

EMERGING EVIDENTIARY ISSUES IN TRUCKING LITIGATION:
PREVENTABILITY ANALYSIS, SAFESTAT, & CSA 2010

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I. INTRODUCTION

As trucking litigation becomes more contentious and the stakes continue to be raised evidentiary issues will be more prominent. It is no secret to anyone reading this that a significant portion of any trucking lawsuit involves issues that have nothing to do with what actually happened on the roadway.

Driver qualifications, hiring and retention decisions, drug and alcohol issues and hours of service are all hot button issues. So too are the manner in which the DOT and FMCSA look at a motor carrier's (and driver's) history, record and performance. Also in the mix is the motor carrier's own internal assessment of its safety record.

The purpose of this paper and the panel arising from it is to discuss how these issues have been and are likely to be treated in state and federal courts confronted with trucking lawsuits. In order, the paper will discuss:

- Post-accident preventability analysis and determinations;
- SafeStat (and, to a lesser extent SAFER) Motor Carrier Safety Ratings; and
- The FMCSA's CSA 2010 initiative.

The paper will discuss the historical background of all three topics, how the courts have treated them from an evidentiary standpoint, and some practical analysis of what has been and

what can be done by motor carriers when faced with evidentiary challenges relating to these issues.¹

II. POST-ACCIDENT PREVENTABILITY ANALYSIS AND DETERMINATIONS

The origin of post-accident preventability determinations is unclear. However, it is well known that companies throughout the transportation industry (railroads, property and passenger motor carriers, public transit systems, and airlines) routinely employ such an analysis.

While one might receive several answers to the question “Why do you conduct preventability analysis and determinations?” the general consensus is that transportation companies want to aggressively examine an accident, engage in self critical analysis and exceed traditional tort concepts. Some motor carriers have expressed that the goal of preventability analysis is zero accidents, which every reasonable person knows is impossible.

The three major sources of a definition of preventability are the National Safety Council (www.nsc.org), the American Trucking Associations (ATA) (www.truckline.com), and the Federal Motor Carrier Safety Regulations (FMCSRs) (www.fmcsa.gov).

The National Safety Council’s definition of preventability states in part:

- A preventable collision is one in which the driver failed to do everything that reasonably could have been done to avoid the accident.

Note that the legal concept of “reasonable care” is mentioned, but the emphasis is not on the affirmative actions of the driver operating the commercial motor vehicle. Rather, the emphasis is on what the driver of the commercial vehicle could have done to *avoid* the accident. From the plaintiff’s perspective, the two concepts are probably indistinguishable. From the defense standpoint the two concepts are polar opposites.

Clearly the National Safety Council was not considering the tort standard of reasonable care. The emphasis is not a courtroom battle in which one side wants to recover money and one side wants to prevent that recovery. The emphasis is safety, not tort liability.

The ATA defines preventability as follows:

- “Was the vehicle driven in such a way to make due allowance for the conditions of the road, weather, and traffic and also to assure that the mistakes of other drivers did not involve the driver in a collision?”

¹ I wish to acknowledge the work of my associate, Markus Apelis who assisted in the preparation of this paper.

This definition is even further removed from a tort “reasonable care” standard. The emphasis is on defensive driving and doing everything possible to counteract the mistakes of other drivers. Conversely a common law “reasonable care” standard is defined as whether the defendants’ actions in operating the vehicle and in putting it on the road were within the reasonable care standard.

The FMCSA’s definition of a preventable accident is found at Part 385.3:

- **“Preventable accident** on the part of a motor carrier means an accident (1) that involved a commercial motor vehicle, and (2) that could have been averted but for an act, or failure to act, by the motor carrier or the driver.”

One can see that the FMCSA’s definition is less stringent than that of either the ATA or the NSC. First, the FMCSA says the accident **could have** (not would have) been prevented and adds a “but for” aspect. Thus, it could be argued that if anything besides the conduct of the motor carrier or driver contributed to the accident (e.g. weather or the other motorist) then the accident was not preventable.

Thus, the battleground in a courtroom setting (or rather motion arguments before the trial starts) is whether a preventability analysis has any place in the evidence presented to the jury or other fact finder.

III. DEFENSE ARGUMENTS AGAINST THE ADMISSIBILITY OF PREVENTABILITY DETERMINATIONS.

A. Subsequent Remedial Measure Under Evid. R. 407

The most obvious argument is that a preventability determination is a subsequent remedial measure under Federal Evid. R.407 and applicable state counterparts. The federal rule states as follows:

- When after an injury or harm allegedly caused by an event, measures are taken that, if taken previously, would have made the injury or harm less likely to occur, evidence of subsequent measures is not admissible to prove negligence, culpable conduct, a defect in a product or a defect in the product’s design or a need for a warning or instruction. This rule does not require the exclusion of evidence of subsequent measures when offered for another purpose such as proving ownership, control or feasibility of precautionary measures, if contrary, or impeachment.

The defense typically argues that a preventability determination is the essence of a subsequent remedial measure. The motor carrier goes to great limits to analyze an event, soon after it occurred, and before all specific facts are known and expert analysis has been completed. The motor carrier is seeking not to determine whether its driver was simply negligent, but whether that driver went far beyond a negligence standard and exceeded his/her obligation to the motoring public as defined by the tort standard of care. The purpose of exclusion of evidence of subsequent remedial measures is to not punish a defendant which seeks to improve its safety; rather defendants or putative defendants should be encouraged to engage in such analysis.

B. Danger of Unfair Prejudice Under Evid. R. 403

Since a preventability analysis/determination goes far beyond the tort standard of care, the following Evidence Rule may be invoked:

- Although relevant, evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence.

The argument, then, is that the slight probative value of the preventability determination is far outweighed by the prejudice flowing from a jury/fact finder assuming that preventability means culpability.

IV. PREVENTABILITY AS A SELF-CRITICAL ANALYSIS

The self-critical privilege has frankly not gained much of an acceptance in courts throughout the country. The self-critical privilege was first recognized approximately three decades ago and was grounded on the premise that potentially damaging self criticism should in most circumstances be protected from discovery. Similar to the subsequent remedial measure analysis, the public policy reason for exclusion of such evidence is that the public will be best served by promoting and not penalizing the improvement in safety.

The self-critical analysis privilege has been attempted to be utilized mostly in medical malpractice, product liability (especially drug and device) litigation and similar cases. However, as will be shown below there are several transportation decisions discussing the concept.

Plaintiffs and defendants can argue over whether a motor carrier's preventability analysis meets the criteria set forth in Section V. below. The motor carrier would argue that the criteria are absolutely met.

The plaintiff would argue that such an analysis does not meet the applicable criteria. Safety is too important to allow the motor carrier to protect itself from its analysis of behavior

which is really nothing more than what ought to be expected of a motor carrier and the driver of a commercial motor vehicle.

It is recommended that motor carriers add a preamble or disclaimer to their preventability documents which clearly explains the different standard of care, subsequent remedial measure, and self-critical nature of the preventability process.

Plaintiffs would further argue that a preventability analysis and determination is nothing more than a statement against interest under Federal Evid. R. 801(d)(2). Thus, not only is the statement not hearsay, it is inherently admissible because it came from the mouth of the defendant.

V. PREVENTABILITY IN THE COURTS

A. Rule-Based Challenges.

Most courts determine the admissibility of accident preventability analysis and determinations under the applicable rules of evidence.

1. Evid. R. 407: Subsequent Remedial Measures.

Although courts are quick to exclude evidence of accident preventability analyses under Evid. R. 403 (see below), courts are less likely to exclude the same evidence under Evid. R. 407, the prohibition against subsequent remedial measures. The Federal Rules of Evidence prohibit evidence of subsequent remedial measures in certain circumstances:

When, after an injury or harm allegedly caused by an event, measures are taken that, if taken previously, would have made the injury or harm less likely to occur, evidence of the subsequent measures is not admissible to prove negligence [or] culpable conduct[.] This rule does not require the exclusion of evidence of subsequent measures when offered for another purpose, such as proving ownership, control, or feasibility of precautionary measures, if controverted, or impeachment.

