2020

Pocket Guide to Large Truck and Bus Statistics



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2020 Pocket Guide to Large Truck and Bus Statistics



Administration

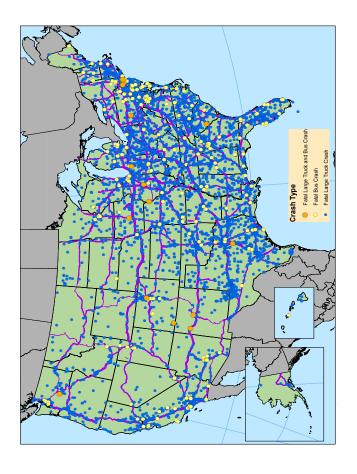
INTRODUCTION

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

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LOCATIONS OF FATAL LARGE TRUCK AND BUS CRASHES, 2018



Note: In 2018, there were 4,630 fatal crashes involving large trucks and buses. Data Source: National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

THE MOTOR CARRIER MANAGEMENT INFORMATION SYSTEM

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

1. Overview: Large Trucks and Buses

In 2018, among the 273,602,100 total registered vehicles in the United States, 10,327,899 were single-unit trucks (straight trucks), 2,906,011 were combination trucks (tractor-trailers), and 992,152 were buses. Also in 2018, there were 3,240.3 billion vehicle miles traveled (VMT) by all motor vehicles. Large trucks traveled 304.9 billion of those miles (9.4 percent of the total), and buses traveled 18.3 billion of those miles (0.6 percent of the total).

FMCSA regulates all motor carriers that operate in interstate commerce, and certain requirements for motor carriers and commercial motor vehicles (CMVs) that transport hazardous materials (HM) in intrastate commerce. As of December 2019, 602,542 interstate motor carriers and intrastate HM motor carriers had recent activity operating in the United States:

- 335,642 were for-hire carriers
- 206,378 were private carriers
- 56,704 were both for-hire and private carriers
- 3,818 were neither for-hire nor private carriers (e.g., government).

FMCSA regulates all drivers involved in interstate commerce, as well as all Commercial Driver's License (CDL) drivers, both interstate and intrastate. Approximately 6.8 million CMV drivers operate in the United States:

- 4.0 million operate interstate
 - 3.4 million operate interstate and hold CDLs
- 2.8 million operate intrastate
 - 1.5 million operate intrastate and hold CDLs.

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 2018; Carrier and CMV Driver Counts - FMCSA, MCMIS, data snapshot as of December 27, 2019.

1-1 Registered Vehicles in the United States, 2015-2018

Year	All Vehicles	Large Trucks	Buses
2015	263,610,219	11,203,184	888,907
2016	268,799,083	11,498,561	976,161
2017	272,480,899	12,229,216	983,231
2018	273,602,100	13,233,910	992,152

Data Source: Federal Highway Administration (FHWA), *Highway Statistics* 2018, Table VM-1.

1-2 Million Vehicle Miles Traveled (VMT) in the United States, 2015-2018

		Large		
Year	All Vehicles	Single-Unit	Combination	Buses
2015	3,095,373	109,597	170,246	16,230
2016	3,174,408	113,338	174,557	16,350
2017	3,212,347	116,102	181,490	17,227
2018	3,240,327	120,699	184,165	18,303

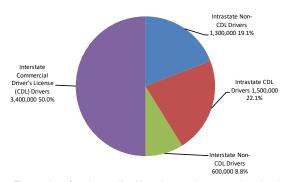
Data Source: Federal Highway Administration (FHWA), *Highway Statistics* 2018, Table VM-1.

1-3 Motorcoach Passenger Trips in the United States and Canada by Fleet Size, 2017

Motorcoach	Passenge	er Trips:	Average Passenger Trips per		
Fleet Size	Total Percent		Motorcoach	Carrier	
100 or more	398,085,000	69.3%	45,314	19,904,251	
50 to 99	31,373,100	5.5%	8,653	475,349	
25 to 49	56,269,900	9.8%	18,891	541,057	
10 to 24	33,736,400	5.9%	6,031	87,627	
1 to 9	55,087,900	9.6%	3,384	21,018	
Industry Total	574,552,300	100.0%	15,418	179,772	

Note: Percentages may not sum to 100 percent because of rounding. Data Source: Motorcoach Census: A Study of the Size and Activity of the Motorcoach Industry in the United States and Canada in 2017. Prepared for the American Bus Association Foundation by John Dunham & Associates, June 5, 2019. Available at www.buses.org/aba-foundation/research-summary/size-and-scope.

1-4 Commercial Motor Vehicle (CMV) Drivers Operating in the United States, 2019



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 27, 2019.

1-5 Active Motor Carriers by Type, 2015-2019

Туре	2015	2016	2017	2018	2019
Interstate Freight	521,248	497,349	515,772	541,231	555,567
Interstate Passenger	13,274	12,667	12,771	12,398	11,900
Intrastate Hazardous	16,628	28,033	30,450	33,091	35,075
Materials					

Total 551,150 538,049 558,993 586,720 602,542

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 28, 2015; December 30, 2016; December 29, 2017; December 28, 2018; and December 27, 2019.

1-6 Active Hazardous Materials (HM) Carriers, 2015-2019

Active HM Carriers	2015	2016	2017	2018	2019
Interstate	67,720	70,556	75,350	76,131	80,810
Interstate HM Carriers Meeting SMS Threshold Interstate HM Carriers with a	7,549	7,420	7,388	7,261	7,218
Safety Permit (HMSP)*	1,182	1,144	1,128	883	843
Intrastate	16,310	28,033	30,450	33,091	35,075
Intrastate HM Carriers Meeting SMS Threshold	2,656	2,484	2,449	2,444	2,557
Intrastate HMSP*	211	178	174	160	157
Total Active HMSP Carriers*	1,393	1,322	1,302	1,043	1,000
Total HM Carriers	84,030	98,589	105,800	109,222	115,885

*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 28, 2015; December 30, 2016; December 29, 2017; December 28,
2018; and December 27, 2019.

1-7 Household Goods Carriers and Brokers Operating in the United States, 2015-2019

Year	Active Household Goods Carriers	Household Goods Brokers Registered	Property Brokers Registered
2015	4,032	507	16,238
2016	4,205	580	17,184
2017	4,394	671	17,966
2018	4,486	711	19,443
2019	4,666	878	20,892

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 28, 2015; December 30, 2016; December 29, 2017; December 28, 2018; and December 27, 2019.

1-8 FMCSA-Regulated Carriers, 2015-2019

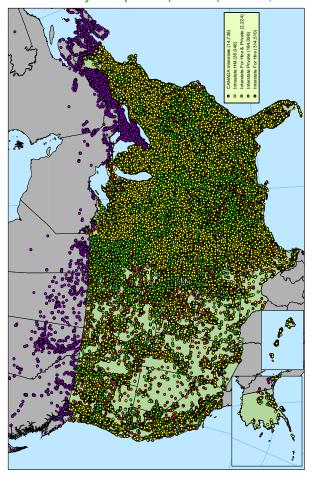
Motor Carrier Census Data	2015	2016	2017	2018	2019
Active Carriers with					
a USDOT Number	550,832	538,049	558,993	586,720	602,542
Power Units	4,407,776	4,381,344	4,517,800	4,650,605	4,788,339
CDL Drivers	3,325,461	3,331,966	3,556,342	3,615,957	3,634,989
Total Drivers	4,659,251	4,686,239	4,870,951	5,024,814	5,151,130

Notes: Compared to prior publications, total driver and CDL counts changed due to new filters being applied to exclude erroneous data in the motor carrier registration file. Only interstate carriers and intrastate HM carriers with recent activity are included in this table. FMCSA regulates all motor carriers that operate in interstate commerce, and certain requirements for motor carriers and commercial motor vehicles (CMVs) that transport HM in intrastate commerce. 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 28, 2015; December 30, 2016; December 29, 2017; December 28, 2018; and

December 27, 2019.

1-9 Carriers by Headquarters (Domicile) Location, 2019



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. FMCSA regulates all motor carriers that operate in interstate commerce, and certain requirements for motor carriers and commercial motor vehicles (CMVs) that transport HM in intrastate commerce. 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.

