

TRB COMMITTEE ON TRUCK & BUS SAFETY (ANB70)
ANNUAL MEETING MINUTES
JANUARY 2014

Meeting Time & Place

Monday, January 13, 2014: 1:30 PM – 5:30 PM Eastern

Location: Marriott, Washington B3 Room

Agenda

1. Welcome & Introductions

- a. 24 members in attendance
- b. 44 Attendees (not including members)

2. Review of Mid-Year Meeting 2013 Minutes – Erin Mabry

- a. Posted at: <http://www.ugpti.org/trb/truckandbus/meetings/>
- b. No comments/revisions noted

3. Paper Review Summary and Discussion

- a. 2013-2014 Papers Summary – Bob Scopatz and Brenda Lantz
 - i. 19 papers – 1 recommended for publication, 10 for re-review, and 14 for presentation (poster)
 - ii. Gene Bergoffen commented and others agreed that better quality papers were received this year
 - iii. Request for Brenda to notify the committee on the paper(s) which are recommended for publication – the following three (3) papers were recommended this year:
 - 1. 14-1894 - Investigating Road Safety Impacts of Bus Priority Using Experimental Microsimulation Modeling
 - 2. 14-2238 - Effect of Circadian Rhythms and Driving Duration on Fatigue Level and Driving Performance in Professional Drivers
 - 3. 14-1125 - Evaluation of Truck Impact Hazards for Interstate Overpasses

4. 2012-2013 ANB70 Paper Award

- a. 13-1278: *Investigating the Effect of Burnout on Accident Involvement in Occupational Drivers*, by Yi-Shih Chung and Hui-Ling Wu
- b. Review committee – Jerry Krueger, Bob Scopatz, and Jeff Hickman
- c. Award and certificate presented to Kun-Feng Wu
- d. Request for next year's review panel
 - i. Current panel to continue serving?
 - 1. Are there any other volunteers?

5. **Committee Membership – Brenda Lantz**

- a. Currently we have 25 members, 5 international members, and 3 young members.
 - i. New member selection after 9-year term limit
 - ii. There is room for one (1) more young member (35 or younger), nominations welcome!
 - 1. Several nominations have been received and are under review
- b. Welcome again to new members
 - i. Erin Mabry – Virginia Tech Transportation Institute
 - ii. John Woodrooffe – UMTRI
 - iii. Dan Murray – ATRI
 - iv. Sean McAlister – Orca Road Safety Consultants
 - v. Tom Yager – FMCSA
 - vi. Ian Noy – Liberty Mutual Research Institute for Safety
 - vii. Steve Smith – FMCSA
 - viii. Steve Vaughn – SJV Consulting
 - ix. Kun-Feng Wu – National Chiao Tung University
 - x. Brian Taylor – Intelligent Imaging Systems
 - xi. George Reagle – George L. Reagle and Associates
 - xii. Charles Corder – Coach USA & MegaBus
 - xiii. Jonas Brandt – SP Technical Research Institute of Sweden

6. **Committee Communications**

- a. Website and Communications Coordination – Brenda Lantz
 - i. <http://www.ugpti.org/trb/truckandbus/>
 - ii. Meeting materials posted, links to resources, etc

7. **FMCSA Reports**

- a. Safety Research Initiatives – Steve Smith
 - i. Highlighted the annual TRB forum
 - 1. The success of the forum continues to grow each year, and this year was no exception, with approximately 210 attendees – up from 175 last year.
 - 2. At the forum, FMCSA showcased several of our safety priorities, highlighted Agency innovations in driver and vehicle safety, and outlined our ongoing emphasis on commercial motor vehicle drivers.
 - 3. If you are interested in viewing the PowerPoint presentations that were delivered at the 2014 forum, they are now available on the FMCSA Web site at the following location:

<http://www.fmcsa.dot.gov/safety/research-and-analysis/transportation-research-board-forum-presentations>

