

A close-up, low-angle shot of the front of a blue semi-truck. The truck's headlight is illuminated, casting a warm glow. The chrome grille is prominent on the right side of the frame. The background is blurred, showing other vehicles and city lights at night.

2022

Pocket Guide to Large Truck and Bus Statistics



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

To access a printable version of this guide, please visit:
www.fmcsa.dot.gov/safety/data-and-statistics/commercial-motor-vehicle-facts. For more information about this publication, contact:

E-mail: FMCSA_Host@dot.gov

Mail: Federal Motor Carrier Safety Administration
Office of Analysis, Research, and Technology
1200 New Jersey Avenue, SE
6th Floor
Washington, DC 20590

Information Service:
Phone: 1-800-832-5660

RRA-22-007
December 2022

2022

Pocket Guide to Large Truck and Bus Statistics

December 2022



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

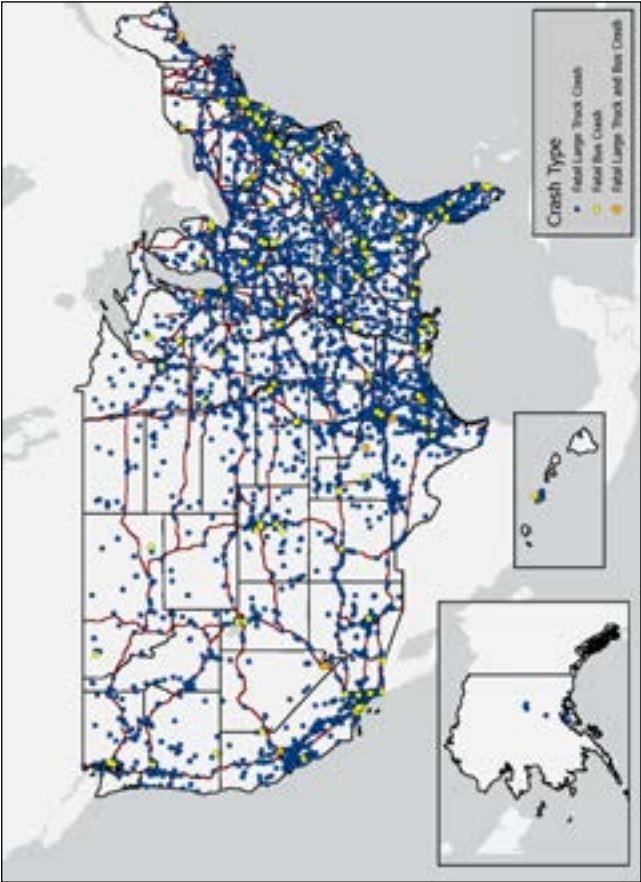
INTRODUCTION

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.

CONTENTS

The Motor Carrier Management Information System	6
Section 1. Overview: Large Trucks and Buses	7
Section 2. Inspections and Violations	17
Section 3. Investigations	25
Section 4. Crashes	31
Section 5. Data Quality	47
Section 6. Grant Programs	51
Section 7. Agency Resources	53
Glossary and List of Acronyms	54

LOCATIONS OF FATAL LARGE TRUCK AND BUS CRASHES, 2020



Note: In 2020, there were 4,588 fatal crashes involving large trucks and buses.
Data Sources: 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, registration, 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. A reportable crash is a fatal, injury, or towaway crash involving at least one large truck with a gross vehicle weight rating (GVWR) or gross combination weight rating (GCWR) greater than 10,000 pounds, any motor vehicle designed to transport nine or more people, including the driver, or any vehicle displaying a hazardous materials placard. 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 2020, among the 275,924,442 total registered vehicles in the United States, 10,500,105 were single-unit trucks (straight trucks), 2,979,277 were combination trucks (tractor-trailers), and 1,006,469 were buses. Also in 2020, there were 2,903.6 billion vehicle miles traveled (VMT) by all motor vehicles. Large trucks traveled 302.1 billion of those miles (10.4 percent of the total), and buses traveled 15.1 billion of those miles (0.5 percent of the total).

FMCSA regulates all registered commercial motor vehicles (CMVs) that operate interstate or that carry hazardous materials (HM). As of December 2021, 757,652 interstate motor carriers and intrastate HM motor carriers had recent activity operating in the United States:

- 484,970 were for-hire carriers
- 202,467 were private carriers
- 67,334 were both for-hire and private carriers
- 2,881 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 8.7 million CMV drivers operate in the United States:

- 5.4 million operate interstate
 - 3.5 million operate interstate and hold CDLs
- 3.3 million operate intrastate
 - 1.6 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 2020*; Carrier and CMV Driver Counts - FMCSA, MCMIS, data snapshot as of December 31, 2021.

1-1 Registered Vehicles in the United States, 2017-2020

Year	All Vehicles	Large Trucks	Buses
2017	272,480,899	12,229,216	983,231
2018	273,602,100	13,233,910	992,152
2019	276,491,174	13,085,643	995,033
2020	275,924,442	13,479,382	1,006,469

Data Source: Federal Highway Administration (FHWA), *Highway Statistics 2020*, Table VM-1.

1-2 Million Vehicle Miles Traveled (VMT) in the United States, 2017-2020

Year	All Vehicles	Large Trucks		Buses
		Single-Unit	Combination	
2017	3,212,347	116,102	181,490	17,227
2018	3,240,327	120,699	184,165	18,303
2019	3,261,772	124,746	175,305	17,980
2020	2,903,622	124,880	177,261	15,104

Data Source: Federal Highway Administration (FHWA), *Highway Statistics 2020*, Table VM-1.

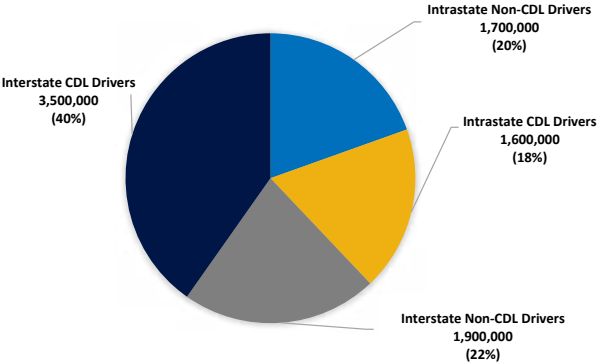
1-3 Motorcoach Passenger Trips in the United States and Canada by Fleet Size, 2020

Motorcoach Fleet Size	Passenger Trips:		Average Passenger Trips per:	
	Total	Percent	Motorcoach	Carrier
100 or more	70,004,300	56.2%	5,894	2,187,635
50 to 99	17,535,700	14.1%	4,429	278,344
25 to 49	9,837,600	7.9%	2,327	82,669
10 to 24	19,394,100	15.6%	3,430	51,580
1 to 9	7,805,700	6.3%	1,518	6,084
Industry Total	124,577,400	100.0%	4,037	66,512

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 2020*. Prepared for the American Bus Association Foundation by John Dunham & Associates, January 7, 2022. Available at https://www.buses.org/assets/images/uploads/pdf/Motorcoach_Census_Survey_2020.pdf.

1-4 Commercial Motor Vehicle (CMV) Drivers Operating in the United States, 2021



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 31, 2021.

1-5 Active Motor Carriers by Type, 2017-2021

Type	2017	2018	2019	2020	2021
Interstate Freight	515,772	541,231	555,567	590,249	708,941
Interstate Passenger	12,771	12,398	11,900	10,846	10,268
Intrastate Hazardous Materials	30,450	33,091	35,075	36,626	38,443
Total	558,993	586,720	602,542	637,721	757,652

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 USDOT number of any carrier that fails to comply with the biennial update requirement.

Data Source: FMCSA, MCMIS, data snapshots as of December 29, 2017; December 28, 2018; December 27, 2019; December 18, 2020; and December 31, 2021.

1-6 Active Hazardous Materials (HM) Carriers, 2017-2021

Active HM Carriers	2017	2018	2019	2020	2021
Interstate	75,350	76,131	80,810	84,226	91,397
Interstate HM Carriers Meeting SMS Threshold	7,388	7,261	7,218	6,563	6,613
Interstate HM Carriers with a Safety Permit (HMSP)*	1,128	883	843	827	799
Intrastate	30,843	33,433	35,404	36,919	38,679
Intrastate HM Carriers Meeting SMS Threshold	2,842	2,786	2,886	2,569	2,421
Intrastate HMSP*	174	161	158	142	133
Total Active HMSP Carriers*	1,302	1,044	1,001	969	932
Total HM Carriers	106,193	109,564	116,214	121,145	130,076

*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 29, 2017; December 28, 2018; December 27, 2019; December 18, 2020; and December 31, 2021.

