CSA 2010

What You Need to Know

With Comprehensive Safety Analysis 2010 (CSA 2010) the Federal Motor Carrier Safety Administration (FMCSA), together with state partners and industry will work to further reduce commercial vehicle (CMV) crashes, fatalities, and injuries on our Nation's highways. CSA 2010 will enable the FMCSA and its state partners to assess the safety performance of a greater segment of the industry and to intervene with more carriers to change unsafe behavior early. This will allow State and Federal officials to screen a much larger number of carriers based on their inspection data.

When CSA 2010 is implemented, the Safety Measurement System (SMS) will replace the current Safety Status (SafeStat) measurement system as FMCSA's tool to identify high-risk motor carriers. The SMS will evaluate the safety of individual motor carriers by considering all safety-based roadside inspection violations, not just out-of service violations, as well as State-reported crashes, using 24 months of performance data. SMS will assess each carrier's safety performance in each of the 7 Behavior Analysis and Safety Improvement Categories (BASICs):

- Unsafe Driving (CFR Parts 392 & 397; speeding, lane change, passing and turning, careless/reckless,   following too close)
- Fatigued Driving (HOS; CFR Parts 392 & 395)
- Driver Fitness (CFR Parts 383 & 391)
- Controlled Substances/Alcohol (CFR Parts 382 & 392; under the influence, possession, consumption of alcohol within 4 hours of duty)
- Vehicle Maintenance (CFR Parts 393 & 396)
- Cargo-Related (CFR Parts 392, 393, 397 & Hazardous Materials)
- Crash Indicator (Reportable Crashes; no injury/no fatality, hazmat involvement, injury/fatality)

SMS calculates a measure for each BASIC by combining the time and severity weighted violations/crashes normalized by exposure. Applying a similar approach to that used in SafeStat, SMS converts each carrier's BASIC measures into percentiles based on rank relative to peers. The CSA 2010 Operational Model will involve a more comprehensive measurement system, a proposed safety fitness determination methodology that is based on performance data, and a comprehensive intervention process designed to more efficiently and effectively correct safety problems.

Data will be scored and weighted based on its relationship to crash causation (violation points + OOS) x time period = total violation score). A total score includes crash records and all safety-based violations observed at roadside inspections. Based on a carrier's score within each BASIC, the SMS signals when an "unfit" threshold is reached and triggers the appropriate intervention by the Agency. Currently these thresholds are set as follows:

Unsafe Driving, Fatigued Driving, Crash Indicator		Drugs/Alcohol, Driver Fitness, Cargo, Vehicle Maintenance	
Most Carriers	72%	Most Carriers	77%
Hazmat	67%	Hazmat	72%
Passenger	50%	Passenger	55%

Red Flag Violations Incur Compliance Review

SMS continually monitors on-road performance. A driver who is pulled over for speeding may be found to be deficient in other areas. Carriers should be prepared to avoid the 11 violations that the SMA deems "red flags", and are always investigated. They automatically incur a compliance review and are always investigated by the Safety Investigator (SI) as part of a carrier

investigation. The current red flags are outlined in the table below, along with the Behavior Analysis and Safety Improvement Category (BASIC) to which they correspond. At present, there are 11 such violations.

Red Flag Violations

BASIC	Part	Violation
Fatigued Driving (HOS)	395.13(d)	Violating Part 395 Out-of-Service (OOS) Order
Controlled Substances/Alcohol	392.4(a)	Possessing, using or being under the influence of a controlled substance
Controlled Substances/Alcohol	392.5(a)	Possessing, being under the influence of, or using alcohol within 4 hours of going on duty
Driver Fitness	383.37(b)	Allowing driver to operate with more than one Commercial Driver's License (CDL)
Driver Fitness	383.21	Operating a commercial motor vehicle (CMV) with more than one CDL
Driver Fitness	383.23(a)	Operating without a valid CDL
Driver Fitness	383.51(a)	Driving while disqualified
Driver Fitness	391.11(b)(5)	Driving without a valid operator's license
Driver Fitness	391.15(a)	Driving while disqualified
Driver Fitness	391.45	False entry on medical examiner's certificate
Vehicle Maintenance	396.9(c)	Operating an OOS vehicle before making repairs

