - Mfgs have NO agreement going forward and are frustrated because they want to test but don't have guidance sufficient to commit to testing.
    - Testing Uncertainties and guidance needed for:
      - Substrates, Sign Size, Height, Sand Bags or not, Flags, Lights
    - Most DOT's grandfathering Category 1
    - Category 2 devices in limbo as industry and DOT's not answering the questions already submitted.
      - FL Cat 2 will require full matrix testing following MASH
      - NC Cat 2 looking to grandfather all devices.
    - Huge difference in testing variables for one device class between 25 vs 125 tests
    - Mfg's looking for some standardized with reasonable quantity and definition of tests.
    - Can industry come up with a sign stand standard working with the 6 manufacturers?
    - No consensus between mfgs on moving 350 products forward as MASH
      - Still not consensus between States and FEDs on what we're doing going forward.
      - Who should be the third party debate continues.
      - ATSSA discussed AASHTO ideas for implementation and none of the ideas were good to members.
      - ATSSA still pushing for legislation to force FHWA to continue writing letters.
    - Terminals – temporary or permanent – should there be a terminal category in work zones for temporary barrier? Pull the others out of permanent. Work zone in with permanent now.
    - There was a low probability that we could come to agreement between mfgs to propose a minimum matrix to the states and a lower probability that the states will formulate a matrix of reduced options to get the process started.

- #7 - Certification of Test Facilities – broadcasted through weblink. Lechtenberg/Bullard
  - Soil Strength ILC report from Idiada KARCO
    - Conclusion – there is a large variation.
      - Should there be an upper limit?
      - Should there be a NCHRP problem statement generated and a study?
        - Yes. Nathan Schultz (TTI) and Joseph Nagy (STI) agreed to lead the effort to write a problem statement.
      - If we establish an upper limit, should we revisit the lower limit as well?
  - Bumper Height ILC from CalTRANS
    - Conclusion – CalTRANS will take the lead to issue a revised worksheet to all labs for comment, etc – with the goal to take a vote in the near future.
  - Hood Height ILC presentation by Nathan of TTI.
    - Conclusion – MwRSF (Karla) was going to follow-up on the old hood height ILC and possibly submit to FHWA/AASHTO for consideration.
- **2:30 p.m**. Subcommittee - **Breakout Session D**
  - #5 - Sign, Luminaire & Traffic Signal Support Hardware Lohrey/Jollo
    - Sign Supports:
      - Only one (1) MASH System in the Guide at this time (SSS21a-b).
      - May consider including non-TF13-style drawings, such as DOT Standard Drawings.
      - Currently "Systems" are breakaway components only, not entire structure. This is different than the Luminaire structures that looks at the entire structure.
    - Luminaire Supports:
      - No new Systems have been added since initial project to update the Guide.
      - "Systems" include entire structure (frangible base, pole, arms). This is different than the Sign Supports and it will need to be determined which method will be used in the future for both.
      - FHWA letters cover frangible base only.
      - AASHTO limits on max. height & weight removed from latest design specification (LRFDLTS-1), which provides even less guidance for designers.
      - The luminaire website was shown with the search categories and the result tables.
      - Not realistic to include all manufacturers entire catalogs into TF13 Guide.
      - Explore ways to use current designator nomenclature for generic families of Systems.
      - List Potential Suppliers/Manufacturers for each generic component.
      - Review individual state DOT standards and QPL process for Luminaire Supports.
      - May consider including non-TF13-style drawings, such as DOT Standard Drawings. There are other State drawings that have been used in the TF13 guide.
    - MASH Implementation
      - Very Few MASH Systems so far.
      - Need guidance for reasonable number of crash tests to cover large families of Systems.
      - ΔV requirements for breakaway supports have not changed from NCHRP 350 to MASH.