1-7 Household Goods Carriers and Brokers Operating in the United States, 2017-2021

Year	Active Household Goods Carriers	Household Goods Brokers Registered	Property Brokers Registered
2017	4,394	671	17,966
2018	4,486	711	19,443
2019	4,666	878	20,892
2020	4,845	956	23,182
2021	5,273	1,104	28,080

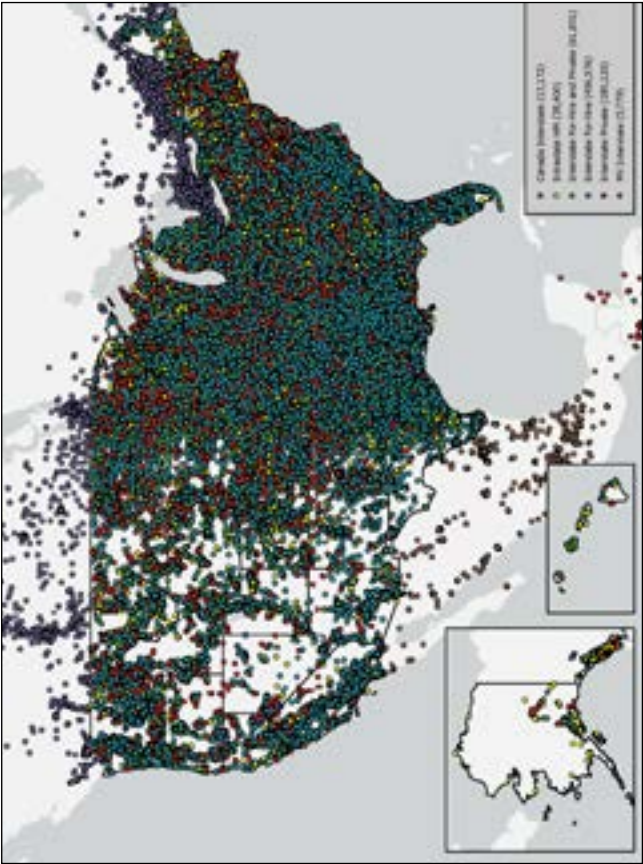
Note: A broker is an individual, partnership, or corporation that receives payment for arranging the transportation of property or household goods belonging to others by using an authorized motor carrier.
 Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshots as of December 29, 2017; December 28, 2018; December 27, 2019; December 18, 2020; and December 31, 2021.

1-8 FMCSA-Regulated Carriers, 2017-2021

Motor Carrier Census Data	2017	2018	2019	2020	2021
Active Carriers with a USDOT Number	558,993	586,720	602,542	637,721	757,652
Power Units	4,517,800	4,650,605	4,788,339	4,899,374	5,132,101
CDL Drivers	3,556,342	3,615,957	3,634,989	3,765,320	4,167,277
Total Drivers	4,870,951	5,024,814	5,151,130	5,310,094	5,646,722

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 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.
 Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshots as of December 29, 2017; December 28, 2018; December 27, 2019; December 18, 2020; and December 31, 2021.

1-9 Carriers by Headquarters (Domicile) Location, 2021



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.

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of December 31, 2021.

1-10 FMCSA-Regulated Carriers by Domicile, 2021

Country	Active Carriers with a USDOT Number	Power Units	CDL Drivers	Total Drivers
United States	738,383	4,987,272	4,036,130	5,496,159
Canada	13,172	108,696	107,165	118,750
Mexico	5,779	33,358	23,766	30,636
Certificate Carriers	158	685	469	595
Commercial Zone Carriers	5,467	31,115	22,278	28,424
Enterprise Carriers	1,037	7,715	6,998	7,516
Long Haul Carriers	72	1,222	775	1,280
Other Countries	318	2,775	216	1,177
All Domiciles	757,652	5,132,101	4,167,277	5,646,722

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 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 county. 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 the border commercial zones. The authority does not allow point-to-point transportation service within the United States for goods other than international cargo. Reports include activity for all U.S. operations from the date the carrier was first allowed to operate up through the date of the current data snapshot.

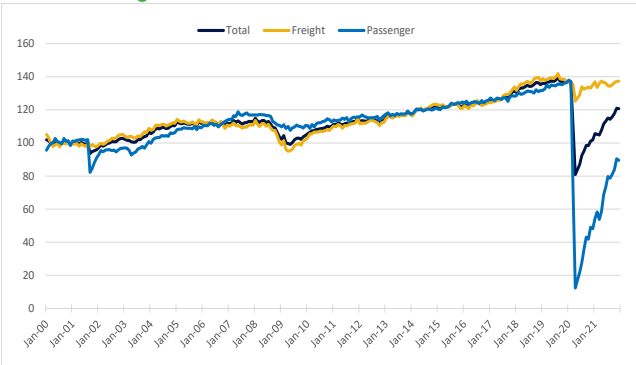
Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of December 31, 2021.

1-11 FMCSA-Regulated Carriers by Number of Power Units, 2017-2021

Power Units	2017	2018	2019	2020	2021
1 Power Unit	261,116	278,448	289,408	317,791	407,872
2 Power Units	95,979	99,221	101,044	104,620	117,742
3–10 Power Units	143,248	147,710	149,225	150,545	161,525
11–100 Power Units	48,515	50,075	51,211	52,121	54,355
>100 Power Units	4,282	4,396	4,572	4,604	4,753
No Power Units/Unreported	5,853	6,870	7,082	8,040	11,405
Total	558,993	586,720	602,542	637,721	757,652

Notes: 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 29, 2017; December 28, 2018; December 27, 2019; December 18, 2020; and December 31, 2021.

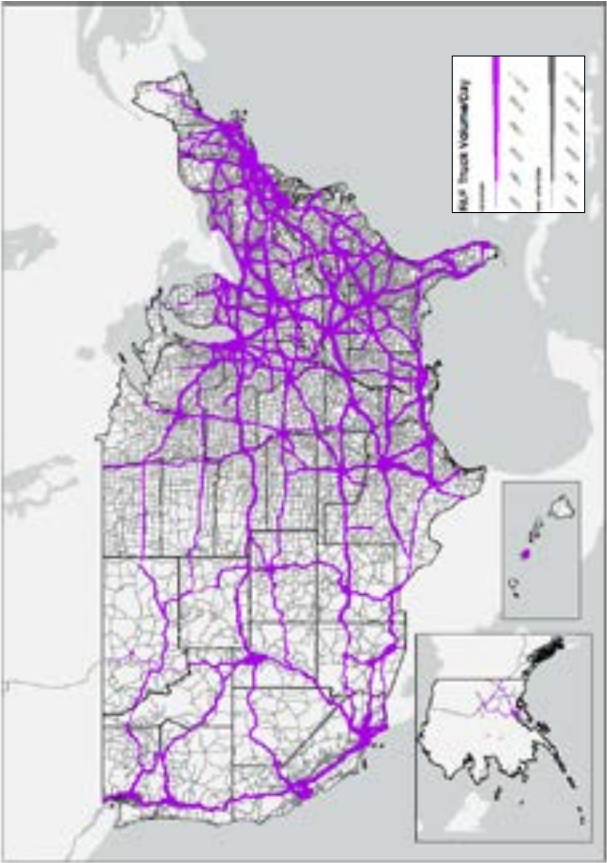
1-12 Transportation Services Index (TSI) Freight and Passenger Movement Estimates, 2000-2021



Notes: The Transportation Services Index (TSI), created by the 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, Bureau of Transportation Statistics, Transportation Services Index, available at <https://data.bts.gov/Research-and-Statistics/Transportation-ServicesIndex-and-Seasonally-Adjus/bw6n-ddqk> as of August 17, 2022.

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



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

Data Source: Federal Highway Administration, 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), 2017-2020

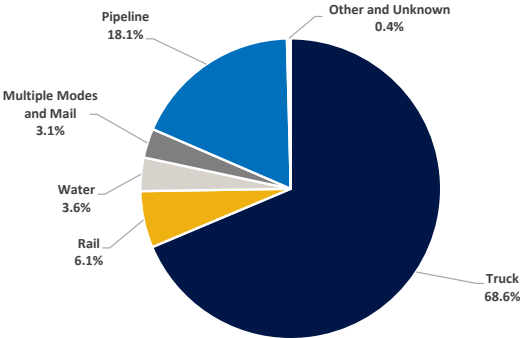
Mode	2017	2018	2019	2020
Truck	11,848	12,016	11,988	11,676
Rail	1,202	1,208	1,165	1,036
Water	662	677	660	612
Air*	2	2	2	2
Multiple Modes and Mail	536	549	538	535
Pipeline	3,133	3,399	3,437	3,078
Other and Unknown	94	93	89	69
Total	17,478	17,943	17,879	17,009

*Includes air and truck-air.

Notes: Data do not include imports and exports that pass through the United States from a foreign origin to a foreign destination by any mode. Data in this version are not comparable to similar data in previous years because of updates to the Freight Analysis Framework. All truck, rail, water, and pipeline movements that involve more than one mode, including exports and imports that change mode at international gateways, are included in Multiple Modes and Mail to avoid double counting. As a consequence, Rail and Water totals in this table are less than other published sources.

Data Source: USDOT, Bureau of Transportation Statistics and Federal Highway Administration, Freight Analysis Framework, version 5.3, 2022, <https://www.bts.gov/faf>.

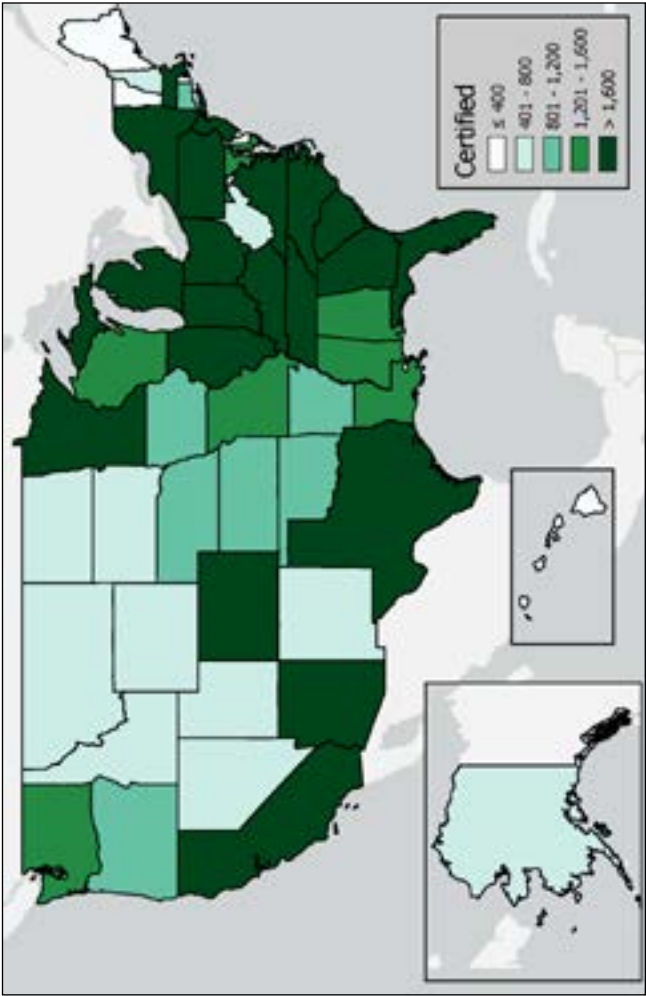
1-15 Percent of Total Weight of Freight Moved by Mode, 2020



Notes: Data do not include imports and exports that pass through the United States from a foreign origin to a foreign destination by any mode. Data in this version are not comparable to similar data in previous years because of updates to the Freight Analysis Framework. All truck, rail, water, and pipeline movements that involve more than one mode, including exports and imports that change mode at international gateways, are included in Multiple Modes and Mail to avoid double counting. Air accounts for 0.01 percent of the total domestic freight and is excluded from this chart. Percentages may not sum to 100 percent due to rounding.