Fed. Evid. R. 407.²

For instance, the motor carrier defendant in *Villalba v. Consol. Freightways Corp.* (N.D.Ill. 2000), 2000 U.S. Dist. LEXIS 11773, discussed in more detailed below, challenged the admissibility of its accident preventability analysis as a subsequent remedial measure. The *Villalba* court declined to decide the question on these grounds, but noted a split in authority among other courts. Compare *Specht v. Jensen* (10th Cir. 1988), 863 F.2d 700, 701-02 (city's

² Citation to the federal rule is, again, by way of example only. Most jurisdictions have substantially similar evidentiary rules proscribing the use of subsequent remedial measures.

press release regarding investigation of misconduct of city employees inadmissible as a subsequent remedial measure) with *Prentiss & Carlisle Co. v. Koehring-Waterous Div. of Timberjack, Inc.* (1st Cir. 1992), 972 F.2d 6, 10 (while measures taken to rectify a defective product is inadmissible, a manufacturer's analysis of a defective product is not a subsequent remedial measure). This split of authority, however, is discussed heavily in non-transportation contexts. Until a court definitively takes a stance on the admissibility of an accident preventability analysis under Evid. R. 407, litigants will still assert arguments for exclusion (or inclusion) as a subsequent remedial measure (or not).

2. Evid. R. 403: Unfair Prejudice.

Courts often exclude evidence of accident preventability analyses as unfairly prejudicial. The Federal Rules of Evidence provide for exclusion of otherwise relevant evidence on grounds of unfair prejudice:

Although relevant, evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence.

Fed. Evid. R. 403. Unfair prejudice “means an undue tendency to suggest decision on an improper basis, commonly, though not necessarily, an emotional one.” Fed. Evid. R. 403, Advisory Cite. Notes.

Villalba v. Consol. Freightways Corp. (N.D. Ill. 2000), 2000 U.S. Dist. LEXIS 11773, involved a truck-automobile collision. The driver of the automobile, Elsa Villalba, sued the owner of the truck, Consolidated Freightways, and its driver for negligence. After the accident, Consolidated Freightways conducted a post-accident review. Ms. Villalba sought to introduce evidence of Consolidated Freightways' internal investigation as a means of inferring negligence. The *Villalba* court excluded the evidence, explaining, “The problem with that inference is that the standard for determining preventability and the standard for determining negligence...are not necessarily the same.” *Id.*

In excluding the evidence as unfairly prejudicial, the *Villalba* court compared the standard for negligence under Illinois law with the National Safety Council's definition of “preventable accident.” Under Illinois law, negligence is “the failure to do something which a reasonably careful person would do, or the doing of something which a reasonably careful person would not do, under circumstances similar to those shown by the evidence.” *Id.* As mentioned above, the National Safety Council's standard for preventability encompasses any “accident...in which the driver failed to do everything that reasonably could have been done to avoid the accident. In other words, when a driver commits errors and/or fails to react reasonably to the errors of others, the National Safety Council considers an accident to be preventable.” *Id.*

The *Villalba* court concluded that the standard for negligence and the standard for preventability were not the same. The danger that these disparate benchmarks would confuse the

jury in its obligation to determine legal liability constitutes unfair prejudice. Consequently, the *Villalba* court excluded the evidence of the accident preventability analysis.

Other courts reach the same conclusion on identical grounds. See *Tyson v. Old Dominion Freight Line, Inc.* (Ga. Ct. App. 2004), 270 Ga. App. 897, 900-01, 608 S.E.2d 266. In *Tyson*, the plaintiff, while driving a truck, struck the front of a second truck belonging to Old Dominion. The *Tyson* plaintiff brought suit against Old Dominion and its driver for negligence. The Old Dominion Accident Review Committee – an internal review board charged with investigating accidents involving its drivers – conducted an accident preventability analysis of the incident. Old Dominion moved *in limine* to exclude evidence of the committee’s findings. The trial court granted Old Dominion’s motion *in limine*. The Georgia Court of Appeals upheld the trial court’s decision, noting that the Old Dominion’s internal definition of preventable accident differed from the legal standard for liability in tort. Given the difference, evidence of the committee’s accident preventability analysis was properly excluded as unfairly prejudicial.

One New York trial court best sums up the argument that unfair prejudice substantially outweighs the probative value of accident preventability analyses:

The contention that an accident is “preventable” in an accident report adds little or nothing to the liability analysis at hand.

Beaumont v. Smyth (Onondaga Cty. (N.Y.) Sup. Ct. 2004), 781 N.Y.S.2d 622, fn 3. Given its minimal probative value, courts often invoke Evid. R. 403 to exclude evidence of accident preventability analyses.

B. Self-Critical Doctrine.

At least two courts confronting the question of admissibility of accident preventability analysis in the context of transportation accidents have decided the issue on common-law grounds, rather than based on the rules of evidence. See *Harper v. Griggs* (W.D. Ky. 2006), 71 Fed. R. Evid. Serv. 227; *Granger v. Nat’l R.R. Passenger Corp.* (E.D. Pa. 1987), 116 F.R.D. 507, 508.

Harper involved a collision between two trucks. 71 Fed. R. Evid. Serv. 227. The Accident Review Board of the defendant motor carrier conducted an accident preventability analysis, and ultimately concluded that the accident was preventable. *Id.* The defendant motor carrier moved *in limine* to exclude evidence relating to the Accident Review Board’s evaluation, and specifically, its ultimate determination that the accident was preventable.

The defendant motor carrier advanced numerous rule-based challenges to the evidence, contending that such evidence was irrelevant, unfairly prejudicial, inadmissible as a subsequent remedial measure and inadmissible as an improper lay opinion. *Id.* The defendant motor carrier also moved to exclude the evidence on the basis of the critical self-analysis doctrine. The Harper court described the doctrine as follows:

[The critical self-analysis doctrine] shields information when public policy outweighs the needs of litigants for access to information relevant to the litigation. One of the purposes of the doctrine is to prevent a chilling effect on self-analysis and self-evaluation prepared for the purpose of protecting the public by instituting practices assuring safer operations.

Id. (citing *Granger v. Nat'l R.R. Passenger Corp.* (E.D. Pa. 1987), 116 F.R.D. 507, 508).

Under this doctrine, the *Harper* court excluded evidence of the accident preventability analysis in part. The court excluded any conclusory evidence contained in the analysis, including “thoughts, analyses, inferences, or deduction based on the factual circumstances of [the] accident[,] recommendations, changes in policy, or employment decisions in light of the accident.” *Id.* However, empirical facts, including factual findings, evidence of the accident’s cause, the factual circumstances surrounding the accident, or measures of damage sustained in the accident was admissible as beyond the scope of critical self-analysis protection. *Id.*

As an additional comment to its discussion of the critical self-analysis doctrine, the *Harper* court recognized the logistical difficulties inherent in its decision. The court noted that its holding might require redaction of portions of internal reports before admitting them into evidence at trial. Disputes arising from this process might also necessitate in camera reviews of an accident preventability analysis, to determine what is inadmissible conclusion as opposed to admissible fact.

See also, *Morgan v. Union Pacific Railroad Co.*, 182 F.R.D. 261 (M.D. Ill. 1988) and *Tice v. American Airlines, Inc.*, 192 F.R.D. 270 (N.D. Ill. 2000).

The cases generally stand for the principle that to meet the self-critical privilege five things must be demonstrated:

1. Information must result from a critical self analysis undertaken by the party seeking protection.
2. The public must have a strong interest in preserving the free flow of that information.
3. The information must be of the type whose flow would be curtailed if discovery were allowed.
4. The information must have been created with the intention that it is meant to be kept confidential and it has in fact remained confidential.
5. The information must be subjective rather than purely factual in nature.

