



## No Simple Calculation

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Questionable data sources and the debatable weight assigned to various violations are examples of why a court should not permit a plaintiff to use CSA evidence to prove that a carrier was unsafe.

# Why Courts Should Not Admit CSA Scores as Evidence

It is well known that the Federal Motor Carrier Safety Administration (FMCSA) launched its newest program to track the performance of commercial motor vehicles in 2010. The program, formerly called “CSA 2010” and now

known as “CSA” (Compliance, Safety, Accountability), collects information from a variety of sources and gives motor carriers a score based on that data. The FMCSA claims that the program will reduce crashes involving commercial motor vehicles by identifying carriers that have deficient scores in one or more areas and then allowing the FMCSA to intervene to try to fix whatever may be causing the carriers to have the deficient scores.

While some data will remain private, many of the scores are, or will soon be, accessible on the Internet. The FMCSA says that making the information public makes the rating process transparent so that carriers and others can understand how and why a carrier received a certain score. Making the information public will also make it accessible to plaintiffs who may seek to have the information admitted as evidence for trials. This article will discuss how and why a plaintiff will seek to use the information, how and why a carrier should seek

to keep the information away from a jury, what can be done to limit the effect of the information if a judge decides to allow a jury to hear it, and what revisions the FMCSA might make to the CSA.

## CSA—How It Works

A full discussion of the CSA deserves its own article. But generally understanding the acronyms and layers of the CSA is important to understanding how information is gathered, grouped, and scored. CSA has three parts: measurement, evaluation, and intervention. Measurement involves the collection of information from various sources and transforming that information into a numerical score. Evaluation involves reviewing the measurements to make intervention decisions. Intervention involves the different ways in which the FMCSA can address the problems that it believes that a carrier has based on the evaluation—from sending a warning letter to shutting down a carrier completely. This



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article is only concerned with the measurement component of CSA.

The FMCSA uses what it calls the Safety Measurement System (SMS) to measure safety. The methodology behind the SMS is detailed and somewhat complicated. The FMCSA's description of the methods weighs in at 120 pages. The summary of the SMS in this article is drawn from the January 2012 FMCSA publication "Safety Measurement System (SMS) Methodology," available at <https://ai.fmcsa.dot.gov/sms/HelpFiles/SMSMethodology.pdf>.

### Collect and Sort the Data

The FMCSA collects data from roadside inspections, state-reported commercial vehicle crash data, and motor carrier census data. The data is then sorted into seven categories called the Behavior Analysis and Safety Improvement Categories (BASICS). The BASICS are (1) unsafe driving, (2) fatigued driving (hours-of-service), (3) driver fitness, (4) controlled substances/alcohol, (5) vehicle maintenance, (6) cargo-related, and (7) crash indicator.

### Score the Severity of the Violations

Once the data is sorted into its proper BASIC, the data that involves a crash or a violation of the FMCSA regulations receives a severity score between 1 and 10 with 1 representing the lowest crash risk and 10 indicating the highest. Again, the methodology first must sort the data because the severity ratings are specific to each BASIC. A 4 in one category does not always mean the same as a 4 in another category. One inspection can identify multiple violations. But the worst possible score from one inspection is 30 points.

### Weight the Violations Based on the Passage of Time

Each event also receives a time weight of 3, 2, or 1. The severity score is multiplied by the time weight. As time passes, the weight decreases: for the first six months, the time weight is 3; for the next six months, the weight is 2; for the second year, the weight is 1. The violations are no longer a part of the calculated score after two years.

### Total the Scored and Weighted Violations

One component of each BASIC score will always be the total of all time- and severity-

weighted violations. For example, assume that a carrier has three violations in one BASIC over the course of two years:

Severity Score	Time Weight (age)=	Event Score
2	3 (less than 6 months)	6
4	2 (between 6 and 12 months)	8
4	1 (over 12 months)	4
<b>Total Score</b>		<b>18</b>

### Normalize the Total Score

The total score, 18 in the example in the previous section, will become one component of the BASIC measure. However, the carrier in this example could be small, the number of inspections it underwent could be less or more than other carriers, or the overwhelming number of violations could be older or more recent than the violations of other carriers. The SMS takes another step to try to compensate for these factors. The BASICS use different factors to adjust the data, and the SMS refers to the process as "normalization." For example, the hours-of-service BASIC normalizes based on the total time weight of the relevant inspections. In the example, the total time weight would be (3+2+1)=6. The BASIC measure on the above example would be:

$$\frac{18 \text{ (total of the time and severity weighted violations)}}{6 \text{ (total time weight of relevant inspections)}} = 3 \text{ (BASIC measure)}$$

### Compare the Carrier with Others Within a Safety Event Group

Once the data is normalized, the SMS places each carrier in a safety event group based on the number of inspections and crashes in which the carrier has been involved. A carrier with no violations within a particular BASIC will not be placed in an event group. Each carrier that has had a violation is then ranked within the safety event group. Each carrier receives a numeric score in each BASIC, which represents its percentile ranking in the safety event group. A score of 100 represents the worst performance in the group, and a score of 0 represents the best score. One carrier in each safety event group will receive a score of 100, and another carrier will receive a score of 0.

