2017

Pocket Guide to Large Truck and Bus Statistics

U.S. Department of Transportation

Federal Motor Carrier Safety Administration

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June 2017

INTRODUCTION

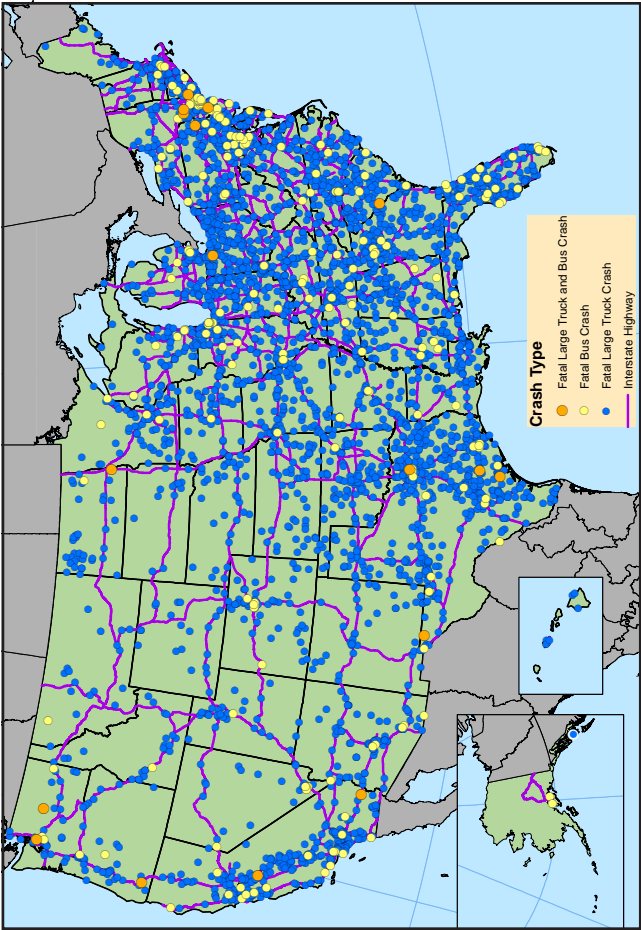The primary mission of the Federal Motor Carrier Safety Administration (FMCSA) is to reduce crashes, injuries, and fatalities involving large trucks and buses. In carrying out its safety mandate, FMCSA develops and enforces data-driven regulations that balance motor carrier safety with efficiency. For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

CONTENTS

Locations of Fatal Large Truck and Bus Crashes, 2015

Note: In 2015, there were 3,838 fatal crashes involving large trucks and buses.
Data Source: National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS), 2015.

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 2015, among the 263,610,219 total registered vehicles in the United States, 8,456,302 were single-unit trucks (straight trucks), 2,746,882 were combination trucks (tractor-trailers), and 888,907 were buses. Also in 2015, there were 3,095.4 **billion vehicle miles traveled (VMT) by all motor vehicles. Large** trucks traveled 279.8 billion of those miles (9.0 percent of the total), and buses traveled 16.2 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 2016, 524,058 interstate motor carriers and intrastate HM motor carriers had recent activity operating in the United States:

- 272,928 were for-hire carriers
- 200,094 were private carriers
- 46,529 were both for-hire and private carriers
- 4,507 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 5.9 million* CMV drivers operate in the United** States:

- 3.7 million operate interstate
  - 3.1 million operate interstate and hold CDLs
- 2.2 million operate intrastate
  - 900,000 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 2015*; Carrier and CMV Driver Counts - FMCSA, MCMIS, data snapshot as of December 30, 2016.

1-1 Registered Vehicles in the United States, 2012-2015

Year	All Vehicles	Large Trucks	Buses
2012	253,639,386	10,659,380	764,509
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

Data Source: Federal Highway Administration (FHWA), *Highway Statistics 2015,* Table VM-1.

1-2 Million Vehicle Miles Traveled (VMT) in the United States, 2012-2015

Year	All Vehicles	Large Trucks		Buses
		Single-Unit	Combination	
2012	2,969,433	105,605	163,602	14,781
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

Data Source: Federal Highway Administration (FHWA), *Highway Statistics 2015,* Table VM-1.

1-3 Motorcoach Passenger Trips in the United States and Canada by Fleet Size, 2014

Motorcoach Fleet Size	Passenger Trips:		Average Passenger Trips per:	
	Total	Percent	Motorcoach	Carrier
100 or more	210,249,600	34.8%	23,900	9,141,300
50 to 99	50,116,300	8.3%	15,300	1,002,300
25 to 49	88,391,200	14.6%	16,400	570,300
10 to 24	95,087,100	15.7%	14,100	216,600
1 to 9	160,073,800	26.5%	13,000	54,100
Industry Total	**603,918,000**	**100.0%**	**16,500**	**166,500**

Note: Percentages may not sum to 100 percent because of rounding.
Data Source: *Motorcoach Census 2015: A Study of the Size and Activity of the Motorcoach Industry in the United States and Canada in 2014.* Prepared for the American Bus Association Foundation by John Dunham & Associates. Available at http://www.buses.org, March 17, 2016.

1-4 Commercial Motor Vehicle (CMV) Drivers Operating in the United States, 2016
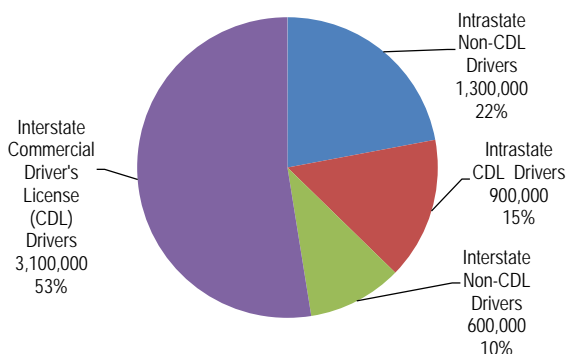
Intrastate Non-CDL Drivers 1,300,000 22%

Intrastate CDL Drivers 900,000 15%

Interstate Non-CDL Drivers 600,000 10%

Interstate Commercial Driver's License (CDL) Drivers 3,100,000 53%

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 30, 2016.

1-5 Active Motor Carriers by Type, 2012-2016

Year	2012	2013	2014	2015	2016
Interstate Freight	507,690	511,211	503,417	521,248	493,730
Interstate Passenger	12,184	12,384	12,487	13,274	12,603
Intrastate Hazardous Materials	15,843	15,719	16,120	16,628	17,725
Total	535,717	539,314	532,024	551,150	524,058

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 14, 2012, December 27, 2013, December 19, 2014, December 28, 2015, and December 30, 2016.

1-6 Active Hazardous Materials (HM) Carriers, 2012-2016

Active HM Carriers	2012	2013	2014	2015	2016
Interstate	55,524	59,778	63,043	68,113	70,681
Interstate HM Carriers with a Safety Permit (HMSP)*	1,206	1,190	1,200	1,182	1,144
Intrastate	15,843	15,719	16,120	16,628	17,725
Intrastate HMSP*	241	235	229	212	179
*Total Active HMSP Carriers**	*1,447*	*1,425*	*1,429*	*1,394*	*1,323*
Total HM Carriers	71,367	75,497	79,163	84,741	88,406

*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 14, 2012, December 27, 2013, December 19, 2014, December 28, 2015, and December 30, 2016.

1-7 Household Goods Carriers and Brokers Operating in the United States, 2012-2016

Year	Active Household Goods Carriers	Household Goods Brokers Registered	Property Brokers Registered
2012	3,464	523	21,354
2013	3,643	387	13,678
2014	3,784	456	15,272
2015	4,034	507	16,238
2016	4,206	580	17,184

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 14, 2012, December 27, 2013, December 19, 2014, December 28, 2015, and December 30, 2016.
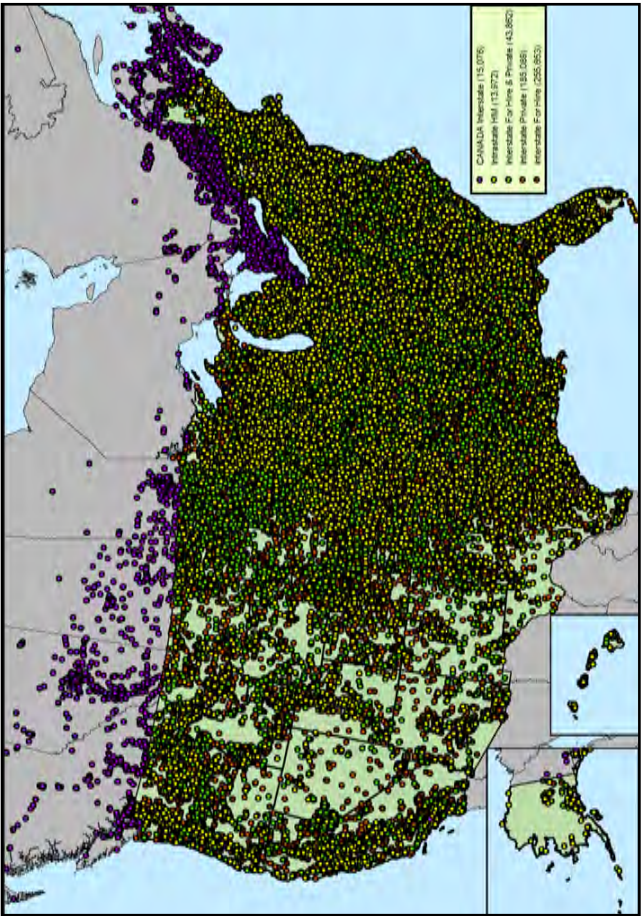
1-8 FMCSA-Regulated Carriers, 2012-2016

Motor Carrier Census Data	2012	2013	2014	2015	2016
Active Carriers with a USDOT Number	535,717	539,314	532,024	551,150	524,058
Power Units	4,036,198	4,111,132	4,248,157	4,412,912	4,339,986
CDL Drivers	3,102,637	3,176,799	3,247,897	3,334,355	3,930,943
Total Drivers	4,360,389	4,412,448	4,605,984	5,335,663	6,393,430

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 14, 2012, December 27, 2013, December 19, 2014, December 28, 2015, and December 27, 2016.