1-10 FMCSA-Regulated Carriers by Domicile, 2019

Country	Active Carriers with a USDOT Number	Power Units	CDL Drivers	Total Drivers
United States	582,155	4,644,403	3,504,552	5,000,756
Canada	14,736	111,258	107,227	121,054
Mexico	5,301	29,823	22,969	28,065
Certificate Carriers	201	654	539	643
Commercial Zone Carriers	4,944	27,803	21,168	26,017
Enterprise Carriers	1,003	6,435	5,831	6,406
Long Haul Carriers	64	935	899	934
Other Countries	350	2,855	241	1,255
All Domiciles	602,542	4,788,339	3,634,989	5,151,130

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. FMCSA regulates all motor carriers that operate in interstate commerce, and certain requirements for motor carriers and commercial motor vehicles (CMVs) that transport HM in intrastate commerce. 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 to points in the United States beyond the commercial zones. FMCSA stopped issuing these certificates in 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 or controlled carrier that is domiciled in the United States and operates in the United States, conducting cross-border transportation of international cargo that originates in or is destined for a foreign country. A Mexican long-haul carrier is a Mexico-domiciled carrier that has authority to engage in long-haul transportation in the United States as a motor carrier of property (except household goods and placardable HM) in interstate commerce in or beyond the border commercial zones. 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.

1-11 FMCSA-Regulated Carriers by Number of Power Units, 2015-2019

Power Units	2015	2016	2017	2018	2019
1 Power Unit	257,650	249,972	261,116	278,448	289,408
2 Power Units	95,997	93,596	95,979	99,221	101,044
3–10 Power Units	141,952	139,549	143,248	147,710	149,225
11–100 Power Units	47,099	47,117	48,515	50,075	51,211
>100 Power Units	4,182	4,176	4,282	4,396	4,572
No Power Units/Unreported	3,952	3,639	5,853	6,870	7,082
Total	550,832	538,049	558,993	586,720	602,542

Only interstate carriers and intrastate hazardous materials (HM) carriers with recent activity are included in this table. FMCSA regulates all motor carriers that operate in interstate commerce, and certain requirements for motor carriers and commercial motor vehicles (CMVs) that transport HM in intrastate commerce. Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshots as of December 28, 2015; December 30, 2016; December 29, 2017; December 28. 2018; and December 27. 2019.

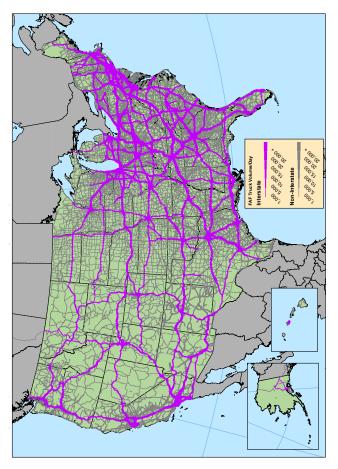
1-12 Transportation Services Index (TSI) Freight and Passenger Movement Estimates, 2000-2019



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 May 11, 2020.

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



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

Data Source: Federal Highway Administration, Office of Freight Management and Operations, FAF, Version V2016.09 as of April 2017

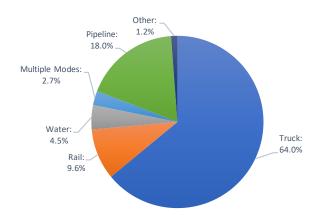
1-14 Weight of Freight Shipped within the United States by Mode (in Millions of Tons), 2014-2018

Mode	2014	2015	2016	2017	2018
Truck	11,257	11,391	11,595	11,599	11,920
Rail	1,891	1,797	1,704	1,750	1,782
Water	748	737	734	780	838
Air*	5	5	5	6	6
Multiple Modes & Mail	491	487	484	495	504
Pipeline	2,950	2,985	2,959	3,062	3,346
Other**	248	247	241	244	221
Total	17,590	17,649	17,722	17,936	18,617

^{*}Includes air and truck-air.

Note: Includes domestic trade and the domestic portion of imports and exports. Data Sources: U.S. Department of Transportation, Bureau of Transportation Statistics and Federal Highway Administration, Freight Analysis Framework, version 4.5.1, as of May 2020, available at http://faf.ornl.gov.

1-15 Percent of Total Weight of Freight Moved by Mode, 2018



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: U.S. Department of Transportation, Bureau of Transportation Statistics and Federal Highway Administration, Freight Analysis Framework, version 4.5.1, as of May 2020, available at http://faf.ornl.gov.

^{**}Includes other, unknown, and no domestic mode.

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 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.

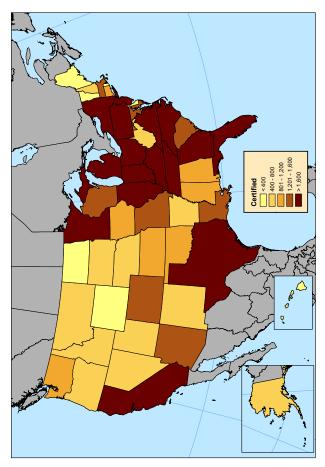
1-17 CMV Driver and Passenger Safety Belt Usage by Occupant Type, 2010, 2013, and 2016

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, 2020



Notes: In May 2020, there were 70,803 medical examiners certified on the National Registry of Certified Medical Examiners (National Registry). If a medical examiner has multiple offices in the same State, the examiner is counted once. However, if a medical examiner has a business office in two or more States, the examiner will be counted once in each State.

Data Source: FMCSA, National Registry, May 14, 2020. Available at https://nationalregistry.fmcsa.dot.gov.

2. Inspections and Violations

What is an Inspection?

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

2-1 Inspections Conducted by Federal and State Inspectors, 2015-2019

	2015	2016	2017	2018	2019
Inspections	3,382,980	3,401,103	3,457,130	3,515,590	3,453,157
State	3,252,724	3,280,166	3,334,891	3,389,991	3,346,894
Federal	130,256	120,937	122,239	125,599	106,263

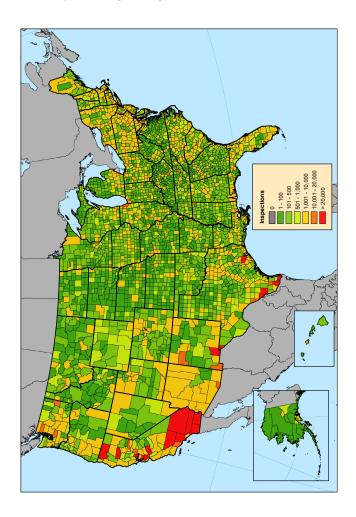
Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 31, 2020.

2-2 Safety Inspectors, Federal and State, 2015-2019

Inspector Type	2015	2016	2017	2018	2019
Safety Inspectors	15,741	14,830	14,182	13,837	13,562
State	15,204	14,321	13,657	13,318	13,059
Federal	537	509	525	519	503

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 31, 2020.

2-3 Inspections by County, 2019



Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 31, 2020.

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2-4 Inspection Out-of-Service (OOS) Rates, 2015-2019

Type of Inspection	2015	2016	2017	2018	2019
Driver Inspections*	3,264,016	3,283,556	3,344,956	3,402,588	3,338,428
With OOS Violation	158,814	161,111	170,843	161,245	170,955
Driver OOS Rate	4.9%	4.9%	5.1%	4.7%	5.1%
Vehicle Inspections**	2,321,376	2,337,164	2,382,217	2,410,620	2,377,415
With OOS Violation	471,393	466,839	493,581	501,713	491,283
Vehicle OOS Rate	20.3%	20.0%	20.7%	20.8%	20.7%
Hazmat Inspections***	191,730	201,309	200,067	202,054	202,263
With OOS Violation	7,373	7,930	7,935	8,437	9,135
Hazmat OOS Rate	3.9%	3.9%	4.0%	4.2%	4.5%

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

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

^{**}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.

