# Congress of the United States

U.S. House of Representatives Committee on Small Business 2361 Rayburn House Office Building Washington, DC 20515-0515

To:

Members, Committee on Small Business

From:

Committee Staff

Date:

July 9, 2012 Hearing: "Is the Federal Motor Carrier Safety Administration's Compliance,

Safety, Accountability Program Driving Small Businesses Off the Road?"

#### I. Introduction

On Wednesday, July 11, 2012, at 1:00 p.m. in Room 2360 of the Rayburn House Office Building, the Committee on Small Business will meet for the purpose of receiving testimony on the Federal Motor Carrier Safety Administration's (FMCSA) Compliance, Safety, Accountability (CSA) Program. The CSA Program may have significant adverse consequences for small businesses that dominate the commercial trucking and hauling industry.<sup>1</sup>

Of primary concern is FMCSA's adoption of a new data analysis methodology, the Safety Measurement System (SMS),<sup>2</sup> which may inaccurately and unfairly identify motor carriers as unsafe. This potential incorrect classification is exacerbated by FMCSA's making the data

<sup>&</sup>lt;sup>1</sup> Ninety percent of motor carriers operate six or less trucks and 97.2 percent of motor carriers operate less than 20 trucks. Sean McNally, Latest Edition of ATA American Trucking Trends Shows Industry's Strength, AMERICAN TRUCKING ASS'N (Apr. 17, 2012), available at <a href="http://www.truckline.com/pages/article.aspx?id=995%2F8e1c7279-ed27-4c03-b189-cceee26bbb12">http://www.truckline.com/pages/article.aspx?id=995%2F8e1c7279-ed27-4c03-b189-cceee26bbb12</a>. The Small Business Administration (SBA) defines a small business within subsector 484, Truck Transportation, as an entity with \$25.5 million or less in annual revenue. 13 C.F.R. § 121.201 (2011). For a recent rulemaking, the FMCSA calculated that the average carrier brings in approximately \$160,000 in annual revenue per truck for firms with multiple power units, i.e. trucks. Thus, a typical carrier that qualifies as a small business would have less than 141 trucks in its fleet. United States Department of Transportation, Federal Motor Carrier Safety Administration, 2010-2011 Hours of Service Rule, Regulatory Impact Analysis, RIN 2126-AB26 7-4 (Dec. 2011), available at <a href="http://www.regulations.gov/#!documentDetail:D=FMCSA-2004-19608-28406">http://www.regulations.gov/#!documentDetail:D=FMCSA-2004-19608-28406</a>.

Withdrawal of Proposed Improvements to the Motor Carrier Safety Status Measurement System (SafeStat) and Implementation of a New Carrier Safety Measurement System (CSMS), 75 Fed. Reg. 18,256 (Apr. 9, 2010) (hereinafter "Withdrawal of SafeStat").

available to the public and urging shippers, brokers, and insurers to utilize this information in making their business decisions.<sup>3</sup>

## II. FMCSA and the Genesis of the CSA Program

The United States depends on large trucks, those weighing greater than 10,000 pounds, and buses, those motor vehicles that carry more than 10 passengers, to move goods and people across the country.<sup>4</sup> That dependence is accompanied by the risk of accidents involving commercial motor vehicles (CMVs). In order to increase safety in the industry, Congress created FMCSA.<sup>5</sup> Since the creation of FMCSA, the number of fatalities and injuries involving large trucks and buses is in decline. For example, in 2005, there were 5,539 fatalities involving large trucks and buses and 136,000 total injuries.<sup>6</sup> By 2010, there were 4,089 fatalities and 79,731 injuries.<sup>7</sup>

Prior to the development of the CSA program, unsafe carriers were identified primarily through compliance reviews (CRs) after being prioritized for intervention by the Motor Carrier Safety Status Measurement System (SafeStat). SafeStat was a statistical model that identified carriers with weak safety records by analyzing accident data and vehicle and driver violations. SafeStat assessed the safety status of individual motor carriers in four Safety Evaluation Areas (SEAs) that were combined to create an overall safety status assessment, a SafeStat score. Those identified by a low SafeStat score were given comprehensive on-site CRs to assess their compliance with safety regulations. FMCSA then used the results of the CRs to assign motor carrier safety ratings of satisfactory, conditional, or unsatisfactory as required by their regulations for Safety Fitness Procedures, 49 C.F.R. Part 385.

Although SafeStat was an improvement over the previous systems, a February 2004 audit by the United States Department of Transportation's Office of Inspector General identified "significant weaknesses in the underlying data reported by states and motor carriers and with FMCSA's

<sup>&</sup>lt;sup>3</sup> Withdrawal of SafeStat, 75 Fed. Reg. at 18,257; UNITED STATES DEPARTMENT OF TRANSPORTATION, FEDERAL MOTOR CARRIER SAFETY ADMINISTRATION, FMCSA DATA — INFORMATION FOR SHIPPERS, BROKERS, AND INSURERS (May 2012), available at https://csa.fmcsa.dot.gov/Documents/FMC-CSA-12-014 ShipInsBrok-508.pdf.

