

**TRB COMMITTEE ON TRUCK & BUS SAFETY (ANB70)  
AND SUBCOMMITTEES ANNUAL MEETING MINUTES  
JANUARY 2018**

**Committee Meeting Time & Place**

Tuesday, January 9, 2018: 1:30 PM- 5:30 PM Eastern Time  
Marriott Marquis, Marquis Ballroom Salon 10 (M2)  
Brenda Lantz, North Dakota State University, presiding

**Meeting Minutes**

**1. TRB Updates / Announcements**

- a. Harassment-Free Environment
- b. Emergency Procedures
- c. A TRB Centennial Task Force created
  - i. Has been working since March 2017 to help plan for TRB's Centennial Celebration (Nov. 11, 2020)
  - ii. The celebration will officially begin in January 2020 at the 99th Annual Meeting, focusing on TRB's history

**2. Welcome & Introductions – All**

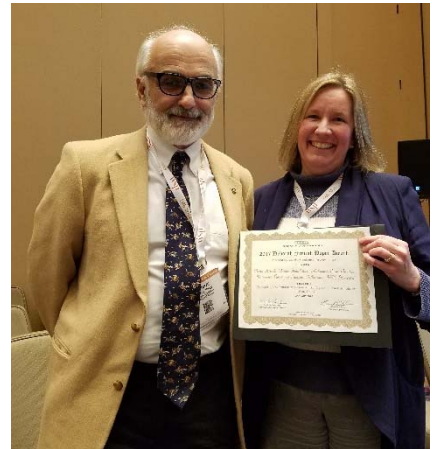
**3. Review of Mid-Year Meeting 2017 Notes – Erin Mabry**

- a. Posted at: <http://www.ugpti.org/trb/truckandbus/meetings/>

**4. Paper Review Summary and Discussion**

- a. 2017-2018 Papers Summary – Bob Scopatz and Brenda Lantz
  - i. 23 papers, 20 submitted for publication
    - 1. Accepted 14 for presentation
    - 2. Recommended 4 for revision
  - ii. Asked members to select at least 3 papers from list to review - this method works well
  - iii. 86 reviews requested by the paper review committee - 70 reviews submitted; 0 declined, 67 accepted
  - iv. 61% of papers accepted for presentation
  - v. 20% of those submitted are candidates for publication
  - vi. Re-review process: 16 re-reviews requested, 9 re-reviews submitted to date - Please complete re-reviews by Jan. 15th
  - vii. No committee comments regarding paper review
- b. 2016-2017 Deborah Freund ANB70 Paper Award – Bob Scopatz, Jerry Krueger, and Jeff Hickman
  - i. *Paper 17-03127* - Transfer of Training in Basic Control Skills from a Truck Simulator to a Real Truck

- ii. *Authors:* Pierro Hirsch, Virage Simulation; Mohamed-Amine Choukou, Department of Rehabilitation, Quebec; François Bellavance, Department of Decision Sciences, Quebec
- iii. Bob recapped review process for the paper award-this year's awardee was an unanimous decision by committee
- iv. Pierro highlighted the private/public partnership that conducted this project-wants to see more of these collaborations



## 5. **Committee Membership**

- a. Thank you to recent past members!
  - i. George Reagle decided to withdraw from our committee
- b. Welcome to new members / new roles!
  - i. Andrew King, OOIDA (Young Member)
  - ii. Sharon Newnam, Monash University (International Member), new chair of alternative compliance subcommittee
  - iii. Peter VanDyne, Liberty Mutual Insurance
    - 1. Replacing Ian Noy who withdrew his membership due to a major reorganization at Liberty Mutual
  - iv. We do still have one (1) open slot for an employee of a state DOT if anyone has a suggestion
  - v. Abby Morgan is the new chair of technology subcommittee, replacing George Reagle
  - vi. Brenda Lantz's last year as ANB70 Chair (April 15, 2018 will be her last day) – she has served 6 years, two 3-year terms
  - vii. Brenda has nominated Bob Scopatz for ANB70 Chair

## 6. **Direction and Scope of the Committee – Brenda Lantz, Bob Scopatz, and Joel Ticatch**

- a. Possible ad-hoc committee to review and offer suggestions
- b. Recommendations for direction, strategy and scope of Committee going forward-submit by April 30, 2018.
- c. Joel, Bob, and Brenda volunteer to lead and support the ad-hoc committee which will formulate a suggested plan going forward-this will then be proposed to the Committee for input, feedback, etc.
- d. Other volunteers (members and friends) for ad-hoc committee welcome
- e. Motion and vote to form ad-hoc committee approved
- f. The strategic plan document will be updated