2-5 Inspections by Level, 2015-2019

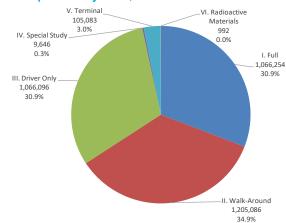
Inspection Level	2015	2016	2017	2018	2019
I. Full	1,060,023	1,013,253	1,039,143	1,104,839	1,066,254
With OOS Violation(s)*	267,193	252,221	266,480	278,182	266,050
II. Walk-Around	1,154,438	1,217,351	1,237,851	1,202,096	1,205,086
With OOS Violation(s)*	258,829	269,558	285,232	280,163	285,417
III. Driver Only	1,049,329	1,052,708	1,067,350	1,094,710	1,066,096
With OOS Violation(s)*	62,539	64,117	65,297	55,543	58,510
IV. Special Study	12,275	11,231	7,563	10,260	9,646
With OOS Violation(s)*	2,198	2,079	1,596	1,998	1,753
V. Terminal	106,689	106,316	104,611	102,742	105,083
With OOS Violation(s)*	6,318	6,184	5,837	5,721	5,825
VI. Radioactive Materials	226	244	612	943	992
With OOS Violation(s)*	2	11	13	5	8
Total	3,382,980	3,401,103	3,457,130	3,515,590	3,453,157

^{*}Out-of-service (OOS) violation numbers are based on inspections. For example, in 2019, there were 1,066,254 Level I inspections. Out of all the Level I inspections completed, 266,050 resulted in <u>at least one</u> OOS violation.

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

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 31, 2020.

2-6 Inspections by Level, 2019



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

2-7 Inspections by Carrier Fleet Size, 2015-2019

Carrier Fleet Size	2015	2016	2017	2018	2019
Very Small (1-6 Power Units)	1,003,154	1,070,118	1,096,781	1,096,865	1,079,711
Small (7-20 Power Units)	588,991	598,280	605,352	617,227	599,293
Medium (21-100 Power Units)	706,199	725,612	733,737	745,918	729,350
Large (>100 Power Units)	828,887	853,350	878,085	904,140	895,883
Unknown	255,749	153,743	143,175	151,440	148,920
Total	3,382,980	3,401,103	3,457,130	3,515,590	3,453,157

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 31, 2020.

2-8 Inspections by Carrier Operation, 2015-2019

Carrier Operation	2015	2016	2017	2018	2019
Interstate	2,784,667	2,777,374	2,808,415	2,793,251	2,751,524
Intrastate	598,313	623,729	648,715	722,339	701,633
Total	3,382,980	3,401,103	3,457,130	3,515,590	3,453,157

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 31, 2020.

2-9 Inspections by Gross Combination Weight Rating (GCWR), 2015-2019

GCWR	2015	2016	2017	2018	2019
<10,000 pounds	17,654	16,743	16,613	15,675	15,047
10,000 - 26,000 pounds	452,307	470,646	494,965	547,740	558,913
>26,000 pounds	2,617,938	2,735,246	2,816,227	2,828,792	2,760,106
Unknown	295,081	178,468	129,325	123,383	119,091
Total	3,382,980	3,401,103	3,457,130	3,515,590	3,453,157

Note: GCWRs are based on Inspection Reports as reported in MCMIS. Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 31, 2020.

2-10 Most Frequent Driver Violations in Inspections, 2019

Violation Code	Category	Violation Description	Number of Violations
392.2SLLS2	Traffic Enforcement	State/Local Laws - Speeding 6-10 miles per hour over the speed limit	71,484
392.2C	Traffic Enforcement	Failure to obey traffic control device	62,131
392.16	Seat Belt	Failing to use seat belt while operating a CMV	58,749
395.8	No Log/Log Not Current	Record of Duty Status violation (general/form and manner)	57,139
391.41AF	Medical Certificate	Operating a property-carrying vehicle without possessing a valid medical certificate	54,241
395.8E	No Log/Log Not Current	False report of drivers record of duty status	42,367
383.23A2	All Other Driver Violations	Operating a CMV without a CDL	40,907
392.2LV	Traffic Enforcement	Lane Restriction violation	36,493
392.2SLLS3	Traffic Enforcement	State/Local Laws - Speeding 11-14 miles per hour over the speed limit	32,016
395.8AELD	No Log/Log Not Current	ELD - No record of duty status (ELD Required)	29,769
391.41A	Medical Certificate	No medical certificate in driver's possession	26,890
395.8F01	No Log/Log Not Current	Driver's record of duty status not current	24,634
395.22H4	No Log/Log Not Current	Driver failed to maintain supply of blank driver's records of duty status graph-grids	19,780
392.82A1	All Other Driver Violations	Using a hand-held mobile telephone while operating a CMV	18,534
392.2SLLS4	Traffic Enforcement	State/Local Laws - Speeding 15 or more miles per hour over the speed limit	18,459
395.22H2	No Log/Log Not Current	Driver failing to maintain ELD instruction sheet	16,660
395.22G	All Other Driver Violations	Portable ELD not mounted in a fixed position and visible to driver	16,379
395.8ANONELD	No Log/Log Not Current	No record of duty status when one is required (ELD Not Required)	13,771
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	13,497
395.22H1	No Log/Log Not Current	Driver failing to maintain ELD user's manual	12,555

Notes: Total number of driver inspections in 2019: 3,338,428. Total number of driver violations in 2019: 950,677. Total number of driver out-of-service (OOS) violations in 2019: 199,426. Only the top 20 driver violations (based on frequency of occurrence) are listed in this table.

2-11 Most Frequent Vehicle Violations in Inspections, 2019

Violation Code	Category	Violation Description	Number of Violations
393.9	Lighting	Inoperable Required Lamp	457,721
396.17C	Periodic Inspection	Operating a CMV without proof of a periodic inspection	184,938
393.47E	Brakes, All Others	Clamp or Roto type brake out-of-adjustment	168,766
393.95A	Emergency Equipment	No/discharged/unsecured fire extinguisher	140,320
396.3A1	All Other Vehicle Defects	Inspection, repair and maintenance of parts & accessories	134,764
393.9TS	Lighting	Inoperative turn signal	120,235
393.11	Lighting	No or defective lighting devices or reflective material as required	111,346
393.75C	Tires	Tire-other tread depth less than 2/32 of inch measured in a major tread groove	109,087
396.5B	All Other Vehicle Defects	Oil and/or grease leak	99,807
393.53B	Brakes, All Others	CMV manufactured after 10/19/94 has an automatic airbrake adjustment system that fails to compensate for wear	91,023
393.78	Windshield	Windshield wipers inoperative/defective	90,226
393.75A3	Tires	Tire-flat and/or audible air leak	86,010
393.45B2	Lighting	Brake hose or tubing chafing and/or kinking	74,788
393.55E	Brakes, All Others	No or Defective ABS Malfunction Indicator Lamp for trailer manufactured after 03/01/1998	74,593
393.95F	Emergency Equipment	No / insufficient warning devices	70,035
396.3A1BOS	Brakes, All Others	Brakes Out of Service: The number of defective brakes is equal to or greater than 20 percent of the service brakes on the vehicle or combination	64,808
393.48A	Brakes, All Others	Inoperative/defective brakes	63,408
396.3A1B	Brakes, All Others	Brakes (general)	62,287
393.9H	Lighting	Inoperable head lamps	60,964
393.60C	Windshield	Damaged or discolored windshield	51,892

Notes: Total number of vehicle inspections in 2019: 2,377,415. Total number of vehicle violations in 2019: 3,700,578. Total number of vehicle OOS violations in 2018: 737,358. Only the top 20 vehicle violations (based on frequency of occurrence) are listed in this table.

2-12 Traffic Enforcement Inspections, 2015-2019

Activity Summary	2015	2016	2017	2018	2019
Traffic Enforcement Inspections	374,880	369,096	377,587	395,397	393,198
With Moving Violations With Drug & Alcohol	210,480	220,810	228,922	244,120	245,276
Violations	865	903	836	343	257
With Railroad Crossing Violations	283	218	223	210	254
With Non-specified State Law/ Miscellaneous Violations	175,008	159,217	159,791	163,105	159,117

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

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 31, 2020.