- Common breakaway supports ("Systems") have already met ΔV requirements.
- Some manufacturers are waiting for results of NCHRP 03-119 before conducting tests. There is concern about performing tests that may not work or performing tests that are not necessary.
- Components supplied from different sources- Who is "owner" if System is entire structure?
- New TCRS NCHRP problem statement directed at evaluating crash performance of families of devices/systems/structures.
  - The project was approved last week, but will likely take several years to complete.
- Current implementation date for breakaway hardware is December 31, 2019. It looks like there may be no systems or very a very limited number of MASH-approved Sign and Luminaire breakaway systems that can be used unless the implementation date is extended.

o NCHRP 03-119 update by Ron from MidWest Roadside Safety.
- Phase 2 of the project is in process.
- 2 sign supports are being simulated.
- 1 Luminaire support will be simulated most likely with the frangible transformer base.
  - Explore the pole sizes (diameter), arm lengths, and pole thicknesses.
- Small sign supports will be simulated.
  - Wood post, PSST, U channel supports are being considered.
- Work zone will not be addressed based on budget of the project.
- Adjustments will be made to the supports as need for crashworthiness based on the simulations.
- It was pointed out that the 90 degree orientation is important to address.
- The next phase will do a full scale test that will be determined at a later date.
  - Will test with bracketing minimum and maximums.
  - Some tests will be performed to check midpoints.
- There may be some money for an additional extension.
- The phase 2 will extend into next year and then will go from there.

o Statements were made that DOTs and industry has not seen safety issues from the current breakaway devices.
- Scott Jollo discussed ODOT's experience with luminaire supports that have been hit and successfully broke away and not hearing about other issues.

o A question from Nucor asked about whether or not PSST and U channel would be considered two MASH options from the State perspective.
- Scott Jollo from ODOT responded that usually one option is selected by maintenance based on inventory. No other DOTs commented.

- **3:30 p.m. BREAK**
- **3:45 p.m**. Recap of Subcommittee activities

- **4:10 p.m.** Steel Transition - Connecting Permanent to Portable Concrete Barrier Ayton
  - Design, crash testing an implementation of a steel plate transition to meet MASH TL-3
  - Conducted MASH 3-20, 3-21, 3-11 – all passed.
  - FHWA Eligibility Letter B-281 issued and accepted by MTO.
  - 1st installation in Toronto on Hwy 401 in April 2019.

- **4:30 p.m.** MwRSF Pooled Fund Recap of yesterday's testing of the Hawaii Barrier Bielenberg
  - Also included a listing of the various projects in the pipeline through the pooled fund group for their 30th year anniversary!
    - Further Evaluation of End Terminals Adjacent to Curb
    - MGS with Reduced Embedment and Post Spacing over Low-Fill Culverts
    - Additional Retrofit Options for Post Conflicts within AGTs
    - Guidelines for Flaring Thrie-Beam Approach Guardrail Transitions - Phase II
    - Development of a Short-Radius Guardrail for Intersecting Driveways or Roadways
    - Annual Consulting Services Support
    - Pooled Fund Center for Highway Safety
    - LS-DYNA Modeling Enhancement Support

- **5:00 p.m.** Task Force 13 Executive Meeting (All Subcommittee Co-Chairs attending)
  - Attendees: Greg Neece, John Durkos, Karla Lechtenberg, Jeff Shewmaker, Scott Jollo, Eric Lohrey, Nathan Schultz, Eric Perry, Rick Mauer, Lance Bullard, Eric Smith, and Kurt Brauner.
  - MVMGT Reflective Guardrail Bolts, LLC – (ACTION ITEM) – John to investigate.
  - Discussion on implementing a searchable button in "attributes" section for devices with FHWA Eligibility Letter. Karla motion, Rick seconded and motion passed. (ACTION ITEM)
  - Overall drawing review through Adobe seems to be working well.
  - TF13 Designators – These will now be available from Eric Lohrey (ACTION ITEM).
  - Co-Chair vacancies … SC#2, SC#3, SC#11
  - John to discuss platform and look of website with AASHTO-TCRS as to their needs, etc (ACTION ITEM)
  - Lohry to look into Cloud Storage costs, etc. (ACTION ITEM)
  - John to ask Chiara as to the dates of the Fall meeting in College Station (ACTION ITEM).