- ii. Research Projects (MAP 21 HOS restart, driver fatigue project)
- b. Policy and Rulemaking Initiatives – Tom Yager
 - i. Electronic logging devices
 - ii. Safety fitness determination (Summer 2014)
 - iii. Drug and Alcohol Clearinghouse (Spring 2014)
 - iv. Coercion rule NPRM (Spring 2014) (action against shippers/receivers)
 - v. New entrant testing
 - vi. National registry of certified medical examiners and electronic ME reporting
 - vii. Driver training-entry level
- 8. **NHTSA Report – George Soodoo and Abby Morgan** (*TRB_NHTSA Report at Committee Meeting_JAN2014.pdf*)
 - a. Crash Avoidance Projects
 - i. Truck tractor and motorcoach stability control (ESC)
 - 1. The heavy vehicle Notice of Proposed Rulemaking (NPRM) was published in 2012. It will not be effective until after a final rule is published. We are currently working on the final rule.
 - ii. Forward crash avoidance and mitigation (FCAM), 1 year FOT with VTTI, 150 vehicles
 - iii. Lane departure warning (LDW)
 - iv. Heavy truck tires
 - b. Crashworthiness Projects
 - i. Heavy vehicle event data recorders
 - ii. Lap/shoulder belts on motorcoaches
 - iii. Motorcoach rollover structural integrity
 - iv. Glazing/window retention in motor coaches
 - v. Motor coach emergency evacuation
 - vi. Motorcoach fire safety
- 9. **NTSB Report – Barbara Czech** (*TRB_NTSB Briefing 2014 NN.pdf*)
 - a. Discussed events and completed reports (forums, recommendations)
 - b. Review of events (completed and under review)
 - c. New “most wanted list”
- 10. **CVSA Report – Steve Keppler**
 - a. Nine (9) changes to the North American Standard Out of Service Criteria, effective April 2014
 - i. Drivers to be put OOS for safety-related events only
 - b. AOB RDs, CVSA has developed an educational video for enforcement

- c. Data quality/uniformity committee is working to enhance data quality and working with FMCSA to effect change
 - i. Due process for adjudicated citations
 - ii. Software modifications to inspection software
- d. Electronic documents task force looking into what is acceptable roadside
- e. Driver fatigue regulatory framework, CVSA partnered with NSC and OOIDA to ask FMCSA to conduct research to assist in developing an objective assessment for identifying fatigue. NIH has a SBIR Grant out for competition in the event anyone is interested in competing for it.
- f. Discussed results from three (3) CVSA Selective Traffic Enforcement programs: Operation Air Brake, Operation Safe Driver and Roadcheck

11. Association briefings / potential research needs

- a. Rob Abbott, VP of Safety Policy, ATA (*ATA TRB Presentation.pdf*)
 - i. Safety Priorities
 - 1. ELD Mandate
 - 2. Compliance, Safety, Accountability data and methodology improvements
 - 3. HOS - 34 Hour Restart and Sleeper Berth
 - 4. Drug and alcohol - Clearinghouse and Hair Testing
 - 5. Speed limiters Mandate
 - ii. Ongoing Research Needs
 - 1. Benefits of Traffic Enforcement vs Roadside inspections
 - 2. Reliability of CSA Scores
- b. Tom Weakley, Director of Operations, OOIDA
 - i. Research needs to focus on interacting/talking to drivers (questionnaires, focus groups, etc.)
 - ii. Health and wellness initiatives
 - 1. Drivers don't understand issues and unsure what to do
 - 2. Need to reach long haul drivers, education and resources
 - iii. Driver training, more enforcement
- c. ABA or UMA Representative
 - i. Not present (conflicts with ABA annual meeting)

12. Subcommittee Reports – research needs identified?

- a. Subcommittee chairs reported on business and RNS
 - i. See separate meeting notes at the end of this document for each subcommittee
- b. Truck and Bus Operator Health and Wellness – Jeff Hickman
- c. Truck and Bus Data Needs – Bob Scopatz
- d. Motorcoach Safety – Brenda Lantz

- i. Replacement chair position to fill
 - ii. Any suggestions, please contact Brenda
- e. Alternative Compliance – Gene Bergoffen
- f. Technology – George Reagle
- g. Driver Training – Tom Weakley
- h. Possible new Economic Subcommittee? – Mike Belzer
 - i. Mike will draft a description / objectives for the subcommittee to discuss at the mid-year meeting.