2-13 Traffic Enforcement Violations, 2015-2019

Activity Summary	2015	2016	2017	2018	2019
Traffic Enforcement Violations	419,654	409,143	416,963	435,817	432,129
Moving Violations	217,170	226,921	235,218	250,359	252,093
Drug & Alcohol Violations	1,020	1,016	955	412	308
Railroad Crossing Violations	284	219	224	211	255
Non-specified State Law/					
Miscellaneous Violations	201,180	180,987	180,566	184,835	179,473

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

3. Investigations

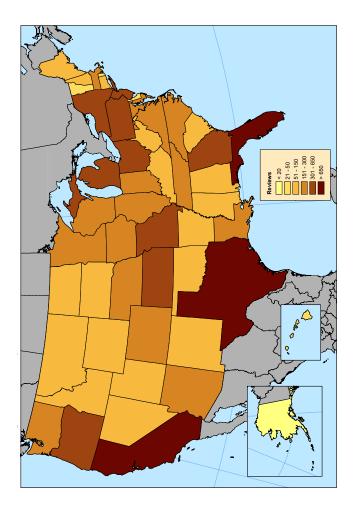
This chapter provides summarized data for the past 5 years on all types of investigations and reviews conducted on motor carriers that transport property or passengers in interstate or intrastate commerce. Investigations are conducted to investigate identified areas of non-compliance and safety concerns, 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, 2019



3-2 Investigations Conducted by Federal and State Investigators, 2015-2019

Investigations	2015	2016	2017	2018	2019
State	6,254	6,320	6,460	6,048	5,360
Federal	8,353	7,762	8,584	8,174	7,655
Total	14,607	14,082	15,044	14,222	13,015

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 31, 2020.

3-3 Interventions by Type, 2015-2019

Intervention Type	2015	2016	2017	2018	2019
Investigations	14,607	14,082	15,044	14,222	13,015
Onsite Comprehensive	5,645	6,080	6,440	5,883	5,341
Onsite Focused	8,237	6,907	7,675	7,418	5,931
Offsite	148	118	76	330	1,374
Cargo Tank Facility Reviews	99	82	131	92	82
Shipper Reviews	135	169	40	12	7
Non-Rated Reviews	360	742	697	502	292
Warning Letters	20,659	35,756	28,508	30,150	26,564
Terminal Reviews	549	532	426	349	343
Security Contact Reviews	87	5,799	15,296	20,439	24,913

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

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 31, 2020.

3-4 FMCSA-Regulated Carriers by Safety Rating, 2019

Safety Rating	Interstate Freight Carriers	Intrastate HM Carriers	Interstate Passenger Carriers	All Carriers
Conditional	14,101	552	266	14,919
Satisfactory	35,336	1,929	3,195	40,460
Unsatisfactory	1,173	116	31	1,320
No Rating	504,957	32,478	8,408	545,843
Total	555,567	35,075	11,900	602,542

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

3-5 Passenger Carrier, Hazardous Materials Carrier, and Household Goods Carrier Investigations, 2015-2019

Carriers by Vehicle Type	2015	2016	2017	2018	2019
Any Passenger Vehicles*	1,221	1,324	1,552	1,166	1,162
Motorcoaches	958	984	1,199	915	964
School Buses	155	168	186	176	315
Vans	276	302	348	281	160
Mini Buses	403	417	541	390	178
Limousines	126	140	116	100	219
Hazardous Materials	783	808	643	524	560
Household Goods	184	177	181	172	135

^{*}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 31, 2020.

3-6 Investigations by Carrier Fleet Size, 2015-2019

Carrier Fleet Size	2015	2016	2017	2018	2019
Very Small (1-6 Power Units)	8,515	8,181	8,986	8,477	7,500
Small (7-20 Power Units)	3,703	3,593	3,737	3,614	3,403
Medium (21-100 Power Units)	1,781	1,720	1,829	1,701	1,639
Large (>100 Power Units)	382	348	332	339	353
No Power Units/Unreported	226	240	160	91	120
Total	14,607	14,082	15,044	14,222	13,015

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

3-7 New Entrant Safety Audits, 2015-2019

Year	Safety Audits	Safety Audit Pass Rate
2015	39,235	84.9%
2016	37,548	88.6%
2017	36,214	89.8%
2018	37,348	89.3%
2019	40,221	88.2%

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 January 31, 2020.

3-8 Summary of Closed Enforcement Cases, 2015-2019

	2015	2016	2017	2018	2019
Subject Type	Cases	Cases	Cases	Cases	Cases
	(Amount	(Amount	(Amount	(Amount	(Amount
	Settled)	Settled)	Settled)	Settled)	Settled)
Broker	0	0	0	0	0
	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)
Cargo Tank	33	27	35	25	15
Facility	(\$766,490)	(\$732,110)	(\$938,720)	(\$593,650)	(\$118,830)
Carrier	4,478	4,309	4,617	4,125	3,498
	(\$31,796,971)	(\$32,493,395)	(\$33,288,715)	(\$29,116,929)	(\$22,453,405)
Drug Consortium	0	0	0	0	1
	(\$0)	(\$0)	(\$0)	(\$0)	(\$5,890)
Freight Forwarder	59	79	64	70	41
	(\$721,200)	(\$901,410)	(\$922,352)	(\$955,874)	(\$416,212)
HM Carrier	165	144	166	139	121
	(\$1,960,565)	(\$1,908,390)	(\$2,341,200)	(\$1,673,220)	(\$1,161,700)
HM Carrier	0	0	0	0	0
(Not Placarded)	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)
HM Carrier/	125	147	107	80	52
Shipper	(\$1,499,180)	(\$1,561,249)	(\$1,407,510)	(\$963,390)	(\$575,100)
Other	3	3	3	4	3
	(\$16,060)	(\$28,300)	(\$15,360)	(\$16,716)	(\$19,640)
Passenger	210	185	206	92	63
Carrier	(\$1,888,238)	(\$1,726,254)	(\$1,779,542)	(\$972,746)	(\$449,133)
Shipper	4	3	5	2	0
	(\$66,280)	(\$30,790)	(\$41,650)	(\$30,110)	(\$0)
Small Passenger	1	0	0	0	0
Carrier	(\$2,400)	(\$0)	(\$0)	(\$0)	(\$0)
Total	5,078	4,897	5,203	4,537	3,794
	(\$38,717,384)	(\$39,381,898)	(\$40,735,049)	(\$34,322,635)	(\$25,199,910)

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, (3) defaulted on the NOC, upon which a "Final Agency Order" is issued, or (4) found liable for violations charged in the NOC after adjudication.

Data Sources: FMCSA, Motor Carrier Management Information System (MCMIS), Enforcement Management Information System (EMIS), January 31, 2020.

4. CRASHES

In 2018, of the 33,654 fatal crashes on the Nation's roadways, 4,630 (13.8 percent) involved at least one large truck or bus. In addition, there were an estimated 6,701,000 nonfatal crashes, 555,000 (8.3 percent) of which involved at least one large truck or bus. For more information on large truck and bus crashes, please refer to the annual *Large Truck and Bus Crash Facts* publication available at http://www.fmcsa.dot.gov/safety/data-and-statistics/large-truck-and-bus-crash-facts.

Data Sources:

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

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

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

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

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

NHTSA Crash Severity Levels:

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

- 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.
- PDO crashes include police-reported crashes involving a motor vehicle in transport on a trafficway in which no one involved in the crash suffered any injuries.

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

Vehicles in Crashes:

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

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

4-1 Total Crashes by Vehicle Type, 2015-2018

	Number of Crashes Involving:							
Year	Large Trucks	Buses	Large Trucks and Buses	All Vehicle Types				
2015	415,000	67,000	480,000	6,296,000				
2016†*	434,000	67,000	496,000	6,821,000				
2017†*	450,000	66,000	512,000	6,454,000				
2018†*	499,000	65,000	560,000	6,735,000				

†Beginning with data for 2016, the National Highway Traffic Safety Administration (NHTSA) implemented changes to revise vehicle classification based on gross vehicle weight rating (GVWR), which reclassified 329 light pickup trucks as large trucks. Due to this methodology change, comparisons of the 2016 (and later) Fatality Analysis Reporting System (FARS) large truck data with prior years should be performed with caution.

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

Notes: Individual subtotals may not add to the totals due to the potential for double counting (e.g., crashes involving both a truck and a bus). A large truck is defined here as a truck with a 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 FARS and injury crash and property-damage-only (PDO) crash data from GES and CRSS. GES and CRSS are samples of motor vehicle crashes—the results generated are estimates rounded to the nearest one thousand; however, associated percentages and rates are based on the unrounded data.

