2023

Pocket Guide to Large Truck and Bus Statistics

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

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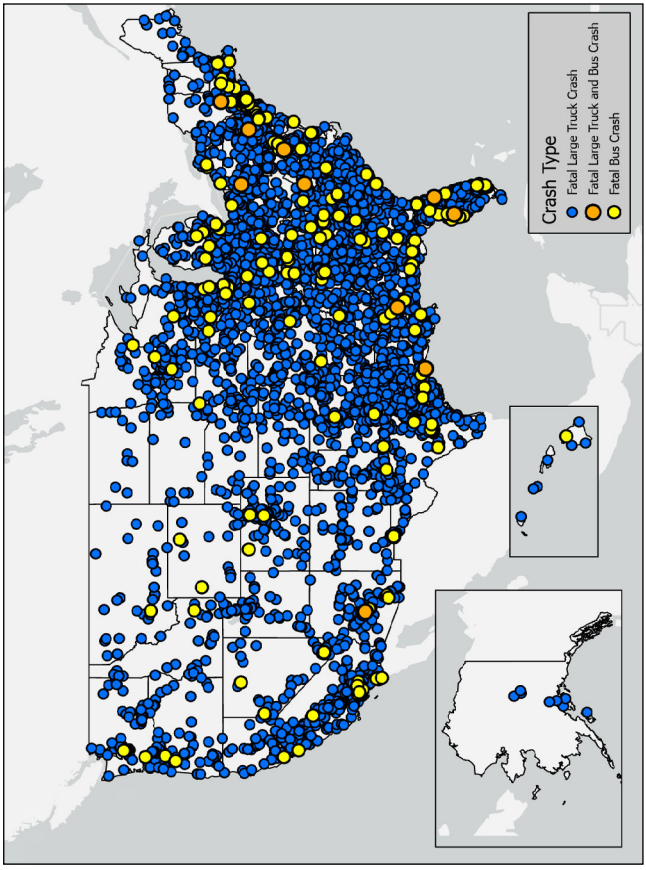
Introduction

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

Note: The COVID-19 pandemic had a major impact on many of the statistics presented in this summary (overall industry vehicle miles traveled, registered carriers, direct interactions by enforcement personnel, etc.)

Contents

Locations of Fatal Large Truck and Bus Crashes, 2021



Note: In 2021, there were 5,340 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 2021, among the 282,354,993 total registered vehicles in the United States, 10,715,697 were single-unit trucks (straight trucks), 3,143,484 were combination trucks (tractor-trailers), and 939,219 were buses. Also in 2021, there were 3,132.4 billion vehicle miles traveled (VMT) by all motor vehicles. Large trucks traveled 327.0 billion of those miles (10.4 percent of the total), and buses traveled 16.7 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, 813,844 interstate motor carriers and intrastate HM motor carriers had recent activity operating in the United States:

- 540,093 were for-hire carriers
- 200,904 were private carriers
- 70,129 were both for-hire and private carriers
- 2,718 were neither for-hire nor private carriers (e.g., Government).

FMCSA regulates all drivers involved in interstate commerce or intrastate transportation of HM, as well as all Commercial Driver's License (CDL) drivers, both interstate and intrastate. Approximately 9 million CMV drivers operate in the United States:

- 5.6 million operate interstate
  - 3.7 million operate interstate and hold CDLs
- 3.4 million operate intrastate
  - 1.6 million operate intrastate and hold CDLs.

Data Sources: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of December 30, 2022.

1-1 Registered Vehicles in the United States, 2018–2021

Year	All Vehicles	Large Trucks	Buses
2018	273,602,100	13,233,910	992,152
2019	276,491,174	13,085,643	995,033
2020	275,936,367	12,899,371	1,010,304
2021	282,354,993	13,859,181	939,219

Data Source: Federal Highway Administration (FHWA), *Highway Statistics 2021*, Table VM-1.

1-2 Million Vehicle Miles Traveled (VMT) in the United States, 2018–2021

		Large Trucks		
Year	All Vehicles	Single-Unit	Combination	Buses
2018	3,240,327	120,699	184,165	18,303
2019	3,261,772	124,746	175,305	17,980
2020	2,903,622	117,832	179,817	15,037
2021	3,132,411	131,637	195,389	16,744

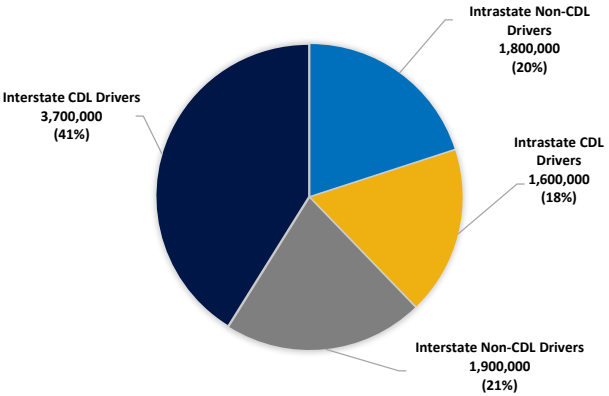
Data Source: Federal Highway Administration (FHWA), *Highway Statistics 2021*, Table VM-1.

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://buses.org/wp-content/uploads/2024/02/Motorcoach_Census_Survey_2020.pdf.

1-4 Commercial Motor Vehicle (CMV) Drivers Operating in the United States, 2022



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, 2022.

1-5 Active Motor Carriers by Type, 2018–2022

Type	2018	2019	2020	2021	2022
Interstate Freight	541,231	555,567	590,249	708,941	763,867
Interstate Passenger	12,398	11,900	10,846	10,268	10,019
Intrastate Hazardous Materials	33,091	35,075	36,626	38,443	39,958
Total	**586,720**	**602,542**	**637,721**	**757,652**	**813,844**

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, 2018; December 27, 2019; December 18, 2020; December 31, 2021; and December 30, 2022.

1-6 Active Hazardous Materials (HM) Carriers, 2018–2022

Active HM Carriers	2018	2019	2020	2021	2022
Interstate	76,131	80,810	84,226	91,397	93,838
Interstate HM Carriers Meeting SMS Threshold	7,261	7,218	6,563	6,613	6,555
Interstate HM Carriers with a Safety Permit (HMSP)*	883	843	827	799	797
Intrastate	33,433	35,404	36,919	38,679	40,190
Intrastate HM Carriers Meeting SMS Threshold	2,786	2,886	2,569	2,421	2,357
Intrastate HMSP*	161	158	142	133	125
*Total Active HMSP Carriers**	*1,044*	*1,001*	*969*	*932*	*922*
Total HM Carriers	**109,564**	**116,214**	**121,145**	**130,076**	**134,028**

*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, 2018; December 27, 2019; December 18, 2020; December 31, 2021; and December 30, 2022.