Additionally, some courts have held that a self-critical analysis should be protected only if the analysis is required by federal, state or other governments. In *Roberts v. Carrier Corp.*,

107 F.R.D. 678 (M.D. Ind. 185), the court said that public policy strives to “assure fairness to persons required by law to engage in self-evaluation.” A careful analysis of the Federal Motor Carrier Safety Regulations (FMCSRs) reveals that there is no requirement that motor carriers engage in a preventability or other self-critical analysis.

VI. SAFESTAT AND SAFER

This paper will not engage in a lengthy discussion of SafeStat, its origins or its structure. However, briefly stated the Motor Carrier Safety Status Measurement System (SafeStat) is most commonly described as an automated system that seeks to measure the safety of motor carriers. The stated purpose of SafeStat (see below) is to prioritize motor carriers for DOT Compliance Reviews. In the words of the FMCSA, from Report No. MH-2004-034 produced by the Inspector General of the United States³

...FMCSA is able to assess less than 2% of about 650,000 active interstate motor carriers each year. To help select the motor carriers targeted for compliance reviews, FMCSA uses the Motor Carrier Safety Status Measurements System (SafeStat) and automated system for ranking motor carriers.

In other words, the government knows that they cannot conduct compliance reviews on anything but a tiny percentage of motor carriers. Thus, in order to identify and prioritize such carriers for compliance reviews SafeStat was developed in the mid-1990s by the Volpe National Transportation Systems Center (Volpe).

Basically, SafeStat assigns motor carriers a ranking between 0 and 100 (with 100 being the worst) in four Safety Evaluation Areas (SEA):

- Accidents (crashes)
- Driver
- Vehicle
- Safety Management

SafeStat information is generally collected by roadside inspectors (either DOT inspectors or state troopers or other motor carrier enforcement personnel authorized by DOT to conduct Level I, II or III inspections), weigh station inspectors and other law enforcement personnel who electronically record the following data:

- Motor carrier census reports and data submitted to the FMCSA including information on number of drivers and power units (largely contained within a

³ The Executive Summary of the 58 page report entitled *Improvements Needed in the Motor Carrier Safety Status Measurement System* is part of this paper. The link to the full report is: <http://www.oig.dot.gov/StreamFile?file=/data/pdfdoc/mh2004034.pdf>

motor carrier's MCS150 Identification Report – Application for USDOT Number as well as biennial updates);

- Police accident reports on crashes involving commercial motor vehicles;
- State reports on vehicles and driver violations found during roadside safety inspections which include serious moving traffic violations such as speeding, but which can include inspections at weigh stations as well as roadside inspections conducted by motor carrier enforcement personnel; and
- Violations, whether considered major or otherwise, discovered during DOT compliance reviews conducted by federal or state personnel.

The data are then subjected to a mathematical algorithm analysis which results in the SEA values ranging from 0 to 100. The higher the number, the worse the score. Any number of 75 or above is considered to be deficient in the particular SEA. Simply stated, a SEA score of 75 means that the motor carrier is worse than 75% of all motor carriers who are evaluated for that SEA. Some basic examples of values which are considered in each of the SEAs are:

- Accident SEA - reportable accidents, number of vehicles involved in crashes involving injuries.
- Driver SEA - driver critical violations, driver acute violations, driver out of service orders.
- Vehicle SEA - again, critical violations, acute violations, and out of service orders.
- Safety Management SEA - critical violations, acute violations and severe violations which are largely gathered from the Driver SEA and the Vehicle SEA. In other words, the Safety Management SEA is largely duplicative of data obtained from the other SEAs. However, the Safety Management SEA also includes compliance review violations which are paperwork oriented.⁴

VII. PROBLEMS WITH SAFESTAT

Virtually from the moment it was rolled out, SafeStat has been subject to intense criticism, from motor carriers. The basis for the criticism is that the data which are being utilized to create a SafeStat score are largely unreliable, misleading, and incomplete. For instance, in the inspector general's report mentioned above, the inspector general found that there were four "data quality weaknesses". They are:

1. Poor Carrier Census Data - it was found that about 42% of interstate motor carriers were not updating their required census data (mainly number of power units and reportable accidents and incidents). For instance, 11% of interstate

⁴ SafeStat and SAFER are easily accessed at: www.safer.fmcsa.dot.gov

carriers were reported as having “zero” power units and 15% of the carriers were on record as having “zero” drivers.

2. Poor Crash Data - the most weight in all SafeStat calculations relates to crashes, but the inspector general was highly critical of the frequency and accuracy with which states reported crash data. Incredibly, six states did not report any crashes in the six month period which was used for the inspector general review.
3. Poor Data on Moving Traffic Violations. The inspector general found that such violations were under reported, but mainly found that there was a large state variation in the reporting of traffic violations. Thus, a geographic bias occurs in the ranking system. This can result in carriers being unfairly targeted in an area of the country which *appears* to have a higher rate of crashes and traffic violations.
4. Poor and Inaccurate Data Records - The inspector general found that data entry was highly inaccurate (approaching 13% in some cases). Eleven percent of the errors related to the wrong carrier being held accountable for a SafeStat related violation! Simply stated, improper data is being entered into crash reports which obviously skews the data and lessens its reliability. It is no secret that SafeStat is replete with data relating to motor carriers and drivers who are found not to be responsible for a crash or to have been acquitted of traffic violations. In fairness, SafeStat does have a system by which motor carriers can appeal or correct improper data. However, the inspector general found that this is not easily done mainly because the motor carrier must persuade individual states to engage in corrective action.

To put it bluntly states and municipalities have improperly reported crash, moving violation, and even out of service data to FMCSA.

The inspector general made three recommendations to the FMCSA. The first one will be discussed later because it is the genesis of CSA 2010. However, it was recommended that FMCSA should re-validate the SafeStat model and use a more sophisticated analysis. Second, the inspector general recommended that FMCSA should make available an improved system for facilitating the correction of data and accuracy of data. Third, it was recommended that FMCSA completely revamp the data quality by various statistical and mathematical improvements.

A telling quote from the report is:

Consequently, while SafeStat is sufficient for internal use, its continued public dissemination and external use require prompt corrective action.

This does not bode well for using SafeStat as evidence.

The inspector general's report was devastating to the credibility and validity of SafeStat. Soon after the report, the FMCSA created a disclaimer which is attached to these materials. The disclaimer states "Caution urged in the use of SafeStat data." The disclaimer frankly admits that:

"...the completeness, timeliness and accuracy of crash data - and to a lesser extent roadside inspection data - vary from state-to-state. Accordingly, SafeStat's ability to accurately and objectively assess the safety fitness of individual motor carriers may be inconsistent and not conclusive without additional analysis."

The FMCSA also removed the accident SEA and the overall SafeStat score from the publicly accessed SafeStat database (the Analysis and Information online, or A&I, website). Carriers are still able to access their own accident SEA and overall SafeStat scores, but it is fairly obvious that the government has no confidence in either of those scores.

Finally, the FMCSA posted the following warning on its disclaimer page:

WARNING - because of state data variations, FMCSA cautions those who seek to use the SafeStat data analysis system in ways not intended by FMCSA. Please be aware that use of SafeStat for purposes other than identifying and prioritizing carriers for FMCSA and state safety improvement and enforcement programs may produce unintended results and not be suitable for certain uses.⁵

Needless to say, cautions, warnings and disclaimers make for a relatively simple argument that the data is so unreliable as not to be admissible in evidence.

VIII. THE SAFETY AND FITNESS ELECTRONIC SYSTEM (SAFER)

As an adjunct to SafeStat, the FMCSA created a website which brings all of the data together and provides a "safety rating" for motor carriers. Again, since the SAFER rating, which can either be satisfactory (the best), conditional, unsatisfactory or unrated is based on the SafeStat score, the argument against admissibility is similarly evident. It can be argued, however, that since SAFER ratings are supposed to be based largely on DOT compliance reviews they are more reliable. However, the disclaimer quoted above applies to both SafeStat and SAFER ratings.

