



2018

Pocket Guide to Large Truck and Bus Statistics



U.S. Department of Transportation
Federal Motor Carrier Safety
Administration

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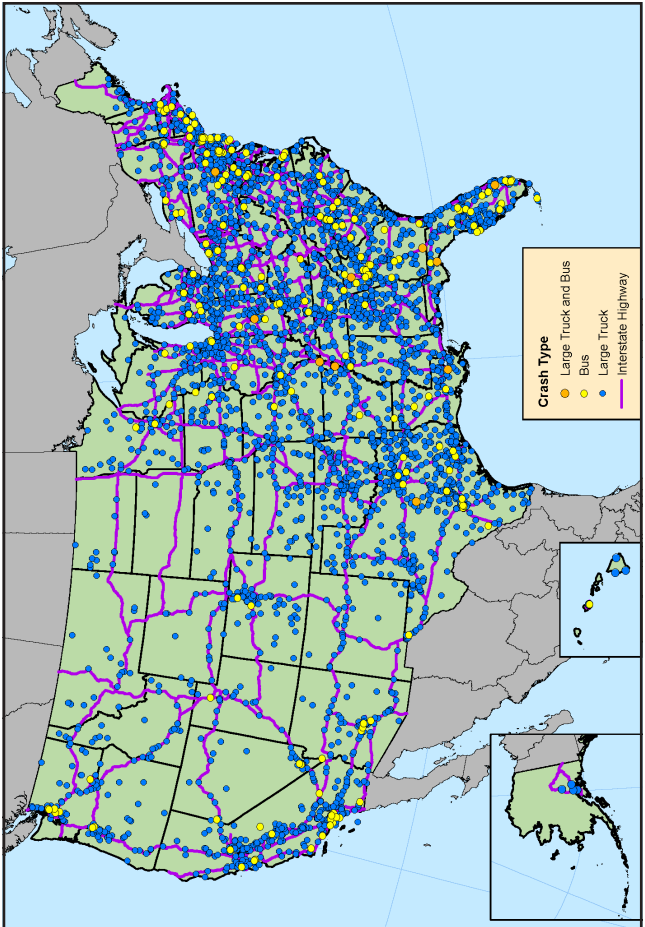
INTRODUCTION

The primary mission of the Federal Motor Carrier Safety Administration (FMCSA) is to reduce crashes, injuries, and fatalities involving large trucks and buses. In carrying out its safety mandate, FMCSA develops and enforces data-driven regulations that balance motor carrier safety with efficiency. For more information about the Agency and its safety-based initiatives, please visit www.fmcsa.dot.gov.

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LOCATIONS OF FATAL LARGE TRUCK AND BUS CRASHES, 2016



Note: In 2016, there were 4,079 fatal crashes involving large trucks and buses.
Data Source: National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

THE MOTOR CARRIER MANAGEMENT INFORMATION SYSTEM

FMCSA created and maintains the Motor Carrier Management Information System (MCMIS). MCMIS contains information on the safety performance of commercial motor carriers (large trucks and buses) and hazardous materials (HM) carriers subject to the Federal Motor Carrier Safety Regulations (FMCSRs) and Hazardous Materials Regulations (HMRs). This system contains crash, census, inspection, and investigation files created to monitor and develop safety standards for commercial motor vehicles (CMVs) operating in interstate commerce. The crash file includes information on all trucks and buses involved in reportable crashes. The census file includes descriptive information on every motor carrier in MCMIS and is updated weekly. FMCSA analyzes motor carrier self-reported MCMIS registration data and applies filters to identify and remove inaccurate entries to avoid over- or under-estimating values. The inspection file contains data from State and Federal inspection actions involving motor carriers operating in the United States. Most of the inspection data included in MCMIS are collected at the roadside by State personnel under the Motor Carrier Safety Assistance Program (MCSAP). The investigation file includes data from warning letters and on-site and off-site investigations and reviews conducted on motor carriers that transport property or passengers in interstate or intrastate commerce. Most of the investigation data is captured onsite during the examination of a motor carrier's operations by a safety investigator.

1. OVERVIEW: LARGE TRUCKS AND BUSES

In 2016, among the 268,799,083 total registered vehicles in the United States, 8,746,518 were single-unit trucks (straight trucks), 2,752,043 were combination trucks (tractor-trailers), and 976,161 were buses. Also in 2016, there were 3,174.4 billion vehicle miles traveled (VMT) by all motor vehicles. Large trucks traveled 287.9 billion of those miles (9.1 percent of the total), and buses traveled 16.3 billion of those miles (0.5 percent of the total).

FMCSA regulates all registered commercial motor vehicles (CMVs) that operate interstate or that carry hazardous materials (HM). As of December 2017, 543,061 interstate motor carriers and intrastate HM motor carriers had recent activity operating in the United States:

- 292,184 were for-hire carriers
- 197,126 were private carriers
- 50,000 were both for-hire and private carriers
- 3,751 were neither for-hire nor private carriers (e.g., government).

FMCSA regulates all drivers involved in interstate commerce or intrastate transportation of HM, as well as all Commercial Driver's License (CDL) drivers, both interstate and intrastate. Approximately 6.1 million* CMV drivers operate in the United States:

- 3.7 million operate interstate
 - 3.2 million operate interstate and hold CDLs
- 2.4 million operate intrastate
 - 1 million operate intrastate and hold CDLs.

*The numbers on this page may not sum to totals due to rounding.

Notes: The number of carriers and/or drivers in operation at any given time is subject to change, due to enforcement actions, business turnovers, licensing issues, and other factors. Interstate and some intrastate driver counts are based on motor carrier registration data contained in the Motor Carrier Management Information System (MCMIS); intrastate driver counts for States that do not require carriers to register with FMCSA were estimated by extrapolation from States requiring both interstate and intrastate carriers to register in MCMIS. Data Sources: Registration Data - Federal Highway Administration (FHWA), *Highway Statistics 2016*; Carrier and CMV Driver Counts - FMCSA, MCMIS, data snapshot as of December 29, 2017.

1-1 Registered Vehicles in the United States, 2013-2016

Year	All Vehicles	Large Trucks	Buses
2013	255,876,822	10,597,356	864,549
2014	260,350,938	10,905,956	872,027
2015	263,610,219	11,203,184	888,907
2016	268,799,083	11,498,561	976,161

Data Source: Federal Highway Administration (FHWA), *Highway Statistics 2016*, Table VM-1.

1-2 Million Vehicle Miles Traveled (VMT) in the United States, 2013-2016

Year	All Vehicles	Large Trucks		Buses
		Single-Unit	Combination	
2013	2,988,280	106,582	168,436	15,167
2014	3,025,656	109,301	169,830	15,999
2015	3,095,373	109,597	170,246	16,230
2016	3,174,408	113,338	174,557	16,350

Data Source: Federal Highway Administration (FHWA), *Highway Statistics 2016*, Table VM-1.

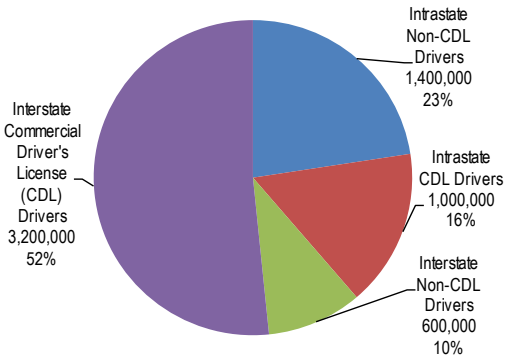
1-3 Motorcoach Passenger Trips in the United States and Canada by Fleet Size, 2015

Motorcoach Fleet Size	Passenger Trips:		Average Passenger Trips per:	
	Total	Percent	Motorcoach	Carrier
100 or more	356,862,700	59.8%	25,101	16,027,941
50 to 99	81,572,700	13.7%	16,839	1,181,802
25 to 49	52,126,100	8.7%	12,830	461,146
10 to 24	62,421,900	10.5%	10,221	158,078
1 to 9	43,460,900	7.3%	4,580	16,307
Industry Total	596,444,300	100.0%	15,404	182,711

Note: Percentages may not sum to 100 percent because of rounding.

Data Source: *Motorcoach Census: A Study of the Size and Activity of the Motorcoach Industry in the United States and Canada in 2015*. Prepared for the American Bus Association Foundation by John Dunham & Associates. Available at www.buses.org/aba-foundation/research-summary/size-and-scope, October 9, 2017.

1-4 Commercial Motor Vehicle (CMV) Drivers Operating in the United States, 2017



Notes: The number of carriers and/or drivers in operation at any given time is subject to change, due to enforcement actions, business turnovers, licensing issues, and other factors. Interstate and some intrastate driver counts are based on motor carrier registration data contained in the Motor Carrier Management Information System (MCMIS); intrastate driver counts for States that do not require intrastate carriers to register with FMCSA are estimated via extrapolation of State data.

Data Source: FMCSA, MCMIS, data snapshot as of December 29, 2017.

1-5 Active Motor Carriers by Type, 2013-2017

Type	2013	2014	2015	2016	2017
Interstate Freight	511,211	503,417	521,248	493,730	511,746
Interstate Passenger	12,384	12,487	13,274	12,603	12,699
Intrastate Hazardous Materials	15,719	16,120	16,628	17,725	18,616
Total	539,314	532,024	551,150	524,058	543,061

Notes: The count of intrastate Hazardous Materials (HM) carriers includes a few active intrastate non-HM carriers with HM activity that meets the Safety Measurement System (SMS) HM threshold definition. Company counts are estimates based on motor carriers in the Motor Carrier Management Information System (MCMIS) with recent activity, defined as those carriers that have had an inspection, a crash, an investigation, a safety audit, an FMCSA Motor Carrier Identification Report (Form MCS-150) update, a vehicle registration activity, or a Unified Carrier Registration (UCR) system payment activity in the past 3 years, or have current operating authority indicated in the FMCSA Licensing and Insurance (L&I) database. Beginning on November 1, 2013, FMCSA's Unified Registration System (URS) rule requires all regulated entities to update their registration information every 24 months. The Agency deactivates the U.S. Department of Transportation (USDOT) number of any carrier that fails to comply with the biennial update requirement.

Data Source: FMCSA, MCMIS, data snapshots as of December 27, 2013, December 19, 2014, December 28, 2015, December 30, 2016, and December 29, 2017.

1-6 Active Hazardous Materials (HM) Carriers, 2013-2017

Active HM Carriers	2013	2014	2015	2016	2017
Interstate	59,778	63,043	68,113	70,681	75,398
Interstate HM Carriers with a Safety Permit (HMSP)*	1,190	1,200	1,182	1,144	1,128
Intrastate	15,719	16,120	16,628	17,725	18,616
Intrastate HMSP*	235	229	212	179	174
Total Active HMSP Carriers*	1,425	1,429	1,394	1,323	1,302
Total HM Carriers	75,497	79,163	84,741	88,406	94,014

*HMSP carriers are a subset of the total HM carrier population.

Note: The count of intrastate HM carriers includes a few active intrastate non-HM carriers with HM activity that meets the Safety Measurement System (SMS) threshold definition.

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshots as of December 27, 2013, December 19, 2014, December 28, 2015, December 30, 2016, and December 29, 2017.

1-7 Household Goods Carriers and Brokers Operating in the United States, 2013-2017

Year	Active Household Goods Carriers	Household Goods Brokers Registered	Property Brokers Registered
2013	3,643	387	13,678
2014	3,784	456	15,272
2015	4,034	507	16,238
2016	4,206	580	17,184
2017	4,396	671	17,966

Note: A broker is an individual, partnership, or corporation that receives payment for arranging the transportation of property or household goods belonging to others by using an authorized motor carrier.

Data Source: FMCSA, Licensing & Insurance (L&I), data snapshots as of December 27, 2013, December 19, 2014, December 28, 2015, December 30, 2016, and December 29, 2017.

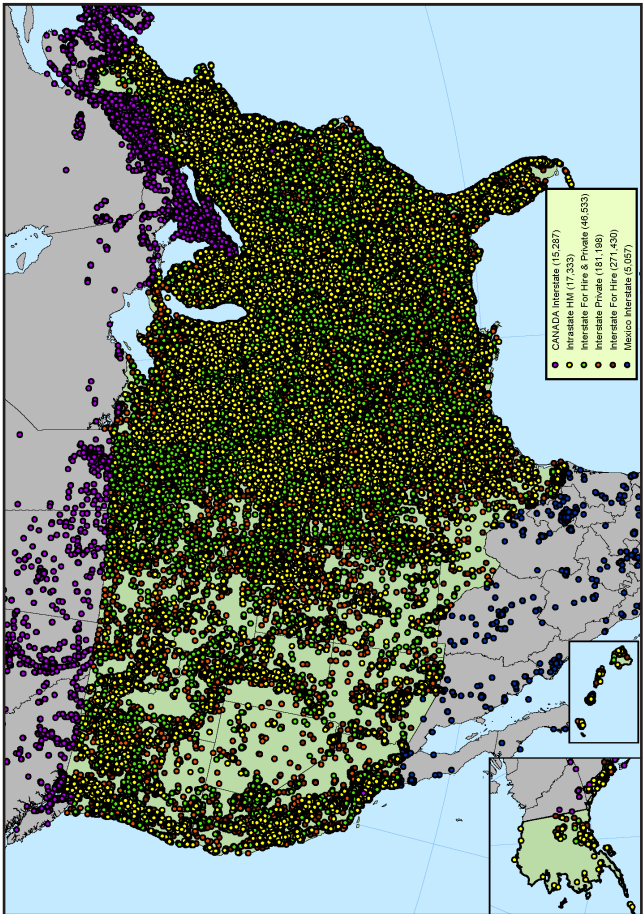
1-8 FMCSA-Regulated Carriers, 2013-2017

Motor Carrier Census Data	2013	2014	2015	2016	2017
Active Carriers with a USDOT Number	539,314	532,024	551,150	524,058	543,061
Power Units	4,111,132	4,248,157	4,412,912	4,339,986	4,470,910
CDL Drivers	3,176,799	3,247,897	3,334,355	3,930,943	3,853,495
Total Drivers	4,412,448	4,605,984	5,335,663	6,393,430	5,739,712

Notes: Only interstate carriers and intrastate hazardous materials (HM) carriers with recent activity are included in this table. Beginning on November 1, 2013, FMCSA's Unified Registration System (URS) rule requires all regulated entities to update their registration information every 24 months. The Agency deactivates the USDOT number of any carrier that fails to comply with the biennial update requirement.

