

Read SMS Without Fooling Yourself

A percentile is a relative priority signal, not a probability that your next load will crash.

7 BASICS	24 months	3 2 1	0-100
behavior and compliance categories	inspection and crash history window	time weights from newest to oldest	relative percentile, where higher is worse

EXECUTIVE SUMMARY

FMCSA describes SMS as a workload prioritization tool that uses inspections, crashes, and investigation findings to identify carriers for intervention.

SMS compares carriers with similar numbers of safety events. The percentile is relative to that group and is shaped by recency, severity, exposure, and data sufficiency.

Version 3.21, revised in May 2026 and documented in June 2026, added nineteen violations and updated eleven descriptions.

01 SMS is a prioritization model

The seven BASICS are Unsafe Driving, Crash Indicator, Hours-of-Service Compliance, Vehicle Maintenance, Controlled Substances or Alcohol, Hazardous Materials Compliance, and Driver Fitness. FMCSA combines on-road performance with recent acute and critical investigation violations.

This is a regulatory workload model. It helps direct limited enforcement resources. A freight team can use it as one risk signal, but should not rename it a safety score or claim that it predicts an individual load.

Evidence: Safety Measurement System Methodology: BASIC Prioritization Status, Version 3.21

02 Recency changes the weight

For applicable inspections and violations, SMS generally uses a twenty-four-month window. Events in the newest six months receive a time weight of three. Events older than six months through twelve months receive two. Events older than twelve months through twenty-four months receive one.

That makes a recent pattern more important than the same pattern aging out. It also means a carrier's profile can improve without a new inspection if older events lose weight. Read the event dates, not only the current percentile.

Event age	Time weight	Operational reading
Zero to six months	3	Current control issue or current improvement evidence
Over six to twelve months	2	Still material, but less current
Over twelve to twenty-four months	1	Historical context approaching the edge of the window
Older than twenty-four months	Not in the standard on-road calculation	Useful history, not current SMS weight

Evidence: Safety Measurement System Methodology: BASIC Prioritization Status, Version 3.21

03 The denominator decides whether the number is stable

SMS uses safety event groups so carriers are compared with others that have similar numbers of relevant inspections, violations, or crashes. Several BASICS also use power units, vehicle miles traveled, or utilization adjustments.

A carrier with little inspection history can have no percentile or a volatile one. A carrier with many clean inspections may have a better-supported view. Before reacting to a percentile, read the inspection count, violation count, out-of-service count, fleet size, mileage freshness, and event dates.

- Ask how many relevant inspections support the measure.
- Check whether the MCS-150 mileage and power unit data are current.
- Separate driver, vehicle, hours, and hazardous materials issues.
- Look for repeated categories, not only the loudest single violation.
- Treat no percentile as insufficient public evidence, not automatic approval.

Evidence: Safety Measurement System Methodology: BASIC Prioritization Status, Version 3.21, 2024 Pocket Guide to Large Truck and Bus Statistics

04 Translate the profile into a load decision

The useful question is not whether the carrier has a bad score. The useful question is whether the observed pattern touches the assigned driver, equipment, route, commodity, and schedule.

Vehicle maintenance issues matter more when the tender includes an unexplained trailer substitution. Hours issues matter more when the appointment math is already tight. Driver fitness issues matter more when the assigned driver cannot be independently verified. The profile should direct the next verification step.

Observed pattern	Next verification	Possible control
Recent vehicle maintenance cluster	Assigned tractor and trailer inspection and repair file	Reject substitution or require documented equipment change

Observed pattern	Next verification	Possible control
Recent hours pattern	Driver clock and route feasibility	Reset schedule or change driver before dispatch
Driver fitness pattern	License, medical, and assigned driver identity	No dispatch until the assigned driver is resolved
Hazardous materials pattern	Endorsement, permit, commodity, and route controls	Use a qualified hazmat review
Thin history	Age, identity, direct insurance, first-load controls	Cap exposure and monitor tightly

Evidence: Safety Measurement System Methodology: BASIC Prioritization Status, Version 3.21

RECOMMENDED ACTIONS

1. Display event dates and denominators beside every percentile.
2. Route each BASIC pattern to a load-specific verification step.
3. Recheck after new inspections, authority changes, equipment changes, and material claims.

QUESTIONS WORTH ASKING NEXT

- Does your carrier score distinguish no data from clean data?
- Can a dispatcher see which recent events are driving the current signal?

LIMITS AND CAUTIONS

- Complete SMS results for property carriers are not all publicly displayed. Do not imply access to private carrier data you do not have.
- Percentiles are relative measures used for intervention prioritization, not crash probabilities.
- Version 3.21 is current as of this research date. FMCSA can revise violation mappings and methodology.

PRIMARY PUBLIC SOURCES

1. **Safety Measurement System Methodology: BASIC Prioritization Status, Version 3.21**
Federal Motor Carrier Safety Administration | 2026-06
2. **2024 Pocket Guide to Large Truck and Bus Statistics**
Federal Motor Carrier Safety Administration | 2025-07
3. **Revised DataQs Requirements for Motor Carrier Safety Assistance Program Grant Funding**
Federal Motor Carrier Safety Administration | 2026-04-15

Web edition: <https://prospectsentinel.com/tools/read-fmcsa-sms-without-fooling-yourself.html> | Published 2026-07-23 | Public sources only