TRB COMMITTEE ON TRUCK & BUS SAFETY (ANB70) ANNUAL MEETING MINUTES JANUARY 2016

Tuesday, January 12, 2016: 8:00 AM – 12:00 PM Eastern Location: Marriott Marquis, Marquis Ballroom, Salon 12 (M2)

- 1. Welcome & Introductions All
- 2. Review of Mid-Year Meeting 2015 Notes Erin Mabry
 - a. Posted at: http://www.ugpti.org/trb/truckandbus/meetings/
- 3. Paper Review Summary and Discussion
 - a. 2015-2016 Papers Summary Bob Scopatz and Brenda Lantz
 - i. 23 papers, 20 submitted for publication
 - ii. 10 accepted for presentation (poster)
 - iii. 6 selected for revision and review can ultimately accept up to 4 papers
 - iv. Reminder to please complete re-reviews by Monday, Jan. 25
 - b. 2014-2015 Paper Award Bob Scopatz, Jerry Krueger, and Jeff Hickman
 - i. ANB70 Deborah Freund Paper Award to: 15-4666 Machine Learning for Commercial Motor Vehicle Drivers' Driving Pattern Recognition
 - 1. Discrete-time logistic regression models are used to quantify the relationships between driving activity patterns and crash risk
 - ii. Authors: Chen Chen and Yuanchang Xie, Department of Civil and Environmental Engineering, University of Massachusetts Lowell



4. Committee Membership

- a. Member changes
 - i. Rob Molloy replaced Barbara Czech as our NTSB representative
 - ii. Will Schaefer replaced Steve Keppler as our CVSA representative
 - iii. George Soodoo retired from NHTSA, and resigned from the committee
- b. Committee rotation
 - i. Need to rotate off one-third of members and appoint new members
 - ii. Can have 25 members, plus -
 - 1. Five (5) additional international members, four (4) additional young members (35 years or younger), and two (2) additional employees of state DOTs
 - iii. Will look to active friends for membership, and also open to nominations or recommendations for members

- iv. Several committee members are at 9-year limit, but can re-appoint with justification
- v. Look for balanced representation of the relevant disciplines including employer types or affiliations

5. Committee Communications – Brenda Lantz and Erin Mabry

- a. Website / Communications Coordination
 - i. http://www.ugpti.org/trb/truckandbus/
 - 1. Any additional upcoming events or resources to post?
 - ii. Erin Mabry Committee Communication Coordinator
 - 1. There were no requests for additional social media (FB, twitter)
 - 2. Email Erin at: emabry@vtti.vt.edu if not receiving emails, or if you would like to add resources to website, etc.
- b. Updates to TRB's Communication Portfolio:
 - i. MyTRB allows people to update their contact information, join committees as a "friend," etc.
 - ii. Online Conferences and Meetings will continue to be supported by TRB
 - iii. eGroups is an online discussion forum and professional network, which currently has eight (8) communities

6. Research Coordination/Needs Statements - Ron Knipling

- a. Research Needs Statements (RNS) Database http://rns.trb.org/
 - Dynamic collection of research needs statements developed and approved by the standing committees that reflects the high priority research needs at any given time
- b. Ron briefly reviewed the 55 Truck & Bus Safety Research Needs in 11 focus areas (available from the committee website home page), and encouraged further review and feedback
- c. Have an idea-develop into a statement with objectives and send to Ron
- d. Research organizations will review and match with their priorities
- e. Ron suggests starting with a problem/needs statement
- f. RNSs might help researchers, such as those submitting papers to us, to understand and target important truck and bus safety problems
- g. Acknowledged by FMCSA as part of their review process

7. FMCSA Report - Safety Research Initiatives - Steve Smith

- a. Activities in 2015
 - i. Data mining and inspection
 - 1. Getting a handle on underreporting of crashes (UMTRI)
 - ii. Driver distraction, eye glance analysis
 - iii. Impact of safety culture on motor carriers