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

4-2 Fatal Crashes by Vehicle Type, 2015-2018

	Number of Crashes Involving:						
Year	Large Trucks	Buses	Large Trucks and Buses	All Vehicle Types			
2015	3,622	259	3,864	32,539			
2016†	4,177	231	4,396	34,748			
2017†	4,366	231	4,586	34,560			
2018†	4,415	230	4,630	33,654			

†Beginning with data for 2016, the National Highway Traffic Safety Administration (NHTSA) implemented changes to revise vehicle classification based on gross vehicle weight rating (GVWR), which reclassified 329 light pickup trucks as large trucks. Due to this methodology change, comparisons of the 2016 (and later) Fatality Analysis Reporting System (FARS) large truck data with prior years should be performed with caution.

Notes: Individual subtotals may not add to the totals due to the potential for double counting (e.g., crashes involving both a truck and a bus). A large truck is defined here as a truck with a 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: NHTSA, FARS,

4-3 Injury Crashes by Vehicle Type, 2015-2018

	Number of Crashes Involving:						
Year	Large Trucks	Buses	Large Trucks and Buses	All Vehicle Types			
2015	83,000	14,000	97,000	1,715,000			
2016*	97,000	16,000	112,000	2,116,000			
2017*	102,000	15,000	116,000	1,889,000			
2018*	107,000	15,000	121,000	1,894,000			

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

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

Data Sources: NHTSA, GES and CRSS.

4-4 Property-Damage-Only (PDO) Crashes by Vehicle Type, 2015-2018

	Number of Crashes Involving:						
Year	Large Trucks	Buses	Large Trucks and Buses	All Vehicle Types			
2015	328,000	53,000	379,000	4,548,000			
2016*	333,000	51,000	380,000	4,670,000			
2017*	344,000	51,000	391,000	4,530,000			
2018*	344,000	51,000	391,000	4,530,000			

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

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

Data Sources: NHTSA, GES and CRSS,

4-5 Large Truck Fatal Crashes, 1975-2018

					Rates per 100 Million VMT		
Year	Fatal Crashes Involving Large Trucks	Large Truck Occupant Fatalities	Total Fatalities in Large Truck Crashes	Million VMT by Large Trucks	Fatal Crashes Involving Large Trucks	Fatalities in Large Truck Crashes	Large Trucks Registered
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
2013	3,554	695	3,981	275,017	1.29	1.45	10,597,356
2014	3,429	656	3,908	279,132	1.23	1.40	10,905,956
2015	3,622	665	4,094	279,844	1.29	1.46	11,203,184
2016†	4,177	815	4,678	287,895	1.45	1.62	11,498,561
2017†	4,366	878	4,905	297,593	1.47	1.65	12,229,216
2018†	4,415	885	4,951	304,864	1.45	1.62	13,233,910

†Beginning with data for 2016, the National Highway Traffic Safety Administration (NHTSA) implemented changes to revise vehicle classification based on gross vehicle weight rating (GVWR), which reclassified 329 light pickup trucks as large trucks. Due to this methodology change, comparisons of the 2016 (and later) Fatality Analysis Reporting System (FARS) large truck data with prior years should be performed with caution.

Notes: A large truck is defined here as a truck with a 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 2018; Fatal Crashes, Vehicles Involved, and Fatalities - NHTSA, FARS.

4-6 Large Truck Injury Crashes, 2015-2018

					Rates per 100 Million VMT		
Year	Injury Crashes Involving Large Trucks	Large Trucks Involved in Injury Crashes	Persons Injured in Large Truck Crashes	Million VMT by Large Trucks	Injury Crashes Involving Large Trucks	Persons Injured in Large Truck Crashes	Large Trucks Registered
2015	83,000	87,000	116,000	279,844	29.5	41.5	11,203,184
2016*	97,000	102,000	134,000	287,895	33.7	46.7	11,498,561
2017*	102,000	107,000	148,000	297,593	34.4	49.7	12,229,216
2018*	107,000	112,000	151,000	304,864	35.0	49.4	13,233,910

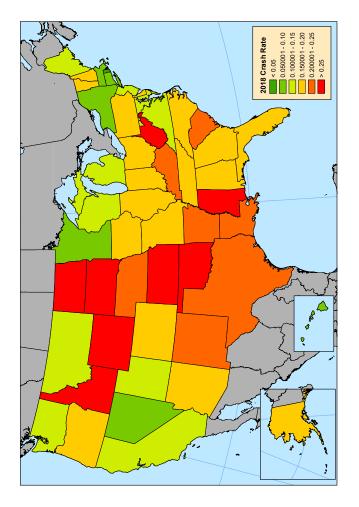
"Beginning with data for 2016, the National Highway Traffic Safety Administration (NHTSA) replaced the General Estimates System (GES) with the Crash Report Sampling System (CRSS). Comparisons of 2016 (and later) CRSS estimates with older GES estimates should be performed with caution. Notes: "Persons Injured" includes all nonfatally injured persons in injury and fatal crashes. A large truck is defined here as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds. The rates displayed in this table are based on unrounded GES and CRSS data. GES and CRSS are samples of motor vehicle crashes—the results generated are estimates rounded to the nearest one thousand; however, associated percentages and rates are based on the unrounded data. Data Sources: Vehicle Miles Traveled and Registered Vehicles: FHWA, Highway Statistics 2018. Injury Crashes, Vehicles Involved, and Persons Injured: NHTSA, GES and CRSS.

4-7 Large Truck and Bus Fatality Rates Per 100 Million Total Vehicle Miles Traveled (VMT) by State, 2017 and 2018

		2017			2018	
State	Fatalities	Million VMT	Fatality Rate	Fatalities	Million VMT	Fatality Rate
Alabama	100	70,677	0.14	127	71,167	0.18
Alaska	6	5,519	0.11	10	5,487	0.18
Arizona	103	65,070	0.16	100	66,145	0.15
Arkansas	90	36,389	0.25	89	36,675	0.24
California	406	343,862	0.12	375	348,796	0.11
Colorado	91	53,382	0.17	97	53,954	0.18
Connecticut	26	31,500	0.08	31	31,596	0.10
Delaware	17	10,467	0.16	19	10,179	0.19
D.C.	1	3,716	0.03	6	3,691	0.16
Florida	316	218,826	0.14	338	221,816	0.15
Georgia	239	124,733	0.19	198	131,456	0.15
Hawaii	10	10,749	0.09	8	10,887	0.07
Idaho	48	17,300	0.28	54	17,709	0.30
Illinois	159	108,011	0.15	174	107,954	0.16
Indiana	159	81,752	0.19	150	81,529	0.18
lowa	71	33,482	0.21	64	33,282	0.19
Kansas	95	32,258	0.29	86	32,190	0.27
Kentucky	93	49,239	0.19	109	49,544	0.22
Louisiana	103	49,221	0.21	108	50,045	0.22
Maine	27	14,738	0.18	18	14,784	0.12
Maryland	63	60,045	0.10	75	59,775	0.13
Massachusetts	30	62.660	0.05	38	66,772	0.06
Michigan	98	101,757	0.10	113	102,398	0.11
Minnesota	63	59,971	0.11	48	60,438	0.08
Mississippi	115	40,877	0.28	114	40,730	0.28
Missouri	118	75.911	0.16	137	76,595	0.18
Montana	27	12,645	0.21	17	12,700	0.13
Nebraska	42	21,002	0.20	52	20,975	0.25
Nevada	42	27,587	0.15	27	28,319	0.10
New Hampshire	13	13.681	0.10	24	13.776	0.17
New Jersey	59	77,509	0.08	99	77,539	0.13
New Mexico	73	29,680	0.25	68	27,288	0.25
New York	142	123.732	0.11	110	123,510	0.09
North Carolina	173	119,176	0.15	184	121,127	0.15
North Dakota	28	9.717	0.29	30	9.856	0.30
Ohio	176	119.598	0.15	186	114.474	0.16
Oklahoma	139	49,402	0.28	118	45,433	0.26
Oregon	56	36,753	0.15	71	36,848	0.19
Pennsylvania	176	101.614	0.17	157	102,109	0.15
Rhode Island	8	8,001	0.10	3	8,009	0.04
South Carolina	104	55,497	0.10	123	56,801	0.04
South Dakota	23	9,643	0.19	29	9,719	0.30
Tennessee	136	82,253	0.24	132	81,321	0.30
Texas	679	oz,zss 272,981	0.17	675	282,037	0.16
Utah	41	31,475	0.23	41	32.069	0.24
Vermont	10	7,424	0.13	12	7,346	0.13
Virginia	109	85,263	0.13	114	85,336	0.16
•	82		0.13	66		0.13
Washington West Virginia	82 55	61,420		54	62,367	
West Virginia		19,072	0.29		19,447	0.28
Wisconsin	92	65,324	0.14	77	65,885	0.12
Wyoming	19	9,785	0.19	29	10,438	0.28
National Totals	5,151	3,212,347	0.16	5,184	3,240,327	0.16

