



Program Effectiveness – Carrier Intervention Effectiveness Model

The Carrier Intervention Effectiveness Model (CIEM) provides FMCSA with a tool for measuring the safety benefits of carrier interventions and the direct impact of these interventions on carriers that received them. The CIEM incorporates compliance reviews (CRs) and additional carrier interventions to yield national-level measurements of the effectiveness of FMCSA’s carrier interventions.

The CIEM is based on data from the individual and cumulative "before and after" changes in the safety performance of carriers that received interventions. The model compares motor carriers’ crash rates in the 12 months following an intervention to their crash rates in the 12 months prior to the intervention. This change in crash rates is adjusted for the observed change in crash rates for carriers not receiving interventions. The CIEM incorporates data collected from compliance reviews (CRs) and other carrier interventions, including warning letters, offsite investigations, onsite focused investigations, and onsite comprehensive investigations. The CIEM yields national-level measurements that estimate the effectiveness of FMCSA’s carrier interventions.

Column/Row Descriptions

Column Name	Description
Total Interventions	Total number of the below intervention measures.
CSA Warning Letter	Number of warning letters sent to notify motor carriers early on about their safety performance and compliance problems, and the consequences of not improving.
Offsite Investigation	Number of non-ratable investigations conducted remotely, rather than at a motor carrier’s place of business.
Onsite Focused Investigation	Number of investigations conducted at a motor carrier’s place of business that targets specific areas of regulatory compliance
Onsite Comprehensive Investigation	Number of investigations conducted at a motor carrier’s place of business that examines all areas of regulatory compliance under 49 CFR 385, Appendix B.
PRISM Warning Letter	Number of PRISM warning letters sent to notify motor carriers early on about their safety performance and compliance problems, and the consequences of not improving.
Compliance Review	Number of compliance reviews or all motor carrier, driver, and vehicle requirements for the carrier’s entire operation, including commercial-zone and long-haul operations, to ensure proper safety management controls are in place.
Non-ratable Review	Number of non-rated reviews conducted.
Estimated Benefits	



Enforcement Programs

Crashes Prevented	Estimated number of crashes prevented by carrier interventions.
Injuries Prevented	Estimated number of injuries prevented by carrier interventions.
Lives Saved	Estimated number of lives saved by carrier interventions.