<sup>&</sup>lt;sup>4</sup> United States Government Accountability Office, Motor Carrier Safety: More Assessment and Transparency Could Enhance Benefits of New Oversight Program 1 n.1 (2011) (hereinafter "GAO Report, Motor Carrier Safety").

<sup>&</sup>lt;sup>5</sup> Motor Carrier Safety Improvement Act of 1999, Pub. L. No.106-159, § 4, 113 Stat. 1748, 1749 (1999).

<sup>&</sup>lt;sup>6</sup> http://www.fmcsa.dot.gov/facts-research/facts-figures/analysis-statistics/MCSPR-12-31-07.htm.

http://www.fmcsa.dot.gov/facts-research/art-safety-progress-report.htm.

<sup>&</sup>lt;sup>8</sup> GAO Report, Motor Carrier Safety, *supra* note 4, at 1; Annette Sandberg, *CSA 2010 and What it Means for Commercial Motor Carriers*, 77 J. TRANSP. L., LOGISTICS & POL'Y 257, 257 (2010).

<sup>&</sup>lt;sup>9</sup> Withdrawal of SafeStat, 75 Fed. Reg. at 18,257. The four SEAs were: 1) Accident; 2) Driver; 3) Vehicle; and 4) Safety Management. *Id*.

<sup>&</sup>lt;sup>10</sup> GAO Report, Motor Carrier Safety, supra note 4, at 1, 4.

<sup>&</sup>lt;sup>11</sup> The Office of Motor Carriers within the Federal Highway Administration, which had responsibility for implementing motor carrier safety regulations prior to the creation of FMCSA, issued an Advanced Notice of Proposed Rulemaking (ANPRM) on July 20, 1998 requesting comments on making changes to 49 C.F.R. Part 385. Subsequently, FMCSA was created, and in 2004, the agency began the Comprehensive Safety Analysis 2010 Initiative (CSA 2010), a complete review and analysis of its safety compliance and enforcement programs. As a result of CSA 2010, the agency withdrew its ANPRM. Safety Fitness Procedures; Withdrawal, 70 Fed. Reg. 67,405 (Nov. 7, 2005).

processes for correcting and disclosing data problems."12 By 2007, FMCSA had made progress on improving the data and creating a system to correct errors, but data issues remained a concern. 13 Additionally, SafeStat and the reliance on resource intensive CRs did not make the best use of limited agency resources. Annually, only about three percent of registered motor carriers were subject to CRs. <sup>14</sup> Consequently, most carriers did not receive a safety rating. <sup>15</sup>

In an effort to better allocate limited agency resources and prioritize unsafe carriers for enforcement, the FMCSA began to develop the CSA in 2004. There are three major elements of the CSA program: measurement; evaluation; and intervention. <sup>17</sup> The CSA's laudable goal is to prevent future crashes by intervening earlier with carriers that are identified as unsafe. The CSA was consistent with section 4138 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) requiring more CRs for certain carriers based on their SafeStat score. 18 However, the initial development of CSA did not eliminate SafeStat; rather recognizing SAFETEA-LU, it worked to improve on overall safety given SafeStat.

FMCSA proposed making improvements to the SafeStat measurement system algorithm in 2006. 19 However, in the process of designing and developing CSA, FMCSA began developing a more comprehensive measurement system, SMS.<sup>20</sup> From 2008 to 2010, the agency conducted the CSA 2010 Operational Model Test,<sup>21</sup> a pilot program in four states (Colorado, Georgia, Missouri and New Jersey).<sup>22</sup> The agency launched the CSA Program in December 2010 by: replacing SafeStat with the new measurement tool, the SMS; using the SMS results to identify

From the funds authorized by section 31104(i) of title 49, United States Code, the Secretary [of Transportation] shall ensure that compliance reviews are completed on motor carriers that have demonstrated through performance data that they pose the highest safety risk. At a minimum, a compliance review shall be conducted whenever a motor carrier is rated as category A or B for 2 consecutive months.

<sup>&</sup>lt;sup>12</sup> Motor Carrier Safety: Oversight of High-Risk Trucking Companies: Hearing Before the Subcomm. on Highways and Transit of the House Comm. on Transportation and Infrastructure, 110th Cong. 5 (2007) (statement of Calvin L. Scovel III, Inspector General, United States Department of Transportation).

<sup>&</sup>lt;sup>14</sup> GAO Report, Motor Carrier Safety, *supra* note 4, at 5.

<sup>&</sup>lt;sup>15</sup> *Id*.

<sup>&</sup>lt;sup>16</sup> *Id*.

http://csa.fmcsa.dot.gov/about/csa\_how.aspx.

<sup>18</sup> Section 4138 provides:

Pub. L. 109-59, 119 Stat. 1144, 1745 (2005), codified at 49 U.S.C. § 3144 note. "[R]ated as category A or B" is SafeStat-related terminology. Withdrawal of SafeStat, 75 Fed. Reg. at 18,259.

