**Motor Carrier Safety Advisory Committee (MCSAC)**

**Task Statement 12-03: Evaluation of and Recommendations on the Compliance, Safety, Accountability (CSA) Program**

**I. Task Summary**

1. FMCSA requests that the MCSAC form a subcommittee to provide feedback, and suggestions on the CSA program and how it could be more effective as a tool for identifying unsafe motor carriers.
2. The subcommittee’s objectives are the following:
3. Identify and make recommendations for enhancements of the CSA program. These topics should include but not be limited to Safety Measurement System (SMS) and the interventions/investigative processes.
4. Develop prioritized recommendations the Agency should pursue, with supporting data, to improve the CSA program to enable the Agency to direct its efforts to the most important or timely needs of the program. Wherever possible, indicate whether the ideas or concepts identified are supported by research and data analyses.

**II. CSA Program Goals and Objectives**

1. Prevent commercial motor vehicle (CMV) crashes, fatalities, and injuries;
2. Improve safety performance;
3. Promote efficient use of enforcement resources;
4. Assess motor carrier safety in a fair and unbiased manner; and
5. Leverage data and technology.

**III. Suggested Objectives for CSA**

1. Correlate driver behavior to crash rates.
2. Carriers, insurers, legal entities, customers, and others have a use for CSA. The MCSAC CSA subcommittee needs to ensure that CSA is being used as intended.
3. The agency with the authority to assign safety determinations to carriers must provide guidance to carriers on how to implement CSA. This can be accomplished by:
   1. Providing information to entities such as shippers and brokers, so they can make informed business decisions.
   2. Identifying potential parallels between Federal Aviation Administration’s (FAA) handling of air carrier concerns and similar concerns/issues with motor carriers (e.g., pilot vs. driver fitness for duty).
   3. Finding a system to address differences among customers of CSA.

**IV. CSA Subcommittee conclusions of questions asked by U.S. House of Representatives Committee of Transportation and Infrastructure in letter to USDOT Inspector General (October 2012)**