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshots as of December 27, 2013, December 19, 2014, December 28, 2015, December 27, 2016, and December 29, 2017.

1-9 Carriers by Headquarters (Domicile) Location, 2018



Notes: Domicile refers to the headquarters location for a carrier. This map displays only interstate carriers and intrastate hazardous materials (HM) carriers. Intrastate non-HM carriers are not displayed. The number of carriers depicted in this map may not be the same as reported elsewhere by FMCSA. Due to potential differences in reporting dates and quality issues with carrier addresses, this map may not include all current carriers. Additionally, the number of carriers that operate at any given time is subject to change due to enforcement actions, business turnover, and other factors.

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 26, 2018.

1-10 FMCSA-Regulated Carriers by Domicile, 2017

Country	Active Carriers with a USDOT Number	Power Units	CDL Drivers	Total Drivers
United States	525,366	4,338,306	3,727,365	5,599,456
Canada	12,416	103,971	103,391	113,603
Mexico	5,057	27,827	22,603	26,130
Certificate Carriers	191	661	567	642
Commercial Zone Carriers	4,823	26,650	21,471	24,909
Enterprise Carriers	991	5,461	4,967	5,372
Long-Haul Carriers	38	394	445	458
Other Countries	222	806	136	523
All Domiciles	543,061	4,470,910	3,853,495	5,739,712

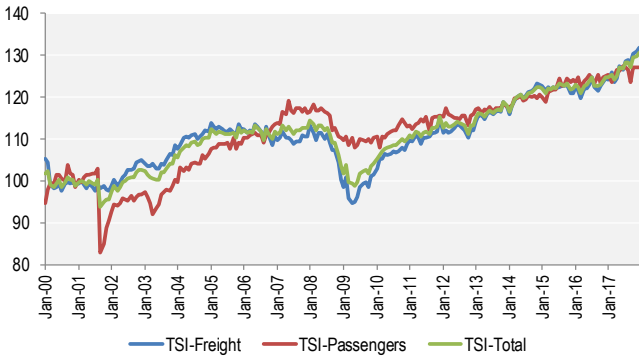
Notes: U.S. domiciled carriers include carriers domiciled in the 50 U.S. States, the District of Columbia, and the U.S. territories. The sum of the Mexican carrier types may not sum to the total as some of the Mexican-owned carriers are domiciled in the United States. Only interstate carriers and intrastate hazardous materials (HM) carriers with recent activity are included in this table. Beginning on November 1, 2013, FMCSA's Unified Registration System (URS) rule requires all regulated entities to update their registration information every 24 months. The Agency deactivates the USDOT number of any carrier that fails to comply with the biennial update requirement. A Mexican certificate carrier is a Mexico-domiciled motor carrier that transports exempt commodities or operates as a private motor carrier. These motor carriers were issued authority to operate trucks throughout the United States prior to 2002. A Mexican commercial zone carrier is a Mexico-domiciled carrier that has authority to operate its trucks only within the U.S.-Mexico border commercial zones in the United States. A Mexican enterprise carrier is a Mexican-owned carrier that is domiciled in the United States; operates in the United States, conducting cross-border transportation of international cargo that originates in or is destined for a foreign country; and is subject to all U.S., State, and local laws pertaining to motor carrier operations and their vehicles. A Mexican long-haul carrier is a Mexico-domiciled carrier that has authority to engage in long-haul transportation as a common carrier of property (except household goods and HM) by motor vehicle in interstate or foreign commerce in or beyond the commercial zones of the United States. The authority does not allow point-to-point transportation services within the United States for goods other than international cargo. Reports include activity for all U.S. operations from the date the carrier was first allowed to operate up through the date of the current data snapshot. Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of December 29, 2017.

1-11 FMCSA-Regulated Carriers by Number of Power Units, 2013-2017

Power Units	2013	2014	2015	2016	2017
1 Power Unit	254,781	248,088	257,695	242,832	253,035
2 Power Units	93,533	92,665	96,034	90,910	92,937
3–10 Power Units	137,465	137,817	142,080	136,322	139,569
11–100 Power Units	44,780	45,600	47,193	46,636	47,989
>100 Power Units	3,870	4,012	4,192	4,171	4,273
No Power Units/Unreported	4,885	3,842	3,956	3,187	5,258
Total	539,314	532,024	551,150	524,058	543,061

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshots as of December 27, 2013, December 19, 2014, December 28, 2015, December 27, 2016, and December 29, 2017.

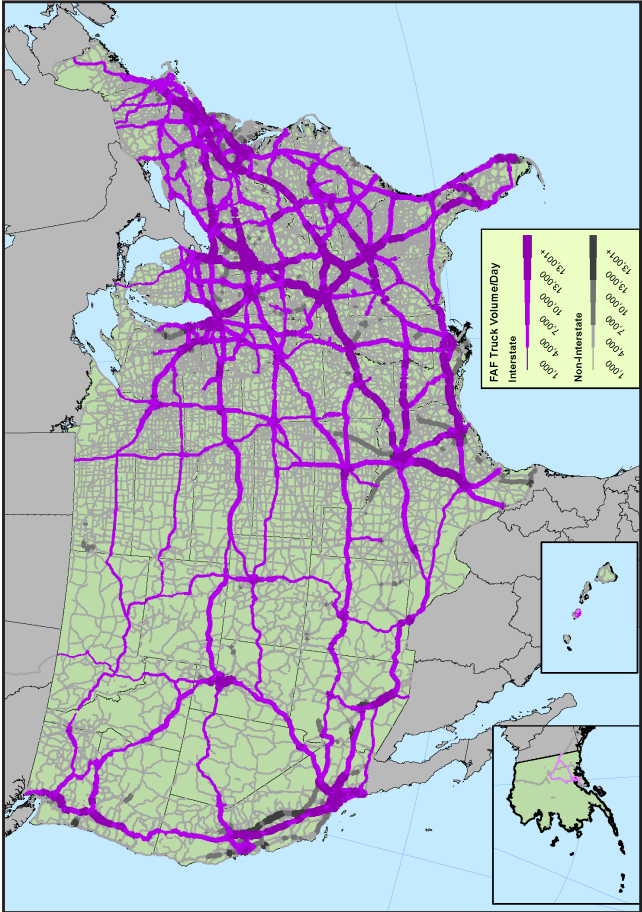
1-12 Transportation Services Index (TSI) Freight and Passenger Movement Estimates, 2000-2017



Notes: The Transportation Services Index (TSI), created by the U.S. Department of Transportation (USDOT), Bureau of Transportation Statistics (BTS), measures the movement of freight and passengers. The index, which is seasonally adjusted and updated monthly, combines available data on freight traffic, as well as passenger travel, that have been weighted to yield a monthly measure of transportation services output. TSI numbers are BTS estimates. The index numbers for the latest 3 months are considered to be preliminary. BTS releases the preliminary number for the latest month and replaces the number for the oldest preliminary month with a revised number. Seasonal adjustment models for the modal data have been updated for the data from January 2000 to the present.

Data Source: USDOT, BTS, TSI, available at <https://www.transtats.bts.gov/OSEA/TSI/> as of March 1, 2018.

1-13 Average Daily Truck Traffic on the National Highway System, 2012



Notes: In this map, both private and for-hire trucks are included. Trucks that are used in movements for multiple modes and mail, or that move in conjunction with domestic air cargo, are excluded. For more information on Freight Analysis Framework (FAF) mode classes, refer to: https://www.bts.gov/archive/subject_areas/freight_transportation/faf/users_guide/.

Data Source: Federal Highway Administration (FHWA), Office of Freight Management and Operations, FAF, Version 4.3 available at <http://faf.ornl.gov> as of March 2017.

1-14 Weight of Freight Shipped within the United States by Mode (in Millions of Tons), 2012-2016

Mode	2012	2013	2014	2015	2016
Truck	10,676	10,915	11,286	11,396	11,641
Rail	1,809	1,795	1,837	1,773	1,835
Water	649	675	707	714	740
Air*	5	5	5	6	5
Pipeline	2,807	2,965	3,069	3,176	2,904
Multiple Modes	418	421	438	438	486
Other**	376	349	313	292	97
Total	16,740	17,126	17,655	17,796	17,709

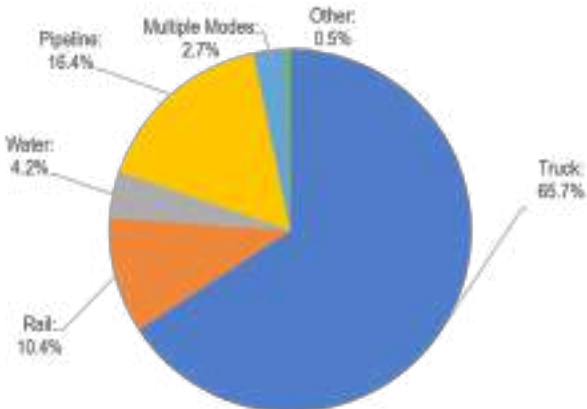
*Includes air and truck-air.

**Includes other, unknown, and no domestic mode.

Note: Includes domestic trade and the domestic portion of imports and exports.

Data Sources: 2012-2015—Bureau of Transportation Statistics (BTS) and Federal Highway Administration (FHWA), Freight Analysis Framework (FAF), Version 4.3 as of March 2017. 2016—BTS and FHWA, FAF, Version 4.4.1 as of May 2018, available at <http://faf.ornl.gov>.

1-15 Percent of Total Weight of Freight Moved by Mode, 2016



Notes: Includes domestic trade and the domestic portion of imports and exports.

Air accounts for 0.03 percent of total domestic freight and is excluded from this chart. Percentages may not sum to 100 percent due to rounding.

Data Sources: Bureau of Transportation Statistics (BTS) and Federal Highway Administration (FHWA), Freight Analysis Framework (FAF), Version 4.4.1 available at <http://faf.ornl.gov> as of May 2018.

1-16 Driver and Passenger Safety Belt Usage by Commercial Motor Vehicle (CMV) Body Type, 2010, 2013, and 2016

Driver and Other Occupant Group	2010	2013	2016
Buses			
Commercial Bus	47.0%	74.4%	65.4%
School Bus	81.7%	85.9%	91.9%
15-Passenger Van	-	-	96.2%
Mini Bus	87.9%	86.3%	88.8%
Transit Bus	-	-	53.4%
Large Trucks			
Bobtail	70.9%	86.2%	84.8%
Intermodal Container	75.3%	81.5%	92.6%
Dump	64.5%	69.3%	77.7%
Flatbed	74.0%	81.9%	82.2%
Van (Enclosed Box Truck)	80.2%	85.7%	87.4%
Tanker	82.5%	85.3%	87.9%
Other	73.3%	80.9%	84.7%

Notes: Prior to 2016, the body type "15-Passenger Van" was captured in the "Mini Bus" category. "Transit Bus" was included as a category for the first time in 2016. The Seat Belt Use by Commercial Motor Vehicle Drivers (SBUCMVD) Survey is conducted every 3 years. In 2016, a total of 39,319 commercial motor vehicles, 39,319 drivers, and 2,451 other occupants were observed at 1,008 sites. Only driver belt use is observed for buses (for the purpose of this study, 15-passenger vans are counted as buses). "Other occupants" are right-front passengers.

Data Source: FMCSA, SBUCMVD 2016 Survey. For more information, refer to: <http://www.fmcsa.dot.gov/safety/safety-belt/safety-belt-studies>.

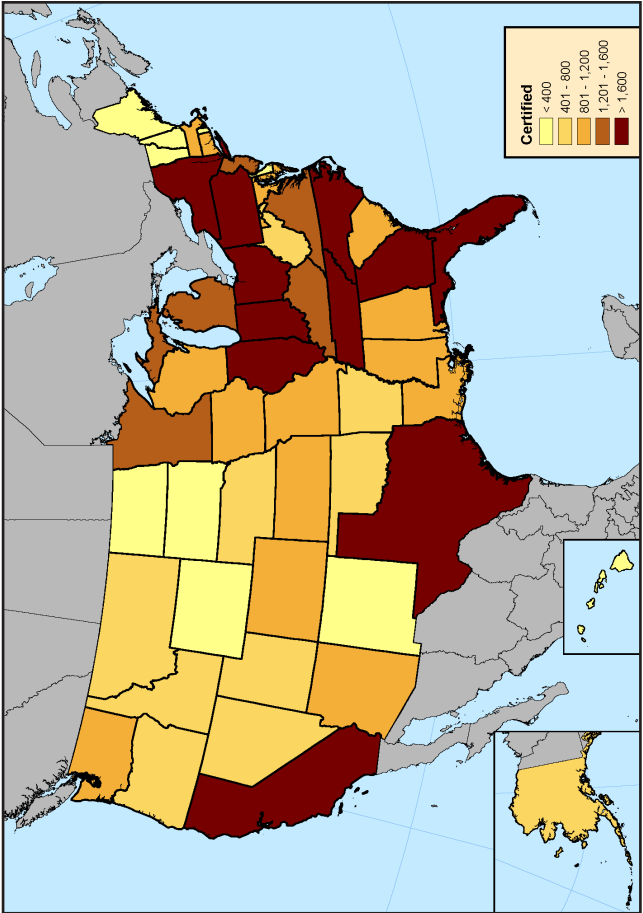
1-17 CMV Driver and Passenger Safety Belt Usage by Occupant Type, 2010, 2013, and 2016

Occupant Type	2010	2013	2016
All Occupants	77.1%	83.0%	84.9%
Drivers	78.1%	83.7%	86.1%
Other Occupants	64.0%	72.9%	69.8%

Notes: The Seat Belt Use by Commercial Motor Vehicle Drivers (SBUCMVD) Survey is conducted every 3 years. In 2016, a total of 39,319 commercial motor vehicles, 39,319 drivers, and 2,451 other occupants were observed at 1,008 sites. Only driver belt use is observed for buses (for the purpose of this study, 15-passenger vans are counted as buses). "Other occupants" are right-front passengers.

