TRB COMMITTEE ON TRUCK & BUS SAFETY (ANB70)
AND SUBCOMMITTEES ANNUAL MEETING MINUTES
JANUARY 2017

<u>Committee Meeting Time & Place</u>

Wednesday, January 11, 2017: 8:00 AM- 12:00 PM Eastern Time

Marriott Marquis, Marquis Ballroom Salon 7 (M2)

<u>Committee Agenda and Discussion</u>

1. **Welcome & Introductions – All**
   a. Welcome to those attending TRB for the first time!
      i. TRB regulars encouraged to reach out to first-timers.
   b. Review of the agenda
2. **Review of Mid-Year Meeting 2016 Notes – Erin Mabry**
   a. Posted at: http://www.ugpti.org/trb/truckandbus/meetings/
3. **Paper Review Summary and Discussion**
   a. 2016-2017 Papers Summary – Bob Scopatz and Brenda Lantz
      i. 26 papers, 23 submitted for publication
         1. Accepted 14 for presentation
         2. Recommended 5 for revision
      ii. Assigned 103 reviews – 4-5 assigned for publication/presentation; 3 assigned for presentation only
      iii. 68 reviews received for Round 1 decisions = 66% return rate
      iv. Notes especially helpful - please complete as you're reviewing
      v. Reminder to go through list and request papers you'd like to review
      vi. Need more review volunteers for the more "complicated" papers
      vii. Please respond quickly regarding review requests
      viii. Will ask for volunteers to review next year
      ix. Update your myTRB profile to list area(s) of expertise for paper review
      x. Re-reviews and final decisions on publication made this month
      xi. Up to 4 papers will be recommended for publication this year (2017)
      xii. Going forward, 3 review requests for each committee member; and please respond immediately
         1. Be willing to accept papers outside your "comfort zone"
         2. Decline quickly if you cannot review
         3. Update myTRB to indicate preferences for expertise/areas of interest
         4. Include specific comments to author and review team
      xiii. More rigorous review process to increase impact factor of TRB journals

xiv. Comments/Discussion
1. Considering webinar to instruct on how to properly review papers-Brenda will keep us posted
2. Will e-journal movement impact publication process? Likely no
3. If you publish in TRR it will not be read. Need to address this.
4. Committees organized into sections, then groups. We are Safety and User Group. Our bet paper award moves on for consideration for Waller Award.
b. 2015-2016 Paper Award – Bob Scopatz, Jerry Krueger, and Jeff Hickman
  i. ANB70 Deborah Freund Paper Award to: *Paper 16-2393 - Sensitivity Analysis of Lane Position and Steering Measurements to Fatigued Driving*
  ii. Authors: Hui Zhang, Chaozhong Wu, Zhen Huang, Xinping Yan, and Tony Qiu from Wuhan University of Technology, China
    1. Congratulations to the Award recipients!

4. **Committee Membership**
  a. Thank you to recent past members!
    i. Michael Belzer, Charles Corder, Ronald Knipling, and Pierre Thiffault have all rotated off of the committee
    ii. Fraser McGuire accepted a different position, and resigned from the committee
    iii. Lori Mooren decided to semi-retire, and resigned from the committee
    iv. Andrea Sequin declined another term due to work conflicts
  b. Member Changes
    i. Sad to report that Sean McAlister passed away August 20th
    ii. Abby Morgan has left NHTSA, and is now working with Kittelson and Associates, Inc. We welcome Alrik Svenson as our new NHTSA representative.
  c. Welcome to new members!
    i. Dave Madsen, Volpe National Transportation Systems Center
    ii. Deborah Quackenbush, Virtual Excellence
    iii. Charlie Vits, Indiana Mills & Manufacturing

       iv.   Ed Watt, Amalgamated Transit Union

        v.   Rob Di Cristoforo, Advantia -- International member

      vi.   Nicholas Kehoe, toXcel -- Young member

     vii.   Emira Rista, Iowa State University -- Young member

   viii.   Juan Martinez, New York DOT -- State DOT member

   d. We do still have one (1) open slot for another Young member (35 or younger), another International Member, as well as one more for an employee of a state DOT if anyone has any suggestions.

        i.   Subsequent to the meeting, Sharon Newnam from Monash University in Australia was appointed as a new International Member; and Andrew King with OOIDA was appointed as a new Young Member.