- iv. Large truck and bus crash report (FARS data)
- v. Grant program to encourage states to use technology
- vi. Annual report on safety data improvement program
- vii. Large Truck Occupant Fatalities
- viii. Pedestrian and Bicyclist Fatalities
- ix. National Academies Panel on Fatigue Research and Statistics
- x. Electric Drive Safety Inspection Procedures
- xi. Driver Restart Study
- b. Looking Ahead, 2016
 - i. Sleeper Berth Pilot Project
 - ii. Fixing America's Surface Transportation (FAST Act) Act Research Activities
 - iii. Commercial Driver Commuting
 - iv. Correlation Study [SMS]
 - v. Safety impact of using military trained drivers for CMVs
 - vi. Circulate committee research needs statements (RNS) for determining possible ideas for research.
 - vii. Driver health
 - viii. Reduce crashes in work zones
 - ix. Reducing pedestrian/bicycle crashes-potential technologies
 - x. Question: CMV restart?
 - 1. Answer: In department review, no dates to confirm yet

8. FMCSA Report - Policy and Rulemaking Initiatives - Tom Yager (see presentation)

- a. ELD-final rule out-effective in February voluntary compliance; vendors can register devices on the website; mandate Dec. 2017 carriers must switch to ELD; outreach and info materials on ELD's to come on FMCSA website
- b. Final rule on coercion; provides penalties for carriers, shippers and receivers and brokers for coercing driver into violating FMCSA regulations; requires an act listed in rule: alleged violator has to threaten driver with punitive action.
- c. Speed limiters-joint rule with NHTSA
- d. Safety fitness determination (SFD)-proposed rule at federal register for publication; will replace rating carriers (3 categories); explains data to be used for rating carriers
- e. Proposed rule on entry level driver training-formal training required before licensure; negotiated rule making, group agrees on general framework of rule; proposal at OMB, to come out soon; process of registries for programs that meet standards for training; quality controlled handled on complaint basis-registry removal
- f. Drug and alcohol clearinghouse-process set up to post/register failure

- g. FAST Act -5 year reauthorization bill; review Title V; money appropriated on an annual basis
 - Rulemaking process-beef up regulatory process; if major rule coming down the line, must do advanced notice of proposal or negotiated rulemaking
 - ii. Regulatory guidance-700 questions and answers that are regulatory guidance; requires posted on website, detailed info and requires review to determine if needed/valid, etc. Must be reviewed every 5 yrs
 - iii. Petitions for rulemaking posted on website, prioritized
 - iv. Regulatory exemptions-5 years before renewal
 - v. Statutory rulemaking-26 outstanding, must be reviewed, prioritized and posted; 7 new added in FAST act
 - vi. 34-hour restart-rule suspended; requirements added
 - vii. CSA program from carrier-crashes, violations, etc.-used to analyze carriers safety; studies ongoing to improve CSA program
 - viii. Mandates for FMCS advisory committee-crashes reported from policehard to attribute fault; crashes against carrier regardless of fault; difficult to handle
- h. Upcoming studies: Veterans obtaining CMV licensure, hair testing for drug/alcohol testing, windshield technology, delays for motor carriers (shippers/receivers)-attributes to fatigue issue, motor carrier safety assistance program provisions, Alternative (beyond) compliance incentives for carriersdevelop process, certification of all data systems, review of how handle preventable crashes, consolidates grants programs/add money
- i. Any questions-email tom.yager@dot.gov
- j. Action item: Post link to Title V on website.
 - i. This has been posted to the committee website, under the Materials link.
- 9. NHTSA Report Abby Morgan (see presentation)
 - a. George Soodoo retired; new contact is David Hines, david.hines@dot.gov
 - b. FAST Act provisions-many dealing with light vehicles
 - c. Crashworthiness projects
 - i. Rollover structural integrity-publishing final rule
 - ii. Advanced glazing
 - iii. Motorcoach evacuation
 - iv. Fire safety-final report to release soon
 - d. Updates on crash avoidance