Data Source: FMCSA, SBUCMVD 2016 Survey. For more information, refer to: <http://www.fmcsa.dot.gov/safety/safety-belt/safety-belt-studies>.

1-18 Number of Medical Examiners Certified by State, 2018



Note: In February 2018, there were 57,273 medical examiners certified on the National Registry of Certified Medical Examiners (National Registry).

Data Source: FMCSA, National Registry, February 28, 2018. Available at <https://nationalregistry.fmcsa.dot.gov>.

2. INSPECTIONS AND VIOLATIONS

What is an Inspection?

An inspection is an examination of an individual commercial motor vehicle (CMV) and/or driver by an authorized safety inspector. State inspectors conduct approximately 95 percent of inspections, with the remainder conducted by Federal inspectors. The inspection determines whether the driver and/or the CMV is in compliance with the Federal Motor Carrier Safety Regulations (FMCSRs) or the Hazardous Materials Regulations (HMRs), as appropriate. Serious violations result in the issuance of vehicle or driver out-of-service (OOS) orders. These violations must be corrected before the affected driver or vehicle can return to service.

2-1 Inspections Conducted by Federal and State Inspectors, 2013-2017

	2013	2014	2015	2016	2017
Inspections	3,507,831	3,413,399	3,382,980	3,400,959	3,451,332
State	3,373,358	3,282,960	3,252,724	3,280,038	3,329,949
Federal	134,473	130,439	130,256	120,921	121,383

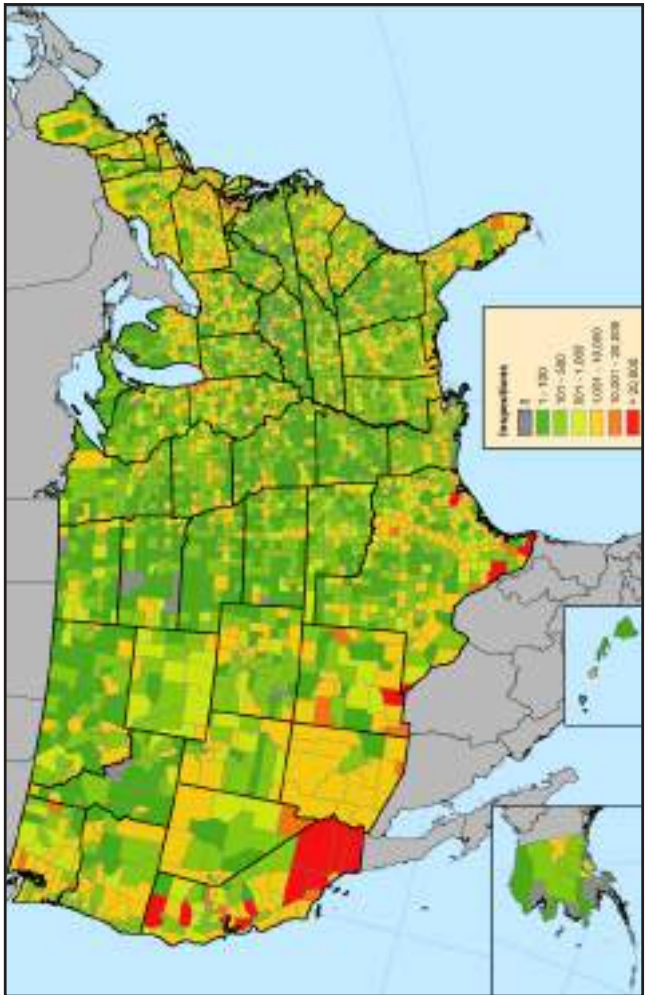
Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 26, 2018.

2-2 Safety Inspectors, Federal and State, 2013-2017

Inspector Type	2013	2014	2015	2016	2017
Safety Inspectors	13,744	14,008	13,719	13,126	12,613
State	13,200	13,462	13,183	12,620	12,098
Federal	544	546	536	506	515

Note: Not all personnel indicated are assigned full-time to conducting inspections. Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 26, 2018.

2-3 Inspections by County, 2017



Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 26, 2018.

2-4 Inspection Out-of-Service (OOS) Rates, 2013-2017

Type of Inspection	2013	2014	2015	2016	2017
Driver Inspections*	3,395,311	3,293,826	3,264,016	3,283,393	3,339,974
With OOS Violation	165,072	166,179	158,814	161,143	171,052
Driver OOS Rate	4.86%	5.05%	4.87%	4.91%	5.12%
Vehicle Inspections**	2,402,122	2,341,484	2,321,376	2,337,063	2,378,400
With OOS Violation	478,030	476,886	471,393	466,837	493,198
Vehicle OOS Rate	19.90%	20.37%	20.31%	19.98%	20.74%
Hazmat Inspections***	203,309	196,158	191,730	201,302	199,742
With OOS Violation	7,914	7,794	7,373	7,930	7,930
Hazmat OOS Rate	3.89%	3.97%	3.85%	3.94%	3.97%

*Driver Inspections were computed based on inspection levels I, II, III, and VI.

**Vehicle Inspections were computed based on inspection levels I, II, V, and VI.

***Hazmat Inspections were computed based on inspection levels I, II, III, IV, V, and VI when hazardous materials were present.

Notes: Inspection OOS rates depicted in this table include both large trucks and buses. Counts in this table include Federal and State inspections. For more information on inspections and inspection levels, please refer to <http://cvsa.org/inspections/inspections/all-inspection-levels/>.

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 26, 2018.

2-5 Inspections by Level, 2013-2017

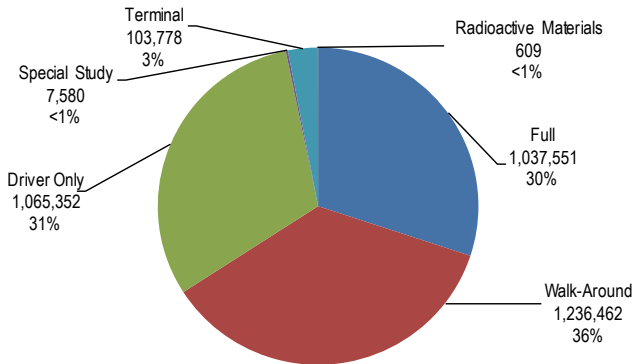
Inspection Level	2013	2014	2015	2016	2017
I. Full	1,093,326	1,063,322	1,060,023	1,013,155	1,037,551
With OOS Violation(s)*	274,122	271,459	267,193	252,214	266,256
II. Walk-Around	1,204,566	1,168,952	1,154,438	1,217,325	1,236,462
With OOS Violation(s)*	260,457	261,961	258,829	269,575	285,154
III. Driver Only	1,095,733	1,061,074	1,049,329	1,052,669	1,065,352
With OOS Violation(s)*	69,109	67,795	62,539	64,128	65,418
IV. Special Study	9,976	10,841	12,275	11,227	7,580
With OOS Violation(s)*	1,575	1,989	2,198	2,077	1,594
V. Terminal	102,544	108,732	106,689	106,339	103,778
With OOS Violation(s)*	6,184	6,908	6,318	6,184	5,808
VI. Radioactive Materials	1,686	478	226	244	609
With OOS Violation(s)*	11	5	2	11	13
Total	3,507,831	3,413,399	3,382,980	3,400,959	3,451,332

*Out-of-service (OOS) violation numbers are based on inspections. For example, in 2017, there were 1,037,551 Level I inspections. Out of all the Level I inspections completed, 266,256 resulted in *at least one* OOS violation.

Note: For more information on inspections and inspection levels, please refer to <http://cvsa.org/inspections/inspections/all-inspection-levels/>.

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 26, 2018.

2-6 Inspections by Level, 2017



Note: For more information on inspections and inspection levels, please refer to <http://cvsa.org/inspections/inspections/all-inspection-levels/>.

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 26, 2018.

2-7 Inspections by Carrier Fleet Size, 2013-2017

Carrier Fleet Size	2013	2014	2015	2016	2017
Very Small (1-6 Power Units)	1,023,977	986,587	1,003,154	1,066,024	1,095,406
Small (7-20 Power Units)	591,010	583,247	588,991	605,020	616,456
Medium (21-100 Power Units)	721,794	707,782	706,199	728,099	740,219
Large (>100 Power Units)	869,686	836,521	828,887	844,355	850,114
Unknown	301,364	299,262	255,749	157,461	149,137
Total	3,507,831	3,413,399	3,382,980	3,400,959	3,451,332

Note: Carriers listed as having zero power units are included in the "Unknown" category.
Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 26, 2018.

2-8 Inspections by Carrier Operation, 2013-2017

Carrier Operation	2013	2014	2015	2016	2017
Interstate	2,908,941	2,809,555	2,784,667	2,776,266	2,806,081
Intrastate	598,890	603,844	598,313	624,693	645,251
Total	3,507,831	3,413,399	3,382,980	3,400,959	3,451,332

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 26, 2018.

2-9 Inspections by Gross Combination Weight Rating (GCWR), 2013-2017

GCWR	2013	2014	2015	2016	2017
<10,000 pounds	17,172	17,344	17,654	16,742	16,550
10,000 - 26,000 pounds	424,771	430,477	452,307	470,602	493,677
>26,000 pounds	2,527,537	2,505,250	2,617,938	2,735,138	2,812,170
Unknown	538,351	460,328	295,081	178,477	128,935
Total	3,507,831	3,413,399	3,382,980	3,400,959	3,451,332

Note: GCWRs are based on Inspection Reports as reported in MCMIS.
Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 26, 2018.

2-10 Most Frequent Driver Violations in Inspections, 2017

Violation Code	Category	Violation Description	Number of Violations
395.8	No Log/Log Not Current	Log Violation (General/Form and Manner)	170,721
395.8F1	No Log/Log Not Current	Driver's Record of Duty Status Not Current	71,004
392.2SLLS2	Traffic Enforcement	State/Local Laws - Speeding 6-10 Miles Per Hour Over the Speed Limit	66,930
392.16	Seat Belt	Failing to Use Seat Belt While Operating Commercial Motor Vehicle (CMV)	62,324
395.3A3II	Hours of Service	Driving Beyond 8-hour Limit Since the End of the Last Off-duty or Sleeper Period of At Least 30 Minutes	51,149
392.2C	Traffic Enforcement	Failure to Obey Traffic Control Device	49,032
391.41AF	Medical Certificate	Operating a Property-Carrying Vehicle without Possessing a Valid Medical Certificate	45,749
395.8E	No Log/Log Not Current	False Report Of Driver's Record Of Duty Status	42,856
383.23A2	All Other Driver Violations	Operating a CMV Without a Commercial Drivers' License (CDL)	35,890
395.3A2PROP	Hours of Service	Driving Beyond 14-hour Duty Period (Property-carrying Vehicle)	32,949
395.8A	No Log/Log Not Current	No Driver's Record of Duty Status	32,604
392.2SLLS3	Traffic Enforcement	State/Local Laws - Speeding 11-14 Miles Per Hour Over the Speed Limit	30,743
392.2LV	Traffic Enforcement	Lane Restriction Violation	28,770
391.41A	Medical Certificate	Driver Not in Possession of Medical Certificate	27,340
395.8K2	No Log/Log Not Current	Driver Failing to Retain Previous 7 Days' Logs	25,554
392.82A1	All Other Driver Violations	Using a Handheld Mobile Telephone While Operating a CMV	21,742
395.3A3PROP	Hours of Service	Driving Beyond 11-hour Driving Limit in a 14-hour Period (Property-carrying Vehicle)	19,190
392.2SLLS4	Traffic Enforcement	State/Local Laws - Speeding 15 or More Miles Per Hour Over the Speed Limit	16,299
391.11B2	All Other Driver Violations	Non-English Speaking Driver	11,348
392.2FC	Traffic Enforcement	Following Too Close	9,741

Notes: Total number of driver inspections in 2017: 3,339,974. Total number of driver violations in 2017: 992,642. Total number of driver out-of-service (OOS) violations in 2017: 200,341. Only the top 20 driver violations (based on frequency of occurrence) are listed in this table.

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 26, 2018.

2-11 Most Frequent Vehicle Violations in Inspections, 2017

Violation Code	Category	Violation Description	Number of Violations
393.9	Lighting	Operating Vehicle Not Having the Required Operable Lamps	488,895
393.47E	Brakes, All Others	Clamp/Roto-Chamber Type Brake(s) Out of Adjustment	181,145
396.17C	Periodic Inspection	Operating a CMV Without Periodic Inspection	166,847
396.3A1	All Other Vehicle Defects	Inspection/Repair and Maintenance Parts and Accessories	148,816
396.5B	All Other Vehicle Defects	Oil and/or Grease Leak	138,399
393.95A	Emergency Equipment	No/Discharged/Unsecured Fire Extinguisher	137,495
393.75C	Tires	Tire—Other: Tread Depth Less Than 2/32 of Inch	134,324
393.9TS	Lighting	Inoperative Turn Signal	115,273
393.11	Lighting	No/Defective Lighting Devices/Reflective Devices/Projected	113,379
393.78	Windshield	Windshield Wipers Inoperative/Defective	88,687
393.53B	Brakes, All Others	Automatic Brake Adjuster CMV Manufactured on or After 10/20/1994—Air Brake	88,118
393.45B2	Lighting	Brake Hose/Tubing Chaffing and/or Kinking	84,216
393.55E	Brakes, All Others	Antilock Braking System (ABS)—Malfunctioning Lamps Towed CMV Manufactured on or After 3/1/1998, Manufactured before 3/1/2009	76,897
393.95F	Emergency Equipment	No/Insufficient Warning Devices	66,251
393.75A3	Tires	Tire—Flat and/or Audible Air Leak	63,241
393.9H	Lighting	Inoperative Head Lamps	62,027
393.48A	Brakes, All Others	Inoperative/Defective Brakes	59,261
396.3A1B	Brakes, All Others	Brakes (General)	57,889
393.60C	Windshield	Damaged or Discolored Windshield	52,441
393.25F	Lighting	Stop Lamp Violations	48,364

Notes: Total number of vehicle inspections in 2017: 2,378,400. Total number of vehicle violations in 2017: 3,789,484. Total number of vehicle OOS violations in 2017: 678,148. Only the top 20 vehicle violations (based on frequency of occurrence) are listed in this table.