⁵ The disclaimer language directly from the FMCSA's website, along with the link, is attached to this paper.

IX. SAFESTAT AND SAFER IN THE COURTS

A. Evidence Admissible in Favor of Plaintiffs.

At least two courts have permitted evidence of safety data and ratings in favor of plaintiffs in the context of negligent hiring claims. See *Jones v. C.H. Robinson Worldwide, Inc.* (W.D. Va. 2008), 558 F.Supp. 2d 630; *Schramm v. Foster* (D. Md. 2004), 341 F.Supp.2d 536.

The *Schramm* case involved a catastrophic motor vehicle accident between a tractor-trailer and a pickup. 341 F.Supp.2d 536. The pickup and tractor-trailer collided when the tractor-trailer failed to stop at an intersection. *Id.* The *Schramm* plaintiffs asserted numerous claims against the driver, the motor carrier and the intermediary broker and third party logistics (3PL) provider, C.H. Robinson. After extensive litigation, the court granted summary judgment in favor of all defendants on all claims except a negligent hiring claim against C.H. Robinson. *Id.* The *Schramm* plaintiffs presented evidence that the motor carrier retained by C.H. Robinson lacked a government SafeStat rating. The *Schramm* court considered this evidence in denying summary judgment, holding that the lack of a satisfactory rating serves as a red flag for brokers and logistics providers that they should investigate their motor carriers and drivers more closely. *Id.* As such, this evidence spoke directly to whether C.H. Robinson had the requisite actual or constructive knowledge of the motor carrier's incompetence to support a negligent hiring claim. *Id.* It should be noted that *Schramm* merely said the SAFER rating (actually the lack thereof) was enough to defeat summary judgment. However, the Court did fully quote the WARNING text copied *supra*.

A federal court in Virginia recently reached the same result. See *Jones v. C.H. Robinson Worldwide, Inc.* (W.D. Va. 2008), 558 F.Supp.2d 630. The *Jones* case involved a collision between two tractor-trailers. The *Jones* plaintiffs brought suit against C.H. Robinson, the 3PL provider and broker for the motor carrier at fault in the accident. As in *Schramm*, the *Jones* plaintiffs also alleged negligent hiring of the motor carrier. However, unlike the unrated carrier in *Schramm*, the motor carrier in *Jones* had a "conditional" safety rating. The *Jones* plaintiffs alleged that C.H. Robinson should have inquired into the safety data of this carrier and driver, given the lack of a satisfactory rating. The *Jones* court, closely paralleling the reasoning in *Schramm*, permitted evidence of the motor carrier's safety rating as evidence of C.H. Robinson's actual or constructive knowledge of the carrier's incompetence. The evidence created an issue of fact sufficient to overcome summary judgment on the negligent hiring claim against C.H. Robinson.

The *Jones* court also revisited the issue in evaluating C.H. Robinson's motion for judgment as a matter of law, or alternatively motion for a new trial, after the jury rendered a verdict in favor of the *Jones* plaintiffs. *Jones v. C.H. Robinson Worldwide, Inc.* (W.D. Va. 2008), 2008 U.S. Dist. LEXIS 51632. The *Jones* court reached the same conclusion as before, holding that the evidence of the SAFER rating was admissible with respect to whether C.H. Robinson had actual or constructive knowledge of the driver's unsafe propensities. *Id.* The evidence of the carrier's safety rating, presented at trial, was sufficient to permit the jury to

reasonably conclude that C.H. Robinson had such knowledge. *Id.* As such, the *Jones* court denied C.H. Robinson's motion for judgment as a matter of law.

The conclusions of the *Schramm* and *Jones* courts indicate a willingness of federal courts to consider evidence of motor carrier safety ratings. This willingness should serve as a cautionary note to motor carriers, brokers and logistics providers that they should carefully scrutinize the safety ratings of the parties with whom they conduct business.

B. Evidence Admissible in Favor of Motor Carriers.

Although the decisions in both *Schramm* and *Jones* admitted evidence of a motor carrier's safety rating in favor of plaintiffs, the conclusions reached by those cases creates a double-edged sword. Other federal courts have also admitted similar evidence in favor of motor carriers. See *Fike v. Peace* (N.D. Ala. 2007), 2007 U.S. Dist. LEXIS 81669; *Smith v. Spring Hill Integrated Logistics Mgmt., Inc.* (N.D. Ohio 2005), 2005 U.S. Dist. LEXIS 22765 (the latter case was litigated by the author of this paper).

Like *Schramm* and *Jones*, the *Smith* case involved a negligent hiring claim brought against a logistics provider and broker following a fatal accident.⁶ 2005 U.S. Dist. LEXIS 22765. The defendant logistics provider and broker moved for summary judgment on the issue of negligent hiring. *Id.* In support of its motion, the logistics provider and broker presented evidence of its satisfactory SAFER rating – the highest available. In granting summary judgment in favor of the logistics provider and broker, the *Smith* court considered the high safety rating as evidence that the logistics provider and broker acted reasonably in hiring the motor carrier involved in the accident. *Id.*

Fike v. Peace represents the inverse of this same proposition. 2007 U.S. Dist. LEXIS 81669. In *Fike*, the court considered evidence of a low safety data scores. Despite the low scores, the *Fike* court found them insufficient to overcome a motion for summary judgment on the *Fike* plaintiffs' negligent hiring claim.

With the exception of *Fike*, the conclusion of these courts necessitates the same cautionary tale as the decisions of the *Schramm* and *Jones* courts. While a negative safety rating may be sufficient to impose liability, a superior safety rating may defeat liability.

C. Evidence Inadmissible or Not Considered.

Still other courts have refused to consider evidence of motor carrier safety data and ratings. In *FCCI Ins. Group v. Rodgers Metal Craft, Inc.*, (M.D. Ga. 2008), 2008 U.S. Dist. LEXIS 81894, defendants requested that a court take judicial notice of a motor carrier's safety

⁶ A team driver fell asleep. His co-driver was asleep in the passenger seat. A multi-vehicle rear-end crash occurred. A 23 year old mother and 8 month old daughter died. A 3 year old son/brother in the vehicle nearly died.

ratings as reported on www.safersys.org . The court refused. *Id.* The *FCCI* court noted that judicial notice was reserved generally for scientific facts, and matters of geography and political history. The court also described the requirements of Fed. Evid. R. 201, which requires that a judicially noticed fact be one that is generally known within the court's territorial jurisdiction, or capable of accurate and ready determination by resort to sources whose accuracy cannot be reasonably questioned. *Id.* [citing Fed. Evid. R. 201(A)]. After examining the data, the *FCCI* court determined that the data is not the type of reliable evidence routinely contemplated by the rules governing judicial notice. *Id.*

In *Kemper Ins. Cos. v. J.B. Hunt Logistics, Inc.* (N.D. Ga. 2003), 2003 U.S. Dist. LEXIS 27574, the court refused to permit discovery regarding safety data and ratings. The *Kemper* plaintiffs submitted an interrogatory requesting information regarding the information a logistics provider/broker keeps on its carriers having a less than satisfactory SAFER rating. *Id.* The logistics provider/broker refused to respond to the request, objecting on relevance grounds. The *Kemper* court denied the plaintiffs' motion to compel discovery, reasoning that the request for this information was not reasonably calculated to lead to the discovery of admissible evidence. *Id.*

Finally, in *Frederick v. Swift Transp. Co.* (D. Kan. 2008), 2008 U.S. Dist. LEXIS 103814, a court refused to admit expert opinion testimony regarding government safety compliance audits. As discussed above, these audits are the process by which the government issues its SAFER ratings. The Plaintiffs' expert proffered opinions regarding a prior safety compliance audit, which resulted in the motor carrier receiving a less than satisfactory rating. *Id.* The *Frederick* court refused to permit such testimony. First, a subsequent compliance audit yielded a satisfactory rating. Second, there was no evidence that the earlier safety compliance audit had anything to do with the accident at issue in the case. *Id.* As such, the *Frederick* court excluded expert testimony on this subject. *Id.*