Task Force 13 Dinner (Cost included in Registration) – Billy's Restaurant

- **~6:15 p.m**. Appetizers and cash bar
- **~6:45 p.m.** Dinner @ Billy's Restaurant

Friday, April 19th
Venue – Embassy Suites, Lincoln, NE

- **8:00 a.m. Begin Task Force Meeting – Day 2**
- **8:00 a.m. Affiliated Committee/Activity Reports**
  - AASHTO Subcommittee on Bridges and Structures — No Report
  - AASHTO & TF-13 - Memorandum of Understanding ("MOU") — Durkos
    - Listing of items to discuss with AASHTO-TCRS at July meeting
      - FHWA Letters/Policy concerns – how can it be streamlined?
      - State QPL Submittal Process
      - Changes to MASH tested products
      - What does TCRS need from TF13?
      - TF13 would like to encourage more state participation in meetings/activities
  - American Traffic Safety Services Association ("*ATSSA*") — Perry
    - 1,400 Members with 27 chapters, representing 42 States and DC.
    - Legislative Fly-In scheduled for May 1st-2nd in DC
    - **Tuesday Topic Series …**
      - **April 23, 2019 –** SBA Loans – A Finance Tool for Your Business!
        Speaker: Jarret Prussin, CEO and Founder of SBA Loan Group
      - **May 7, 2019 –** Congressional Outlook on Roadway Safety Infrastructure and Funding
        Speaker: Nate Smith, ATSSA Vice President of Government Relations
      - **May 28, 2019 –** Designing Temporary Traffic Control (TTC) Zones for Pedestrian Accessibility
        Speaker: Melisa D. Finley, P.E., Research Engineer, Texas A&M Transportation Institute
      - **All webinars are at 2:00 p.m. Eastern and are also recorded for "anytime" viewing.**
      - Register Now – visit www.atssa.com/TuesdayTopics
    - ATSSA MidYear 2019 is scheduled for August 21st-23rd in San Diego, CA
    - Status of ATSSA/FHWA/AASHTO Meeting to discuss Eligibility Process, etc.
      - Preliminary meeting in Tampa, during ATSSA Expo
      - Conference call in February 2019 – 3rd party contractor bailed
      - FHWA still working on a 3rd vendor for the process.
  - National Association of County Engineers — No Report
    - Meeting was held this week in Wichita, KS
  - TRB Committee AFB20 Roadside Safety — Bligh
    - 98th annual meeting held in January 2019, included three subcommittee meetings, three research paper sessions (13 given, 4 to be publish) and a workshop.
    - Summer Meeting in Reno, NV on July 21-24th – joint with three AASHTO groups, to include TCRS.
      - Agenda for meeting will be sent in early May
      - Technical Topics will include MASH Implementation, MASH Updates, ISPEs, Non-Standard Barrier Applications and Break-Out Groups.
      - Also will be developing and forwarding (through AASHTO-TCRS) problem statements for NCHRP consideration. Typically AFB20 submits five per year and the vast majority receive funding.
      - Registration site is open, as of April 19th.

- AASHTO Technical Committee on Roadside Safety General Discussion Only
  - Roadside Design Guide is close to being submitted for peer review.
  - Current edition is 2011.

- **8:45 a.m. Reports from Special Subcommittee Co-Chairs**
  - #9 - Marketing Mauer/Perry
    - Newsletter recently sent out. New feature is … "where are they now?"
    - LinkedIn
  - New Standardization Areas Durkos
    - Stamping/Stenciling project, identified at Wednesday's Joint Meeting.

- **9:15 a.m. BREAK**

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

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The remainder of the meeting was broadcasted.