5. **Committee Communications – Brenda Lantz and Erin Mabry**
    a. Website / Communications Coordination
        i. Erin Mabry - Committee Communication Coordinator
    b. 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

6. **FMCSA Report - Safety Research Initiatives – Terri Hallquist**
    a. *Current studies*
    b. Flexible sleeper berth pilot-OMB approval for survey. Safety implications of flexible sleeper berth times. Recruiting drivers (n=200) next steps
    c. CDIDS -> 5 year study. Results coming. Identifying driver characteristics that may affect safety. 2017 published
    d. Feasibility study for Longitudinal Driver health study. Track CMV drivers and health metrics over time. NIOSH partner
    e. Advanced fatigue modeling for individual differences. Develop trucking fatigue meter from ELD data. Fatigue score. Considers HOS.
    f. CMV technology evaluation program. Conduct quick turnaround of independent evaluation of technologies.
    g. CMV driver commuting. FAST act. Assessing excessive commuting. Survey, OMB process next.
    h. *Planned projects*
    i. Crash risk by CMV driver schedules Phase 2. ELD data and crash data collected. Truck and bus volunteer to provide data. Building database. Looking at crash risk in later driving period (hours 10, 11, etc.). Phase 1 complete with VTTI-fewer than 9 carriers. Phase 2 with more carriers. Envision an ongoing data collection

j. Assessment of CMV driver health and fitness programs. Early planning stages. Assess availability and success of companies improving driver health and fitness. What are carriers doing for driver health and fitness

k. Evaluating effectiveness of NAFMP. Nafmp.org. Comprehensive approach for fatigue educating and training. Drivers, family, management, shippers/receivers, etc. Free. Partner with Canada. Will evaluate effectiveness of this resource.

l. *Comments*

m. Status on shipper detention research?

    i. Office of Inspector General, not FMCSA. Results may be coming 2017.

        1. Terri to find out.

n. 34 hour restart study?

    i. Office of Secretary of Transportation is reviewing.

    ii. Subsequent to the meeting, the study has been published and is available on the FMCSA website at: https://www.fmcsa.dot.gov/safety/research-and-analysis/commercial-motor-vehicle-driver-restart-study

o. Ron K comments -- RNS available to inform crash risk by CMV driver schedule project-critiques past work in this area.

p. Gene B. comments -- need better interaction between committee and FMCSA. Strategic planning at FMCSA going on- committee should be more involved?

    i. We should help strategically shape the research program. More interaction needed. FMCSA provide feedback on RNS.

    ii. Terri will report this suggestion back to Martin and Steve.

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

a. Comment on Terri's update -- Their work largely driven by legislation. Trying to inform regulatory agendas. Getting these projects off the ground is complicated.

b. Fatigue and HOS important for FMCSA agenda.

c. Autonomous vehicles new and exciting area. Human factors still largely considered moving ahead.

d. New administration, new leadership ahead.

e. Year of implementation. In a phase of implementation of regulations. Role of IT. In the past, stovepipe data systems. Continuing to expand data mining effort.

f. ELDs mandate coming Dec. 2017. Loose ends on FMCSA's ELD-teams working on this intensely, moving along. Website for ELDs. Posting FAQs. Data retained by carrier

g. FMCSA website difficult to navigate but a lot of info is there.

h. Drug and alcohol clearinghouse. IT database setup and implementation. Intensive effort for 2017. January 2018 mandate implementation date.

i. Three (3) years to develop these data systems following rulemaking

      j.   National registry for certified MEs-successful rulemaking story. Considering this model for entry level driver training rule (Feb 2020 implementation date).

      k.   Training provider registry-self certify qualification. Completely electronic system.

      l.   Formal interpretation of regulations-Regulatory Guidance. 700 Q/As in existence. Mandated to clean this up in the FAST act. Results coming 2017.

8. **FMCSA Automated Vehicles presentation - Brian Routhier (see presentation)**

      a.   Industry Demos of full automation

          i.   Many testing players. How to involve FMCSA?

      b.   Technical and policy challenges

          i.   Many issues to consider, public perception, human factors, licensing, safety, cost/benefit, data to support implementation of technology, state vs. local regulations, NHTSA and FMCSA mandates and regulations

      c.   FMCSA projects update

      d.   FHWA Projects

      e.   NHTSA Policy

      f.   FMCSA policy

          i.   Inspecting technologies in the future-what will this look like?

      g.   *Comments*

      h.   Dealing with autonomous technology from a crash perspective. Currently, no easy way to tell what the vehicle is equipped with as far as autonomous technology. Was the driver in control during crash? No solution yet. Will need to be considered in policy. What's being recorded? Who has access?

      i.   Neutral safety impact?? This is concerning.

          i.   Better wording is equivalent level of safety

      j.   Suggestion to consider driver perspective more-get opinions of experienced / skilled drivers.