13. Update on the activities of the SSUG Young Member Council - Andrea Sequin

- a. Started January, 2013
- b. Many committees are not represented, goal to increase young member participation

14. Research Coordination/Needs Statements

- a. Review of Truck & Bus Safety Research Needs Summary Sheet – Ron Knipling
- b. Currently 11 distinct topic areas (6 subcommittees & 8 focus areas, 3 of which overlap)
- c. Request subcommittees identify priority research and submit RNS
- d. Gene Bergoffen suggested to work with FMCSA to review RNS and provide feedback, more action is needed to turn RNSs into research projects!

15. Updates on the activities of the TRB Technical Activities Council (TAC)

- a. 2013 “TRB Critical Issues in Transportation” document (*Critical Issues 2013 Final2.pdf*)
- b. Key transportation research achievements over the last 20 years, and breakthroughs expected over the next 10 years (submitted by over 80 TRB committees): <http://www.trb.org/AboutTRB/KeyResearchAchievements.aspx>

16. Roundtable discussion – All

- a. Elisa Braver, NTSB - Estimates of deaths and injuries in crashes involving single-unit trucks (*TRB-Estimates in Crashes Jan 13 2014.pdf*)
- b. Other recent research projects / topics of interest
 - i. Long haul truck driver survey-NIOSH (Drs. Chen and Sieber) study finished and publications anticipated soon

17. 2014-2015 Meeting Activities and Plans

- a. Discussion of potential joint sessions to plan in 2014 for 2015 meeting?
- b. Mid-Year Meeting – agenda topics?

18. Additional Business / Announcements

19. Adjournment

Subcommittee Annual Meeting 2014 Notes

Truck and Bus Operator Health and Wellness – Jeff Hickman

Monday, January 13, 2014: 8:00 AM – 9:45 AM Eastern; Marriott, Park Tower Suite 8206

1. Introduction and Overview of Subcommittee
2. Presentation: Injury and Safety: National Survey of U.S. Long-Haul Truck Driver. Guang X. Chen¹, W. Karl Sieber¹, Jennifer E. Lincoln¹, Jan Birdsey¹, Edward M. Hitchcock¹, Akinori Nakata², and Cynthia F. Robinson¹. Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health University of Occupational and Environmental Health, Fukuoka, Japan². (*Trucker survey injury component 2014_Guang.pdf*; and *ajim22293-published online 1-4-2014.pdf*)
3. Presentation: Meeting the Challenge of Reaching the Long-haul Driver Population on Health and Wellness (Phase 1). Tom Weakley¹, Joyce Ramay², and Lauren Hallberg². Operations Owner-Operator Independent Drivers Association Foundation Inc¹ and Human Factors Analytics².
4. Presentation: Transforming Driver Health at Work, Home and On the Go! Betty Van Huizen-Couture, HEALTHeSIGNALS. (*HealthSignals 10 reasons to transform driver health and how to do it.pdf*)
5. Discussed future direction of ANB70(3) and RNSs. Committee agreed the subcommittee should focus more effort on truck and bus injuries resultant from improper lifting, ingress/egress, and slips, trips, and falls.

Truck and Bus Data Needs – Bob Scopatz

Wednesday, January 15, 2014: 2:30 PM – 4:00 PM Eastern; Marriott, Park Tower Suite 8206

1. Welcome and self-introductions / sign-in sheet
2. Review the mission and scope of the subcommittee
3. Presentation: Paper 14-5053: Investigating Crash Frequency and Injury Severity at Freeway Weigh Stations in Michigan; Valerian Kwigizile (presenting), Fathi Alkhatni, Jun Oh (Western Michigan University)
4. Agency Update: FMCSA (Bill Bannister)
 - Exempt trucks (farm use)
 - Rental trucks
 - Mexican trucks
 - Random testing versus fixed testing annual survey
 - Large Truck/Bus Crash Facts
 - Pocket Guide on CMVs
 - SaDIP grant program report
 - ART Forum (truck occupant fatalities)

