

Federal Motor Carrier Safety Administration

[Docket No. FMCSA-2015-0149]

Future Enhancements to the Safety Measurement System (SMS)

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), U.S. Department of Transportation (U.S. DOT).

ACTION: Notice; response to public comments; request for public comments.

SUMMARY: FMCSA proposes enhancements to information on the public Safety Measurement System (SMS) Website and responds to comments received in response to FMCSA's Federal Register Notice, "Proposal for Future Enhancements to the Motor Carrier Safety Measurement System (SMS)," published on June 29, 2015. These enhancements are a continuation of the Agency's efforts to provide law enforcement, the motor carrier industry, and motor carriers with more informative safety data. This notice explains the Agency's proposed enhancements to the public SMS Website, including two additional changes not originally proposed, which were identified during the development of the SMS Preview. FMCSA has provided information about the proposed enhancements to the National Academies of Sciences to consider in the Correlation Study required by Section 5221 of the Fixing America's Surface Transportation (FAST) Act. The proposed enhancements will be available for preview, at: <https://csa.fmcsa.dot.gov/SMSPreview/> on October 4, 2016. The Agency seeks comments on these changes based on the preview. The Agency will not implement the changes until after the Agency satisfies the requirements of Section 5223 of the FAST Act.

DATES: Comments must be received by December 3, 2016. Question and answer (Q&A) sessions for the public and industry are scheduled for the following dates and times:

1. Wednesday, October 12, 2016, 10:00–11:30 a.m. Eastern Time (ET)
2. Thursday, October 13, 2016, 2:00–3:30 p.m. ET
3. Tuesday, October 18, 2016, 3:00–4:30 p.m. ET
4. Thursday, October 20, 2016, 11:00 a.m.–12:30 p.m. ET

For more information on these sessions, see Section V.

ADDRESSES: You may submit comments bearing the Federal Docket Management System Docket ID (FMCSA-2015-0149) using any of the following methods:

Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the online instructions for submitting comments.

Mail: Docket Management Facility; U.S. Department of Transportation, 1200 New Jersey Avenue SE, West Building Ground Floor, Room W12-140, Washington, DC 20590.

Hand Delivery or Courier: West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590, between 9 a.m. and 5 p.m., ET, Monday through Friday, except Federal holidays.

Fax: 1-202-493-2251.

Each submission must include the Agency name and the docket number for this notice. Note that DOT posts all comments received without change to www.regulations.gov, including any personal information included in a comment. Please see the Privacy Act heading below.

Docket: For access to the docket to read background documents or comments, go to www.regulations.gov at any time or visit Room W12-140 on the ground level of the West Building, 1200 New Jersey Avenue SE, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The online Federal document management system is available 24 hours each day, 365 days each year. If you want acknowledgment that the Agency received your comments, please include a self-addressed, stamped envelope or postcard or print the acknowledgement page that appears after submitting comments online.

Privacy Act: In accordance with 5 U.S.C. 553(c), DOT solicits comments from the public to better inform its rulemaking process. DOT posts these comments, without edit, including any personal information the commenter provides, to www.regulations.gov, as described in the system of records notice (DOT/ALL-14 FDMS), which can be reviewed at www.dot.gov/privacy.

FOR FURTHER INFORMATION CONTACT: For information concerning this notice, contact Mr. David Yessen, Federal Motor Carrier Safety Administration, 1200 New Jersey Avenue SE, Washington, DC 20590, telephone 609-275-2606 or by email at david.yessen@dot.gov. If you have questions on viewing or submitting material to the docket, contact Docket Services at 202-366-9826.

SUPPLEMENTAL INFORMATION:

I. Public Participation and Request for Comments

FMCSA encourages you to participate by submitting comments and related materials.

A. Submitting Comments

If you submit a comment, please include the docket number for this notice (FMCSA-2015-0149), indicate the specific section of this document to which each comment applies, and provide a reason for each suggestion or recommendation. You may submit your comments and material online or by fax, mail, or hand delivery, but please use only one of these methods. FMCSA recommends that you include your name and a mailing address, an email address, or a phone number in the body of your document so that the Agency can contact you if it has questions regarding your submission.