- ESC-require Yaw and Roll stability control, published June 2015; creating test procedures, working with industry now on response to petition for rulemaking
- ii. Heavy vehicle speed limiters-2 petitions for rulemaking granted 2011;NPRM in OIRA review
- iii. Forward crash avoidance and mitigation (automatic emergency braking)received petition for rulemaking-petition granted; testing tractors now; research docket just opened-adding research reports in 2016
- iv. Field operational test-track performance of crash avoidance systems;
 final report early spring 2016; considering follow on study to test next
 generation systems; understanding driver response to these systems
 (current and new)
- v. V2V communication-research summary report early 2016; focusing more on heavy vehicle; reach out to NHTSA if working on this
- vi. Question: How many V2V DSRC devices needed on tractor trailer?
 - 1. Answer: Goal is to have just one (study not officially awarded)

10. NTSB Report – Rob Molloy (see presentation)

- Barbara Czech stepped down from committee-more rail work; Rob acting director of Highway Safety, 4 board members for this year (until election)
- Most wanted Safety list-strengthen commercial trucking safety (recognizing FMCSA and NHTSA); to be released Wednesday at TRB (several related to trucking/bus) – see www.ntsb.gov/mostwanted
- c. Completed investigations
 - i. Predominately CMV
 - ii. Orland, CA (4/10/14)-CMV truck and motorcoach crash;
 recommendations-seat belt use, pre-trip safety briefs, secondary door,
 improved flammability for motorcoaches, EDRs, improved window egress
 and visibility
 - iii. Cranbury, NJ (6/7/14)-CMV truck and limo van-recommendations: work zone safety, pre-trip briefings, EMS improvements, fatigue management (commuting CMV drivers), FCW data collection, onboard monitoring program, limo van exit requirements, advanced speed limiters
 - iv. Davis, OK (9/26/14)-drugs (synthetic marijuana) found in commercial busrecommendations: seat belts, median barriers, EDRs, adjustable seats

d. Studies

- i. Safety report: CMV onboard video systems-loss of consciousness
- ii. SIR: Forward Collision Avoidance Systems-recommendations: manufacturer standard on truck, buses, cars

e. Current Investigations

- Naperville, 1/27/14: CMV truck broken down, emergency response vehicle and officer were hit by another CMV truck while assisting-CMV driver 2 over HOS
- ii. Anaheim, CA 4/24/14: bus run off road into tree
- iii. Red Lion, DE 9/21/14: motorcoach took turn too quickly, rollover
- iv. Knoxville, TN 12/2/14, school bus driver texting while driving, hits another bus
- v. Penwell, TX 1/14/15-prison bus pulled off road and hit by train, no seat belt use
- vi. Oxnard, CA 2/24/15; truck driver drove down railroad tracks, train derails, truck driver fatigue
- vii. Chatanooga, TN 6/24/15, CMV truck driver impairment
- viii. Houston, TX 9/15/15, distracted passenger vehicle hit school bus, no seat belt use, 2 child fatalities
- ix. Seattle, WA 9/24/15, duck and motorcoach collision
- x. Little Rock, AR 11/6/15-motorcoach, driver fatigue, drivers not authorized to drive (no commercial license)

f. Other items

- i. Pedestrian forum-May 10
- ii. Report on backseat safety (passenger vehicles)
- g. Question: Commuting truck drivers-any regulations at this time?
- h. Suggestion-long reports, long lag time for investigations, family members left in the dark.
 - i. Response: Goal is to close investigations within year of event; sometimes local police don't cooperate-extends time

11. CVSA Report – Will Schaefer

- a. CVSA Spring Workshop April 24-28, 2016 in Chicago, IL
- b. CVSA Size & Weight policy under review
- c. New FMCSA Electronic Logging Device rule working on rollout
- d. April 1, 2016 NAS Out of Service Criteria
- e. CVSA petition to FMCSA re: eliminate 30 minute rest break difficult to enforce
- f. CVSA petition to PHMSA re: placarding hazmat tank vehicles
- g. CVSA desires federal Safety Chains requirement for full trailers
- h. Adjudicated citations CVSA seeks for FMCSA to distinguish between violations "dismissed" (without any court review) and found "not guilty" (as a result of a court review)
- i. CVSA is considering an electronic inspection concept for the future