At a glance: Differences between SafeStat and CSA 2010

Today's Measurement System: SafeStat	Tomorrow's CSA 2010 SMS
Organized by four broad categories - Safety Evaluation Areas (SEAs): Accident, Driver, Vehicle, and Safety Management	Organized by seven specific Behavior Analysis Safety Improvement Categories (BASICs)
Identifies carrier for a compliance review (CR)	Identifies safety problems to determine who to investigate and where to focus the investigation
Uses only out-of-service (OOS) and moving violations from roadside inspections.	Uses _all_ safety-based road-side inspection violations (includes warnings and citations)
Little to no impact on safety rating	Used to propose safety fitness determination based on carriers' current on-road safety performance (future)
Violations are not weighted based on relationship to crash risk	Violations are weighted based on relationship to crash risk
Assesses carriers only	Two distinct safety measurement systems-one for individual carriers and one for individual commercial motor vehicle (CMV) drivers

Intervention

Once the measurement system signals the need to intervene, CSA 2010 outlines progressive interventions designed to advise the motor carrier or driver that their safety performance has come to the government's attention. These steps are meant to improve unsafe behavior early:

- Warning Letter
- Targeted Roadside Inspection
- Off-Site Investigation
- On-Site Investigation—Focused Cooperative Safety Plan Notice of Violation Increasing (more than ever before) Severity On-Site Investigation
- Comprehensive Notice of Claim/Settlement Agreement

The intervention process is triggered by one or more deficient BASICs, a high crash indicator, a complaint, or a fatal crash. Intervention selection is influenced by safety performance, hazardous material or passenger carrier status, intervention history and investigator discretion. In November 2010 when CSA is implemented, a carrier could begin with a more stringent intervention, depending on initial findings.

Driver and Carrier Scoring

Carriers are measured *only* on the inspections and crashes tagged with their DOT number. Therefore, the violations that a driver gets while working for a specific carrier apply to that carrier's score. The violations that a driver receives before or after their employment will not affect the carrier's score.

Critical note: Terminating a driver for any reason does *not* eradicate their crash and inspection results incurred while operating for the carrier. This data continues to apply to the carrier's SMS evaluation for 24 months from the date of occurrence, although the carrier's score will diminish over the course of the 24 months, provided the violation is corrected or does not reoccur.

The weighted formula for determining multiplication of violation points based on time pertains to: Within the last 6 months, x3; from 6-12 months, x2; between 12-24 months, x1.

The SMS will stop flagging a motor carrier when the carrier's safety performance reflects all BASIC scores below the intervention threshold. This can happen in one of two ways: 1) improved performance as demonstrated by clean inspections at roadside; and/or 2) poor inspections count less as they age and eventually fall outside of the 24-month timeframe. Appendix A at http://csa2010.fmcsa.dot.gov/documents/SMSMethodology.pdf lists violations that count against the motor carrier. A subset of these violations is applied to evaluate driver safety in cases where the commercial motor vehicle driver is also responsible in part for the occurrence. This subset of violations is noted in the "Driver Responsible" column in Appendix A of the SMS Methodology document. The driver safety assessment tool in the SMS, at present, is only used by enforcement personnel who are conducting carrier investigations. The new tool enables safety Sis to focus on drivers with poor safety performance histories when they are investigating a carrier.

More and Heavier Fines on the Horizon*

Under the new SMS, FMCSA estimates that for every 6,642 carriers SafeStat identified for a compliance review, SMS will identify 51,044 carriers with safety behavior problems for investigations.

This forecast means that carriers have an 8.5 times greater chance of incurring heavier fines and being mandated what their operation must do to become compliant.

*http://www.fmcsa.dot.gov/facts-research/enforcement-reports/enforcement-reports.aspx

How Carriers Can Avoid Scrutiny under CSA 2010

To determine measures that carriers can proactively institute to avoid intervention and compliance reviews, let's look at the 10 most frequently cited violations of 2009. These top 10 represented nearly 79 percent of all violations issued. Of those, five

related to hours of service (HOS), record of duty status and driver logs— 1, 3, 5, 8, and 9. Particular note should be taken of the first and third entries that represent the greatest number of violations.

Note the point counts for these as well. Under SafeStat, citations that imposed points were typically issued after two to three warnings. Under SMS, each warning will impose points, with an additional two points for a driver that is out of service.