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 26, 2018.

2-12 Traffic Enforcement Inspections, 2013-2017

Activity Summary	2013	2014	2015	2016	2017
Traffic Enforcement Inspections	395,387	386,216	374,880	369,125	376,875
With Moving Violations	216,361	215,247	210,480	220,809	228,563
With Drug & Alcohol Violations	916	850	865	904	839
With Railroad Crossing Violations	279	254	283	219	224
With Non-specified State Law/ Miscellaneous Violations	190,320	181,887	175,008	159,248	159,427

Notes: One inspection may result in more than one violation; therefore, totals may not equal the sum of all components. The traffic enforcement program involves the enforcement of 26 moving and non-moving driver violations, which are included in the driver violation portion of the inspection procedures. As of January 2017, two new traffic enforcement violations were added: "driving a commercial motor vehicle (CMV) while texting" and "using a hand-held mobile telephone while operating a CMV." These violations are included in the moving violations category.

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 26, 2018.

2-13 Traffic Enforcement Violations, 2013-2017

Activity Summary	2013	2014	2015	2016	2017
Traffic Enforcement Violations	446,144	435,971	419,654	409,178	416,190
Moving Violations	224,728	223,739	217,170	226,922	234,854
Drug & Alcohol Violations	1,128	999	1,020	1,017	958
Railroad Crossing Violations	281	254	284	220	225
Non-specified State Law/ Miscellaneous Violations	220,007	210,979	201,180	181,019	180,153

Notes: The traffic enforcement program involves the enforcement of 26 moving and non-moving driver violations, which are included in the driver violation portion of the inspection procedures. Inspections that result in drug- or alcohol-related violations are included as traffic enforcement type inspections if another moving violation is present. As of January 2017, two new traffic enforcement violations were added: "driving a commercial motor vehicle (CMV) while texting" and "using a hand-held mobile telephone while operating a CMV." These violations are included in the moving violations category.

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 26, 2018.

3. INVESTIGATIONS

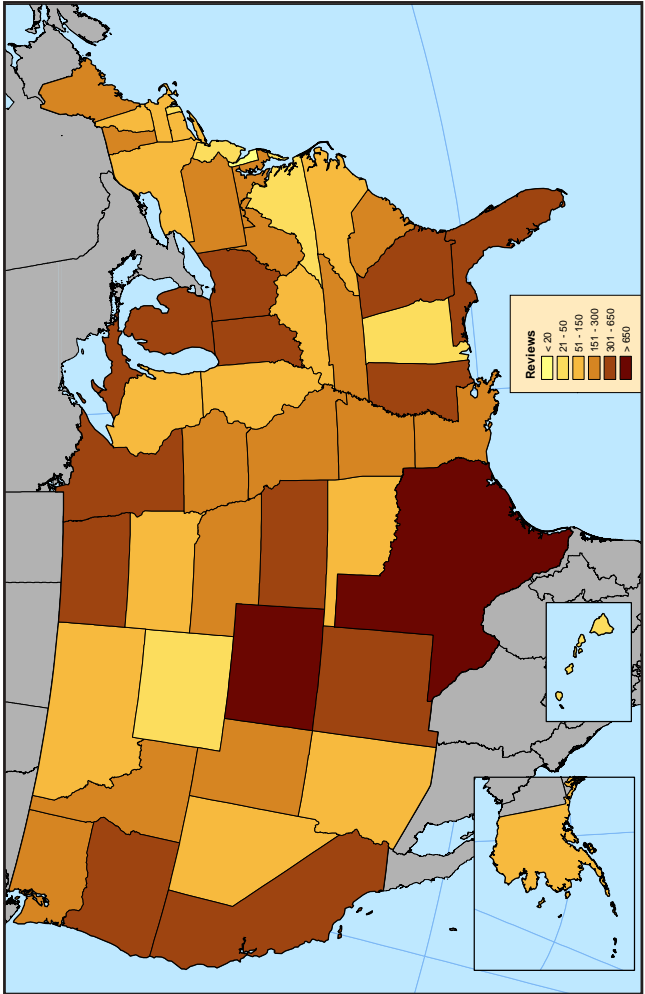
This chapter provides summarized data for the past 5 years on all types of investigations and reviews conducted on motor carriers that transport property or passengers in interstate or intrastate commerce. Investigations are conducted to investigate identified areas of non-compliance and safety concerns, with a focus on carriers identified as high risk; to investigate complaints; or in response to other safety and compliance concerns. It is intended that through education, heightened safety regulation awareness, and the enforcement effects of investigations, motor carriers will improve the safety of their commercial vehicle operations and, ultimately, reduce their involvement in crashes.

The Compliance, Safety, Accountability (CSA) program is FMCSA's enforcement model to focus the Agency's efforts on large truck and bus safety and to prevent crashes, injuries, and fatalities related to commercial motor vehicles (CMVs). This program has introduced an enforcement and compliance model that allows FMCSA and its State partners to contact more carriers earlier in order to address safety deficiencies before crashes occur. The CSA program provides a nationwide system for making the roads safer for motor carriers and the public alike.

Companies investigated by FMCSA include, but are not limited to: trucking companies, household goods moving companies, bus companies, cargo tank facilities, and hazardous materials shippers.

For more statistics on investigations, please refer to: <http://ai.fmcsa.dot.gov/SafetyProgram/Review.aspx>.

3-1 Investigations by State, 2017



Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 26, 2018.

3-2 Investigations Conducted by Federal and State Investigators, 2013-2017

Investigations	2013	2014	2015	2016	2017
State	7,780	7,077	6,254	6,320	6,455
Federal	10,076	7,121	8,353	7,762	8,578
Total	17,856	14,198	14,607	14,082	15,033

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 26, 2018.

3-3 Interventions by Type, 2013-2017

Intervention Type	2013	2014	2015	2016	2017
Investigations	17,856	14,198	14,607	14,082	15,125
Onsite Comprehensive	6,108	5,950	5,645	6,076	6,435
Onsite Focused	9,072	7,206	8,237	6,911	7,670
Offsite	537	316	148	118	76
Cargo Tank Facility Reviews	79	56	86	72	120
Shipper Reviews	282	163	131	163	36
Non-Rated Reviews	1,783	509	360	742	696
Warning Letters	20,478	20,115	20,659	35,756	28,508
Security Contact Reviews	738	597	549	532	426
Terminal Reviews	84	85	87	5,775	15,125

Correction: The values for security contact reviews and terminal reviews were inverted in a previous version of this publication. This was corrected on September 13, 2018.

Notes: Warning letters are based on a Safety Measurement System (SMS) algorithm that was implemented nationally in December of 2010.

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 26, 2018.

3-4 FMCSA-Regulated Carriers by Safety Rating, 2017

Safety Rating	Interstate Freight Carriers	Intrastate HM Carriers	Interstate Passenger Carriers	All Carriers
Conditional	17,893	15	438	18,346
Satisfactory	49,913	82	3,876	53,871
Unsatisfactory	1,508	1	51	1,560
No Rating	442,432	18,518	8,334	469,284
Total	511,746	18,616	12,699	543,061

Note: In order to receive a safety rating, a carrier must have received a compliance review or comprehensive onsite investigation.

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of December 29, 2017.

3-5 Passenger Carrier, Hazardous Materials Carrier, and Household Goods Carrier Investigations, 2013-2017

Carriers by Vehicle Type	2013	2014	2015	2016	2017
Any Passenger Vehicles*	2,493	1,340	1,221	1,324	1,554
Motorcoaches	1,960	980	958	984	1,201
School Buses	284	183	155	168	186
Vans	560	332	276	302	349
Mini Buses	721	447	403	417	541
Limousines	249	133	126	140	115
Hazardous Materials	1,056	770	783	809	644
Household Goods	191	161	184	177	179

*The "Any Passenger Vehicles" row might not equal the sum of subcategories for a given row due to carriers applying for multiple passenger authority at the time of the application.

Notes: Passenger carriers were those carriers that registered to transport passengers and owned or leased at least one passenger vehicle (motorcoach, school bus, van, mini-bus, or limousine). Beginning in 2014, reporting criteria for identifying passenger carrier investigations was updated. As a result, data may differ from previous versions. Passenger carrier investigations now reflect investigations performed by Federal and State personnel on motor carriers that were subject to the Safety Measurement System (SMS) passenger carrier threshold at the time of the investigations.

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 26, 2018.

3-6 Investigations by Carrier Fleet Size, 2013-2017

Carrier Fleet Size	2013	2014	2015	2016	2017
Very Small (1-6 Power Units)	7,966	5,845	6,045	5,692	6,298
Small (7-20 Power Units)	5,037	4,319	4,392	4,387	4,707
Medium (21-100 Power Units)	3,374	2,893	3,037	2,895	2,972
Large (>100 Power Units)	1,115	914	909	873	900
No Power Units/Unreported	364	227	224	235	156
Total	17,856	14,198	14,607	14,082	15,033

Note: Carriers listed as having zero power units are included in the "No Power Units/Unreported" category.

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 26, 2018.

3-7 New Entrant Safety Audits, 2013-2017

Year	Safety Audits	Safety Audit Pass Rate
2013	34,022	81.1%
2014	39,519	83.6%
2015	39,235	84.9%
2016	37,550	88.6%
2017	35,234	89.8%

Notes: A new entrant is a motor carrier that applies for a USDOT number in order to initiate operations in interstate commerce or the intrastate transportation of hazardous materials (HM). Carriers remain in the New Entrant Safety Assurance Program until they pass the safety audit and have been in business for 18 months. For more information on the New Entrant Safety Assurance Program, visit <http://www.fmcsa.dot.gov/safety/new-entrant-safety-assurance-program>.

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of December 29, 2017.

3-8 Summary of Closed Enforcement Cases, 2013-2017

Subject Type	2013	2014	2015	2016	2017
	Cases (Amount Settled)	Cases (Amount Settled)	Cases (Amount Settled)	Cases (Amount Settled)	Cases (Amount Settled)
Broker	1 (\$2,850)	2 (\$6,410)	0 (\$0)	0 (\$0)	0 (\$0)
Cargo Tank Facility	26 (\$186,230)	31 (\$469,950)	29 (\$478,910)	25 (\$732,320)	41 (\$1,231,150)
Carrier	4,784 (\$19,273,050)	3,756 (\$23,573,926)	4,273 (\$29,154,958)	4,504 (\$34,594,165)	5,892 (\$44,524,577)
Freight Forwarder	111 (\$1,300,297)	89 (\$1,224,960)	70 (\$918,450)	92 (\$1,343,350)	85 (\$1,165,652)
HM Carrier	182 (\$1,516,729)	134 (\$1,401,774)	171 (\$2,032,031)	152 (\$2,429,750)	211 (\$3,219,920)
HM Carrier (Not Placarded)	0 (\$0)	1 (\$63,960)	0 (\$0)	0 (\$0)	0 (\$0)
HM Carrier/ Shipper	140 (\$856,647)	114 (\$1,422,376)	130 (\$1,523,392)	132 (\$1,495,555)	145 (\$1,818,354)
Other	4 (\$11,570)	3 (\$35,700)	3 (\$16,060)	2 (\$24,560)	4 (\$19,100)
Passenger Carrier	280 (\$2,004,854)	230 (\$2,174,996)	233 (\$2,085,895)	179 (\$1,851,689)	257 (\$2,271,716)
Shipper	15 (\$143,900)	6 (\$32,740)	4 (\$66,280)	3 (\$30,790)	5 (\$41,650)
Small Passenger Carrier	0 (\$0)	0 (\$0)	0 (\$0)	1 (\$2,400)	0 (\$0)
Total	5,543 (\$25,296,127)	4,366 (\$30,406,792)	4,913 (\$36,275,976)	5,090 (\$42,504,579)	6,640 (\$54,292,119)

Notes: FMCSA is responsible for ensuring full compliance with all Federal Motor Carrier Safety Regulations (FMCSRs) and Hazardous Materials Regulations (HMRs) required of large truck and bus companies regulated by the U.S. Department of Transportation (USDOT). This table provides data for 5 calendar years of enforcement cases considered "closed" for large truck and bus companies regulated by the USDOT. An enforcement case is deemed "closed" once FMCSA issues a carrier a "Notice of Claim" (NOC) and the carrier has (1) paid the penalty in full, (2) signed a settlement agreement, or (3) defaulted on the NOC, upon which a "Final Agency Order" is issued.

Data Sources: FMCSA, Motor Carrier Management Information System (MCMIS), Enforcement Management Information System (EMIS), and Licensing & Insurance (L&I), February 2, 2018.

4. CRASHES

In 2016, of the 34,439 fatal crashes on the Nation's roadways, 4,079 (11.8 percent) involved at least one large truck or bus. In addition, there were an estimated 7,242,000 nonfatal crashes, 537,000 (7.4 percent) of which involved at least one large truck or bus. For more information on large truck and bus crashes, please refer to the annual *Large Truck and Bus Crash Facts* publication available at <http://www.fmcsa.dot.gov/safety/data-and-statistics/large-truck-and-bus-crash-facts>.

Data Sources:

FARS: Maintained by the National Highway Traffic Safety Administration (NHTSA), the Fatality Analysis Reporting System (FARS) is an annual census of fatal crashes involving motor vehicles traveling on public trafficways. For more information on FARS, refer to <http://www.nhtsa.gov/FARS>.

GES: Also maintained by NHTSA, the General Estimates System (GES) is a probability-based nationally representative sample of police-reported fatal, injury, and property-damage-only crashes. The data from GES yield national estimates, calculated using a weighting procedure, but cannot give State-level estimates. Because GES is a sample of motor vehicle crashes, the results generated are estimates rounded to the nearest one thousand; however, associated percentages and rates are based on the unrounded data. NHTSA retired GES in 2017 and replaced it with the Crash Report Sampling System. For more information on GES, go to <https://www.nhtsa.gov/national-automotive-sampling-system-nass/nass-general-estimates-system>.

CRSS: NHTSA's newly established CRSS builds on GES, beginning with data for 2016. Although the two systems are both samples of police-reported crashes involving all types of motor vehicles, CRSS includes a more efficient and flexible sample using updated traffic and demographic information. As a result, comparisons of 2016 CRSS estimates with older GES estimates should be performed with caution. To learn more about CRSS, visit <https://www.nhtsa.gov/national-center-statistics-and-analysis-ncsa/crash-report-sampling-system-crss#crash-report-sampling-system-crss-data-files>.