9. **NHTSA Report – Alrik Svenson (see presentation)**

      a.   Heavy V2V Research-Several projects underway and wrapping up

      b.   Human Factors Research

      c.   Automated Vehicles

      d.   *Comments*

      e.   On automatic emergency braking, can we expect rulemaking to not be released for several more years due to additional study? Unknown at this time.

10. **NTSB Report – Rob Molloy (see presentation)**

      a.   *Current investigations*

      b.   CMV investigations across the country

      c.   Additional issues with pedestrians and CMVs

      d.   *Most wanted list*

      e.   2 year most wanted list rather than 1 - allow more accomplishments

f. *Repeat safety issues*

　　　　g. Medical oversight bus drivers

　　　　　　i. How do we identify these med issues that can incapacitate drivers?

　　　　　　ii. How do we identify drivers trying to beat the system?

　　　　h. Children saved by safety belts in school bus crash

　　　　i. Migrant workers not following FMCSR's

　　　　　　i. Seat belt non-use

　　　　　　ii. Ignoring HOS

　　　　j. Infrastructure issues

　　　　　　i. Striping Gore areas

　　　　　　ii. Unfinished roadway resurfacing/repair. Wrong aggregate used.

　　　　　　iii. Work zones

　　　　k. Driver impairment

　　　　　　i. Fatigue-can me very severe crashes, quite frequent

　　　　　　ii. Drugged drivers-recs for hair testing and prevalence of drugged CMV driving.

　　　　　　iii. Pre-employment screening tool from FMCSA, not being used by companies!

　　　　　　iv. Excited about drug clearinghouse initiative from FMCSA

　　　　l. Other issues: limitations of autonomous technology

　　　　m. Comment: What is difference in issues between migrant and non-migrant workers?

　　　　　　i. Answer: Crossing state lines, Question of who is responsible for oversight? Not registered with FMCSA but registered with DOL. What is DOL doing for regulations and compliance?

　　　　n. Upcoming schedule of events

11. **CVSA Report – Will Schaefer**

　　　　a. CVSA Workshop April 23-27, 2017, Atlanta

　　　　　　i. FMCSA may host an automated vehicle discussion at this conference

　　　　b. April 1, 2017 NAS Out of Service Criteria

　　　　　　i. New OOS criteria for ELD rule, rule is effective in December 2017

　　　　c. New positions hired at CVSA

　　　　　　i. COHMED Program Director (hazardous materials)

　　　　　　ii. Director of Roadside Enforcement and Inspection Program Development (inspector/trainer/roadside expert)

　　　　d. New committee at CVSA

　　　　　　i. CVSA Enforcement and Industry Modernization Committee, activities include:

　　　　　　ii. Technology topics

       iii. ADAS, automated and/or autonomous vehicles, etc.

       iv. Electronic inspections concepts

  e. Inspection bulletin for Unified Carrier Registrations – enforcement postponed until February 1, 2017.

  f. New post-crash inspections, helpful in assessing brake systems

       i. Comments/discussion: How do you assess brakes post-crash?

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

  a. Michael Cammisa, VP, Safety Policy & Connectivity, ATA

       i. New leadership, president and CEO

       ii. Underway Research interests: split sleeper birth study, young veterans pilot program, FMCSA CSA program

       iii. Future research interests: automated vehicles

  b. Tom Weakley, Director of Operations, OOIDA

       i. Anything FMCSA and NTSB comes up with, OOIDA has concerns, making sure it is reliable and valid.

       ii. Biggest concerns with new administration, concerns with limits on research funding-ensure research is cost effective

       iii. CSA disaster for OOIDA-may have contributed to increase in crashes since 2010? Fewer miles driven and fewer drivers registered. Want to look at overall effect of CSA program

       iv. Concerns with recent research-distraction from practice and enforcement

       v. Will continue to challenge programs-member program.