Continuing with the example, the SMS divides the hours-of-service BASIC into

five safety event groups. The hypothetical carrier in the example would belong in group 1 with other carrier that had at least 3 inspections but not more than 10. It is impossible to say what the percentile score for the example would be. If every other carrier in the group has a BASIC measure higher than 3, then the score would be 0. If every other carrier's score is lower than 3, then this hypothetical carrier's score would be 100.

### Determine Which Carriers Require Intervention

The percentile ranking is the trigger for intervention by the FMCSA. Each of the BASICS has a threshold at which the FMCSA will intervene. For example, in the fatigued driving BASIC, the FMCSA will intervene with every carrier that has a percentile ranking of worse than 65.

### Give Carriers an Opportunity to Review and Question the Score

If a carrier feels that there is an error in the data used to generate a score, the carrier can request a data review through the DataQs system. Fed. Motor Carrier Safety Admin., DataQs System, <https://dataqs.fmcsa.dot.gov/login.asp> (last visited Nov. 1, 2012) (a system to record and monitor challenges to Fed. Motor Carrier Safety Admin. data).

### Why Would a Plaintiff Want to Use the Information?

As carriers know, plaintiffs and their attorneys make every effort to make claims directly against trucking companies. They know that a jury is more likely to return a big verdict if they can paint a picture of a carrier as having pushed drivers to exceed hours-of-service limits, ignoring maintenance issues, or overlooking dangerous driving behavior. If a carrier has received any warning letters through the CSA, a plaintiff's attorney will certainly seize on that information. In addition, a plaintiff's attorney may try to use a percentile ranking in a BASIC to suggest that a carrier is deficient. A numeric score seems simple, and an attorney for a plaintiff is likely to use a "bad" number as a constant refrain in a case, hoping that a jury focuses on the simple information and ignores the fact that the number does not show how safe a carrier is.

## Keeping the Information Out

If a plaintiff's attorney seeks to admit evidence related to CSA, a carrier will need to ask the court to exclude the information. There are no appellate cases addressing the admissibility of SMS percentile ratings. Therefore the arguments about admissibility will be based primarily on the applicable rules of evidence.

**CSA evidence, probably in the form of a percentile ranking, does not make it more or less likely that the carrier was operating safely.**

### SafeStat Decisions Offer Little Guidance

Before the FMCSA began the CSA project, it used another rating system called "SafeStat." While there are significant differences between SafeStat and the CSA programs, both rated carriers for safety, used the scores to determine whether an intervention was appropriate, and made the scores available to the public. Precedent related to admitting SafeStat information would, therefore, likely influence a court's decision on whether to admit CSA data, but there are few accessible decisions addressing the admissibility of SafeStat data. In two cases, the courts determined that a jury should decide whether a third-party logistics provider should have reviewed a commercial motor vehicle carrier's SafeStat score before arranging to hire that carrier. See *Schramm v. Foster*, 341 F. Supp. 2d 536 (D. Md. 2004); *Jones v. C.H. Robinson Worldwide, Inc.*, 558 F. Supp. 2d 630 (W.D. Va. 2008).

Those decisions did not involve using the data directly against the carrier. In another case, a district court admitted SafeStat evidence in a bench trial over the defendant's objection but noted, "If I rely on any of them I'll make sure it's in my decision." See *Doyle v. Watts Trucking of Nebraska, Inc.*, 207 WL 1977271 (Neb. Ct. App. 2007). The Mississippi Supreme Court determined that a carrier's safety rating was not relevant to a claim that a carrier's failure to

have reflective tape on its trailer caused an accident that killed someone in another vehicle. See *Utz v. Running & Rolling Trucking, Inc.*, 32 So. 3d 450 (Miss. 2010) (noting that the carrier's rating at issue was for violations occurring after the accident). In contrast, a federal district court allowed a carrier to offer evidence that it had a good safety rating and record to defend itself from claims that it failed to train or supervise a driver properly. See *Grosek v. Panther Transp., Inc.*, 2009 WL 905035 (M.D. Penn. 2009). The limited case law is not particularly helpful.

### The Rules of Evidence Will Control a Court's Decision

With so little precedent to turn to, a district court will make decisions on admitting CSA evidence based on the applicable rules of evidence. The strongest arguments for excluding the evidence will maintain that the evidence is not relevant.