- Private versus For-Hire safety comparison
 - A&I Online Crash Stats improvement
 - Compliance Review Effectiveness Model (CREM); New CSA includes several new interventions, so they developed the Carrier Intervention Effectiveness Model (CIEM)
 - Roadside Intervention Effectiveness Model (RIEM)
5. Ron Knipling asked if Bill had any comments on the Research Needs Statement. Bill will provide feedback. There is a large amount of traffic enforcement that is not captured in MCMIS. There is a known data quality problem with the field in MCMIS coding for “enforcement” versus “inspection”. It’s an open question whether or not the mix of enforcement versus inspection is optimizing safety, and it’d be tough to answer this without addressing the data quality issue.
 6. RESEARCH NEED: It would be helpful to know how much enforcement activity is going on that is NOT associated with an inspection (and thus is not captured in the database). Ron Knipling is writing this up.
 7. DATA GAP: CDLIS conviction data do not reliably contain the VIN. It would be interesting to see what is being captured at the State level data. The officers are supposed to check whether or not it’s a CMV when they issue a citation. Ron said there is a research need statement associated with this, and asked Bill to look at it.
 8. Large Truck Crash Causation Study II: It is under discussion now. Putting together a list of research questions that they would hope to have answered by the new study. Issue is finding the funding to do a large effort (about double the annual research budget). Ron asked about the option of Naturalistic Driving and noted the difference between “surrogate measures” and actual crashes. Perhaps a combined approach. Under discussion internally now at FMCSA.
 9. Agency Update: FHWA (Steven Jessberger)
Steven Jessberger presented the FHWA Office of Policy Information; Travel Monitoring and Surveys Section list of projects and studies:
 - o Traffic Monitoring Program Guide and Procedures
 - o Pooled Funding Study Assessing Roadway Traffic Count Duration and Frequency impact on AADT
 - o Pooled fund: Visualization of WIM Data
 - o Speed Data has been added to the 2013 TMG and in the TMAS (Travel Monitoring Analysis System) software 3.0. TMAS will be entirely GIS-based. NOTE: There are 300 Million individual truck records in TMAS for 2012-to-date for WIM data. Detailed data on speed, following distance, etc. Will get per-vehicle data from multiple states.
 - o Ped/Bike Data is in the new TMG
 - o National VMT Forecasting
 - o New methodology for household long-distance travel survey

- SBIR on tracking heavy vehicles based on WIM and vehicle signature

10. Strategic Planning Discussion

Where're we gonna go? What're we gonna do?

Bob Scopatz outlined the need for a strategic plan and a fresh look at the vision, mission, and goals for this subcommittee. There was not sufficient time to engage in a strategic planning exercise during this meeting. Bob stated that he would contact past attendees/members and attempt to conduct a strategic planning meeting through email or a webinar format.

Motorcoach Safety – Brenda Lantz

Wednesday, January 15, 2014: 8:00 AM – 9:45 AM Eastern; Marriott, Park Tower Suite 8206

1. Welcome & Introductions – there were 14 attendees
2. Review of 2013 Annual Meeting Notes
 - a. Discussion of the definition of motorcoach (doesn't include transit)
 - b. Question if there are any inputs into the Motorcoach Safety Action plan from the DOT (<http://www.fmcsa.dot.gov/safety/passenger-safety/2012-motorcoach-safety-action-plan>)?
 - c. Discussion of possible chairs for this subcommittee
 - d. Discussion of the differences in movement of passengers versus freight
3. Presentation / Discussion - Paper 14-1894, "Investigating the Road Safety Impacts of Bus Priority Using Experimental Micro-Simulation Modelling" (*Currie Bus Priority Safety - Research Summary TRB 2014 15-1-2014 V1.0.pdf*)
 - a. Professor Graham Currie, Institute of Transport Studies, Monash University
 - b. Review of bus priority lanes – if the number of people using/riding the buses is one-third of the traffic, then buses should get 1 of the 3 lanes.
 - c. Discussion of possible intersection effects of these priority lanes.
 - d. Question – In the U.S., we have FHWA for roadway operations, NHTSA for vehicle design, and FMCSA for heavy truck safety – there are regulations everywhere. Is there a single governing body in Australia?
 - i. Response – Not really, there are several there as well; however the agency responsible for the roads need to implement this type of priority lane as the transit agency doesn't know about roads.
 - e. Suggestion that this topic may make a good research needs statement (RNS), perhaps as a cross-committee RNS with the road safety committee?
 - i. This may already be an RNS, and Ron will check.
4. Presentation / Discussion – “Antireflective coating for bus windshields” (*2013 DoT Phase I - MB TRB Presentation.pdf*)
 - a. Dr. Michael H. Belzer, Associate Professor, Department of Economics, Wayne State University
 - b. Would like users for this who would recognize the problem.