D. Use of Safety Data in Other Contexts.

Just as above, courts have both used and not used safety data and ratings in other contexts. For instance, courts have both considered and ignored safety data when deciding jurisdictional questions. *See Ezzell Trucking, Inc. v. Fed. Motor Carrier Safety Admin.* (D.C. Cir. 2002), 309 F.3d 24, 26; *Lyons v. Swift Transp. Corp.* (E.D. La. 2001), 2001 U.S. Dist. LEXIS 15585. In *Ezzell*, a federal court refused to consider safety data in deciding a jurisdictional question. 309 F.3d 24, 26. The *Ezzell* court held that the public availability of a negative SAFER rating is not a sufficiently concrete injury to confer Article III standing when a motor carrier seeks judicial review of the Federal Motor Carrier Safety Administration's administrative decision not to increase its rating. *Id.*

Conversely, the *Lyons* court considered safety data in deciding a jurisdictional question. 2001 U.S. Dist. LEXIS 15585. The *Lyons* court examined safety data proffered for the purpose of describing a motor carrier's sufficient minimum contacts and establishing personal jurisdiction. *Id.* In *Lyons*, the safety data indicated that the defendant motor carrier was involved in only one accident in the previous 30 months in the federal district where plaintiff

sought to bring suit. Moreover, the safety data indicated that only four drivers held licenses issued by the federal court's forum state. Still further, the safety data revealed that no accidents involving these drivers occurred in the forum state. As such, the safety data was insufficient to establish personal jurisdiction over the motor carrier.

These cases fit the trend discussed above, insofar as federal courts may or may not be willing to consider motor carrier safety data and ratings in a variety of contexts.

X. COMPREHENSIVE SAFETY ANALYSIS (CSA) 2010

Due largely in response to the intense criticism of SafeStat and SAFER as well as a desire to review and analyze them, in August 2004 the FMCSA embarked on the CSA 2010 program⁷.

As stated by FMCSA, the goal of CSA 2010:

Is the development and deployment of a new operation model - a new approach to using FMCSA resources to identify drivers and operators that pose safety problems and to intervene to address those problems.

CSA 2010 seeks to analyze not only motor carrier but drivers who are at risk from a safety standpoint. Instead of simply reporting data which the FMCSA believes demonstrates the safety status of a motor carrier or a driver, the goal is to identify safety performance such as unsafe driving, fatigue, driver fitness, drug and alcohol usage, vehicle maintenance, loading/cargo securement, crash history, and safety management so as to come up with a safety evaluation. The safety evaluation will then be used to assist the FMCSA, DOT, State and Industry Partners to "intervene" in the behavior of motor carriers and drivers by targeted roadside inspections, off site investigations and onsite investigations. Corrective actions resulting from such an intervention would be warning letters, the development of a cooperative safety plan, and settlement agreements between the government and motor carriers. Of course, if a motor carrier is not considered to be at risk then no intervention is necessary. Thus, a motor carrier and driver can be rated as:

- Continue to operate;
- Marginal; or
- Unfit

The backbone of CSA 2010 is the focus on evaluating and targeting "behaviors" which can affect safety. The emphasis will no longer be on compliance reviews since less than 2% of motor carriers are ever actually reviewed by the DOT. CSA 2010 believes that through the use of web based technology and data reports from states FMCSA can more effectively evaluate safety and at risk motor carriers and drivers. There are seven motor carrier and driver behaviors

⁷ The FMCSA's official description of CSA 2010 can be found at www.fmcsa.dot.gov/safety-security/csa2010/home.htm, the CSA 2010 Fact Sheet is attached to this paper.

(called “BASIC”-- Behavior Analysis and Safety Improvement Categories.) The components of BASIC are as follows:

- Unsafe driving
- Fatigued driving
- Driver fitness
- Drugs/alcohol
- Vehicle maintenance
- Improper loading/cargo issues
- Crashes

The idea is that the FMCSA will obtain on-road safety event data (e.g. inspections and crashes) and use them to create either a motor carrier or driver BASIC. The federal government is confident that the data will be significantly more reliable than SafeStat, although there is no specific explanation of why the data is expected to be more reliable. CSA 2010 on-line publications available from the federal government do not address the concerns set forth in the inspector general report referenced above in the SafeStat discussion. For instance, violations under hours of service regulations (generally Part 395 of the Federal Motor Carrier Regulations) can be as benign as a driver failing to submit his/her logs to the motor carrier within thirteen days, failing to keep seven days worth of logs in the cab of the power unit or even failing to promptly record a change in duty status. Any one of those violations would be listed under the “fatigued driving” behavior. Similarly a driver who fails to submit to an alcohol and a control substance test within two hours or eight hours under FMCSR 382.303 would receive a negative score under the “drugs and alcohol behavior”. Even if the drug and alcohol test is eventually conducted and is negative, or there was no reason to believe that the driver was under the influence of drugs or alcohol, there will be a drug and alcohol behavior notation.

At any rate, the stated goal of CSA 2010 is not only to identify at risk behaviors, but also to engage in “interventions” which are designed to correct those behaviors. Thus, the goal of CSA 2010 is arguably not Draconian or Punitive, but rather to improve the safety performance and thereby reduce crashes, injuries and fatalities.

FMCSA expects CSA2010 to be fully implemented in Mid-2010. However, In February, 2008 FMCSA began a pilot program in which CSA 2010 would be tested in four states (Colorado, Georgia, Missouri, and New Jersey). According to FMCSA:

The purpose of the test is to determine both the feasibility and effectiveness of the new CSA 2010 interventions and measurement system.

Since rulemaking which would adopt CSA 2010 has not occurred, motor carriers are not actually being rated under the CSA 2010 safety fitness methodology. These carriers are still subject to existing safety rating methodology.

The test was implemented in two phases. Phase I of the test was a startup phase involving three of the seven BASICS. Phase II was launched in late September 2008 when the remaining BASICS were added.

Of course, before CSA 2010 can become the official, enforceable method of rating carriers and drivers it will have to go through the usual rulemaking procedures and be adopted by DOT/FMCSA.

XI. PREDICTIONS ON ADMISSIBILITY OF CSA 2010 EVIDENCE

Obviously, the courts have not been able to address CSA 2010 as regards admissibility of evidence of ratings under that program. However, it is fairly evident that motor carriers and their defense attorneys will argue that CSA 2010 is as or more unreliable than SafeStat. The same concerns that exist in a SafeStat evidence admissibility analysis (improper reporting of data, misinterpretation of data, uneven enforcement, lumping all violations related to a certain behavior no matter how severe or benign into the same pot, etc.) mean that evidence of CSA 2010 ratings is inherently unreliable.

Although the FMCSA has not taken a specific position as to whether a disclaimer will be added to the CSA 2010 website as it has been added to the SafeStat/SAFER website, the prediction is that such a disclaimer will have to be added. Without directly saying so, the government has made it clear that it does not intend for safety ratings or safety data to be used in civil (or, one supposes, criminal) litigation. FMCSA personnel who have been interviewed or questioned at industry conferences always premise their answers with "I cannot speak for the agency." However, the same FMCSA representatives routinely acknowledge that a disclaimer similar to that associated with SafeStat/SAFER will be added to the CSA 2010 website.

XII. CONCLUSION

Obviously, judicial determinations of the admissibility of preventability determinations, SafeStat/SAFER ratings and data, and eventually CSA 2010 ratings and data will be up to individual state and federal judges. However, it is hoped that this paper will shed some insight as to arguments for and against admissibility. It is expected that the body of reported decisions will increase as trucking litigation, and the attendant admissibility arguments, increase.