<sup>&</sup>lt;sup>19</sup> Proposed Improvements to the Motor Carrier Safety Status (SafeStat) Measurement System, 71 Fed. Reg. 26,170 (May 3, 2006).

20 Comprehensive Safety Analysis 2010 Initiative, 72 Fed. Reg. 62,293, 62,295 (Nov. 2, 2007).

<sup>&</sup>lt;sup>21</sup> CSA 2010 was renamed CSA – Compliance, Safety, Accountability, when it was deployed in December 2010. UNITED STATES DEPARTMENT OF TRANSPORTATION, FEDERAL MOTOR CARRIER SAFETY ADMINISTRATION, CSA: FREQUENTLY ASKED QUESTIONS AND ANSWERS - FEBRUARY 10, 2011, available at http://csa.fmcsa.dot.gov/Resources.aspx (hereinafter "CSA FAQ").

<sup>&</sup>lt;sup>22</sup> UNIVERSITY OF MICHIGAN TRANSPORTATION RESEARCH INSTITUTE, EVALUATION OF THE CSA 2010 OPERATIONAL MODEL TEST ii, (2011), available at http://csa.fmcsa.dot.gov/Documents/Evaluation-of-the-CSA-Op-Model-Test.pdf (hereinafter "UMTRI Study").

carriers that should be subject to roadside inspections; making SMS available on the Internet to the shippers, insurance companies, and the general public; and utilizing intervention tools such as warning letters.<sup>23</sup>

The new SMS identifies high-risk motor carriers for on-site investigations and provides motor carriers and other stakeholders (e.g., shippers and brokers) with regularly updated safety performance assessments through an Internet website.<sup>24</sup> According to FMCSA, SMS is different from the old system, SafeStat, in six important ways. First, SafeStat was organized in four SEAs, whereas SMS has seven behavioral areas (Behavior Analysis and Safety Improvement Categories or BASICs).<sup>25</sup> Second, SafeStat only used out-of-service violations and selected moving violations. SMS uses all safety-based inspection violations. Third, SMS uses riskbased violation weightings while SafeStat did not. Fourth, SafeStat only identified carriers for CRs while SMS examines safety performance and issues alerts that determine the intervention level.<sup>26</sup> Fifth, during carrier interventions, SMS provides a tool for investigators to identify drivers with safety problems. Finally, FMCSA anticipates conducting a rulemaking to use SMSgenerated scores to determine safety fitness ratings. 27 Under SafeStat, safety fitness ratings were based solely on the outcome of an onsite CR.<sup>28</sup>

Ultimately, FMCSA intends to use SMS-generated scores to determine if carriers are unfit to operate.<sup>29</sup> It must revise 49 C.F.R. Part 385, the Safety Fitness Procedures, which currently require that the safety fitness rating be determined based on the results of a comprehensive CR. This rulemaking has been delayed by several years due to changes to SMS (e.g., changes to calculating crash rates) that arose during testing.<sup>30</sup> According to the United States Department of Transportation's (DOT) May 2012 Report on DOT Significant Rulemakings, FMCSA expects to publish the proposed safety fitness determination rule on November 20, 2012.<sup>31</sup>

http://www.wtatrucking.com/documents/DataOs Users Guide and Best Practices Manual.pdf (hereinafter "DataOs Manual"); GAO Report, Motor Carrier Safety, supra note 4, at 9.

<sup>&</sup>lt;sup>23</sup> CSA FAQ, supra note 21, at 1.

<sup>&</sup>lt;sup>24</sup> Withdrawal of SafeStat, 75 Fed. Reg. at 18,257.

<sup>&</sup>lt;sup>25</sup> Currently, the seven BASICs are: Unsafe Driving; Fatigued Driving (Hours-of-Service); Driver Fitness; Controlled Substances/Alcohol; Vehicle Maintenance; Cargo-Related; and Crash Indicator. Improvements to the Compliance, Safety, Accountability (CSA) Motor Carrier Safety Measurement System (SMS), 77 Fed. Reg. 18,298, 18,299 (Mar. 27, 2012). However, the FMCSA is proposing to make changes to the BASICs which includes moving cargo/load securement violations from the Cargo-Related BASIC to the Vehicle Maintenance BASIC and renaming the Cargo-Related BASIC the hazardous materials (HM) BASIC. Id.

<sup>&</sup>lt;sup>26</sup> Under the SafeStat program, safety data was used to determine which carriers would be subject to comprehensive CRs. The CR was a one-size-fits-all compliance protocol that FMCSA used to compel carriers to improve their behaviors and make safety fitness determinations. In contrast, the CSA permits FMCSA to apply a series of escalating interventions to help compel compliance. FMCSA has stated that the incorporation of these additional tools will help it more efficiently use its resources to inspect more carriers.