1-7 Household Goods Carriers and Brokers Operating in the United States, 2018–2022

Year	Active Household Goods Carriers	Household Goods Brokers Registered	Property Brokers Registered
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
2022	5,567	1,169	30,716

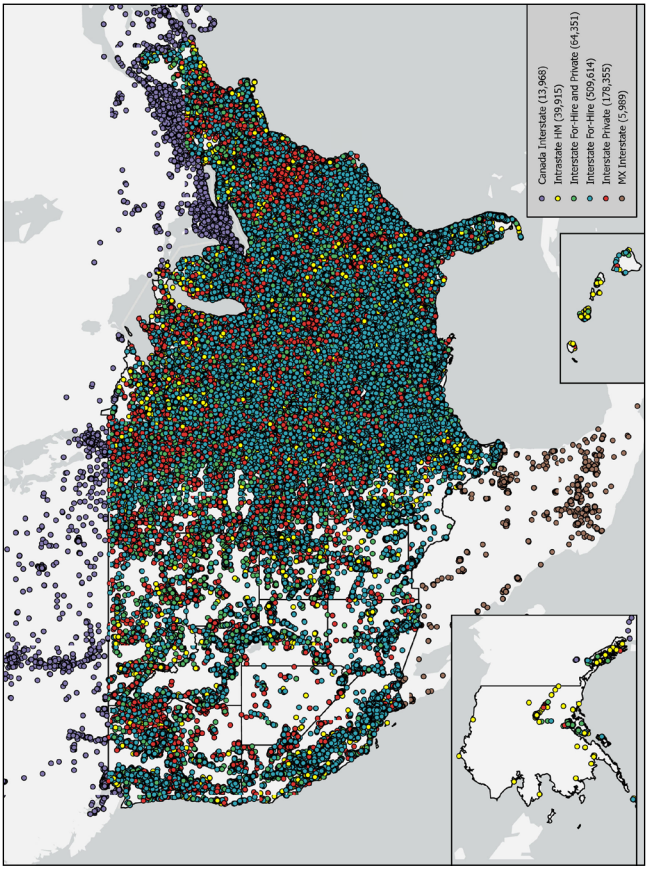
Note: A broker is an individual, partnership, or corporation that receives payment for arranging the transportation of property or household goods belonging to others by using an authorized motor carrier.
Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshots as of December 28, 2018; December 27, 2019; December 18, 2020; December 31, 2021; and December 30, 2022..

1-8 FMCSA-Regulated Carriers, 2018–2022

Motor Carrier Census Data	2018	2019	2020	2021	2022
Active Carriers with a USDOT Number	586,720	602,542	637,721	757,652	813,844
Power Units	4,650,605	4,788,339	4,899,374	5,132,101	5,405,018
CDL Drivers	3,615,957	3,634,989	3,765,320	4,167,277	4,172,559
Total Drivers	5,024,814	5,151,130	5,310,094	5,646,722	5,800,289

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. 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, 2018; December 27, 2019; December 18, 2020; December 31, 2021; and December 30, 2022.

1-9 Carriers by Headquarters (Domicile) Location, 2022



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, 2022.

1-10 FMCSA-Regulated Carriers by Domicile, 2022

Country	Active Carriers with a USDOT Number	Power Units	CDL Drivers	Total Drivers
United States	793,577	5,254,235	4,038,350	5,643,647
Canada	13,968	113,810	110,440	123,518
Mexico	5,989	34,276	23,556	31,982
Certificate Carriers	152	729	514	629
Commercial Zone Carriers	5,703	31,727	22,150	29,415
Enterprise Carriers	1,047	8,150	7,303	8,199
Long Haul Carriers	70	1,573	682	1,675
Other Countries	310	2,697	213	1,142
All Domiciles	**813,844**	**5,405,018**	**4,172,559**	**5,800,289**

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, 2022.

1-11 FMCSA-Regulated Carriers by Number of Power Units, 2018–2022

Power Units	2018	2019	2020	2021	2022
1 Power Unit	278,448	289,408	317,791	407,872	445,673
2 Power Units	99,221	101,044	104,620	117,742	125,856
3–10 Power Units	147,710	149,225	150,545	161,525	168,198
11–100 Power Units	50,075	51,211	52,121	54,355	56,361
>100 Power Units	4,396	4,572	4,604	4,753	4,908
No Power Units/Unreported	6,870	7,082	8,040	11,405	12,848
Total	**586,720**	**602,542**	**637,721**	**757,652**	**813,844**

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, 2018; December 27, 2019; December 18, 2020; December 31, 2021; and December 30, 2022.

1-12 Transportation Services Index (TSI) Freight and Passenger Movement Estimates, 2000–2023

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: U.S. Department of Transportation, 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 Weight of Freight Shipped within the United States by Mode (in Millions of Tons), 2018–2021

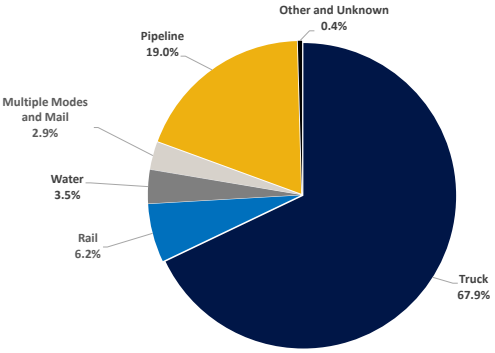
Mode	2018	2019	2020	2021
Truck	12,015	11,942	11,558	11,780
Rail	1,208	1,160	1,034	1,072
Water	677	657	601	615
Air*	2	2	2	2
Multiple Modes and Mail	549	538	512	508
Pipeline	3,399	3,437	3,232	3,292
Other and Unknown	93	89	75	78
Total	**17,943**	**17,825**	**17,015**	**17,346**

*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 & mail to avoid double counting. As a consequence, rail and water totals in this table are less than other published sources.

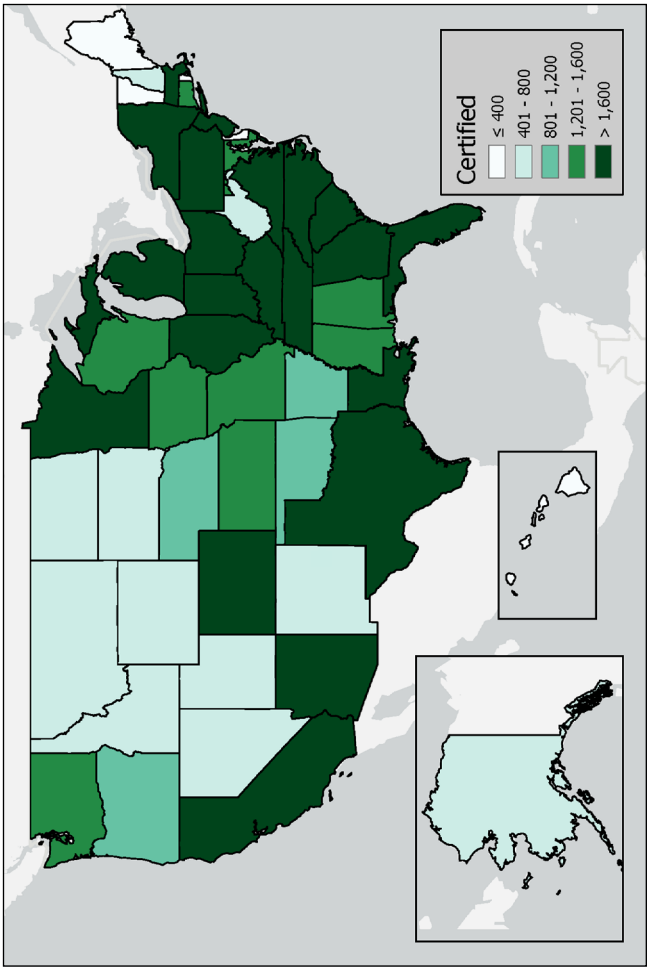
Data Source: U.S. Department of Transportation, Bureau of Transportation Statistics and Federal Highway Administration, Freight Analysis Framework, version 5.3, 2022, https://www.bts.gov/faf.

1-14 Percent of Total Weight of Freight Moved by Mode, 2021



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 & 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.