- j. New CVSA decal under development
- k. Working with states on FAST Act implementation
- I. New inspection bulletin for Unified Carrier Registrations enforcement postponed until February 1, 2016.
- m. Pleased to see CMV passenger seatbelt requirement rule
- Out of service (OOS) violation changes/provisions in works: Solid objects lodged between tires-considered OOS violation, gas (hydrocarbon gas fuel) leak detection, unified single OOS violation for disconnected electrical connector (rather than multiple lamp outages)

12. Association briefings / potential research needs

- a. Rob Abbott, VP of Safety Policy, ATA
 - i. Objectives, recent successes, future plans, research needs
 - ii. Legislative
 - FAST act
 - 2. Supportive of data reliability, CSA, hair testing, regulatory reform provisions, ELD in support of, entry level driving training, safety fitness determination proposal
 - iii. Research needs
 - 1. CSA-SMS reliability issue-relationship between high scores and future crash rates, exposure, fleet size, etc.
 - 2. Beyond compliance incentives for fleet
- b. Tom Weakley, Director of Operations, OOIDA
 - i. OOIDA's response to several provisions of the FAST ACT
 - ii. OOIDA's concerns about the F4A recent rulings
 - iii. Participation in a Health and Wellness program
 - iv. Continued legislative issues and judicial reviews
 - v. TRB papers better on correlation/causation
 - 1. Chief concerns-statistical significance vs. real world significance
 - vi. Concerns about representation of the industry (addressed in FAST act); small carriers aren't often represented in research
 - vii. FAST act concerns-CSA scores re-evaluation, glad to see scientific methodology for fatigue, federal agencies targeting technologies vs. drivers
 - viii. Pushing entry level driver training
 - ix. Entry level driver training data committee-no data to support
 - x. Support chain of responsibility-ex. Shippers and receivers not concerned for drivers time
 - xi. Prioritize driver training rather than technologies

- xii. Will challenge ELDs, speed limiters
- xiii. Beyond compliance will be challenged-how will small carriers fit into this?
- xiv. Comment: Driver training effectiveness-difficult to show effectiveness
- c. Brandon Buchanan, ABA (not able to attend)

13. Subcommittee Reports – see committee meeting minutes at the end of this document

- a. Truck and Bus Operator Health and Wellness Jeff Hickman
 - i. Three (3) presentations: Dr. Thiese (Framingham CV score and crash risk),
 Dr. Chen (LHTDS, seat belt use and crash risk) and Dr. Hickman (methods for ongoing CDIDS project)
 - ii. Grey area for funding-DOT vs. NIH
- b. Truck and Bus Safety Data Needs Bob Scopatz
 - i. Discuss plans for this year, assign help
- c. Motorcoach Safety Tom Yager
 - i. Presentations and open discussion of research needs
- d. Alternative Compliance Gene Bergoffen (see presentation)
 - i. FMCSA took two actions last year to support alternative compliance
 - ii. FAST act (Section 5222)-research concept has been embraced! Now being defined as "Beyond Compliance"
 - iii. FMCSA has scheduled two (2) listening sessions for input (seeking out best practices)
- e. Technology George Reagle
 - i. Will discuss Beyond Compliance
 - ii. What will happen in 5 years regarding technology?
- f. Driver Training Tom Weakley
 - i. Discussed rule making on driver training
 - ii. No cost benefit analysis
 - iii. No # on CDL's issued/year
 - iv. No data-company's unwilling to share data
 - v. Mexico DOT looking at best way to approach/train drivers where dust storms-have grant money to address. Looking to build a training program or curriculum
 - vi. Representative speakers on simulators, effectiveness of simulators

14. Update on the activities of the SSUG Young Member Council

a. There is an interactive online community (http://ymc.groupsite.com) and committee website, with resources for young and new members at: https://sites.google.com/site/youngmemberscouncil