1. *Question: What percent of active motor carriers have sufficient data in FMCSA’s SMS to generate a score in any of the seven measurement categories?*
2. FMCSA (Bill Quade) estimates that approximately 40 percent of carriers have sufficient data to be in FMCSA’s SMS. FMCSA expressed a concern that there is an assumption in the trucking community that those 60 percent of carriers that are not scored in SMS are “safe.” FMCSA provides authority to those carriers that the Agency does not believe are unsafe but does not decide which are “safe.” One reason that 60 percent of carriers are not scored may be because of a lack of information being uploaded or reported.
3. Inspections can be conducted differently from one State to another. Therefore, data and scoring can be difficult to compare when making decisions about which carriers are unsafe or safe.
4. Crashes and safety should be a top priority for CSA.
5. *Question: What percent of active motor carriers have sufficient data in FMCSA’s SMS to generate scores in all of the seven measurement categories?*
6. The CSA subcommittee will discuss this further when additional data is available.
7. *Question: In each of the Behavior Analysis and Safety Improvement Categories (BASICs), do carriers with scores above the threshold pose a greater risk (higher crash rate) than those with scores below the threshold (and had sufficient data to generate a score) in the same BASIC?*
8. The subcommittee would like to build on the BASICs that are working and correct those that are not.
9. *Question: In each BASIC, please characterize the relationship between scores and future crash risk.*
   1. The subcommittee did not directly discuss this question.
10. *Question: Is the weight of each violation assigned based on data analysis tying the violation to the strength of its relationship to future crashes or increased crash severity?*
    1. The subcommittee did not directly discuss this question.
11. *Question: Are carriers’ scores impacted by jurisdictional and regional disparities in enforcement practices?*
12. In response to a suggestion that FMCSA have responsibility for all commercial, intrastate carriers, FMCSA (Bill Quade) explained that CSA works with States that use DOT tracking numbers, which provide the data needed to address problems. Although national uniformity is ideal, States have different resources to correct unique problems that need to be solved.
13. In California, law enforcement is provided forms and automated reporting as incentives to upload data.
14. *Question: Has FMCSA been transparent with respect to the data on which violation severity weights are based?*
15. Traditionally, FMCSA uses crash reports to apply weights. (Bill Quade)
16. It was suggested that scores could be made public however; items that cannot be verified should not be made public until clear data is available and understood.
17. It was suggested that the information on violation severity weights not be made public and that violations involving safety should be called out separately.
18. The subcommittee should review any completed violation severity weight assessment studies. It would helpful to the subcommittee for these experts or authors of these studies to explain the results.
19. Stakeholders and customers need to understand CSA terminology.
20. *Question: Is it possible for carriers to have high scores that erroneously reflect the fleet’s safety performance?*
21. It is possible, however, the reasons for the errors are unknown by the carriers.
22. More data is needed with regard to unfit driving.
23. *Question: Is it possible that some carriers with potential safety problems may not be identified and targeted by CSA?*
24. The subcommittee did not directly discuss this question.
25. *Question: FMCSA makes carrier’s scores public so that third parties involved in the transportation industry can make safety-based business decisions. Given your findings, is a carrier’s CSA score an accurate portrayal of the safety of the carrier? If so, is this accurate for all BASICs?*
26. FMCSA can do its best to educate and inform the public but it cannot control the interpretation of the data. Providing justification for releasing some scores and withholding others would be informative to carriers and the public. If there is no correlation to safety, the public does not necessarily need to see the data, as it could cause confusion.
27. Controlled substances/alcohol and driver fitness BASICs are not as reliable as the other five BASICs. These two BASICs need additional research and are currently withheld from the public.
28. The culture that is created from stating that all aspects of safety are important can lead to greater safety.
29. Ultimately, each violation should be linked to crash risk.
30. Driver performance is critical to safety on the road. Unqualified drivers will continue to operate vehicles until they are addressed in the regulations. It was suggested that driver scores staying with the driver’s record would be a disincentive to hire that driver.
31. *Question: How effective has FMCSA been in working with the States to properly implement CSA?*
32. FMCSA has attempted to roll out CSA to all States.
33. Reporting speeds vary among States but generally the States are doing well with the implementation of CSA.
34. Some States could put more resources towards implementing CSA.
35. California is working to obtain DOT intra and interstate numbers to access data, implement CSA best practices, and use DataQs.
36. Regarding DataQs, FMCSA is working with States to implement best practices.