To submit your comment online, go to <http://www.regulations.gov> and put the docket number, “FMCSA-2015-0149” in the “Keyword” box, and click “Search.” When the new screen appears, click on the “Comment Now!” button and type your comment into the text box in the following screen. Choose whether you are submitting your comment as an individual or on behalf of a third party and then submit. If you submit your comments by mail or hand delivery, submit them in an unbound format, no larger than 8½ by 11 inches, suitable for copying and electronic filing. If you submit comments by mail and would like to know that they reached the facility, please enclose a stamped, self-addressed postcard or envelope.

FMCSA will consider all comments and materials received during the comment period and may change the approach discussed in this notice based on your comments.

B. Viewing Comments and Documents

To view comments, as well as documents mentioned in this preamble as being available in the docket, go to <http://www.regulations.gov> and insert the docket number, “FMCSA-2015-0149” in the “Keyword” box and click “Search.” Next, click the “Open

Docket Folder” button and choose the document listed to review. If you do not have access to the internet, you may view the docket by visiting the Docket Management Facility in Room W12-140 on the ground floor of the DOT West Building, 1200 New Jersey Avenue SE, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

II. Background

On June 29, 2015 (80 FR 37037), FMCSA proposed the following SMS enhancements and requested initial comments on them in advance of providing motor carriers to preview how their safety performance data would be presented on the SMS Website.

1. Changing some of the SMS Intervention Thresholds to better reflect the Behavior Analysis and Safety Improvement Categories’ (BASICS) correlation to crash risk.
2. Two changes to the Hazardous Materials (HM) Compliance BASIC:
 - a. Segmenting the HM Compliance BASIC by Cargo Tank (CT) and non-CT carriers; and
 - b. Releasing motor carrier percentile rankings under the HM Compliance BASIC to the public.
3. Reclassifying violations for operating while Out of Service (OOS) under the Unsafe Driving BASIC rather than the BASIC of the underlying OOS violation.
4. Increasing the maximum Vehicle Miles Travelled (VMT) used in the Utilization Factor to more accurately reflect the operations of high-utilization carriers.

The Agency's analysis and explanations were provided in the June 29, 2015 notice. Stakeholders had 30 days to submit comments. The comment period ended on July 29, 2015.

After receiving and analyzing the comments in response to this preview, FMCSA will provide the results to the National Academies of Sciences to consider during the Correlation Study required by Sections 5221 and 5223 of the FAST Act, related to SMS and public display. The study required by Section 5221 is required to be within 18 months of the enactment of the Act.

III. Summary of Public Comments and Response

FMCSA received 50 docket comments in response to the June 29, 2015 notice. However, only 30 of the submissions contained comments specifically on the changes proposed in that notice. The commenters included motor carriers, drivers, industry associations, and safety advocates. Relevant input and feedback were received from the Advocates for Highway and Auto Safety (Advocates), American Association for Justice (AAJ), American Bus Association (ABA), American Trucking Associations, Inc. (ATA), Con-way Freight, FedEx Corporation (FedEx), Institute of Makers of Explosives (IME), National Motor Freight Traffic Association, Inc. (NMFTA), National Propane Gas Association (NPGA), National Transportation Safety Board (NTSB), Owner-Operator Independent Drivers Association (OOIDA), Schneider National, Inc. (Schneider), Snack Food Association (SFA), Transportation Intermediaries Association (TIA), Werner Enterprises, Inc. (Werner), YRC Worldwide Inc., and individuals who did not identify their organizations. Many stakeholders provided comments on multiple proposed

enhancements and topics. Comments outside the scope of the June proposal are not discussed in this notice.

In addition, many stakeholders requested additional analysis on the proposed enhancements to better inform their comments. Detailed analysis on the proposed enhancements from the June notice, as well as the additional enhancements proposed in this notice, are available in the Foundational Document at:

<https://csa.fmcsa.dot.gov/Documents/SMS-Preview-Foundational-Document.pdf>.

Below is a summary of the comments received that address the proposed changes and the Agency's responses:

1. Changing some of the SMS Intervention Thresholds to better reflect the BASICS' correlation to crash risk.

Arleen Wells commented that the Vehicle Maintenance BASIC Intervention Threshold should not go higher, but raising the percentage for the Controlled Substances/Alcohol BASIC Intervention Threshold was an "excellent idea." George Hopkins felt that changing the Vehicle Maintenance threshold is not productive, as many of the violations are "not going to result in a crash." Another anonymous commenter expressed concern that the proposed Vehicle Maintenance BASIC Intervention Threshold change would hurt flatbed carriers.