Data Source: USDOT, Bureau of Transportation Statistics and Federal Highway Administration, Freight Analysis Framework, version 5.3, 2022, <https://www.bts.gov/faf>.

1-16 Number of Medical Examiners Certified by State, 2022



Notes: In April 2022, there were 84,446 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, August 1, 2022. 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, 2017-2021

	2017	2018	2019	2020	2021
Inspections	3,457,130	3,515,954	3,471,201	2,582,023	2,876,502
State	3,334,891	3,390,262	3,361,853	2,556,227	2,830,203
Federal	122,239	125,692	109,348	25,796	46,299

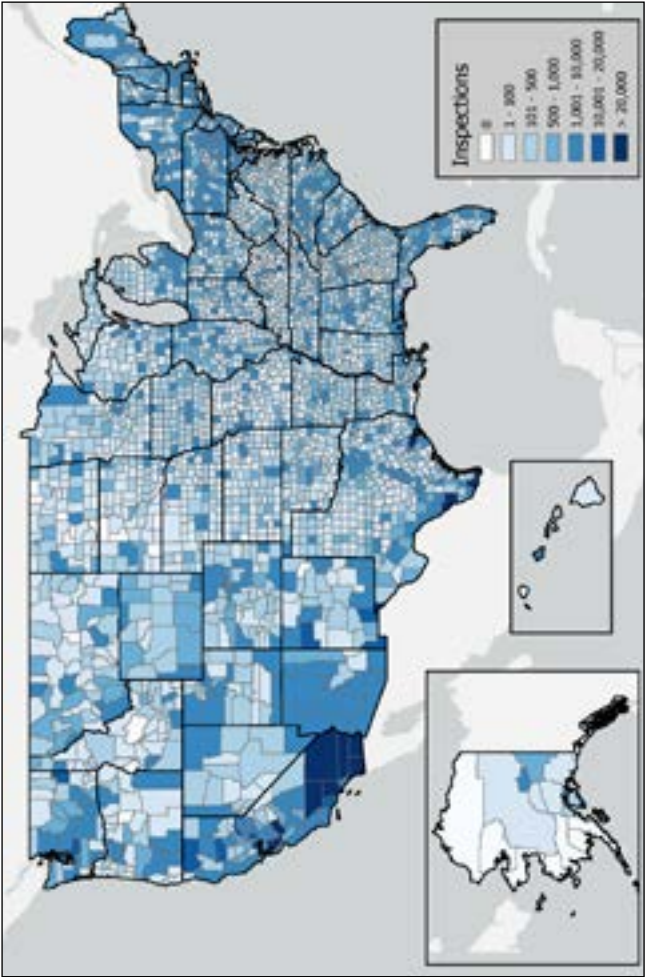
Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 28, 2022.

2-2 Safety Inspectors, Federal and State, 2017-2021

Inspector Type	2017	2018	2019	2020	2021
Safety Inspectors	14,182	13,839	13,597	12,782	12,718
State	13,657	13,320	13,089	12,421	12,250
Federal	525	519	508	361	468

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 28, 2022.

2-3 Inspections by County, 2021



Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 28, 2022.

2-4 Inspection Out-of-Service (OOS) Rates, 2017-2021

Type of Inspection	2017	2018	2019	2020	2021
Driver Inspections*	3,344,956	3,402,946	3,353,735	2,460,580	2,766,086
With OOS Violation	170,843	161,203	170,874	129,442	170,728
Driver OOS Rate	5.1%	4.7%	5.1%	5.3%	6.20%
Vehicle Inspections**	2,382,217	2,410,876	2,384,413	1,759,961	1,962,737
With OOS Violation	493,581	501,729	492,129	364,598	420,136
Vehicle OOS Rate	20.7%	20.8%	20.6%	20.7%	21.4%
Hazmat Inspections***	200,067	202,077	202,912	149,805	168,037
With OOS Violation	7,935	8,437	9,150	6,557	7,570
Hazmat OOS Rate	4.0%	4.2%	4.5%	4.4%	4.5%

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

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

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

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

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 28, 2022.

2-5 Inspections by Level, 2017-2021

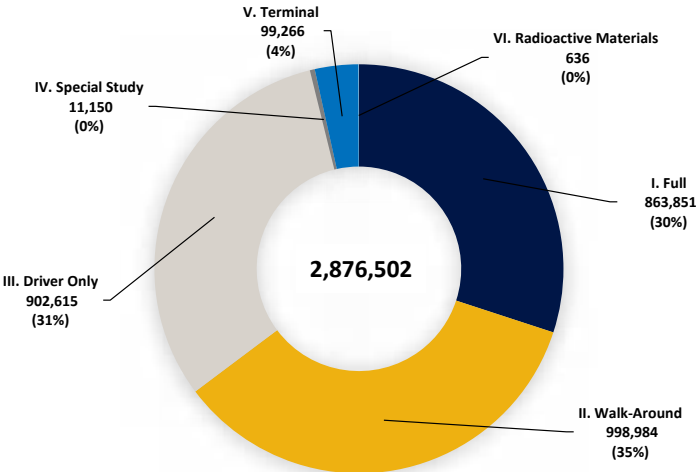
Inspection Level	2017	2018	2019	2020	2021
I. Full	1,039,143	1,104,938	1,069,471	771,662	863,851
With OOS Violation(s)*	266,480	278,174	266,595	191,625	225,648
II. Walk-Around	1,237,851	1,202,248	1,208,460	889,351	998,984
With OOS Violation(s)*	285,232	280,165	285,658	217,833	254,818
III. Driver Only	1,067,350	1,094,817	1,074,811	798,973	902,615
With OOS Violation(s)*	65,297	55,528	58,498	43,772	59,108
IV. Special Study	7,563	10,261	10,493	11,346	11,150
With OOS Violation(s)*	1,596	1,998	1,753	1,842	1,810
V. Terminal	104,611	102,747	105,489	98,354	99,266
With OOS Violation(s)*	5,837	5,722	5,862	4,516	4,724
VI. Radioactive Materials	612	943	993	594	636
With OOS Violation(s)*	13	5	8	5	7
Total	3,457,130	3,515,954	3,469,717	2,570,280	2,876,502

*Out-of-service (OOS) violation numbers are based on inspections. For example, in 2021, there were 863,851 Level I inspections completed, 225,648 resulted in at least one OOS violation.

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

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 28, 2022.

2-6 Inspections by Level, 2021



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

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 28, 2022.

2-7 Inspections by Carrier Fleet Size, 2017-2021

Carrier Fleet Size	2017	2018	2019	2020	2021
Very Small (1-6 Power Units)	1,096,781	1,118,490	1,090,273	823,135	962,396
Small (7-20 Power Units)	605,352	614,298	610,541	441,460	495,156
Medium (21-100 Power Units)	733,737	737,394	728,794	531,871	579,750
Large (>100 Power Units)	878,085	895,320	891,735	679,554	740,246
Unknown	143,175	150,448	148,374	94,260	98,954
Total	3,457,130	3,515,950	3,469,717	2,570,280	2,876,502

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 28, 2022.

2-8 Inspections by Carrier Operation, 2017-2021

Carrier Operation	2017	2018	2019	2020	2021
Interstate	2,808,415	2,794,424	2,767,629	2,038,567	2,315,500
Intrastate	648,715	721,530	703,572	543,456	561,002
Total	3,457,130	3,515,954	3,471,201	2,582,023	2,876,502

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 28, 2022.

2-9 Inspections by Gross Combination Weight Rating (GCWR), 2017-2021

GCWR	2017	2018	2019	2020	2021
<10,000 pounds	16,613	15,657	15,090	9,290	9,272
10,000 - 26,000 pounds	494,965	547,994	561,457	451,550	499,487
>26,000 pounds	2,816,227	2,829,302	2,776,960	2,016,607	2,234,710
Unknown	129,325	123,001	117,694	104,576	133,033
Total	3,457,130	3,515,954	3,471,201	2,582,023	2,876,502

Note: GCWRs are based on Inspection Reports as reported in Motor Carrier Management Information System (MCMIS).

Data Source: FMCSA, MCMIS, data snapshot as of January 28, 2022.

