

THE SAFETY DATA IMPROVEMENT PROGRAM 2007–2008 BIENNIAL REPORT TO CONGRESS

Pursuant to Section 4128 of the
Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
Public Law 109-59
February 2010

INTRODUCTION

Section 4128 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) authorized the Secretary of the U.S. Department of Transportation (DOT) to make grants to States through the Safety Data Improvement Program (SaDIP) for projects and activities to improve the accuracy, timeliness, and completeness of commercial motor vehicle (CMV) safety data. The SAFETEA-LU also directed the Secretary to transmit a biennial report to Congress on the activities and results of the program and any recommendations the Secretary determines appropriate. The Safety Data Improvement Program 2005-2006 Biennial Report was transmitted to Congress on October 4, 2007.

BACKGROUND

The Federal Motor Carrier Safety Administration (FMCSA) is responsible for regulating the safety of interstate truck and bus travel in the United States. Since FMCSA was formed in 1999, large truck and bus fatalities have declined from a high of 5,620 in 2000 to 5,099 in 2007 (the year the most recent crash data is available). In 2000, the fatality rate from crashes involving large trucks and buses was 0.205 per 100 million vehicle miles traveled (VMT). In 2007, that same rate decreased to 0.168. This represents a decrease for the third consecutive year and suggests that FMCSA is on target to meet its ambitious safety goal of reducing fatalities involving large trucks and buses to a rate of no more than 0.160 fatalities per 100 million VMT by the end of 2011. Additionally, the injury rate for 2007 from crashes involving large trucks and buses decreased to 2.72 per 100 million VMT. This rate has improved each year since 2000, which represents a 30 percent overall improvement. With roughly 1,100 employees, FMCSA oversees an industry comprised of more than 700,000 interstate and hazardous materials motor carriers and approximately 7 million commercial drivers. The FMCSA relies on strong partnerships with its stakeholders to achieve its safety mission.

The FMCSA is a data driven organization. Timely, accurate, and accessible data are critical to the success of the agency's safety programs and development of its regulations. The FMCSA uses data collected from motor carriers, Federal and State agencies, and other sources to monitor motor carrier compliance with the Federal Motor Carrier Safety Regulations and Hazardous Materials Regulations and to evaluate the safety performance of motor carriers, drivers, and vehicle fleets. The data are used to characterize and evaluate the safety experience of CMV operations and to help Federal safety investigators focus their enforcement resources by identifying high-risk carriers and drivers.

The FMCSA maintains the Motor Carrier Management Information System (MCMIS), which contains census, crash, inspection, safety audit, and compliance review data for carriers. Access to the system is provided to designated employees in each State through SAFETYNET, an automated information management system that supports FMCSA programs by allowing designated users to upload to MCMIS safety performance data on interstate and intrastate commercial motor carriers. Once entered, the data are available to States and other entities for further analysis.

The MCMIS information forms the basis for FMCSA's funding of enforcement activities identified in State motor carrier safety improvement plans, as required under the Motor Carrier Safety Assistance Program. Additionally, motor carrier companies, insurers, shippers, safety researchers, advocacy groups, and a variety of other entities use the data in the MCMIS files.

Prior to SAFETEA-LU and the Motor Carrier Safety Improvement Act of 1999 (MCSIA), periodic audits of MCMIS crash data by FMCSA and others revealed problems. Data on crashes involving large trucks and buses were incomplete and many eligible crashes were not reported.

Section 225 of MCSIA addressed the lack of complete, timely, and accurate CMV crash data through the creation of the Commercial Vehicle Analysis Reporting System (CVARS) program. The CVARS was developed to address deficiencies in data quality and the lack of data reporting. Under CVARS, FMCSA initiated several efforts. These efforts included continued funding to States to improve the collection and analysis of truck and bus crash data, the development of the State Safety Data Quality (SSDQ) map, and other initiatives to assist the States in improving data reported to FMCSA.

Under MCSIA and the CVARS program, DOT provided over \$21 million in discretionary grants and cooperative agreements to 34 States between 2002 and 2005.

STATE SAFETY DATA IMPROVEMENT PROGRAM

Under SAFETEA-LU, Congress authorized SaDIP. The SaDIP is the successor to the CVARS program. The SAFETEA-LU authorized \$11 million for Fiscal Years (FY) 2006 through 2009 (\$2 million for FY 2006 and \$3 million for the remaining years) to award grants to States for projects and activities to improve data reported to FMCSA. In FY 2008, requests for SaDIP grants exceeded the available funds.

Since FY 2006, FMCSA awarded 36 SaDIP grants to 25 States, totaling approximately \$8 million. Additionally, in FY 2006, FMCSA established specific guidelines for assessing State proposals for SaDIP grants that better assess and prioritize States' funding requests and provide greater uniformity in evaluating, ranking, and awarding funds to States. Evaluation criteria for awards have been clearly defined and posted publicly at www.grants.gov for any potential grant applicant to review and consider prior to submitting their application. These enhancements were made in response to a November 2005 Government Accountability Office report entitled *Further Opportunities Exist to Improve Data on Crashes Involving Commercial Motor Vehicles*.