OOIDA questioned the Agency's logic for the Vehicle Maintenance Intervention Threshold pointing out that "The inclusion of an additional 5% of motor carriers with lower Vehicle BASIC scores causes the average number of accidents per power unit above the new threshold to increase 7%. These numbers more than illustrate the

randomness and ineffectiveness of FMCSA’s reliance on correlation rather than causation.”

However, Con-way Freight supported the adjustments to the BASIC Intervention Thresholds to better prioritize carriers. SFA “commend[ed] the Agency for taking these preliminary moves to more closely correlate its enforcement interventions to actual crash risk.” ATA, TIA, and Schneider supported adjusting the SMS Intervention Thresholds. TIA “applaud[ed] the proposed enhancements to the Safety Measurement System (SMS), specifically, better adjusting some of the SMS interventions.” ATA recommended that the Agency adjust the thresholds further to yield even better results. NTSB voiced concern about whether the Agency has sufficient resources to reach the 41,000 carriers that will be at or above the proposed Intervention Thresholds.

Regarding the Controlled Substances/Alcohol Intervention Threshold change, an anonymous commenter advised, “I am saddened by the proposal to raise the threshold for controlled substances. I believe that it sends the wrong message to the public and reflects poorly on the industry.” AAJ requested that the Controlled Substances/Alcohol BASIC remain unchanged, emphasizing that the change “ignores the real and serious risks of impaired driving.” AAJ cited a recent National Highway Traffic Safety Administration (NHTSA) Drug and Alcohol Crash Risk Study, which found that drivers with an alcohol level of 0.08% were four times more likely to crash than sober drivers and that marijuana users were about 25% more likely to be involved in a crash than drivers with no evidence of marijuana use.¹ Advocates did not support the proposed change to the Controlled Substances/Alcohol BASIC pointing out that “Raising the intervention levels to 90%

¹ Compton, R. P. & Berning, A. (2015, February). *Drug and alcohol crash risk*. (Traffic Safety Facts Research Note. DOT HS 812 117). Washington, DC: National Highway Traffic Safety Administration.

would then only identify the bottom 10% of carriers, even though all carriers above the 50th percentile are below average.”

FMCSA issued an amendment to the enforcement policy for its Hazardous Materials Safety Permit (HMSP) program prior to the release of the June notice on the proposed SMS enhancements. This amendment uses the SMS results under the current Intervention Thresholds to monitor carriers that have non-temporary HMSPs and prioritize them for investigations focused on HM compliance. IME requested that the Agency clarify whether the proposed Intervention Thresholds will replace the current thresholds outlined in this amendment.

FMCSA Response

FMCSA disagrees with OOIDA’s assertion that the change to the Vehicle Maintenance BASIC Intervention Threshold does not have a correlation to crash risk. The baseline crash rate of 5.12 crashes per 100 Power Units (PUs) is not limited to the Vehicle Maintenance BASIC. Rather, it applies to any of the seven BASICs that are at or above the current Intervention Thresholds. Therefore, the 7% increase in crash rate includes lowering the Vehicle Maintenance BASIC threshold from 80% to 75%, as well as raising the Intervention Thresholds for the Driver Fitness, HM Compliance, and Controlled Substances/Alcohol BASICs from 80% to 90%. In addition, FMCSA’s SMS Effectiveness Test (ET) results show that lowering the Intervention Threshold for the Vehicle Maintenance BASIC will help identify more carriers with higher correlations to crash rate.² Carriers at or above the current threshold for this BASIC have a crash rate of

² *The Carrier Safety Measurement System (CSMS) Effectiveness Test by Behavior Analysis and Safety Improvement Categories (BASICs)*, January 2014, FMCSA, pg. 42. The full report is available at: http://csa.fmcsa.dot.gov/Documents/CSMS_Effectiveness_Test_Final_Report.pdf.

5.78 crashes per 100 PUs. Lowering the threshold for this BASIC to 75% will include those carriers, as well as a new set of carriers with a crash rate of 5.61 crashes per 100 PUs. Both of these crash rates are much higher than the national average of 3.43 crashes per 100 PUs.