2-10 Most Frequent Driver Violations in Inspections, 2021

Violation Code	Category	Violation Description	Number of Violations
392.2-SLLS2	Speeding	State/Local Laws - Speeding 6-10 miles per hour over the speed limit.	63,950
392.2C	Failure To Obey Traffic Control Device	Failure to obey traffic control device	59,188
395.8(e)	False Log Book	False report of drivers record of duty status	53,313
392.16	Seat Belt	Failing to use seat belt while operating a CMV	50,297
383.23(a)(2)	All Other Driver Violations	Operating a CMV without a CDL	42,005
392.2LV	All Other Driver Violations	Lane Restriction violation	37,587
395.8A-ELD	No Log Book, Log Not Current, General Log Violations	Electronic Logging Devices (ELD) - No record of duty status (ELD Required)	36,901
395.8	Log Book Form And Manner	Record of Duty Status violation (general/form and manner)	35,759
391.41(a)	Medical Certificate	No medical certificate in driver's possession	34,640
392.2-SLLS3	Speeding	State/Local Laws - Speeding 11-14 miles per hour over the speed limit.	30,280
391.41(a)(1)	Medical Certificate	Operating a property-carrying vehicle without possessing a valid medical certificate - no previous history.	28,892
395.24D	All Other Hours-Of-Service	ELD cannot transfer ELD records electronically	23,844
392.2-SLLS4	Speeding	State/Local Laws - Speeding 15 or more miles per hour over the speed limit.	21,356
395.22H4	All Other Hours-Of-Service	Driver failed to maintain supply of blank drivers records of duty status graph-grids	21,088
395.8F01	No Log Book, Log Not Current, General Log Violations	Drivers record of duty status not current	20,321
392.82(a)1	All Other Driver Violations	Using a hand-held mobile telephone while operating a CMV	17,861
395.24C2III	Log Book Form And Manner	Driver failed to manually add shipping document number	17,420
395.22H2	All Other Hours-Of-Service	Driver failing to maintain ELD instruction sheet	17,250
395.22G	All Other Hours-Of-Service	Portable ELD not mounted in a fixed position and visible to driver	16,403
395.30B1	Log Book Form And Manner	Driver failed to certify the accuracy of the information gathered by the ELD	16,368

Notes: Total number of driver inspections in 2021: 2,766,086. Total number of driver violations in 2021: 932,495. Total number of driver out-of-service (OOS) violations in 2021: 203,273. Only the top 20 driver violations (based on frequency of occurrence) are listed in this table.

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 28, 2022.

2-11 Most Frequent Vehicle Violations in Inspections, 2021

Violation Code	Category	Violation Description	Number of Violations
393.9	Lighting	Inoperable Required Lamp	350,886
396.17(c)	Periodic Inspection	Operating a CMV without proof of a periodic inspection	166,281
393.47(e)	Brakes, Out Of Adjustment	Clamp or Roto type brake out-of-adjustment	128,376
393.95(a)	Emergency Equipment	No/discharged/unsecured fire extinguisher	116,239
393.9TS	Lighting	Inoperative turn signal	106,265
396.3(a)(1)	All Other Vehicle Defects	Inspection, repair and maintenance of parts and accessories	94,506
393.75(a)(3)	Tires	Tire-flat and/or audible air leak	88,784
393.11	Lighting	No or defective lighting devices or reflective material as required	76,107
393.53(b)	Brakes, All Others	CMV manufactured after 10/19/94 has an automatic airbrake adjustment system that fails to compensate for wear	75,109
393.78	Windshield	Windshield wipers inoperative/defective	74,874
393.75(c)	Tires	Tire-other tread depth less than 2/32 of inch measured in a major tread groove	68,238
390.21T(b)	All Other Vehicle Defects	Carrier name and/or USDOT Number not displayed as required	65,903
396.5(b)	All Other Vehicle Defects	Oil and/or grease leak	64,976
393.95(f)	Emergency Equipment	No / insufficient warning devices	58,896
393.9H	Lighting	Inoperable head lamps	55,223
393.45(b)(2)	Brakes, All Others	Brake hose or tubing chafing and/or kinking	53,048
396.3(a)1BOS	Brakes, Out Of Adjustment	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	51,855
393.48(a)	Brakes, All Others	Inoperative/defective brakes	51,493
393.55(e)	Brakes, All Others	No or Defective ABS Malfunction Indicator Lamp for trailer manufactured after 03/01/1998	48,889
393.9(a)	Lighting	Inoperative Brake Lamps	41,953

Notes: Total number of vehicle inspections in 2021: 1,962,737. Total number of vehicle violations in 2021: 2,982,559. Total number of vehicle out-of-service (OOS) violations in 2021: 629,170. Only the top 20 vehicle violations (based on frequency of occurrence) are listed in this table.

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 28, 2022.

2-12 Traffic Enforcement Inspections, 2017-2021

Activity Summary	2017	2018	2019	2020	2021
Total Number of Traffic Enforcement Inspections	552,810	567,501	590,860	492,542	549,605
Number of Traffic Enforcement Inspections (Driver observed)	328,866	350,102	353,637	293,924	334,244
With Moving Violations	325,186	345,943	349,419	290,430	327,961
With Drug & Alcohol Violations	4,679	5,365	5,492	4,277	5,665
With Railroad Crossing Violations	223	210	252	183	169
Number of Traffic Enforcement Inspections (Vehicle observed)	223,944	217,399	237,223	198,618	215,361

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 28, 2022.

2-13 Traffic Enforcement Violations, 2017-2021

Activity Summary	2017	2018	2019	2020	2021
Total Number of Traffic Enforcement Violations	791,626	805,526	855,046	726,478	822,667
Number of Traffic Enforcement Violations (Driver observed)	354,488	378,827	384,204	319,020	364,610
Moving Violations	348,691	372,043	377,131	313,280	354,844
Drug & Alcohol Violations	5,573	6,573	6,820	5,186	6,867
Railroad Crossing Violations	224	211	253	184	169
Number of Traffic Enforcement Violations (Vehicle observed)	437,138	426,699	470,842	407,458	458,057

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

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 28, 2022.

3. INVESTIGATIONS

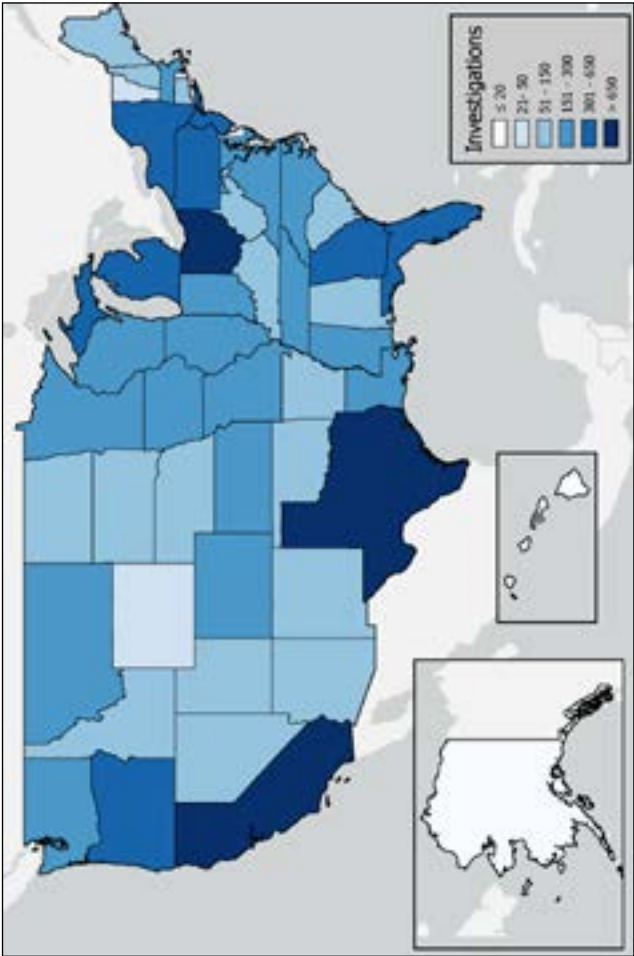
This chapter provides summarized data for the past 5 years on all types of investigations and reviews conducted on motor carriers that transport property or passengers in interstate or intrastate commerce. Investigations are conducted to investigate identified areas of non-compliance and safety concerns, 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:
<https://ai.fmcsa.dot.gov/SafetyProgram/Review.aspx>.

3-1 Investigations by State, 2021



Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 28, 2022.

3-2 Investigations Conducted by Federal and State Investigators, 2017-2021

Investigations	2017	2018	2019	2020	2021
State	6,461	6,048	5,377	4,412	4,343
Federal	8,583	8,174	7,663	7,049	7,987
Total	15,044	14,222	13,040	11,461	12,330

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 28, 2022.

3-3 Interventions by Type, 2017-2021

Intervention Type	2017	2018	2019	2020	2021
Investigations	15,045	14,222	13,040	11,461	12,330
Onsite Comprehensive	6,441	5,883	5,359	1,974	2,341
Onsite Focused	7,675	7,418	5,937	3,609	5,004
Offsite	76	330	1,374	5,760	4,871
Cargo Tank Facility Reviews	131	92	82	27	30
Shipper Reviews	40	12	7	2	1
Non-Rated Reviews	697	502	293	90	83
Warning Letters	28,508	30,150	26,564	22,230	28,181
Security Contact Reviews	426	349	344	164	103
Total Terminal Investigations	15,301	20,442	25,010	23,687	22,661

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 28, 2022.

3-4 FMCSA-Regulated Carriers by Safety Rating, 2021

Safety Rating	Interstate Freight Carriers	Intrastate HM Carriers	Interstate Passenger Carriers	All Carriers
Conditional	11,482	502	148	12,132
Satisfactory	30,913	1,708	2,535	35,156
Unsatisfactory	919	116	7	1,042
No Rating	646,777	36,074	7,202	690,053
Total	690,091	38,400	9,892	738,383

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

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 28, 2022.