MCMIS: Maintained by FMCSA, the Motor Carrier Management Information System (MCMIS) Crash File contains data on commercial trucks and buses in fatal, injury, and towaway crashes (crashes in which at least one vehicle is disabled as a result of the crash and transported

away from the crash scene). Crash severity thresholds and vehicle type definitions in MCMIS differ slightly from those in FARS and GES/CRSS, and all tables are noted accordingly. All MCMIS crash data presented are considered preliminary for 22 months. For more information on MCMIS, refer to <https://ask.fmcsa.dot.gov/app/mcmiscatalog/mcmishome>.

NHTSA Crash Severity Levels:

This Pocket Guide includes data on police-reported crashes collected by NHTSA, which include fatal, injury, and property-damage-only (PDO) crashes.

1. **Fatal crashes** include police-reported crashes involving a motor vehicle in transport on a trafficway in which at least one person dies within 30 days of the crash. The fatality does not have to occur at the scene of the crash and includes any person involved, including non-motorists.
2. **Injury crashes** include police-reported crashes involving a motor vehicle in transport on a trafficway in which no one died but at least one person was reported to have: (1) an incapacitating injury; (2) a visible but not incapacitating injury; (3) a possible, not visible injury; or (4) an injury of unknown severity.
3. **PDO crashes** include police-reported crashes involving a motor vehicle in transport on a trafficway in which no one involved in the crash suffered any injuries.

For more information on crash severity levels, refer to NHTSA's National Center for Statistics and Analysis (NCSA) Data Resource Web site at: <https://crashstats.nhtsa.dot.gov/#/>.

Vehicles in Crashes:

Large Trucks: FARS and GES/CRSS define a large truck as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds. The Motor Carrier Management Information System (MCMIS) defines a large truck as a vehicle designed, used, or maintained primarily for carrying property, with a GVWR or gross combination weight rating (GCWR) of more than 10,000 pounds, or any vehicle carrying hazardous materials that requires placarding, regardless of weight.

Buses: A bus is defined as a vehicle with seats for at least nine people, including the driver.

4-1 Total Crashes by Vehicle Type, 2013-2016

Year	Number of Crashes Involving:			
	Large Trucks	Buses	Large Trucks and Buses	All Vehicle Types
2013	327,000	66,000	389,000	5,687,000
2014	411,000	68,000	476,000	6,065,000
2015	415,000	67,000	480,000	6,295,000
2016*	475,000	69,000	541,000	7,276,000

*Beginning with data for 2016, the National Highway Traffic Safety Administration (NHTSA) replaced the General Estimates System (GES) with the Crash Report Sampling System (CRSS). Comparisons of 2016 CRSS estimates with older GES estimates should be performed with caution.

Notes: Individual subtotals may not add to the totals due to the potential for double counting (e.g., crashes involving both a truck and a bus). A large truck is defined here as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds. A bus is defined as a vehicle with seats for at least nine people, including the driver. The "All Vehicle Types" category includes crashes involving passenger cars, light trucks, large trucks, buses, motorcycles, or any other type of motorized vehicle. These numbers include fatal crash data from the Fatality Analysis Reporting System (FARS) and injury crash and property-damage-only (PDO) crash data from GES and CRSS. GES and CRSS are samples of motor vehicle crashes—the results generated are estimates rounded to the nearest one thousand; however, associated percentages and rates are based on the unrounded data.

Data Sources: NHTSA, FARS, GES, and CRSS.

4-2 Fatal Crashes by Vehicle Type, 2013-2016

Year	Number of Crashes Involving:			
	Large Trucks	Buses	Large Trucks and Buses	All Vehicle Types
2013	3,554	282	3,821	30,203
2014	3,429	235	3,656	30,056
2015	3,622	259	3,864	32,539
2016	3,864	225	4,079	34,439

Notes: Individual subtotals may not add to the totals due to the potential for double counting (e.g., crashes involving both a truck and a bus). A large truck is defined here as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds. A bus is defined as a vehicle with seats for at least nine people, including the driver. The "All Vehicle Types" category includes crashes involving passenger cars, light trucks, large trucks, buses, motorcycles, or any other type of motorized vehicle.

Data Source: National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

4-3 Injury Crashes by Vehicle Type, 2013-2016

Year	Number of Crashes Involving:			
	Large Trucks	Buses	Large Trucks and Buses	All Vehicle Types
2013	69,000	18,000	86,000	1,591,000
2014	82,000	11,000	93,000	1,648,000
2015	83,000	14,000	97,000	1,715,000
2016*	104,000	15,000	119,000	2,177,000

*Beginning with data for 2016, the National Highway Traffic Safety Administration (NHTSA) replaced the General Estimates System (GES) with the Crash Report Sampling System (CRSS). Comparisons of 2016 CRSS estimates with older GES estimates should be performed with caution.

Notes: Individual subtotals may not add to the totals due to the potential for double counting (e.g., crashes involving both a truck and a bus). A large truck is defined here as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds. A bus is defined as a vehicle with seats for at least nine people, including the driver. The "All Vehicle Types" category includes crashes involving passenger cars, light trucks, large trucks, buses, motorcycles, or any other type of motorized vehicle. These numbers include injury crash data from GES and CRSS. GES and CRSS are samples of motor vehicle crashes—the results generated are estimates rounded to the nearest one thousand; however, associated percentages and rates are based on the unrounded data.

Data Sources: NHTSA, GES and CRSS.

4-4 Property-Damage-Only (PDO) Crashes by Vehicle Type, 2013-2016

Year	Number of Crashes Involving:			
	Large Trucks	Buses	Large Trucks and Buses	All Vehicle Types
2013	254,000	48,000	299,000	4,066,000
2014	326,000	57,000	379,000	4,387,000
2015	328,000	53,000	379,000	4,548,000
2016*	367,000	54,000	418,000	5,065,000

*Beginning with data for 2016, the National Highway Traffic Safety Administration (NHTSA) replaced the General Estimates System (GES) with the Crash Report Sampling System (CRSS). Comparisons of 2016 CRSS estimates with older GES estimates should be performed with caution.

Notes: Individual subtotals may not add to the totals due to the potential for double counting (e.g., crashes involving both a truck and a bus). A large truck is defined here as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds. A bus is defined as a vehicle with seats for at least nine people, including the driver. The "All Vehicle Types" category includes crashes involving passenger cars, light trucks, large trucks, buses, motorcycles, or any other type of motorized vehicle. These numbers include PDO crash data from GES and CRSS. GES and CRSS are samples of motor vehicle crashes—the results generated are estimates rounded to the nearest one thousand; however, associated percentages and rates are based on the unrounded data.

Data Sources: NHTSA, GES and CRSS.

4-5 Large Truck Fatal Crashes, 1975-2016

Year	Fatal Crashes Involving Large Trucks	Large Truck Occupant Fatalities	Total Fatalities in Large Truck Crashes	Million VMT by Large Trucks	Rates per 100 Million VMT		Large Trucks Registered
					Fatal Crashes Involving Large Trucks	Fatalities in Large Truck Crashes	
1975	3,722	961	4,483	81,330	4.58	5.51	5,362,369
1980	5,042	1262	5,971	108,491	4.65	5.50	5,790,653
1985	4,841	977	5,734	123,504	3.92	4.64	5,996,337
1990	4,518	705	5,272	146,242	3.09	3.60	6,195,876
1995	4,194	648	4,918	178,156	2.35	2.76	6,719,421
2000	4,573	754	5,282	205,520	2.23	2.57	8,022,649
2005	4,551	804	5,240	222,523	2.05	2.35	8,481,999
2010	3,271	530	3,686	286,527	1.14	1.29	10,770,054
2012	3,486	697	3,944	269,207	1.29	1.47	10,659,380
2013	3,554	695	3,981	275,017	1.29	1.45	10,597,356
2014	3,429	656	3,908	279,132	1.23	1.40	10,905,956
2015	3,622	665	4,094	279,844	1.29	1.46	11,203,184
2016	3,864	722	4,317	287,895	1.34	1.50	11,498,561

Notes: A large truck is defined here as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds. The Federal Highway Administration (FHWA) implemented an enhanced methodology for estimating registered vehicles and vehicle miles traveled (VMT) by vehicle type beginning with data from 2007. As a result, involvement rates may differ, and in some cases significantly, from earlier years. Data Sources: Vehicle Miles Traveled and Registered Vehicles - FHWA, *Highway Statistics 2016*; Fatal Crashes, Vehicles Involved, and Fatalities - National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

4-6 Large Truck Injury Crashes, 2013-2016

Year	Injury Crashes Involving Large Trucks	Large Trucks Involved in Injury Crashes	Persons Injured in Large Truck Crashes	Million VMT by Large Trucks	Rates per 100 Million VMT		Large Trucks Registered
					Injury Crashes Involving Large Trucks	Persons Injured in Large Truck Crashes	
2013	69,000	73,000	95,000	275,017	25.1	34.6	10,597,356
2014	82,000	88,000	111,000	279,132	29.4	39.8	10,905,956
2015	83,000	87,000	116,000	279,844	29.5	41.5	11,203,184
2016*	104,000	110,000	145,000	287,895	36.2	50.3	11,498,561

*Beginning with data for 2016, the National Highway Traffic Safety Administration (NHTSA) replaced the General Estimates System (GES) with the Crash Report Sampling System (CRSS). Comparisons of 2016 CRSS estimates with older GES estimates should be performed with caution.

Notes: "Persons Injured" includes all nonfatally injured persons in injury and fatal crashes. A large truck is defined here as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds. The rates displayed in this table are based on unrounded GES and CRSS data. GES and CRSS are samples of motor vehicle crashes—the results generated are estimates rounded to the nearest one thousand; however, associated percentages and rates are based on the unrounded data. Data Sources: Vehicle Miles Traveled and Registered Vehicles: FHWA, *Highway Statistics 2016*. Injury Crashes, Vehicles Involved, and Persons Injured: NHTSA, GES and CRSS.

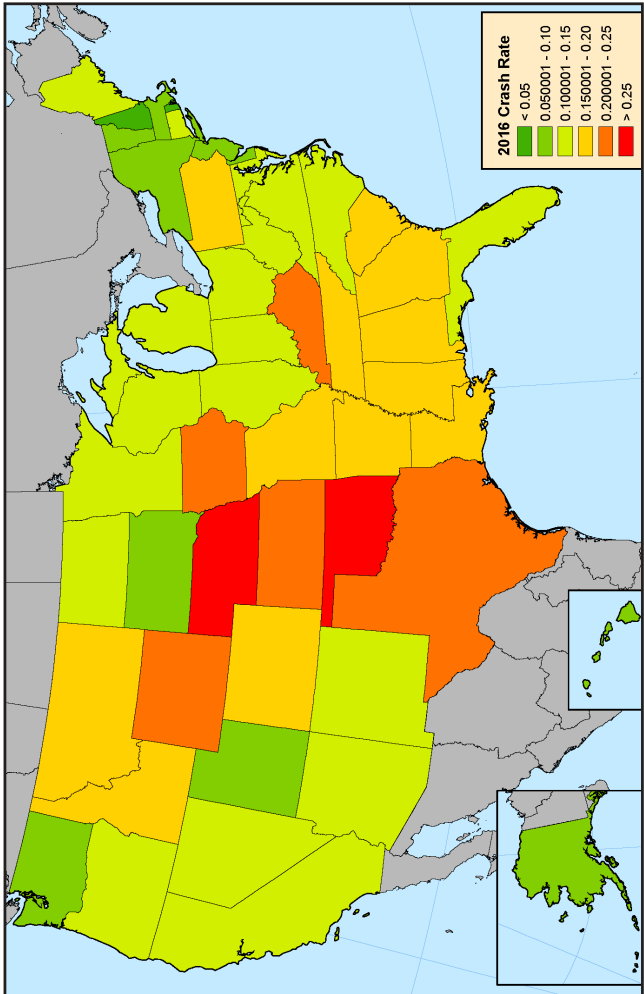
4-7 Large Truck and Bus Fatality Rates Per 100 Million Total Vehicle Miles Traveled (VMT) by State, 2015 and 2016

State	2015			2016		
	Fatalities	Million VMT	Fatality Rate	Fatalities	Million VMT	Fatality Rate
Alabama	104	67,257	0.15	137	69,227	0.20
Alaska	4	5,045	0.08	4	5,259	0.08
Arizona	98	65,045	0.15	88	65,786	0.13
Arkansas	78	34,897	0.22	69	35,755	0.19
California	323	335,539	0.10	341	340,115	0.10
Colorado	71	50,437	0.14	88	52,152	0.17
Connecticut	40	31,592	0.13	33	31,639	0.10
Delaware	15	9,931	0.15	10	10,178	0.10
D.C.	3	3,557	0.08	5	3,622	0.14
Florida	244	206,982	0.12	313	215,551	0.15
Georgia	188	118,107	0.16	199	122,802	0.16
Hawaii	5	10,301	0.05	7	10,635	0.07
Idaho	27	16,662	0.16	34	17,199	0.20
Illinois	116	105,223	0.11	150	107,314	0.14
Indiana	123	78,819	0.16	110	83,183	0.13
Iowa	62	33,161	0.19	71	33,337	0.21
Kansas	65	31,379	0.21	74	32,103	0.23
Kentucky	86	48,675	0.18	104	49,313	0.21
Louisiana	81	48,180	0.17	94	49,156	0.19
Maine	11	14,629	0.08	20	14,838	0.13
Maryland	68	57,516	0.12	67	59,137	0.11
Massachusetts	32	59,257	0.05	32	61,825	0.05
Michigan	80	97,843	0.08	112	99,433	0.11
Minnesota	68	57,395	0.12	64	59,029	0.11
Mississippi	78	39,890	0.20	78	40,755	0.19
Missouri	108	71,918	0.15	117	74,019	0.16
Montana	21	12,345	0.17	23	12,599	0.18
Nebraska	40	20,101	0.20	55	20,700	0.27
Nevada	36	25,925	0.14	32	26,788	0.12
New Hampshire	6	13,094	0.05	5	13,513	0.04
New Jersey	58	75,393	0.08	67	77,093	0.09
New Mexico	46	27,435	0.17	38	27,886	0.14
New York	156	127,230	0.12	117	122,930	0.10
North Carolina	137	111,879	0.12	162	116,749	0.14
North Dakota	49	10,036	0.49	13	9,739	0.13
Ohio	167	113,673	0.15	133	118,608	0.11
Oklahoma	107	47,713	0.22	126	49,013	0.26
Oregon	55	35,999	0.15	55	36,719	0.15
Pennsylvania	176	100,945	0.17	184	101,362	0.18
Rhode Island	2	7,833	0.03	3	7,927	0.04
South Carolina	118	51,726	0.23	109	54,553	0.20
South Dakota	13	9,324	0.14	5	9,507	0.05
Tennessee	123	76,670	0.16	129	76,884	0.17
Texas	599	258,122	0.23	584	271,263	0.22
Utah	41	29,604	0.14	21	31,449	0.07
Vermont	8	7,314	0.11	7	7,382	0.09
Virginia	74	82,625	0.09	96	84,463	0.11
Washington	44	59,653	0.07	59	61,018	0.10
West Virginia	22	19,827	0.11	28	19,539	0.14
Wisconsin	62	62,073	0.10	71	64,046	0.11
Wyoming	28	9,597	0.29	21	9,323	0.23
National Totals	4,366	3,095,373	0.14	4,564	3,174,408	0.14

Notes: D.C. = District of Columbia. Fatality rate is equal to "Fatalities" divided by "Million VMT," multiplied by 100. A large truck is defined here as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds. A bus is defined as a vehicle with seats for at least nine people, including the driver.