**V. Discussion from Oct 16–17Task 12-03 Subcommittee Meeting**

* + 1. What is working well with the CSA Program?
       1. FMCSA is interacting more with the industry (i.e., warning letters and focused reviews, in addition to conventional compliance reviews).
       2. CSA is a more efficient tool – carriers tend to improve their performance as a result of FMCSA’s interaction.
       3. Risk-based compliance targeting.
       4. Greater usability has led to a cultural change and increased use of the data. The cultural change should be encouraged and continued through communication, education, and outreach.
       5. FMCSA is continually revising its systems as a work in progress.
       6. Increased focus on behavior; leading indicators as opposed to lagging indicators.
       7. Having more categories increases the likelihood of accuracy.
       8. Roll-out process with SMS Web site was very well done. From an enforcement perspective, the roll-out was successful because of the educational tools provided (e.g., webinars). Increased cooperation among the States and FMCSA helped involve States and reach out to non-test States in a mentoring capacity. FMCSA outreach was effective.
       9. Interventions, as a result of CSA, have been effective.
       10. Carriers have increased visibility so they can focus their attention on CSA.
    2. Which CSA issues should be addressed by the subcommittee?[[1]](#footnote-1)
       1. Intervention levels: examine whether they are appropriate and if there is any opportunity for fine tuning. What are the intervention levels and does FMCSA believe they are effective? **(Longer-term[[2]](#footnote-2) discussion)**
          1. FMCSA can present data on items such as the profiles that have been conducted, the patterns of intervention, and the results of the focus reviews.
       2. See if the data collection and CSA system is working. **(December 5, 2012, meeting discussion)** 
          1. A third party (non-FMCSA) should evaluate the system, i.e., whether it is meeting its objectives.
       3. DataQs process is not working well for carriers. **(Longer-term discussion)** 
          1. There are inconsistencies among States with regard to statutes of limitation. If a carrier works across several States there are different reporting methods for each State. This places an administrative burden on the carrier.
          2. Review issues with adjudication of citations. Commercial Vehicle Safety Alliance (CVSA) is currently looking into this. Representatives from the agency and law enforcement can provide an update to the subcommittee on this issue, as well as provide suggestions for areas where additional assistance is needed. Generally, objective oversight for citations, within States, is needed.
          3. Would FMCSA consider reviewing the DataQ challenge process if a state denies a challenge? There are opportunities for carriers to discuss concerns about data that is being used for safety rating determination.
       4. Impact of court dismissal on violations in CSA. FMCSA’s policy and guidance to States on what to do with adjudicated violations. **(Longer-term discussion)**
       5. How to ensure that data in CSA is related only to safety and crash predictability. **(Near-term[[3]](#footnote-3) discussion)**
          1. Can CSA indicate, accurately and cost effectively, when carriers/drivers are at fault in crashes?
       6. Examine the concept of credit allowance for voluntary carrier implementation of increased safety practices or technologies (Also see item V.B.10 below) **(Longer-term discussion)**
          1. Bill Quade stated that although there are carriers that prioritize safety, it would be difficult for FMCSA to know how a carrier is approaching safety practices. So, the focus should be on crash ratings.
          2. Currently, a carrier collects points through violations in inspections; if an inspection does not have any violations the carrier does not accumulate a point but the number of inspections increases by one. This favors the carrier.
          3. Questions to discuss include the following:

1. What technologies would qualify for a credit?
2. How would credits be applied?
3. For how long would the credit be applied?
4. Would adding technology to vehicles create different driving behavior?  
   * + 1. Examine whether regional enforcement disparities exist and to what extent they make a difference. **(Near-term discussion)**
          1. Disparities among the number of inspections in different States and the types of violation.
          2. Disparities as to the level of inspections in different States.
          3. Different expectations for different conditions (e.g., urban vs. rural areas of operation) may dilute the system’s effectiveness.
       2. Evaluate whether the availability of public data impacts driver safety. **(Near-term discussion)**
       3. Should CSA focus more on reducing the incidence or the severity of crashes? What is the priority level of CSA objectives? **(Near-term discussion)**
          1. For purposes of providing third parties with safety data to make decisions, should this objective be treated differently from safety objectives? Should the data visible to third parties be limited?
       4. Inspection vs. screening – a carrier should receive some credit in CSA for successfully passing a screening. **(Longer-term discussion)** 
          1. A screening can be a simple review of a license or truck characteristics by an officer, so a screening would not be deemed a formal inspection. The inequity in the difference is that credits would be awarded only during inspections. A screening could result in no violation but a credit would not be awarded.
          2. An established definition of screening and inspection needs to be developed. By definition, screening is used to review several trucks at a time, whereas inspections require more documentation and time per truck.
          3. CVSA would be interested in using wireless technology for screening.
       5. What is the definition of a crash? **(Near-term discussion)** The definition serves the purpose for post-crash reviews, measuring CSA effectiveness, and reducing crashes in the future.
       6. Explore the separation of motorcoach vs. trucks.**(Longer-term discussion)**