Relevant evidence typically is defined as evidence that "has any tendency to make a fact of consequence more or less probable than it would be without the evidence." Fed. R. Evid. 401. And "[i]rrelevant evidence is not admissible." Fed. R. Evid. 402. Courts should make their relevancy determinations based on the applicable substantive law and the facts at issue. See, e.g., *Phillips v. Western co. of N. America*, 953 F.2d 923 (5th Cir. 1992).

### Relevant Evidence Relates to a Claim in the Complaint

The first step in assessing an attempt to introduce CSA evidence is to review a plaintiff's complaint. If a complaint only raises a claim based on the alleged negligence of a driver, then any evidence related to CSA should be excluded because it does not tend to make it more or less probable that the driver was negligent.

If a complaint alleges a cause of action based on the conduct of the carrier, a carrier can still argue that the CSA evidence is irrelevant for several reasons.

### CSA Evidence Is Not Relevant Because It Is Not Reliable

First, a carrier can argue that the CSA evidence, probably in the form of a percentile ranking, does not make it more or less likely that the carrier was operating

safely. Someone has to finish in last place in the finals of the 100-meter dash at the Olympics, but no one would call that person slow. Similarly, the fact that a carrier finishes at or near the bottom of its safety event group does not automatically mean that the carrier is unsafe. It simply means that the other carriers had fewer violations in the previous two years.

In addition, a carrier can point to the fact that data collected from the CSA comes from a variety of states, which perform inspections at different rates and report accidents with different dependability. The difference in reporting makes the data unreliable, and therefore it is cannot be relied on to make a fact more or less probable.

Next, the seven BASICS cover a wide range of potential violations. For example, the unsafe driving BASIC includes obvious violations such as reckless driving, improper passing, speeding, and operating a vehicle while texting. It also includes failing to use a seatbelt, having an unauthorized passenger on board, failing to display a placard indicating that the vehicle stops at railroad crossings, and smoking within 25 feet of a hazardous material vehicle. A carrier's percentile score does not indicate which of these violations led to the score, and it does not indicate which violations led to another carrier's score.

Also, the severity scoring within the BASICS is open to challenge. Failing to have a placard on the back of a truck indicating that the vehicle stops at railroad crossings receives a severity weight of 5, the same score as a truck that *actually* fails to stop at a railroad crossing. Failing to use caution in hazardous conditions has a severity weight of 5, but failing to wear a seatbelt in a commercial motor vehicle has a weight of 7.

Because of the inconsistent data sources, the questionable weighting of some violations, and the lumping together of many violations in a single BASIC, the percentile score cannot be used to make a fact of consequence more or less probable. Even more important, the score has no relation to safe driving. It simply shows how a carrier's performance rates compared to other carriers. Even if every carrier in one group has an excellent safety record, one carrier will have the worst possible score of 100. Conversely, even if every carrier in another group has a terrible safety record, one car-

rier will have the best possible score of 0. Since the information does not present reliable evidence of a carrier's safety record, it does not make a fact more or less probable, and a court should exclude it.

### **Relevant Evidence Can Still Be Excluded**

Relevant evidence can be excluded if its probative value is substantially outweighed by a danger of unfair prejudice, confusing the issues, misleading the jury, and creating undue delay. *See* Fed. R. Evid. 403; *Old Chief v. U.S.*, 519 U.S. 172 (1997). Unfair prejudice is prejudice that damages a party for reasons other than its probative value—like an appeal to emotion. *See U.S. v. Mohr*, 318 F.3d 613, 620 (4th Cir. 2003). Questions of confusing the issue, misleading the jury, and creating undue delay turn on whether the proof will create a side issue that will unduly distract the jury from the main issues. *See U.S. v. Terzado-Madruga*, 897 F.2d 1099 (11th Cir. 1990).

The arguments regarding prejudice mirror the arguments that show that the CSA evidence is not relevant. A carrier's score in a BASIC relies on questionably gathered data that receives a questionable weight and is then compared to other carriers. An attempt to introduce a low BASIC score, particularly without a detailed explanation of the methods behind the score, is simply an appeal to punish a commercial motor vehicle carrier. That appeal to emotion is not allowed under the rules of evidence.

As the multiple steps involved in determining a percentile score make clear, the evidence is complicated. Presenting the jury with a lengthy explanation on the nature of a BASIC score would confuse the jury and distract the members from deciding the main issues. The evidence would also significantly delay the trial. Therefore, even if a court determines that the CSA evidence is relevant, the court should exclude it because it is prejudicial and confusing.

### **Reducing the Effect of Admitted Evidence**

There are several things that a carrier can do to limit the effect of admitted evidence. Some of those actions can, and should, take place as part of day-to-day operations. Others involve actions that should be undertaken during discovery and trial preparation.