Rank	Violation Code	Violation Description	# of Inspections	# of Violations	% of Total Violations	# of OOS Violations	OOS Percent	CSA 2010 Value	OOS Weight
1	395.8	Log violation (general/form and manner)	163,926	228,730	16.86%	453	0.20%	2	
2	392.2S	Speeding (§ 392.2S*)	188,848	189,042	13.94%	52	0.03%	5	
3	395.8F1	Drivers record of duty status not current	185,513	187,191	13.80%	711	0.38%	5	
4	391.41A	No medical certificate in driver's possession	134,697	135,224	9.97%	734	0.54%	1	
5	395.3A2	Requiring or permitting driver to drive after 14 hours on duty	72,861	88,254	6.51%	37,419	42.40%	7	Plus 2
6	391.11B2	Non-English speaking driver	78,913	79,518	5.86%	3,832	4.82%	6	
7	392.16	Failing to use seat belt while operating CMV	70,417	70,893	5.23%	14	0.02%	1	
8	395.3A1	Requiring or permitting driver to drive more than 11 hours	41,570	48,678	3.59%	22,580	46.39%	7	Plus 2
9	395.8E	False report of drivers record of duty status	39,474	47,004	3.47%	31,720	67.48%	7	Plus 2
10	391.45B	Expired medical examiner's certificate	42,810	42,836	3.16%	114	0.27%	5	
			976,219	1,074,534	79%	97,515			

Total # of Driver Inspections in CY2009: 3,390,104
Total # of Driver Violations in CY2009: 1,356,261
Total # of Driver OOS Violations in CY2009: 226,866

Foolproof Protection Against Fatigued Driving

Fatigued Driving is a BASIC for which SMS imposes pretty stiff point counts, found in the chart below. Once again, an electronic log system can prevent these violations. In fact, since carriers will be measured against their peer group (# of comparable units), those that have electronic logs will automatically be rated at the highest level of HOS compliance. Essentially, those with electronic logs will set the bar.

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CSMS Fatigued Driving (HOS) BASIC Violations				
Section	**Violation Description**	**Violation Group**	**Severity Weight**	**Violations in the DSMS (Y/N)**
395.8(a)(1)	Log violation (general/form and manner)	Other Log/Form & Manner	2	Y
395.3(a)(2)	Requiring or permitting driver to drive after 14 hours on duty	Hours	7	Y
395.3(a)(1)	Requiring or permitting driver to drive more than 11 hours	Hours	7	Y
395.8(e)	False Report of drivers record of duty status	False Log	7	Y
395.8(f)(1)	Drivers record of duty status not current	Incomplete/ Wrong Log	5	Y

If you are running electronic logs, you may want to challenge any violations that are written under 395.8 or others, make sure they are rated as 395.15 violations, which carry a lower point rating. Essentially, SMS recognizes the value of an electronic environment's role in helping drivers and carriers operate more safely.

Section	**Violation Description**	**Violation Group**	**Severity Weighting**	**Driver Responsible (Yes / No)**
395.15(a)(1)	Any violation of 395.15 (on-board recording devices)	EOBR Related	1	Y
395.15(b)	Onboard recording device information requirements not met	EOBR Related	1	Y
395.15(b)(5)	Onboard recording device information requirements not met	EOBR Related	1	Y
395.15(c)	Onboard recording device improper form and manner	EOBR Related	1	Y
395.15(d)(1)	Any violation of 395.15 (on-board recording devices)	EOBR Related	1	Y
395.15(f)	Onboard recording device failure and driver failure to reconstruct duty status	EOBR Related	1	Y
395.15(g)	On-board recording device information not available	EOBR Related	1	Y
395.15(h)(3)	Any violation of 395.15 (on-board recording devices)	EOBR Related	1	Y
395.15(i)(5)	Onboard recording device does not display required information.	EOBR Related	1	Y

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Driver Education

Drivers will be under more scrutiny than ever before with the onset of CSA2010. Carriers that proactively educate their drivers will have the opportunity to prevent unwanted and unnecessary point violations. Based on the 2009 inspection data, both drivers and carriers have the opportunity to virtually eliminate over 30% of the most common point violations by using electronic logs. As drivers become more and more aware of the level of exposure that they have, they too will want to eliminate these points.

In regards to vehicle maintenance, a driver can receive points in 198 out of 271 various section violations. Vehicle inspection history remains attached to a driver for 36 months, and crash data for 5 years. With the increase in pre-employment screening, there is no better time to get driver buy-in for a safe program than now.

Summary and Conclusion

Carriers that have invested in technology that promotes driver and vehicle safety have a leg up in the race for CSA 2010 compliance. Electronic driver logs, fault codes, engine performance monitoring and OERs provide the ability to measure driver behavior and performance will be crucial under the new Safety Measurement System. FMCSA updated "A Carrier's Guide to Improving Highway Safety" in December 2009. This is designed to assist the motor carrier in understanding and complying with the Federal Motor Carrier Safety Regulations. For this information, visit FMCSA's ETA Program.