**VI. General discussion points for December 5, 2012, meeting:**

1. The subcommittee requests that the December 5 meeting take the form of a panel discussion regarding the details of CSA data that has been collected. The subcommittee requests clarification of the following:
2. Data quality – Are we asking the right questions? Collecting the right data? Addressing the right audience to collect the data? How is the data being measured?
3. Data integrity – How useful is the data and what else needs to be collected?
4. How is drug and alcohol data used and analyzed? What does the data tell FMCSA about drivers? Are there better ways to collect drug and alcohol data?
5. How is the data relevant to crashes? What conclusions can be made in terms of crashes? Does the data tell the right story about crashes and carriers?
6. How should the data collected by CSA be released to the public (in a manner that is clear and relevant to safety)? Should compliance data be shared with the public now or when more carrier data is collected?
7. Has anyone measured the impact of geographic differences? For example, the impact of one State conducting more inspections than another or how crashes are reported. How much would these regional disparities impact the data collected?
8. Would data look different if the collective commercial motorcoach data were analyzed separately?
9. What dynamic does the data produce for outliers (i.e., carriers with data that does not follow the trend or National average)? Why do outliers exist and what effect does the data have on the outliers with regard to their scores?
10. Has research been conducted on alternative weightings for violations within each BASIC?
11. Is there additional data that should be captured? For example, equipment type, regional data, urban data verses rural, day time/night time. Is this data collected and what story did it tell? Are moving violation data being collected and is there an impact on crashes?
12. Data regarding equipment for straight trucks and how it is compared to combination trucks. Is it being interpreted correctly? Are there alternative ways to group different segments of the industry?
13. Given the scores, are the threshold percentiles appropriate? Can the thresholds for groups be more descriptive? What was the basis behind creating the thresholds and what are the goals for each threshold?
14. How is Hazmat grouped and what the relationship is between hazmat data and crashes?
15. Does data suggest that those carriers with technology on their trucks are safer?
16. Is data collected differentiated between fatality/injury and tow-away?
17. Administrative items for December 5 meeting
18. The panel moderator should understand statistics and be able to ask appropriate questions of the panel members.
19. Ask panel participants (American Transportation Research Institute (ATRI), University of Michigan Transportation Research Institute (UMTRI), Gallo, and Gimpel) to talk prior to the December 5 subcommittee meeting to discuss areas of consensus and areas where more information/discussion is needed.
20. Panel discussion can be 2-3 hours. Subcommittee discussion will continue through the rest of the day. Additional time for public comment period should be anticipated.
21. Provide ATRI and UMTRI studies to subcommittee members prior to meeting.

**VII. Presentations and Data requested for Future CSA Meetings**

1. Presentations requested:

| Presentation/Topic | Potential Presenters | Timeframe (Near-Term, Long-Term) |
| --- | --- | --- |
| How insurance companies evaluate risk:  -What aspects of motor carrier operations are deemed important?  -On which violations and behaviors do insurance companies focus?  -Companies that insure shippers and brokers as well as those that insure carriers should be represented. | Jeff Tucker will provide speaker recommendations to Dave Parker. | Near-term (Feb-June 2013) |
| Effectiveness of CSA (i.e., the relationships between scores and crash risk):  - Panel discussion with statisticians/researchers that have studied CSA’s effectiveness. | -Gimpel from Univ. of MD  -Gallo from Wells Fargo  -ATRI author  -Volpe Center personnel  -UMTRI experts | Near-term (Feb-June 2013) |
| Crash investigations. | Experts in commercial vehicle safety programs -Dan Blower  -UMTRI | Near-term (Feb-June 2013) |
| Observations from investigations of crashes. | - National Transportation Safety Board (NTSB)  -A defense attorney and plaintiff lawyer with related background | Near-term (Feb-June 2013) |
| Crash reconstruction expert. | National Highway Traffic Safety Administration (NHTSA) | Near-term (Feb-June 2013) |
| Large truck crash causation study. | Ralph Craft, FMCSA | Near-term (Feb-June 2013) |
| DataQ issues:  -How DataQs are processed and adjudication process for citations.  -A description of how States process their DataQs (acceptance rates and rejections).  -What is working well? -What are the DataQs challenges? | -A consultant that works with carriers on DataQs issues.  -Former Administrator Sandberg -CVSA  -Betsy Benkowski (FMCSA)  -Conway Freight | Longer-term |
| Updates on enforcement issues. Differences among state police reports. | -CVSA  -UMTRI | Near-term (Feb-June 2013) |
| Provide insight into intervention levels:  - Where is common ground in the data?  - Are there any areas for FMCSA to evaluate? | -Gimpel from MD  -Gallo from Wells Fargo  -ATRI author  -Volpe Center | Longer-term |
| -What can shippers and brokers do with collected data to make informed business decisions?  -What is done with shipper and broker data?  -What correlations are made? | Panel discussion with experts:  -Gimpel  -Gallo  -ATRI author  -FMCSA  -Volpe Center | Near-term (Feb-June 2013) |
| Is a disclaimer enough protection for a shipper? | Legal counsel | Near-term (Feb-June 2013) |