       vi. Concerns with automation-focus on drivers

       vii. Get more drivers involved with research and meetings

       viii. Will challenge speed limiters

       ix. Entry level driver training-what happened with final rule? Won't trust next negotiated rulemaking

       x. OOIDA feels they have been left out of diverse/inclusive research-include their drivers

       xi. Comments: Agree with Tom's voice for drivers, concerns about platooning and driver safety and health, impact of V2V and V2I on driver health?

  c. Brandon Buchanan, Director of Regulatory Affairs, ABA

       i. Not in attendance, will provide an offline update

13. **Research Coordination/Needs Statements – Bob Scopatz and Ron Knipling**
    a. Research Needs Statements (RNS) Database - http://rns.trb.org/
        i. Dynamic collection of research needs statements developed and approved by the standing committees that reflects the high priority research needs at any given time
        ii. Truck & Bus Safety Research Needs
        iii. Review list and submit new ideas to Ron-title and sentence and where it fits on current list. Ideas for graduate students.
        iv. Would a member like to take over this initiative of collecting and organizing RNS?
            1. Subsequent to the meeting, Nicholas Kehoe has volunteered to take over as Research Coordinator for our committee.
14. **Subcommittee Reports**
    a. Alternative Compliance – Brenda Lantz
        i. Heard an update from FMCSA on beyond compliance program
        ii. Many research needs discussed
        iii. Agreed to continue subcommittee
        iv. Suggestion to expand scope, perhaps including carrier safety management practices
        v. Planning a follow up conference call
    b. Technology – George Reagle
        i. Presentation on NHTSA policy on advanced autonomous vehicles-very thorough
        ii. Reviewed NHTSA guidelines-very comprehensive
        iii. NHTSA requesting lots of data to inform policy and guidance
    c. Truck and Bus Safety Data Needs – Bob Scopatz
        i. FMCSA presentation-data needs
        ii. Reviewed RNS
        iii. Ideas for 2017-follow up meeting TBD
        iv. Updating data chapter of Truck & Bus Safety Domain document and refresh of old data systems
        v. Adding a new section of data chapter of future of truck and bus data-inclusive development
    d. Truck and Bus Operator Health and Wellness – Jeff Hickman
        i. Will be three presentations
    e. Driver Training – Tom Weakley
        i. New ideas on automated trucking, RNS
    f. Motorcoach Safety – Charlie Vits
        i. Will be two presentations -- NTSB, VTTI

        ii.   Scope of subcommittee

        iii.   Review RNS

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

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

    b.   Looking to cultivate next generation of active TRB participants

    c.   Focusing on content developed for and by young members

    d.   Mentoring program

    e.   Next year, planning hybrid session to demonstrate research and progress

16. **TRB Updates – Bernardo Kleiner**

    a.   Spotlight theme for the 2017 meeting: *Transportation Innovation: Leading the Way in an Era of Rapid Change*

    b.   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

    c.   IDEA (Innovations Deserving Exploratory Analysis) Programs - http://www.trb.org/IDEA

        i.   Fosters new ideas and awards start-up funding, open to everyone

    d.   Practice-Ready Papers (PRP) Database - http://prp.trb.org/

        i.   Papers identified by standing committees as having potential interest to practitioners as practice-ready

    e.   Record TRB attendance this year! 1500 papers reviewed this year.

    f.   TRB trying to fill niche between research and practice. Keep this in mind during paper review, planning sessions, committee meetings, etc.

    g.   TRR research record going completely electronic this year. Still volume based. Does not mean more or longer papers accepted for publication.

17. **2017 Mid-Year Meeting and 2018 Annual Meeting Activities and Plans/Ideas – All**

    a.   More information to come.

    b.   Possibly form a subcommittee to begin work on updating our Circular?

    c.   2018 Annual Meeting Activities & Plans

        i.   Theme: *Transportation moves the economy of the future*

        ii.   Committee and Subcommittee meetings

        iii.   FMCSA sessions and Poster session

18. **Roundtable discussion – All**
    a. Discussion of Wednesday afternoon sessions – Mike Belzer
        i. Regulatory Liberalization and Commercial Motor Vehicle Safety: Europe and North America (2:30-4:00)
        ii. Rates and Regulation: Policy Implications of the Economic Approach to Commercial Motor Vehicle Safety (4:30-6:00)
    b. Other recent research projects / topics of interest
19. **Additional Business and Announcements – All**
20. **Adjournment**