1-9 Carriers by Headquarters (Domicile) Location, 2017

Legend (map inset):
- CANADA Interstate (15,076)
- Intrastate HM (13,672)
- Interstate For-Hire & Private (43,862)
- Interstate Private (195,088)
- Interstate For-Hire (255,853)

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. Mexico-domiciled carriers not depicted.

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2017.

1-10 FMCSA-Regulated Carriers by Domicile, 2016

| Country	Active Carriers with a USDOT Number	Power Units	CDL Drivers	Total Drivers
United States	506,737	4,211,313	3,812,247	6,255,823
Canada	12,263	101,398	96,908	111,868
Mexico	4,831	26,422	21,621	25,198
Certificate Carriers	203	642	519	636
Commercial Zone Carriers	4,603	25,552	20,880	24,330
Enterprise Carriers	936	4,581	4,321	4,656
Long-Haul Carriers	23	116	112	120
Other Countries	227	853	167	541
All Domiciles	524,058	4,339,986	3,930,943	6,393,430

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 27, 2016.

1-11 FMCSA-Regulated Carriers by Number of Power Units, 2012-2016

Power Units	2012	2013	2014	2015	2016
1 Power Unit	253,958	254,781	248,088	257,695	242,832
2 Power Units	92,785	93,533	92,665	96,034	90,910
3–10 Power Units	135,953	137,465	137,817	142,080	136,322
11–100 Power Units	43,606	44,780	45,600	47,193	46,636
>100 Power Units	3,801	3,870	4,012	4,192	4,171
No Power Units/Unreported	5,614	4,885	3,842	3,956	3,187
Total	535,717	539,314	532,024	551,150	524,058

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshots as of December 14, 2012, December 27, 2013, December 19, 2014, December 28, 2015, and December 27, 2016.

1-12 Transportation Services Index (TSI) Freight and Passenger Movement Estimates, 2000-2016
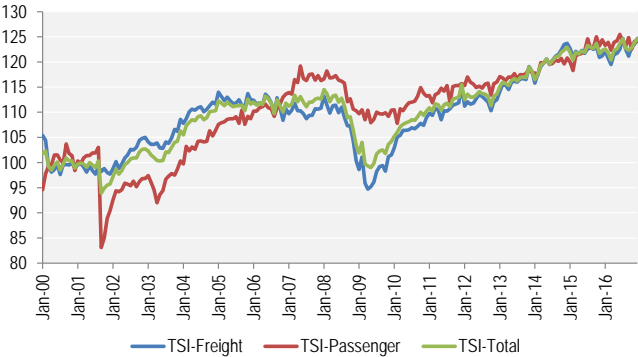
Notes: The Transportation Services Index (TSI), created by the U.S. Department of Transportation (USDOT), Bureau of Transportation Statistics (BTS), measures the movement of freight and passengers. The index, which is seasonally adjusted and updated monthly, combines available data on freight traffic, 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, 2017.

1-13 Average Daily Truck Traffic on the National Highway System, 2012
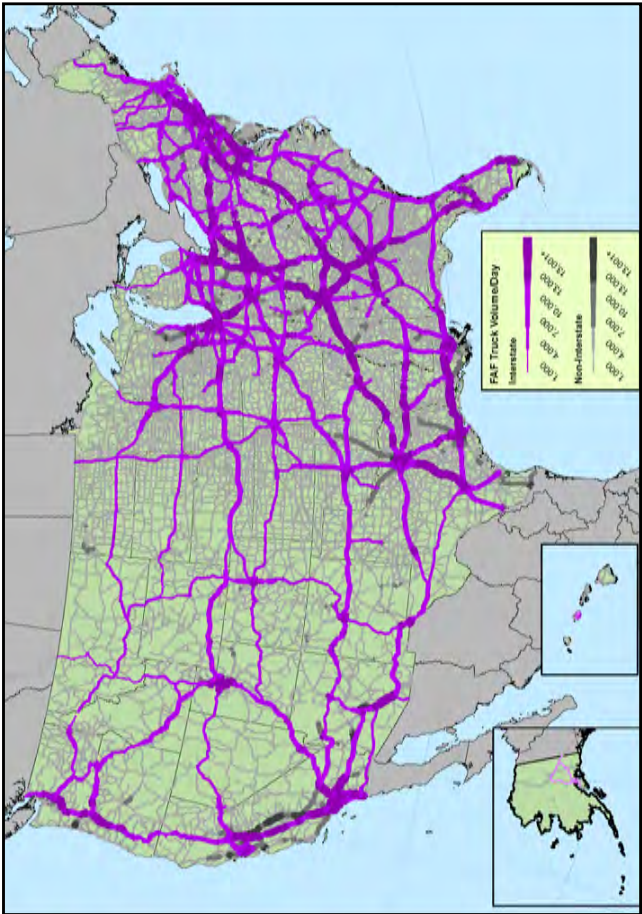
Notes: In this map, both private and for-hire trucks are included. Trucks that are used in movements for multiple modes and mail, or that move in conjunction with domestic air cargo, are excluded. For more information on Freight Analysis Framework (FAF) mode classes, refer to: https://www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/subject_areas/freight_transportation/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)

Mode	2011	2012	2013	2014	2015
Truck	11,924	10,676	10,915	11,286	11,396
Rail	2,053	1,809	1,795	1,837	1,773
Water	645	649	675	707	714
Air*	6	5	5	5	6
Pipeline	1,912	2,807	2,965	3,069	3,176
Multiple Modes	583	418	421	438	438
Other**	499	376	349	313	292
Total	17,622	16,740	17,126	17,655	17,796

*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: 2011–Bureau of Transportation Statistics (BTS) and Federal Highway Administration (FHWA), Freight Analysis Framework (FAF), Version 3.6 as of September 2015. 2012-2015–BTS and FHWA, FAF, Version 4.3 as of March 2017, available at http://faf.ornl.gov.

1-15 Percent of Total Weight of Freight Moved by Mode, 2015

Multiple Modes: 2.5%
Other: 1.6%
Pipeline: 17.8%
Truck: 64.0%
Water: 4.0%
Rail: 10.0%
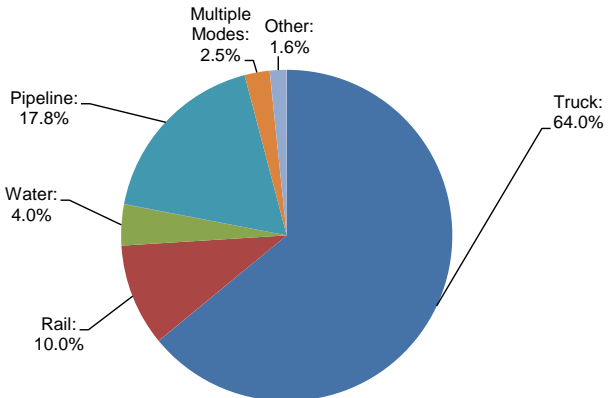
Notes: Includes domestic trade and the domestic portion of imports and exports. Air accounts for 0.03 percent of total domestic freight and is excluded from this chart. Percentages may not sum to 100 percent due to rounding.
Data Sources: Bureau of Transportation Statistics (BTS) and Federal Highway Administration (FHWA), Freight Analysis Framework (FAF), Version 4.3 available at http://faf.ornl.gov as of March 2017.

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, 2017
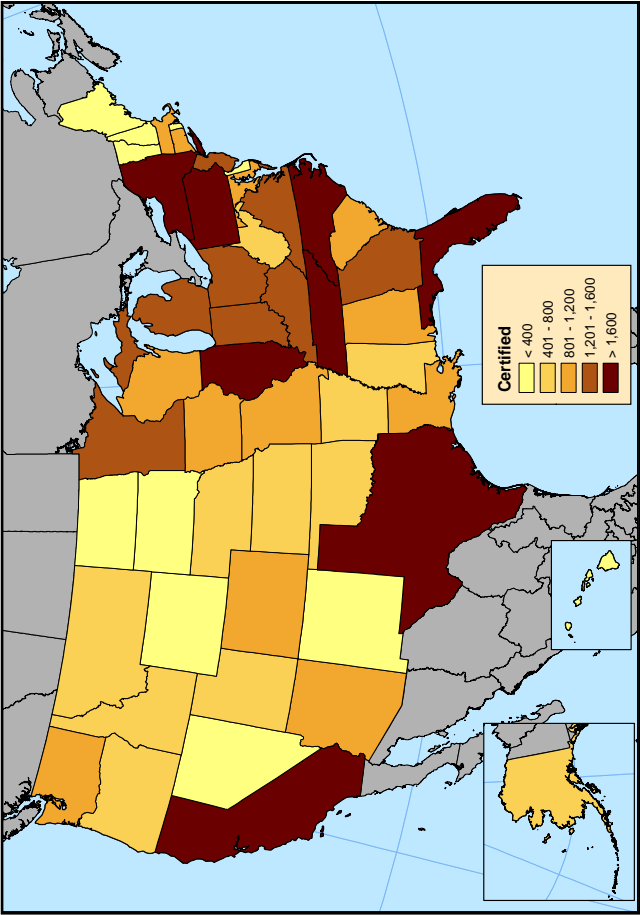
Note: In January 2017, there were 52,052 medical examiners certified on the National Registry of Certified Medical Examiners (National Registry).
Data Source: FMCSA, National Registry, January 27, 2017. Available at https://nationalregistry.fmcsa.dot.gov.