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 2018, 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, 2018



Data Sources: Vehicle Miles Traveled - FHWA, *Highway Statistics 2018*; Fatalities - National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

4-9 Vehicle Occupants Killed in Large Truck Crashes by Vehicle Type, 2015-2018

Occupant of:	2015	2016†	2017†	2018†
Passenger Car	1,495	1,629	1,741	1,673
Light Truck	1,264	1,364	1,469	1,524
Large Truck	665	815	878	885
Motorcycle	226	302	284	284
Bus	18	18	17	25
Other/Unknown	12	38	23	19
Total Vehicle Occupants	3,657	4,166	4,412	4,410

†Beginning with data for 2016, the National Highway Traffic Safety Administration (NHTSA) implemented changes to revise vehicle classification based on gross vehicle weight rating (GVWR), which reclassified 329 light pickup trucks as large trucks. Due to this methodology change, comparisons of the 2016 (and later) Fatality Analysis Reporting System (FARS) large truck data with prior years should be performed with caution.

Notes: A passenger car is defined here 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 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 GVWR greater than 10,000 pounds. A bus is defined as a vehicle with seats for at least nine people, including the driver

Data Source: NHTSA, FARS.

4-10 Nonmotorists Killed in Large Truck Crashes, 2015-2018

Nonmotorist Type	2015	2016†	2017†	2018†
Total Nonmotorist Fatalities	414	511	493	541
Pedestrian	337	397	391	442
Pedalcyclist	55	97	78	76
Other/Unknown Nonmotorist	22	17	24	23
Total Fatalities	4,094	4,678	4,905	4,951
Percent Nonmotorist Fatalities	10.1%	10.9%	10.1%	10.9%

†Beginning with data for 2016, the National Highway Traffic Safety Administration (NHTSA) implemented changes to revise vehicle classification based on gross vehicle weight rating (GVWR), which reclassified 329 light pickup trucks as large trucks. Due to this methodology change, comparisons of the 2016 (and later) Fatality Analysis Reporting System (FARS) large truck data with prior years should be performed with caution.

Notes: A large truck is defined here as a truck with a 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: NHTSA, FARS.

4-11 Nonmotorists Killed in Bus Crashes, 2015-2018

Nonmotorist Type	2015	2016	2017	2018
Total Nonmotorist Fatalities	90	68	54	63
Pedestrian	80	53	42	53
Pedalcyclist	9	12	11	7
Other/Unknown Nonmotorist	1	3	1	3
Total Fatalities	297	290	276	262
Percent Nonmotorist Fatalities	30.3%	23.4%	19.6%	24.0%

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

Data Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System.

4-12 Fatal Crashes by Work Zone, 2015-2018

	2015		201	16†	201	17†	201	18†
Crash Type:	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Large Truck Fatal Crashes	3,622	100.0%	4,177	100.0%	4,366	100.0%	4,415	100.0%
Work Zone	175	4.8%	194	4.6%	221	5.1%	203	4.6%
Not a Work Zone	3,447	95.2%	3,983	95.4%	4,145	94.9%	4,212	95.4%
All Fatal Crashes	32,539	100.0%	34,748	100.0%	34,560	100.0%	33,654	100.0%
Work Zone	653	2.0%	687	2.0%	720	2.1%	671	2.0%
Not a Work Zone	31,886	98.0%	34,061	98.0%	33,840	97.9%	32,983	98.0%
Percent of Work-Zone Fatal Crashes that Involved at Least One Large Truck	26.	8%	28.	2%	30.	7%	30.3%	
Percent of All Fatal Crashes that Involved at Least One Large Truck	11.	1%	12.	0%	12.6%		13.	1%

†Beginning with data for 2016, the National Highway Traffic Safety Administration (NHTSA) implemented changes to revise vehicle classification based on gross vehicle weight rating (GVWR), which reclassified 329 light pickup trucks as large trucks. Due to this methodology change, comparisons of the 2016 (and later) Fatality Analysis Reporting System (FARS) large truck data with prior years should be performed with caution.

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

Data Source: NHTSA FARS

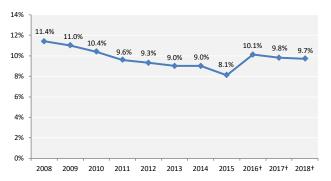
4-13 Truck Weight Rating for Large Trucks in Fatal Crashes, 2015-2018

Truck Weight Rating	2015	2016†	2017†	2018†
Class 3: 10,001 - 14,000 lb	144	478	592	619
Class 4: 14,001 - 16,000 lb	70	116	102	108
Class 5: 16,001 - 19,500 lb	85	112	151	170
Class 6: 19,501 - 26,000 lb	221	249	246	287
Class 7: 26,001 - 33,000 lb	257	225	271	226
Class 8: > 33,000 lb	3,191	3,082	3,319	3,307
Unknown/Other	106	300	123	145
Total	4,074	4,562	4,804	4,862

†Beginning with data for 2016, the National Highway Traffic Safety Administration (NHTSA) implemented changes to revise vehicle classification based on gross vehicle weight rating (GVWR), which reclassified 329 light pickup trucks as large trucks. Due to this methodology change, comparisons of the 2016 (and later) Fatality Analysis Reporting System (FARS) large truck data with prior years should be performed with caution.

Notes: A large truck is defined here as a truck with a GVWR greater than 10,000 pounds. Data Source: NHTSA. FARS.

4-14 Percentage of Large Truck Drivers in Fatal Crashes Not Wearing Any Type of Safety Belt, 2008-2018



†Beginning with data for 2016, the National Highway Traffic Safety Administration (NHTSA) implemented changes to revise vehicle classification based on gross vehicle weight rating (GVWR), which reclassified 329 light pickup trucks as large trucks. Due to this methodology change, comparisons of the 2016 (and later) Fatality Analysis Reporting System (FARS) large truck data with prior years should be performed with caution.

Note: A large truck is defined here as a truck with a GVWR greater than 10,000 pounds. Data Source: NHTSA, FARS.

4-15 Hazardous Materials (HM) Cargo Release in Crashes Involving Large Trucks with HM Placards, 2015-2019

		Numbe	r of Large	Trucks	
Cargo Release	2015	2016	2017	2018	2019*
Cargo Release: No	2,664	2,500	2,793	2,954	2,692
Cargo Release: Yes	483	553	605	664	625
Corrosives	43	41	41	50	36
Explosives	12	18	11	16	20
Flammable Liquid	264	295	284	345	287
Flammable Solids	6	6	7	7	9
Gases	64	65	66	57	76
Miscellaneous					
Dangerous Goods	27	37	51	61	58
Oxidizing Substances	8	5	2	12	2
Poison & Infectious					
Substances	4	4	8	7	2
Radioactive Material	1	0	3	0	1
Unknown	54	82	132	109	134
Cargo Release: Unknown	581	524	496	501	373
Total	3,728	3,577	3,894	4,119	3,690

^{*}Crash records reported to the Motor Carrier Management Information System (MCMIS) through December 31, 2019, 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 31, 2020.

4-16 Large Truck and Bus Drivers in Crashes, by Driver's License Class, 2015-2019

	Number of Vehicles Involved							
License Class	2015	2016	2017	2018	2019*			
Class A	111,600	115,049	118,007	124,808	119,033			
Class B	22,292	22,713	22,133	23,161	22,403			
Class C	11,364	11,429	12,871	15,057	14,449			
Class D	18,702	21,054	21,072	22,792	22,157			
Class M	160	185	177	116	83			
Unknown	7,685	7,662	8,232	8,860	8,950			
Total	171,803	178,092	182,492	194,794	187,075			

*Crash records reported to the Motor Carrier Management Information System (MCMIS) through December 31, 2019, 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 31, 2020.