As for the anonymous commenter's concern about the flatbed bias, the Agency examined this bias relating to cargo securement violations in the last set of methodology enhancements. To address this bias, the Agency replaced the Cargo-Related BASIC with the HM Compliance BASIC. More information on this enhancement is available in the notice for the previous methodology changes (77 FR 19298, March 27, 2012) and is also in docket FMCSA-2012-0074.

FMCSA values NTSB's concern about the Agency's resources; however, this change to the Intervention Thresholds will identify a similar number of carriers for interventions as the current SMS methodology. Interventions include warning letters, Notices of Claim, Notices of Violation, and investigations.

FMCSA acknowledges the concerns raised by AAJ, Advocates, and the anonymous commenter about the serious risks associated with impaired driving due to use of controlled substances and alcohol. In response to these concerns, the Agency conducted additional analysis to determine the impact of removing the subset of carriers that would no longer be prioritized under the proposed threshold for the Controlled Substances/Alcohol BASIC of 90%. Using the SMS ET, the Agency found that carriers with percentiles in the 80% to 90% range have a crash rate of 1.24 crashes per 100 PUs, which is about one third the crash rate of the national average of 3.43 crashes per 100 PUs. Based on these results, the Agency believes that there is no strong evidence to

continue identifying this subset of carriers for interventions. Raising the Intervention Threshold for the Controlled Substances/Alcohol BASIC will help to focus the Agency's resources on those carriers with the greatest safety risk. However, the Agency will continue to assess this BASIC and review comments and supplemental data to determine the best path forward.

Based on IME's request for clarification, the Agency notes that if the proposed enhancements to the BASIC Intervention Thresholds are implemented, they will also impact the amendment to the HMSP program's enforcement policy that became effective August 18, 2015 (80 FR 35253, June 19, 2015). Carriers are prioritized for these investigations if they are at or above the Intervention Thresholds for the HM Compliance BASIC or any other two BASICs over a consecutive two-month period. Under this proposed enhancement, carriers will be prioritized based on the proposed thresholds outlined in Table 1 below.

Table 1: Comparison of Current and Proposed Intervention Thresholds

BASIC	Current Intervention Thresholds			Proposed Intervention Thresholds		
	Passenger Carrier	HM Carrier	General Carrier	Passenger Carrier	HM Carrier	General Carrier
Unsafe Driving, Crash Indicator, Hours-of-Service (HOS) Compliance	50%	60%	65%	50%	60%	65%
Vehicle Maintenance	65%	75%	80%	60%	70%	75%
Controlled Substances/Alcohol, Driver Fitness	65%	75%	80%	75%	85%	90%
HM Compliance	N/A	80%	N/A	N/A	90%	N/A

2. Two changes to the HM Compliance BASIC:

- a. Segmenting the HM Compliance BASIC by CT and non-CT carriers; and**
- b. Releasing motor carrier percentile rankings under the HM Compliance BASIC to the public.**

David Vargyas, Con-way Freight, and ATA supported the segmentation of CT and non-CT carriers. ATA noted that “Under the current methodology, non-CT carriers often have higher scores not because they are less safe, but because they have a greater potential for HM compliance violations than CT carriers.” ATA noted that the preview period will allow motor carriers to see how this proposed change will actually impact them. In addition, several commenters requested additional information on how CT and non-CT segments are defined. Advocates requested that the Agency provide analysis to support its claim that this change will improve the HM Compliance BASIC’s ability to prioritize carriers with HM compliance problems for interventions.

Con-way Freight did not support making the HM Compliance BASIC publically available, noting that “The root cause of the release can often be attributed to a violation in another BASIC, such as Unsafe Driving, which has a more significant correlation to crash risk.” IME also opposed making the HM Compliance BASIC percentiles available to the public. However, IME did not provide any new data to support this position. FedEx stated that “there other existing flaws with the HM Compliance BASIC that make the BASIC less than accurate and which result in biases favoring certain motor carriers over others.” ATA “strenuously objects” to making the BASIC publically available and noted that “scores in this category are a reflection of compliance with HM regulations, many of them relating to paperwork and placarding, not individual motor carrier crash risk.”

AAJ supported making the HM Compliance BASIC percentiles publically available, noting that “keeping this information accessible to the motor carrier industry, consumers, and other safety stakeholders will not only continue to assist people seeking to work with safe carriers, but will help keep carriers with high crash risks off of the road.”

