Minutes of Subcommittee on Truck and Bus Safety Data Needs
www.ugpti.org/trb/truckandbus/subcommittees/

Tuesday, January 24, 2012
1:30PM - 3:15PM
Marriott, Park Tower Suite 8219

Brenda Lantz, Chair
(brenda.lantz@ndsu.edu)

1. Welcome and self-introductions / sign-in sheet

2. Review of the mission and scope of the subcommittee
   Mission Statement: The ANB70 Data Needs Subcommittee exists to document and propose solutions to gaps in the available data to support analysis of truck and bus safety.
   Scope: The scope of the ANB70 Data Needs Subcommittee is all data containing information related to truck and bus safety. This includes information about driver, vehicle, environmental factors and their interactions. Information useful in safety research may include, but not be limited to, crash records and associated traffic records data sources (roadway, driver, vehicle, citation/adjudication, and injury surveillance systems), exposure data (e.g., travel data, demographic information and population statistics), and data from commercial motor vehicle and driver inspections and motor carrier reviews.

3. Review the list of data source links created based on the discussion at last meeting
   a. List is posted at: http://www.ugpti.org/trb/truckandbus/subcommittees/datasources.php
   b. Any additional links to information? Any missing?
      - Add NMVCCS - National Motor Vehicle Crash Causation Survey
      - Add DIR – Driver Information Resource and Pre-Employment Screening Program
      - Naturalistic driving data is available from a number of sources – Dan Blower (dfblower@umich.edu) is a good point of contact. Perhaps list the standards / guidance for using?
      - Add VMT – vehicle miles traveled – under Exposure Data
        1. Need both urban and rural
      - Add Vehicle classification data
      - Add AAMVA as a source for driver population data
      - Add Census Bureau - http://www.census.gov/
      - Add state toll authorities as source for toll information
      - Add FHWA as source for traffic volume data
   c. Reminder that there is a Research Needs Statement related to exposure data at: http://rns.trb.org/dproject.asp?n=25336

4. FMCSA Analysis Division project updates / discussion / Q&A – Bill Bannister
   a. MX Long-haul Trucking Pilot: Two Federal Register notices have been published. The Analysis Division developed the sampling and analysis plan and will be conducting the safety comparison of MX trucks operating under the Pilot and U.S. truck based on inspections results. We will look at driver and vehicle OOS rates and specific violation rates such as traffic enforcement, driver fitness, hours of service, brakes, etc.
   b. Non-fatal Crash Completeness: As part of the State Safety Data Quality program, we are implementing a performance measure on the completeness of non-fatal crashes submitted to FMCSA by the States. It uses a model that UMTRI developed based on data from 16 States and takes into account a rural/urban factor to estimate non-fatal crash totals from the number of fatal crashes reported.
   c. DataQs User Guide and Manual: We plan on updating the Guide this year.

d. Crash Accountability: We are developing a process for analyzing police accident reports to assess accountability. We've developed a coding manual based primarily on the process used in the Large Truck Crash Causation Study. When rolled out it will initially use the DataQs process for requesting reviews of crashes for accountability.
e. CMV Driver Survey: We have OMB permission to conduct a pilot for an annual survey of driver work and compensation information. It will be a combination of a mail out, and in person interviews at DMVs, rest areas, and inspection stations.
f. Delay and Environmental Cost of Crashes: This was presented at the FMCSA Analysis, Research and Technology Forum at TRB. It utilizes the TSIS-CORSIM and MOVES models to simulate and analyze what happens to traffic after a crash occurs, and provides estimates of lost productivity, emissions and wasted fuel due to congestion.
g. Minimum Levels of Financial Responsibility: The current minimum liability insurance levels for-hire carriers of passengers and freight are required to maintain were set in the 1980's. We are conducting a study to determine whether those levels are adequate today or if they need to be adjusted.
h. CSA Effectiveness Model: Similar to the Compliance Review Effectiveness Model (CREM), we are developing a model to estimate the safety effectiveness of CSA interventions based on a before/after analysis of crash rates.
i. Passenger Carrier Driver Risk Characteristics: The University of Maryland has conducted an analysis of the impact of driver characteristics such as age, body mass index, gender, work history, and past driver violations, vehicle violations, and crashes on future crash likelihood. It is undergoing internal review.
j. Owner-Operator Safety Performance: The UMD is analyzing the safety performance of owner-operators that lease their services to other carriers compared to the safety performance of other types of drivers and vehicles.
k. Pre-employment Screening Program (PSP) Safety Effectiveness: We are initiating a before and after safety performance comparison of carriers that have made use of the PSP versus those who have not.

5. Brief Truck & Bus Safety-related presentations and discussion — Emphasis on data sources, analysis techniques, and any data gaps discovered. Attendees were encouraged to contact the presenters directly for any follow-up questions / information.
    a. Use of Crash Clustering to Inform Fleet Road Safety
        – Presenter: Phillip Darby - Loughborough University (P.Darby@lboro.ac.uk)
    b. Safety Benefits of Stability Control Systems
        – Presenter: John Woodrooffe - University of Michigan Transp. Res. Inst. (jhfw@umich.edu) and Dan Blower (dfblower@umich.edu)
        – Dan discussed how it is difficult to find buses in state data, and how they linked VINs to buses on a case by case basis. It is also difficult to identify un-tripped roll-over cases as well as pre-trip crash loss of control. He also reminded the committee about the BCCS – Bus Crash Causation Study – data available.
    c. Predicting Truck Crash Involvement: Commercial Driver Behavior-Based Model and Benefits of Alternative Compliance in the Trucking Industry
        – Presenter: Micah Lueck - American Transp. Research Institute (mlueck@trucking.org)
    d. Evaluation of Factors Influencing Large-Truck Crash Severity
        – Presenter: Andrea Bill - University of Wisconsin, Madison (bill@wisc.edu)
        – Has a "Safety Data Resource Guide" we could link to.
        – Identified a number of data gaps, including vehicle factors (weight not filled out), incorrect or missing sequence of events, and the issue of trying to link data sets.
    e. Run-Off-Road Crashes of Commercial Vehicle Drivers
        – Presenter: Yiyun Peng - University of Washington (yiyunp@u.washington.edu)
    f. Effects of Hours of Service and Driving Patterns on Motor Carrier Crashes
        – Presenter: Kun-Feng Wu - Pennsylvania State University (kxw930@psu.edu)

g. Crashes Involving Large Trucks: Exploratory Injury Severity Analysis
    - Presenter: Mouyid Bin Islam - University of Texas, El Paso (mbislam@miners.utep.edu)

h. Note: For the project "Safety Impact and Driver Acceptance of an Integrated Crash Warning System for Heavy Trucks," the full report is available at: www.nhtsa.gov/DOT/NHTSA/NVS/Crash%20Avoidance/Technical%20Publications/2011/811464.pdf
    - Emily Nodine from the Volpe Center also noted that her team is now conducting the evaluation of the heavy truck and bus data from the ITS Safety Pilot Program (Connected Vehicle field test that will launch this summer).

6. Wrap-up / Next steps
    a. Brenda let the committee know that she would be looking for volunteers to chair this subcommittee as she will be the new incoming Chair of the Truck & Bus Safety Committee. Since then, Bob Scopatz (bscopatz@data-nexus.com) has volunteered to take over as Chair of the subcommittee.