1-15 Number of Medical Examiners Certified by State, 2023



Notes: In August 2023, there were 90,687 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 10, 2023. 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, 2018–2022

	2018	2019	2020	2021	2022
Inspections	3,515,954	3,471,201	2,582,347	2,881,848	2,984,331
State	3,390,262	3,361,853	2,556,548	2,835,323	2,898,862
Federal	125,692	109,348	25,799	46,525	85,469

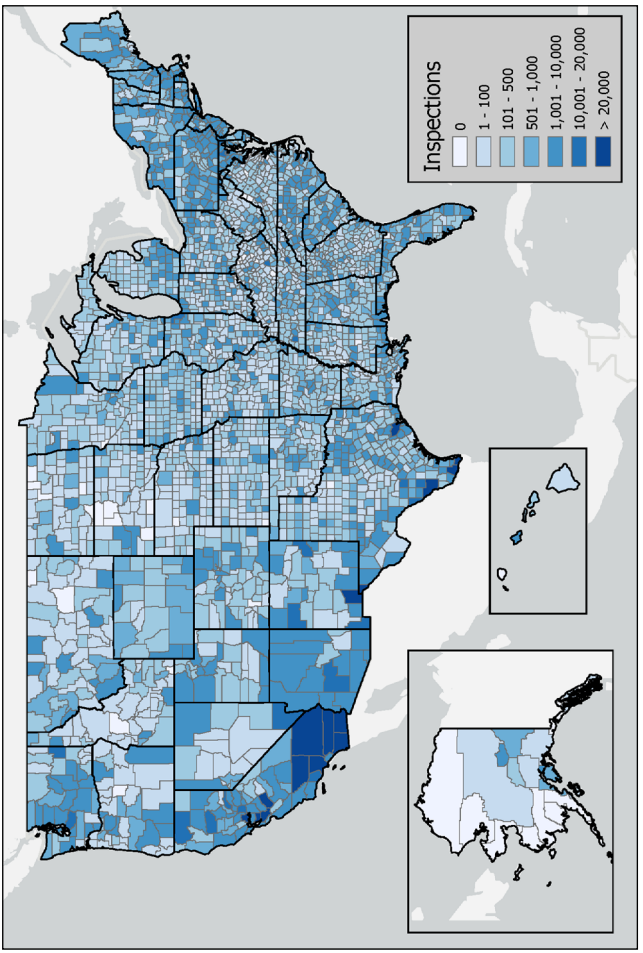
Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2023.

2-2 Safety Inspectors, Federal and State, 2018–2022

Inspector Type	2018	2019	2020	2021	2022
Safety Inspectors	13,839	13,597	12,782	12,744	12,591
State	13,320	13,089	12,420	12,275	12,100
Federal	519	508	362	469	491

Note: Not all personnel indicated are assigned full-time to conducting inspections.
Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2023.

2-3 Inspections by County, 2022



Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2023.

2-4 Inspection Out-of-Service (OOS) Rates, 2018–2022

Type of Inspection	2018	2019	2020	2021	2022
Driver Inspections*	3,402,946	3,355,104	2,471,877	2,770,737	2,879,966
With OOS Violation	161,203	170,803	129,390	170,268	198,493
Driver OOS Rate	4.7%	5.1%	5.2%	6.1%	6.9%
Vehicle Inspections**	2,410,876	2,385,606	1,767,656	1,966,954	2,016,103
With OOS Violation	501,729	492,288	365,569	420,686	455,079
Vehicle OOS Rate	20.8%	20.6%	20.7%	21.4%	22.6%
Hazmat Inspections***	202,077	202,967	150,350	168,383	170,967
With OOS Violation	8,437	9,149	6,557	7,562	7,757
Hazmat OOS Rate	4.2%	4.5%	4.4%	4.5%	4.5%

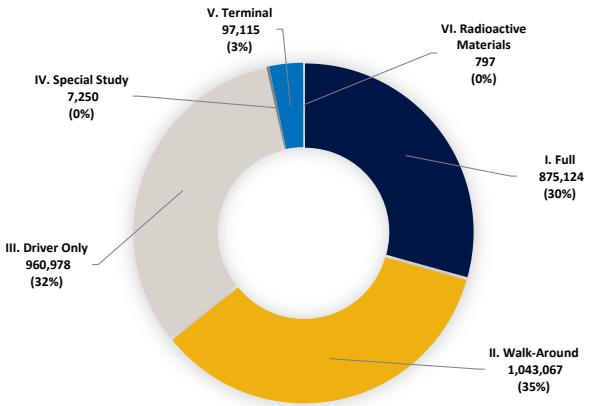
*Driver Inspections were computed based on inspection levels I, II, III, and VI.
**Vehicle Inspections were computed based on inspection levels I, II, V, and VI.
***Hazmat Inspections were computed based on inspection levels I, II, III, IV, V, and VI when hazardous materials were present.
Notes: Inspection 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/all-inspection-levels/.
Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2023.

2-5 Inspections by Level, 2018–2022

Inspection Level	2018	2019	2020	2021	2022
I. Full	1,104,938	1,070,216	775,583	865,811	875,124
With OOS Violation(s)*	278,174	266,685	194,466	228,361	240,424
II. Walk-Around	1,202,248	1,208,788	892,420	1,000,551	1,043,067
With OOS Violation(s)*	280,165	285,685	221,448	258,647	290,107
III. Driver Only	1,094,817	1,075,107	803,280	903,734	960,978
With OOS Violation(s)*	55,528	58,482	44,104	59,409	69,423
IV. Special Study	10,261	10,488	11,411	11,160	7,250
With OOS Violation(s)*	1,998	1,755	1,889	1,864	1,188
V. Terminal	102,747	105,609	99,059	99,951	97,115
With OOS Violation(s)*	5,722	5,876	4,587	4,821	4,659
VI. Radioactive Materials	943	993	594	641	797
With OOS Violation(s)*	5	8	5	7	3
Total	**3,515,954**	**3,471,201**	**2,582,347**	**2,881,848**	**2,984,331**

*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 27, 2023.

2-6 Inspections by Level, 2022



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 27, 2023.

2-7 Inspections by Carrier Fleet Size, 2018–2022

Carrier Fleet Size	2018	2019	2020	2021	2022
Very Small (1-6 Power Units)	1,118,490	1,093,631	825,816	966,933	1,025,767
Small (7-20 Power Units)	614,298	608,958	440,880	490,565	501,116
Medium (21-100 Power Units)	737,394	720,773	528,433	579,398	593,936
Large (>100 Power Units)	895,320	898,347	693,024	746,331	774,500
Unknown	150,448	149,492	94,194	98,621	89,012
Total	**3,515,950**	**3,471,201**	**2,582,347**	**2,881,848**	**2,984,331**

Note: Carriers listed as having zero power units are included in the "Unknown" category.
Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2023.

2-8 Inspections by Carrier Operation, 2018–2022

Carrier Operation	2018	2019	2020	2021	2022
Interstate	2,794,424	2,767,629	2,038,729	2,318,901	2,427,840
Intrastate	721,530	703,572	543,618	562,947	556,491
Total	**3,515,954**	**3,471,201**	**2,582,347**	**2,881,848**	**2,984,331**

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2023.

2-9 Inspections by Gross Combination Weight Rating (GCWR), 2018–2022

GCWR	2018	2019	2020	2021	2022
<10,000 pounds	15,657	15,090	9,290	9,371	9,126
10,000 - 26,000 pounds	547,994	561,457	451,694	500,918	520,010
>26,000 pounds	2,829,302	2,776,960	2,016,786	2,238,590	2,337,086
Unknown	123,001	117,694	104,577	132,969	118,109
Total	**3,515,954**	**3,471,201**	**2,582,347**	**2,881,848**	**2,984,331**

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 27, 2023.

