

Improvements to the CSA 2010 Safety Measurement System

FMCSA conducted a 30-month Operational Model Test (Op-Model Test) in nine states to assess the efficiency and effectiveness of the new CSA 2010 initiative. By design, the Op-Model Test included continual assessment of results and solicitation of stakeholder feedback, with an eye towards refinement prior to national launch. The Op-Model Test ended on June 30, 2010 and the SMS enhancements are a direct result of that process.

F Q. What refinements are being made to the SMS test methodology?

A. The SMS uses seven Behavior Analysis and Safety Improvement Categories (BASICS) to assess motor carriers' safety. The BASICS are: Unsafe Driving, Fatigued Driving (Hours-of-Service), Driver Fitness, Controlled Substances/Alcohol, Vehicle Maintenance, Cargo-Related, and Crash Indicator. FMCSA has identified four opportunities to improve the SMS methodology:

1. Modifications to the measure of exposure for the Unsafe Driving BASIC and Crash Indicator;
2. Refinements to the measurement approach for the Controlled Substances/Alcohol BASIC;
3. Updates to the severity weights of roadside violations based on Subject Matter Expert review;
4. A more strategic approach to addressing motor carriers with a history of size and weight violations, which affects the Cargo-Related BASIC.

A **Q** Q. What modifications are being made to the measure of exposure for the Unsafe Driving BASIC and Crash Indicator?

A. Analysis conducted by FMCSA showed measuring exposure solely by Power Units (PUs) may overly identify as deficient those carriers with high utilization rates (i.e. those carriers with greater than the national average per power unit rate). Analysis also indicated that the sole use of Vehicle Miles Traveled (VMT) as the measure of exposure overly identified those carriers with low utilization rates as deficient. As a result, the Agency created a new approach to measure carriers' exposure on the road within the Unsafe Driving BASIC and the Crash Indicator using a combination of PUs and, when available and reliable, VMT data. The Agency is also exploring options to enhance the reliability of VMT data for future use, including potential cross checks against State databases that include VMT and enforcement action against motor carriers that report erroneous data. Additionally, the carrier population is now segmented into two groups based on the type of vehicle (combination and straight) operated so that companies operating different types of vehicles are no longer compared to each other.

Q **S** Q. What kind of refinements is FMCSA making to the measurement approach for the Controlled Substances/Alcohol BASIC?

A. Op-Model Test results and law enforcement experts indicated that violations within the Controlled Substances/Alcohol BASIC are more likely to be found during an inspection rather than be the cause of an inspection, which was confirmed by analysis conducted by the Agency. The Controlled Substances/Alcohol BASIC measure of exposure will now be based on the number of relevant inspections instead of the number of PUs, as in the earlier test version of the SMS.

Q. Should we expect to see any updates to the severity weights of roadside violations?

A. Severity weights are assigned to violations in the measurement system based on a violation's relationship to crash risk. Subject Matter Experts from FMCSA's field staff, including enforcement personnel and CSA 2010 development team members, examined these severity weights and submitted recommendations to the Agency to better associate crash risk to the violations. These recommendations have been incorporated into the SMS methodology. More detailed information, including an updated list of violations and severity weights, will be published on the CSA 2010 Website on August 16, 2010.

Q. When will more information be available and where can I get it?

A. FMCSA will provide motor carriers with a preview of their SMS safety assessments beginning August 16, 2010 on the CSA 2010 Website at <http://csa2010.fmcsa.dot.gov/>. The assessments will be based on the improved SMS methodology. The updated methodology document will also be posted on the Website at that time. Today motor carriers can visit the Website and log into the CSA 2010 Data Preview that was launched on April 12, 2010. It provides carriers with an inventory of their safety violations and crashes within the SMS BASICS and information on how to improve safety compliance.