Data Sources: VMT - Federal Highway Administration (FHWA), *Highway Statistics 2016*; Fatalities - National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

4-8 Large Truck and Bus Fatality Rates Per 100 Million Total Vehicle Miles Traveled (VMT) by State, 2016



Data Sources: Vehicle Miles Traveled - FHWA, *Highway Statistics 2016* (VM-2); Fatalities - National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

4-9 Vehicle Occupants Killed in Large Truck Crashes by Vehicle Type, 2013-2016

Occupant of:	2013	2014	2015	2016
Passenger Car	1,446	1,443	1,495	1,525
Light Truck	1,163	1,162	1,264	1,288
Large Truck	695	656	665	722
Motorcycle	208	221	226	273
Bus	16	15	18	5
Other/Unknown	12	18	12	36
Total Vehicle Occupants	3,540	3,515	3,657	3,849

Notes: A passenger car is defined as a motor vehicle used primarily for carrying passengers, including convertibles, sedans, and station wagons. A light truck is defined as a truck with a gross vehicle weight rating (GVWR) of 10,000 pounds or less, including pickups, vans, truck-based station wagons, and sport utility vehicles. A large truck is defined as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds. A bus is defined as a vehicle with seats for at least nine people, including the driver.

Data Sources: National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

4-10 Nonmotorists Killed in Large Truck Crashes, 2013-2016

Nonmotorist Type	2013	2014	2015	2016
Total Nonmotorist Fatalities	441	393	414	468
Pedestrian	339	308	337	364
Pedalcyclist	79	61	55	87
Other/Unknown Nonmotorist	23	24	22	17
Total Fatalities	3,964	3,903	4,094	4,317
Percent Nonmotorist Fatalities	11%	10%	10%	11%

Notes: A large truck is defined as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds. A nonmotorist is defined as any person who is not an occupant of a motor vehicle, including, but not limited to, the following: pedestrians, pedalcyclists, or others such as skateboard riders, people riding on animals, and persons riding in other nonmotorized conveyances.

Data Source: National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

4-11 Nonmotorists Killed in Bus Crashes, 2013-2016

Nonmotorist Type	2013	2014	2015	2016
Total Nonmotorist Fatalities	90	92	90	67
Pedestrian	72	78	80	53
Pedalcyclist	13	14	9	12
Other/Unknown Nonmotorist	5	0	1	2
Total Fatalities	320	283	297	264
Percent Nonmotorist Fatalities	28%	33%	30%	25%

Notes: A bus is defined as a vehicle with seats for at least nine people, including the driver. A nonmotorist is defined as any person who is not an occupant of a motor vehicle, including, but not limited to, the following: pedestrians, pedalcyclists, skateboard riders, people riding on animals, and persons riding in other nonmotorized conveyances.

Data Source: National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

4-12 Fatal Crashes by Work Zone, 2013-2016

Crash Type:	2013		2014		2015		2016	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Large Truck Fatal Crashes	3,554	100.0%	3,429	100.0%	3,622	100.0%	3,864	100.0%
Work Zone	151	4.2%	183	5.3%	175	4.8%	184	4.8%
Not a Work Zone	3,403	95.8%	3,246	94.7%	3,447	95.2%	3,680	95.2%
All Fatal Crashes	30,203	100.0%	30,056	100.0%	32,539	100.0%	34,439	100.0%
Work Zone	536	1.8%	607	2.0%	653	2.0%	682	2.0%
Not a Work Zone	29,667	98.2%	29,449	98.0%	31,886	98.0%	33,757	98.0%
Percent of Work-Zone Fatal Crashes that Involved at Least One Large Truck	27.7%		30.1%		26.8%		27.0%	
Percent of All Fatal Crashes that Involved at Least One Large Truck	11.8%		11.4%		11.1%		11.2%	

Notes: "Not a Work Zone" counts include crashes where the location was unknown. A large truck is defined here as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds. A work zone is defined as an area of a trafficway where construction, maintenance, or utility work activities are identified by warning signs/signals/indicators.

Data Source: National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

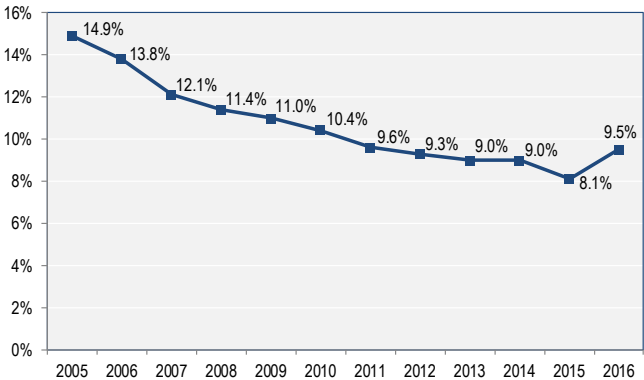
4-13 Truck Weight Rating for Large Trucks in Fatal Crashes, 2013-2016

Truck Weight Rating	2013	2014	2015	2016
Class 3: 10,001 - 14,000 lb	256	155	144	232
Class 4: 14,001 - 16,000 lb	93	70	70	97
Class 5: 16,001 - 19,500 lb	83	79	85	99
Class 6: 19,501 - 26,000 lb	221	221	221	255
Class 7: 26,001 - 33,000 lb	243	235	257	234
Class 8: > 33,000 lb	2,945	2,902	3,191	3,186
Unknown/Other	80	87	106	110
Total	3,921	3,749	4,074	4,213

Notes: A large truck is defined here as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds.

Data Source: National Highway Traffic Safety Administration (NHTSA), FARS.

4-14 Percentage of Large Truck Drivers in Fatal Crashes Not Wearing Any Type of Safety Belt, 2005-2016



Note: A large truck is defined here as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds.

Data Source: National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

4-15 Hazardous Materials (HM) Cargo Release in Crashes Involving Large Trucks with HM Placards, 2013-2017

Cargo Release	Number of Large Trucks				
	2013	2014	2015	2016	2017*
Cargo Release: No	2,420	2,532	2,643	2,475	2,044
Cargo Release: Yes	385	440	483	552	452
Corrosives	44	37	43	41	30
Explosives	7	13	12	18	10
Flammable Liquid	216	254	264	295	203
Flammable Solids	1	2	6	6	6
Gases	47	41	64	65	50
Miscellaneous Dangerous Goods	29	30	27	37	34
Oxidizing Substances	3	6	8	5	1
Poison & Infectious Substances	6	6	4	4	8
Radioactive Material	0	1	1	0	1
Unknown	32	50	54	81	109
Cargo Release: Unknown	439	726	586	534	363
Total	3,244	3,698	3,712	3,561	2,859

*Crash records reported to the Motor Carrier Management Information System (MCMIS) through December 31, 2017, are included in this table. States are expected to report crash data to FMCSA within 90 days of the crash. Data are considered preliminary for 22 months to allow for changes.

Notes: Large trucks are defined here as vehicles designed, used, or maintained primarily for carrying property, with a gross vehicle weight rating (GVWR) or gross combination weight rating (GCWR) of more than 10,000 pounds or any vehicle carrying HM that requires placarding, regardless of weight.

Data Source: FMCSA, MCMIS, data snapshot as of January 26, 2018.

4-16 Large Truck and Bus Drivers in Crashes, by Driver's License Class, 2013-2017

License Class	Number of Vehicles Involved				
	2013	2014	2015	2016	2017*
Class A	97,689	108,699	111,586	114,861	85,582
Class B	20,796	21,618	22,286	22,616	15,373
Class C	10,008	10,885	11,350	11,234	9,025
Class D	13,722	15,685	18,695	20,947	14,521
Class M	1,187	1,345	160	186	132
Unknown	6,961	7,630	7,700	7,878	5,861
Total	150,363	165,862	171,777	177,722	130,494

*Crash records reported to the Motor Carrier Management Information System (MCMIS) through December 31, 2017, are included in this table. States are expected to report crash data to FMCSA within 90 days of the crash. Data are considered preliminary for 22 months to allow for changes.

Notes: Large trucks are defined here as vehicles designed, used, or maintained primarily for carrying property, with a gross vehicle weight rating (GVWR) or gross combination weight rating (GCWR) of more than 10,000 pounds, or any vehicle carrying hazardous materials (HM) that requires placarding, regardless of weight. A bus is defined as a vehicle with seats for at least nine people, including the driver. Descriptions for driver's license classes are as follows: Class A pertains to any combination of vehicles which has a GCWR or gross combination weight of 26,001 pounds or more, whichever is greater, inclusive of a towed unit(s) with a GVWR or gross vehicle weight of more than 10,000 pounds, whichever is greater. Class B pertains to any single vehicle which has a GVWR or gross vehicle weight of 26,001 pounds or more, or any such vehicle towing a vehicle with a GVWR or gross vehicle weight that does not exceed 10,000 pounds. Class C pertains to any single vehicle, or combination of vehicles, that does not meet the definition of Class A or Class B, but is either designed to transport 16 or more passengers, including the driver, or is transporting material that has been designated as hazardous and is required to be placarded or is transporting any quantity of a material listed as a select agent or toxin. Class D pertains to any vehicle, or any combination of vehicles, with a GVWR of 26,000 pounds or less that is not used 1) for the purpose of transporting HM which are required by law to be placarded, 2) to transport more than 15 passengers including the driver, and 3) is not a school bus used to transport children to and from school for compensation. Class M pertains to motorcycles and motor-driven cycles.

Data Source: FMCSA, MCMIS, data snapshot as of January 26, 2018.

4-17 Large Trucks in Crashes by Operation Classification, 2013-2017

Classification	2013	2014	2015	2016	2017*
For-Hire	69,545	79,342	84,858	88,619	90,418
Private	23,581	25,780	26,388	27,404	26,062
Both For-Hire and Private	11,057	12,456	12,424	13,085	13,507
Neither For-Hire Nor Private	1,849	1,674	1,559	1,693	1,543
No USDOT Number	26,793	28,931	28,654	28,804	24,954
Total	132,825	148,183	153,883	159,605	156,484

*Crash records reported to the Motor Carrier Management Information System (MCMIS) through December 31, 2017, are included in this table. States are expected to report crash data to FMCSA within 90 days of the crash. Data are considered preliminary for 22 months to allow for changes.

Note: Large trucks are defined here as vehicles designed, used, or maintained primarily for carrying property, with a gross vehicle weight rating (GVWR) or gross combination weight rating (GCWR) of more than 10,000 pounds, or any vehicle carrying hazardous materials (HM) that requires placarding, regardless of weight.

Data Sources: Crash data for all years: FMCSA, MCMIS, data snapshot as of January 26, 2018. Operation classification information: FMCSA, MCMIS, data snapshots as of December 27, 2013, December 19, 2014, December 28, 2015, December 30, 2016, and December 29, 2017.

4-18 Large Trucks in Crashes by Carrier Operation, 2013-2017

Carrier Operation	2013	2014	2015	2016	2017*
Interstate	93,082	104,461	107,571	111,340	111,043
Intrastate Hazardous Materials (HM)	1,281	1,399	1,443	1,499	1,637
Intrastate Non-HM**	11,669	13,392	16,215	17,951	18,833
Unknown Carrier Operation**	0	0	0	11	17
No USDOT Number	26,793	28,931	28,654	28,804	24,954
Total	132,825	148,183	153,883	159,605	156,484

*Crash records reported to the Motor Carrier Management Information System (MCMIS) through December 31, 2017, are included in this table. States are expected to report crash data to FMCSA within 90 days of the crash. Data are considered preliminary for 22 months to allow for changes.

**Some States do not require intrastate non-HM carriers to obtain USDOT numbers.

Note: Large trucks are defined here as vehicles designed, used, or maintained primarily for carrying property, with a gross vehicle weight rating (GVWR) or gross combination weight rating (GCWR) of more than 10,000 pounds, or any vehicle carrying HM that requires placarding, regardless of weight.

Data Sources: Crash data for all years: FMCSA, MCMIS, data snapshot as of January 26, 2018. Carrier operation information: FMCSA, MCMIS, data snapshots as of December 27, 2013, December 19, 2014, December 28, 2015, December 30, 2016, and December 29, 2017.