2-10 Most Frequent Driver Violations in Inspections, 2022

Violation Code	Category	Violation Description	Number of Violations
392.2C	Failure To Obey Traffic Control Device	Failure to obey traffic control device	65,675
392.2-SLLS2	Speeding	State/Local Laws - Speeding 6-10 miles per hour over the speed limit.	63,561
395.8(e)	False Log Book	False report of drivers record of duty status	60,856
392.16	Seat Belt	Failing to use seat belt while operating a CMV	53,638
383.23(a)(2)	All Other Driver Violations	Operating a CMV without a CDL	51,401
392.2LV	All Other Driver Violations	Lane Restriction violation	41,531
391.41(a)(1)	Medical Certificate	Operating a property-carrying vehicle without possessing a valid medical certificate - no previous history.	40,375
395.8A-ELD	No Log Book,Log Not Current,General Log Violations	ELD - No record of duty status (ELD Required)	40,061
392.2MI	All Other Driver Violations	Miscellaneous Traffic Law Violation	39,607
395.8	Log Book Form And Manner	Record of Duty Status violation (general/form and manner)	39,263
391.41(a)	Medical Certificate	No medical certificate in driver's possession	31,293
392.2-SLLS3	Speeding	State/Local Laws - Speeding 11-14 miles per hour over the speed limit.	30,826
392.2-SLLS1	Speeding	State/Local Laws - Speeding 1-5 miles per hour over the speed limit.	23,521
395.24D	All Other Hours-Of-Service	ELD cannot transfer ELD records electronically	23,050
395.8F01	No Log Book,Log Not Current,General Log Violations	Drivers record of duty status not current	22,374
395.24C2III	Log Book Form And Manner	Driver failed to manually add shipping document number	22,233
395.22H4	All Other Hours-Of-Service	Driver failed to maintain supply of blank drivers records of duty status graph-grids	21,804
395.30B1	Log Book Form And Manner	Driver failed to certify the accuracy of the information gathered by the ELD	21,680
392.2-SLLS4	Speeding	State/Local Laws - Speeding 15 or more miles per hour over the speed limit.	21,358
392.82(a)1	All Other Driver Violations	Using a hand-held mobile telephone while operating a CMV	18,635

Notes: Total number of driver inspections in 2022: 2,879,966. Total number of driver violations in 2022: 1,094,979. Total number of driver out-of-service (OOS) violations in 2022: 239,910. 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 27, 2023.

2-11 Most Frequent Vehicle Violations in Inspections, 2022

Violation Code	Category	Violation Description	Number of Violations
393.9	Lighting	Inoperable Required Lamp	372,664
396.17(c)	Periodic Inspection	Operating a CMV without proof of a periodic inspection	187,803
393.47(e)	Brakes, Out Of Adjustment	Clamp or Roto type brake out-of-adjustment	131,339
393.95(a)	Emergency Equipment	No/discharged/unsecured fire extinguisher	124,635
393.9TS	Lighting	Inoperative turn signal	116,051
393.75(a)(3)	Tires	Tire-flat and/or audible air leak	109,317
396.3(a)(1)	All Other Vehicle Defects	Inspection, repair and maintenance of parts and accessories	91,975
393.78	Windshield	Windshield wipers inoperative/defective	87,246
393.11	Lighting	No or defective lighting devices or reflective material as required	82,706
393.53(b)	Brakes, All Others	CMV manufactured after 10/19/94 has an automatic airbrake adjustment system that fails to compensate for wear	80,279
393.75(c)	Tires	Tire-other tread depth less than 2/32 of inch measured in a major tread groove	74,580
396.5(b)	All Other Vehicle Defects	Oil and/or grease leak	67,609
393.95(f)	Emergency Equipment	No / insufficient warning devices	61,555
393.9H	Lighting	Inoperable head lamps	59,580
393.45(b)(2)	Brakes, All Others	Brake hose or tubing chafing and/or kinking	56,190
393.48(a)	Brakes, All Others	Inoperative/defective brakes	55,798
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	55,138
393.55(e)	Brakes, All Others	No or Defective ABS Malfunction Indicator Lamp for trailer manufactured after 03/01/1998	55,066
393.9(a)	Lighting	Inoperative Brake Lamps	47,916
396.3A1B	Brakes, All Others	Brakes (general) Explain:	44,572

Notes: Total number of vehicle inspections in 2022: 2,016,103. Total number of vehicle violations in 2022: 3,149,465. Total number of vehicle out-of-service (OOS) violations in 2022: 680,510. Only the top 20 vehicle violations (based on frequency of occurrence) are listed in this table.
Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2023.

2-12 Traffic Enforcement Inspections, 2018–2022

Activity Summary	2018	2019	2020	2021	2022
Total Number of Traffic Enforcement Inspections	567,502	590,860	492,564	550,064	573,211
Number of Traffic Enforcement Inspections (Driver observed)	350,102	353,637	293,931	334,411	353,500
With Moving Violations	345,943	349,419	290,438	328,143	344,281
With Drug & Alcohol Violations	5,365	5,492	4,275	5,650	6,455
With Railroad Crossing Violations	210	252	183	173	192
Number of Traffic Enforcement Inspections (Vehicle observed)	217,400	237,223	198,633	215,653	219,711

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 27, 2023.

2-13 Traffic Enforcement Violations, 2018–2022

Activity Summary	2018	2019	2020	2021	2022
Total Number of Traffic Enforcement Violations	805,524	855,046	726,513	823,539	865,946
Number of Traffic Enforcement Violations (Driver observed)	378,827	384,204	319,025	364,766	385,780
Moving Violations	372,043	377,131	313,289	355,025	372,258
Drug & Alcohol Violations	6,573	6,820	5,182	6,854	7,657
Railroad Crossing Violations	211	253	184	173	192
Number of Traffic Enforcement Violations (Vehicle observed)	426,697	470,842	407,488	458,773	480,166

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 27, 2023.

3. Investigations

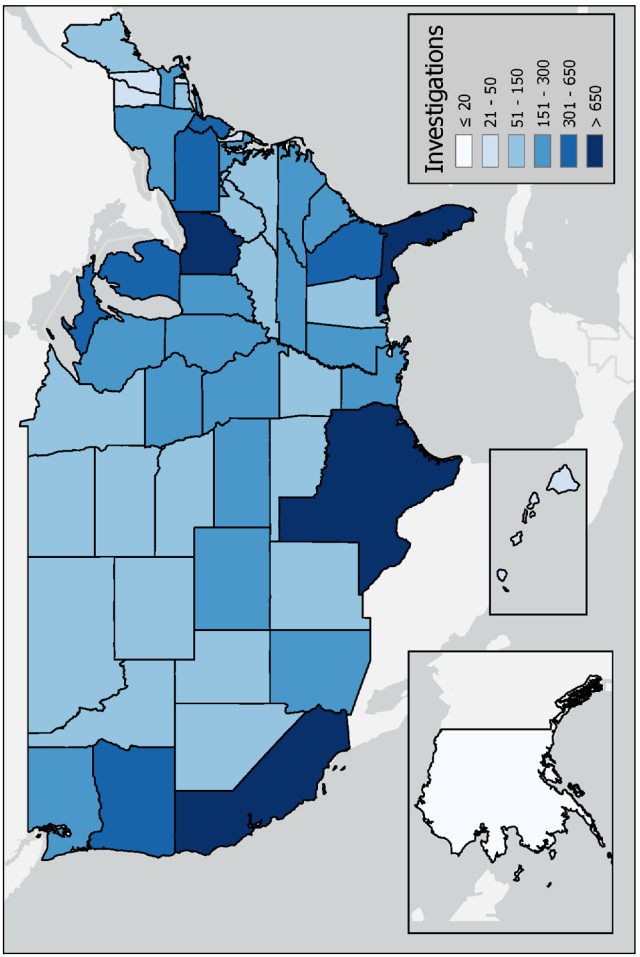
This chapter provides summarized data for the past 5 years on all types of investigations and reviews conducted on motor carriers that transport property or passengers in interstate or intrastate commerce. Investigations are conducted to investigate identified areas of non-compliance and safety concerns, 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, 2022



Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2023.

3-2 Investigations Conducted by Federal and State Investigators, 2018–2022

Investigations	2018	2019	2020	2021	2022
State	6,048	5,377	4,412	4,353	4,263
Federal	8,174	7,663	7,048	7,989	8,233
Total	**14,222**	**13,040**	**11,460**	**12,342**	**12,496**

Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2023.