2. ROADSIDE INSPECTIONS AND VIOLATIONS

What is a Roadside Inspection?

A roadside 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 Roadside Inspections Conducted by Federal and State Inspectors, 2012-2016

	2012	2013	2014	2015	2016
Roadside Inspections	3,541,566	3,507,831	3,413,399	3,382,810	3,380,213
State	3,403,558	3,373,358	3,282,960	3,252,566	3,261,719
Federal	138,008	134,473	130,439	130,244	118,494

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2017.

2-2 Safety Inspectors, Federal and State, 2012-2016

Inspector Type	2012	2013	2014	2015	2016
Safety Inspectors	13,890	13,745	14,008	13,720	13,148
State	13,332	13,201	13,462	13,184	12,642
Federal	558	544	546	536	506

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 27, 2017.

2-3 Roadside Inspections by County, 2016

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2017.

2-4 Roadside Inspection OOS Rates, 2012-2016

Type of Roadside Inspection	2012	2013	2014	2015	2016
Driver Inspections*	3,426,636	3,395,311	3,293,826	3,263,861	3,263,824
With OOS Violation	167,635	165,072	166,179	158,856	160,691
Driver OOS Rate	4.89%	4.86%	5.05%	4.87%	4.92%
Vehicle Inspections**	2,429,828	2,402,122	2,341,484	2,321,276	2,323,533
With OOS Violation	489,038	478,030	476,886	471,393	464,343
Vehicle OOS Rate	20.13%	19.90%	20.37%	20.31%	19.96%
Hazmat Inspections***	203,662	203,309	196,158	191,723	199,470
With OOS Violation	7,640	7,914	7,794	7,375	7,902
Hazmat OOS Rate	3.75%	3.89%	3.97%	3.85%	3.96%

*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: Roadside 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 roadside inspections and inspection levels, please refer to https://csa.fmcsa.dot.gov.
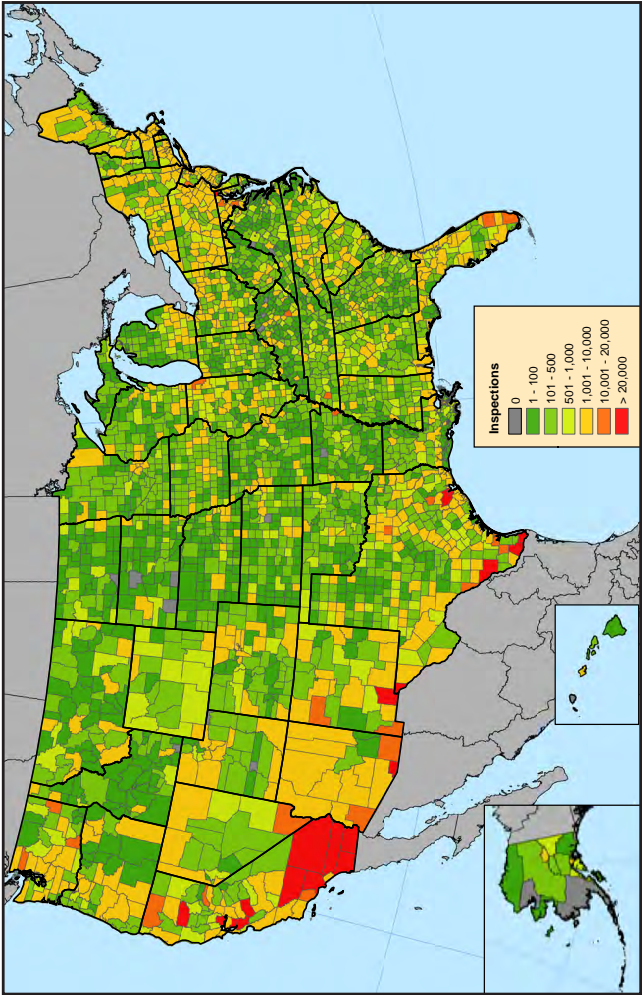Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2017.

2-5 Roadside Inspections by Inspection Level, 2012-2016

Inspection Level	2012	2013	2014	2015	2016
I. Full	1,113,828	1,093,326	1,063,322	1,060,005	1,006,742
With OOS Violation(s)*	284,251	274,122	271,459	267,212	250,844
II. Walk-Around	1,209,658	1,204,566	1,168,952	1,154,370	1,210,922
With OOS Violation(s)*	262,029	260,457	261,961	258,829	268,301
III. Driver Only	1,101,339	1,095,733	1,061,074	1,049,260	1,045,916
With OOS Violation(s)*	70,086	69,109	67,795	62,550	63,973
IV. Special Study	10,399	9,976	10,841	12,274	10,764
With OOS Violation(s)*	1,639	1,575	1,989	2,198	2,012
V. Terminal	104,531	102,544	108,732	106,675	105,625
With OOS Violation(s)*	6,452	6,184	6,908	6,318	6,132
VI. Radioactive Materials	1,811	1,686	478	226	244
With OOS Violation(s)*	18	11	5	2	11
Total	3,541,566	3,507,831	3,413,399	3,382,810	3,380,213

*Out-of-service (OOS) violation numbers are based on roadside inspections. For example, in 2014, there were 1,063,322 Level I inspections. Out of all the Level I inspections completed, 271,459 resulted in _at least one_ OOS violation.
Note: For more information on roadside inspections and inspection levels, please refer to http://cvsa.org/inspections/inpections/all-inspection-levels/.
Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2017.
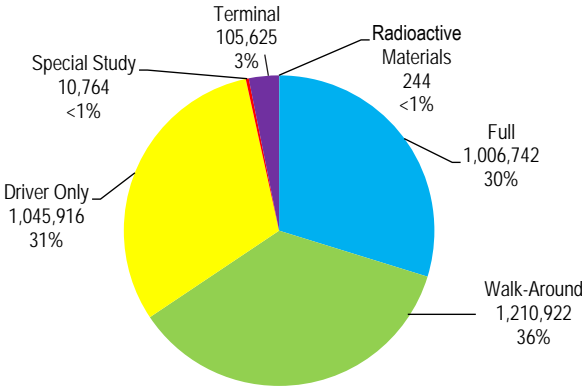
2-6 Roadside Inspections by Inspection Level, 2016

Terminal
105,625
3%

Radioactive Materials
244
<1%

Special Study
10,764
<1%

Full
1,006,742
30%

Driver Only
1,045,916
31%

Walk-Around
1,210,922
36%

Note: For more information on roadside inspections and inspection levels, please refer to http://cvsa.org/inspections/inpections/all-inspection-levels/.
Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2017.

2-7 Roadside Inspections by Carrier Fleet Size, 2012-2016

Carrier Fleet Size	2012	2013	2014	2015	2016
Very Small (1-6 Power Units)	1,021,641	1,023,977	986,587	1,005,574	1,072,807
Small (7-20 Power Units)	605,288	591,010	583,247	593,602	600,076
Medium (21-100 Power Units)	717,337	721,794	707,782	708,314	717,803
Large (>100 Power Units)	870,226	869,686	836,521	819,252	822,226
Unknown	327,074	301,364	299,262	256,068	167,301
Total	3,541,566	3,507,831	3,413,399	3,382,810	3,380,213

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 27, 2017.

2-8 Roadside Inspections by Carrier Operation, 2012-2016

Carrier Operation	2012	2013	2014	2015	2016
Interstate	2,918,783	2,908,941	2,809,555	2,784,565	2,755,616
Intrastate	622,783	598,890	603,844	598,245	624,597
Total	3,541,566	3,507,831	3,413,399	3,382,810	3,380,213

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2017.

2-9 Roadside Inspections by Gross Combination Weight Rating (GCWR), 2012-2016

GCWR	2012	2013	2014	2015	2016
<10,000 pounds	17,236	17,172	17,344	17,650	16,540
10,000 - 26,000 pounds	418,300	424,771	430,477	452,232	466,511
>26,000 pounds	2,509,830	2,527,537	2,505,250	2,617,832	2,718,809
Unknown	596,200	538,351	460,328	295,096	178,353
Total	3,541,566	3,507,831	3,413,399	3,382,810	3,380,213

Note: GCWRs are based on Roadside Inspection Reports as reported in MCMIS.
Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2017.

