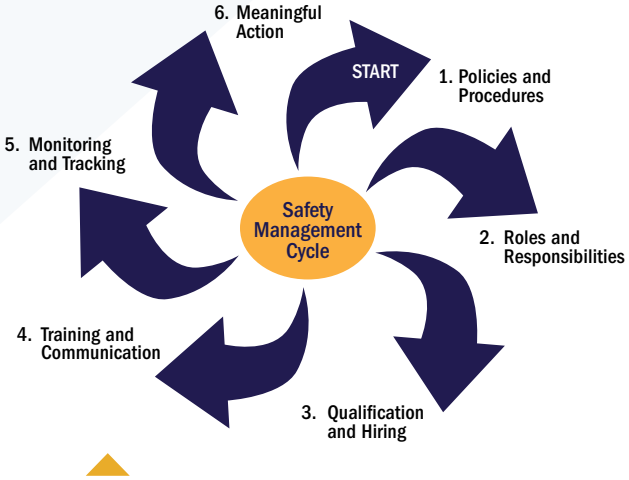
Safety Management Cycle

FMCSA's Safety Management Cycle Overview

This factsheet introduces motor carriers to the Federal Motor Carrier Safety Administration's (FMCSA) new investigative process and its signature tool, the Safety Management Cycle (SMC). The SMC tool is designed to help enforcement staff and motor carriers assess how well a motor carrier's safety management controls support safe operations. A motor carrier can use the SMC at any time; however, it can be particularly helpful to a motor carrier after it has reviewed its violations and crash history on the ***Safety Measurement System (SMS)****. This overview describes a framework that covers all of the seven Behavior Analysis and Safety Improvement Categories (BASICs). However, when Safety Investigators (SIs) and/or motor carriers apply the SMC, they use SMC tools and guidance tailored to each* ***BASIC****.*

This document identifies tools motor carriers can use to establish and improve appropriate safety management controls, thereby reducing or eliminating violations. Motor carriers and drivers are reminded, however, that they are ultimately responsible for ensuring compliance with all applicable regulations.



The Safety Management Cycle, or SMC, consists of the six Safety Management Processes, or SMPs, outlined in the graphic above.

What Is the Safety Management Cycle?

FMCSA developed the SMC to help SIs and motor carriers effectively address motor carrier safety and compliance issues and to improve compliance with the Federal Motor Carrier Safety Regulations (FMCSRs). Applying the SMC is a step-by-step process that looks at "why" the safety and compliance issues are occurring rather than just identifying the violation (the "what"). The tool provides a framework for brainstorming remedies, choosing solutions, and designing and implementing plans to improve the motor carrier's safety operations. The SMC consists of six Safety Management Processes (SMPs).

What Are the Safety Management Processes?

The SMPs are six areas of a motor carrier's operations, laid out in a specific order, that all work together to form the SMC.

1. **Policies and Procedures** defines the "what" and "how" of a motor carrier's operations. Policies establish the guidelines for how motor carriers and their employees behave in a given situation. Procedures explain how to accomplish policies. The other five SMPs focus on how to implement the policies and procedures. *(Continued on page 2)*

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2. **Roles and Responsibilities** clearly defines what each employee should do to successfully implement the policies and procedures.
3. **Qualification and Hiring** discusses recruiting and screening applicants to fulfill the roles and responsibilities for positions.
4. **Training and Communication** outlines a motor carrier's communication of its policies, procedures, roles, and responsibilities so that everyone understands the expectations and has the adequate skills and knowledge to perform their assigned function.
5. **Monitoring and Tracking** concentrates on the need to have a system in place to monitor and track employee performance that enables companies to be aware of their employees' safety performance and compliance with its policies and procedures and how they execute their roles and responsibilities. Monitoring represents the motor carrier looking at the performance of the operation, and Tracking is assessing the data collected leading to Meaningful Action.
6. **Meaningful Action** gives motor carriers the tools to correct or improve employee behavior, including, for example, refresher training and positive reinforcement such as rewards or bonuses, in order to improve the motor carrier's overall safety performance.

How Is the Safety Management Cycle Used?

The SMC is used by the FMCSA during investigations. The SMC is also useful in helping motor carriers identify and take actions to improve their safety compliance. Below are the general steps a motor carrier should follow in applying the SMC to its operation.

Step 1 Review the company's violations and crash history on the **SMS** for trends.

Step 2 Assess each of the SMPs, starting with the Policies and Procedures, to determine which contains process breakdowns that contribute to crashes and/or violations. Each SMP highlights the kinds of safety management controls that are needed to ensure strong safety performance and where they may be breaking down. A company or an SI uses the SMC to identify which processes are not working well and are contributing to the motor carrier's violation(s) of the FMCSRs and/or crashes.

Step 3 Assess why the breakdowns are occurring in that process and identify Safety Improvement Practices (SIPs) to address these problems. SIPs are identified within each SMP and motor carriers can implement them to begin improving their safety performance.

Step 4 Select and prioritize SIPs to address improving safety compliance, create an implementation plan appropriate for company size and available resources, implement the plan, and monitor and track progress and the effect on the company's BASIC percentile ranks over time.

Subscribe to the CSA Website to learn about additional SMC materials when they are published.

Case Study

CSA Program Helps Small Motor Carriers with Safety Management

*This case study is not based on real events or an actual motor carrier.