3-3 Interventions by Type, 2018–2022

Intervention Type	2018	2019	2020	2021	2022
Investigations	14,222	13,040	11,460	12,342	12,496
Onsite Comprehensive	5,883	5,359	1,974	2,345	3,609
Onsite Focused	7,418	5,937	3,609	5,009	5,375
Offsite	330	1,374	5,759	4,874	3,356
Cargo Tank Facility Reviews	92	82	27	30	55
Shipper Reviews	12	7	2	1	-
Non-Rated Reviews	502	293	90	83	105
Warning Letters	30,150	26,564	22,230	28,181	32,463
Security Contact Reviews	349	344	164	103	34
Total Terminal Investigations	20,442	25,010	23,700	22,777	19,755

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 27, 2023.

3-4 FMCSA-Regulated Carriers by Safety Rating, 2022

Safety Rating	Interstate Freight Carriers	Intrastate HM Carriers	Interstate Passenger Carriers	All Carriers
Conditional	11,229	485	136	11,850
Satisfactory	29,634	1,662	2,410	33,706
Unsatisfactory	882	119	6	1,007
No Rating	702,245	37,649	7,120	747,014
Total	**743,990**	**39,915**	**9,672**	**793,577**

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 27, 2023.

3-5 Passenger Carrier, Hazardous Materials Carrier, and Household Goods Carrier Investigations, 2018–2022

Carriers by Vehicle Type	2018	2019	2020	2021	2022
Any Passenger Vehicles*	1,166	1,164	399	468	715
Motorcoaches	915	966	227	284	578
School Buses	176	316	107	121	102
Vans	281	160	91	134	191
Mini Buses	390	178	70	175	253
Limousines	100	219	80	36	65
Hazardous Materials	524	564	440	511	534
Household Goods	174	135	63	66	165

*The "Any Passenger Vehicles" row might not equal the sum of subcategories for a given row due to carriers applying for multiple passenger authority at the time of the application.
Notes: Passenger carriers were those carriers that registered to transport passengers and owned or leased at least one passenger vehicle (motorcoach, school bus, van, mini-bus, or limousine). Beginning in 2014, reporting criteria for identifying passenger carrier investigations was updated. As a result, data may differ from previous versions. Passenger carrier investigations now reflect investigations performed by Federal and State personnel on motor carriers that were subject to the Safety Measurement System (SMS) passenger carrier threshold at the time of the investigations.
Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2023.

3-6 Investigations by Carrier Fleet Size, 2018–2022

Carrier Fleet Size	2018	2019	2020	2021	2022
Very Small (1-6 Power Units)	8,477	7,509	6,150	6,641	6,788
Small (7-20 Power Units)	3,614	3,413	3,248	3,604	3,452
Medium (21-100 Power Units)	1,701	1,643	1,688	1,701	1,826
Large (>100 Power Units)	339	355	328	365	378
No Power Units/Unreported	91	120	46	31	52
Total	**14,222**	**13,040**	**11,460**	**12,342**	**12,496**

Note: Carriers listed as having zero power units are included in the "No Power Units/Unreported" category.
Data Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2023.

3-7 New Entrant Safety Audits, 2018–2022

Year	Safety Audits	Safety Audit Pass Rate
2018	37,348	89.30%
2019	40,277	88.20%
2020	40,221	92.60%
2021	48,392	92.30%
2022	63,554	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 27, 2023.

3-8 Summary of Closed Enforcement Cases, 2018–2022

Subject Type	2018 Cases (Amount Settled)	2019 Cases (Amount Settled)	2020 Cases (Amount Settled)	2021 Cases (Amount Settled)	2022 Cases (Amount Settled)
Broker	0 ($0)	0 ($0)	0 ($0)	1 ($3,880)	0 ($0)
Cargo Tank Facility	25 ($593,650)	14 ($94,500)	9 ($12,288,560)	3 ($33,080)	5 ($82,840)
Carrier	4127 ($29,138,349)	3499 ($22,443,295)	2402 ($14,589,814)	2685 ($17,593,615)	3456 ($24,231,641)
Drug Consortium	0 ($0)	1 ($5,890)	0 ($0)	0 ($0)	0 ($0)
Freight Forwarder	70 ($955,874)	42 ($434,932)	11 ($59,700)	13 ($61,350)	17 ($107,780)
HM Carrier	139 ($1,673,220)	121 ($1,161,700)	54 ($405,289)	39 ($455,370)	81 ($830,690)
HM Carrier (Not Placarded)	0 ($0)	0 ($0)	1 ($3,110)	0 ($0)	0 ($0)
HM Carrier/ Shipper	80 ($963,390)	52 ($575,100)	25 ($287,780)	32 ($264,540)	39 ($330,930)
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	4 ($16,716)	3 ($19,640)	0 ($0)	0 ($0)	0 ($0)
Passenger Carrier	92 ($972,746)	63 ($449,133)	34 ($217,650)	11 ($64,369)	20 ($87,060)
Shipper	2 ($30,110)	0 ($0)	0 ($0)	0 ($0)	1 ($29,390)
Small Passenger Carrier	0 ($0)	0 ($0)	0 ($0)	0 ($0)	0 ($0)
Total	**4539 ($34,344,055)**	**3795 ($25,184,190)**	**2536 ($27,851,903)**	**2784 ($18,476,204)**	**3619 ($25,700,331)**

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 Source: FMCSA, Motor Carrier Management Information System (MCMIS), data snapshot as of January 27, 2023.

4. Crashes

In 2021, of the 39,508 fatal crashes on the Nation's roadways, 5,340 (13.5 percent) involved at least one large truck or bus. In addition, there were an estimated 6,064,000 nonfatal crashes, 531,000 (8.7 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://www.fmcsa.dot.gov/registration/mcmis-catalog/mcmis-data-dissemination-program-mcmis-catalog.

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 Website 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, 2018–2021

Year	Number of Crashes Involving:			
	Large Trucks	Buses	Large Trucks and Buses	All Vehicle Types
2018	499,000	65,000	560,000	6,735,000
2019	511,000	72,000	580,000	6,755,000
2020	407,000	33,000	439,000	5,251,000
2021	494,000	48,000	536,000	6,104,000

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, 2018–2021

Year	Number of Crashes Involving:			
	Large Trucks	Buses	Large Trucks and Buses	All Vehicle Types
2018	4,461	234	4,678	33,919
2019	4,502	234	4,722	33,487
2020	4,423	164	4,574	35,935
2021	5,149	204	5,340	39,508

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, 2018–2021

	Number of Crashes Involving:			
Year	Large Trucks	Buses	Large Trucks and Buses	All Vehicle Types
2018	107,000	15,000	121,000	1,894,000
2019	114,000	13,000	127,000	1,916,000
2020	99,000	8,000	107,000	1,593,000
2021	110,000	10,000	119,000	1,728,000

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, 2018–2021

	Number of Crashes Involving:			
Year	Large Trucks	Buses	Large Trucks and Buses	All Vehicle Types
2018	388,000	50,000	434,000	4,807,000
2019	392,000	59,000	448,000	4,806,000
2020	304,000	25,000	327,000	3,622,000
2021	379,000	38,000	412,000	4,336,000

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 wight 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, 1975–2021

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: Fatal Crashes Involving Large Trucks	Rates per 100 Million VMT: 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
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†	*4,423*	*822*	*4,945*	*297,649*	*1.49*	*1.66*	*12,899,371*
2021†	*5,149*	*1008*	*5,788*	*327,026*	*1.57*	*1.77*	*13,859,181*

†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 2021*.

