



U.S. House of Representatives
Committee on Transportation and Infrastructure

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BRIEFING MEMORANDUM

TO: Members, Subcommittee on Highways and Transit
FROM: Staff, Subcommittee on Highways and Transit
RE: Subcommittee Hearing on "Evaluating the Effectiveness of DOT's Truck and Bus Safety Program"

PURPOSE

The Subcommittee on Highways and Transit will meet on Thursday, September 13, 2012, at 10:00 a.m. in Room 2167 of the Rayburn House Office Building to receive testimony related to the Federal Motor Carrier Safety Administration's (FMCSA) Compliance, Safety, Accountability (CSA) program. At this hearing the Subcommittee will review FMCSA's new motor carrier safety enforcement and compliance program and identify issues related to its implementation. The Subcommittee will hear from the Administrator of FMCSA, Co-Founder of Road Safe America, Assistant Chief of the Texas Department of Public Safety, Vice President of Safety and Maintenance of FedEx Ground, Vice President of Colonial Freight Systems, Inc., Director for Carrier Services of C.H. Robinson, and President of Gentry Trailways.

BACKGROUND

FMCSA's Compliance Safety Accountability Program

On January 1, 2000, FMCSA was established through the Motor Carrier Safety Improvement Act of 1999 (P.L. 106-159) with the mission of reducing crashes, injuries, and fatalities involving large trucks and buses. In order to manage limited resources, FMCSA created the Motor Carrier Safety Status Measurement System (SafeStat) to target unsafe truck and bus companies (motor carriers) identified through accident records and vehicle and driver violations that result in out-of-service orders. Data collected into SafeStat was combined to create a SafeStat score for a motor carrier. If a score fell below a certain threshold, FMCSA would conduct a comprehensive on-site compliance review of that motor carrier and issue a rating of satisfactory, conditional, or unsatisfactory.

After a 2004 audit by the Department of Transportation's Office of Inspector General that reported significant data problems with SafeStat,¹ FMCSA began to develop CSA. Like SafeStat, the goal of CSA is to intervene with unsafe carriers in order to prevent future crashes. This goal is achieved through CSA's three emphasis areas: measurement, evaluation and intervention.

CSA's Carrier Safety Measurement System (SMS)

In December 2010, FMCSA replaced SafeStat with the CSA program. The main component of CSA is the Safety Measurement System (SMS) that analyzes safety violations from inspections and crash data to identify high-risk motor carriers for compliance reviews and other more-focused interventions to address specific problems. The SMS uses seven safety improvement categories called Behavior Analysis and Safety Improvement Categories (BASIC) to examine a carrier's on-road performance and potential crash risk. The seven BASICS are Unsafe Driving, Fatigued Driving (Hours-of-Service), Driver Fitness, Controlled Substances/Alcohol, Vehicle Maintenance, Cargo-Related and Crash Indicator.²

Data from inspections and crash reports are classified into one of these seven BASICS. A carrier's measure for each BASIC depends on the perceived severity of the violation or crash (severity weight), number of adverse safety events, and when the event occurred (time weight).. Severity weights are scaled from 1 to 10, where 1 is the lowest crash risk and 10 is the highest crash risk. After a measurement is determined, the carrier is then placed in a peer group (based on, for example, each carrier's number of power units, vehicle miles traveled, and inspections) and a rank and percentile is assigned. SMS is available on the Internet to the general public.

Concerns Regarding the Effectiveness of SMS

Before implementing CSA, FMCSA conducted the CSA Operational Model Test from February 2008 through June 2010. The goals of the Operational Model Test were to assess the new CSA design, determine whether it was likely to result in improved carrier safety performance, and to identify any features that needed to be adjusted prior to implementation. The Operational Model Test divided motor carriers from four States (Colorado, Georgia, Missouri, and New Jersey) into test groups (utilizing the new SMS) and control (utilizing SafeStat) groups.

In order to evaluate the effectiveness of the Operational Model Test, FMCSA commissioned a study by the University of Michigan's Transportation Research Institute.³ The study found that motor carriers that exceeded the SMS thresholds, especially in the Unsafe Driving, Fatigued Driver, and Controlled Substance and Alcohol BASICS, have a higher crash risk than motor carriers not exceeding the thresholds. The study concluded that a carrier's BASICS are significantly related to that carrier's safety and future crash risk.

