Transportation Research Board

ACS20 Committee on Safety Performance and Analysis

Safety Analytical Methods Subcommittee, ACS20(1)

Annual Meeting 2021 – Meeting Agenda

Friday January 8, 2021 – 10-11:30 AM (online)

Ad hoc Subcommittee chairs: John Ivan and Bhagwant Persaud

Agenda items

1. Introductions (sign in on Google Form)
2. Charge from Committee chairs (Kim Eccles and Karen Dixon)
3. Context/background for formation of this subcommittee
   1. TRB Committee restructuring – ANB20 Safety Data Analysis and Evaluation and ANB25 Highway Safety Performance have been combined into ACS20 Safety Performance and Analysis.
   2. The intention is for the subcommittees in the new ACS20 to complement one another, not compete or be redundant.
   3. This subcommittee will be a merger of the existing Subcommittee on Future Directions in Road Safety Analysis (joint subcommittee) and the Subcommittee on Technical Issues (ANB25).
   4. This subcommittee will NOT include Surrogate Measures of Safety subcommittee (ANB20), which will remain a separate subcommittee within ACS20.
   5. Issues related to connected and automated vehicles to be covered by a separate joint subcommittee to be formed in the future (after the ACS20 reorganization is complete).
   6. Consequently, the focus of this subcommittee is intended to be on methods of analysis, not on subjects of analysis.
4. Group discussion: write a scope and mission statement for the subcommittee.
   1. The scope and mission for the Future Directions and the Technical Issues subcommittees are attached to be considered as starting points.
   2. The Technical Issues Subcommittee addressed ad hoc issues with Highway Safety Manual (HSM) Part B Safety Management Systems and Part D CMFs as well as Part C Predictive Methods. Not all of those issue will necessarily be within the purview of this new subcommittee. Consequently, the functions of the ANB25 Technical Issues Subcommittee could be handled in one of two ways. What is the consensus of this group regarding which would be best?
      1. A working group within this new subcommittee, working cooperatively with other appropriate subcommittees (in ACS20 or other committees) for non-analytical technical issues.
      2. A working group outside this new subcommittee that refers analytical issues to this Subcommittee, and other issues to other appropriate subcommittees (in ACS20 or other committees).

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ANB25 Committee on Highway Safety Performance

Proposed Subcommittee on Technical Issues

Proposed Scope and Mission

January 15, 2020

Prepared by: Douglas Harwood, John Ivan, Raul Avelar, Cong Chen, Bahar Dadashova, Derek Troyer, Jerry Roche

Scope

The Technical Issues Subcommittee will serve the Committee on Highway Safety Performance by conducting the following activities as needed:

1. Technical Evaluation and Advising
2. Serving as the Committee’s primary resource for assessing technical issues in data-driven highway safety performance analysis methods
3. Responding to specific requests/issues that arise with the content of the HSM and other data-driven highway safety performance tools content
4. Evaluating the effectiveness of current and proposed data-driven methods and tools and their use to assess highway safety performance (in conjunction with Future Directions Subcommittee of ANB20 and TRB Committee ABJ80).
5. Research Implementation
   1. Providing input towards integrating the science of safety into highway agency guidance
   2. Assessing the ability to implement specific research results and their potential for practical application by highway agencies
   3. Generating Research Need Statements for consideration by the Committee related to technical methods and procedures for highway safety performance
   4. Incorporating human behavior into the assessment of highway safety performance
   5. Considering new technologies, data, and modes in research needs
6. Strategic Planning
   1. Defining a strategic vision that moves us closer to the goal of improving safety performance of the highway system
   2. Identifying the list of research directions / topics that need to be addressed in the near / medium-term future (e.g., five years). These topics will be developed into research needs statements and prioritized.

Mission

The Subcommittee on Technical Issues will serve the Committee by providing technical evaluation and advising, guidance on research implementation, and supporting strategic planning related to technical issues in sound road safety evaluation.

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Joint Subcommittee on Future Directions in Road Safety Analysis

Committee on Safety Data Analysis & Evaluation (ANB20 – lead) and

Committee on Highway Safety Performance (ANB25)

Scope of Subcommittee:

* The Subcommittee will focus on creation of knowledge rather than the application of knowledge.
* The Subcommittee will monitor emerging ideas and approaches in safety analysis, which would include safety simulation, causal and structural modeling and surrogate measures of safety.
* The Subcommittee will monitor applicable analytical methods from other disciplines, such as econometrics, epidemiology and biostatistics.
* The Subcommittee will promote analysis and development of quantitative metrics for using emerging and non-traditional data sets not already used in safety, such as emergency medical transport and care, hospital records, and other public health databases, crowd-sourcing data, social network data, and naturalistic driving data.
* The Subcommittee will promote quantitative analysis of human behavior and factors, education and enforcement approaches to safety improvement, in other words, approaches other than engineering as we have traditionally addressed.