Table 1 – State Grant Funding Distribution FY 2006 – FY 2008

State	FY 2006 Funding	FY 2007 Funding	FY 2008 Funding
Alabama	\$300,000.00		\$240,000.00
Alaska	\$160,384.00		
Arizona		\$112,800.00	\$129,350.00
California		\$400,000.00	
District of Columbia	\$209,337.60		
Iowa	\$26,400.00		\$300,000.00
Idaho			\$300,000.00
Indiana		\$408,740.00	\$300,000.00
Kansas	\$415,957.00	\$640,000.00	\$436,000.00
Kentucky			\$256,000.00
Louisiana		\$188,482.91	
Maine	\$243,656.64	\$101,408.00	
Maryland	\$201,578.00	\$154,400.00	
Massachusetts			\$299,664.00
Michigan			\$230,810.00
Mississippi	\$249,994.00		
Nevada			\$8,640.00
New Hampshire	\$125,790.54		
New Jersey		\$116,120.00	
New Mexico			\$180,000.00
North Carolina		\$425,153.00	\$291,520.00
Oklahoma		\$80,726.09	
Rhode Island	\$44,000.00	\$72,000.00	
Tennessee			\$28,016.00
Washington		\$300,170.00	
TOTAL	\$1,977,097.78	\$3,000,000.00	\$3,000,000.00

Using these grants, States have undertaken the following primary activities:

- Reducing the backlog of data not yet entered into State-level databases by hiring contractors and State personnel to create more complete State crash data files.
- Developing and implementing electronic data systems for collecting and processing crash data in a more timely, accurate, and consistent manner.
- Providing training, such as educating law enforcement officers and State traffic records personnel on the definitions and criteria for CMV crashes and to create more accurate and consistent data.
- Analyzing existing data and State crash data collection forms to identify insufficiencies or inaccuracies and develop plans for addressing them.

Awards for activities supported by SaDIP and its predecessor CVARS have resulted in significantly improved data reported by the States to FMCSA. Table 2 shows that data on the number of large trucks involved in crashes reported to FMCSA, as compared to the large truck crashes reported by the National Highway Traffic Safety Administration's (NHTSA) General Estimates System (GES), have increased and have aligned more with the GES projections.

Table 2 – Trucks Involved in Crashes Reported to FMCSA and NHTSA's Fatality Analysis Reporting System (FARS) and GES

Year	Large Trucks Reported in MCMIS	Large Trucks Reported in GES* (Non-Fatal) + FARS (Fatal)	Percent Reported in MCMIS
2001	109,248	147,105	74.3
2002	116,434	145,319	80.1
2003	127,472	140,375	90.1
2004	139,291	139,444	99.9
2005	147,491	139,681	105.6
2006	147,350	135,522	108.7
2007	147,872	130,424	113.4
2008	132,894	117,581	113.0

Source: MCMIS, FARS, and GES, 2001 to 2008.

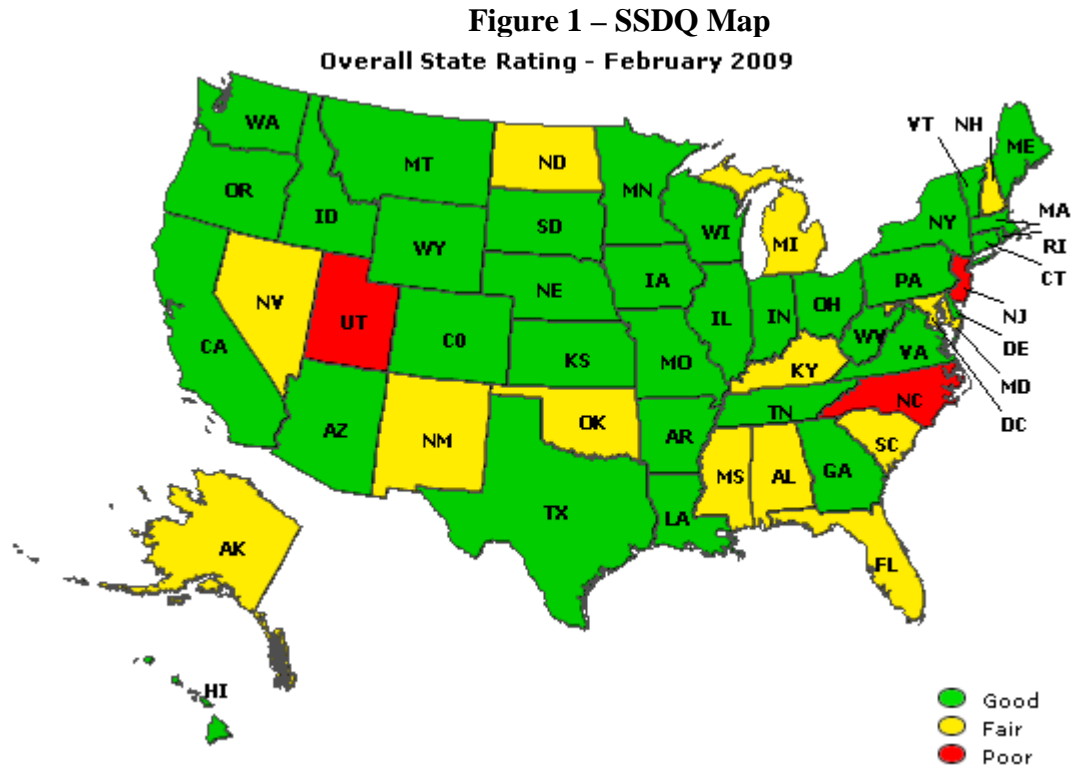
*The GES is a sample survey of large truck crashes nationwide; therefore, large truck numbers are estimates.