FMCSA Response

The Foundational Document provides additional information on how CT and non-CT segments are defined. It also includes detailed analysis on this proposed enhancement and its safety impact and can be found at: <https://csa.fmcsa.dot.gov/Documents/SMS-Preview-Foundational-Document.pdf>.

The preview will reflect segmentation within the HM Compliance BASIC by CT and non-CT carriers and is only available to carriers and enforcement personnel, not the public. The Agency will consider the feedback on this issue and will ensure that the display of the HM Compliance BASIC is in accordance with the FAST Act requirements.

3. Reclassifying violations for operating while OOS under the Unsafe Driving BASIC rather than the BASIC of the underlying OOS violation.

Commenters including IME, ATA, Schneider, and ABA approved of moving operating while OOS violations to the Unsafe Driving BASIC. These stakeholders maintained that this change will more accurately reflect the role that unsafe driving behavior plays in the violation of an OOS Order. However, ATA noted that FMCSA’s notice indicated that adding these violations to the Unsafe Driving BASIC did not change the average crash rate. Therefore, ATA concluded that this change did not improve the BASIC’s ability to identify unsafe carriers. Advocates also expressed tentative

agreement, noting that the Agency provided no data or evidence illustrating the impact on the Unsafe Driving and other BASICS.

FMCSA Response

FMCSA acknowledges that moving OOS violations to the Unsafe Driving BASIC will have minimal impact on this BASIC's ability to identify carriers for interventions. However, the Agency believes that consolidating these violations in one BASIC will help motor carriers and enforcement more effectively identify and correct safety problems related to the violation of an OOS Order.

FMCSA proposes that this change be implemented retroactively, i.e., any such violations from the past 24 months on a carrier's SMS profile will be moved into the Unsafe Driving BASIC, unless comments during the preview period present evidence to change the Agency's position.

4. Increasing the maximum VMT used in the Utilization Factor to more accurately reflect the operations of high-utilization carriers.

Comments in support of expanding the range over which the Utilization Factor applied from 200,000 to 250,000 VMT per average PU were submitted by John Whisnant, ATA, NMFTA, Schneider, NPGA, and ABA. NMFTA noted that "The increase should improve the correlation between the Unsafe Driving and Crash Indicator percentiles and actual crash risk for these very high utilization-carriers." Advocates tentatively supported this change but requested that the Agency provide more data.

OOIDA pointed out that this enhancement helps large carriers the most and that such enhancements are unavailable to small carriers. Werner felt the notice "lack[ed] explanation and data to support the statement, 'industry stakeholders noted that the

current Utilization Factor is not accurate for some companies with extremely high utilization”” and felt more information was needed to comment on this proposal.

FMCSA Response

In regard to OOIDA’s concern, this proposed enhancement to the Utilization Factor will benefit all high-utilization carriers regardless of their size, as the Utilization Factor is based on the VMT to average PU ratio, not the number of PUs. This approach allows the SMS to account for carriers of different sizes and hold them to a similar standard. As a result, large carriers and small carriers with high VMT per average PU ratios can receive adjustments that reflect their increased exposure.

IV. Additional Enhancements

In addition to the proposed enhancements outlined above, FMCSA proposes two additional changes based on issues identified and analysis conducted during the development of the preview. Detailed analysis on these changes is available in the Foundational Document at: <https://csa.fmcsa.dot.gov/Documents/SMS-Preview-Foundational-Document.pdf>. Carriers and other interested stakeholders can review these changes during the preview and provide any additional comments or analysis for the Agency to consider in its final decision.

1. Data sufficiency standards for the Crash Indicator BASIC.

In response to comments received to the Federal Register Notice of January 23, 2015, which announced the results of FMCSA’s study on the feasibility of using a motor carrier's role in crashes in the assessment of the company’s safety (80 FR 3719), the Agency conducted additional analyses. One of the areas reconsidered was the minimum number of crashes used to establish the data sufficiency standard in the Crash Indicator

BASIC. Currently, the Agency assigns a percentile to carriers in the Crash Indicator BASIC if they have at least two reportable crashes in the last two years. The Agency proposes increasing the minimum number of crashes required for a percentile from two to three. According to the analysis conducted by FMCSA, the overall crash rate of the Crash Indicator BASIC remains about the same as the current Crash Indicator BASIC (6.33 vs. 6.34 crashes per 100 PUs). While the number of crashes covered under this scenario is lower than the number of crashes for the current Crash Indicator BASIC (14,838 vs. 15,638 crashes) the results suggest that the proposed change identifies a similar group of carriers with high crash rates as the current Crash Indicator BASIC. While this change does not substantively impact the effectiveness of the Crash Indicator BASIC, the greater data sufficiency standard of this BASIC would yield greater confidence that this BASIC is identifying carriers with established patterns of crashes thereby enabling the Agency to further focus its investigative resources on carriers with more crash involvement.