7. **Committee Communications – Brenda Lantz and Erin Mabry**
  - a. Committee website – [www.ugpti.org/trb/truckandbus/](http://www.ugpti.org/trb/truckandbus/)
    - i. Any additional upcoming events or resources to post?
  - b. Committee Communication Coordinator – Erin Mabry
    - i. Announcements / resources at: <http://www.trb.org/abouttrb/crc.aspx>
8. **FMCSA Report - Safety Research Initiatives – Steve Smith**
  - a. Thank you Brenda for serving two (2) successful terms as our Committee Chair!
  - b. All FMCSA slides presented at today’s Research Forum will be available on FMCSA website under TRB heading:
    - i. <https://www.fmcsa.dot.gov/safety/research-and-analysis/transportation-research-board-forum-presentations>
  - c. FAST Act-number of studies completed
    - i. Double decker motorcoach study completed
    - ii. Ways to improve police accident report-Study complete and recommendations provided and being reviewed
  - d. Underway studies
    - i. Truck driver commuting times (safety effects of long commutes)-federal register notice out now for comment
    - ii. Beyond compliance
  - e. Pilot projects
    - i. Flexible sleeper berth (currently with OMB)
    - ii. Drivers under 21 with military training-scoping phase
  - f. Autonomous vehicles
    - i. Worked with FHWA on truck platooning
    - ii. Impact of automated vehicles-research completed-will be updated on website soon
  - g. FMCSA website-research projects summarized and status
    - i. <https://www.fmcsa.dot.gov/safety/research-and-analysis/active-research-projects>
  - h. Question: Status of lower level autonomous technologies (i.e. AEB)
    - i. Answer: FMCSA looking at barriers to adopting these technologies
  - i. **FMCSA Data Repository - Rebecca Hammond, VTTI (see presentation)**
    - i. FMCSA study led by VTTI-raw, public use dataset for all FMCSA funded projects
    - ii. Data access, management, oversight, support and tracking
    - iii. Access to de-identified public use data
    - iv. Permissions available for detailed, identifiable data (VTTI secure data enclave)
    - v. Public use forms available on repository website
    - vi. Query builder: ways to query specific data across multiple datasets
    - vii. Several levels of access available

1. Level 1 open access, login required (no IRB training required), no PII, VTTI tracks who using and how its being used
  2. Level 2 identifiable data with secured access; can run queries to see what data is available-cannot obtain data through the query, FMCSA approval required, IRB training required
  3. Level 3-Requires Secure Data Enclave
- viii. VTTI will track IRBs
  - ix. Wide variety of datasets anticipated to go in the repository
  - x. Website not live yet-going through security assurances now
  - xi. Query output is summary data (not raw data)

**9. FMCSA Report - Policy and Rulemaking Initiatives – Tom Yager**

- a. Regulatory side of house very busy
- b. Implementation programs busy now
- c. Review ongoing for regulatory business
- d. A lot of activity but not far enough along for announcing yet
- e. Still early for regulatory action re. autonomous driving (regulation at state level)
- f. 2 areas working on
  - i. ELD rule-swamped with exemption requests; receiving a lot of questions on HOS rules; electronic record (not a device on a vehicle)
  - ii. Entry level driver training-implementation date Feb. 2020-developing data system that will support that rulemaking-performance based training; challenge-who's providing training?
  - iii. Several house-keeping rules underway

**10. NHTSA Report – Bob Kreeb (see presentation)**

- a. Bob Kreeb (NHTSA research) presenting for Alrik Svenson
- b. Introduced Lisandra Garay-Vega, also with NHTSA
- c. October NHTSA final rule-truck tractor and large bus stability control
- d. Heavy vehicle speed limiters-receiving and addressing comments
- e. Research activities
  - i. AEB systems and Advanced crash avoidance technology-FOT assessing performance of these systems (report on regulations.gov)
  - ii. AEB FOT completed with VTTI (150 trucks, 7 fleets)-user acceptance issues-published on NHTSA website; results: 6/7 fleets liked technology and would buy (important to note that fleets chosen that would not normally seek out these technologies)
  - iii. VTTI study on newer generation AEB system is underway (new systems from Bendix, Wabco, and Detroit Assurance)
  - iv. Safety benefits of heavy vehicle crash avoidance systems-Volpe; target population report now available

- v. Working with VTTI in human factor area-driver warning interfaces-visual vs. audio vs. mixed warnings
- f. Heavy vehicle V2V research
  - i. Heavy truck trailer basic safety message development study
  - ii. Heavy vehicle V2V retrofit feasibility
- g. Heavy vehicle cybersecurity research
  - i. UMTRI project on determining cybersecurity risks specific to heavy vehicles
  - ii. New joint study with FMCSA-cybersecurity best practices for integration/retrofit of telematics and aftermarket electronic systems in heavy vehicles
- h. Automated vehicles-reports applicable to light and heavy vehicles
- i. Comment: AEB integrations should be considered for federal rulemaking; NTSB agrees
- j. By 2022 every light vehicle will have AEB-this idea extended to heavy vehicle manufacturers; several heavy vehicle manufacturers putting these into operations