15. TRB Updates – Bernardo Kleiner

- TRB Executive Committee has spotlighted critical issues in transportation for Sessions at this year's meeting
 - i. Transformational Technologies, Resilience, and Public Health
- b. Paper reviews for TRB key-thank you!!!
- c. Transportation Innovation-theme for next year
 - i. March 15 deadline to submit ideas for TRB 2017
- d. Propose ACRP, NCHRP, and TCRP Synthesis Study Topics
 - i. The Airport Cooperative Research Program (ACRP), National Cooperative Highway Research Program (NCHRP), and Transit Cooperative Research Program (TCRP) are seeking study topics for the Synthesis Studies Program - http://www.trb.org/SynthesisPrograms/Public/Suggest.aspx
- e. IDEA (Innovations Deserving Exploratory Analysis) Programs http://www.trb.org/IDEA
 - i. Fosters new ideas and awards start-up funding, open to everyone
- f. Practice-Ready Papers (PRP) Database http://prp.trb.org/
 - Papers identified by standing committees as having potential interest to practitioners as practice-ready

16. 2016 Mid-Year Meeting - All

- a. Possibly form a subcommittee to begin work on updating our Circular?
- b. Mid-year-Joint committee meeting potentially, ideas to circulate later

17. 2017 Annual Meeting Activities and Plans/Ideas - All

- a. Committee and Subcommittee meetings
- b. FMCSA sessions and Poster session
- c. Theme: "Transportation Innovation: Leading the way in an era of rapid change"
 - i. Think of ideas for planning

18. Roundtable discussion - All

- Alejandra Cruz-Ross, Road Transport Sector International Labour Organization:
 Conclusions and Resolutions on Road Transport
- b. Other recent research projects / topics of interest

19. Additional Business and Announcements – All

- a. Rich Hanowski 10th International Conference on Managing Fatigue
 - i. March 20-23, 2017 San Diego, CA
- b. New product-reads brainwaves to predict fatigue

20. Adjournment

Subcommittee Annual Meeting 2016 Notes

1. Truck and Bus Operator Health and Wellness Subcommittee

Monday, January 11, 2016: 1:30 PM-3:15 PM

Marriott Marquis, Marquis, Ballroom Salon 17 (M2)

Jeffrey Hickman, Virginia Tech Transportation Institute, presiding

- Welcome and Introductions there were 10 in attendance
- Truck and Health-related sessions at TRB
- Driver behaviors: Results from the national survey of long-haul truck driver health and injury by Dr. Guang Chen from the National Institute for Occupational Safety and Health
 - Driver behavior key factor for truck crashes
 - o 35% not wearing seatbelt
 - o 31% fatigued
 - o 30% speeding
 - o 21% fatigued
 - o 12% distracted
 - o Driver behavior contributing factor in 90% of crashes
 - o 32 truck stops, survey
 - o 1265 drivers completed survey
 - Dependent variable-seatbelt use/nonuse
 - IV individual differences
 - o 48 yrs old, 16 years tenure as LHD
 - o 60 hr/week work, 66% paid by mile, 36% owner operators
 - o 62% slept 6 days or less at home for previous 30 days
 - 24% self-report continuing to drive despite fatigue, bad weather or heavy traffic
 - o 86% self-report often seatbelt; 6% never
 - o 66% smokers
 - Seatbelt nonuse related to speeding, co has no safety policy, being female, 2 or more moving violations, resident of state w/o seatbelt law
 - BMI not associated with seat belt use!
 - O Drivers that don't wear seat belts, are they risky or is it just that the belts are not designed/comfortable for them??
- Truck driver health and safety in a large sample of truck drivers by Dr. Thiese from the University of Utah
 - o CV risk factors and crash risk, truck drivers
 - o Framingham score predictors in relation to being involved in DOT crash