<u>**Subcommittee Meetings Minutes**</u>

1. **Motor Carrier Alternative Compliance Subcommittee**
        Monday, January 9, 2017: 10:15 AM-12:00 PM
        Marriott Marquis, Marquis Ballroom Salon 14 (M2)
        Brenda Lantz, North Dakota State University, presiding
    - Attendees: Eric Miller, Jennifer Lincoln, Gene Bergoffen, Steve Vaughn, Dan Blower, Sharon Newnam, Jeff Burns, Stacey Tisdale, Brian Taylor, Ron Knipling, Deborah Quackenbush, Mike Fox, and David Madsen
    - Welcome and Introductions
    - Review and discussion of minutes from the last meeting
        o Ron Knipling – How are "good" safety management practices defined? Does technology make you safe? What are the safety practices and evidence of what technology works?
        o Gene Bergoffen – No organization to analysis – if we do this, do we get this result? Not only about the technology hardware but also the culture and best practices.
        o Ron concurred – what is the evidence that a technology works?
        o Gene – Need a prospective versus retrospective analysis, and need fleet participation of different types and sizes
        o Jeff Burns – Mike Belzer and Don Osterberg tried a benchmarking study years ago – safety as a service expectation
        o Gene mentioned a white paper to set-up the concept of a pilot test
        o Ron stated that there is only one RNS identified in this area, and it could be improved

- Update from FMCSA on Beyond Compliance Program (see presentation)
  - https://www.fmcsa.dot.gov/fastact/beyond-compliance
  - *Comments*
  - From the FAST Act, what does "adopting feel safety management tools, technologies, and programs" mean? Needs more detail / definition.
    - Perhaps this subcommittee could help with the definition.
    - Technology is advancing fast, with differing levels of effectiveness and integration.
  - Dan Blower – What is the research design? There are a lot of confounding variables and the term "safety culture" is vague.
    - Ron stated that we need a list of behaviors/practices.
  - Mike Fox – the NTSB has investigated crashes, but does not do anything with the technology – they don't analyze data such as time of day or the experience of the driver.
  - Gene – Need to research best practices – gather, use, analyze, mitigate, and track.
  - Sharon Newnam – Need to separate safety culture and technology, and need to be more proactive.
  - Brian Taylor – One research idea is to implement a technology in half of a fleet for one year, then analyze/compare. If a company implements throughout the whole fleet, they should not "forget" about it.
- Discussion of existing models / examples
  - TruckSafe system in Australia - http://trucksafe.com.au/
    - Primarily large companies who participate.
    - Does have a great best practices framework.
    - Dan – The advantage to this is there is an independent group monitoring / auditing; appears to mostly involve "following the current laws/regulations".
    - Sharon -- Does this make a difference? Does it work? Is there a financial incentive?
    - Gene – should set-up a baseline and measure results.
    - Ron suggested a before/after case study – possible RNS?
    - Mike Fox mentioned the examples of the International Motorcoach Group (IMG), which is a monitoring group (http://imgcoach.com/about-img); and the Transportation Safety Exchange (TSX), which is an auditing group -- https://www.transportationsafetyexchange.com/

- o Responsible Care program in the Chemical industry - http://responsiblecare.americanchemistry.com/
  - How accurate are their metrics?
- o SmartWay® Program - http://epa.gov/smartway/
  - How are they monitoring?
- o Beyond Compliance: Strengthening the Safety Culture of the Offshore Oil and Gas Industry - http://www.trb.org/main/blurbs/175037.aspx
  - Do they certify? Are there tangible benefits?
- Open discussion on research needs and next steps
  - o Sharon – What is the key to safety culture where visibility of performance does not exist?
  - o Brian – Discussed the Partners in Compliance program in Alberta -- http://www.partnersincompliance.com/ -- comprised of premier carriers with the trucking association backing, performs audits.
  - o Ron discussed ISO 9000 and U.S. military certification, and the need to examine carrier safety management – consider expanding the scope of the committee to include this.
  - o Jeff mentioned that broker groups also have an interest in this topic – need to improve process versus reduced liability.
  - o Gene mentioned that perhaps FMCSA could use this committee as a "sounding board" for additional research and/or provide stakeholder input to potential research designs.
  - o The attendees decided that a follow-up conference call would be beneficial to continue the discussion.
  - o Subsequent to the meeting, Sharon Newnam volunteered to take over as Chair of this subcommittee.