**11. NTSB Report – Jennifer Morrison (see presentation)**

- a. Jennifer Morrison presenting for Rob Molloy
- b. 4 new investigations
  - i. Biloxi , MS
    - 1. Motorcoach drives on railroad tracks, hit by train; 4 fatalities (3 of which where passengers exiting bus when train hits)
  - ii. Concan, TX
    - 1. Pickup truck weaving on road, hits shuttlebus, 13 of 14 occupants killed; all rear passengers wearing lap only belts
  - iii. Flushing, NY
    - 1. Transit bus turning, hit by motorcoach (3 fatalities including motorcoach driver, transit passenger, and pedestrian)
  - iv. Las Vegas, NV
    - 1. Self-driving shuttle hit by backing truck-no injuries or fatalities
- c. 4 completed investigations
  - i. San Jose, CA
    - 1. 9 barrel crash attenuator on hwy-reflective sheathing not present; greyhound bus with 20 passengers hit crash attenuator; greyhound bus has installed drive cam on fleet-very valuable; recommendations to FHWA re. left exits and barrier markings; seatbelts would have saved passengers not wearing belts from

being ejected out front windshield); AEB would have prevented crash

ii. Palm Spring, CA

1. Rolling road block, stopped traffic, tractor trailer stopped and never started again (fell asleep), rear-ended by motorcoach (12 fatalities); driver likely had undiagnosed sleep apnea; AEB would have prevented crash; Recommendations: develop guidance for traffic breaks and recommended osa evaluation for cmv drivers

iii. St. Marks, FL

1. Intersection collision, tractor trailer and blue bird school bus; bus blew through traffic beacon and stop sign; fire; 3 fatal inside bus and truck driver died (result of fire); recommendations: outreach to farm labor contractors to offer safe, reliable transportation, and side-mounted fuel tank crashworthiness

iv. Orland, CA

1. Side diesel tank eruption (10 fatalities)-further supports recommendation for side-mounted fuel tank crashworthiness

d. Upcoming events

- i. April 2018 Board Meeting
- ii. Sirius/XM radio podcast
- iii. Highway Crash Investigation 101 Course

**12. CVSA Report – Will Schaefer (see presentation)**

- a. Work to generate uniform inspections and train inspectors
- b. Operation Airbrake 2017-half of service violations are brake related
- c. Operation Safe Driver Week-traffic enforcement campaign
- d. ELD implementation-effective Dec. 2017; April 1 OOS violation will be issued
  - i. OOIDA states their members are currently getting OOS-should not be until April 1
  - ii. OOIDA states carrier is responsible for putting ELDs in place but driver is the one receiving violations/citations
- e. CVSA events (upcoming conference, workshops and symposiums)
- f. CVSA inspection bulletins updated ([www.cvsa.org](http://www.cvsa.org))
- g. OOS Criteria Handbook out April 1, 2018
- h. CVSA IDEA nominations due

**13. Association briefings / potential research needs**

- a. Michael Cammisa, VP, Safety Policy & Connectivity, ATA (see presentation)
  - i. 2018 Preparing for Change Theme
  - ii. Technology: AEB, rear view cameras, advance lighting, platooning, levels of automation; what can we learn about technology to improve crash

- avoidance? What changes will this new technology allow or require? Can ELD data provide insights?
- iii. Drugs and alcohol: What are detection methods for marijuana and other drugs? How will legalization of marijuana in some states affect drivers of passenger cars and trucks?
- iv. Other research needs: Truck parking, CSA, split sleeper berth, younger drivers
- b. Tom Weakley, Director of Operations, OOIDA
  - i. OOIDA president Jim Johnston passed away Jan. 8 after battling cancer
  - ii. OOIDA has fought ELDs for years
  - iii. Systems that retrofit/plug into trucks-OOIDA has serious concerns about plugging anything into an engine that has not been tested or verified by FMCSA or some third party testing organization.
- c. Brandon Buchanan, Director of Regulatory Affairs, ABA
  - i. Announcement of upcoming meetings - <https://www.buses.org/events>
  - ii. Wants to see buses included in CMV studies (not just trucks)
  - iii. Suggestion to invite congressional staff to our meeting
  - iv. Confusion with ELD requirements
  - v. Interested in FAST ACT initiatives
  - vi. Interested in engaging with advocacy community
  - vii. Concerned about city/state's increasingly taking an interest in safety regulations. Safety inspections are now being done by airport authorities and there is a proliferation of permitting requirements by cities and localities.