The FMCSA developed the SSDQ methodology and map as an important visual tool for States to use in improving the crash and inspection data reported to FMCSA. The map depicts the overall data quality for each State in one of three rating categories – good, fair, and poor. The underlying rating system that is visually depicted serves as an incentive for States to improve their crash and inspection data. Originally, the map contained five performance measures and one overriding indicator that were used to determine the State's overall data quality rating. In October 2007, FMCSA introduced two additional measures to the overall rating in the SSDQ methodology and map. Today, there are seven performance measures and one overriding indicator. The measures include the following:

- The number of fatal crashes reported to NHTSA's FARS compared to MCMIS cases.
- The length of time to upload crashes and inspections from the State to the MCMIS file.
- The number of carriers whose DOT numbers and contact information for crashes and inspections match the information in FMCSA's system.

- The number of non-fatal crashes reported.
- The completeness of the records reported.
- Changes in the number of cases added over past reporting periods.

The FMCSA identified standards for each measure to arrive at an overall rating, which produces the color-coded SSDQ map. Figure 1 depicts the current SSDQ map as of February 2009.



Source: Analysis and Information Online, February 2009 (<http://ai.fmcsa.dot.gov/>)

The initial SSDQ map produced in March 2004 depicts 24 “Good” States, 13 “Fair” States, and 14 “Poor” States. The present SSDQ map, dated March 2009, depicts 34 “Good” States, 13 “Fair” States, and 4 “Poor” States. Table 3 shows the States’ improvements from 2004 to 2009.

Table 3 – Number of States by Rating Category

Rating Category	March 2004	June 2007	September 2007*	February 2009
Good	24	38	27	34
Fair	13	10	16	13
Poor	14	3	8	4**

Source: Analysis and Information Online, March 2004, June 2007, September 2007, and February 2009 (<http://ai.fmcsa.dot.gov/>).

*New measures introduced.

**Including the District of Columbia.

While there has been significant improvement in the overall quality of State-reported data over the last several years, FMCSA continues to work with the States to improve the performance and quality of safety data reported.

In August 2008, FMCSA conducted its first Data Quality System-Wide Training and Conference. This conference was designed to work with the agency's State partners, review current aspects of the FMCSA's SSDQ Program, and identify targeted solutions to support State reporting of complete, accurate, and timely data on large truck crashes and inspections. One hundred sixty Federal and State partners representing public safety, law enforcement, State traffic records departments, and safety coordinators participated in the training.

The training and associated presentations were designed to give all attendees a baseline of what is expected by FMCSA and to identify what programs are available to States to assist them in reporting quality data to FMCSA. Twelve unique presentations included Crash Data Collection Training, Identifying the Responsible Motor Carrier, Case Studies using SAFETYNET, Observations from State Data Quality Reviews, FMCSA Selection Criteria and Crash Classification using ANSI D16.1, Understanding the State Safety Data Quality Map and Measurement Tool, Proposed Commercial License Class Element and Access to CDLIS, Using the VIN Translation Tool to Improve Crash Completeness, Case Studies in Data Q's, and Improving Data Quality from the States Perspective. Sessions entitled "Meet Your Data Quality Analyst" were available all 3 days. State personnel could meet and receive one-on-one assistance and review the reports generated for each attendee.

The FMCSA has integrated the availability of SaDIP grants into its overall grant announcement published in the Federal Register on October 17, 2008, and solicited applications from States through www.grants.gov. Awards for FY 2009 SaDIP funds were made by the end of the fiscal year.

SUMMARY

The SaDIP, the SSDQ map, and FMCSA's efforts have contributed to the States making great strides in improving the quality of their truck and bus crash data collection and reporting. This improvement enhances the ability of both Federal and State governments to make highway planning, investment, and safety enforcement decisions. However, much work remains to be done. The FMCSA continues its support of States' data quality efforts in order to sustain this progress and increase the number of State participants working to improve the collection and reporting of motor carrier crash and inspection data, with the primary goal of improving motor carrier safety.