2. **Truck and Bus Technology Subcommittee**
   Monday, January 9, 2017: 3:45 PM-5:30 PM
   Marriott Marquis, Howard University (M1)
   George Reagle, George L. Reagle and Associates, presiding
- There were 15 attendees.
- Welcome and Introductions
- Brief opening remarks on major technology issues
- Presentation on NHTSA Rulemaking on Autonomous Vehicles
  - o Leigh Merino, Senior Director, Regulatory Affairs, MEMA (Motor Equipment Manufacturers Association)
- Discussion on Autonomous Vehicles

- Discussion on cybersecurity
- Open discussion on current technology issues and research needs
- Summary and wrap up

3. **Truck and Bus Data Subcommittee**

   Tuesday, January 10, 2017: 6:00 PM-7:30 PM

   Marriott Marquis, Marquis Ballroom Salon 16 (M2)

   Robert Scopatz, VHB, presiding

- Attendees: Bob Scopatz, Swaroop Dinakar, Jeff Muttart, Scott Valentine, Ron Knipling, Dave Madsen, Brenda Lantz, Andrew Krupp, Mouyid Islam, Ron Weber, Bahar Dadashova
- Welcome and Introductions
- 2016 Recap
- Scott Valentine, FMCSA - Data FMCSA needs in order to really move safety forward
  - Scott's topics included USDOT numbers; Motor Carrier Registration; Inspection Modernization; Crash Data History; National Governors' Association (NGA) Crash Criteria; Crash File Challenges; Crash Report Advisory Committee; and Other areas of interest (Driver Pay, Driver Retention, Seat Belts, and Waze Data)
- Top 5 Data Needs Discussion
  - The group discussed the top five data needs based on 2016 notes. This fed into the Research Needs Statements Discussion as that was the original purpose of our Top 5 discussion.
- Research Needs Statements
  - Ron Knipling presented information on the research needs statements developed since last year's meeting. Our subcommittee had one that has been posted to the RNS website. It was authored by Mouyid Islam and is titled *Analyze Injury Outcomes of Rural and Urban Truck Crashes.* Other RNS submittals are pending.
- Next Steps: Plan for 2017
  - The subcommittee discussed two tasks that we could take on in 2017.
    - 1. An update to the Data Chapter in our Committee's white paper on the Domain of Truck and Bus Safety.
    - 2. A potential e-Circular and associated podium session on the Future of Truck and Bus Safety data.

4. **Truck and Bus Operator Health and Wellness Subcommittee**
   Wednesday, January 11, 2017: 2:30 PM-4:00 PM
   Marriott Marquis, Marquis, Ballroom Salon 14 (M2)
   Jeffrey Hickman, Virginia Tech Transportation Institute, presiding
   - Attendees: Matt Thiese, Andrew King, Larry Decima, Brenda Lantz, Steve Jerry Krueger, Alexander Crizzle, Pierre Thiffault, Erin Mabry, Eric Miller, Sharon Newnam, Carlyn Muir, Julie Perrot, Etsuo Perrot, and David Madsen
   - Welcome and Introductions
   - Review Truck/bus and health-related sessions at TRB
   - Presentations
     - Dr. Thiese from the University of Utah
       - Crash Risk for Drivers with Multiple Medical Conditions
     - Dr. Mabry from the Virginia Tech Transportation Institute
       - Commercial Driver Individual Differences Study
     - Dr. Krueger from Krueger Ergonomics Consultants
       - Commercial Driver Fatigue, Long-term Health, and Highway Safety: Report of Research Needs
   - Open discussion on research needs
   - Fatigue Conference Announcement
   - Closing

5. **Truck and Bus Driver Training Subcommittee**
   Wednesday, January 11, 2017: 2:30 PM-4:00 PM
   Marriott Marquis, Marquis Ballroom Salon 16 (M2)
   Thomas Weakley, Owner-Operator Independent Drivers Association Foundation, Inc. (OOIDA), presiding
   - There were four (4) attendees.
   - Welcome and Introductions
   - Discussion on the present Entry Level Driver Training Rulemaking
   - Petition or reconsideration of the Behind the Wheel training hours
   - Update from New Mexico DOT on training for drivers experiencing dust storms
   - Presentation by Pierro Hirsch on simulator research findings
   - Open discussion of driver training research needs
   - Discussion of whether the committee should be continued in light of the entry level driver training mandate and if yes, what should be its focus going forward
     - Decision to discontinue this subcommittee, until if/when there may be interest in continuing it once again.