3-5 Passenger Carrier, Hazardous Materials Carrier, and Household Goods Carrier Investigations, 2017-2021

Carriers by Vehicle Type	2017	2018	2019	2020	2021
Any Passenger Vehicles*	1,552	1,166	1,162	399	468
Motorcoaches	1,199	915	964	227	284
School Buses	186	176	315	107	121
Vans	348	281	160	91	134
Mini Buses	541	390	178	70	175
Limousines	116	100	219	80	36
Hazardous Materials	643	524	560	439	511
Household Goods	181	174	135	63	66

*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 28, 2022.

3-6 Investigations by Carrier Fleet Size, 2017-2021

Carrier Fleet Size	2017	2018	2019	2020	2021
Very Small (1-6 Power Units)	8,986	8,477	7,509	6,150	6,635
Small (7-20 Power Units)	3,737	3,614	3,413	3,249	3,602
Medium (21-100 Power Units)	1,830	1,701	1,643	1,688	1,697
Large (>100 Power Units)	332	339	355	328	365
No Power Units/Unreported	160	91	120	46	31
Total	15,045	14,222	13,040	11,461	12,330

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

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 28, 2022.

3-7 New Entrant Safety Audits, 2017-2021

Year	Safety Audits	Safety Audit Pass Rate
2017	36,214	89.80%
2018	37,348	89.30%
2019	40,277	88.20%
2020	40,220	92.60%
2021	48,257	92.30%

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

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 28, 2022.

3-8 Summary of Closed Enforcement Cases, 2017-2021

Subject Type	2017	2018	2019	2020	2021
	Cases (Amount Settled)	Cases (Amount Settled)	Cases (Amount Settled)	Cases (Amount Settled)	Cases (Amount Settled)
Broker	0 (\$0)	0 (\$0)	0 (\$0)	0 (\$0)	1 (\$3,880)
Cargo Tank Facility	35 (\$938,720)	25 (\$593,650)	14 (\$94,500)	9 (\$12,288,560)	3 (\$33,080)
Carrier	4,617 (\$33,288,715)	4,127 (\$29,138,349)	3,499 (\$22,443,295)	2,405 (\$14,609,534)	2,674 (\$17,487,345)
Drug Consortium	0 (\$0)	0 (\$0)	1 (\$5,890)	0 (\$0)	0 (\$0)
Freight Forwarder	64 (\$922,352)	70 (\$955,874)	42 (\$434,932)	11 (\$59,700)	13 (\$61,350)
HM Carrier	166 (\$2,341,200)	139 (\$1,673,220)	121 (\$1,161,700)	54 (\$405,289)	38 (\$453,370)
HM Carrier (Not Placarded)	0 (\$0)	0 (\$0)	0 (\$0)	1 (\$3,110)	0 (\$0)
HM Carrier/ Shipper	107 (\$1,407,510)	80 (\$963,390)	52 (\$575,100)	25 (\$287,780)	32 (\$264,540)
HM Carrier/ Shipper (Not Placarded)	0 (\$0)	0 (\$0)	0 (\$0)	0 (\$0)	0 (\$0)
Not Carrier (45-Day)	0 (\$0)	0 (\$0)	0 (\$0)	0 (\$0)	0 (\$0)
Other	3 (\$15,360)	4 (\$16,716)	3 (\$19,640)	0 (\$0)	0 (\$0)
Passenger Carrier	206 (\$1,779,542)	92 (\$972,746)	63 (\$449,133)	34 (\$217,650)	11 (\$64,369)
Shipper	5 (\$41,650)	2 (\$30,110)	0 (\$0)	0 (\$0)	0 (\$0)
Small Passenger Carrier	0 (\$0)	0 (\$0)	0 (\$0)	0 (\$0)	0 (\$0)
Total	5,203 (\$40,735,049)	4,539 (\$34,344,055)	3,795 (\$25,184,190)	2,539 (\$27,871,623)	2,772 (\$18,367,934)

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 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 Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 28, 2022.

4. CRASHES

In 2020, of the 35,766 fatal crashes on the Nation's roadways, 4,588 (12.8 percent) involved at least one large truck or bus. In addition, there were an estimated 5,215,000 nonfatal crashes, 440,000 (8.4 percent) of which involved at least one large truck or bus. For more information on large truck and bus crashes, please refer to the annual *Large Truck and Bus Crash Facts* publication available at <https://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. 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) FARS large truck data with prior years should be performed with caution. For more information on FARS, refer to <https://www.nhtsa.gov/FARS>.

CRSS: NHTSA established the Crash Report Sampling System (CRSS) in 2016 when the long-running General Estimates System (GES) was retired. CRSS is a sample of police-reported crashes involving all types of motor vehicles, pedestrians, and cyclists, ranging from property-damage-only crashes to those that result in fatalities. CRSS is used to estimate the overall crash picture, identify highway safety problem areas, measure trends, inform consumer information initiatives, and support cost and benefit analyses of highway safety initiatives and regulations. The data from CRSS yield national estimates through a weighting procedure but cannot give State-level estimates. Because CRSS is a sample of motor vehicle crashes, the results generated are estimates rounded to the nearest 1000; however, associated percentages and rates are based on the unrounded data. To learn more about CRSS, visit <https://www.nhtsa.gov/crash-data-systems/crash-report-sampling-system>.

MCMIS: Maintained by FMCSA, the Motor Carrier Management Information System (MCMIS) Crash File contains data on commercial trucks and buses in fatal, injury, and towaway crashes (crashes in which at least one vehicle is disabled as a result of the crash and transported away from the crash scene). Crash severity thresholds and vehicle type definitions in MCMIS differ slightly from those in FARS and GES/CRSS, and all tables are noted accordingly. All MCMIS crash data presented are considered preliminary for 22 months.

For more information on MCMIS, refer to <https://ask.fmcsa.dot.gov/app/mcmiscatalog/mcmishome>.

NHTSA Crash Severity Levels:

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

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

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

Vehicles in Crashes:

Large Trucks: FARS and 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, 2017-2020

Year	Number of Crashes Involving:			
	Large Trucks	Buses	Large Trucks and Buses	All Vehicle Types
2017	450,000	66,000	512,000	6,454,000
2018	499,000	65,000	560,000	6,735,000
2019	511,000	72,000	580,000	6,755,000
2020	415,000	30,000	445,000	5,251,000

Notes: Individual subtotals may not sum 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 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 motor vehicle. These numbers include fatal crash data from Fatality Analysis Reporting System (FARS) and injury crash and property-damage-only (PDO) crash data from Crash Report Sampling System (CRSS). CRSS is a sample of motor vehicle crashes—the results generated are estimates rounded to the nearest one thousand; however, associated percentages and rates are based on the unrounded data.

Data Sources: National Highway Traffic Safety Administration (NHTSA), FARS, and CRSS.

4-2 Fatal Crashes by Vehicle Type, 2017-2020

Year	Number of Crashes Involving:			
	Large Trucks	Buses	Large Trucks and Buses	All Vehicle Types
2017	4,367	231	4,587	34,560
2018	4,461	234	4,678	33,919
2019	4,502	234	4,722	33,487
2020	4,444	155	4,588	35,766

Notes: Individual subtotals may not sum 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 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 motor vehicle.

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

4-3 Injury Crashes by Vehicle Type, 2017-2020

Year	Number of Crashes Involving:			
	Large Trucks	Buses	Large Trucks and Buses	All Vehicle Types
2017	102,000	15,000	116,000	1,889,000
2018	107,000	15,000	121,000	1,894,000
2019	114,000	13,000	127,000	1,916,000
2020	101,000	7,000	108,000	1,593,000

Notes: Individual subtotals may not sum 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 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 motor vehicle. These numbers include injury crash data from Crash Report Sampling System (CRSS). CRSS is a sample of motor vehicle crashes—the results are estimates rounded to the nearest one thousand; however, associated percentages and rates are based on the unrounded data.

Data Sources: National Highway Traffic Safety Administration (NHTSA) and CRSS.

4-4 Property-Damage-Only (PDO) Crashes by Vehicle Type, 2017-2020

Year	Number of Crashes Involving:			
	Large Trucks	Buses	Large Trucks and Buses	All Vehicle Types
2017	344,000	51,000	391,000	4,530,000
2018	388,000	50,000	434,000	4,807,000
2019	392,000	59,000	448,000	4,806,000
2020	310,000	23,000	332,000	3,622,000

Notes: Individual subtotals may not sum 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 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 motor vehicle. These numbers include PDO crash data from Crash Report Sampling System (CRSS). CRSS is a sample of motor vehicle crashes—the results generated are estimates rounded to the nearest one thousand; however, associated percentages and rates are based on the unrounded data.

Data Sources: National Highway Traffic Safety Administration (NHTSA) and CRSS.

4-5 Large Truck Fatal Crashes, 1975-2020

Year	Fatal Crashes Involving Large Trucks	Large Truck Occupant Fatalities	Total Fatalities in Large Truck Crashes	Million VMT by Large Trucks	Rates per 100 Million VMT		Large Trucks Registered
					Fatal Crashes Involving Large Trucks	Fatalities in Large Truck Crashes	
1975	3,722	961	4,483	81,330	4.58	5.51	5,362,369
1980	5,042	1262	5,971	108,491	4.65	5.50	5,790,653
1985	4,841	977	5,734	123,504	3.92	4.64	5,996,337
1990	4,518	705	5,272	146,242	3.09	3.60	6,195,876
1995	4,194	648	4,918	178,156	2.35	2.76	6,719,421
2000	4,573	754	5,282	205,520	2.23	2.57	8,022,649
2005	4,551	804	5,240	222,523	2.05	2.35	8,481,999
2010	3,271	530	3,686	286,527	1.14	1.29	10,770,054
2011	3,365	640	3,781	267,594	1.26	1.41	10,270,693
2012	3,486	697	3,944	269,207	1.29	1.47	10,659,380
2013	3,554	695	3,981	275,017	1.29	1.45	10,597,356
2014	3,429	656	3,908	279,132	1.23	1.40	10,905,956
2015	3,622	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†	4,367	878	4,906	297,593	1.47	1.65	12,229,216
2018†	4,461	890	5,006	304,864	1.46	1.64	13,233,910
2019†	4,502	893	5,032	300,050	1.50	1.68	13,085,643
2020†	4,444	831	4,965	302,141	1.47	1.64	13,479,382

†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 as a truck with 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: FARS and Vehicle Miles Traveled and Registered Vehicles – Federal Highway Administration (FHWA), *Highway Statistics 2020*.