<sup>&</sup>lt;sup>27</sup> Withdrawal of SafeStat, 75 Fed. Reg. at 18,258; UNITED STATES DEPARTMENT OF TRANSPORTATION, FEDERAL MOTOR CARRIER SAFETY ADMINISTRATION, DATAQS USER GUIDE AND MANUAL, FIRST EDITION JANUARY 2011, BEST PRACTICES FOR STATE AGENCY USERS 12 n.1 (2011), available at

<sup>&</sup>lt;sup>28</sup> Id. <sup>29</sup> Id.

<sup>&</sup>lt;sup>30</sup> *Id.* at 9, 20.

<sup>&</sup>lt;sup>31</sup> See http://regs.dot.gov/rulemakings/201205/report.htm.

#### **III. How SMS Modifies CSA**

As previously mentioned, the purpose of CSA is to improve large truck and bus safety and ultimately reduce crashes, injuries and fatalities involving CMVs. To accomplish this goal, the program's SMS uses statistical methods to predict which carriers and drivers are likely to cause an accident in order to apply specific interventions aimed at improving a carrier's safety behavior. Another purpose of the SMS is to provide input safety measurements to the safety fitness determination process, by which FMCSA identifies carriers that are conditional or unfit to operate. <sup>32</sup>

The SMS measures the safety performance of CMV carriers through scores in individual BASICs.<sup>33</sup> The data for the BASICs are supplied by FMCSA's Motor Carrier Management Information System (MCMIS).<sup>34</sup> The MCMIS is the computerized system where FMCSA maintains a comprehensive record of the safety performance of the motor carriers and hazardous materials shippers that are subject to the Federal Motor Carrier Safety Regulations or Hazardous Materials Regulations.<sup>35</sup> The system contains separate files that include an Inspection File of data from roadside inspections, a Crash File that contains data on CMV crashes, and a Census File that FMCSA uses to identify each operating entity.<sup>36</sup>

Once data has been classified into a BASIC, the SMS assigns a severity weight which, as its names suggests, is based upon the supposed severity of the violation as it relates to the safe operation of a CMV. The severity weights range on a scale from 1 to 10, in which 1 represents the lowest crash risk and 10 represents the highest crash risk. In addition to measuring the supposed severity of the violation, severity weights are time-weighted so that recent violations count more than older violations.<sup>37</sup>

Once data has been categorized and assigned a severity weight, the scores are "normalized" to take into account each carrier's exposure, i.e. the number of power units, vehicle miles travelled and relevant inspections. The SMS then converts each carrier's BASICs measures into percentiles based on rank relative to its peers.<sup>38</sup> To arrive at BASICs scores, the SMS applies statistical methodologies that compare a carrier's safety behavior with those of its peers.<sup>39</sup> Thus, the SMS measures safety as a relative factor not an absolute one.

In certain respects, the SMS-based CSA program has the potential to vastly improve the previous deficiencies of the SafeStat program and allow FMCSA to more efficiently and comprehensively

<sup>32</sup> UMTRI Study, supra note 22, at xiv.

<sup>&</sup>lt;sup>33</sup>While there are 7 BASICs in all, for the purposes of this hearing, the Committee will focus on those with the greatest potential to cause disproportionate effects on small businesses. These are the Unsafe Driving BASIC, the Fatigued Driving BASIC, and the Crash BASIC. A list and description of each individual BASIC can be found on FMCSA's website at <a href="https://csa.fmcsa.dot.gov/Resources.aspx?locationid=58">https://csa.fmcsa.dot.gov/Resources.aspx?locationid=58</a>.

<sup>&</sup>lt;sup>34</sup> UMTRI Study, *supra* note 22, at xiv.

<sup>35</sup> http://mcmiscatalog.fmcsa.dot.gov/beta/Catalogs&Documentation/documentation/census/mcmis\_doc.asp.

<sup>&</sup>lt;sup>36</sup> UMTRI Study, supra note 22, at xiv.

<sup>&</sup>lt;sup>37</sup> Sandberg, *supra* note 8, at 260.

<sup>&</sup>lt;sup>38</sup> DataOs Manual, *supra* note 27, at 12.

<sup>&</sup>lt;sup>39</sup> UMTRI Study, *supra* note 22, at 3. FMCSA initially proposed to determine peer groupings based on the number of power units ("trucks"), but has since stated that it will also incorporate a miles travelled metric in assigning carriers to specific peer groups. GAO Report, Motor Carrier Safety, *supra* note 4, at 13.

identify and inspect unsafe and potentially unsafe carriers. However, as will be described below, a number of transportation industry stakeholders have identified certain problems with the SMS methodology that could result in inaccurate carrier scores, especially for small carriers.

### IV. Issues Regarding the Accuracy and Reliability of the SMS

In order to determine the safety risk of carriers, the SMS measures carrier performance in individual BASICs that FMCSA believes are indicative of crash risk. However, a number of stakeholders and third-party researchers are questioning whether the data and methodologies FMCSA is using to calculate individual BASICs scores achieve this purpose. These concerns involve the types of incidents included in BASICs, the severity weights assigned to specific types of violations, and the methods SMS uses to obtain scores.

