

Motor Carrier Safety Assistance Program Performance Standards, Measurements and Benchmarks Update



MCSAP PSMBs

MOTOR CARRIER SAFETY

Subtitle A—Motor Carrier Safety Grant Consolidation

SEC. 5101. GRANTS TO STATES.

(1) making targeted investments to promote safe commercial motor vehicle transportation, including the transportation of passengers and hazardous materials;

(2) investing in activities likely to generate maximum reductions in the number and severity of commercial motor vehicle crashes and in fatalities resulting from such crashes;

(3) adopting and enforcing effective motor carrier, commercial motor vehicle, and driver safety regulations and practices consistent with Federal requirements; and

(4) assessing and improving statewide performance by setting program goals and meeting performance standards, measures, and benchmarks.



MCSAP PSMBs

- PSMBs were called for in The Moving Ahead for Progress in the 21st Century Act (MAP-21)
- The PSMB project involved the establishment of a joint Federal-State working group to analyze available data and develop performance standards, measures, and benchmarks (PSMB) for MCSAP-related grants.
- The PSMB Working Group started working in 2014.
- PSMB subgroups were given the charge of determining which data elements or measurement approaches should be used, rather than a single office within FMCSA establishing standards unilaterally.



MCSAP PSMBs

- PSMB subgroups
 - New Entrant
 - Border Enforcement
 - Crash Statistics
 - Outreach and Public Education
 - Carrier Investigation
 - Inspection
 - Special Emphasis
 - Traffic Enforcement



MCSAP PSMBs

- To that end, here is an update on one of the subject areas that were taken up by the workgroups - **Special Emphasis Areas**.
- **Special Emphasis Areas - Hazmat and Passenger Carriers**



Special Emphasis Areas - Hazmat and Passenger Carriers

- **Methodology and Rationale for Measurement**
- It is critical that FMCSA and its state partners evaluate how passenger and hazardous materials (placarded HM) carriers are prioritized during roadside enforcement. This can be accomplished with a performance-based plan that maximizes resource focus within a simple, risk-based management system.



Special Emphasis Areas – Hazmat Carriers

Type of Measurement and Calculation

- FMCSA and States (analysts) can determine the prevalence of specific types of crashes by establishing the rate of those crashes to all crashes that occur in the State.

$$\text{HM Crash Rate} = \frac{\text{Crashes with placarded HM}}{\text{All CMV Crashes}}$$

- This establishes a rate that analysts can use to approximate the risk that States have for potentially-severe hazardous materials incidents. That is, assuming that hazardous material vehicles are not more prone to crashes than non-hazardous material vehicles, this rate is a representation of the exposure of hazardous material vehicles to significant crashes.



Special Emphasis Areas - Hazmat Carriers

- Analysts can also use this calculation to approximate the response to this risk. That is, the rate of inspections of hazardous material placarded vehicles to all CMV inspections.

$$\text{HM Inspection Rate} = \frac{\text{Inspections with placarded HM}}{\text{All CMV Inspections}}$$



Special Emphasis Areas - Hazmat Carrier

- Using statistical analysis (data normalization and standard deviation), analysts can compare the crash rate (risk – exposure) to the inspection rate (risk mitigation – response)
- A State’s response should be generally comparable to its risk
- Specific explanation of this process will be described in the accompanying summary paper.



Next Steps

- States volunteer to conduct demonstration project (by sending an e-mail to brandon.poarch@dot.gov)
- Will include all 8 components of the PSMB effort
- Will apply the statistical approaches to real world scrutiny
- Will lead to final methodological proposal for review and comment



Final Goal

- A catalog will be established of the performance standards that relate to the program components; measurement methodologies and criteria
- Each State and Local partner and FMCSA can use the catalog and guidance on how to establish incremental benchmarks to use when tracking progress towards goals, in evaluating performance and activities;
- This catalog will become an appendix to the MCSAP Comprehensive Policy and will serve as the single point of reference for FMCSA-prescribed programmatic evaluation criteria.



What Questions Can I Answer?