#### 14. Subcommittee Reports

- a. Motorcoach Safety – Charlie Vits
  - i. Met yesterday to discuss purpose of subcommittee and consider future and scope going forward.
  - ii. Discussed significant events involving motorcoaches in the past year that lead to identifying bus safety needs not being considered, members will submit RNS's on these items.
- b. Truck and Bus Safety Data Needs – Bob Scopatz
  - i. Met yesterday-Discussed future of subcommittee; discussed activities that committee would like to accomplish; reviewed domain circular for subcommittee and is planning to update; asked for volunteer to take over that committee-if interested contact Bob or Brenda
- c. Alternative Compliance – Sharon Newnam
  - i. Met yesterday-discussed accreditation programs (strengths and weaknesses); discussed best practice frameworks; 2 presentations;

discussion on expanding scope of committee to carrier safety management

- d. Technology – Abby Morgan
  - i. Meets tomorrow-2 presentations, 1 on connected vehicle pilot program; discussion on organizing webinars during the year-focused on technology
- e. Truck and Bus Operator Health and Wellness – Jeff Hickman
  - i. Meets tomorrow; 3 presentations

**15. Research Coordination/Needs Statements – Nicholas Kehoe**

- a. Research Needs Statements (RNS) Database - <http://rns.trb.org/>
- b. 1 new RNS in 2017; goal for 2018 is action to expand on these

**16. Update on the activities of the SSUG Young Member Council – Nicholas Kehoe**

- a. Mentoring program to match young members with seasoned members

**17. TRB Updates – Bernardo Kleiner**

- a. Spotlight theme for the 2018 meeting: *Transportation moves the economy of the future*
- b. Over 13,000 attendees, up 3%
- c. 6,000 paper submissions - Paper reviewing very important and appreciated!
- d. Over 800 sessions and workshops, 500+ meetings
- e. AMonline – all presentations, full paper or abstract - Every paper accepted will be on AM online-for those that choose, authors can submit extended abstract in lieu of full paper
- f. Sage publications taking over publishing of TRR
- g. Webinars – popular, good attendance, and well rated - submit ideas to Bernardo - need to be well thought out in scope; submit by March 15<sup>th</sup>
- h. 2020 – TRB centennial; retrospective on transportation and TRB
- i. Certificate presentation to Brenda Lantz - thank you for your service as Chair
- j. Spotlight theme for the 2019 meeting: *Transportation for a smart, sustainable, and equitable future*

**18. 2018 Mid-Year Meeting – All**

- a. Possible joint meeting with another committee/group?
- b. Subcommittee to begin work on updating Circular?



**19. 2019 Annual Meeting Activities and Plans/Ideas – All**

- a. Committee and Subcommittee meetings
- b. FMCSA sessions and Poster session



## 20. Roundtable discussion – All

- a. CMV Safety and CDL Compliance Summit – being organized by Brenda Lantz
  - i. For Western States – enforcement, CDL, and university participants
  - ii. November 28-29, 2018 in Denver, Colorado
- b. An Empirical Analysis of Truck Driver Hours and Testing an Economic Theory for Why They Work Long Hours (see presentation)
  - i. Presenter: Dr. Mike Belzer, Associate Professor, Department of Economics, Wayne State University
- c. Innovative approaches to Large Truck Safety in Ontario (see presentation)
  - i. Presenter: Patrick A. Byrne, Ph.D., Ontario Ministry of Transportation
- d. Other recent research projects / topics of interest

## 21. Additional Business and Announcements – All

## 22. Adjournment

### Subcommittee Meetings Minutes

#### 1. Motorcoach Safety Subcommittee

*Monday 10:15 AM- 12:00 PM*

Marriott Marquis, Marquis Ballroom Salon 13 (M2)

Charles Vits, IMMI, presiding

#### **Welcome and Introductions.**

Attending: Charles Vits, Julie Perrot, Deborah Quackenbush, Charlie Hood, Brian Sherlock, Bob Scopatz, Pete VanDyke, Les Brusza.

#### **Minutes of Last Meeting**

Minutes from 2017 subcommittee meeting were distributed and used to further the discussion on the sub-committee direction.

#### **Review of significant safety events in 2017:**

- California passed bill SB 20 related to motorcoach belt use. This bill requires a passenger who is 16 years of age or older in a bus that is equipped with safety belts to be properly restrained by a safety belt and would require a motor carrier to maintain those safety belts in good working order for the use of the passengers. The bill prohibits a parent, legal guardian, or chartering party from transporting on a bus that is equipped with safety belts, or permitting to be transported on a bus that is equipped with safety belts, a child, ward, or passenger who is 8 years of age or older, but under 16 years of age, unless he or she is properly restrained by a safety belt. The bill also prohibits a parent, legal

guardian, or chartering party from transporting on a bus that is equipped with safety belts, or permitting to be transported on a bus that is equipped with safety belts, a child, ward, or passenger who is under 8 years of age and under 4 feet 9 inches in height, unless he or she is acceptably restrained by a safety belt, except as specified. The bill exempts a passenger leaving his or her seat to use an onboard bathroom from the seatbelt requirement. The requires a motor carrier operating a bus equipped with safety belts to either: (1) require the bus driver to inform passengers of the requirement to wear a seatbelt or (2) post, or allow to be posted, signs or placards informing passengers of the requirement to wear a seatbelt, as specified. The bill make a violation of these provisions an infraction punishable by a fine of not more than \$20 for a first offense and a fine of not more than \$50 for each subsequent offense. The bill does not apply to a school bus or a school pupil activity bus.