4-6 Large Truck Injury Crashes, 2018–2021

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: Injury Crashes Involving Large Trucks	Rates per 100 Million VMT: Persons Injured in Large Truck Crashes	Large Trucks Registered
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	99,000	105,000	142,000	297,649	33.2	47.6	12,899,371
2021	110,000	117,000	155,000	327,026	33.6	47.3	13,859,181

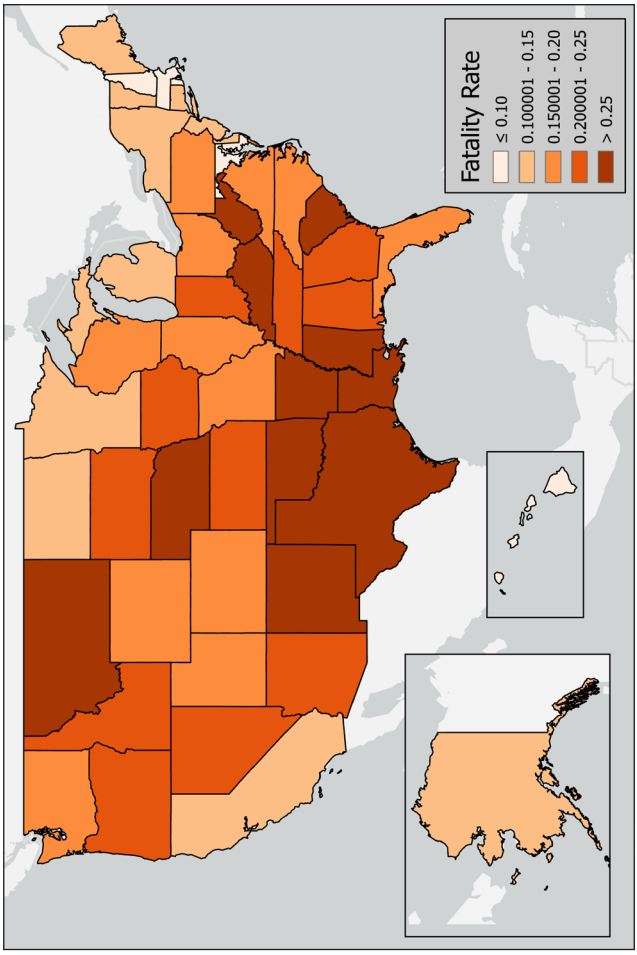
Notes: "Persons Injured" includes all nonfatally injured persons in injury and fatal crashes. A large truck is defined as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds. The rates displayed in this table based on unrounded Crash Report Sampling System (CRSS) data. CRSS is 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 2021*, 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, 2020 and 2021

State	2020†			2021†		
	Fatalities	Million VMT	Fatality Rate	Fatalities	Million VMT	Fatality Rate
Alabama	145	67,921	0.21	150	71,892	0.21
Alaska	9	5,306	0.17	8	5,752	0.14
Arizona	124	65,758	0.19	152	73,760	0.21
Arkansas	89	33,919	0.26	117	38,427	0.30
California	427	299,812	0.14	447	310,823	0.14
Colorado	87	48,642	0.18	105	53,840	0.20
Connecticut	27	29,845	0.09	29	28,989	0.10
Delaware	11	8,345	0.13	14	10,152	0.14
D.C.	2	3,030	0.07	6	3,248	0.18
Florida	355	208,076	0.17	402	217,566	0.18
Georgia	247	115,967	0.21	249	120,685	0.21
Hawaii	7	8,785	0.08	8	9,972	0.08
Idaho	52	17,406	0.30	46	19,308	0.24
Illinois	176	94,121	0.19	185	97,530	0.19
Indiana	156	76,608	0.20	172	78,640	0.22
Iowa	73	29,751	0.25	69	33,039	0.21
Kansas	72	27,854	0.26	79	31,693	0.25
Kentucky	119	46,536	0.26	133	48,111	0.28
Louisiana	103	48,374	0.21	138	54,728	0.25
Maine	22	13,086	0.17	18	14,560	0.12
Maryland	60	50,885	0.12	43	56,601	0.08
Massachusetts	27	54,127	0.05	35	59,115	0.06
Michigan	77	86,547	0.09	118	96,744	0.12
Minnesota	59	51,619	0.11	85	57,171	0.15
Mississippi	88	39,665	0.22	110	40,853	0.27
Missouri	113	72,797	0.16	138	79,791	0.17
Montana	33	12,104	0.27	39	13,482	0.29
Nebraska	56	19,432	0.29	57	21,210	0.27
Nevada	43	25,231	0.17	67	27,077	0.25
New Hampshire	11	11,956	0.09	7	13,130	0.05
New Jersey	61	66,341	0.09	94	73,673	0.13
New Mexico	52	23,756	0.22	89	26,823	0.33
New York	127	102,477	0.12	129	106,870	0.12
North Carolina	174	106,342	0.16	178	117,734	0.15
North Dakota	21	8,768	0.24	13	9,256	0.14
Ohio	152	103,115	0.15	223	112,923	0.20
Oklahoma	89	42,000	0.21	138	44,760	0.31
Oregon	76	32,298	0.24	88	36,842	0.24
Pennsylvania	138	87,982	0.16	167	102,686	0.16
Rhode Island	6	6,864	0.09	3	7,526	0.04
South Carolina	134	53,972	0.25	149	57,492	0.26
South Dakota	27	9,743	0.28	20	9,994	0.20
Tennessee	182	76,392	0.24	188	82,596	0.23
Texas	650	260,582	0.25	821	285,028	0.29
Utah	42	30,251	0.14	67	33,638	0.20
Vermont	4	6,007	0.07	8	6,625	0.12
Virginia	113	76,110	0.15	126	80,102	0.16
Washington	64	53,658	0.12	90	57,797	0.16
West Virginia	34	16,054	0.21	46	16,079	0.29
Wisconsin	72	57,600	0.13	107	64,983	0.16
Wyoming	25	9,800	0.26	21	11,097	0.19
National Totals	**5,113**	**2,903,622**	**0.18**	**5,991**	**3,132,411**	**0.19**

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 2021*; 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, 2021



Data Sources: Vehicle Miles Traveled - FHWA, *Highway Statistics 2021*; Fatalities - National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

4-9 Vehicle Occupants Killed in Large Truck Crashes by Vehicle Type, 2018–2021

Occupant of:	2018	2019	2020	2021
Passenger Car	1,696	1,657	1,535	1,770
Light Truck	1,536	1,580	1,622	2,017
Large Truck	890	893	822	1008
Motorcycle	288	302	291	314
Bus	25	4	9	6
Other/Unknown	18	26	44	43
Total Vehicle Occupants	**4,453**	**4,462**	**4,323**	**5,158**

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, 2018–2021

Nonmotorist Type	2018	2019	2020	2021
Total Nonmotorist Fatalities	553	570	622	631
Pedestrian	452	453	517	549
Pedalcyclist	78	91	84	66
Other/Unknown Nonmotorist	23	26	21	15
Total Fatalities	**5,006**	**5,032**	**4,945**	**5,788**
Percent Nonmotorist Fatalities	**11.0%**	**11.3%**	**12.6%**	**10.9%**

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, 2018–2021

Nonmotorist Type	2018	2019	2020	2021
Total Nonmotorist Fatalities	64	74	57	55
Pedestrian	54	59	46	47
Pedalcyclist	7	12	7	6
Other/Unknown Nonmotorist	3	3	4	2
Total Fatalities	**267**	**261**	**187**	**221**
Percent Nonmotorist Fatalities	**24.0%**	**28.4%**	**30.5%**	**24.9%**

