

CARRIER SAFETY MANAGEMENT SUBCOMMITTEE (ACS60-1)

Tuesday 10th January, 8:00 AM- 9:45 AM (ET)

Venue: MM Mount Vernon Square (M3)

Chair: Prof Sharon Newnam, Queensland University of Technology

| AGENDA | RESPONSIBILITY |
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| 1. Welcome and Introductions (10 mins) | All |
| 2. Update from the 2022 TRB meeting (20 mins) | All |
| 3. Presentation (30 mins) Title: Safety scores to improve safety Overview: Currently, the Federal Motor Carrier Safety Administration (FMCSA) quantifies carrier safety performance and identifies targets for intervention using Behavioral and Safety Improvement Category scores (BASICS). The 2017 National Academies of Sciences Engineering and Medicine’s (NAS) Panel on the Review of the Compliance, Safety, and Accountability Program of the FMCSA recommended exploring an item response framework as an alternative to BASICS. Item response models (IRM) are a form of latent trait psychometric model designed to analyze instrument response patterns. In the motor carrier safety context, roadside inspections would be treated as “safety tests” and safety scores would be generated based on the probability of carriers receiving violations. The most important function of safety scores is to help the FMCSA keep public roads safe and, ultimately, reduce the frequency of crashes. Therefore, the severity weights used to construct BASICS are tied directly to crash occurrence and crash severity. However, item response scores do not explicitly consider crashes in their formation – they are exclusively based on violation probabilities. This raises an important question: how predictive of crashes are item response measures relative to BASICS? That said, this paper also seeks to compare “Unsafe Driving” (USD) item response scores to USD BASIC scores in terms of crash prediction. | Walter Ryley (Bowling Green State University) & Michael Belzer (Wayne State University) |
| 4. Presentation (30 mins) Title: The National Road Safety Partnership Program: Heavy Vehicles and Vulnerable Road Users | Prof Jude Charlton, Chair of the National Road Safety Partnership Program, Australia |

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| <p>Overview: The National Road Safety Partnership Program (NRSP) is a collaborative network to support Australian businesses in developing a positive road safety culture. This presentation will provide an overview of the NRSP-led project the Construction Logistics and Community Safety (Australia) project. CLOCS-A is about addressing the interaction between heavy vehicles and vulnerable road users including cyclists, pedestrians and motor bike rider to ensure all road uses are more aware, understanding and tolerant of each other on the road.</p> | |
| <p>5. Open discussion on research needs and next steps</p> | <p>All</p> |