4-6 Large Truck Injury Crashes, 2017-2020

Year	Injury Crashes Involving Large Trucks	Large Trucks Involved in Injury Crashes	Persons Injured in Large Truck Crashes	Million VMT by Large Trucks	Rates per 100 Million VMT		Large Trucks Registered
					Injury Crashes Involving Large Trucks	Persons Injured in Large Truck Crashes	
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
2019	114,000	119,000	158,000	300,050	38.0	52.8	13,085,643
2020	101,000	107,000	147,000	302,141	33.4	48.7	13,479,382

Notes: "Persons Injured" includes all nonfatally injured persons in injury and fatal crashes. A large truck is defined as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds. The rates displayed in this table based on unrounded Crash Report Sampling System (CRSS) data. CRSS is a sample of motor vehicle crashes--the results generated are estimates rounded to the nearest one thousand; however, associated percentages and rates are based on the unrounded data.

Data Sources: Vehicle Miles Traveled and Registered Vehicles; Federal Highway Administration (FHWA), *Highway Statistics 2020*, Injury Crashes, Vehicles Involved, and Persons Injured; National Highway Traffic Safety Administration (NHTSA), and CRSS.

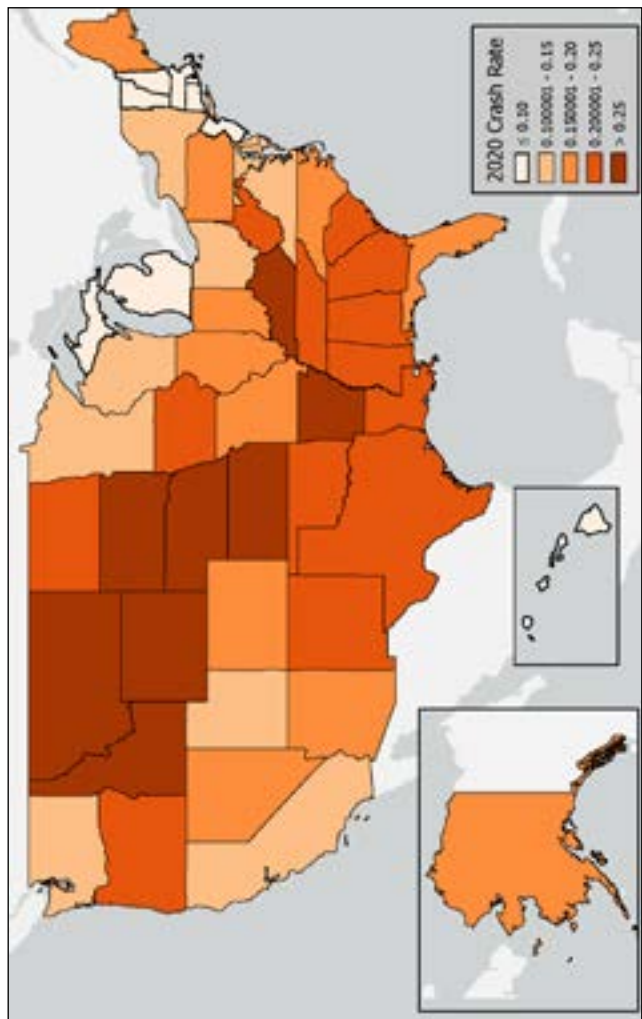
4-7 Large Truck and Bus Fatality Rates Per 100 Million Total Vehicle Miles Traveled (VMT) by State, 2019 and 2020

State	2019			2020		
	Fatalities	Million VMT	Fatality Rate	Fatalities	Million VMT	Fatality Rate
Alabama	141	71,735	0.20	145	67,921	0.21
Alaska	9	5,881	0.15	9	5,306	0.17
Arizona	92	70,281	0.13	124	65,758	0.19
Arkansas	82	37,099	0.22	88	33,919	0.26
California	429	340,836	0.13	413	299,812	0.14
Colorado	106	54,634	0.19	87	48,642	0.18
Connecticut	23	31,601	0.07	26	29,845	0.09
Delaware	17	10,245	0.17	11	8,345	0.13
D.C.	0	3,756	0.00	2	3,030	0.07
Florida	368	226,514	0.16	355	208,076	0.17
Georgia	217	133,128	0.16	247	115,967	0.21
Hawaii	4	11,024	0.04	7	8,785	0.08
Idaho	44	18,058	0.24	52	17,406	0.30
Illinois	148	107,525	0.14	181	94,121	0.19
Indiana	146	82,719	0.18	157	76,608	0.20
Iowa	70	33,537	0.21	73	29,751	0.25
Kansas	86	31,843	0.27	75	27,854	0.27
Kentucky	119	49,410	0.24	119	46,536	0.26
Louisiana	93	51,360	0.18	103	48,374	0.21
Maine	18	14,871	0.12	22	13,086	0.17
Maryland	69	60,216	0.11	61	50,885	0.12
Massachusetts	34	64,890	0.05	28	54,127	0.05
Michigan	111	102,174	0.11	80	86,547	0.09
Minnesota	62	60,731	0.10	60	51,619	0.12
Mississippi	93	41,091	0.23	86	39,665	0.22
Missouri	140	79,168	0.18	122	72,797	0.17
Montana	35	12,892	0.27	34	12,104	0.28
Nebraska	66	21,242	0.31	56	19,432	0.29
Nevada	43	28,794	0.15	41	25,231	0.16
New Hampshire	7	13,828	0.05	12	11,956	0.10
New Jersey	89	78,205	0.11	61	66,341	0.09
New Mexico	78	27,772	0.28	52	23,756	0.22
New York	136	123,986	0.11	128	102,477	0.12
North Carolina	165	122,475	0.13	175	106,342	0.16
North Dakota	21	9,826	0.21	21	8,768	0.24
Ohio	179	114,694	0.16	152	103,115	0.15
Oklahoma	105	44,648	0.24	89	42,000	0.21
Oregon	68	35,808	0.19	76	32,298	0.24
Pennsylvania	142	102,864	0.14	138	87,982	0.16
Rhode Island	4	7,581	0.05	6	6,864	0.09
South Carolina	126	57,939	0.22	134	53,972	0.25
South Dakota	16	9,922	0.16	28	9,743	0.29
Tennessee	156	82,892	0.19	182	76,392	0.24
Texas	671	288,227	0.23	650	260,582	0.25
Utah	47	32,911	0.14	42	30,251	0.14
Vermont	12	7,346	0.16	4	6,007	0.07
Virginia	115	85,432	0.13	113	76,110	0.15
Washington	84	62,530	0.13	67	53,658	0.12
West Virginia	43	19,077	0.23	34	16,054	0.21
Wisconsin	74	66,348	0.11	72	57,600	0.13
Wyoming	41	10,208	0.40	25	9,800	0.26
National Totals	5,244	3,261,772	0.16	5,125	2,903,622	0.18

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

Data Sources: Vehicle Miles Traveled and Registered Vehicles – Federal Highway Administration (FHWA), Highway Statistics 2020; 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, 2020



Data Sources: Vehicle Miles Traveled - FHWA, *Highway Statistics 2020*; Fatalities - National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

4-9 Vehicle Occupants Killed in Large Truck Crashes by Vehicle Type, 2017-2020

Occupant of:	2017	2018	2019	2020
Passenger Car	1,741	1,696	1,657	1,691
Light Truck	1,469	1,536	1,580	1,483
Large Truck	878	890	893	831
Motorcycle	285	288	302	298
Bus	17	25	4	6
Other/Unknown	23	18	26	34
Total Vehicle Occupants	4,413	4,453	4,462	4,343

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

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

4-10 Nonmotorists Killed in Large Truck Crashes, 2017-2020

Nonmotorist Type	2017	2018	2019	2020
Total Nonmotorist Fatalities	493	553	570	622
Pedestrian	391	452	453	514
Pedalcyclist	78	78	91	84
Other/Unknown Nonmotorist	24	23	26	24
Total Fatalities	4,906	5,006	5,032	4,965
Percent Nonmotorist Fatalities	10.0%	11.0%	11.3%	12.5%

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

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

4-11 Nonmotorists Killed in Bus Crashes, 2017-2020

Nonmotorist Type	2017	2018	2019	2020
Total Nonmotorist Fatalities	54	64	74	54
Pedestrian	42	54	59	45
Pedalcyclist	11	7	12	7
Other/Unknown Nonmotorist	1	3	3	2
Total Fatalities	276	267	261	176
Percent Nonmotorist Fatalities	19.6%	24.0%	28.4%	30.7%

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

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

4-12 Fatal Crashes by Work Zone, 2017-2020

Crash Type:	2017		2018		2019		2020	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Large Truck Fatal Crashes	4,367	100.0%	4,461	100.0%	4,502	100.0%	4,444	100.0%
Work Zone	221	5.1%	207	4.6%	249	5.5%	204	4.6%
Not a Work Zone	4,146	94.9%	4,254	95.4%	4,253	94.5%	4,240	95.4%
All Fatal Crashes	34,560	100.0%	33,919	100.0%	33,487	100.0%	35,766	100.0%
Work Zone	720	2.1%	672	2.0%	765	2.3%	774	2.2%
Not a Work Zone	33,840	97.9%	33,247	98.0%	32,722	97.7%	34,992	97.8%
Percent of Work-Zone Fatal Crashes that Involved at Least One Large Truck	30.7%		30.8%		32.5%		26.4%	
Percent of All Fatal Crashes that Involved at Least One Large Truck	12.6%		13.2%		13.4%		12.4%	