6. **Motorcoach Safety Subcommittee**

   Wednesday, January 11, 2017: 4:30 PM-6:00 PM

   Marriott Marquis, Marquis Ballroom Salon 14 (M2)

   Charles Vits, IMMI, presiding

- Attendees: Charles Vits, Andrew Krum, Rob Pearson, Patrick Hallan, Brenda Lantz, Swaroop Dinakar, Jeff Muttart, Julie Perrot, Matthew Daus, Sasha Ozeran, Kris Poland, Thomas Barth, Rob Molloy, Brian Sherlock

- Welcome and Introductions
  - Overview of subcommittee and its history was discussed. Tom Yager (FMCSA) stepped down from subcommittee chair position. Charlie Vits, newly appointed to parent Truck and Bus Committee ANB70, agreed to take over chair.

- Review of Minutes of Last Meeting

- Presentation: "NTSB Assessment of Motorcoach Current Bus Operation and Occupant Protection Issues"
  - Robert Molloy, Ph.D., National Transportation Safety Board
  - Presentation reviewed recent NTSB investigations related to multi-passenger vehicles. Points covered included areas needing technology/design, operations, usage, and regulatory improvements. In addition to motorcoach crashes, school buses, transit bus, and duck crash investigations were presented. NTSB web site has now a page for school transportation on school bus. Conclusion was that there are still opportunities to make significant improvements in safety in these vehicles but cost benefits are still a challenge to achieving progress.

- Regulatory Update – Patrick Hallan National Highway Traffic Safety Administration (NHTSA)
  - Suggested referencing web site www.Reginfo.gov as location to get latest regulatory status. Motorcoach structural integrity regulation which was to be finalized last year was dropped by OMB but NHTSA will retry in 2017 to move it forward. This is NHTSA's commitment along with restraints (done), fire safety, and evacuation.
  - Motor coach is now termed as "Over the Road Bus" being an elevated passenger compartment over a luggage compartment regardless of GVWR. NHTSA is granting very few exceptions. This means lap shoulder belts are now required on all "over the road buses" since November, 2016. Discussion occurred on need for rulemaking that would be clearer and more encompassing.

- Discussion – Motorcoach Safety Issues and Research needs
  - "Truck and Bus Maintenance Requirements and Their Impact on Safety" Andrew Krum, Center for Truck and Bus Safety at the Virginia Tech Transportation Institute. Maintenance found to be one of three top categories of issues among carriers related to crash causes and 65% higher crash rate was found to be related to maintenance needs. Looking at how to focus on individual vehicles rather that carrier performance and what interventions can be exercised to improve maintenance. Working to develop a systematic maintenance program. Looking at Safety Measurement System (SMS) data and recorded violations associated with the vehicle. Looking for motorcoach carriers that would fit into program research needs.
  - Driver vision limits at "A" Pillar – Brian Sherlock, Amalgamated Transit Union - Brief presentation on issues related to construction of A pillars, mirror, and other visual obstacles resulting in pedestrian injuries and fatalities. Research on how to remove obstructions needed.
- Discussion – Evaluation of Scope of Committee
  - Sub-Committee 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:
    - Agreement was to focus on changing scope
    - Safety issues are now being focused on more of the non-traditional niche buses and how to define what regulations they fall under
    - Change name to "bus subcommittee" but concern that this really is the parent committee name and responsibility.
    - Concern was that Parent Committee had greater focus on Truck safety than Bus safety and different safety solutions existed or were needed especially considering the different types of bus classes.
    - Discussion moved to similarities across buses regardless of application bus would all benefit fro same safety measures such as occupant restraints.
    - Discussed Limousine industry and its relationship to multi-passenger vehicles beyond the motorcoach. Varied uses make regulatory classification difficult.
    - Agreed that we need to broaden scope to some type of "multi-passenger commercial vehicle safety" subcommittee that does not infringe on the defined role of the Truck and Bus Committee. Charlie

Vits agreed to review with Brenda Lantz and then report back to the committee for further discussion by email. Goal is to have if formally defined by next year's meeting.

- 2017 Activity, Opportunities, Meetings
  - Charlie Vits to investigate mid-year conference call meetings to continue discussions and continue progress in research.