Background

Conan Trucking is a small motor carrier in Hartford, Connecticut that transports vehicles from auto auctions to dealerships on the East Coast. Frank Conan has owned Conan Trucking for over 20 years and inherited it from his father Andy. When Conan Trucking began exceeding the Intervention Threshold in one of CSA's Behavior Analysis and Safety Improvement Categories (BASICs), Mr. Conan received a warning letter from the Federal Motor Carrier Safety Administration (FMCSA), and then six months later Safety Investigator (SI) Angela Jones called Mr. Conan to schedule an Onsite Investigation and request documents to review during the visit. Investigations are important opportunities to inform motor carriers of their safety problems and provide them with tools to better their safety practices. During investigations, SIs will provide a report of their findings, including violations noted, and may follow up with enforcement (e.g., fines). Some reviews also result in a safety rating.

Situation

On the day of the investigation, SI Angela Jones arrived at Conan Trucking to check its compliance with the Federal Motor Carrier Safety Regulations (FMCSRs). She was focusing on the company's Safety Measurement System (SMS) information, specifically on the FMCSRs related to the Fatigued Driving (Hours-of-Service (HOS)) BASIC, Conan Trucking's percentile rank in that BASIC was above the Intervention Threshold and the company had not made progress in addressing its safety issues since it received the warning letter. A high percentile rank in any of the BASICs means lower safety compliance. Conan Trucking's Fatigued Driving (HOS) BASIC was high due to multiple "false logs" and "logs not current" violations as seen in the details of the SMS.

SI Jones began the Onsite Investigation by reviewing the documents she had requested from Mr. Conan including driver(s) records of duty status (RODS). Her review indicated that drivers might be falsifying their RODS. She further investigated the matter and requested additional documentation, such as bills of lading, fuel receipts, toll receipts, and/or pay records from Mr. Conan, to find the source of noncompliance. Review of this additional documentation showed repeated paperwork inconsistencies. She was able to pinpoint a contributing factor, which was that while the motor carrier did have the necessary records, Conan Trucking was not checking and verifying driver RODS with the trip receipts and other available documentation.

After documenting her findings, SI Jones closed out the investigation by reviewing with Mr. Conan what she found and walking him through FMCSA's Safety Management Cycle (SMC). SI Jones described to Mr. Conan the SMC's intent, how to use it, how it could be applied to the situation she discovered during her investigation of Conan Trucking, and how Mr. Conan could use the tool on an ongoing basis. An essential part of this closeout was to engage Mr. Conan in a process designed to help him identify the issues himself so that he could take responsibility for the solution. Mr. Conan wanted to know what action he could take to make everything right. SI Jones pointed him to the **SMS Website** where he could review his safety information and explained how he could use the SMC as a tool to improve his company's safety compliance. *(Continued on page 4)*

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Approach

Together, as part of the closeout of the investigation, SI Jones and Mr. Conan used the SMC to do an in-depth assessment of Conan Trucking's process breakdowns that led to the false RODS and found ways to fix them. They began by reviewing the SMC's six steps, or Safety Management Processes (SMPs). Conan Trucking's policies and procedures were in place, and employees had well-defined roles and responsibilities. However, SI Jones noticed process breakdowns in two of the six SMPs, specifically Training and Communication and Monitoring and Tracking.

Using the SMC they discovered that Mr. Conan's employee, who was assigned to monitor and track RODS, was not properly trained to check for falsification. Conan Trucking had a policy and procedure in place for drivers to submit RODS, but drivers didn't know the HOS regulations and the safety rationale behind them. SI Jones brought to Mr. Conan's attention that if his company had been checking several other supporting documents, such as toll and/or fuel receipts, inaccuracies would have been found.

The SMC also brought to Mr. Conan's attention that his employee had never raised the issue of inaccurate records and never gave drivers any feedback about their RODS. As a result, Conan Trucking's on-road safety performance in the Fatigued Driving (HOS) BASIC was poor relative to its peers.

Solution

Using the SMC during the closeout of the Onsite Investigation provided Mr. Conan with the knowledge and tool to uncover his company's process breakdowns and to continually evaluate his company's safety processes. He was able to resolve those breakdowns by identifying Safety Improvement Practices: educating his drivers on the HOS regulations and about the importance of accurately logging duty status changes and the safety rationale behind this requirement and training them on what is expected. Also, he took the time to sit down with his employee and train him on RODS so that he knew how to check for falsification and give drivers feedback about their RODS.

Mr. Conan's work paid off when his company's roadside inspection results improved over time and Conan Trucking no longer exceeded the Intervention Threshold in that BASIC. He can also breathe easier now that he is armed with FMCSA's SMC and has a tool to guide him in his safety operations. Use of the SMC and CSA tools could also help his company to avoid enforcement action, such as assessment of civil penalties for regulatory violations. The SMC helped him diagnose his company's process breakdowns related to the Fatigued Driving (HOS) BASIC. This case study demonstrates how a motor carrier can use the SMC to work through the six SMPs in order to improve its safety compliance.

This is an official U.S. government publication, produced and disseminated by the Federal Motor Carrier Safety Administration.
CSA is FMCSA's enforcement program to improve large truck and bus safety and ultimately reduce CMV-related crashes, injuries, and fatalities. For more information about CSA, visit **http://csa.fmcsa.dot.gov**