## A. Contradictory Evidence

The University of Michigan's Transportation Research Institute (UMTRI) Operational Model Test, commissioned by FMCSA, found positive correlations between high BASICs scores – especially in the Unsafe Driving, Fatigued Driver, and Controlled Substance and Alcohol BASICs – and crash risk. In contradistinction, a study of the CSA program by Wells Fargo Securities, LLC found no meaningful statistical relationship between a carrier's actual accident incidence and the scores for Unsafe Driving, Fatigued Driving or Driver Fitness BASICs. The Wells Fargo conclusion was buttressed through a statistical analysis of SMS by James Gimpel, a professor at the University of Maryland, in which no relationship was found between scores in the Unsafe Driving BASIC and crashes for carriers with the fewest inspections. Furthermore, only a weak correlation existed for carriers in higher inspection categories, albeit with a significant margin of error.

The Wells Fargo Advisors and Gimpel studies have identified a number of issues that may contribute to discrepancies between their findings and FMCSA's UMTRI study. These are issues involving the severity weights assigned to violations, differences in inspection frequency between states, the inclusion of violations with little or no correlation with the safe operations of a CMV, and potential statistical flaws with the SMS.

#### B. Severity Weights

Violations of motor carrier regulations are assigned severity weights which are supposed to reflect the potential danger of the violation and have a temporal element. In their research, Wells Fargo Advisors concluded that the seemingly illogical severity weights given to certain

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<sup>&</sup>lt;sup>40</sup> UMTRI Study, *supra* note 22, at xv.

<sup>&</sup>lt;sup>41</sup> ANTHONY GALLO & MICHAEL BUSHCE, WELLS FARGO SECURITIES, CSA: GOOD INTENTIONS UNCLEAR OUTCOMES 2 (2011), available at <a href="http://www.ime.org/userfiles/files/Federal%20Agencies/DOT/FMCSA/HMSP/WellsFargo-TRANS110311-120501.pdf">http://www.ime.org/userfiles/files/Federal%20Agencies/DOT/FMCSA/HMSP/WellsFargo-TRANS110311-120501.pdf</a> (hereinafter "Wells Fargo Study").

<sup>42</sup> JAMES GIMPEL, STATISTICAL ISSUES IN THE SAFETY MEASUREMENT AND INSPECTION OF MOTOR CARRIERS, DRAFT 3-

<sup>&</sup>lt;sup>42</sup> JAMES GIMPEL, STATISTICAL ISSUES IN THE SAFETY MEASUREMENT AND INSPECTION OF MOTOR CARRIERS, DRAFT 3 6 (undated) (on file with author) (hereinafter "Gimpel Study").

<sup>43</sup> Id.

violations may, in part, account for the lack of finding a clear correlation between high BASICs scores and crashes.<sup>44</sup>

For instance, in the Unsafe Driving BASIC, SMS gives a "not wearing a seatbelt" violation a severity weight of 7, but "improper lane change" and "following too closely" violations receive a severity weight of 5. Concerns about severity weights were also included in the UMTRI study which stated "whether the severity weights used in the calculation of the BASICs scores are appropriate is unknown," and that "no rationale or justification for the weights are given" in the documentation explaining SMS. Absent an explanation on severity weights, such as why not wearing a seatbelt may contribute more to the possibility of a crash than tailgating, the severity weights appear to be arbitrary determinations with no connection to the goal sought by FMCSA—safe roads. FMCSA should review the severity weights assigned to specific violations, determine which violations can actually be correlated to crash risk, and adjust the severity weights accordingly.

## C. Inspection Frequency

Wells Fargo Advisors points out that some states impose more frequent inspections than other states. Thus, an "individual carrier's exposure to a particular state may result in disproportionate and disparate outcomes." The Gimpel Study also raised questions regarding inspection frequency and carrier composite safety scores. Carrier exposure to inspection frequency also could be increased in cases where states enforce particular regulations as part of a federal grant program, including those that may have little correlation to a carrier's safety, such as state-federal "Click It or Ticket" campaigns. The Wells Fargo Study and the Gimpel Study also identified variability in local enforcement emphasis on specific types of violations as a potential source of disproportionate and disparate outcomes.

The issue of inspection frequency is important in determining both the accuracy of the SMS in identifying unsafe drivers at risk of causing a crash, and the SMS's potential for imposing disparate impacts on small carriers. While an argument can be made that inspection frequency is irrelevant since carriers are supposed to be in compliance with regulations at all times, according to the Gimpel Study, the data gathering process for BASICs introduces biases into the SMS methodology that may prevent the BASICs indicators from assessing what they are intended to evaluate on the tomation of the same and regions are cited more often for violations that have little correlation with crash risk, they are far more likely to obtain unfavorable BASICs scores. Thus, application of the SMS methodology could result in classification of carriers as a greater crash risk when that is not the case.