This bill requires the driver to be properly restrained by the safety belt and require the motor carrier to maintain the driver safety belt. The bill makes violation of these provisions an infraction punishable by a fine of up to \$20 for the first violation and of up to \$50 for subsequent violations.

Also required is written or video instructions to include among other things, instructions on the requirement to wear a seatbelt, and the penalties for violating that requirement.

- Discussion went on to include other motorcoach items identified as needing safety improvement such as driver vision obstructions by mirrors and/or body structure.
- Discussed messaging to motorcoach/bus passengers concerning the use of occupant restraints when available. Several documents were supposedly already in existence including a proposal from the NTSB, Florida, and Greyhound
- Julie Perrot reported that the NTSB would be scheduling a report presentation in April on the investigation of the Baltimore and Chattanooga school bus crashes. She also reported on recent NTSB involving bus and motorcoach crashes in New York City; St. Mark's, FL; Livingston, CA; Concan, TX; and Biloxi, MS.

- Regulatory Update – no one was aware of any federal regulatory changes passed in 2017 impacting motor coaches. The need for more attention to 10,000 – 26,000 lb. GVWR occupant protection was discussed.

**Discussion – Future direction of committee in relation to Truck and Bus committee and consideration of scope of the sub-committee.**

- The future of the Motor Coach Subcommittee was discussed as a follow-up to the initial discussion in last year’s meeting as well as in the mid-year Truck and Bus Committee meeting. Committed direction options:
  - Continue subcommittee as is using current focus on large motorcoach
  - Change scope of subcommittee to broaden or decrease it.
  - To sunset subcommittee
- Response points:
  - Truck and Bus committee agreed in mid-year meeting to review all the scope of all exiting sub-committees in 2018 as a focused task. Bob Scopatz confirmed this direction.
  - When considering earlier meeting discussion, it was noted that there remain many areas that required research related to motor coach and bus. It was agreed that the sub-committee should continue its existence.
  - Discussion continued that confirmed last year’s subcommittee sentiment that the subcommittee scope needs to expand to include other bus types since many safety issues were common across all bus types.
  - Consensus was that the parent Truck and Bus committee had greater focus on truck issues and not bus thus furthering the need for the subcommittee.
  - Charlie Vits would address these points with the parent committee in upcoming discussions related to subcommittee scope

**Research Needs Statements**

- Charlie Vits would forward Research Needs Statement and sample to subcommittee members to initiate transforming research topics discussed in meeting and from other sources into RNS documents for submission. This is a primary purpose of this TRB subcommittee and Charlie committed to helping develop any proposed statement documents and submit them to the Truck and Bus Committee

## 2018 Activity, Opportunities, Meetings

- Charlie Vits to investigate mid-year conference call meetings to continue discussions and continue progress in research.

### Meeting Adjournment

Charles Vits

January 11, 2018

2018 MOTOR COACH SUBCOMMITTEE ATTENDANCE		
Name	Organization	Email
Charlie Vits	IMMI	<a href="mailto:cvits@imminet.com">cvits@imminet.com</a>
Julie Perrot	NTSB	<a href="mailto:julie.perrot@ntsb.gov">julie.perrot@ntsb.gov</a>
Deborah Quackenbush	Virtual Excellence	<a href="mailto:Daquack@aol.com">Daquack@aol.com</a>
Charlie Hood	NASDPTS	<a href="mailto:execdir@nasdpts.org">execdir@nasdpts.org</a>
Brian Sherlock	ATU	<a href="mailto:bsherlock@atu.org">bsherlock@atu.org</a>
Bob Scopatz	VHB	<a href="mailto:bscopatz@vhb.com">bscopatz@vhb.com</a>
Pete Van Dyke	Liberty Mutual	<a href="mailto:Peter.vandyke@libertymutual.com">Peter.vandyke@libertymutual.com</a>
Les Bruzsa	NHVR Australia	<a href="mailto:Les.bruzsa@nhvr.gov.au">Les.bruzsa@nhvr.gov.au</a>

## 2. Truck and Bus Data Subcommittee

*Monday 1:30 PM- 3:15 PM*

Marriott Marquis, Marquis Ballroom Salon 8 (M2)

Robert Scopatz, VHB, presiding

- **Welcome and Introductions**

Bob Scopatz opened the meeting and the attendees introduced themselves.