¹ *Improvements Needed in the Motor Carrier Safety Status Measurement System* (February 13, 2004), U.S. Department of Transportation, Office of Inspector General, MH-2004-034.

² <http://ai.fmcsa.dot.gov/sms/HelpFiles/SMSMethodology.pdf>

³ University of Michigan Transportation Research Institute, *Evaluation of the CSA 2010 Operational Model Test*, (2011), <http://csa.fmcsa.dot.gov/Documents/Evaluation-of-the-CSA-Op-Model-Test.pdf>

Conversely, a study of CSA by Wells Fargo Securities, LLC found no correlation between a carrier's actual accident incidence and the scores for Unsafe Driving, Fatigued Driving, or Driver Fitness BASICS.⁴ The study suggests that interested parties should not rely exclusively on a carrier's composite BASIC scores to assess overall risk. Several issues were identified in the study that may contribute to the differing conclusions of the Wells Fargo study and the University of Michigan's Transportation Research Institute study:

- Even though CSA is a Federally administered program, citations are issued and inspections are carried out at the State level. Each State has different enforcement and inspection priorities that may result in a carrier receiving a disproportionate number of violations depending on where the carrier conducts most of its business.
- Each violation of a motor carrier regulation is assigned a severity weight that, according to FMCSA, is indicative of the potential danger of the violation. For example, in the Unsafe Driving categories a severity weight of 7 is given to "not wearing a seatbelt" but "following too close" and "improper lane change" are each assigned a 5. In the Driver Fitness category, severity weight is high for failure to have a valid Commercial Driver License (CDL). However, a driver may not have a valid CDL due to non-driving related infractions that have nothing to do with highway safety – such as missed child support payments. The study concludes some severity weights given to certain violations are illogical.

Another study by the University of Maryland's James Gimpel questions whether there is an adequate amount of data to accurately generate a BASIC score.⁵ Variations in data collection from State to State, the exclusion of carriers with no inspection violations, and the lack of a clear statistical relation between some BASIC scores and the number of crashes lead to a weak correlation with a carrier's crash risk. Given that FMCSA only generates data to assess 12 percent of active carriers in a BASIC, the number of inspections can have a significant impact on a BASIC score. Carriers that are inspected infrequently may not have enough data to generate a reliable BASIC score.

The trucking industry has raised concerns over the inclusion of crash data that may not be attributable to a commercial motor vehicle driver. Currently, crash data is included in the BASIC score regardless of who is at fault for the crash. If a motor carrier is involved in a crash where a passenger vehicle is found to have caused the accident, the crash will still be counted "against" the motor carrier in their BASIC score. FMCSA states that there is a concern regarding the consistency of police crash reports and how fault is assessed. However, no progress has been made by FMCSA to address this issue.

⁴ Anthony Gallo & Michael Bushce, Wells Fargo Securities, CSA: Good Intentions, Unclear Outcomes (2011), <http://www.ime.org/userfiles/files/Federal%20Agencies/DOT/FMCSA/HMSP/WellsFargo-TRANS110311-120501.pdf>

⁵ James Gimpel, Statistical Issues in the Safety Measurement and Inspection of Motor Carriers

The DataQ System that allows stakeholders and the public to challenge erroneous data in the SMS has been criticized for being inconsistent, which could result in a carrier being identified as having a high crash risk. An individual can file a claim through a Request for Data Review (RDR). However, some carriers report inconsistent handling of RDRs due to varying jurisdictional procedures on the State level.

Additionally, freight brokers and shippers have raised concerns that BASIC scores may have an impact on vicarious liability. They are concerned that a court may consider BASIC scores in determining liability and negligent hiring claims brought forth by victims of crashes involved with a carrier hired by a broker or shipper. If a motor carrier is sued for damages caused by an accident, the broker can be liable for those damages even though brokers and carriers haven't traditionally been considered to have an employer-employee relationship. It is unclear how a broker should view a carrier that is deemed satisfactory by FMCSA but has a high score in one of the BASICS.

WITNESS LIST

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