2. Carriers with recent violations.

Currently, FMCSA assigns percentiles to carriers in the HOS Compliance, Vehicle Maintenance, HM Compliance, and Driver Fitness BASICs if they meet the following criteria: the most recent inspection in the previous 24 months resulted in a violation. Recently, FMCSA reviewed its data sufficiency standards to make them more effective at prioritizing carriers that pose the greatest safety risk. Based on this assessment, the Agency proposes assigning BASIC percentiles only to carriers that have had an inspection with a violation in the past year. This change will increase the Agency's focus on carriers with recent violations and remove carriers with no violations in the past year from prioritization.

This change will reduce the number of carriers with a BASIC at or above the Intervention Threshold. Based on recent SMS results, 1,243 carriers will no longer have a BASIC at or above the threshold as a result of this change. After analyzing this subset of carriers using the SMS ET, the Agency found that these carriers have a crash rate that is 4.8 times lower than the national average (0.71 compared to the national average of 3.43 crashes per 100 PUs). Therefore, removing these carriers from prioritization will allow the Agency to focus its intervention efforts on a set of carriers with a much higher crash rate of 5.20 crashes per 100 PUs.

V. Preview of Proposed SMS Enhancements

The preview will be available October 4, 2016, on the Compliance Safety Accountability (CSA) Website at: <https://csa.fmcsa.dot.gov/SMSPreview/>. Motor carriers will be able to log in through the CSA Website or the Portal to see how the proposed enhancements may impact their SMS results. The public will also be able to view the enhancements using example carriers. To support the preview, FMCSA will hold a series of Q&A sessions for the industry and the public, where participants will be able to ask questions about the proposed changes and receive real-time responses. Before the Q&A sessions, participants can view a video presentation outlining the proposed enhancements and how to use the preview site and review slides and a transcript of that presentation. All of these reference materials are available in the SMS Preview Help Center at: <https://csa.fmcsa.dot.gov/SMSPreview/HelpCenter/Index.aspx>. Each session will end once all questions have been answered. All sessions will have closed captioning. The sessions are scheduled for the following dates and times:

1. Wednesday, October 12, 2016, 10:00–11:30 a.m. Eastern Time (ET)

2. Thursday, October 13, 2016, 2:00–3:30 p.m. ET
3. Tuesday, October 18, 2016, 3:00–4:30 p.m. ET
4. Thursday, October 20, 2016, 11:00 a.m.–12:30 p.m. ET

FMCSA encourages all stakeholders to participate in these Q&A sessions and submit questions ahead of time via the CSA Feedback form at:

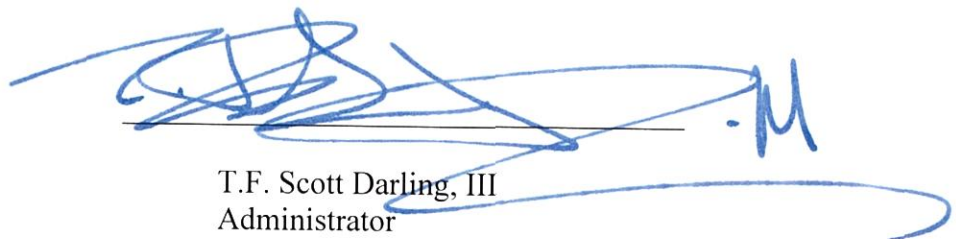
https://csa.fmcsa.dot.gov/CSA_feedback.aspx?defaulttag=SMSPREVIEWQA. Interested parties should register for one of these sessions through FMCSA's National Training Center at:

<https://connectdotcpub1.connectsolutions.com/content/connect/c1/7/en/events/catalog.html?folder-id=1124233886>.

VI. Request for Comments

FMCSA requests additional comments on the proposed SMS enhancements outlined above. Commenters are requested to provide supporting data wherever appropriate.

Issued on:



T.F. Scott Darling, III
Administrator