- c. There is a need for a benefit/cost analysis.
 - d. Which agency would be responsible for this – NHTSA, FTA, RITA?
 - e. Follow-up from Mike 7/15/14 - The company whose antireflective coating I was promoting won the Phase 2 contract and is moving toward production of the coating. I hope to have quite a bit more on which to report next year.
5. Roundtable discussion – Recent research projects / topics of interest
- a. Jon Mueller from FMCSA discussed the Motor Carrier Safety Initiative.
 - i. It consists of targeted enforcement - quick strike – 250 high risk carriers, extensive compliance reviews, and 52 were placed out-of-service.
 - 1. In addition, Safety Assessments were conducted on 1,300 carriers with no data. Of those, 140 were selected for a follow up compliance review.
 - 2. The Safety Assessments help the Agency meet the requirement for frequency of passenger carrier inspections in MAP 21.
 - ii. It also provides tools/resources for people planning travel (not just cost information).
 - iii. There are upcoming changes to the web site / outreach.
 - iv. There is also a program evaluation determining the effectiveness of the quick strike.
 - b. Gene Bergoffen discussed some possible data mining conducted by Wes Barber, and mentioned that updates to the motorcoach curricula is continuing via Matt Daecher
 - c. Julie Perrot from NTSB discussed accident investigations involving short/small buses. Companies use these because they are cheaper to operate (but, they are not as safe). This may be a new trend, and needs research.
 - i. Follow-up from Julie 1/21/14 - Based on the RNS suggestion about “short buses” that I made during the Motorcoach Safety Subcommittee meeting, I’m going to send the idea to my NTSB colleagues and see if they can help me solidify the idea/statement.
 - d. Follow-up 1/20/14 - Charlie Vits from IMMI mentioned that he had submitted a research needs statement last year to the Occupant Protection Committee (ANB45) regarding the use of lap-shoulder belts on modern motorcoaches. At the committee meeting Wednesday afternoon he was informed that it had been approved and is listed among TRB Research Needs Statements, and can be found at: <http://rns.trb.org/dproject.asp?n=33952>
 - i. Our committee could endorse it or possibly write another version of it identifying additional needs.
 - ii. Also as Julie Perrot and Charlie discussed, based on much of the upcoming NHTSA research and possible regulations on new technology for motorcoaches as prompted by MAP-21, we need to evaluate if the

focus of the committee should also extend itself to the transit bus market.

Alternative Compliance – Gene Bergoffen

Wednesday, January 15, 2014: 10:15 AM – 12:00 PM Eastern; Marriott, Park Tower Suite 8206