4-19 Bus Fatal Crashes, 1975-2016

Year	Fatal Crashes Involving Buses	Bus Occupant Fatalities	Total Fatalities in Bus Crashes	Million VMT by Buses	Rates per 100 Million VMT		Buses Registered
					Fatal Crashes Involving Buses	Fatalities in Bus Crashes	
1975	323	53	348	6,055	5.33	5.75	462,156
1980	329	46	390	6,059	5.43	6.44	528,789
1985	337	57	398	4,478	7.53	8.89	593,485
1990	286	32	340	5,726	4.99	5.94	626,987
1995	271	33	311	6,420	4.22	4.84	685,503
2000	323	22	357	7,590	4.26	4.7	746,125
2005	278	58	340	6,980	3.98	4.87	807,053
2010	247	44	278	13,770	1.79	2.02	846,051
2012	252	39	282	14,781	1.70	1.91	764,509
2013	282	54	320	15,167	1.86	2.11	864,549
2014	235	44	283	15,999	1.47	1.77	872,027
2015	259	49	297	16,230	1.60	1.83	888,907
2016	225	40	264	16,350	1.38	1.61	976,161

Note: A bus is defined as a vehicle with seats for at least nine people, including the driver.
 Data Sources: Vehicle Miles Traveled and Registered Vehicles - FHWA, *Highway Statistics 2016*; Fatal Crashes, Vehicles Involved, and Fatalities - National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

4-20 Bus Injury Crashes, 2013-2016

Year	Injury Crashes Involving Buses	Buses Involved in Injury Crashes	Persons Injured in Bus Crashes	Million VMT by Buses	Rates per 100 Million VMT		Buses Registered
					Injury Crashes Involving Buses	Persons Injured in Bus Crashes	
2013	18,000	18,000	38,000	15,167	117.0	250.6	864,549
2014	11,000	11,000	22,000	15,999	68.7	139.0	872,027
2015	14,000	15,000	24,000	16,230	89.2	146.8	888,907
2016*	15,000	16,000	35,000	16,350	92.7	216.4	976,161

*Beginning with data for 2016, the National Highway Traffic Safety Administration (NHTSA) replaced the General Estimates System (GES) with the Crash Report Sampling System (CRSS). Comparisons of 2016 CRSS estimates with older GES estimates should be performed with caution.

Notes: "Persons Injured" includes all nonfatally injured persons in injury and fatal crashes. A bus is defined as a vehicle with seats for at least nine people, including the driver. The rates displayed in this table are based on unrounded GES and CRSS data. GES and CRSS are samples of motor vehicle crashes—the results generated are estimates rounded to the nearest one thousand; however, associated percentages and rates are based on the unrounded data.
 Data Sources: Vehicle Miles Traveled and Registered Vehicles: FHWA, *Highway Statistics 2016*. Injury Crashes, Vehicles Involved, and Persons Injured: NHTSA, GES and CRSS.

4-21 Fatal Crashes Involving Buses, by Type of Bus, 1975-2016

Year	School Bus	Cross-Country Intercity Bus (Motorcoach)	Transit Bus	Van-Based Bus*	Other Bus Type	Bus Type Unknown	Total
1975	129	29	128	—	18	19	323
1980	117	38	149	—	14	11	329
1985	126	29	116	—	33	33	337
1990	111	26	113	—	19	17	286
1995	109	23	101	—	23	15	271
2000	119	40	127	—	20	17	323
2005	110	37	83	—	34	14	278
2010	113	35	84	—	11	4	247
2012	101	34	78	30	7	2	252
2013	114	44	82	28	10	4	282
2014	90	32	79	9	21	4	235
2015	98	33	92	13	18	5	259
2016	86	16	93	6	18	6	225

* "Van-based bus" was listed as a bus type for the first time in 2011.

Note: A bus is defined as a vehicle with seats for at least nine people, including the driver. Data Source: National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

4-22 Estimated Costs of Large Truck and Bus Crashes, 2013-2016

Year	Fatal Crashes	Injury Crashes	Property-Damage-Only (PDO) Crashes	All Large Truck and Bus Crashes
2013	\$44 Billion	\$41 Billion	\$22 Billion	\$107 Billion
2014	\$42 Billion	\$44 Billion	\$28 Billion	\$114 Billion
2015	\$44 Billion	\$46 Billion	\$28 Billion	\$118 Billion
2016*	\$47 Billion	\$56 Billion	\$31 Billion	\$134 Billion

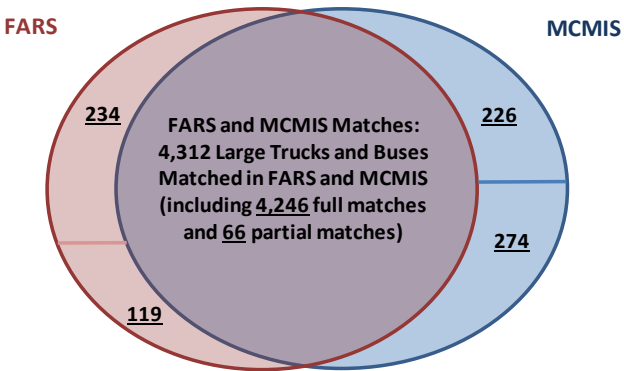
*Beginning with data for 2016, the National Highway Traffic Safety Administration (NHTSA) replaced the General Estimates System (GES) with the Crash Report Sampling System (CRSS). Since the 2016 estimates of injury and PDO crash costs are based on CRSS data and pre-2016 estimates are based on GES data, comparisons of 2016 crash cost estimates with earlier estimates should be performed with caution.

Notes: A large truck is defined here as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds. A bus is defined as a vehicle with seats for at least nine people, including the driver. The total costs may not add up exactly due to rounding. Changes to past years are the result of updating for inflation and changes in guidance from the Office of the Secretary of Transportation on how to value fatalities and injuries. Estimates are based on fatal crash data from the Fatality Analysis Reporting System (FARS) and injury crash and PDO crash data from GES and CRSS.

Data Sources: T. Miller, E. Zaloshnja, and R. Spicer, Revised Cost of Large Truck and Bus Involved Crashes (2002), adjusted to 2015 dollars, and a year 2015 value of a statistical life (VSL) (as published on August 8, 2016, by the Office of the Secretary of Transportation); NHTSA, FARS, GES, and CRSS.

4-23 Fatality Analysis Reporting System (FARS) and Motor Carrier Management Information System (MCMIS) Matching for Large Trucks and Buses in Fatal Crashes, 2016

Number	Category	Percentage
4,246	Large trucks and buses matched in FARS and MCMIS	82.2%
66	Large trucks and buses that were partially matched in FARS and MCMIS	1.3%
234	Large trucks and buses in FARS and not in MCMIS	4.5%
119	Large trucks and buses in FARS matched to large trucks and buses in non-fatal crashes in MCMIS	2.3%
226	Large trucks and buses in MCMIS and not in FARS	4.4%
274	Large trucks and buses in MCMIS matched to vehicles in FARS that were not large trucks or buses	5.3%
5,165	Total large trucks and buses in fatal crashes in FARS, MCMIS, or both	100.0%



Notes: A large truck is defined in FARS as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds. A large truck is defined in MCMIS as a vehicle designed, used, or maintained primarily for carrying property, with a GVWR or gross combination weight rating (GCWR) of more than 10,000 pounds, or any vehicle carrying hazardous materials that requires placarding, regardless of weight. A bus is defined as a vehicle with seats for at least nine people, including the driver.

Data Sources: National Highway Traffic Safety Administration (NHTSA), FARS; FMCSA, MCMIS, data snapshot as of January 26, 2018.

5. DATA QUALITY

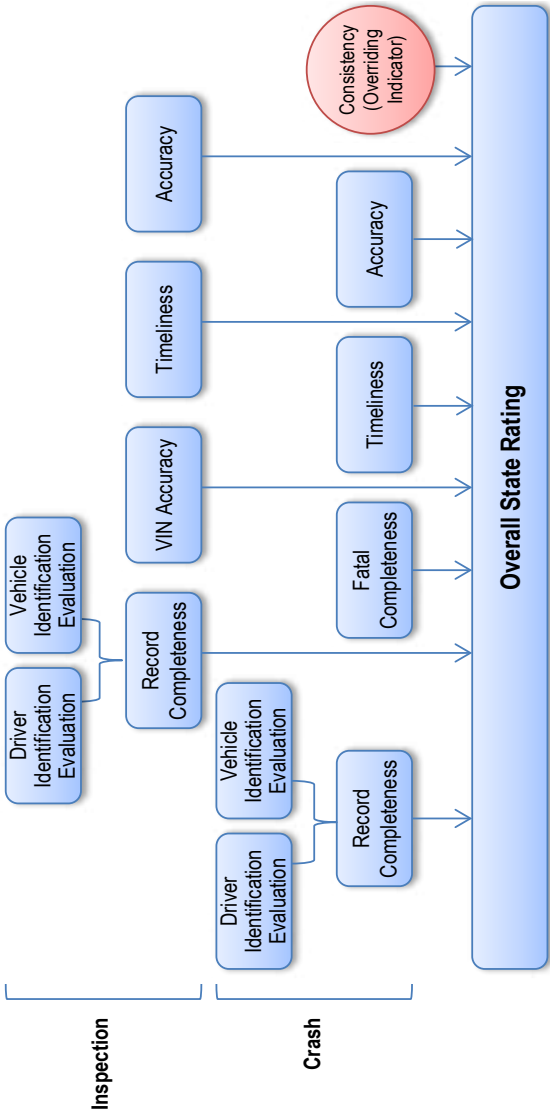
State Safety Data Quality (SSDQ) Methodology

FMCSA implemented the State Safety Data Quality (SSDQ) Methodology to evaluate the completeness, timeliness, accuracy, and consistency of State-reported data. The SSDQ evaluation uses a 12-month timeframe that ends 3 months prior to the Motor Carrier Management Information System (MCMIS) snapshot for each measure, unless otherwise stated in the rating description. The methodology consists of eight performance measures (four crash and four inspection measures) and one overriding performance indicator (see 5-1). The SSDQ methodology has changed over the years to represent higher thresholds of data quality. Since 2004, additional performance measures have been added related to the completeness of driver and vehicle information contained in crash and inspection reports.

The SSDQ evaluation is updated monthly to reflect improvements in crash and inspection reporting. States receive an overall rating of “Good,” “Fair,” or “Poor” for each SSDQ measure and rating. FMCSA developed the color-coded SSDQ map (see 5-2) as a visual tool for States to use in improving crash and inspection data reported to FMCSA. The overall data quality rating for each State is based on the following criteria:

- Good (green) for States with at least one good crash measure, one good inspection measure, and no poor measures.
- Fair (yellow) for States with no more than one poor measure.
- Poor (red) for States with two or more poor measures. States flagged red in Consistency (the overriding performance indicator shown in 5-1) are rated poor overall.

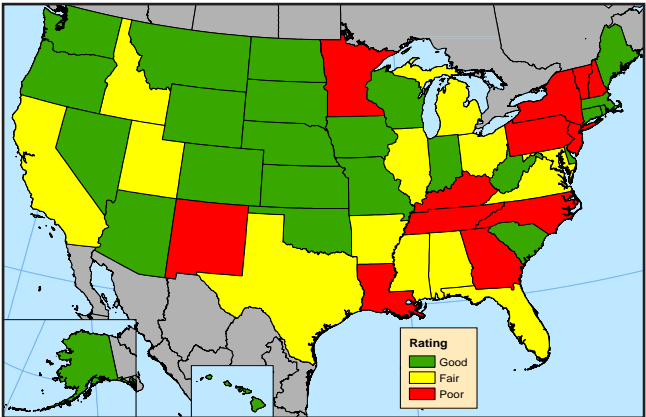
5-1 State Safety Data Quality (SSDQ) Performance Measures



Data Source: FMCSA, Analysis & Information (A&I) Online, <http://ai.fmcsa.dot.gov/DataQuality>.

5-2 Overall State Safety Data Quality (SSDQ) Ratings, June 2004 and December 2017

Overall SSDQ Ratings, June 2004



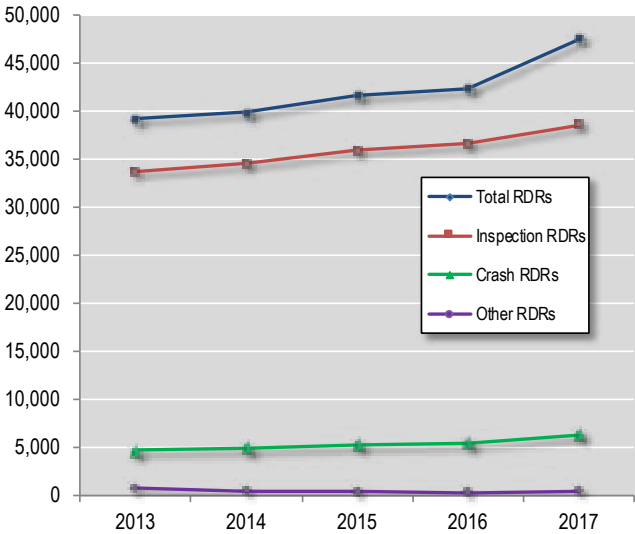
Overall SSDQ Ratings, December 2017



Note: Ratings depicted on this map are overall State ratings. Washington, D.C. is rated poor (red) in June, 2004 and good (green) in December, 2017.

Data Sources: June 2004 Ratings: FMCSA, Analysis & Information (A&I) Online, State Safety Data Quality (SSDQ) as of June, 2004; December 2017 Ratings: FMCSA, A&I Online, SSDQ as of December, 2017. For most recent State ratings, refer to: <https://ai.fmcsa.dot.gov/DataQuality/National.aspx>.

5-3 Annual Requests for Data Review (RDRs) in DataQs, 2013-2017



Data Source: FMCSA, DataQs, March 7, 2018 (based on submissions received in 2017).

DataQs is an online system that provides affected commercial motor carriers, commercial drivers, and others an opportunity to seek and obtain correction of information maintained and disseminated by FMCSA. Through the system, users can request and track a review of data issued by FMCSA; the system automatically forwards a Request for Data Review (RDR) to the appropriate office for resolution and collects updates and responses for current RDRs.

For more information on DataQs, please refer to:
<https://dataqs.fmcsa.dot.gov>.