### **Day-to-Day Operations**

Obviously, the best way to avoid having to worry that a court will admit CSA data into evidence is to have only positive data. However, most carriers will have negative data at some point, and some will receive warning letters. While the FMCSA does not require a response to a warning letter, it would be a good practice to respond. A carrier should have an internal policy related to warning letters, and it should follow that policy. If a plaintiff offers evidence of a warning letter, a carrier should have evidence to offer demonstrating that the carrier received letter and that the carrier took immediate action to address potential problems.

Carriers should also track their SMS scores to assure that the data being used is accurate. The SMS data will be updated each month. A carrier should track the data to make sure that older violations are being adjusted appropriately, no violations are somehow being counted more than once, and any new violations are being identified properly.

### **Discovery and Trial Preparation**

Carriers should prepare to educate both judges and juries about the complicated method of calculating scores under the CSA. At least one company representative should be prepared to testify about the CSA in general and a carrier's responses to any warning letters or other violations. Carriers should also identify experts who can discuss the methodology behind calculating BASIC scores and describe the problems and limitations of the program.

### **Recent Statistical Analysis**

In October of 2012, the American Transportation Research Institute (ATRI) published a detailed statistical analysis of the correlation between BASIC scores and accidents: "Compliance, Safety, Accountability: Analyzing the Relationship of Scores to Crash Risk." The report is thoughtful and detailed. It finds that there is some correlation between certain BASIC scores and accidents. Interestingly, the report finds a negative correlation between BASIC scores in the driver fitness and the controlled substances and alcohol categories. That is, a higher, worse percentile score correlated with a lower crash rate. *Id.* at 16–17.

The report also criticizes several aspects of the SMS. The report notes that some of

the methodology used to collect data is flawed. For example, the ATRI believes that there is selection bias that introduces "systematic error into the measurement system." *Id.* at 4. Similarly, the ATRI notes that the region in which a carrier operates can have a significant effect on its score because different regions and states emphasize different issues in inspections. *Id.* In addition, the ATRI analysis involved viewing a single, 24-month period, which means that the study considered crash evidence that was contemporaneous to the BASIC scores. As the study noted, "the findings herein should not be interpreted as predicting *future* crashes based on BASIC measures; rather, the findings are descriptive in nature, examining current safety risk differences according to the previous two years of crash and SMS information." *Id.* at 34 (emphasis in original). Plaintiffs' counsel may try to use the favorable portions of the ATRI report. Carriers and their attorneys should argue that the report, by its own admission, does not suggest that a carrier's BASIC rankings at any given time predict the likelihood of *future* accidents.

### **Will the FMCSA Revise the CSA to Account for Fault?**

One common complaint by carriers is that the CSA includes all reportable accidents regardless of fault. The SMS methodology does not distinguish between an accident involving a completely and properly stopped truck that another vehicle crashes into and one that was the truck driver's fault, let alone how much at fault. The FMCSA has decided to conduct a study into the feasibility of considering fault in the CSA scoring. *See* Fed. Motor Carrier Safety Admin., Crash Weighting Research Plan: Will Crash Weighting Improve the Capability of FMCSA to Identify High Crash-risk Motor Carriers? (July 23, 2012), [http://csa.fmcsa.dot.gov/documents/CrashWeightingResearchPlan\\_7-2012.pdf](http://csa.fmcsa.dot.gov/documents/CrashWeightingResearchPlan_7-2012.pdf). The FMCSA plans to make the results of that study available in the summer of 2013.

As discussed above, one way to attack the admission of the CSA ratings and interventions is to point out that the data treats all accidents equally, which prejudices a carrier. At this point carriers cannot know whether and to what extent the CSA ratings will consider comparative fault when it ini-

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tiates interventions. If a truck driver helps cause an accident, but the majority of fault rests with another driver, the FMCSA still may attribute the accident to the driver after studying crash weighting. A change in the methodology that the CSA uses may not eliminate prejudice to a carrier.

In addition, if the FMCSA does factor fault into the ratings, carriers will want to pay attention to the method used to determine fault because that will have consequences. If the CSA relies on citations issued, a carrier will need to make deci-

sions about whether to challenge a citation. In jurisdictions that allow a driver to enter a no-contest plea by paying a fine, a carrier will need to know if paying a fine will prevent the carrier from challenging a fault determination by the FMCSA.

**Conclusion**

Plaintiffs and their attorneys certainly will make every effort to present CSA evidence to juries. It can appear that the scores that carriers receive under the CSA, and the interventions taken by the FMCSA as a result of those scores, are simple evi-

dence that a jury can review in deciding whether a motor vehicle carrier operated negligently. Calculating the ratings, however, is not simple. The questionable data sources, the debatable weight assigned to various violations, and a percentile rating that shows the relationship between carriers but not the relationship to an objective standard of safety all demonstrate that a court should not permit a plaintiff to use the CSA evidence to prove that a carrier was unsafe. Carriers and their attorneys should challenge attempts to offer CSA evidence to juries. 