1. Background of subcommittee – Gene Bergoffen
 - a. This subcommittee was formed and primarily led by Gene, Dan, and Steve
 - b. CTBSSP – alternative compliance synthesis – reviewed all efforts up to that point – Australia, Canada, California (Belzer), Help, NorPass
 - c. Updates to synthesis / monitoring activities / guide research as occurs
 - d. White paper – pilot study of best practices by fleets would be recognized, suggestions from paper by Dan/ATRI
 - e. CVSA set-up task force from enforcement community side – how can impact on CSA - has developed own white paper, and now working on pilot project proposal – present to program initiatives committee – impacts on unsafe, hours-of-service, and crash BASICS – possible reduction in CSA scores – believes there is a need for research to design methodology for pilot and proper effectiveness evaluation
 - f. Completed work, sunset subcommittee – perhaps interest group / blog on web site to keep each other informed?
 - g. Brian Taylor – perhaps focus down, support CVSA?
2. David Goettee – safety culture finished by this spring – training is effective in reducing crashes for small companies
3. Dan – ATRI – effectiveness of compliance reviews decreases dramatically the larger the company – most benefit from alternative compliance
4. New project – safe carriers – those with and without technology – what is difference in culture?
 - a. Tom – OOIDA is against the way the concept is portrayed (small carriers cannot afford technology)
 - b. Dan – Not just technology, but other tools – drug testing, ENS
5. Steve – Also, fatigue management programs, driver training
6. Dan – this subcommittee gives neutral, collaborative platform (not just enforcement)
7. Goals / objectives – what’s the benefit of each alternative? Different for different size companies? “e-inspection” – credit for electronic screening? (No documentation because not “inspection”). Carrot versus stick methods?
 - a. Example: Company participates in bypass, so doesn’t get many inspections, and scores increase. How correct in the systems? Issue with scores relative.
 - b. Counterpoint – may not still be safe – hire new drivers, etc., shouldn’t stay “safe” forever.
 - c. Dan/Steve – there needs to be an “audit” approach; third-party, with FMCSA oversight. Ongoing safety performance monitoring (need time window).

8. Bob – usefulness of post-crash inspection? Driver and truck condition for “safe” versus “unsafe” companies.
9. Dan – Need certain CSA score to apply for alternative compliance?
 - a. CSA or insurance credit (not likely)? Or something else?
10. The subcommittee discussed its future and decided to discuss further at the mid-year meeting, with input from the activities in this area from CVSA. Gene suggested we should review the subcommittee charter and possibly re-commission the subcommittee.

Technology – George Reagle

Tuesday, January 14, 2014: 3:45 PM – 5:30 PM Eastern; Marriott, Park Tower Suite 8212

1. There were about 20 people at our first meeting.
2. Since this was the first meeting of the group, we had a very robust discussion on the purpose of the group. Frankly, not sure we drew any conclusions but there was much enthusiasm. I would think a lot depends on the outcome of the four priorities that were chosen.
3. I think it very important to note that technology appears to be very, very important to the truck and bus world.
4. The first priority was to identify independent sources of data/ evaluations of in vehicle safety technologies. What are the sources of this data? Is it independent? Reliable? Consistent? Robust?
5. Our second priority is to attempt to create a group like CAMP on the truck side that can do independent but collaborative research. Such a group would theoretically involve OEMs and suppliers as the foundation of a joint effort.
6. The third priority was to identify how the safety technologies respond in the real world. This appears to be a major issue since the best source of this data was TIFA. This data system was managed at UMTRI, but financed by FMCSA. Unfortunately, the federal government no longer funds the collection/analysis of this data base.
7. Our fourth priority was to sponsor appropriate webinars in vehicle technologies.
8. Future plans include securing a “champion” for each issue; to hold a summer conference call of the subcommittee and to have some initial results for next year’s meeting.

Driver Training – Tom Weakley

Monday, January 13, 2014: 10:15 AM – 12:00 PM Eastern; Marriott, Park Tower Suite 8206

1. There was another TRB meeting at the same time, Trucking Industry Research Committee, that a few other interested parties attended and expressed a wish to still be a part of the Truck and Bus Driver Training Subcommittee.
2. 10 people attended
 - a. One from FMCSA (Tom Yager)
 - b. Three Safety Advocate representatives
 - c. Two truck driving school representatives (Sage)

- d. Two transportation consultants
 - e. One trucking firm representative
 - f. One trade association member
 - g. Each introduced themselves and their concerns and why they felt this committee was important
3. A discussion was held on the lack of any specific requirements for training in obtaining a CDL
 4. Went over the past somewhat traditional methods that have been recommended (PTDI and PTDIA)
 5. FMCSA is very interested in obtaining as much feedback as possible for potential rulemaking
 6. The Safe Truck Act introduced by OOIDA was briefly discussed