- CVD risk score 0-30% scale
- o 817 drivers
- 0 2008-2011
- Anthropometric and blood panel
- Self-report DOT reportable crash
- CVD scores binned
- o OR, univariate and multivariate models
- o 50% smokers
- o Av 10 year risk, 9%
- o BMI 33
- o 38.6% reported lifetime DOT crash
- o Lowest risk 0, reference category
- o >13% CVD risk, OR >2. Adjusted for age, BMI, cell use, etc.
- o Prospective design needed
- Interesting to look at WC data in relation to CV risk factors-predictors for crash risk
- Location of driving (geographic) important factors to consider, total mileage
- Presentation by Dr. Hickman from the Virginia Tech Transportation Institute
 - CDIDS methodology
 - Prospective
 - What factors predict future crash risk
 - 3000 cases and controls
- Open discussion of research needs
 - o Where to submit proposals? DOT vs. NIH? Grey area
 - o Need help summarizing research needs statements and filling in holes
 - o 3 RNS current; 8 working ideas-lack detail
- Fatigue Conference Announcement
 - Managing Fatigue Conference-March 20-23 2017, San Diego CA

2. Truck and Bus Driver Training Subcommittee

Monday, January 11, 2016: 1:30 PM-3:15 PM

Marriott Marquis, Marquis Ballroom Salon 16 (M2)

Thomas Weakley, Owner-Operator Independent Drivers Association Foundation, Inc. (OOIDA), presiding

- Welcome and Introductions 8 attendees
- Discussion of the Entry Level Driver Training Advisory Committee recommendations
- New Mexico DOT official was looking for information on how to best reach drivers on driving in a dust storm, although not all that common it does occur in the Southwest states and recently caused several highway deaths
- Discussed the role of simulators in driver training
- Some discussion on psychological and or personality testing for drivers
- Attendee from Austria discussed their training of drivers in Austria and the EU

3. Motorcoach Safety Subcommittee

Tuesday, January 12, 2016: 3:45 PM-5:30 PM

Marriott Marquis, Woodley Park (M3)

Thomas Yager, Federal Motor Carrier Safety Administration, presiding

- Welcome and Introductions 12 in attendance
- Review of Minutes of Last Meeting
- Presentations
 - National Transportation Safety Board (NTSB), Robert Molloy, Acting Director,
 Office of Highway Safety
 - Presentation and discussion of recent Motorcoach crashes investigated by NTSB
 - National Highway Traffic Safety Administration (NHTSA), Shashi Kuppa, Ph.D.,
 Chief, Special Vehicles and System Division, Office of Crashworthiness
 Standards
 - Presentation and discussion of NHTSA's work on Motorcoach structural integrity and egress issues.
- Open Roundtable Discussion of Motorcoach Research Needs and Issues
 - No specific research needs statements developed

4. Motor Carrier Alternative Compliance Subcommittee

Wednesday, January 13, 2016: 8:00 AM-9:45 AM

Marriott Marquis, Marquis Ballroom Salon 13 (M2)

Brenda Lantz, NDSU, presiding (filling in for Gene Bergoffen, MaineWay Services)

- Welcome and Introductions there were eight (8) people in attendance
- Review of minutes of Jan, 2015 meeting and aims of the meeting
 - While the chair had indicated that the subcommittee should be dissolved due to a lack of positive response by Government to support pursuit of an alternative compliance pilot trial, CVSA formally advised that some kind of action in this area would assist them.
 - As FMCSA has introduced legislation to implement a "Beyond Compliance" program, the Subcommittee discussed whether continuance of the Subcommittee would be useful.
- Review of briefing to the full committee
 - Subcommittee and Related Actions to Date
 - o FAST Act Mandate on Alternative Compliance
 - Likely next Steps
 - Notice of Public Listening Session to solicit information on the potential benefits and feasibility of voluntary compliance and ways to credit carriers and drivers who initiate and establish programs that promote safety beyond the standards established in FMCSA regulations -https://www.federalregister.gov/articles/2015/12/24/2015-32358/potential-benefits-and-feasibility-of-voluntary-compliance-public-listening-sessions
- Definition and validity of "Alternative Compliance"
 - The term "alternative compliance" is problematic as it could be argued that the only alternative is non-compliance.
 - Benchmarking good practices could be a better option, however there is little evidence of what good safety management practices are.
 - Compliance reviews have demonstrated that they reduce crash risk, in particular for smaller companies
 - Compensation/pay of drivers is an important motivator for safe driving
 - FMCSA is seeking input to what things should be rewarded under "Beyond Compliance, saying that these may also include things like transparency in reporting.
- Safety technologies, compensation and other safety management items
 - The installation of safety monitoring technologies may not assure safety outcomes – consider:
 - Are they switched on?