<sup>44</sup> Wells Fargo Study, supra note 41, at 3.

<sup>45</sup> UMTRI Study, supra note 22, at 23-24.

<sup>46</sup> Wells Fargo Study, supra note 41, at 2.

<sup>&</sup>lt;sup>47</sup> Gimpel Study, *supra* note 42, at 2.

<sup>&</sup>lt;sup>48</sup> Kevin Jones, *Happy Anniversary? Many say CSA not a True Safety Photo, Unfair to Some Carriers*, THE TRUCKER, Feb. 1-14, 2012, at 15.

<sup>&</sup>lt;sup>49</sup> Gimpel Study, supra note 42, at 2.

<sup>&</sup>lt;sup>50</sup> *Id*.

In addition, the SMS rates carriers based on the performance of their peers. This could result in small carriers operating in states with high inspection frequencies being compared to carriers that operate in states that perform fewer inspections. While the SMS normalizes this data to take into account a carrier's inspection exposure, <sup>51</sup> it does not take into account regional disparities in enforcement emphasis, <sup>52</sup> for example receiving a not wearing a seatbelt citation in a state receiving a federal "Click It or Ticket" grant. FMCSA should consider whether methodological changes can be made that account for differences in inspection rates amongst the states.

## D. Data Quality

The ability to statistically predict an outcome with a high degree of accuracy depends upon the quality and quantity of the model's data. Many Members of Congress and staff may be familiar with the margin of error in public opinion polling where, in addition to ensuring an adequate representative sampling of potential voters in an election, the accuracy of the poll is highly dependent upon the number of individuals polled. As already demonstrated, there are issues about the quality of the data used in SMS. The researchers are also concerned with the limited sample size used to generate the BASICs scores.

The Gimpel Study questions whether SMS may have too little data on smaller firms to accurately generate BASICs scores.<sup>53</sup> Overall, FMCSA only has enough data to assess 12 percent of active carriers in a BASIC.<sup>54</sup> The Gimpel Study notes that small changes in the number of violations per inspection have a substantially larger effect when the number of total inspections is small than they do when the number of total inspections is higher.<sup>55</sup> As a result, it claims that since smaller firms are subject to fewer overall inspections, whatever BASICs scores they generate, high or low, are not reliable indicators of these firms' ability to operate safety and comply with federal safety regulatory requirements.<sup>56</sup>

#### E. Inclusion of Non-Attributable Accident Data in BASICs

When the FMCSA was developing the SMS, it was amenable to instituting a crash accountability process, to better indicate which crashes are the attributable to CMV drivers and those that are not.<sup>57</sup> Based on discussions with FMCSA, the trucking community was under the impression that FMCSA would be implementing a crash accountability process in the SMS. Unfortunately,

<sup>&</sup>lt;sup>51</sup> JOHN A. VOLPE NATIONAL TRANSPORTATION SYSTEMS CENTER, COMPLIANCE, SAFETY ACCOUNTABILITY, SAFETY MEASUREMENT SYSTEM (SMS) METHODOLOGY, VERSION 2.2 2-5 (Jan. 2012), available at <a href="http://csa2010.fmcsa.dot.gov/documents/smsmethodology.pdf">http://csa2010.fmcsa.dot.gov/documents/smsmethodology.pdf</a>.

<sup>&</sup>lt;sup>52</sup> AMERICAN TRUCKERS ASSOCIATION, ATA'S TOP CONCERNS WITH FMCSA'S COMPLIANCE, SAFETY, ACCOUNTABILITY PROGRAM 5 (Mar. 5, 2012) (hereinafter "ATA'S TOP Concerns").

<sup>53</sup> Gimpel Study, supra note 42, at 10.

<sup>&</sup>lt;sup>54</sup> UNITED STATES DEPARTMENT OF TRANSPORTATION, FEDERAL MOTOR CARRIER SAFETY ADMINISTRATION, REVIEW OF WELLS FARGO EQUITY RESEARCH REPORT ON COMPLIANCE, SAFETY, ACCOUNTABILITY 5 (2012), available at http://csa.fmcsa.dot.gov/resources.aspx.
<sup>55</sup> Id.

<sup>&</sup>lt;sup>56</sup> Gimpel Study, *supra* note 42, at 12. There is no evidence that FMCSA utilized statistical methodologies to address low sample size in the development of the SMS.

<sup>&</sup>lt;sup>57</sup> "FMCSA intends to allow carriers to request changes to their violations data by providing a police accident report to demonstrate that the carrier should not be held accountable for a particular crash." GAO Report, Motor Carrier Safety, *supra* note 4, at 13.

no new information about a crash accountability process was included in the agency's notice of March 27, 2012 announcing changes to the SMS. Instead, FMCSA only indicated that additional research was needed in order to move forward with a proposal on weighting crashes in the SMS.<sup>58</sup>

In justifying the decision not to pursue a crash accountability process, FMCSA claims that it is particularly concerned about the use of police reports to determine fault in a crash, citing a lack of uniformity and consistency in how crash fault is assessed and reported. However, some stakeholder groups have stated that FMCSA has for nearly two years studied the use of police reports in a crash accountability process and has called upon FMCSA to release the results of its study. By removing data on crashes not attributable to a CMV driver, FMCSA should be able to better identify the drivers that pose the greatest risk on the roads.