1. Data Requested:

|  |  |  |
| --- | --- | --- |
| Data | Who Provides? | Timeframe (Near-Term, Long-Term) |
| Case studies of preventable crashes? What are the accident causation factors? What other data may impact crash incidence? |  |  |
| Having the data that the Agency used to create the threshold algorithms for each BASIC would be useful. |  |  |
| Data from FMCSA and third parties on their understanding of the relationship between data and crash risk. |  |  |
| Data tying specific violations to crash risk. |  |  |
| How many carriers can be scored in each category? What portion of the population does that account for? |  |  |
| Breakdown of the size of carriers assigned a score. |  |  |
| FAA views an accident as a series of events. There may be something to learn from FAA’s broader view of accidents. |  |  |
| The percentage of crashes that are reported to FMCSA by the States should be examined. |  |  |
| Data collected should fit the analytical model needed. |  |  |
| Is there any correlation between carriers that are other data systems (e.g., pre-pass, pre-clearance, and CVISN data) to crash vulnerability? |  |  |

**VIII.** **Additional notes for Task 12-03 (From August MCSAC meeting)**

1. Prioritization of the initial issues addressed by the subcommittee?
2. See if the system is working. A third party (non-FMCSA) should evaluate the system, i.e., whether it is meeting its objectives. Is the system fair and balanced?
3. Should CSA focus more on reducing the incidence or severity of crashes? What is the priority level of CSA objectives?
4. For purposes of providing third parties with safety data on which to make decisions, should this objective be treated differently from safety objectives? Should the data visible to third parties be different?
5. Data Quality Issues
6. DataQ process. (Betsy Benkowski with FMCSA can present data on this.)
7. Does the top priority reflect the largest CSA problem?
8. Logistics
9. What process should guide the subcommittee’s work? Timeline?
10. Listening sessions? Where? Frequency of meetings? Locations? Venues?
    1. Scheduled CSA subcommittee meetings:
11. December 5, 2012, at Alexandria Hilton (MCSAC 12/3 and 12/4)
12. February 5 and 6, 2013, at Alexandria Hilton
13. April 10, 2013, at Alexandria Hilton
14. September 11, 2013, at Alexandria Hilton
15. December 11, 2013, at Alexandria Hilton
16. How should the subcommittee identify milestones and objectives?
17. What other stakeholders should be involved on a CSA Subcommittee?
    1. Shippers
18. What degree do we fund small entities to join us or present to us?
19. What are all the open/pending/planned research projects that are relevant?
20. Outreach
21. How do we enhance, improve, and expand the outreach of FMCSA?
22. Send a letter to shipper explaining to them that CSA data should be viewed in the context of a larger safety picture. CSA data is just an indicator.
23. CSA is generally misunderstood throughout driver community. FMCSA should continue expanding outreach and education to drivers.
24. How do we reach, engage, and educate small truckers?
    1. FMCSA should include small motorcoach companies in CSA outreach as well.
25. Are there any places where the task/job is misaligned or assigned incorrectly and, therefore, needs another entity and/or approach (e.g., a non-FMCSA entity)?

1. Note that bolded parentheticals in this section of the outline indicate the subcommittee’s placement of each topic on the Task 12-03 discussion points timeline. [↑](#footnote-ref-1)
2. Longer-term refers to discussion in second half of 2013 and beyond. [↑](#footnote-ref-2)
3. Near-term refers to discussion in the February-June 2013 timeframe. [↑](#footnote-ref-3)