- Are they used for safety management or other business purposes?
- Are they on all trucks in the fleet?
- Driver compensation and pay influence safety motivations and outcomes
 - E.g. at JB Hunt a 30% rise in driver pay resulted in a 50% reduction in crashes and a 4-fold drop in big cost crashes
- Economic incentives (like Beyond Compliance?) are important but why invest in technologies when those that don't undercut prices. Also the big carriers subcontract to the cheapest contractors.
- CSA BASIC scores, safety results and enforcement issues
 - The reason that small carriers improve more (more so than large carriers)
 after Compliance Reviews may be that these carriers have a lesser
 opportunity to know what they are meant to do than the large carriers
 - Small carriers may be disadvantaged if they cannot receive a CSA score without having a violation
 - FMCSA working with CVSA on an algorithm to ensure by-passes are fair and accurate. Currently a by-pass is neither a credit nor violation. Perhaps it should be a pass/credit by default
 - Also, if a carrier has a bad score, this cannot be changed until it is inspected again
- Insurance companies and benchmarking
 - o Can insurance companies provide incentives through benchmarking?
 - o What are the benchmarks?
 - An Australian insurer discounts premiums for TruckSafe accredited carriers as they have fewer crashes, but it is not known whether they are accredited because they are safer or whether the accreditation improves safety
- Continue the Subcommittee
 - The committee agreed that the Subcommittee should be continued and focus efforts on reviewing the Beyond Compliance initiative by FMCSA, and identifying possible research needs from this
 - As Gene had requested to resign as Chair, Lori or Brian were discussed as possible Chairs for the Subcommittee

5. Truck and Bus Data Subcommittee

Wednesday, January 13, 2016: 10:15 AM-12:00 PM Marriott Marquis, Woodley Park (M3) Robert Scopatz, VHB, presiding

• Welcome and Introductions – Attendees:

Name	Organization	Email
Bob Scopatz	VHB	bscopatz@vhb.com
Jenny Guarino	FMCSA	Jenny.Guarino@dot.gov
Bill Bannister	FMCSA	William.bannister@dot.gov
Brenda Lantz	NDSU	Brenda.Lantz@ndsu.edu
Tom weakley	OOFI	Tom_weakley@ooida.com
Andrew King	OOFI	Andrew_King@ooida.com
Zijian Zheng	NDSU	Zijian.zheng@ndsu.edu
Tianjia Tang	FHWA	Tianjia.tang@dot.gov
Jeff Muttart	Crash Safety Research	Jmuttart@crashsafetyresearch.com
Swaroop Dinakar	Crash Safety Research	sdinakar@crashsafetyresearch.com
Robin Riessman	UMassSafe	riessman@ecs.umass.edu
John kim	PART	Johnk@partnc.org
Dave Madsen	Volpe OST-R	Dave.madsen@dot.gov
Will Schaefer	CVSA	williams@cvsa.org
Mike Belzer	Wayne State/Sound	Michael.h.belzer@wayne.edu
	Science	
Andrew Miller	Virginia Tech	Amiller@vtti.vt.edu
	Transportation Institute	
Dalia Hafiz	Virginia Tech	Dalia1@vt.edu

- 2015 Recap These are the items we agreed to at the 2015 meeting:
 - As a group, we will encourage and collaborate on Research Needs
 Statements. Our FMCSA members, along with Gene Bergoffen, will explore
 methods by which FMCSA might make productive use of our RNS suggestions
 in the absence of a formal program for selection and funding.
 - The group will concentrate on the top five (or so) most important data needs for truck and bus safety decision making. This is in lieu of the attempt to make a comprehensive list of all safety-related data needs to accompany our (already completed) list of relevant data systems.
- Top 5 Data Needs and RNS Discussion -
- Names in Red signify lead person for creating a corresponding Research Needs Statement