2-10 Most Frequent Driver Violations in Roadside Inspections, 2016

Violation Code	Category	Violation Description	Number of Violations
395.8	No Log/Log Not Current	Log Violation (General/Form and Manner)	171,415
395.8F1	No Log/Log Not Current	Driver's Record of Duty Status Not Current	74,566
392.2SLLS2	Traffic Enforcement	State/Local Laws - Speeding 6-10 Miles Per Hour Over the Speed Limit	67,487
391.11B2	All Other Driver Violations	Non-English Speaking Driver	66,339
392.16	Seat Belt	Failing to Use Seat Belt While Operating Commercial Motor Vehicle (CMV)	59,964
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	58,757
391.41AF	Medical Certificate	Operating a Property-Carrying Vehicle without Possessing a Valid Medical Certificate	45,890
392.2C	Traffic Enforcement	Failure to Obey Traffic Control Device	43,721
395.8E	No Log/Log Not Current	False Report of Driver's Record of Duty Status	39,271
395.3A2PROP	Hours of Service	Driving Beyond 14-hour Duty Period (Property-Carrying Vehicle)	35,888
395.8A	No Log/Log Not Current	No Driver's Record of Duty Status	28,409
392.2SLLS3	Traffic Enforcement	State/Local Laws - Speeding 11-14 Miles Per Hour Over the Speed Limit	28,325
392.2LV	Traffic Enforcement	Lane Restriction Violation	25,347
395.8K2	No Log/Log Not Current	Driver Failing to Retain Previous 7 Days' Logs	24,924
383.23A2	All Other Driver Violations	Operating a CMV Without a Commercial Driver's License (CDL)	24,631
391.41A	Medical Certificate	Driver Not in Possession of Medical Certificate	21,214
392.82A1	All Other Driver Violations	Using a Handheld Mobile Telephone While Operating a CMV	20,983
395.3A3PROP	Hours of Service	Driving Beyond 11-hour Driving Limit in a 14-hour Period (Property-carrying Vehicle)	20,223
392.2SLLS4	Traffic Enforcement	State/Local Laws - Speeding 15 or More Miles Per Hour Over the Speed Limit	15,510
391.11B5DNL	All Other Driver Violations	Driver Does Not Have a Valid Operator's License for the CMV Being Operated	11,342

Notes: Total number of driver inspections in calendar year (CY) 2016: 3,274,950. Total number of driver violations in 2016: 1,022,195. Total number of driver out-of-service (OOS) violations in 2016: 186,949. 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 February 24, 2017.

2-11 Most Frequent Vehicle Violations in Roadside Inspections, 2016

Violation Code	Category	Violation Description	Number of Violations
393.9	Lighting	Operating Vehicle Not Having the Required Operable Lamps	488,494
393.47E	Brakes, All Others	Clamp/Roto-Chamber Type Brake(s) Out of Adjustment	180,951
396.3A1	All Other Vehicle Defects	Inspection/Repair and Maintenance Parts and Accessories	149,394
396.17C	Periodic Inspection	Operating a CMV without Periodic Inspection	141,715
393.75C	Tires	Tire—Other: Tread Depth Less Than 2/32 of Inch	139,948
396.5B	All Other Vehicle Defects	Oil and/or Grease Leak	138,401
393.95A	Emergency Equipment	No/Discharged/Unsecured Fire Extinguisher	134,832
393.11	Lighting	No/Defective Lighting Devices/Reflective Devices/ Projected	114,381
393.9TS	Lighting	Inoperative Turn Signal	110,425
393.78	Windshield	Windshield Wipers Inoperative/Defective	88,174
393.53B	Brakes, All Others	Automatic Brake Adjuster CMV Manufactured On Or After 10/20/1994— Air Brake	86,066
393.45B2	Lighting	Brake Hose/Tubing Chaffing and/or Kinking	80,824
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	66,869
393.95F	Emergency Equipment	No/Insufficient Warning Devices	62,252
393.9H	Lighting	Inoperative Head Lamps	58,812
393.48A	Brakes, All Others	Inoperative/Defective Brakes	57,771
396.3A1B	Brakes, All Others	Brakes (General)	55,826
393.60C	Windshield	Damaged or Discolored Windshield	51,847
393.75A3	Tires	Tire—Flat and/or Audible Air Leak	49,464
393.25F	Lighting	Stop Lamp Violations	48,836

Notes: Total number of vehicle inspections in 2016: 2,323,533. Total number of vehicle violations in 2016: 3,666,987. Total number of vehicle OOS violations in 2016: 642,049. 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 27, 2017.

2-12 Traffic Enforcement Inspections, 2012-2016

Activity Summary	2012	2013	2014	2015	2016
Traffic Enforcement Inspections	470,550	395,387	386,216	374,857	366,990
With Moving Violations	193,666	216,361	215,247	210,464	219,135
With Drug & Alcohol Violations	1,135	916	850	864	907
With Railroad Crossing Violations	392	279	254	285	219
With Non-specified State Law/ Miscellaneous Violations	290,663	190,320	181,887	175,002	158,677

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 24 moving and non-moving driver violations, which are included in the driver violation portion of the roadside inspection procedures. New codes for State and local laws were added to inspection data systems from 2009 to 2011. These codes represented violations that would not be considered as a traffic enforcement, such as size and weight and driver/vehicle/carrier registrations. As a result, inspectors now use the new codes rather than the non-specified State law violations, which has reduced the number of inspections recorded as traffic enforcement inspections.
Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2017.

2-13 Traffic Enforcement Violations, 2012-2016

Activity Summary	2012	2013	2014	2015	2016
Traffic Enforcement Violations	554,540	446,144	435,971	419,635	406,770
Moving Violations	199,612	224,728	223,739	217,159	225,224
Drug & Alcohol Violations	1,368	1,128	999	1,020	1,020
Railroad Crossing Violations	395	281	254	286	220
Non-specified State Law/ Miscellaneous Violations	353,165	220,007	210,979	201,170	180,306

Notes: The traffic enforcement program involves the enforcement of 24 moving and non-moving driver violations, which are included in the driver violation portion of the roadside inspection procedures. Roadside inspections that result in drug- or alcohol-related violations are included as traffic enforcement type inspections if another moving violation is present. New codes for State and local laws were added to inspection data systems from 2009 to 2011. These codes represented violations that would not be considered as a traffic enforcement, such as size and weight and driver/vehicle/carrier registrations. As a result, inspectors now use the new codes rather than the non-specified State law violations, which has reduced the number of inspections recorded as traffic enforcement inspections.
Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2017.
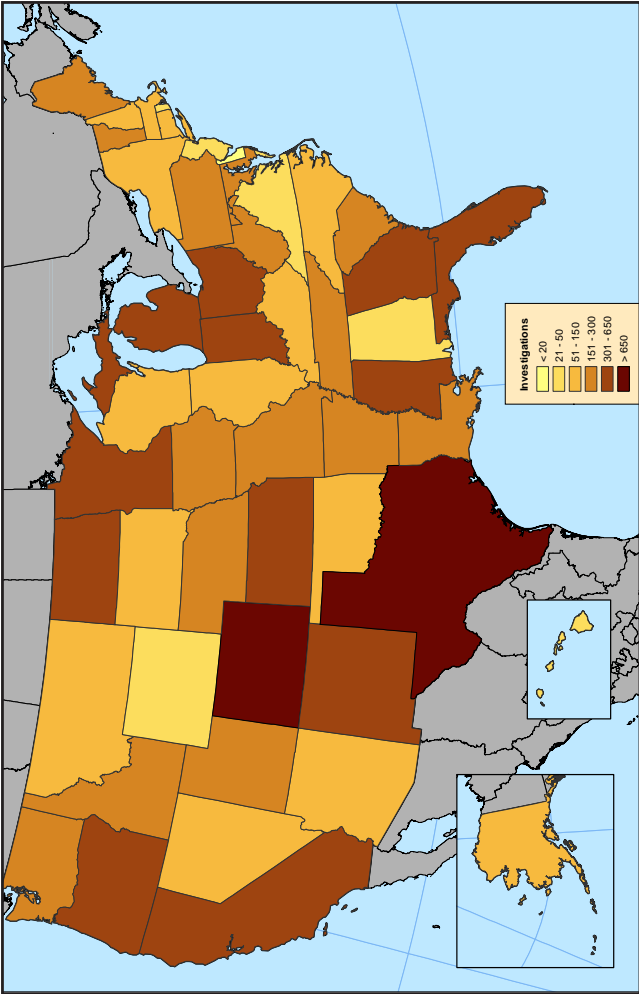
3. Investigations

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, 2016

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2017.

3-2 Investigations Conducted by Federal and State Investigators, 2012-2016

Investigations	2012	2013	2014	2015	2016
State	7,863	7,780	7,077	6,254	6,294
Federal	12,131	10,077	7,121	8,353	7,759
Total	**19,994**	**17,857**	**14,198**	**14,607**	**14,053**

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2017.

3-3 Interventions by Type, 2012-2016

Intervention Type	2012	2013	2014	2015	2016
Investigations	19,996	17,857	14,198	14,607	14,053
Onsite Comprehensive	6,720	5,805	5,676	5,336	5,671
Onsite Focused	10,730	8,888	7,056	7,941	6,440
Offsite	553	441	283	108	1
Cargo Tank Facility Reviews	74	77	56	83	66
Shipper Reviews	300	251	132	103	129
Non-Rated Reviews	1,619	2,395	995	1,036	1,746
Warning Letters	23,617	20,478	20,115	20,659	35,756

Note: 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 27, 2017.

3-4 FMCSA-Regulated Carriers by Safety Rating, 2016

Safety Rating	Interstate Freight Carriers	Intrastate HM Carriers	Interstate Passenger Carriers	All Carriers
Conditional	17,937	20	472	18,429
Satisfactory	51,016	84	3,786	54,886
Unsatisfactory	1,540	3	64	1,607
No Rating	423,237	17,618	8,281	449,136
Total	**493,730**	**17,725**	**12,603**	**524,058**

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 30, 2016.