Executive Summary
Improvements
Needed in the Motor Carrier
Safety Status Measurement System
Federal Motor Carrier Safety Administration

Report No. MH-2004-034

February 13, 2004

INTRODUCTION

Safety investigators from the Federal Motor Carrier Safety Administration (FMCSA) conduct compliance reviews to ensure motor carriers are following safety regulations. However, FMCSA is able to assess less than 2 percent of about 650,000 active interstate motor carriers each year. To help select the motor carriers targeted for compliance reviews, FMCSA uses the Motor Carrier Safety Status Measurement System (SafeStat), an automated system for ranking motor carriers. The Volpe National Transportation Systems Center (Volpe) developed SafeStat in the mid-1990s.

The public also has access to SafeStat. SafeStat results have been available to the public via the Internet since 1999. Thus, motor carriers, shippers, insurers, and other Government users have free access to SafeStat information when making business decisions.

How SafeStat Works. When sufficient information from FMCSA's database is available, SafeStat assigns motor carriers a percentile ranking between 0 and 100 (with 100 being the worst) in one or more of the following four safety evaluation areas: accidents (crashes), driver, vehicle, and safety management. Carriers ranked in the 75th percentile or greater are considered deficient in an area. Carriers deficient in two or more areas are assigned an overall SafeStat score of 150 to 550, based on the weighted accumulation of the percentile rankings. The relative weights assigned to each area are accidents 2.0; driver 1.5; vehicle 1.0; and safety management 1.0.

Where SafeStat Data Come From. Key FMCSA data sources for calculating SafeStat rankings are:

- periodic census reports that motor carriers submit to FMCSA, which include information on the number of drivers and vehicles (expressed as power units) used by the motor carrier;
- police accident reports on crashes involving commercial vehicles;
- state reports on vehicle and driver violations found during roadside safety inspections, which include serious moving traffic violations such as speeding; and
- FMCSA compliance review and enforcement records on motor carriers.

Uses of SafeStat. FMCSA uses SafeStat to identify and prioritize high-risk motor carriers for compliance reviews.¹ FMCSA also uses SafeStat to generate warning letters advising carriers that continued performance problems may result in compliance reviews and potential state vehicle registration sanctions. Public uses for SafeStat include providing information to individuals making contract award or acquisition decisions and allowing carriers to assess their own safety strengths and weaknesses.

Breakdown of SafeStat Results. Of 645,551 active interstate carriers on record², in SafeStat, 26 percent or about 170,000 had sufficient data³ to compute a value for one or more of the four safety evaluation areas. Of the 170,000 carriers, 7,821 were considered deficient; to the point they were classified as the riskiest carriers and placed in categories A, B, or C. Another 34,844 carriers, somewhat less deficient, were placed in categories D, E, F, or G. FMCSA field offices are directed to concentrate their compliance review efforts on category A and B carriers, which are considered the highest risk.

OBJECTIVES AND SCOPE

This audit responds to a request from Representative Thomas E. Petri, Chairman of the House Transportation and Infrastructure Highways and Transit Subcommittee. Concerned about data issues as well as the SafeStat methodology, Chairman Petri requested that we review the reliability, validity, and objectivity of SafeStat. Specifically, our objectives were to determine whether the:

¹ Federal and state safety investigators perform compliance reviews by examining motor carrier operations to determine whether motor carriers and their drivers meet safety requirements. Based on the results of a compliance review, FMCSA assigns carriers safety ratings of satisfactory, conditional, or unsatisfactory.

² The breakdown of SafeStat results is based on January 2003 data. As of August 2003, 665,646 active motor carriers were on record in SafeStat.

³ One example of a data sufficiency rule is that carriers must have at least three inspections on record within the most recent 30 months to receive a value in the driver or vehicle areas.

- SafeStat model is valid and whether the scores calculated are consistent with the model's design.
- data SafeStat uses are complete, timely, consistent, and accurate.
- data quality control systems are adequate to ensure information quality for intended uses.

In conducting the audit, we used data obtained from Department of Transportation organizations, selected motor carriers, and state offices. Our work included an assessment of information from a sample of crash and inspection reports obtained in 10 states.

RESULTS

The SafeStat model generally calculated scores consistent with its design, and a 1998 study supported the model's validity. However, the model needs to be revalidated because changes have occurred since the earlier study, and more sophisticated analysis, not previously conducted, would optimize the model's effectiveness. Moreover, we found material weaknesses in the SafeStat data reported by states and motor carriers and with FMCSA's processes for correcting and disclosing data problems. Consequently, while SafeStat is sufficient for internal use, its continued public dissemination and external use require prompt corrective action. Improvements in the model are important, but getting better data is essential. Examples of problems with FMCSA's database include:

- The lack of updated census data for 42 percent of the 643,909 active carriers, and for 31 percent of the 170,623 carriers that had percentile values calculated in SafeStat for one or more of the four safety evaluation areas. (Census data include the current number of vehicles and drivers used by the companies.)
- Recorded values of zero vehicles for approximately 11 percent of active carriers and zero drivers for 15 percent of active carriers even though many of these same carriers also had crashes or inspections reported against vehicles or drivers.
- Missed reports for an estimated one-third of the large trucks involved in accidents annually, including 37,000 crashes involving interstate carriers.
- Late reporting of 20 percent or about 19,000 of the crashes in Fiscal Year 2002 by 6 or more months after the crashes occurred.

- Underreporting of serious moving traffic violations (mainly speeding) identified during roadside inspections. In one state visited, an estimated 29,000 serious moving traffic violations went uncounted over a 3-year period.

In addition, based on our tests of FMCSA's database, we estimated that 13 percent of the 21,000 crashes and 7 percent of the more than 1 million inspection transactions occurring in our 6-month sample period contained carrier identification errors, such as failure to identify a carrier associated with the violation, or in a smaller number of instances, identifying the wrong carrier.

Problems with inaccurate data are compounded because no effective system is in place now to facilitate the correction of errors in data reporting. Requests received by FMCSA for state data correction are forwarded to the states where the incidents occurred, and there is no system in place to centrally track the resolution of these requests.

We recognize that FMCSA relies on state officials to generate and process much of the safety event data used in SafeStat and that this presents many challenges for obtaining complete, timely, and accurate data. However, as a result of weaknesses in the data reported by states, SafeStat rankings are geographically biased against carriers operating in states that provide more complete data, while weaknesses in the data provided by carriers can produce errors in SafeStat calculations and cause some high-risk carriers to be missed.

Thus, while SafeStat is sufficient for targeting compliance reviews and considered valuable by internal users, its continued public dissemination and external use require prompt and complete action to improve the model and improve the quality of the data used. Because carrier safety data and the model's rankings are publicly disclosed, a higher standard of quality must be met to ensure fairness to motor carriers who may lose business or be placed at a competitive disadvantage by inaccurate SafeStat results. FMCSA will need to demonstrate timely improvements if it is to continue to publicly disclose carrier results across all SafeStat categories.

Need to Revalidate the Model. FMCSA must act to revalidate the SafeStat model because changes have occurred since a 1998 study that supported the model's validity. These changes include the addition of serious moving traffic violations to SafeStat calculations, revised weighting of fatal accidents, and altered methods for calculating the number of vehicles used by motor carriers. In addition, while the general approach used in the 1998 study was acceptable, more sophisticated analysis, not previously conducted, would optimize the model's effectiveness. Such analysis could determine the degree to which the weightings used produced internally consistent results across all categories of carriers and

demonstrate the degree to which the weighting reflected the views of experts. It could also test whether changes in the model would yield better predictive results.

Any future analysis should be conducted so that the results can be subject to independent confirmation. We could not independently verify the 1998 study because the data used were not available.