4-17 Large Trucks in Crashes by Operation Classification, 2015-2019

Operation Classification	2015	2016	2017	2018	2019*
For-Hire	84,856	88,716	94,163	100,900	93,535
Private	26,393	27,441	27,375	29,439	27,597
Both For-Hire and Private	12,429	13,114	14,185	15,341	15,051
Neither For-Hire Nor Private	1,560	1,694	1,615	1,497	1,418
No USDOT Number	28,658	28,899	26,042	29,205	28,288
Total	153,896	159,864	163,380	176,382	165,889

^{*}Crash records reported to the Motor Carrier Management Information System (MCMIS) through December 31, 2019 are included in this table. States are expected to report crash data to FMCSA within 90 days of the crash. Data are considered preliminary for 22 months to allow for changes.

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

Data Sources: Crash data for all years: FMCSA, MCMIS, data snapshot as of January 31, 2020. Operation classification information: FMCSA, MCMIS, data snapshots as of December 28, 2015; December 30, 2016: December 29, 2017; December 28, 2018; and December 27, 2019.

4-18 Large Trucks in Crashes by Carrier Operation, 2015-2019

Carrier Operation	2015	2016	2017	2018	2019*
Interstate	107,576	111,478	115,725	123,385	114,682
Intrastate Hazardous Materials (HM)	1,446	1,499	1,731	1,858	1,918
Intrastate Non-HM**	16,216	17,977	19,865	21,666	20,645
Unknown Carrier Operation**	0	11	17	1,334	1,313
No USDOT Number	28,658	28,899	26,042	28,139	27,331
Total	153,896	159,864	163,380	176,382	165,889

^{*}Crash records reported to the Motor Carrier Management Information System (MCMIS) through December 31, 2019 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.

Data Sources: Crash data for all years: FMCSA, MCMIS, data snapshot as of January 31, 2020. Carrier operation information: FMCSA, MCMIS, data snapshots as of December 28, 2015; December 30, 2016; December 29, 2017; December 28, 2018; and December 27, 2019.

^{**}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.

4-19 Bus Fatal Crashes, 1975-2018

						s per ion VMT	
Year	Fatal Crashes Involving Buses	Bus Occupant Fatalities	Total Fatalities in Bus Crashes	Million VMT by Buses	Fatal Crashes Involving Buses	Fatalities in Bus Crashes	Buses Registered
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
2013	282	54	320	15,167	1.86	2.11	864,549
2014	235	44	283	15,999	1.47	1.77	872,027
2015	259	49	297	16,230	1.60	1.83	888,907
2016	231	64	290	16,350	1.41	1.77	976,161
2017	231	43	276	17,227	1.34	1.60	983,231
2018	230	43	262	18,303	1.26	1.43	992,152

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* 2018; Fatal Crashes, Vehicles Involved, and Fatalities - National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

4-20 Bus Injury Crashes, 2015-2018

					Rates per 100 Million VMT		
Year	Injury Crashes Involving Buses	Buses Involved in Injury Crashes	Persons Injured in Bus Crashes	Million VMT by Buses	Injury Crashes Involving Buses	Persons Injured in Bus Crashes	Buses Registered
2015	14,000	15,000	24,000	16,230	89.2	146.8	888,907
2016*	16,000	17,000	35,000	16,350	96.8	213.5	976,161
2017*	15,000	15,000	25,000	17,227	84.6	142.5	983,231
2018*	15,000	15,000	27,000	18,303	80.9	145.4	992,152

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

Notes: "Persons Injured" includes all nonfatally injured persons in injury and fatal crashes. A bus is defined here as a vehicle with seats for at least nine people, including the driver. The rates displayed in this table are based on unrounded GES and CRSS data. GES and CRSS are samples of motor vehicle crashes—the results generated are estimates rounded to the nearest one thousand; however, associated percentages and rates are based on the unrounded data. Data Sources: Vehicle Miles Traveled and Registered Vehicles: FHWA, Highway Statistics 2018. Injury Crashes, Vehicles Involved, and Persons Injured: NHTSA, GES and CRSS.

4-21 Fatal Crashes Involving Buses, by Type of Bus, 1975-2018

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
2013	114	44	82	28	10	4	282
2014	90	32	79	9	21	4	235
2015	99	34	92	14	18	5	259
2016	87	17	97	6	19	6	231
2017	72	13	97	31	16	4	231
2018	84	15	83	26	20	3	230

^{* &}quot;Van-based bus" was listed as a bus type for the first time in 2011.

Note: A bus is defined here 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, 2015-2018

Year	Fatal Crashes	Injury Crashes	Property-Damage-Only (PDO) Crashes	All Large Truck and Bus Crashes
2015	\$44 Billion	\$46 Billion	\$28 Billion	\$119 Billion
2016†*	\$51 Billion	\$53 Billion	\$29 Billion	\$132 Billion
2017†*	\$53 Billion	\$55 Billion	\$29 Billion	\$137 Billion
2018†*	\$53 Billion	\$57 Billion	\$33 Billion	\$143 Billion

†Beginning with data for 2016, the National Highway Traffic Safety Administration (NHTSA) implemented changes to revise vehicle classification based on gross vehicle weight rating (GVWR), which reclassified 329 light pickup trucks as large trucks. Due to this methodology change, comparisons of the 2016 (and later) Fatality Analysis Reporting System (FARS) large truck data with prior years should be performed with caution.

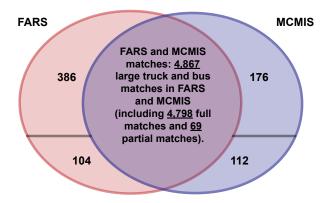
"Beginning with data for 2016, NHTSA replaced the General Estimates System (GES) with the Crash Report Sampling System (CRSS). Since the 2016 estimates of injury and PDO crash costs are based on CRSS data and pre-2016 estimates are based on GES data, comparisons of 2016 (and later) crash cost estimates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

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

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

4-23 Fatality Analysis Reporting System (FARS) and Motor Carrier Management Information System (MCMIS) Matching for Large Trucks and Buses in Fatal Crashes, 2018

Number	Category	Percentage
4,798	Large trucks and buses matched in FARS and MCMIS	85.0%
69	Large trucks and buses that were partially matched in FARS and MCMIS	1.2%
386	Large trucks and buses in FARS and not in MCMIS	6.8%
104	Large trucks and buses in FARS matched to large trucks and buses in non-fatal crashes in MCMIS	1.8%
176	Large trucks and buses in MCMIS and not in FARS	3.1%
112	Large trucks and buses in MCMIS matched to vehicles in FARS that were not large trucks or buses	2.0%
5,645	Total large trucks and buses in fatal crashes in FARS, MCMIS, or both	100.0%



†Beginning with data for 2016, the National Highway Traffic Safety Administration (NHTSA) implemented changes to revise vehicle classification based on gross vehicle weight rating (GVWR), which reclassified 329 light pickup trucks as large trucks. Due to this methodology change, comparisons of the 2016 (and later) Fatality Analysis Reporting System (FARS) large truck data with prior years should be performed with caution.

Notes: A large truck is defined in FARS as a truck with a 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: NHTSA, FARS, FMCSA, MCMIS, data snapshot as of January 31, 2020.

5. DATA QUALITY

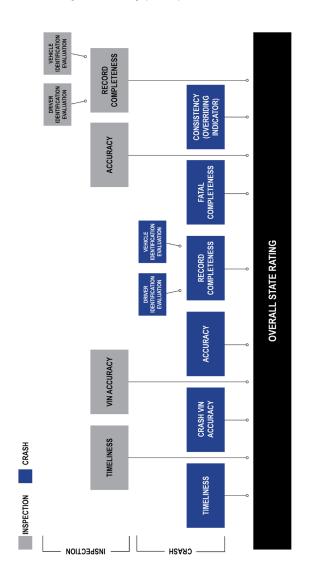
State Safety Data Quality (SSDQ) Methodology

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 nine performance measures (five crash and four inspection measures) and one overriding performance indicator (see 5-1). The SSDQ methodology has changed over the years to represent higher thresholds of data quality. Since 2004, additional performance measures have been added related to the completeness of driver and vehicle information contained in crash and inspection reports.