3-5 Passenger Carrier, Hazardous Materials Carrier, and Household Goods Carrier Investigations, 2012-2016

Carriers by Vehicle Type	2012	2013	2014	2015	2016
Any Passenger Vehicles*	1,425	2,495	1,344	1,221	1,320
Motorcoaches	863	1,962	984	958	985
School Buses	175	285	184	155	168
Vans	427	562	333	276	302
Mini Buses	389	722	449	403	414
Limousines	176	250	133	126	139
Hazardous Materials	1,570	1,071	794	800	911
Household Goods	240	191	161	184	175

*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 27, 2017.

3-6 Investigations by Carrier Fleet Size, 2012-2016

Carrier Fleet Size	2012	2013	2014	2015	2016
Very Small (1-6 Power Units)	8,647	7,967	5,845	6,045	5,673
Small (7-20 Power Units)	5,721	5,037	4,319	4,392	4,382
Medium (21-100 Power Units)	3,890	3,374	2,893	3,037	2,890
Large (>100 Power Units)	1,318	1,115	914	909	873
No Power Units/Unreported	420	364	227	224	235
Total	19,996	17,857	14,198	14,607	14,053

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 27, 2017.

3-7 New Entrant Safety Audits, 2012-2016

Year	Safety Audits	Safety Audit Pass Rate
2012	34,254	75.4%
2013	34,022	81.1%
2014	39,519	83.6%
2015	39,233	84.9%
2016	36,756	88.6%

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 30, 2016.

3-8 Summary of Closed Enforcement Cases, 2012-2016

Subject Type	2012 Cases (Amount Settled)	2013 Cases (Amount Settled)	2014 Cases (Amount Settled)	2015 Cases (Amount Settled)	2016 Cases (Amount Settled)
Broker	0 ($0)	1 ($2,850)	2 ($6,410)	0 ($0)	0 ($0)
Cargo Tank Facility	21 ($103,290)	26 ($186,230)	31 ($469,950)	31 ($589,300)	28 ($910,010)
Carrier	5,199 ($18,704,332)	4,800 ($19,532,054)	3,806 ($24,260,338)	4,441 ($31,094,554)	5,417 ($42,117,473)
Drug Consortium	1 ($4,950)	0 ($0)	0 ($0)	0 ($0)	0 ($0)
Freight Forwarder	103 ($1,231,350)	111 ($1,300,297)	92 ($1,303,660)	71 ($925,750)	106 ($1,445,650)
HM Carrier	228 ($1,638,988)	182 ($1,516,729)	138 ($1,593,314)	174 ($2,099,151)	182 ($2,938,890)
HM Carrier (Not Placarded)	0 ($0)	0 ($0)	1 ($63,960)	0 ($0)	0 ($0)
HM Carrier/ Shipper	187 ($1,259,422)	139 ($855,437)	115 ($1,446,366)	133 ($1,579,422)	162 ($1,846,549)
HM Carrier/ Shipper (Not Placarded)	0 ($0)	0 ($0)	0 ($0)	0 ($0)	0 ($0)
Not Carrier (45-Day)	0 ($0)	0 ($0)	0 ($0)	0 ($0)	0 ($0)
Other	0 ($0)	4 ($11,570)	3 ($35,700)	3 ($16,060)	3 ($28,300)
Passenger Carrier	277 ($1,099,200)	282 ($2,055,904)	232 ($2,224,886)	237 ($2,132,765)	211 ($2,080,249)
Shipper	8 ($406,320)	15 ($143,900)	6 ($32,740)	4 ($66,280)	3 ($30,790)
Small Passenger Carrier	0 ($0)	0 ($0)	0 ($0)	0 ($0)	1 ($2,400)
Total	6,024 ($24,447,852)	5,560 ($25,604,971)	4,426 ($31,437,324)	5,094 ($38,503,282)	6,113 ($51,400,311)

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 24, 2017.

4. CRASHES

In 2015, of the 32,166 fatal crashes on the Nation's roadways, 3,838 (11.9 percent) involved at least one large truck or bus. In addition, there were an estimated 6,263,000 nonfatal crashes, 476,000 (7.6 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. For more information on GES, go to https://www.nhtsa.gov/national-automotive-sampling-system-nass/nass-general-estimates-system.

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, 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 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, 2012-2015

Year	Number of Crashes Involving:			
	Large Trucks	Buses	Large Trucks and Buses	All Vehicle Types
2012	317,000	54,000	371,000	5,615,000
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

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 the General Estimates System (GES). 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.
Data Sources: National Highway Traffic Safety Administration (NHTSA), FARS and GES.

4-2   Fatal Crashes by Vehicle Type, 2012-2015

Year	Number of Crashes Involving:			
	Large Trucks	Buses	Large Trucks and Buses	All Vehicle Types
2012	3,486	252	3,726	31,006
2013	3,554	282	3,821	30,203
2014	3,429	235	3,656	30,056
2015	3,598	257	3,838	32,166

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, 2012-2015

Year	Number of Crashes Involving:			
	Large Trucks	Buses	Large Trucks and Buses	All Vehicle Types
2012	73,000	12,000	85,000	1,634,000
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

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 the General Estimates System (GES). 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.
Data Source: National Highway Traffic Safety Administration (NHTSA), General Estimates System (GES).

4-4 Property-Damage-Only (PDO) Crashes by Vehicle Type, 2012-2015

Year	Number of Crashes Involving:			
	Large Trucks	Buses	Large Trucks and Buses	All Vehicle Types
2012	241,000	42,000	282,000	3,950,000
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

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 property-damage-only (PDO) crash data from the General Estimates System (GES). 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.
Data Source: National Highway Traffic Safety Administration (NHTSA), General Estimates System (GES).

4-5 Large Truck Fatal Crashes, 1975-2015

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
2011	3,365	640	3,781	267,594	1.26	1.41	10,270,693
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	3,598	667	4,067	279,844	1.29	1.45	11,203,184

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 2015;* Fatal Crashes, Vehicles Involved, and Fatalities - National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

4-6 Large Truck Injury Crashes, 2012-2015

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	
2012	73,000	77,000	104,000	269,207	27.1	38.6	10,659,380
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

Notes: The rates displayed in this table are based on unrounded General Estimates System (GES) data. 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. "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.
Data Sources: Vehicle Miles Traveled and Registered Vehicles: FHWA, *Highway Statistics 2015.* Injury Crashes, Vehicles Involved, and Persons Injured: National Highway Traffic Safety Administration (NHTSA), GES.

4-7 Large Truck and Bus Fatality Rates Per 100 Million Total Vehicle Miles Traveled (VMT) by State, 2014 and 2015