6. GRANT PROGRAMS

FMCSA achieves its goal of preventing commercial motor vehicle (CMV)-related fatalities and injuries by working closely with a host of important safety partners through its grant programs. Safety partners include State and local government agencies, non-profit organizations, universities and other organizations who support FMCSA's national safety priorities. Activities conducted through FMCSA's grant programs include conducting high-visibility traffic enforcement in CMV crash corridors, targeting high-risk motor carriers and CMV drivers for compliance investigations, implementing innovative safety information systems and CMV technologies at the roadside, strengthening CMV equipment and operating standards, implementing and updating CMV safety training, and increasing public awareness of CMV safety challenges.

In December 2015, the Fixing America's Surface Transportation Act, or FAST Act, Public Law 114-94, directed the consolidation of multiple FMCSA grant programs into the Motor Carrier Safety Assistance Program (MCSAP) and High Priority (HP) grant programs. Beginning October 1, 2016 (or with Fiscal Year 2017), MCSAP and HP now include components of the previously separate New Entrant, Border Enforcement, State Safety Data Quality (SSDQ) (formerly known as the Safety Data Improvement Program, or SaDIP), Performance and Registration Information Systems Management (PRISM), and the Innovative Technology Deployment (ITD) (formerly known as Commercial Vehicle Information Systems and Networks, or CVISN) grant programs. The FAST Act also increased focus on accountability, performance standards, efficiency, and effectiveness while reducing administrative burdens on FMCSA grantees. More information on FMCSA's grant programs can be found at <http://www.fmcsa.dot.gov/mission/grants>.

6-1 FMCSA Grant Awards, Fiscal Year 2017

Grant Program	Total Awards
MCSAP	\$288,211,000
High Priority	\$41,557,857
CDL Program Implementation	\$30,732,000
CMVOST	\$1,000,000
Total Grant Awards	\$361,500,857

Motor Carrier Safety Assistance Program (MCSAP)

Governed by 49 U.S.C. Sections 31102–31104 and by 49 CFR Part 350, the MCSAP grant is a formula grant program that provides financial assistance to the States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, American Samoa, Guam, and the U.S. Virgin Islands to reduce the number and severity of crashes and hazardous material incidents involving CMVs. Specifically, only the State lead agency (as designated by the Governor) is eligible to apply for MCSAP grant funding. There are five national program elements for the MCSAP, outlined in 49 CFR 350.109. These include driver/vehicle inspections, traffic enforcement, compliance reviews (Compliance, Safety, Accountability investigations), public education and awareness, and data collection. FMCSA establishes annual national priorities based on emerging or continuing issues.

Per the FAST Act grant consolidation, MCSAP-eligible program activities now include Border Enforcement, New Entrant Safety Audits, SSDQ, PRISM, and ITD operations and maintenance. The Border Enforcement component provides financial assistance to States and entities that share a land border with another country. Border Enforcement activities focus on the compliance of CMVs entering the United States with the Federal Motor Carrier Safety Regulations and Hazardous Materials Regulations, as well as U.S. financial responsibility and registration requirements. All drivers of those vehicles must be properly licensed and qualified to operate a CMV in the United States.

High Priority (HP) Grant

HP grant funding is available for activities and projects that are national in scope, increase public awareness and education, demonstrate new technologies, and augment efforts to reduce the number and rate of CMV crashes. Eligible recipients are States, local governments, Federally recognized Indian tribes, and other political jurisdictions as necessary. FMCSA may reserve HP funding for innovative traffic enforcement projects, with particular emphasis on work zone enforcement and rural road safety.

The ITD activities included within HP are a key component of FMCSA's drive to improve CMV safety through technology and information connectivity. The program provides discretionary funding to the States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, American Samoa, Guam, and the U.S. Virgin Islands to deploy, operate, and maintain elements of their ITD programs. FMCSA may award ITD funds to agencies of States, the District of Columbia, or U.S. territories that have an approved plan, as outlined in the FAST Act.

The goals of the ITD Program are to:

- Improve the safety and productivity of motor carriers, commercial vehicles, and CMV drivers.
- Simplify enforcement operations.
- Improve the efficiency and effectiveness of commercial vehicle safety programs through targeted enforcement.
- Improve data security and commercial vehicle data sharing within the States and between the States and FMCSA.
- Reduce Federal/State and industry regulatory and administrative costs.
- Achieve nationwide deployment of the program, with all jurisdictions participating.

PRISM activities included within the HP grant program are focused on a cooperative Federal-State safety program developed to reduce commercial vehicle crashes. The performance of unsafe carriers is improved through a comprehensive system of identification, education, data gathering, safety monitoring, and treatment. The PRISM program incorporates registration and enforcement processes to identify motor carriers and hold them responsible for the safety of their operations. To be eligible, State agencies located in one of the 50 States or in one of the U.S. territories must work on highway traffic safety activities and demonstrate a capacity to work with highway traffic safety stakeholders.

SSDQ activities included within the HP grant program focus on providing financial and technical assistance to the States to facilitate the collection of accurate, complete, and timely data on all large commercial truck and bus crashes that involve a fatality, injury, or a vehicle towed from the crash scene. Reports from the Government Accountability Office and the USDOT Inspector General have previously recommended that improvements be made in FMCSA crash and enforcement data. Congress has responded by providing funding annually under HP for States to improve their reporting of large commercial truck and bus crash data.

Commercial Driver's License Program Implementation (CDLPI) Grant

The CDLPI grant provides financial assistance to the States, to help them achieve compliance with the requirements of 49 CFR Parts 383 and 384. The grant also provides funding to other entities capable of executing national projects that aid States in their compliance efforts and that will improve the national Commercial Driver's License (CDL) program. The goal of the program is to reduce the number and severity of CMV crashes in the United States by ensuring that only qualified drivers receive and retain a CDL. This is achieved by focusing on the concept that for every driver, there is only one driving record and only one licensing document, commonly referred to as "One Driver–One License–One Record." States are required to conduct knowledge and skills testing before issuing a CDL, to maintain a complete and accurate driver history record for anyone who obtains a CDL, and to impose appropriate disqualifications against any driver who commits certain offenses. The Federal share of CDLPI grants in FY 2017 was 100 percent of the expenditures approved in the State or entity's application.

Commercial Motor Vehicle Operator Safety Training (CMVOST) Grant

The CMVOST Grant Program is a discretionary program that provides financial assistance to public or private organizations that train operators of CMVs, as defined by 49 U.S.C. 31103 and 31104 (i.e., accredited post-secondary educational institutions such as colleges, universities, vocational-technical schools, associations, and truck driver training schools). The goals of the CMVOST grant program are to expand the number of CDL holders who possess enhanced operator safety training to help reduce the severity and number of crashes involving CMVs on U.S. roads, and to assist current or former members of the U.S. Armed Forces (including National Guard members and Reservists) and their spouses who are transitioning to the CMV operation industry by offering training.

7. AGENCY RESOURCES

FMCSA Web site

<http://www.fmcsa.dot.gov>

Analysis & Information (A&I) Online

<http://ai.fmcsa.dot.gov>

Compliance, Safety, Accountability (CSA)

<https://csa.fmcsa.dot.gov>

DataQs

<http://dataqs.fmcsa.dot.gov>

FMCSA Grants and Financial Assistance

<https://www.fmcsa.dot.gov/mission/grants>

FMCSA New Entrant Safety Assurance Program

<https://www.fmcsa.dot.gov/safety/new-entrant-safety-assurance-program>

FMCSA Portal

<https://portal.fmcsa.dot.gov>

Freight Analysis Framework (FAF)

http://ops.fhwa.dot.gov/FREIGHT/freight_analysis/faf/index.htm

Innovative Technology Deployment (ITD) Program

<https://www.fmcsa.dot.gov/information-systems/itd/innovative-technology-deployment-itd>

Motor Carrier Management Information System (MCMIS)

<https://ask.fmcsa.dot.gov/app/mcmiscatalog/mcmishome>

Fatality Analysis Reporting System (FARS)

<http://www.nhtsa.gov/FARS>

Federal Highway Administration (FHWA) Highway Statistics Series

<https://www.fhwa.dot.gov/policyinformation/statistics.cfm>

General Estimates System (GES)

<https://www.nhtsa.gov/national-automotive-sampling-system-nass/nass-general-estimates-system>

Crash Report Sampling System (CRSS)

<https://www.nhtsa.gov/national-center-statistics-and-analysis-nca/crash-report-sampling-system-crss#crash-report-sampling-system-crss-data-files>

Licensing & Insurance (L&I)

<http://li-public.fmcsa.dot.gov>

GLOSSARY AND LIST OF ACRONYMS

A&I	Analysis & Information
ABS	Antilock Braking System
BTS	Bureau of Transportation Statistics
CDL	Commercial Driver's License
CDLPI	Commercial Driver's License Program Improvement
CMV	Commercial Motor Vehicle (includes both large trucks and buses)
CMVOST	Commercial Motor Vehicle Operator Safety Training
CRSS	Crash Report Sampling System
CSA	Compliance, Safety, Accountability (CSA) is a major FMCSA safety measurement and reporting initiative. Designed to replace the SafeStat program, CSA was previously known as "Comprehensive Safety Analysis," or more commonly "CSA 2010."
CVISN	Commercial Vehicle Information Systems and Networks
DataQs	DataQs is an FMCSA system that allows users to request and track reviews of Federal and State data issued by FMCSA. The system automatically forwards a user's Request for Data Review to the appropriate office for resolution and collects updates and responses for current requests.
Domicile	Refers to the headquarters location of a carrier.
EMIS	Enforcement Management Information System
FAF	Freight Analysis Framework
FARS	Fatality Analysis Reporting System
FAST Act	Fixing America's Surface Transportation Act, 2015
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
FMCSRs	Federal Motor Carrier Safety Regulations
Form MCS-150	Motor Carrier Identification Report (Application for USDOT Number)
GES	General Estimates System
GCWR	Gross Combination Weight Rating
GVWR	Gross Vehicle Weight Rating
HM	Hazardous Materials
HMRs	Hazardous Materials Regulations

HMSP	Hazardous Materials Carrier with a Safety Permit
HOS	Hours of Service
ITD	Innovative Technology Deployment (formerly CVISN)
L&I	Licensing & Insurance
MCMIS	The Motor Carrier Management Information System (MCMIS) is an FMCSA system that contains crash, census, and inspection files created to monitor and develop safety standards for commercial motor vehicles operating in interstate commerce.
MCSAP	Motor Carrier Safety Assistance Program
MMUCC	Model Minimum Uniform Crash Criteria
NHTSA	National Highway Traffic Safety Administration
OOS	Out of Service
PDO	Property Damage Only
PRISM	Performance and Registration Information Systems Management
RDR	Request for Data Review
SaDIP	State Safety Data Improvement Program
SBUCMVD	Seat Belt Usage by Commercial Motor Vehicle Drivers
SMS	Safety Measurement System
SSDQ	State Safety Data Quality
TSI	Transportation Services Index
UCR	Unified Carrier Registration
URS	Unified Registration System
USDOT	U.S. Department of Transportation
VIN	Vehicle Identification Number
VMT	Vehicle Miles Traveled
VSL	Value of a Statistical Life

Visor Cards for Law Enforcement

The FMCSA State Safety Data Quality (SSDQ) Program created five quick-reference visor identification cards for use by law enforcement officers. The cards are laminated and may be placed in the law enforcement vehicle sun visor.

Truck and Bus Crashes Reportable to FMCSA

REPORT A TRAFFIC CRASH IF IT INVOLVES...

Any truck that has a gross vehicle weight rating (GVWR) of more than 10,000 pounds or a gross combination weight rating (GCWR) of more than 10,000 pounds used on public highways

OR

Any motor vehicle with seating to transport nine (9) or more people, including the driver's seat

OR

Any motor vehicle displaying a hazardous materials placard (regardless of weight)

...AND RESULTS IN

A fatality: any person(s) killed in or outside of any vehicle (truck, bus, car, etc.) involved in the crash or who dies within 30 days of the crash as a result of an injury sustained in the crash

OR

An injury: any person(s) injured as a result of the crash who immediately receives medical treatment away from the crash scene

OR

A tow-away: any motor vehicle (truck, bus, car, etc.) disabled as a result of the crash and transported away from the scene by a tow truck or other vehicle

Revised 06/05

Federal Motor Carrier Safety Administration

U.S. Department of Transportation
www.fmcsa.dot.gov

These cards are intended to assist officers in the process of determining FMCSA's selection criteria for completing the commercial motor vehicle (CMV) section of their State's crash report form. The pictured visor card aids officers in identifying USDOT-reportable large truck and bus crashes. All five visor cards are available for download at: <https://www.fmcsa.dot.gov/regulations/enforcement/visor-cards-law-enforcement>.

<p>Crashes involving commercial motor vehicles and some non-commercial motor vehicles must be reported on a State's crash report and to the FMCSA. A commercial motor vehicle is any motor vehicle that is used on a trafficway for the transportation of goods, property, or people in interstate or intrastate commerce.</p>	
<p>INCLUDED:</p> <p>Here are some examples of commercial and non-commercial operations that, when involved in a crash, should be included if they meet the criteria on the front of this card.</p> <p>Examples:</p> <ol style="list-style-type: none"> 1. A trucking company or individual owner/operator hauling the goods of a business for a fee. 2. A manufacturing company hauling its own products to retail stores, or a retail store delivering products to its buyers. 3. A farm hauling its produce to market. 4. A motorcoach, airport shuttle, or hotel-owned shuttle bus or limousine service transporting passengers. 5. A government-owned truck or bus. 6. A school bus transporting students to/from school or school-related activities. 7. A rented or leased truck used to transport either commercial or personal goods. 8. A truck or truck tractor owned and operated for commerce being used for a personal trip or to transport personal goods. 	<p>EXCLUDED:</p> <p>Here are some examples of non-commercial operations that, when involved in a crash, should <u>not</u> be included.</p> <p>Examples:</p> <ol style="list-style-type: none"> 1. A non-commercial horse owner transporting hay bales from his pasture on one side of the road to his stables on the other side of the road in a truck with a GVWR greater than 10,000 pounds. 2. A homeowner carrying recyclables to a drop-off point in a personally owned pickup truck with a GVWR greater than 10,000 pounds. 3. A family of 10 persons taking a trip in the family's 12-person van. 4. A personally owned pickup truck hauling a boat, horse or utility trailer with a GCWR greater than 10,000 pounds not operating in commerce or as part of a business. 5. A family operating a personally owned and registered recreational vehicle or motor home.

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