# F. Removal of Inaccurate Data from the SMS

Because SMS relies upon data to calculate BASICs scores and target carriers for interventions or CRs, inaccurate data could result in a carrier being falsely identified as a high-crash risk. Ensuring that carriers have the opportunity to correct erroneous information is critical to ensuring the system is not only fair to carriers, but also protects the integrity and predictive value of the SMS.

The DataQs System, an online system launched in February 2004, allows the general public, commercial drivers, motor carriers, FMCSA/state agency users, and FMCSA administrative level users to file challenges to federal and state data that is made available to the public by the FMCSA.<sup>61</sup> After a Request for Data Review (RDR) is filed, it can be monitored through the DataQ system as well. The first RDR was filed on February 27, 2004.

As compared to the number of challenges made under the SafeStat system, an increased number of RDRs have been made by carriers with the nationwide rollout of the SMS-based CSA program. This is in part because SafeStat only focused on certain violations whereas SMS uses all violations to calculate carriers' BASICs scores. Small trucking companies are concerned that the DataQs system is not working as well as it should. Often dismissed and dropped citations continue to count against carriers and drivers despite the fact that FMCSA's DataQs guidelines recommend that states remove the points.

<sup>&</sup>lt;sup>58</sup> Improvements to the Compliance, Safety, Accountability (CSA) Motor Carrier Safety Measurement System (SMS), 77 Fed. Reg. 18,298, 18,299 (Mar. 27, 2012).

<sup>60</sup> Sean McNally, ATA Calls on FMCSA to Release Crash Accountability Study, June 4, 2012, available at http://www.truckline.com/pages/article.aspx?id=1012%2F8e1c7279-ed27-4c03-b189-ceeee26bbb12.

<sup>&</sup>lt;sup>61</sup> DataQsManual, *supra* note 27, at 15. The DataQs system was established to implement the Information Quality Act. Conolidated Appropriations Act, 2001, Pub. L. No. 106-554, App. C, Tit. V, § 515, 114 Stat. 2763, 2763A-153-54 (2000).

<sup>(2000). &</sup>lt;sup>62</sup> GAO Report, Motor Carrier Safety, *supra* note 4, at 14.

<sup>63</sup> Id.

<sup>&</sup>lt;sup>64</sup> ATA's Top Concerns, *supra* note 52, at 3.

Moreover, DataQs RDRs are not handled consistently. According to a lawyer whose firm has submitted a number of DataQs RDRs on behalf of drivers and carriers, "[t]he only thing that has been consistent is the inconsistency. Things such as response times and willingness to consider the validity of challenges vary from state to state and from person to person." [C]arriers' efforts to correct erroneous data are hampered by overwhelmed DataQs personnel, response time lags, inconsistent policies between jurisdictions and other problems." SMS uses all safety-based inspection violations to calculate BASICs scores. Thus, DataQs challenges should be handled consistently and expeditiously because the Administrative Procedure Act (the basic tablet for federal agency decision making) was enacted to prohibit such ad hoc and inconsistent decision making.

# G. Vicarious Liability & Negligent Hiring Lawsuits

Vicarious liability and negligent hiring lawsuits are burgeoning issues for brokers and shippers.<sup>67</sup> FMCSA is encouraging shippers, brokers and insurers to rely on SMS BASICs scores.<sup>68</sup> Even though FMCSA has stated that BASICs scores are not safety ratings, brokers are concerned that courts may consider BASICs scores in determining the viability of vicarious liability and negligent hiring claims.<sup>69</sup>

Brokers facilitate and arrange the efficient and economical movement of goods by carriers (e.g., trucks, ships, and airplanes) for shippers (e.g., the manufacturer or retailer). Vicarious liability has become an issue for brokers under the common law doctrine of respondeat superior, which states that "[a]n employer is subject to liability for torts committed by employees while acting within the scope of their employment." Negligent hiring is a common law tort which historically had only applied to inherently dangerous activities (e.g., the hiring of an explosives expert by a general contractor). Courts are increasingly allowing plaintiffs to pursue vicarious liability claims under the theory that federally licensed independent motor carriers are the agents

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<sup>72</sup> Id.

<sup>&</sup>lt;sup>65</sup> Jim Klepper, Ask the Attorney: CSA's DataQ Challenge Response Differs From State to State, Person to Person, THE TRUCKER, May 27, 2011, available at <a href="http://www.thetrucker.com/news/stories/2011/5/27/ASKTHEATTORNEYCSAsDataQchallengeresponsediffersfromsta">http://www.thetrucker.com/news/stories/2011/5/27/ASKTHEATTORNEYCSAsDataQchallengeresponsediffersfromsta</a>

<sup>&</sup>lt;sup>6</sup> ATA's Top Concerns, supra note 52, at 6.

