May 2017

Beyond Compliance Process Research To Support FMCSA Implementation

FAST Act Requirements

- FMCSA to provide recognition including credit or an improved SMS percentile, for carriers that:
 - Install advanced safety equipment
 - Use enhanced driver fitness measures
 - Adopt fleet safety management tools, technologies and programs:
 or
 - Satisfy other standards determined appropriate by the Administrator

Research Objectives and Hypotheses

- Core Hypothesis of the FAST Act and Research:
 - Carriers that adopt and implement best safety management technologies and practices perform more safely than those that do not.
 - The research will seek to provide an objective evaluation, using accepted safety performance metrics, of the impact of application of best practices, including technology use and safety programs.
 - This can then lead to a solid framework for carrier recognition under the Beyond Compliance banner.
 - The added value of identification of Beyond Compliance practices can serve FMCSA, and the CVSA and Carrier communities in encouraging a broader base of carriers to adopt best practices and to allow targeting of enforcement efforts on lower performing entities.

Information Collection and Design Plan – Assessment of Best Practices

- The time frame for the research will require a Retrospective Analysis, along with a synthesis of proven impacts of application of safety technologies.
- İnitial Outreach to nine carriers (across industry size continuum) mostly conducted in face-to-face format or teleconference (questions communicated in advance), focused on these primary objectives:
 - Solicit inputs on safety initiatives that have been implemented, or are being tested, (without government mandates). Initiatives may be technology (i.e. active collision mitigation) or programmatic/management practices(i.e. predictive analytics).
 - How did the carrier measure effectiveness and ROI for these initiatives?
 - Pre and post implementation metric comparison
 - Determine whether safety culture/climate is being measured within each carrier, and if so, how?
 - Solicit suggestions on what incentives or recognition carriers will find most attractive, encourage them to participate in the Beyond Compliance Program.
- Upon OMB approval, expand outreach to other carriers to determine:
 - Barriers to investment in safety improvement programs / technologies
 - Solicit suggestions on what incentives or recognition carriers will find most attractive.

Performance Measures and Metrics

- Data identified in Information and Collection Plan will be a guide
- Measures will not be limited to formal regulatory criteria (CSA, e.g.) but will include measures used by carriers drawn from various technologies, and from other sources that record driver behaviors
- Will also consider thresholds for entry in the program, or for continued carrier eligibility

ICR Process/Peer Review – Research Overview

- Based on feedback from the initial carrier interviews, select a few particular technologies and/or practices to assess in detail.
- Reach out to several more carriers that have or may adopt those practices and/or technologies.
- <u>Hypothesis:</u> A carrier that adopts and implements a given best safety management technology or practice will improve safety performance (i.e. reduce crashes).
- Objective: Measure the crash reduction associated with implementing a given technology or safety practice.