- **9:30 a.m.** NCHRP Bush
  - Projects under Contract
    - 03-119 Application of MASH Test Criteria to Breakaway Sign & Luminaire Supports and Crashworthy WZ TCDs ($599,134) 2020
    - 03-134: Determination of Encroachment Conditions in Work Zones ($500,000)
    - 15-53 Roadside Design for Conflicts in Proximity to Bridge Ends and Intersecting Roadways 2020
    - 16-05 Guidelines for Cost-Effective Safety Treatments of Roadside Ditches 2019
    - 17-11(02) Development of Clear Recovery Area Guidelines 2019
    - 17-43 Long-Term Roadside Crash Data Collection Program 2020
    - 17-76 Guidance for the Setting of Speed Limits 2019
    - 17-79 Safety Effects of Raising Speed Limits to 75 MPH and Higher 2019
    - 17-82 Proposed Guidance for Fixed Objects in the Roadside Design Guide ($500,000) 2020
    - 17-86 Estimating Effectiveness of Safety Treatments in the Absence of Crash Data ($600,000) 2022
    - 17-90: Validation of Roadside Crash Injury Metrics in Real World Crashes (Correlation of Actual Injury Outcomes to Predicted During Crash Testing) ($400,000)
    - 22-26 Identification of Factors Related to Serious Injury & Fatal Motorcycle Crashes into Traffic Barriers ($500,000) 2021
    - 22-31 Recommended Guidelines for the Selection and Placement of Test Levels 2 through 5 Median Barriers ($577,000) 2020
    - 22-32 Development of Methods to Evaluate Side Impacts with Roadside Safety Features ($500,000) 2021
    - 22-33 Development of a Collaborative Approach for Multi-State In-Service Evaluations of Roadside Safety Features ($650,000) 2021

- 22-34 Determination of Zone Intrusion Envelopes under MASH Impact Conditions for Barrier Attachments ($400,000) 2021
- 22-35 Bridge Rail Testing Program to Confirm MASH Compliance ($500,000) 2021
- 22-36 Development of the Next Generation MASH, Portable Concrete Barrier ($400,000) 2019
- 22-37: Development of a Barrier Design to Accommodate Vehicles, Pedestrians and Cyclists ($500,000) 2020
- 22-38: Development of MASH TL-3 Deflection Reduction Guidance for 31 in Guardrail ($499,429) 2022
- 22-39: Guardrail Performance at Various Offsets from Curb for MASH TL-3 Applications ($600,000) 2022

o Studies on Traffic Safety RELATED to 20-07:
- Task 368 Development of a Roadmap for Use of SHRP2 Safety Data to enhance Existing AASHTO Publications $100K
- Task 372 Evaluation of MASH Test Vehicles $90K
- Task 383 Review and Update of the AASHTO Roadside Design Guide $100K (Added continuation $120,000)
- Task 395 MASH Equivalency of NCHRP 350 Approved Bridge Railing $75K
- Task 401 A Systematic Approach to Hardware Replacement Analysis to Support AASHTO MASH Implementation

o **New Approved NCHRP PROJECTS** **FY 2020 Relevant to TCRS and TF13**
FY2020 (Project numbers not yet assigned) in development:
- 12-xx (C-01): Bridge Deck Overhangs with MASH-Compliant Railings ($500,000)
- 22-xx (C-13): Impact Performance Assessment of Barrier Performance at High Speeds ($600,000)
- 22-xx (C-14) Developing Testing Protocol for a Family of Devices – Signs, Breakaway Poles and Work Zone Devices ($500,000)
- 22-xx (C-15) Development of a Crash Data Collection Tool for MASH In-Service Performance and Application Guidelines ($400,000)

- **9:45 a.m**. Texas A&M Transportation Institute Schlutz
  - PennDOT PA Steel Bridge Barrier
    - MASH Tests 5-10, 5-11, 5-12 – all passed
  - MGS with reduced post spacing with 8” blocks
    - Quarter Post spacing 3-10, 3-11 – both passed
      - Tests ran on 12” blocks in the past, but only with 350 vehicles, not MASH.
    - Transition, standard (Full Post) MGS to Quarter Post 3-21 – ruptured rail, rolled vehicle
      - Only 2 Half Post Spacings – between the Full Post and Quarter Post
      - Test has never been ran with 12” blocks – under any testing specification.
    - Half Post spacing 3-11 ruptured rail and rolled vehicle.
      - Reevaluating, checking soils, etc.
      - This same test has not previous been ran on 12” blocks.