Attendees were:

Name	Contact email	Organization
Bob Scopatz	<a href="mailto:bscopatz@vhb.com">bscopatz@vhb.com</a>	VHB
Bill Bannister	<a href="mailto:William.Bannister@dot.gov">William.Bannister@dot.gov</a>	FMCSA
Andrew King	<a href="mailto:Andrew_King@ooida.com">Andrew_King@ooida.com</a>	OOIDA
Pete VanDyne	<a href="mailto:Peter.vandyne@libertymutual.com">Peter.vandyne@libertymutual.com</a>	Liberty Mutual Insurance
Andrew Miller	<a href="mailto:Amiller@vtti.vt.edu">Amiller@vtti.vt.edu</a>	VTTI
Moggan Motamed	<a href="mailto:mogganmotamed@westat.com">mogganmotamed@westat.com</a>	Westat
Jenny Guarino	<a href="mailto:Jenny.Guarino@dot.gov">Jenny.Guarino@dot.gov</a>	DOT/FMCSA
Jianrong Qiu	<a href="mailto:Jocelyn.Qiu@monash.edu">Jocelyn.Qiu@monash.edu</a>	Monash University
Guang chen	<a href="mailto:Gchen@cdc.gov">Gchen@cdc.gov</a>	Niosh
James Yiin	<a href="mailto:jcy5@cdc.gov">jcy5@cdc.gov</a>	NIOSH
Samuel Taylor	<a href="mailto:sgt9@nau.edu">sgt9@nau.edu</a>	Northern Arizona University

- **FMCSA Update**

Bill Bannister provided information on FMCSA ongoing and upcoming research projects.

- Police Accident Reporting Advisory Committee: the FAST act required FMCSA to establish a working group to review State crash data reporting and make recommendations on additional crash data elements that should be collected by FMCSA. The primary recommendation was that FMCSA expand its crash data systems to accept all MMUCC5 data elements and work with the States to encourage them to adopt the MMUCC5 crash data elements in their police accident reports. I gave a presentation on this at the FMCSA Analysis, Research, and Technology Forum on Tuesday morning of TRB.
- Data Quality Training: FMCSA conducted data quality training at a CVSA sponsored workshop in August 2017 in Orlando, FL. The training was for State data analysts responsible for reporting crash and inspection data to FMCSA. There were approximately 100 attendees. FMCSA and CVSA will conduct data quality training workshops every 18 months, with the next one scheduled for January 2019.
- Recidivism Study: FMCSA and the Volpe Center developed the Carrier Intervention Effectiveness Model to estimate the safety benefits (crashes and injuries prevented, lives saved) from CSA interventions (e.g., investigations, warning letters). The model assumes that the positive impact of the interventions lasts for a year from the date of the intervention. We plan to do a study to assess how long the positive benefit of the intervention lasts and when its affect declines.
- Safety Analyses: The Analysis Division will conduct analyses of FMCSA data to assess safety performance of a variety of CMV scenarios. One example is comparing the safety performance of carriers that don't comply with credentialing requirements (e.g., paying URS fees, IFTA reporting) with carriers that do comply.

- **Review of data-related portions of the "Domain" e-circular.**

Bob described the e-circular (E-C117; May 2007)

URL=<http://onlinepubs.trb.org/onlinepubs/circulars/ec117.pdf>

- He said that the subcommittee could do well to update the data portions of that document. Volunteers to help with that effort included:
  - Bill Bannister** (FMCSA data) with Jenny Guarino
  - Andrew King** (on industry data needs)
  - Pete VanDyne** (on non-research uses)
  - Andrew Miller** (on naturalistic driving study data)
  - Moggan Motamed** (on FARS and State data)

**Guang Chen** (on truck driver data)

**Samuel Taylor** (on State and HSIS data)

- **Data Sources and Resources**

Our data sources and resources compendium needs a refresh. There are dead links; files that are no longer being updated (but for which archival data are still available); and new files (such as naturalistic data sources) that are not yet listed.

We need a couple of volunteers to work on the file.

Bob will reach out to a small group to discuss the possibility of taking this task on.

URL=<https://www.ugpti.org/trb/truckandbus/subcommittees/datasources.php>

- **Research Needs Statements**

Nicholas Kehoe is leading the effort for ANB70. Our subcommittee has contributed a number of ideas over the past, including several that were prepared as fully developed RNS documents using the TRB format.

We are always looking for more ideas.

There is a new Behavioral Traffic Safety Cooperative Research Program (BTSCRCP) being sponsored by NHTSA and managed by GHSA. Ideas will be submitted separately to that program, and the deadline is coming up shortly after TRB (update: mid-February)

- **New Subcommittee Chair**

We have received two volunteers (so far) to take over the Data Needs Subcommittee. Others interested in taking over the subcommittee should contact Brenda and Bob as soon as possible. We are heading into a committee membership rotation this year and we want to get the subcommittees chairs lined up.

### 3. Motor Carrier Alternative Compliance

*Monday 6:00 PM- 7:30 PM*

Marriott Marquis, Marquis Ballroom Salon 8 (M2)

Sharon Newnam, Monash University, presiding

- **Welcome and Introductions**

- Fourteen attendees were present at the meeting (a list is provided).
- The meeting commenced with introductions and an overview of the agenda.