	2014			2015		
State	**Fatalities**	**Million VMT**	**Fatality Rate**	**Fatalities**	**Million VMT**	**Fatality Rate**
Alabama	88	65,667	0.13	104	67,257	0.15
Alaska	6	4,857	0.12	4	5,045	0.08
Arizona	71	62,631	0.11	98	65,045	0.15
Arkansas	79	34,024	0.23	78	34,897	0.22
California	325	332,857	0.10	313	335,539	0.09
Colorado	67	48,985	0.14	71	50,437	0.14
Connecticut	23	31,190	0.07	40	31,592	0.13
Delaware	15	9,596	0.16	15	9,931	0.15
D.C.	6	3,528	0.17	3	3,557	0.08
Florida	207	201,040	0.10	244	206,982	0.12
Georgia	162	111,535	0.15	188	118,107	0.16
Hawaii	9	10,174	0.09	6	10,301	0.06
Idaho	23	16,154	0.14	27	16,662	0.16
Illinois	121	104,906	0.12	116	105,223	0.11
Indiana	134	79,204	0.17	122	78,819	0.15
Iowa	49	31,414	0.16	62	33,161	0.19
Kansas	47	30,710	0.15	65	31,379	0.21
Kentucky	73	47,941	0.15	86	48,675	0.18
Louisiana	87	48,252	0.18	75	48,180	0.16
Maine	10	14,301	0.07	11	14,629	0.08
Maryland	55	56,432	0.10	67	57,516	0.12
Massachusetts	30	57,552	0.05	28	59,257	0.05
Michigan	107	97,384	0.11	80	97,843	0.08
Minnesota	70	57,395	0.12	66	57,395	0.11
Mississippi	84	39,499	0.21	78	39,890	0.20
Missouri	105	70,909	0.15	109	71,918	0.15
Montana	12	12,157	0.10	21	12,345	0.17
Nebraska	53	19,613	0.27	40	20,101	0.20
Nevada	17	25,302	0.07	36	25,925	0.14
New Hampshire	12	12,970	0.09	6	13,094	0.05
New Jersey	85	74,856	0.11	59	75,393	0.08
New Mexico	72	25,347	0.28	46	27,435	0.17
New York	128	129,263	0.10	156	127,230	0.12
North Carolina	129	108,012	0.12	138	111,879	0.12
North Dakota	49	10,511	0.47	49	10,036	0.49
Ohio	142	112,766	0.13	167	113,673	0.15
Oklahoma	137	47,699	0.29	107	47,713	0.22
Oregon	35	34,610	0.10	54	35,999	0.15
Pennsylvania	170	99,882	0.17	175	100,945	0.17
Rhode Island	3	7,677	0.04	2	7,833	0.03
South Carolina	67	49,931	0.13	118	51,726	0.23
South Dakota	22	9,225	0.24	13	9,324	0.14
Tennessee	120	72,336	0.17	123	76,670	0.16
Texas	570	243,076	0.23	593	258,122	0.23
Utah	21	27,554	0.08	39	29,604	0.13
Vermont	11	7,059	0.16	8	7,314	0.11
Virginia	96	80,985	0.12	73	82,625	0.09
Washington	40	58,060	0.07	46	59,653	0.08
West Virginia	31	19,117	0.16	22	19,827	0.11
Wisconsin	59	60,053	0.10	62	62,073	0.10
Wyoming	34	9,457	0.36	28	9,597	0.29
National Totals	**4,168**	**3,025,656**	**0.14**	**4,337**	**3,095,373**	**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 2015*; 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, 2015
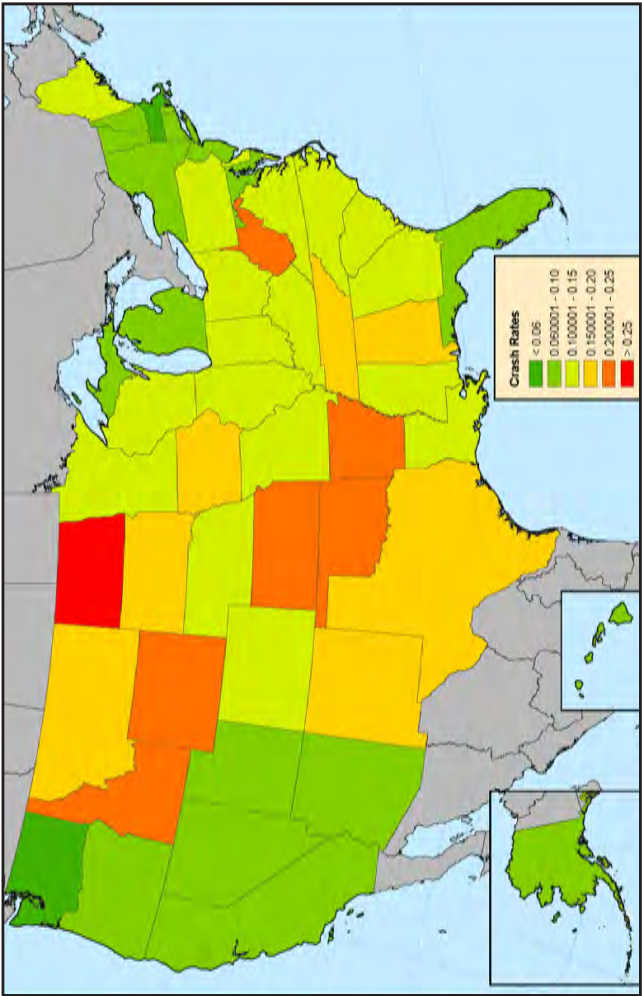
Data Sources: Vehicle Miles Traveled - FHWA, *Highway Statistics 2015* (VM-2); Fatalities - National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

4-9 Vehicle Occupants Killed in Large Truck Crashes by Vehicle Type, 2012-2015

Occupant of:	2012	2013	2014	2015
Passenger Car	1,423	1,446	1,443	1,478
Light Truck	1,153	1,163	1,162	1,257
Large Truck	697	695	656	667
Motorcycle	251	208	221	225
Bus	10	16	15	18
Other/Unknown	20	12	18	12
Total Vehicle Occupants	3,554	3,540	3,515	3,657

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, 2012-2015

Nonmotorist Type	2012	2013	2014	2015
Total Nonmotorist Fatalities	390	441	393	410
Pedestrian	305	339	308	334
Pedalcyclist	62	79	61	54
Other/Unknown Nonmotorist	23	23	24	22
Total Fatalities	3,944	3,964	3,903	4,067
Percent Nonmotorist Fatalities	10%	11%	10%	10%

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, 2012-2015

Nonmotorist Type	2012	2013	2014	2015
Total Nonmotorist Fatalities	89	90	92	90
Pedestrian	77	72	78	80
Pedalcyclist	12	13	14	9
Other/Unknown Nonmotorist	0	5	0	1
Total Fatalities	282	320	283	295
Percent Nonmotorist Fatalities	32%	28%	33%	31%

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. These numbers include fatal crash data from the Fatality Analysis Reporting System (FARS) and injury crash and property-damage-only (PDO) crash data from the General Estimates System (GES). 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.
Data Sources: Fatal Crashes - National Highway Traffic Safety Administration (NHTSA), FARS; Injury and PDO Crashes - NHTSA, GES.

4-12 Fatal Crashes by Work Zone, 2012-2015

Crash Type:	2012		2013		2014		2015	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Large Truck Fatal Crashes	3,486	100.0%	3,554	100.0%	3,429	100.0%	3,598	100.0%
Work Zone	132	3.8%	151	4.2%	183	5.3%	173	4.8%
Not a Work Zone	3,354	96.2%	3,403	95.8%	3,246	94.7%	3,425	95.2%
All Fatal Crashes	31,006	100.0%	30,203	100.0%	30,056	100.0%	32,166	100.0%
Work Zone	555	1.8%	536	1.8%	607	2.0%	642	2.0%
Not a Work Zone	30,451	98.2%	29,667	98.2%	29,449	98.0%	31,524	98.0%
Percent of Work-Zone Fatal Crashes that Involved at Least One Large Truck	23.8%		27.7%		30.1%		26.9%	
Percent of All Fatal Crashes that Involved at Least One Large Truck	11.2%		11.8%		11.4%		11.2%	

Notes: "Not a Work Zone" counts includes crashes where 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 an area of a trafficway where construction, maintenance, or utility work activities are identified by warning signs/signals/indicators.
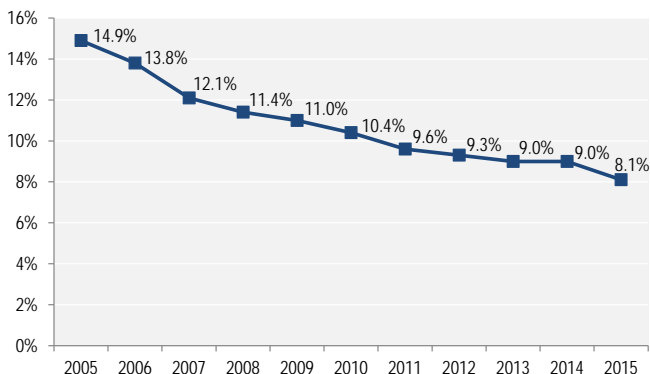Data Source: National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

4-13 Truck Weight Rating for Large Trucks in Fatal Crashes, 2012-2015

Truck Weight Rating	2012	2013	2014	2015
Class 3: 10,001 - 14,000 lb	286	256	155	142
Class 4: 14,001 - 16,000 lb	77	93	70	69
Class 5: 16,001 - 19,500 lb	91	83	79	83
Class 6: 19,501 - 26,000 lb	215	221	221	212
Class 7: 26,001 - 33,000 lb	212	243	235	253
Class 8: > 33,000 lb	2,841	2,945	2,902	3,135
Unknown	103	80	87	156
Total	**3,825**	**3,921**	**3,749**	**4,050**

Notes: A large truck is defined here as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds. Starting in 2013, Vehicle Identification Number (VIN)-derived data elements, including Truck Weight Rating, were moved to a separate file in the Fatality Analysis Reporting System (FARS) (Vindecode). 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, 2005-2015

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, 2012-2016

Cargo Release	Number of Large Trucks				
	2012	2013	2014	2015	2016*
Cargo Release: No	2,000	2,420	2,531	2,637	1,801
Cargo Release: Yes	358	385	440	487	392
Corrosives	27	44	37	43	30
Explosives	12	7	13	12	12
Flammable Liquid	202	216	254	267	206
Flammable Solids	5	1	2	6	5
Gases	36	47	41	65	45
Miscellaneous Dangerous Goods	27	29	30	27	34
Oxidizing Substances	5	3	6	8	4
Poison & Infectious Substances	2	6	6	4	3
Radioactive Material	0	0	1	1	0
Unknown	42	32	50	54	53
Cargo Release: Unknown	401	439	726	585	411
Total	2,759	3,244	3,697	3,709	2,604

*Crash records reported to the Motor Carrier Management Information System (MCMIS) through December 31, 2016, 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 27, 2017.

4-16 Large Truck and Bus Drivers in Crashes, by Driver's License Class, 2012-2016

License Class	Number of Vehicles Involved				
	2012	2013	2014	2015	2016*
Class A	90,100	97,671	108,663	111,452	83,449
Class B	19,613	20,779	21,588	22,248	16,140
Class C	8,586	10,007	10,880	11,319	8,113
Class D	12,630	13,723	15,679	18,720	15,188
Class M	506	1,187	1,345	159	120
Unknown	6,955	6,961	7,636	7,716	5,825
Total	138,390	150,328	165,791	171,614	128,835

*Crash records reported to the Motor Carrier Management Information System (MCMIS) through December 31, 2016, 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 27, 2017.