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

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

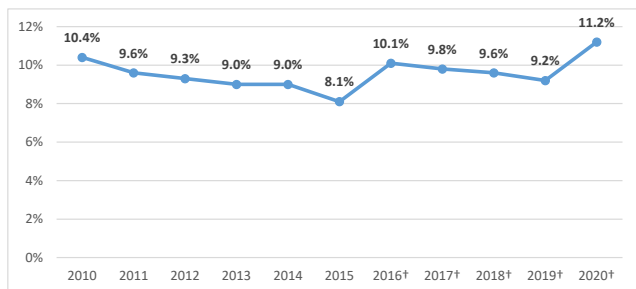
4-13 Truck Weight Rating for Large Trucks in Fatal Crashes, 2017-2020

Truck Weight Rating	2017	2018	2019	2020
Class 3: 10,001 - 14,000 lb	593	635	658	724
Class 4: 14,001 - 16,000 lb	102	111	132	139
Class 5: 16,001 - 19,500 lb	151	172	163	169
Class 6: 19,501 - 26,000 lb	246	287	274	291
Class 7: 26,001 - 33,000 lb	271	222	235	247
Class 8: > 33,000 lb	3,319	3,197	3,353	3,123
Unknown/Other	123	285	218	149
Total	4,805	4,909	5,033	4,842

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

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

4-14 Percentage of Large Truck Drivers in Fatal Crashes Not Wearing Any Type of Safety Belt, 2010-2020



†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 as a truck with a GVWR greater than 10,000 pounds. Drivers with unknown safety belt usage are not included in the percentages displayed.

Data Sources: NHTSA and Fatality Analysis Reporting System (FARS).

4-15 Hazardous Materials (HM) Cargo Release in Crashes Involving Large Trucks with HM Placards, 2017-2021

Cargo Release	Number of Large Trucks				
	2017	2018	2019	2020	2021*
Cargo Release: No	2,792	2,972	2,776	2,130	2,396
Cargo Release: Yes	607	674	641	557	522
Corrosives	42	52	40	41	28
Explosives	11	16	20	14	10
Flammable Liquid	286	350	299	291	263
Flammable Solids	7	8	10	6	8
Gases	66	59	77	69	66
Miscellaneous					
Dangerous Goods	51	61	58	34	41
Oxidizing Substances	2	12	3	7	7
Poison & Infectious Substances	8	7	1	6	5
Radioactive Material	3	0	1	1	1
Unknown	131	109	132	88	93
Cargo Release: Unknown	495	500	391	271	315
Total	3,894	4,146	3,808	2,958	3,233

*Crash records reported to the Motor Carrier Management Information System (MCMIS) through December 31, 2021, 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: Here, a large truck is defined as a vehicle 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 March 25, 2022.

4-16 Large Truck and Bus Drivers in Crashes, by Driver's License Class, 2017-2021

License Class	Number of Vehicles Involved				
	2017	2018	2019	2020	2021*
Class A	118,162	125,681	123,263	108,389	119,275
Class B	22,197	23,323	23,274	15,885	18,328
Class C	12,866	15,545	15,619	13,124	15,809
Class D	21,114	22,969	23,024	20,341	24,064
Class M	171	105	85	68	80
Unknown	8,253	9,000	9,311	9,405	11,938
Total	182,763	196,623	194,576	167,212	189,494

*Crash records reported to the Motor Carrier Management Information System (MCMIS) through December 31, 2021, 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: Here, a large truck is defined as a vehicle 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 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 March 25, 2022.

4-17 Large Trucks in Crashes by Operation Classification, 2017-2021

Operation Classification	2017	2018	2019	2020	2021*
For-Hire	94,163	100,900	93,535	87,511	103,250
Private	27,375	29,439	27,597	24,220	28,469
Both For-Hire and Private	14,185	15,341	15,051	13,690	15,544
Neither For-Hire Nor Private	1,615	1,497	1,418	1,287	1,409
No USDOT Number	26,042	29,205	28,288	27,690	28,145
Total	163,380	176,382	165,889	154,398	176,817

*Crash records reported to the Motor Carrier Management Information System (MCMIS) through December 31, 2021, 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: Here, a large truck is defined as a vehicle 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 March 25, 2022. Operation classification information: FMCSA, MCMIS, data snapshots as of December 29, 2017; December 28, 2018; December 31, 2019; December 18, 2020; and December 31, 2021.

4-18 Large Trucks in Crashes by Carrier Operation, 2017-2021

Carrier Operation	2017	2018	2019	2020	2021*
Interstate	115,725	123,385	114,682	105,710	124,119
Intrastate Hazardous Materials (HM)	1,731	1,858	1,918	1,724	1,897
Intrastate Non-HM**	19,865	21,666	20,645	19,150	22,580
Unknown Carrier Operation**	17	1,334	1,313	944	926
No USDOT Number	26,042	28,139	27,331	26,870	27,295
Total	163,380	176,382	165,889	154,398	176,817

*Crash records reported to the Motor Carrier Management Information System (MCMIS) through December 31, 2021, are included in this table. States are expected to report crash data to FMCSA within 90 days of the crash. Data are considered preliminary for 22 months to allow for changes.

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

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

Data Sources: Crash data for all years: FMCSA, MCMIS, data snapshot as of March 25, 2022. Carrier operation information: FMCSA, MCMIS, data snapshots as of December 29, 2017; December 28, 2018; December 27, 2019; December 18, 2020; and December 31, 2021.

4-19 Bus Fatal Crashes, 1975-2020

Year	Fatal Crashes Involving Buses	Bus Occupant Fatalities	Total Fatalities in Bus Crashes	Million VMT by Buses	Rates per 100 Million VMT		Buses Registered
					Fatal Crashes Involving Buses	Fatalities in Bus Crashes	
1975	323	53	348	6,055	5.33	5.75	462,156
1980	329	46	390	6,059	5.43	6.44	528,789
1985	337	57	398	4,478	7.53	8.89	593,485
1990	286	32	340	5,726	4.99	5.94	626,987
1995	271	33	311	6,420	4.22	4.84	685,503
2000	323	22	357	7,590	4.26	4.70	746,125
2005	278	58	340	6,980	3.98	4.87	807,053
2010	247	44	278	13,770	1.79	2.02	846,051
2011	243	55	284	13,807	1.76	2.06	666,064
2012	252	39	282	14,781	1.70	1.91	764,509
2013	282	54	320	15,167	1.86	2.11	864,549
2014	235	44	283	15,999	1.47	1.77	872,027
2015	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	234	44	267	18,303	1.28	1.46	992,152
2019	234	35	261	17,980	1.30	1.45	995,033
2020	155	16	176	15,104	1.03	1.17	1,006,469

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 2020*; Fatal Crashes, Vehicles Involved, and Fatalities - National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

4-20 Bus Injury Crashes, 2017-2020

Year	Injury Crashes Involving Buses	Buses Involved in Injury Crashes	Persons Injured in Bus Crashes	Million VMT by Buses	Rates per 100 Million VMT		Buses Registered
					Injury Crashes Involving Buses	Persons Injured in Bus Crashes	
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
2019	13,000	14,000	25,000	17,980	74.6	140.4	995,033
2020	7,000	7,000	14,000	15,104	49.5	92.0	1,006,469

Notes: "Persons Injured" includes all nonfatally injured persons in injury and fatal crashes. A bus is defined as a vehicle with seats for at least nine people, including the driver. The rates displayed in this table are based on unrounded Crash Report Sampling System (CRSS) data. CRSS is a sample of motor-vehicle crashes—the results generated are estimates rounded to the nearest one thousand; however, associated percentages and rates are based on the unrounded data.

Data Sources: Vehicle Miles Traveled and Registered Vehicles – Federal Highway Administration (FHWA), *Highway Statistics 2020*; Injury Crashes, Vehicles Involved, and Persons Injured – National Highway Traffic Safety Administration (NHTSA), and CRSS.

4-21 Fatal Crashes Involving Buses, by Type of Bus, 2010-2020

Year	School Bus	Cross-Country Intercity Bus (Motorcoach)	Transit Bus	Van-Based Bus*	Other Bus Type	Bus Type Unknown	Total
2010	113	35	84	—	11	4	247
2011	97	40	68	25	10	3	243
2012	101	34	78	30	7	2	252
2013	114	44	82	28	10	4	282
2014	90	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	81	15	84	30	23	2	234
2019	86	15	79	32	22	1	234
2020	46	9	85	3	11	1	155

* “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: Fatality Analysis Reporting System (FARS).