<sup>&</sup>lt;sup>67</sup> Smith v. Spring Hill Integrated Logistics Mgmt., 2005 U.S. Dist. LEXIS 22765 (N.D. Ohio Oct. 6, 2005) (dismissing vicarious liability claims against broker, Spring Hill); Schramm v. Foster, 341 F. Supp. 2d 536 (D. Md. 2004) (denying broker's motion for summary judgment on negligent hiring claim); Sperl v. C.H. Robinson Worldwide, Inc., 408 Ill. App. 3d 1051 (Ill. App. Ct. 3d Dist. 2011) (affirming judgment holding broker, C.H. Robinson, vicariously liable); Puckrein v. ATI Transp., Inc., 186 N.J. 563 (N.J. 2006) (reversing lower court that had granted shipper's motion for summary judgment and reinstating negligence claims against shipper).

<sup>68</sup> http://csa.fmcsa.dot.gov/Documents/FMC-CSA-12-014 ShipInsBrok-508.pdf.
69 Nat'l Ass'n of Small Trucking Cos. v. FMCSA, No.10-1402, Motion for Emergency Stay at 13-15 (D.C. Cir. Nov. 29, 2010). "Shippers on transportation baselogs who are questioned for the start of the start

<sup>2010). &</sup>quot;Shippers or transportation brokers who are customers of FMCSA regulated motor carriers will be exposed to the threat of vicarious liability . . . . This threat will become immediate whenever a carrier used by such customers has an accident while handling their freight, and then turns out to have less than perfect BASIC scores." *Id.* at 13.

<sup>&</sup>lt;sup>70</sup> Brokers are also referred to as transportation intermediaries or third party logistics companies. See <a href="http://www.tianet.org/AM/Template.cfm?Section=Education">http://www.tianet.org/AM/Template.cfm?Section=Education</a>.

<sup>71</sup> RESTATEMENT (THIRD) OF AGENCY § 2.04 (2006).

(e.g., employees) of a federally licensed broker (e.g., the employer).<sup>73</sup> Thus, if a motor carrier causes an accident, the broker, as well as the motor carrier, is sued for damages, even though the broker-motor carrier relationship is not what previously would have been considered an employer-employee relationship.

For carriers with both a safety rating and BASICs scores, brokers and shippers have been placed in the uncomfortable position of having to determine on which assessment to rely. The difficulty is that a carrier may be rated satisfactory by FMCSA but have problematic BASICs scores.<sup>74</sup> Brokers, along with carriers, question the accuracy of the SMS and do not have confidence in the BASICs scores. 75 Thus, while brokers may be hesitant to rely on the BASICs scores in determining which carriers are safe to hire, they may feel forced to do so because of court cases holding brokers liable for the negligence of the carriers and drivers they hire. 76 Consequently. concerns about vicarious liability and negligent hiring are leading brokers to drop small trucking companies with bad BASICs score even though the carriers may have satisfactory safety ratings.

#### V. Conclusion

The CSA program has the potential to improve FMCSA's ability to more efficiently use and focus its resources on problem drivers and carriers in order to improve highway safety and reduce crashes caused by CMV operators. However, a number of possible issues related to the accuracy and reliability of current SMS raise questions not only as to its ability to accurately identify potentially dangerous carriers, but also about the program's potential to misidentify those carriers who are not at risk of causing crashes.

These concerns are not only problematic for carriers misidentified for interventions by FMCSA. but for those carriers whose scores make it difficult to secure future business. As FMCSA has repeatedly stated, it intends that brokers and shippers consider SMS scores in making decisions to hire carriers. Bad BASICs scores inappropriately assigned to small commercial motor carriers can cause brokers to stop using these companies and result in insurance companies raising their rates. Moreover, the same flaws in the SMS methodology that result in the FMCSA focusing its attention and activities on less risky carriers, may also result in the agency losing track of or ignoring those carriers with a real potential to cause a highway crash.

The differences between the former SafeStat system and the SMS are significant. While FMCSA may have been under no legal obligation to put the program up for Notice and Comment Rulemaking, the scope of the changes, and the concerns identified by small businesses, suggest that the agency and public would benefit from more stakeholder input into the design of the SMS methodologies.

75 TIA Strategy, supra note 73, at 3.

<sup>76</sup> *Id*.

<sup>&</sup>lt;sup>73</sup> Transportation Intermediaries Ass'n, TIA Strategy to Reduce 3PL Liability: Lawsuits, CSA and a COMPREHENSIVE SOLUTION 5 (2012), available at

http://www.tianet.org/AM/Template.cfm?Section=Home&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=79 12 (hereinaster "TIA Strategy").

74 Stephanie Overman, CSA Scores Help Shippers Avoid Potential Lawsuits, TRANSPORT TOPICS, Feb. 27, 2011,

available at http://www.ttnews.com/articles/printopt.aspx?storvid=28786.