4-17 Large Trucks in Crashes by Operation Classification, 2012-2016

Classification	2012	2013	2014	2015	2016*
For-Hire	59,801	64,278	67,477	80,482	82,322
Private	18,508	19,977	19,880	26,027	26,511
Both For-Hire and Private	18,000	21,077	22,681	12,892	12,944
Neither For-Hire Nor Private/No USDOT Number	27,250	28,428	28,213	31,110	31,244
Total	123,559	133,760	138,251	150,511	153,021

*Crash records reported to the Motor Carrier Management Information System (MCMIS) through December 31, 2016, 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 2012-2014: FMCSA, MCMIS, data snapshot as of January 27, 2017. Crash data for 2015-2016: FMCSA, MCMIS, data snapshot as of February 24, 2017. For-hire and private information: FMCSA, MCMIS, data snapshots as of September 28, 2012, June 20, 2014, January 23, 2015, January 29, 2016, January 27, 2017, and February 24, 2017.

4-18 Large Trucks in Crashes by Carrier Operation, 2012-2016

Carrier Operation	2012	2013	2014	2015	2016*
Interstate	85,683	92,979	97,807	95,946	99,656
Intrastate Hazardous Materials (HM)	1,142	1,276	1,375	1,447	1,446
Intrastate Non-HM**	10,053	11,901	12,849	15,752	17,106
Unknown Carrier Operation**	26,681	27,604	30,734	35,508	32,720
Total	123,559	133,760	142,765	148,653	150,928

*Crash records reported to the Motor Carrier Management Information System (MCMIS) through December 31, 2016, 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 2012-2014: FMCSA, MCMIS, data snapshot as of January 27, 2017. Crash data for 2015-2016: FMCSA, MCMIS, data snapshot as of February 24, 2017. For-hire and private information: FMCSA, MCMIS, data snapshots as of September 28, 2012, June 20, 2014, January 23, 2015, January 29, 2016, January 27, 2017, and February 24, 2017.

4-19 Bus Fatal Crashes, 1975-2015

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
2011	243	55	284	13,807	1.76	2.06	666,064
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	257	49	295	16,230	1.58	1.82	888,907

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 2015*; Fatal Crashes, Vehicles Involved, and Fatalities - National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

4-20 Bus Injury Crashes, 2012-2015

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	
2012	12,000	12,000	23,000	14,781	80.6	156.3	764,509
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

Notes: The rates displayed in this table are based on unrounded General Estimates System (GES) data. "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.
Data Sources: Vehicle Miles Traveled and Registered Vehicles: FHWA, *Highway Statistics 2014*. Injury Crashes, Vehicles Involved, and Persons Injured: National Highway Traffic Safety Administration (NHTSA), GES.

4-21 Fatal Crashes Involving Buses, by Type of Bus, 1975-2015

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
2011	97	40	68	25	10	3	243
2012	101	34	78	30	7	2	252
2013	114	44	82	28	10	4	282
2014	90	31	79	9	21	4	235
2015	98	32	92	13	17	5	257

* "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).
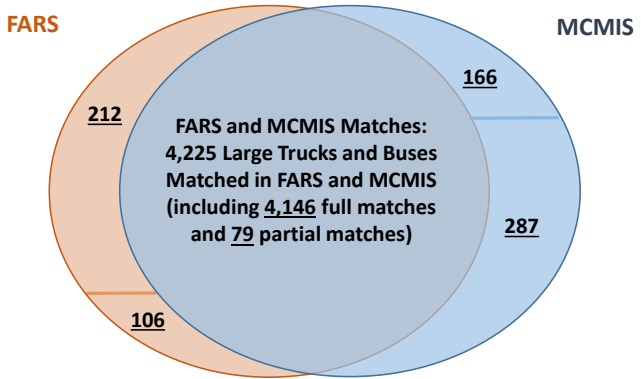
4-22 Estimated Costs of Large Truck and Bus Crashes, 2012-2015 (2015 Dollars)

Year	Fatal Crashes	Injury Crashes	Property-Damage-Only (PDO) Crashes	All Large Truck and Bus Crashes
2012	$43 Billion	$40 Billion	$21 Billion	$104 Billion
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

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. Data Source: 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).

4-23 Fatality Analysis Reporting System (FARS) and Motor Carrier Management Information System (MCMIS) Matching for Large Trucks and Buses in Fatal Crashes, 2015

Number	Category	Percentage
4,146	Large trucks and buses matched in FARS and MCMIS	83.0%
79	Large trucks and buses that were partially matched in FARS and MCMIS	1.6%
212	Large trucks and buses in FARS and not in MCMIS	4.2%
106	Large trucks and buses in FARS matched to large trucks and buses in non-fatal crashes in MCMIS	2.1%
166	Large trucks and buses in MCMIS and not in FARS	3.3%
287	Large trucks and buses in MCMIS matched to vehicles in FARS that were not large trucks or buses	5.7%
4,996	**Total large trucks and buses in fatal crashes in FARS, MCMIS, or both**	**100.0%**

FARS / **MCMIS**

212

166

FARS and MCMIS Matches: 4,225 Large Trucks and Buses Matched in FARS and MCMIS (including 4,146 full matches and 79 partial matches)

287

106

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 27, 2017.
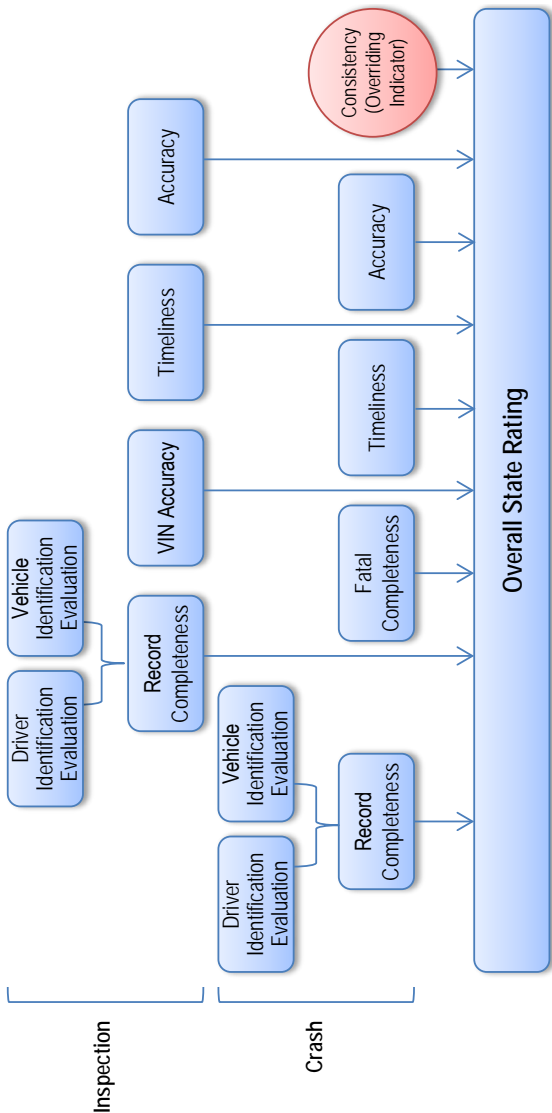
5. DATA QUALITY

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 roadside 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 indictor shown in 5-1) are rated poor overall.
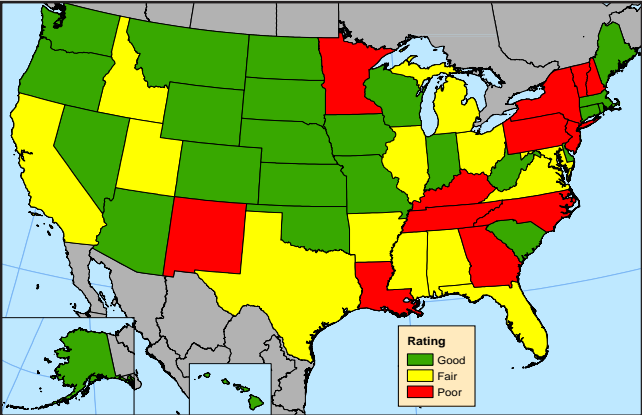
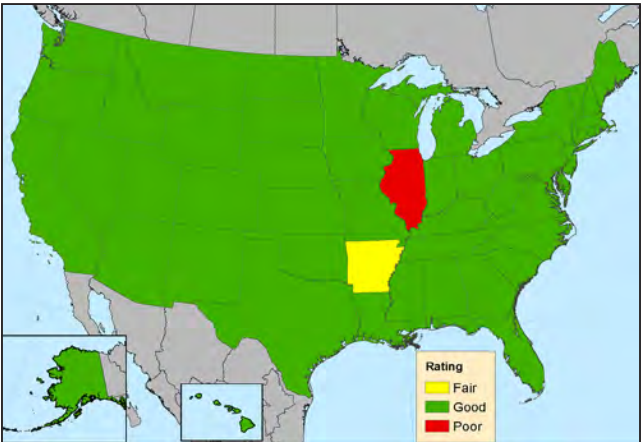## 5-1 State Safety Data Quality (SSDQ) Performance Measures

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 2016

Overall SSDQ Ratings, June 2004

Overall SSDQ Ratings, December 2016

Note: Ratings depicted on this map are overall State ratings. Washington, D.C. is rated poor (red) as of June, 2004 and December, 2016.
Data Sources: June 2004 Ratings: FMCSA, Analysis & Information (A&I) Online, State Safety Data Quality (SSDQ) as of June, 2004; December 2016 Ratings: FMCSA, A&I Online, SSDQ as of December, 2016. 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, 2012-2016
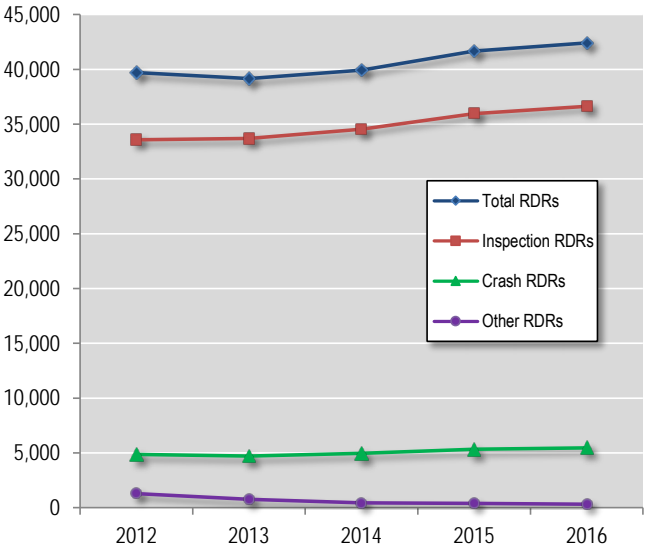
Data Source: FMCSA, DataQs, March 23, 2017 (based on submissions received in 2016).