Data Quality Weaknesses. FMCSA should take action to improve data quality because significant problems exist with the data motor carriers and the states provide, and these data problems limit SafeStat's effectiveness and introduce bias into the ranking process. The most serious problems lie with outdated census data on the number of vehicles and drivers used by motor carriers, incomplete crash reporting from the states, and late or incomplete inspection reporting, particularly reports on serious moving traffic violations. Specifically:

- *Poor Carrier Census Data.* SafeStat calculations use census data that motor carriers are required to complete and update every 2 years. SafeStat cannot effectively rank carriers without accurate and complete census information. In the worst case, carriers incorrectly shown on census records as having zero vehicles can have crashes, including fatalities, without it negatively impacting their SafeStat score. We found that:
 - About 272,000 or 42 percent of the active interstate motor carriers had not met the congressionally mandated requirement to update census data every 2 years, as of January 2003. This includes 23,919 motor carriers on record without an update since coming on file in 1974. It also includes 4,086 carriers identified in SafeStat as having 2 or more accidents.
 - Approximately, 71,000 (11 percent) of the 643,909 active interstate carriers were on record in January 2003 as having "zero" power units and about 98,000 carriers or 15 percent of the 643,909 carriers were on record as having zero drivers. This included 15,136 carriers who had at least one inspection on record between October 2001 and September 2002. Getting good data on drivers and power units is important as these data are used frequently in SafeStat calculations. In January 2003, one or both of these data elements were used to calculate the SafeStat score for at least 74 percent of the category A carriers, the highest risk SafeStat category.
- *Poor Crash Data.* SafeStat calculations attach the greatest weight to crashes, because crash history is considered to be associated with future crash risks, but large gaps exist in how completely and timely states report crash data. For example:

- 6 of 51 states (including 2 of the 10 states we visited) did not report any crashes in the 6-month period we reviewed. The six states were the District of Columbia, Florida, New Hampshire, New Mexico, Pennsylvania, and Vermont. These six states constitute approximately 11 percent of the total commercial vehicle miles traveled in 2002 and are home to an equivalent percentage of the active, interstate motor carriers in the nation.
- 1 of the 10 states we reviewed reported only fatal crashes to FMCSA but failed to report 5,816 non-fatal large truck crashes from 2001 to the FMCSA database.
- Meanwhile other states reported most crashes within 90 days.

Such data variations across geographic locations indicate that FMCSA may fail to target certain high-risk carriers simply because of where they operate.

- *Poor Data on Moving Traffic Violations.* State reports on roadside inspections are supposed to include data on serious moving traffic violations, but often they do not. In addition, large state-to-state variations exist in the reporting of traffic violations, which introduce a degree of geographic bias in the ranking system. For example, California reported only 115 serious moving violations to the FMCSA database in FY 2001 compared to Indiana, which reported about 25,000. Although moving traffic violations are weighted less in SafeStat calculations than are crashes, these violations have been associated with higher crash rates. Thus, underreporting in this area reduces the effectiveness of SafeStat.
- *Inaccurate Data Records.* Even when crash and inspection data reach the FMCSA database, our review showed that errors or omissions occur during the process that could influence SafeStat scores. Based on a sample of FMCSA records, we estimate that errors occurred in approximately 13 percent (2,851 of 21,225) of the crashes and 7 percent (76,521 of 1.02 million) of inspection transactions on interstate carriers during a 6-month sample period. A critical mistake that occurred in an estimated 11 percent (9,484 of 79,372) of the errors was that the wrong carrier was held accountable for a SafeStat-related violation. We cannot estimate the impact of such errors on SafeStat category rankings, but reasons for errors included the misinterpretation of reporting rules by local officials and data entry errors.

Improving Systems for Disclosing and Correcting Poor Data. Given the state of data quality, FMCSA should improve processes for disclosing and correcting data problems. Areas requiring specific improvement include:

- *Insufficient Disclosure of Weaknesses in Publicly Disseminated Data.* To mitigate problems posed by public dissemination of inaccurate data, FMCSA should ensure public users of SafeStat are aware of any known data quality weaknesses. In the past, the SafeStat Internet site pointed to problems with data provided by carriers, but did not disclose reporting problems with states. Following the issuance of our draft report, FMCSA placed a more comprehensive disclaimer on the Internet site, and promised to provide state-specific information in the future.
- *Ineffective Systems for Facilitating Data Correction by the States.* Motor carriers cannot easily correct inaccurate crash and inspection information in SafeStat because carriers must deal with individual states to obtain corrective actions. In addition, FMCSA maintains no data on the adjudication or timeliness of correction challenges and does not enforce existing requirements. FMCSA standards call for the correction of data inaccuracies within 7 days, but we have no evidence of this being enforced.

Since we initiated our audit, FMCSA and Volpe have developed a prototype for a data quality tracking system to centrally accept and track data accuracy challenges that motor carriers make to the states. However, timely action is needed to complete testing and field the system. FMCSA expects to have the system operational by the end of February 2004. With SafeStat scores being calculated and released monthly, versus the earlier practice of releasing scores semiannually, a properly operating data correction process will enable errors to be corrected on a more timely basis.

- *Insufficient Reviews of Data Quality.* We found that states had limited controls to ensure the quality of data submitted to FMCSA. To catch many of the data problems we found, quality reviews should include assessments of source documentation to make sure data transmitted to FMCSA and used in SafeStat calculations are accurate. Compounding the lack of state controls, FMCSA did not routinely conduct its own oversight reviews targeted at control weaknesses in the states. One area ripe for such a review would be identifying and correcting reporting problems associated with serious moving traffic violations observed in conjunction with roadside inspections.
- *Ineffective Use of Sanctions and Incentives.* Overall, FMCSA has not effectively used existing sanctions and incentives to promote better data reporting by states and motor carriers. FMCSA has not imposed sanctions, such as the withholding of basic Motor Carrier Safety Assistance Program (MCSAP) grant funds from states for failing to correct data quality problems. Also, current MCSAP incentive grant formulas, while useful in theory, are not sufficient. As implemented, only the timeliness of data is factored into the

incentive calculations, while completeness and accuracy of the data are ignored. Following the issuance of our draft report, FMCSA informed the states that certain grant funding would be contingent on participation in an improved system for tracking public challenges to the accuracy of SafeStat data.

- *Slow Implementation of Joint Programs.* Although the Motor Carrier Safety Improvement Act of 1999 directed FMCSA and the National Highway Traffic Safety Administration (NHTSA) to take action to improve the collection and analysis of state crash reporting, results have been slow to materialize. The agencies did not finalize a memorandum of understanding on the basic approach until February 2003. Encouragingly, since then the agencies have initiated a plan designed to bring about immediate improvement in the completeness of crash reporting for targeted states. Planned actions include reviews of how targeted states collect, store, and analyze crash data. Rapid implementation of the planned actions is needed and the plans should be extended to cover all states.

Correcting data quality problems are critical to ensure that SafeStat more effectively targets high-risk carriers for compliance reviews. However, quick action is even more important given the continued public dissemination of SafeStat results. Department of Transportation (DOT) guidelines issued in October 2002 underscore the need to apply stricter standards to “influential” information, such as SafeStat data, that has a “clear and substantial impact on important public policies or private sector decisions.” To implement this higher standard, and thus ensure the continued public dissemination of SafeStat results, FMCSA officials will need to implement an overall data program. The program should include minimum standards for data completeness, timeliness, and accuracy and make sure that those standards are met.

Summary of Recommendations. Although we support SafeStat’s use as an internal risk management tool, continued public disclosure of the information requires significant and timely actions to improve the system. Strong efforts are needed to obtain better data from the states on crashes and inspections. Funding to improve data reporting has been and continues to be provided to the states and FMCSA should act to ensure that the funding brings about the desired results. We have made the following recommendations to improve SafeStat.

First, FMCSA should revalidate the SafeStat model using a more sophisticated analysis and solicit public comment on model changes.

Second, to mitigate the impact of inaccuracies or incomplete data on public users of SafeStat, FMCSA should make available to all states, within 3 months of issuance of this report, an improved system for facilitating the correction of data

inaccuracies and the tracking of corrective actions. The agency should also expand the caution statements on the use of SafeStat recently placed on the Internet to include state-specific information on data quality problems.