- **10:35 a.m.** Midwest Roadside Safety Facility — Rosenbaugh
  - TL-4 Steel 3-Tube Bridge Railing
    - MASH Tests 4-10, 4-11, 4-12 (4-12 to be run soon) 4-10 and 4-11 passed
  - NJ/CalTRANS Modified Thrie Beam – possibly will run in the future with TL-4 vehicle in future
    - Typical installation 34"Tall Thrie Beam, 6'-9"L W6x8.5# post, W14x22# Blocks w/ bottom/front 45 degree angle notch.
    - MASH Test 3-11 on single sided system - passed
    - MASH Test 3-10 on double sided (median) system – passed
    - CURRENTLY THIS IS THE ONLY **MASH THRIE** BEAM SYSTEM AVAILABLE
  - Type 3 Barricades – Steel Supports, Plastic horizontal and lights on top
    - MASH Test 3-71 & 3-72 - Passed

- **11:10 a.m.** FHWA/George Mason University — Marzougui
  - Modeling of the 2014 Chevy Silverado 1500
  - Upcoming:
    - Modeling of Speed Bump Test (FOIL)
    - Modeling of Single Slope test (MwRSF)
    - Modeling of ST-75 Steel Post & Beam Bridge Railing (CalTRANS)
    - Modeling of Suspension Failure (FOIL)

- **11:45 a.m.** New/Old Business — Durkos
  - Location of 2019 Fall Task Force 13 Meeting with Roadside Safety Pooled Fund.
    - College Station, TX September 26th – 27th, 2019. The Pooled Fund Meeting is scheduled for

  - Location of Various 2019 Industry Meetings — Durkos
    - ATSSA Legislative Fly-In scheduled for May 1st-2nd in DC
    - AFB20/AASHTO Summer Meeting in Reno, NV on July 21-24th
    - ATSSA MidYear 2019 is scheduled for August 21st-23rd in San Diego, CA
    - Task Force 13 Scheduled for September 26th – 27th, 2019 in College Station, TX
    - IRF Meeting in Las Vegas, NV is scheduled for November 19th-22nd, 2019

  - Executive Committee Summary — Durkos

  - Review of Task Force 13 "To Do List", generated from meeting — Durkos
    - MVMGT Reflective Guardrail Bolts, LLC – (ACTION ITEM) – John to investigate.
    - Discussion on implementing a searchable button in "attributes" section for devices with FHWA Eligibility Letter. Karla motion, Rick seconded and motion passed. (ACTION ITEM)
    - TF13 Designators – Will be available from Eric Lohry (ACTION ITEM).
    - Co-Chair vacancies … SC#2, SC#3, SC#11
    - John to discuss platform and look of website with AASHTO-TCRS as to their needs, etc (ACTION ITEM)
    - Lohry to look into Cloud Storage costs, etc. (ACTION ITEM)
    - Initiate some form of reminder/request/reward system to generate topics for the joint meetings, in advance (ACTION ITEM)
    - Volunteers for Guardrail/Median Barriers review - Don Gripne, Kurt Brauner, Jeff Lail, Tom Close, Mark Ayton, Richard Butler (ACTION ITEM)

  - Volunteers for Terminals review - Joe Nagy, Tom Close, Chuck Patterson (ACTION ITEM)
  - Volunteers for Crash Cushions review – Joe Nagy, John Durkos, Jeff Lail, JD Kinchelor (ACTION ITEM)
  - On future meetings, schedule the morning break to be just after the SC#1 report (ACTION ITEM)

- **12:00 noon** Adjournment

Meeting notes completed, edited and distributed on 8 July 2019.