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, 2018–2021

	2018		2019		2020		2021	
Crash Type:	**No.**	**Pct.**	**No.**	**Pct.**	**No.**	**Pct.**	**No.**	**Pct.**
Large Truck Fatal Crashes	4,461	100.0%	4,502	100.0%	4,423	100.0%	5,149	100.0%
Work Zone	207	4.6%	249	5.5%	205	4.6%	288	5.6%
Not a Work Zone	4,254	95.4%	4,253	94.5%	4,218	95.4%	4,861	94.4%
All Fatal Crashes	33,919	100.0%	33,487	100.0%	35,935	100.0%	39,508	100.0%
Work Zone	672	2.0%	765	2.3%	780	2.2%	872	2.2%
Not a Work Zone	33,247	98.0%	32,722	97.7%	35,155	97.8%	38,636	97.8%
Percent of Work-Zone Fatal Crashes that Involved at Least One Large Truck	**30.8%**		**32.5%**		**26.3%**		**33.0%**	
Percent of All Fatal Crashes that Involved at Least One Large Truck	**13.2%**		**13.4%**		**12.3%**		**13.0%**	

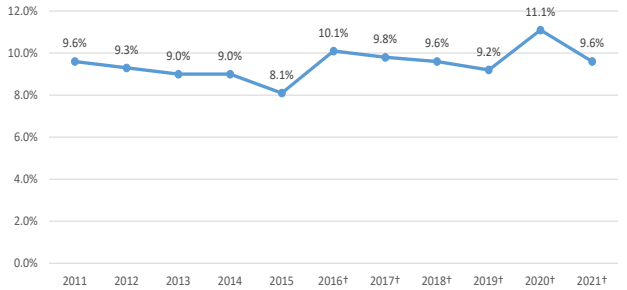
Notes: "Not a Work Zone" counts include crashes where the location was unknown. A large truck is defined as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds. A work zone is defined as an area of a trafficway where construction, maintenance, or utility work activities are identified 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, 2018–2021

Truck Weight Rating	2018	2019	2020	2021
Class 2: 6,001 - 10,000 lb	0	1	0	0
Class 3: 10,001 - 14,000 lb	635	658	722	868
Class 4: 14,001 - 16,000 lb	111	132	125	142
Class 5: 16,001 - 19,500 lb	172	163	160	232
Class 6: 19,501 - 26,000 lb	287	274	295	388
Class 7: 26,001 - 33,000 lb	222	235	290	325
Class 8: > 33,000 lb	3,197	3,353	3,229	3,745
Unknown/Other	285	217	0	0
Total	**4,909**	**5,033**	**4,821**	**5,700**

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, 2011–2021



†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, 2018–2022

	Number of Large Trucks				
Cargo Release	**2018**	**2019**	**2020**	**2021**	**2022**
Cargo Release: No	2,972	2,780	2,135	2,470	2,350
Cargo Release: Yes	674	635	556	550	548
Corrosives	52	40	41	31	39
Explosives	16	20	13	9	8
Flammable Liquid	350	299	292	265	273
Flammable Solids	8	10	6	9	4
Gases	59	77	68	66	75
Miscellaneous Dangerous Goods	61	58	34	43	42
Oxidizing Substances	12	3	7	7	8
Poison & Infectious Substances	7	1	6	5	1
Radioactive Material	-	1	1	1	-
Unknown	109	126	88	114	98
Cargo Release: Unknown	500	387	266	315	346
Total	**4,146**	**3,802**	**2,957**	**3,335**	**3,244**

*Crash records reported to the Motor Carrier Management Information System (MCMIS) through December 30, 2022, 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 31, 2023.

4-16 Large Truck and Bus Drivers in Crashes, by Driver's License Class, 2018–2022

	Number of Vehicles Involved				
License Class	**2018**	**2019**	**2020**	**2021**	**2022***
Class A	125,691	123,286	108,553	123,090	121,934
Class B	23,322	23,280	15,906	18,999	19,891
Class C	15,546	15,629	13,258	16,666	16,804
Class D	22,967	23,030	20,444	25,027	22,357
Class M	105	85	69	85	81
Unknown	9,002	9,322	9,478	12,522	12,760
Total	**196,633**	**194,632**	**167,708**	**196,389**	**193,827**

*Crash records reported to the Motor Carrier Management Information System (MCMIS) through December 30, 2022, 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 31, 2023.

4-17 Large Trucks in Crashes by Operation Classification, 2018–2022

Operation Classification	2018	2019	2020	2021	2022*
For-Hire	101,712	99,699	90,130	106,281	103,988
Private	29,762	29,544	25,991	29,121	28,490
Both For-Hire and Private	15,473	15,952	14,086	15,879	15,437
Neither For-Hire Nor Private	1,527	1,520	1,327	1,455	1,276
No USDOT Number	30,051	29,790	25,924	30,135	29,740
Total	**178,525**	**176,505**	**157,458**	**182,871**	**178,931**

*Crash records reported to the Motor Carrier Management Information System (MCMIS) through December 30, 2022, 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 31, 2023. Operation classification information: FMCSA, MCMIS, data snapshots as of December 28, 2018; December 27, 2019; December 18, 2020; December 31, 2021; and December 30, 2022.

4-18 Large Trucks in Crashes by Carrier Operation, 2018–2022

Carrier Operation	2018	2019	2020	2021	2022*
Interstate	124,373	122,090	109,947	127,509	124,994
Intrastate Hazardous Materials (HM)	1,890	2,061	1,777	1,953	1,868
Intrastate Non-HM**	21,934	22,190	19,681	23,194	22,305
Unknown Carrier Operation**	1,406	1,486	1,037	1,017	801
No USDOT Number	28,922	28,678	25,016	29,198	28,963
Total	**178,525**	**176,505**	**157,458**	**182,871**	**178,931**

*Crash records reported to the Motor Carrier Management Information System (MCMIS) through December 30, 2022, 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 28, 2018; December 27, 2019; December 18, 2020; December 31, 2021; and December 30, 2022.

4-19 Bus Fatal Crashes, 1975–2021

Year	Fatal Crashes Involving Buses	Bus Occupant Fatalities	Total Fatalities in Bus Crashes	Million VMT by Buses	Rates per 100 Million VMT: Fatal Crashes Involving Buses	Rates per 100 Million VMT: 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	4.70	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	164	19	187	15,037	1.09	1.24	1,010,304
2021	204	15	221	16,744	1.22	1.32	939,219

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 2021*; Fatal Crashes, Vehicles Involved, and Fatalities - National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

4-20 Bus Injury Crashes, 2018–2021

Year	Injury Crashes Involving Buses	Buses Involved in Injury Crashes	Persons Injured in Bus Crashes	Million VMT by Buses	Rates per 100 Million VMT: Injury Crashes Involving Buses	Rates per 100 Million VMT: Persons Injured in Bus Crashes	Buses Registered
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	8,000	8,000	16,000	15,037	54.3	104.7	1,010,304
2021	10,000	10,000	18,000	16,744	60.8	109.8	939,219

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 2021*; 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, 2011–2021

Year	School Bus	Cross-Country Intercity Bus (Motorcoach)	Transit Bus	Van-Based Bus*	Other Bus Type	Bus Type Unknown	Total
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	43	13	80	—	25	3	164
2021	80	17	78	—	22	7	204

* "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).