Third, FMCSA should detail the components of an overall data quality improvement program that:

- Addresses longstanding issues associated with motor carrier census data by imposing fines on carriers that fail to provide updated carrier census information despite repeated opportunities to do so.
- Sets minimum standards for the quality of SafeStat data consistent with the Department's data quality guidelines. At a minimum, the standards should address completeness, accuracy, and timeliness of data.
- Accomplishes actions planned, in conjunction with NHTSA, for improving the completeness and timeliness of state-reported crashes.
- Enhances the depth, frequency, and type of FMCSA state data quality reviews and monitoring, and ensures state plans address data quality.
- Modifies FMCSA guidance and funding decisions so that MCSAP incentive grant awards are based, in part, on each state's implementation of guidelines established to provide accurate, complete, and timely safety event data.

MANAGEMENT COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

We provided FMCSA a draft of this report December 10, 2003. In its comments, FMCSA agreed with our concerns for improving data quality and cited a number of improvements already implemented or ongoing to address the recommendations in the report. The improvements reported included:

- hiring a contractor to conduct a new study to revalidate the SafeStat model;
- implementing an improved system for tracking public challenges to the accuracy of SafeStat data;
- providing SafeStat users with comprehensive information on data limitations;
- assigning staff to review monthly state reports that address state data quality issues and to work with the states to resolve them;
- establishing goals for completeness, accuracy, and timeliness of data; and

- making state grant funding contingent on participation in certain data quality programs.

In commenting on the findings in the draft report, FMCSA did not agree with all of our assertions regarding the impact of data quality problems on SafeStat. Specifically, FMCSA commented that the language in the draft report overstated the problem of out-of-date census data on SafeStat. FMCSA also disagreed with any implication in the report that some motor carriers SafeStat categorized as high risk, may only be categorized as high-risk carriers because of the existing data problems.

The full text of a matrix provided by FMCSA detailing corrective actions that have been taken or that are ongoing is provided in the Appendix along with FMCSA's substantive comments on the draft report's findings.

We appreciate FMCSA's positive response to our recommendations and have revised the final report to indicate the number of corrective actions that have been taken or are underway. Although we did not agree that the problem with out-of-date census data was overstated in the draft report, we provided additional information on the issue in this final report to ensure the full context of the problem is presented.

On the question of whether some carriers may be categorized as high risk only due to the existing data quality problems, we agree with FMCSA that data quality problems are more likely to make a high-risk carrier look good. However, we continue to maintain that the opposite situation can also occur. Because SafeStat scoring involves a relative ranking of one carrier against another, missing data may place a carrier in a deficient category because data for a higher-risk carrier is not included in the calculation. Missing crash data were most significant with six states failing to report any crashes for the 6 months analyzed. Nationwide, estimates for the underreporting of large trucks involved in crashes varied in magnitude with some states underreporting by 60 percent or more and other states underreporting by less than 20 percent.

The existing data quality problems should not prevent FMCSA from using SafeStat as an internal decisionmaking tool. However, while the data used for SafeStat calculations are sufficient for internal purposes, if public dissemination of SafeStat results is to continue, the data must meet a higher standard.

Although FMCSA comments were generally responsive, we are requesting some additional information. Specifically, we request that FMCSA clarify whether its commitment to work with states to resolve data issues will include carrying out our recommendation to ensure that state plans address data quality. We also request that FMCSA clarify whether the review of source documentation proposed

will be a one-time or an ongoing task. FMCSA also needs to provide target dates for several corrective actions, as noted in the body of the report.

Caution Urged in the Use of SafeStat Data

SafeStat (short for Motor Carrier Safety Status Measurement System) is an automated, data driven analysis system designed by the Federal Motor Carrier Safety Administration (FMCSA). SafeStat combines current and historical carrier-based safety performance information to measure the relative (peer-to-peer) safety fitness of interstate commercial motor carriers and intrastate commercial motor carriers that transport hazardous materials. This information includes Federal and State data on crashes, roadside inspections, on-site compliance review results and enforcement history. SafeStat enables FMCSA to quantify and monitor the safety status of individual motor carriers on a monthly basis and thereby focus enforcement resources on carriers posing the greatest potential safety risk.

The States are required to provide standard, basic information about large truck and bus crashes to FMCSA within 90 days of the crash event, and the results of roadside inspections within 21 days of inspection. However, the completeness, timeliness and accuracy of crash data – and to a lesser extent roadside inspection data – vary from state-to-state. Accordingly, SafeStat's ability to accurately and objectively assess the safety fitness of individual motor carriers may be inconsistent and not conclusive without additional analysis.

Temporary Removal of Accident Safety Evaluation Area (SEA) and Overall SafeStat Score

FMCSA has temporarily removed the motor carrier Accident SEA and Overall SafeStat Scores from its Analysis & Information Online (A&I) Web site while the agency works with its State partners to improve the timeliness, completeness and accuracy of large truck and bus safety data. Carriers can still access their own Accident SEA and Overall SafeStat Scores.

To view **more information** on the data quality of State-reported crashes and inspections, please refer to the:

Updated Results
November 21, 2008



[STATE SAFETY DATA QUALITY ANALYSIS RESULTS](#)

WARNING

Because of State data variations, FMCSA cautions those who seek to use the SafeStat data analysis system in ways not intended by FMCSA. Please be aware that use of SafeStat for purposes other than identifying and prioritizing carriers for FMCSA and state safety improvement and enforcement programs may produce unintended results and not be suitable for certain uses.

FMCSA recommends that all motor carriers periodically verify the accuracy of their SafeStat data. A new system, DataQs, has been introduced by FMCSA for filing concerns about federal and state data released to the public. For information on how to file a data concern [click here](#).

[Click here to access the SafeStat Module](#)



Safety Evaluation – Safety fitness determination would be based on performance data processed through the measurement system, and would not necessarily be tied to the current FMCSA compliance review. Depending on the motor carrier’s BASIC scores, the safety fitness determination could be “continue to operate,” “marginal” (with ongoing intervention), or proposed “unfit.” Each motor carrier or driver for which there is sufficient data would receive a safety fitness determination that would be updated every 30 days. This new CSA 2010 safety fitness methodology must be implemented through notice

COMPASS - CSA 2010 is closely aligned with COMPASS, an FMCSA-wide initiative that is leveraging new technology to transform the way that FMCSA does business. By optimizing FMCSA business processes and improving the Agency’s IT functionality, COMPASS will help FMCSA and State enforcement personnel make better decisions, identify high-risk carriers and drivers more effectively, and apply a wider range of interventions to correct high-risk behavior early.

Op-Model Test – In February, 2008 FMCSA launched a field test of the new CSA 2010 operational model (Op-Model). The purpose of the test is to determine both the feasibility and effectiveness of the new CSA 2010 interventions and measurement system.

FMCSA is not providing any regulatory relief during the Op-Model test. Motor carriers are not actually being rated under the CSA 2010 safety fitness methodology, because that methodology must yet be implemented through rulemaking. Instead, motor carriers will be rated under FMCSA’s current rating process in conjunction with the new CSA 2010 Safety Measurement System and progressive interventions.

The Op-Model test is being carried out in four States using approximately 26 Federal and State investigators. The four States are Colorado, Georgia, Missouri, and New Jersey.

The test was implemented in two phases. Phase I of the test was a startup phase involving three of the seven BASICs. Phase II was launched in late September 2008 when the remaining BASICs were added.

The test is now fully operational and is scheduled to run for 30 months into mid-2010, at which time FMCSA is planning full implementation. The thirty-month timeframe is designed to provide sufficient data for statistical purposes with results evaluated at periodic intervals. It is anticipated that full implementation of CSA 2010 can take place through the addition of more States as the planned safety fitness rulemaking is completed.

If you have questions on CSA 2010, please go web site www.fmcsa.dot.gov/csa2010, or contact Mr. William Mahorney at 202-493-0001, or bill.mahorney@dot.gov.



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OPERATIONAL MODEL

