TRB Truck and Bus Safety – Carrier Safety Management Subcommittee

Marriott Marquis, Mount Vernon Square (M3)

Tuesday, January 09th, 2024, 3:45- 5:30 p.m. ET

Meeting Minutes

1) Welcome and introductions

Attendees –

Bob Scopatz	bscopatz@vhb.com
Olivia Dobson	Olivia.dobson@qut.edu.au
Hillel Bar-Gera	Hillelb@rsa.org.il
Jude Charlton	Judith.charlton@monash.edu
Kelly Stowe	Kelly.stowe@dot.gov
Bob Kreeb	Robert.krreb@dot.gov
Nicholas Lockhart	Nicholas.lockhart@dot.gov
Md Mazharul Haque	m1.haque@qut.edu.au
Jason C Anderson	jason.c.anderson@pdx.edu
David Madsen	Dave.madsen@dot.gov
Brenda Lantz	Brenda.lantz@ndsu.edu
Jonathan Mueller	Jon.mueller@dot.gov
Zach Cahalan	Zcahalan@trucksafety.org
Brian Heath	Bheath@drivewyze.com
Andrew King	
Xin Pei	Peixin@tsinghua.edu.cn
Shimul Haque	m1.haque@qut.edu.au

2) Update since the 2023 TRB meeting
   a. Jude Charlton provided an update on the Construction Logistics and Community Safety – Australia (CLOCS-A) project
      i. The standard (https://clocs-a.org.au/wp-content/uploads/2023/06/CLOCS-A-Standard-v1-2.pdf) has been finalised, including a tiered approach to accreditation (Bronze, Silver, or Gold)
      ii. The project has evolved beyond the initial CLOCS model developed in the UK, adapted to specifically suit the Australian road environment and operators
      iii. The project has launched the awareness-raising Ride Along event, allowing the public (as well as stakeholders from government) to see the road from the perspective of a truck driver
      iv. The Chartered Institute of Logistics and Transport (who contributed to the development of CLOCS-A) has been awarded as the host of the program, and will be in charge of the long-term governance and sustainability of the program
      v. More information on CLOCS-A (including audit and accreditation procedure and supporting materials) can be found at www.clocs-a.org.au

3) Presentations
   a. *Evaluation of the National Road Safety Partnership Program*
      i. Olivia Dobson, Research Assistant, Queensland University of Technology (olivia.dobson@qut.edu.au)

ii. The National Road Safety Partnership Program (NRSPP) was created to bring together businesses, researchers, and government in a collaborative network and support organisations to improve road safety.
iii. Olivia summarised findings from a program evaluation completed by the Monash University Accident Research Centre, measuring the program's activities, outputs and impact.
iv. The evaluation identified evidence that the NRSPP has increased its engagement in activities including knowledge production, advancement, and dissemination since its inception in 2013.
v. Findings support the program's influence on key decision-makers, including government, external stakeholders, the research sector, and workplace organisations, as evidenced by reference to the NRSPP in policy papers, scientific reports, and stakeholder materials.
vi. Survey results additionally demonstrate the program's positive contribution to workplace health and safety outcomes (e.g. employee safety knowledge and workplace safety culture), and highlight areas of improvement to inform the future strategic directions of the program.
vii. Learn more about the NRSPP at: https://www.nrspp.org.au/
viii. The full evaluation report can be accessed online at: https://www.nrspp.org.au/resources/nrspp-evaluation-report/

b. *AI-based video analytics to understand safety issues associated with Heavy Vehicles at urban intersections*
   i. Professor Shimul Haque, Professor of Transportation Engineering, Queensland University of Technology (m1.haque@qut.edu.au)
   ii. Heavy vehicles such as trucks and buses can significantly impact overall traffic movements, particularly in urban environments. They also pose a significant risk to vulnerable road users (VRUs), such as pedestrians and bicyclists, due to large blind spots, poor visibility, longer turning manoeuvres, and wider turning radii.
   iii. The conventional safety assessments based on historical crash records are reactive, based on limited information and often rely on engineering judgment instead of evidence-based support.
   iv. A new project, led by Prof Shimul Haque, Prof Sharon Newnam and Jerome Carslake, aims to utilise Artificial Intelligence (AI)-based video analytics and traffic conflict-based safety assessment for measuring the crash risks associated with heavy vehicles at urban intersections.
   v. Shimul highlighted the previous applications of AI-based video analytics on road safety, and discussed the aim and objectives of the new upcoming project on heavy vehicle safety (risk management framework).
   vi. Note that Shimul is unable to share his PowerPoint slides until the project is officially announced, but he is very happy to answer questions via email.

4) Open discussion on research needs and next steps
   a. Kelly Stowe: Need for further quantitative analysis of safety culture growth over time (longitudinally) to measure the effects of strategies and interventions (e.g., training, enforcement)

i. Kelly noted the example of the Short Line Safety Institute's work in collecting data in the rail industry. It would be useful to apply a validated methodology for collecting data on safety culture in the Truck industry
ii. Jude Charlton noted that the Global Road Safety Partnership may have previously done work on this research priority, and will raise this at the next meeting with the GRSP.

b. Bob Kreeb: Need for further automated driving systems to provide rigour to quality control/training/inspections
    i. Bob noted the work in Safety Management Systems present in the Aerospace industry (e.g., NASA) to ensure that incidents are investigated and appropriate follow-up is completed, tracked and documented
    ii. Olivia Dobson shared the work of Professor Sharon Newnam in creating a Systems Thinking Incident Review (STIR) app
        - STIR is a digital toolkit for investigating injuries in the workplace using a systems-thinking approach. It consists of targeted prompts and questions to assist practitioners in identifying the factors contributing to an injury across all levels of the systems, not only factors focused on the errors of frontline staff or equipment failure.
        - The App also guides practitioners in generating actions that have the capability to create systemic change, providing a standardised and accessible method for investigating injuries and generating actions to prevent future injuries.

c. Hillel Bar-Gera has requested any guidance (e.g., materials) to assist in a study of vehicle safety in Israel
    i. Hillel is particularly interested in learning more about the ISO 39001 road traffic safety management standard and compliance with this standard or any equivalent standards in the USA, Australia or elsewhere).