- 3 projects: Jeff Muttart
 - Retroreflective materials...forensic case studies. Dump trucks have dirty tail lights and configuration that appear to be further away and causing misjudgment of closing speeds
 - o All trailers had to be retrofitted with retroreflective as of Dec 1993. That fleet is getting old. More than ½ of all trucks do not meet the standards. How old are the materials and what's the functional level of retro-reflectivity?
 - O Bus carrier: inattention and use of cruise control. Several crashes involved buses on cruise control at the time of the crash. Are they open to a gross negligence claim? Getting reaction time study on/off cruise control. Also investigating glances when cruise control is on/off?
- Bill Bannister: We need exposure data by state and vehicle type. FHWA has traffic volumes by states and smaller geographic areas. Would be good to have the ability to classify different truck types.
- Bob Scopatz: What are the unintended consequences of driver assistive technology?
 Help drivers focus? Information on human factors, driver reaction time?
- Jenny Guarino: We need to be able to link the MCMIS crashes to the state crash data files.
- Tom Weakley: Entry level driving training rule soon to hit the street...it was
 negotiated rule-making because there was no good data linking training to safety.
 Can we get and analyze data on training and safety impact. Can we identify the most
 effective components of the training for improving safety?
- Andrew Miller: Driver population how many, what's the demographics? FMCSA estimates between 5-13 million. Training history? Other characteristics?
- Brenda and Bob: Intrastate: can we get counts of carriers at state level without the USDOT number? OMB asks FMCSA to look at overall impact of rules not just on the interstate...can't get good data. Exempt industries and driver/vehicle regulations?
- Bob will ask Dr. A Monica Dorhoi: What do we need to know about cargo value? Do we care? Do we look at this from liability insurance perspective, or some other. FMCSA uses a general average cost of cargo—have analyzed insurance claims to try to improve B/C analyses. Does this factor into the decisions of which drivers a company hires or assigns? What about traffic impact of cargo loss/spill depending on the exact nature of the cargo? HAZMAT is another example. What about externalities—costs born by "everybody", like traffic delay.
- What do people get paid to drive a truck? What's included in the job? What are industry-specific factors? Method of payment? FMCSA is trying to get a survey through OMB

- Research Needs Discussion; Part 2
 - The ANB70 Committee's RNS list is updated continuously (see link from committee website home page)
 - o Also see the 2007 Circular available on the same website.
- Further discussion
 - What do people get paid to drive a truck? What's included in the job? What are industry-specific factors? Method of payment? FMCSA is trying to get a survey through OMB
 - Definition of work. Misclassification of workers; employees versus independent contractors. Uberization of freight? Work time isn't just driving and paid time?
 - FAST Act has tasked FMCSA to analyze commute time. Where will they get the data? What data? Mike Belzer said that Daniel Rodriguez (UNC, Chapel Hill—soon at Berkeley).

6. Truck and Bus Technology Subcommittee

Wednesday, January 13, 2016: 2:30 PM-4:00 PM
Marriott Marquis, Marquis Ballroom Salon 16 (M2)
George Reagle, George L. Reagle and Associates, presiding

- Welcome and Introductions there were about 20 people at our meeting
- Randy Mullett, formerly from Conway and now XPO
 - Excellent presentation on their experience with safety technologies and also driver systems. The most important aspect of this presentation was the safety results. All of the technologies showed major results; of particular note was the overwhelming reduction of rear end collisions-- as a result of equipping their tractors with CMS (Collision Mitigation Systems).
 - There was very good dialogue on this presentation.
- We also had a very good discussion on systems to monitor / assist the driver. Is it
 possible to collect data that predicts the driver's "normal steering patterns"? Can
 technologies then perceive major changes in "the norm"? After such tracking and
 analysis, can systems give Reliable "warnings"? This appears to be an important area
 for technology.