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 sytem, 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 to prevent commercial motor vehicle (CMV)-related fatalities and injuries primarily through State and local government agencies, as well as others that can support national priorities or provide innovative approaches and outcomes. Activities of the Administration through FMCSA's grant programs contribute to ensuring safety in motor carrier operations through strong enforcement of safety regulations; targeting high-risk carriers and CMV drivers; improving safety information systems and CMV technologies; strengthening CMV equipment and operating standards; training; and increasing safety awareness. FMCSA's CMV Operator Safety Program also assists current or former members of the U.S. Armed Forces interested in CMV operations by providing training.

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. As of October 1, 2016 (Fiscal Year 2017), MCSAP and HP now include components of the previously separate New Entrant, Border Enforcement, Safety Data Improvement (SaDIP), Performance and Registration Information Systems Management (PRISM), and Commercial Vehicle Information Systems and Networks (CVISN) grant programs. The FAST Act changed the names and funding structures of these programs, but many programmatic components remain the same. The FAST Act also increased focus on accountability, performance standards, efficiency, and effectiveness while reducing administrative burdens on FMCSA grantees. More information on these grant programs can be found at http://www.fmcsa.dot.gov/mission/grants. This section provides an overview of Fiscal Year 2016 FMCSA grant awards and short program descriptions, the last year of awards prior to the FAST Act consolidation.

6-1 FMCSA Grant Awards, Fiscal Year 2016

Grant Program	Total Awards
MCSAP Basic & Incentive	$168,275,000
MCSAP High Priority	$15,000,000
Border Enforcement	$32,000,000
CVISN	$16,825,428
MCSAP New Entrant	$30,012,668
PRISM	$5,000,000
SaDIP	$1,809,404
CDL Program Implementation	$30,000,000
CMVOST	$996,947
Total Grant Awards	**$299,919,447**

Motor Carrier Safety Assistance Program (MCSAP) Basic and Incentive Grants

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 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 Basic and Incentive grant funding. There are five national program elements for the MCSAP outlined in 49 CFR 350.19. 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.

MCSAP High Priority Grant

MCSAP High Priority grant funding is available for projects that are national in scope, increase public awareness and education, demonstrate new technologies, and reduce the number and rate of CMV accidents. Eligible recipients are State agencies, local governments, and organizations representing government agencies that use and train qualified officers and employees in coordination with State motor vehicle safety agencies. FMCSA may reserve High Priority funding exclusively for innovative traffic enforcement projects, with particular emphasis on work zone enforcement and rural road safety.

Border Enforcement Grant (BEG)

The BEG program is a Federal discretionary grant program that provides financial assistance to States and entities that share a land border with another country. CMVs from foreign countries entering the United States must comply with the Federal Motor Carrier Safety and Hazardous Material Regulations, as well as U.S. financial responibility and registration requirements. All drivers of those vehicles must be properly licensed and qualified to operate a CMV.

Congress intended that these Border Enforcement Grants be used primarily for enforcement activities related to foreign-domiciled carriers that engage in international commerce by crossing the Mexican or Canadian borders.

The Federal share of the BEG may be 100 percent of the expenditures approved in the State or entity's Border Enforcement Plan, provided the maintenance of expenditures amount is met.

Commercial Vehicle Information Systems and Networks (CVISN) Grant

The Innovative Technology Deployment Program (formerly known a CVISN) is a key component of FMCSA's drive to improve CMV safety through technology and information connectivity. The program provides discretionary funding for States and the District of Columbia to deploy, operate, and maintain elements of their commercial vehicle, commercial driver, and carrier-specific information systems and networks. The agency in each State and the District of Columbia that is primarily responsible for the development, implementation, and maintenance of CVISN-related systems is eligible to apply for grant funding. The ITD/CVISN Program supports FMCSA's goals by 1) focusing safety enforcement on high-risk operators, 2) integrating systems to improve the accuracy, integrity, and verifiability of credentials, 3) improving efficiency through electronic screening of commercial vehicles, and 4) enabling online application and issuance of credentials.

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

New Entrant Safety Audit Grant

The goal of the New Entrant Safety Audit grant program is to reduce CMV-involved crashes, fatalities, and injuries through consistent, uniform, and effective CMV safety programs. New Entrant discretionary grant funds are awarded to States and local governments for conducting safety audits on new interstate motor carriers, to help ensure the Agency's safety mission from the beginning, at entry into CMV activity. States may use these funds for salaries and related expenses of auditors, including training and equipment, and to perform other eligible activities that are directly related to conducting safety audits. The Federal share for the New Entrant grants is established at 100 percent of authorized funds.

Performance and Registration Information Systems Management (PRISM) Grant

The PRISM grant program is a cooperative Federal-State safety program developed to reduce commercial vehicle accidents. The performance of unsafe carriers is improved through a comprehensive system of identifications, 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.

Safety Data Improvement Program (SaDIP) Grant

The goal of SaDIP grant funding is to provide financial and technical assistance to 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 recommended that improvements be made in FMCSA crash and enforcement data. Congress has responded by providing funding annually for FMCSA to work with the States to improve reporting of large commercial truck and bus crashes. The standalone SaDIP grant program ended in FY 2016, due to changes mandated by Congress in the Fixing America's Surface Transportation Act, 2015 (FAST Act). Beginning in FY 2017, States can apply for safety data improvement grants under the MCSAP and High Priority grant programs.

Commercial Driver's License Program Implementation (CDLPI) Grant

The CDLPI grant provides financial assistance to States to 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 are eligible to receive and retain a CDL. This is achieved by focusing on maintaining 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 is 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 31301 of Title 49 (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 on U.S. roads involving CMVs, 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

Licensing & Insurance (L&I)
http://li-public.fmcsa.dot.gov

GLOSSARY AND LIST OF ACRONYMS

A&I	Analysis & Information
ABS	Antilock Braking System
BEG	Border Enforcement Grant
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
CR	Compliance Review
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.
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
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
OP-2 Authority	Carriers with OP-2 authority are Mexico-domiciled for-hire motor carriers and private motor carriers who transport property only in municipalities in the United States on the United States-Mexico international border or within the commercial zones of such municipalities.
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
SCR	Security Contact Review
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.

Nine Classes of Hazardous Materials

Class 1: Explosives
Divisions: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6

Class 2: Gases
Divisions: 2.1, 2.2, 2.3

Class 3: Flammable Liquid and Combustible Liquid

Class 4: Flammable Solid, Spontaneously Combustible, and Dangerous When Wet
Divisions 4.1, 4.2, 4.3

Class 5: Oxidizer and Organic Peroxide
Divisions 5.1, 5.2

Class 6: Poison (Toxic) and Poison Inhalation Hazard

Class 7: Radioactive

Class 8: Corrosive

Class 9: Miscellaneous

Dangerous

Federal Motor Carrier Safety Administration

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

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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 and properly reporting hazardous materials placards. All five visor cards are available for download at: https://www.fmcsa.dot.gov/regulations/enforcement/visor-cards-law-enforcement.

Reporting Hazardous Materials Information

ACCURATE REPORTING SAVES LIVES

Data you collect is used to calculate risk assessment, determine response methods, and develop regulations. Vehicles carrying hazardous materials are required to carry shipping papers containing the HM Class and ID number (or name). Your Accident or Collision Report/Supplement may ask the following hazardous materials questions (exact wording will vary by State):

1. DOES THE VEHICLE HAVE A HAZARDOUS MATERIALS PLACARD? YES ● NO ○

Placards should be on all four sides of the vehicle. For containers with bulk packages inside, if the required ID# marking is not visible, the transport vehicle must be marked on each side and each end. **Some Common Placards**

2. ENTER THE FOUR-DIGIT NUMBER (OR NAME) FROM THE PLACARD 1 9 9 3

The four-digit number may be on an orange panel or a white "square-on-point" panel. If no four-digit number appears on the placard, enter the Placard Name.

3. ENTER THE HAZARDOUS MATERIALS CLASS NUMBER FROM THE BOTTOM OF THE PLACARD 3

The Class Number can be a one- or two-digit number with a decimal in the middle. **5.1** It is critical for identifying and studying various types of hazardous materials involved in traffic crashes.

4. WAS HAZARDOUS CARGO RELEASED? YES ● NO ○

The intent of this question is to determine whether any of the **placarded material** was released or escaped from its transport container into the environment. Fuel or oil carried by the vehicle for its own use is NOT considered cargo and should not be reported in this section.

Federal Motor Carrier
Safety Administration

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