- **Accreditation programs**

- *Paul Ryan* (Victorian Transport Authority, Australia) provided an overview of three accreditation schemes in Australia (TruckSafe, National Heavy Vehicle Accreditation Scheme & Main Roads Western Australia). (See presentation)
- Paul focused on the structure of the schemes, effectiveness, role of auditors, and inspections.
- Group discussion focused on the strengths and weaknesses of the schemes and comparisons with the U.S.

- *Les Bruzsa* (NHVR, Australia) commented that an independent review will be conducted in Australia to identify effective elements of existing accreditation schemes (as discussed by Paul) and ensure they apply consistently across Australia. The aim of this exercise is to promote a national approach to accreditation.

**Action:**

- Les Bruzsa will provide an update on the independent review of accreditation at the mid-year meeting.

- **Best practice frameworks**

- An overview of the Partners in Compliance Program that operates in Alberta, Canada was provided. (See related document)
- The aim of the program is to assemble motor carriers and demonstrate excellence in safety and compliance performance.
- The history of the program was provided as well as its structure and operation.
- Discussion focused on future plans to expand the program to the provinces and similarities with the TruckSafe program in Australia.

**Actions:**

- The policy and operations manual will be posted on-line following the meeting.
- Evidence of other best practice frameworks will be provided at the mid-year meeting

- **Update from FMCSA on Beyond Compliance Program**

- *Gene Bergoffen* (MaineWay Services) provided an update on the Beyond Compliance Program. (See presentation)
- The presentation focused on the results from interviews with carriers, outcomes with three case studies a synthesis of the literature.
- Future steps for the program was discussed.
- The group discussion focused on the generalizability of the results to other carriers, particularly smaller fleets. Discussion also focused on the future plans to promote innovative behaviour in smaller fleets, through the use of resources and incentives, as well as the challenges in reaching these carriers.

**Action:**

- Gene Bergoffen will provide an update on the Beyond Compliance Project will be provided at the mid-year meeting.

- **Research paper presentations**

- *Sharon Newnam* (Monash University Accident Research Centre) presented her research in a system-based approach to crash investigations. (See presentation)
- The presentation focused on recent analysis of 27 NTSB reports in the U.S which identified factors contributing to crashes at multiple levels of the road freight transportation system, including environment, drivers, companies, regulatory agencies and government bodies.
- *Will Schaefer* (CVSA) stated that there will be discussions regarding the development of a uniform crash investigation system that can be applied a national level. There was discussion on the possibility of extending the scope of these discussions to include other parties (e.g., scholars).
- *Ron Knipling* (Safety for the Long Haul, Inc.) commented that this research showed similarities to the Large Truck Crash Causation Study in the U.S.
- *Michael Belzer* (Wayne State) provided a brief update on his research focused on work-stress factors associated with truck crashes. (See presentation)
- This study used data from the Large Truck Crash Causation Study to predict truck crashes based on work pressure factors driven by market pressures. The presentation focused on how economic factors contribute significantly to truck crashes.
- Discussion focused on how this research highlights the role of factors extending beyond the driver that contribute to crashes.

**Action:**

- Will Schaefer will provide an update on discussions regarding crash investigations in the CVSA.
- Sharon Newnam's paper will be posted on-line following the meeting.

- **Expanding the scope of the subcommittee**

- Group discussion focused on the history of the sub-committee and its intention to focus on safety management.
- Group consensus was attained in changing the sub-committee name to "*Carrier Safety Management*"



**Action:**

- Feedback on the suitability of the new sub-committee name is sought from members and friends that were unable to attend the meeting, either prior to or at the mid-year meeting

- **Other business**

- *Ron Knipling* (Safety for the Long Haul, Inc.) made the suggestion (following the committee meeting) that the dismantled driver training subcommittee be integrated within this sub-committee. Ron stated that driver training aligns with the goals of the subcommittee and that it could be included as a regular agenda item at group meetings.

**Action:**

- Group discussion focused on expanding the scope of the Carrier Safety Management Committee to include Driver Training at the mid-year meeting.