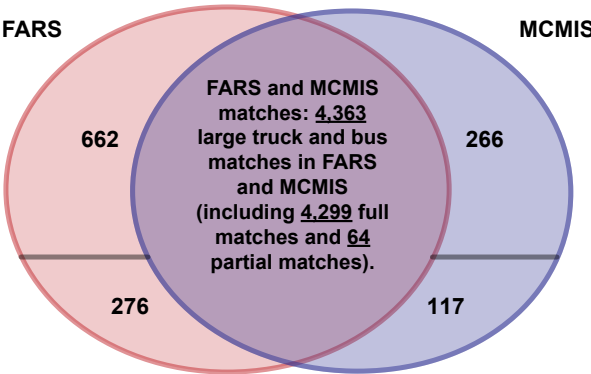
4-22 Estimated Costs of Large Truck and Bus Crashes, 2017-2020

Year	Fatal Crashes	Injury Crashes	Property-Damage-Only (PDO) Crashes	All Large Truck and Bus Crashes
2017	\$60 Billion	\$62 Billion	\$29 Billion	\$151 Billion
2018	\$61 Billion	\$65 Billion	\$33 Billion	\$158 Billion
2019	\$62 Billion	\$68 Billion	\$34 Billion	\$163 Billion
2020	\$60 Billion	\$58 Billion	\$25 Billion	\$143 Billion

Notes: A large truck is defined as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds. A bus is defined as a vehicle with seats for at least nine people, including the driver. Costs may not sum to the totals 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 property-damage-only (PDO) crash data from Crash Report Sampling System (CRSS).
Data Sources: T. Miller, E. Zaloshnja, and R. Spicer, Revised Cost of Large Truck and Bus Involved Crashes (2002), adjusted to current dollars, and a year 2020 value of a statistical life (VSL); National Highway Traffic Safety Administration (NHTSA), FARS, 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, 2020

Number	Category	Percentage
4,299	Large trucks and buses matched in FARS and MCMIS	75.6%
64	Large trucks and buses that were partially matched in FARS and MCMIS	1.1%
662	Large trucks and buses in FARS and not in MCMIS	11.6%
276	Large trucks and buses in FARS matched to large trucks and buses in non-fatal crashes in MCMIS	4.9%
266	Large trucks and buses in MCMIS and not in FARS	4.7%
117	Large trucks and buses in MCMIS matched to vehicles in FARS that were not large trucks or buses	2.1%
5,684	Total large trucks and buses in fatal crashes in FARS, MCMIS, or both	100.0%



Notes: A large truck is defined in FARS as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds. A large truck is defined in MCMIS as a vehicle, 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: T. Miller, E. Zaloshnja, and R. Spicer, Revised Cost of Large Truck and Bus Involved Crashes (2002), adjusted to current dollars, and a year 2020 value of a statistical life (VSL);National Highway Traffic Safety Administration (NHTSA), FARS, and CRSS.

5. DATA QUALITY

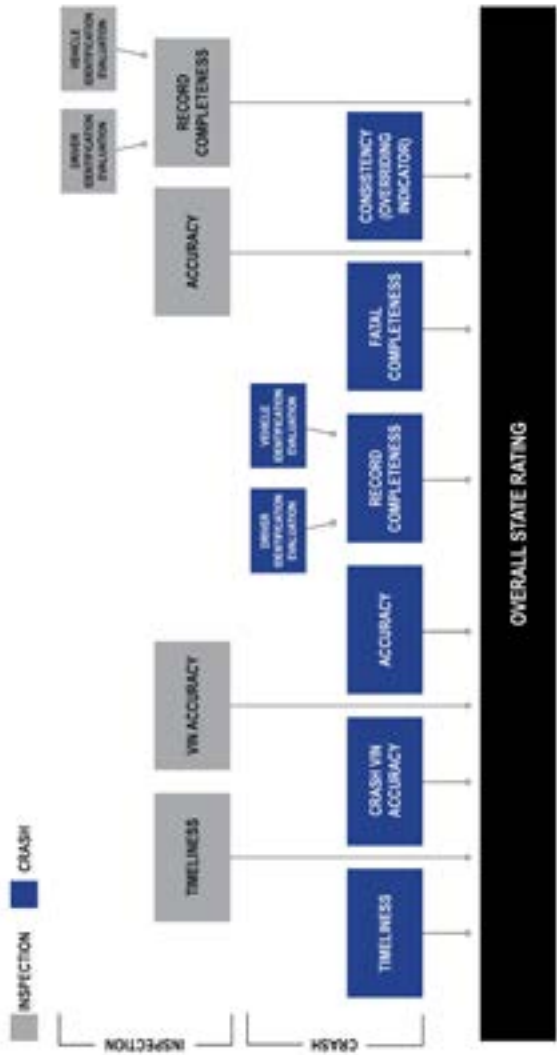
State Safety Data Quality (SSDQ) Methodology

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 indicator shown in 5-1) are rated poor overall.

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



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

5-2 Overall State Safety Data Quality (SSDQ) Ratings, June 2004 and December 2021

Overall SSDQ Ratings, June 2004



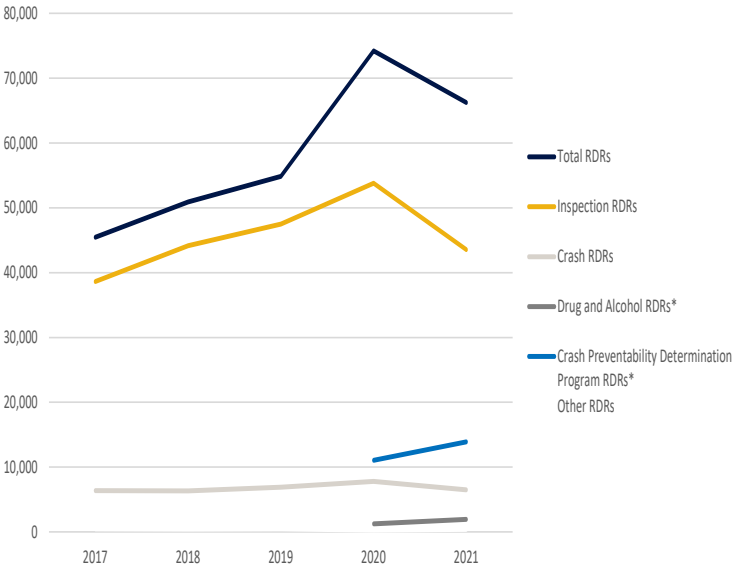
Overall SSDQ Ratings, December 2021



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 2021.

Data Sources: June 2004 Ratings: FMCSA, Analysis & Information (A&I) Online, State Safety Data Quality (SSDQ) as of June 2004; December 2021 Ratings: FMCSA, A&I Online, SSDQ as of December 2021. 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, 2017-2021



* The Drug & Alcohol Clearinghouse and Crash Preventability Determination Program began in 2020.

Data Source: FMCSA, DataQs, May 13, 2021 (based on submissions received in 2020).

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 November 2021, Congress passed the Bipartisan Infrastructure Law, or BIL. This legislation is a once-in-a-generation investment in our infrastructure. It includes policies, investments, and partnerships that enable technologies, data systems, research, workforce development, and most importantly opportunities to directly impact the safety of people using our transportation systems. It contains over \$3.2 billion in grant opportunities that FMCSA is sharing with our State partners to support transformative changes aimed at achieving the USDOT's ambitious, long-term safety goal of zero fatalities on the Nation's roadways.

In FY 2023 and the years to come, MCSAP lead agencies will be eligible for unprecedented funding to grow existing programs and develop new ones aimed at reducing CMV-related crashes and fatalities. With these additional resources comes both an opportunity and obligation to ensure that FMCSA and its State are doing everything we can to improve the safety of commercial motor vehicles on our roadways and support the national transportation safety strategies that galvanize these critical efforts.

6-1 FMCSA Grant Awards, Fiscal Year 2021

Grant Program	Total Awards
MCSAP	\$304,069,500
High Priority	\$45,210,333
CDL Program Implementation	\$28,981,802
CMVOST	\$2,000,000
Total Grant Awards	\$380,261,635

Motor Carrier Safety Assistance Program (MCSAP) Grant

MCSAP is a Federal formula grant program that provides financial assistance to States, including 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 commercial motor vehicles (CMVs). Specifically, only the State lead agency (as designated by the Governor) is eligible to apply for MCSAP grant funding.

High Priority (HP) Grant

HP is a Federal competitive grant program which provides financial assistance to States, local governments, federally recognized Indian tribes, other political jurisdictions as necessary, and other persons to carry out high priority activities and projects that augment motor carrier safety activities and projects:

- To carry out activities and projects that augment motor carrier safety;
- To advance the technological capability and promote the deployment of intelligent transportation system applications for CMV operations, including CMV, commercial driver, and carrier-specific information systems/networks; and to support and maintain CMV information systems and networks.

Commercial Driver License (CDL) Program Implementation Grant

Eligible Applicants: The State agency designated as the primary driver licensing agency responsible for the development, implementation and maintenance of the CDL program or State agencies local governments, or other persons for high priority activities or emerging issues as identified by the Secretary of Transportation.

CMV Operator Safety Training (CMVOST) Grant

Eligible Applicants: State or local governments; accredited post-secondary educational institutions (public or private) including colleges, universities, vocational / technical schools and truck-driver training schools. Primary funding priority is given to regional or multi-State educational or not-for-profit associations that recruit and train current and former members of the United States Armed Forces (including National Guard members and Reservists) and their spouses to receive training to transition to the CMV operation industry.

7. AGENCY RESOURCES

FMCSA Web site

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

Analysis & Information (A&I) Online

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

Compliance, Safety, Accountability (CSA)

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

DataQs

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

FMCSA Grants and Financial Assistance

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

FMCSA New Entrant Safety Assurance Program

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

FMCSA Portal

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

Freight Analysis Framework (FAF)

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

Innovative Technology Deployment (ITD) Program

<https://www.fmcsa.dot.gov/itd>

Motor Carrier Management Information System (MCMIS)

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

Fatality Analysis Reporting System (FARS)

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

Federal Highway Administration (FHWA) Highway Statistics Series

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

General Estimates System (GES)

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

Crash Report Sampling System (CRSS)

<https://www.nhtsa.gov/crash-data-systems/crash-report-sampling-system>

Licensing & Insurance (L&I)

<https://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

If you want to make a difference and save lives,
we want you to join us.
Scan the QR code below to check out current opportunities.



Cover photo by iStock/vitpho