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

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

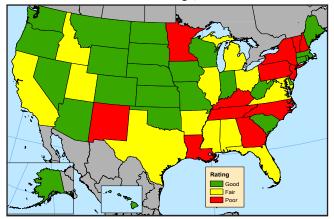
5-1 State Safety Data Quality (SSDQ) Performance Measures



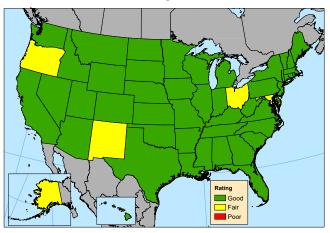
Data Source: FMCSA, Analysis & Information (A&I) Online, http://ai.fmcsa.dot.gov/DataQuality.

5-2 Overall State Safety Data Quality (SSDQ) Ratings, June 2004 and December 2018

Overall SSDQ Ratings, June 2004



Overall SSDQ Ratings, December 2019

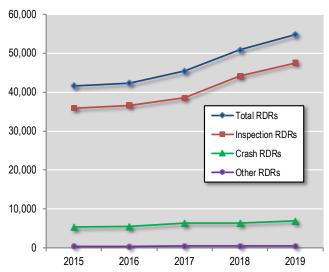


Note: Ratings depicted on this map are overall State ratings. Washington, D.C. is rated poor (red) in June, 2004 and good (green) in December, 2019.

Data Sources: June 2004 Ratings: FMCSA, Analysis & Information (A&I) Online, State

Data Sources: June 2004 Ratings: FMCSA, Analysis & Information (A&I) Online, State Safety Data Quality (SSDQ) as of June, 2004; December 2019 Ratings: FMCSA, A&I Online, SSDQ as of December, 2019. 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, 2014-2018



Data Source: FMCSA, DataQs, May 13, 2020 (based on submissions received in 2019).

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

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

6. GRANT PROGRAMS

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

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

6-1 FMCSA Grant Awards, Fiscal Year 2019

Grant Program	Total Awards		
MCSAP	\$299,735,500		
High Priority	\$43,340,000		
CDL Program Implementation	\$32,012,500		
CMVOST	\$2,000,000		
Total Grant Awards	\$377,088,000		

Motor Carrier Safety Assistance Program (MCSAP)

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

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

High Priority (HP) Grant

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

State Safety Data Quality (SSDQ)

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

Performance and Registration Information Systems Management (PRISM)

PRISM activities included within the HP grant program are focused on a cooperative Federal-State safety program developed to reduce commercial vehicle crashes. The performance of unsafe carriers is improved through a comprehensive system of identification, education, data gathering, safety monitoring, and enforcement. 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 a U.S. territory must work on highway traffic safety activities and demonstrate a capacity to work with highway traffic safety stakeholders.

Innovative Technology Deployment (ITD)

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

The goals of the ITD Program are to:

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

Commercial Driver's License Program Implementation (CDLPI) Grant

The CDLPI grant provides financial assistance to the States, to help them achieve compliance with the requirements of 49 CFR Parts 383 and 384. The grant also provides funding to other entities capable of executing national projects that aid States in their compliance efforts and that will improve the national Commercial Driver's License (CDL) program. The goal of the program is to reduce the number and severity of CMV crashes in the United States by ensuring that only qualified drivers receive and retain a CDL. This is achieved by focusing on the concept that for every driver, there is only one driving record and only one licensing document. commonly referred to as "One Driver-One License-One Record." States are required to conduct knowledge and skills testing before issuing a CDL, to maintain a complete and accurate driver history record for anyone who obtains a CDL, and to impose appropriate disqualifications against any driver who commits certain offenses. The Federal share of CDLPI grants in FY 2019 was 90 percent of the expenditures approved in the State or entity's application.

Commercial Motor Vehicle Operator Safety Training (CMVOST) Grant

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

7. AGENCY RESOURCES

FMCSA Web site

http://www.fmcsa.dot.gov

Analysis & Information (A&I) Online

http://ai.fmcsa.dot.gov

Compliance, Safety, Accountability (CSA)

https://csa.fmcsa.dot.gov

DataOs

http://datags.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/safetv/new-entrant-safetv-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-technologydeployment-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/nassgeneral-estimates-system

Crash Report Sampling System (CRSS)

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

Licensing & Insurance (L&I)

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

GLOSSARY AND LIST OF ACRONYMS

A&I Analysis & Information
ABS Antilock Braking System

BTS Bureau of Transportation Statistics

CDL Commercial Driver's License

CDLPI Commercial Driver's License Program Improvement

CMV Commercial Motor Vehicle (includes both large trucks and

buses)

CMVOST Commercial Motor Vehicle Operator Safety Training

CRSS Crash Report Sampling System

CSA Compliance, Safety, Accountability (CSA) is a major

FMCSA safety measurement and reporting initiative. Designed to replace the SafeStat program, CSA was previously known as "Comprehensive Safety Analysis," or

more commonly "CSA 2010."

CVISN Commercial Vehicle Information Systems and Networks

DataQs DataQs is an FMCSA system that allows users to request and

track reviews of Federal and State data issued by FMCSA.
The system automatically forwards a user's Request for Data
Review to the appropriate office for resolution and collects

updates and responses for current requests.

Domicile Refers to the headquarters location of a carrier.

EMIS Enforcement Management Information System

FAF Freight Analysis Framework

FARS Fatality Analysis Reporting System

FAST Act Fixing America's Surface Transportation Act, 2015

FHWA Federal Highway Administration

FMCSA Federal Motor Carrier Safety Administration
FMCSRs Federal Motor Carrier Safety Regulations

Form MCS-150 Motor Carrier Identification Report (Application for USDOT

Number)

GES General Estimates System

GCWR Gross Combination Weight Rating
GVWR Gross Vehicle Weight Rating

HM Hazardous Materials

HMRs Hazardous Materials Regulations

HMSP Hazardous Materials Carrier with a Safety Permit

HOS Hours of Service

ITD Innovative Technology Deployment (formerly CVISN)

L&I Licensing & Insurance

MCMIS The Motor Carrier Management Information System

(MCMIS) is an FMCSA system that contains crash, census, and inspection files created to monitor and develop safety standards for commercial motor vehicles operating in

interstate commerce.

MCSAP Motor Carrier Safety Assistance Program
MMUCC Model Minimum Uniform Crash Criteria

NHTSA National Highway Traffic Safety Administration

OOS Out of Service

PDO Property Damage Only

PRISM Performance and Registration Information Systems

Management

RDR Request for Data Review

SaDIP State Safety Data Improvement Program

SBUCMVD Seat Belt Usage by Commercial Motor Vehicle Drivers

SMS Safety Measurement System
SSDQ State Safety Data Quality
TSI Transportation Services Index
UCR Unified Carrier Registration
URS Unified Registration System

USDOT U.S. Department of Transportation

VIN Vehicle Identification Number

VMT Vehicle Miles Traveled
VSL Value of a Statistical Life

Visor Cards for Law Enforcement

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



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 commerical motor vehicle types, some of which require endorsements to operate. All five visor cards are available for download at: https://www.fmcsa.dot.gov/regulations/enforcement/visorcards-law-enforcement.

> found to be hazardous which require the used in the transportation of materials

oiological material or agent posing a threat to national security, including includes any quantity of chemical or motor vehicle to be placarded. This

bassengers including the driver, or is

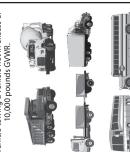
designed to transport 16 or more vehicles, that meets neither the Group C (Small Vehicle)

Commercial Driver's License (CDL) COMMERCIAL MOTOR VEHICLE GROUPS

vehicle towing a vehicle not in excess of 26,001 pounds or more, or any such Any single vehicle with a GVWR of Group B (Heavy Straight Vehicle) 0,000 pounds GVWR.

definition of Group A nor Group B, but is

Any single vehicle, or combination of





provided the gross vehicle weight rating (GVWR) of the vehicle(s) being towed is Any combination of vehicles with a (GCWR) of 26,001 pounds or more, gross combination weight rating Group A (Combination Vehicle) in excess of 10,000 pounds

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