- **List of attendees**

Name	Affiliation
Sharon Newnam	Monash University Accident Research Centre, Australia
Paul Ryan	Victorian Transport Authority, Australia
Luke Loy	U.S DoT, FMCSA
Brian Taylor	Intelligent Imaging Systems, Drivewyze
Will Schaefer	Commercial Vehicle Safety Alliance
Crystal Frederik	U.S DoT, FMCSA
Bob Scopatz	VHB
Abigail Potter	American Trucking Associations
Ron Knipling	Safety for the Long Haul, Inc.
Brenda Lantz	NDSU-UGPTI
Michael Belzer	Wayne State
Gene Bergoffen	Road Runner
Les Bruzsa	National Heavy Vehicle Regulator, Australia
Carlyn Muir	Monash University Accident Research Centre, Australia

#### 4. Truck and Bus Technology Subcommittee

*Wednesday 8:00 AM- 9:45 AM*

Marriott Marquis, Marquis Ballroom Salon 13 (M2)

Abby Morgan, Kittelson & Associates, Inc. (KAI), presiding

- Introductions & Review of existing Research Needs Statements – there were 20 attendees
- Presentation: **Evaluation of Ontario’s Large Truck Speed Limiter Legislation**, Patrick Byrne, Ph.D., Road Safety Research Office, Safety Policy and Education Branch, Ministry of Transportation of Ontario (see presentation)
  - In 2009, Ontario implemented legislation compelling large truck (Gross Vehicle Weight Rating > 11,793 kg) operators to set speed limiters on their vehicles to a maximum of 105 km/h (65 mph) when operating within the province. Results were presented from a recently completed evaluation of the overall road safety impact of this legislation performed by the Road Safety Research Office of the Ontario Ministry of Transportation. Areas that require further investigation were discussed, as well as areas where new or improved technology could be of benefit.
- Presentation: **Wyoming’s Connected Vehicle Pilot Deployment Program**, Abby Morgan, Ph.D., P.E., Connected and Automated Vehicle Project Lead, Kittelson & Associates, Inc.
  - The USDOT-sponsored Connected Vehicle Pilot Deployment Program in Wyoming is focused on freight vehicle applications. Many of the CV applications focus on improving weather-related travel information sharing to improve freight logistics across I-80. A general overview of the deployment was presented. More information is available at: [wydotcvp.wyroad.info/](http://wydotcvp.wyroad.info/) or [its.dot.gov/pilots/](http://its.dot.gov/pilots/)
- Discussion: **Research Needs Statements**
  - [RNS: Indirect Visibility Systems \(IVSs\) on Buses](#). Conduct literature review and focus groups to identify potential indirect visibility system configurations for certain bus types to improve visibility, increase driver situation awareness, and reduce crashes.
    - Update: VTTI is conducting mirror visibility study on buses in New York City. (Andrew Krum, VTTI)
  - [Pilot Test of Truck Platooning](#). Conduct a pilot test to determine the safety and fuel efficiency benefits of truck platooning employing vehicle-to-vehicle communications and synchronized braking and acceleration.
    - Update: What should we look at for platooning mental health (e.g., alertness, level of fatigue)? (Pierre Thiffault, Transport Canada)

- Discussion: **Mid-year meeting ideas / webinars**
  - The Subcommittee agreed to host technology-relevant webinars throughout the year.
  - The webinar presentations may be saved as an e-Circular.
  - Possible Topics:
    - Electronic Logging Devices (ELDs) are mandated by FMCSA, and CVSA will begin enforcement in April 2018. Discuss the mandate, enforcement plans, ELD equipment reliability and certification process, and the challenges of assigning violations to drivers when the fleet is responsible for installing the aftermarket devices. (Julie Perrot, NTSB and Will Schaefer, CVSA)
    - Brake Systems:
      - Foundation brakes
      - Automatic Emergency Braking (AEB) Systems
      - Continue discussions on disc vs. drum brakes and combination disc/drum systems on tractor-trailer combinations, which will take place at ATA's [Technology & Maintenance Council \(TMC\) annual meeting](#) March 5-8, 2018. (Bill Gouse, SAE Int'l) <tmcannual.trucking.org>
    - Policy:
      - Automated vehicle policy for trucking (AASHTO)
      - Driver Alertness / Monotonous Driving Tasks
      - Hours of Service (vigilance vs. fatigue)
    - Pilot Projects & Test Tracks: Discuss ongoing pilots and test sites. Discuss data needs for pilots to support potential rulemaking changes (such as hours of service).

## 5. Truck and Bus Operator Health and Wellness Subcommittee

*Wednesday 10:15 AM- 12:00 PM*

Marriott Marquis, Marquis Ballroom Salon 13 (M2)

Jeffrey Hickman, Virginia Polytechnic Institute and State University, presiding

- 10:15a-10:25: Introductions – there were 29 attendees
- 10:25a-55a: Dr. Guang Chen: Delivery schedules linked to job satisfaction, opinions on safety regulations/laws, and regulation/laws compliance, NIOSH Survey of U.S. Long-Haul Truck Driver Health and Injury. (See presentation)
- 10:55a-11:10a: Dr. Karl Sieber: New NIOSH Health Research Initiative (See presentation)

- 11:10a-11:40a: Dr. Jeff Hickman: Update on Commercial Driver Individual Safety Risk Factors study (See presentation)
- 11:40a-noon: Discussion and comments on National Occupational Research Agenda for Transportation, Warehousing and Utilities (See presentation)
  - Discussed NORA Research Agenda for next 10 years, with focus on Objective 3: Health and Wellness of TWU workers.