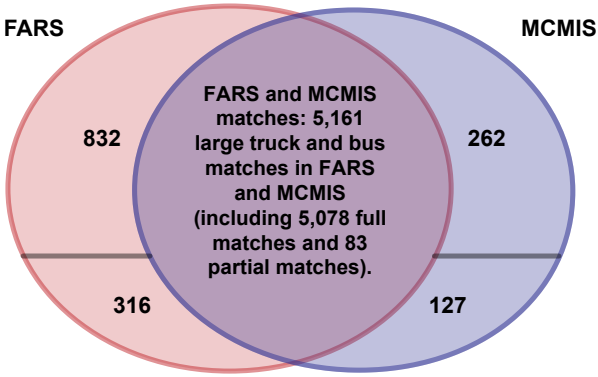
4-22 Estimated Costs of Large Truck and Bus Crashes, 2018–2021

Year	Fatal Crashes	Injury Crashes	Property-Damage-Only (PDO) Crashes	All Large Truck and Bus Crashes
2018	$64 Billion	$37 Billion	$19 Billion	$119 Billion
2019	$64 Billion	$39 Billion	$19 Billion	$122 Billion
2020	$63 Billion	$33 Billion	$14 Billion	$110 Billion
2021	$73 Billion	$37 Billion	$18 Billion	$128 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 in costs from previous editions of the Pocket Guide are due to a new crash cost methodology developed by FMCSA. 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: Crash Costs for Highway Safety Analysis, Federal Highway Administration (FHWA); The Economic and Societal Impact of Motor Vehicle Crashes, 2019 (Revised), National Highway Traffic Safety Administration (NHTSA); and Delay and Environmental Costs of Truck Crashes, Volpe Center, adjusted to current dollars, and a year 2021 value of a statistical life (VSL); 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, 2021

Number	Category	Percentage
5,078	Large trucks and buses matched in FARS and MCMIS	75.8%
83	Large trucks and buses that were partially matched in FARS and MCMIS	1.2%
832	Large trucks and buses in FARS and not in MCMIS	12.4%
316	Large trucks and buses in FARS matched to large trucks and buses in non-fatal crashes in MCMIS	4.7%
262	Large trucks and buses in MCMIS and not in FARS	3.9%
127	Large trucks and buses in MCMIS matched to vehicles in FARS that were not large trucks or buses	1.9%
6,698	**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

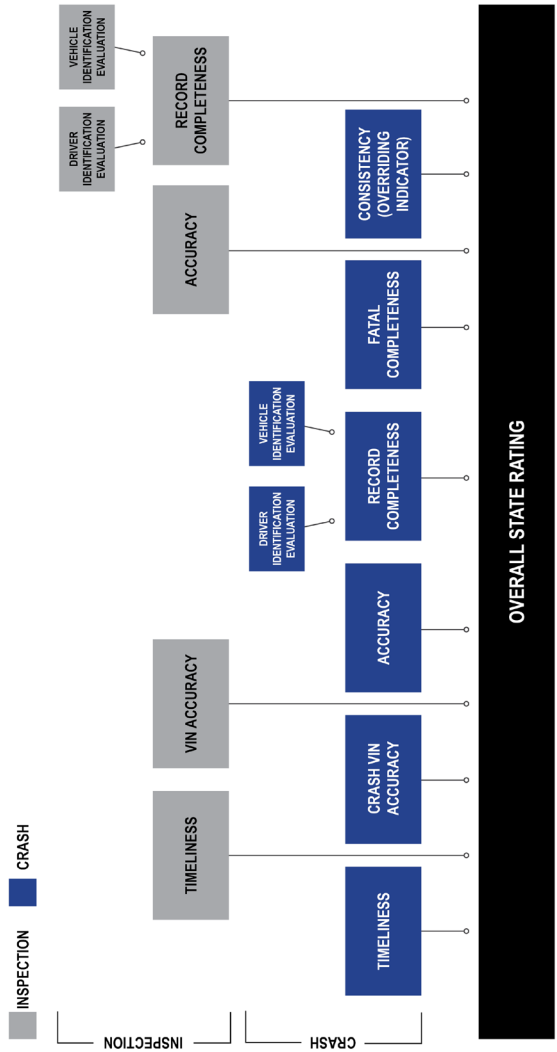
State Safety Data Quality (SSDQ) Methodology

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

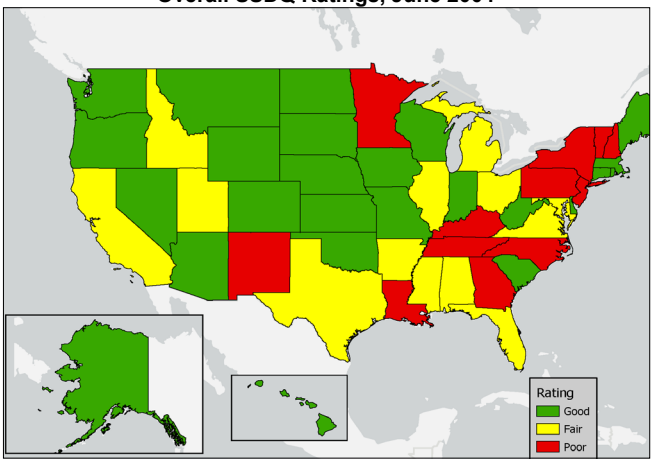
5-1 State Safety Data Quality (SSDQ) Performance Measures



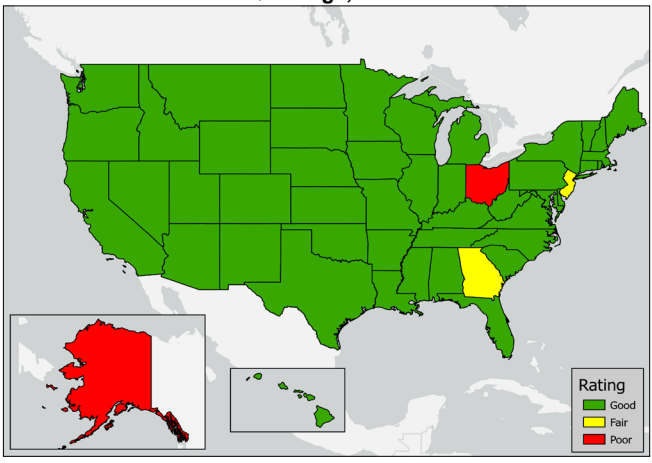
Data Source: FMCSA, Analysis & Information (A&I) Online, https://ai.fmcsa.dot.gov/DataQuality.

5-2 Overall State Safety Data Quality (SSDQ) Ratings, June 2004 and December 2022

Overall SSDQ Ratings, June 2004

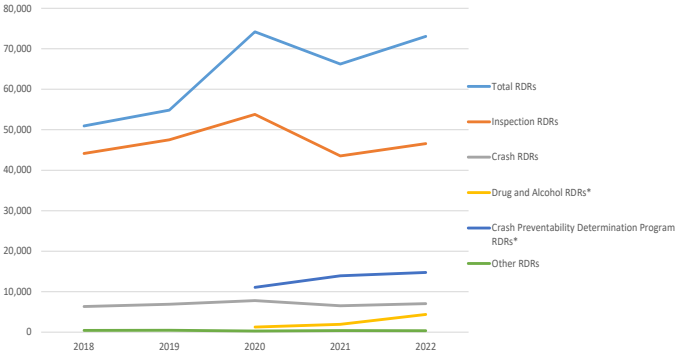


Overall SSDQ Ratings, December 2022



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 2022.
Data Sources: June 2004 Ratings: FMCSA, Analysis & Information (A&I) Online, State Safety Data Quality (SSDQ) as of June 2004; December 2022 Ratings: FMCSA, A&I Online, SSDQ as of December 2022. 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, 2018–2022



* The Drug & Alcohol Clearinghouse and Crash Preventability Determination Program began in 2020.
Data Source: FMCSA, DataQs, December 30, 2022 (based on submissions received in 2021).

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 U.S. Department of Transportation'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	$463,442,500
High Priority	$80,190,903
CDL Program Implementation	$44,214,974
CMVOST	$3,100,000
Total Grant Awards	**$590,948,377**

Motor Carrier Safety Assistance Program (MCSAP) Grant

The Motor Carrier Safety Assistance Program (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

High Priority (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.

More information on FMCSA's grant programs can be found at https://www.fmcsa.dot.gov/mission/grants.

7. Agency Resources

FMCSA Website
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://www.fmcsa.dot.gov/registration/mcmis-catalog/mcmis-data-dissemination-program-mcmis-catalog

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

You've seen the stats. Now let's get to **zero**.

If you want to make a difference and save lives,
we want you to join us.

Scan the code for current opportunites to serve.

FMCSA

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