

Crash Data Overview

Jessica Powell



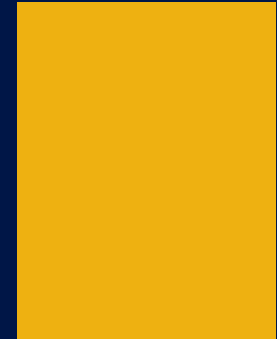
U.S. Department of Transportation
Federal Motor Carrier Safety Administration

Federal Motor Carrier Safety Administration

2024

SAFETY RESEARCH FORUM

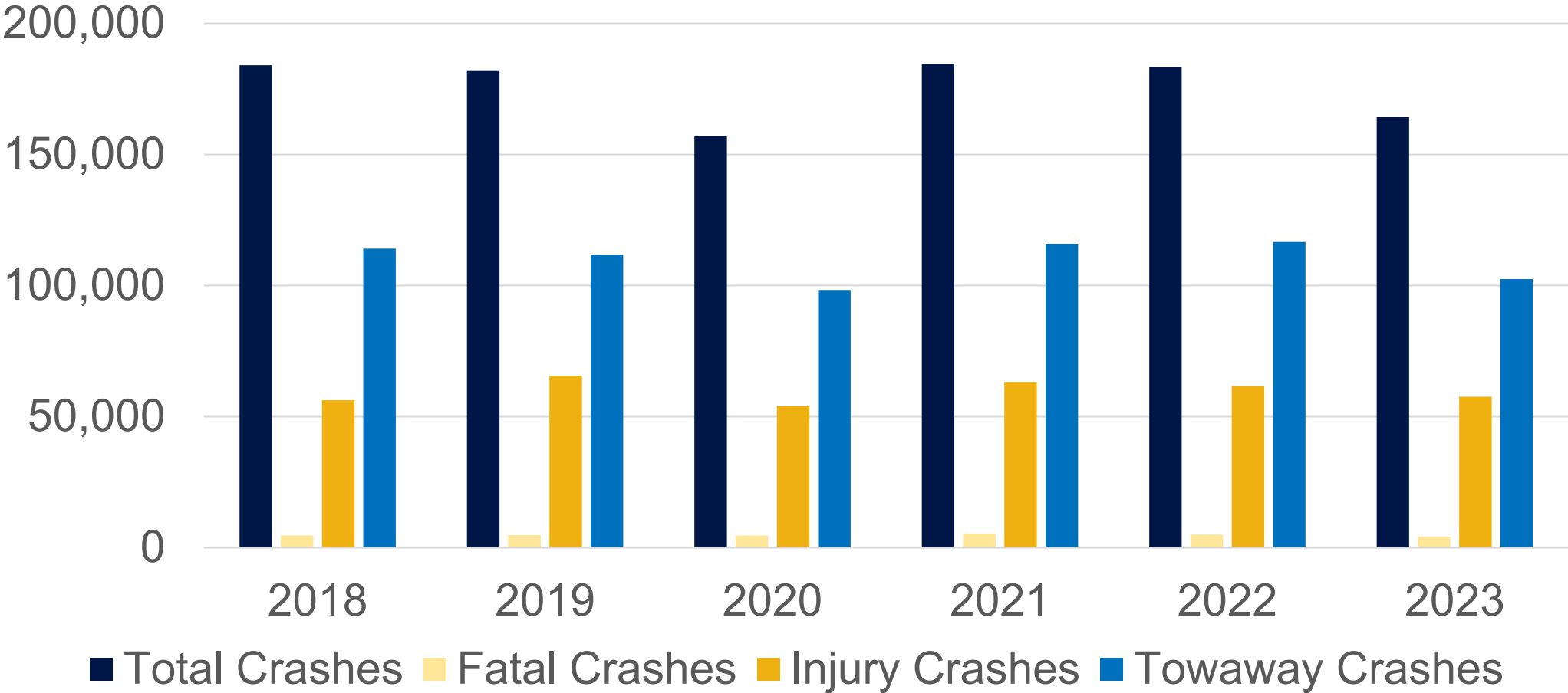
VIRTUAL EVENT



Data Source

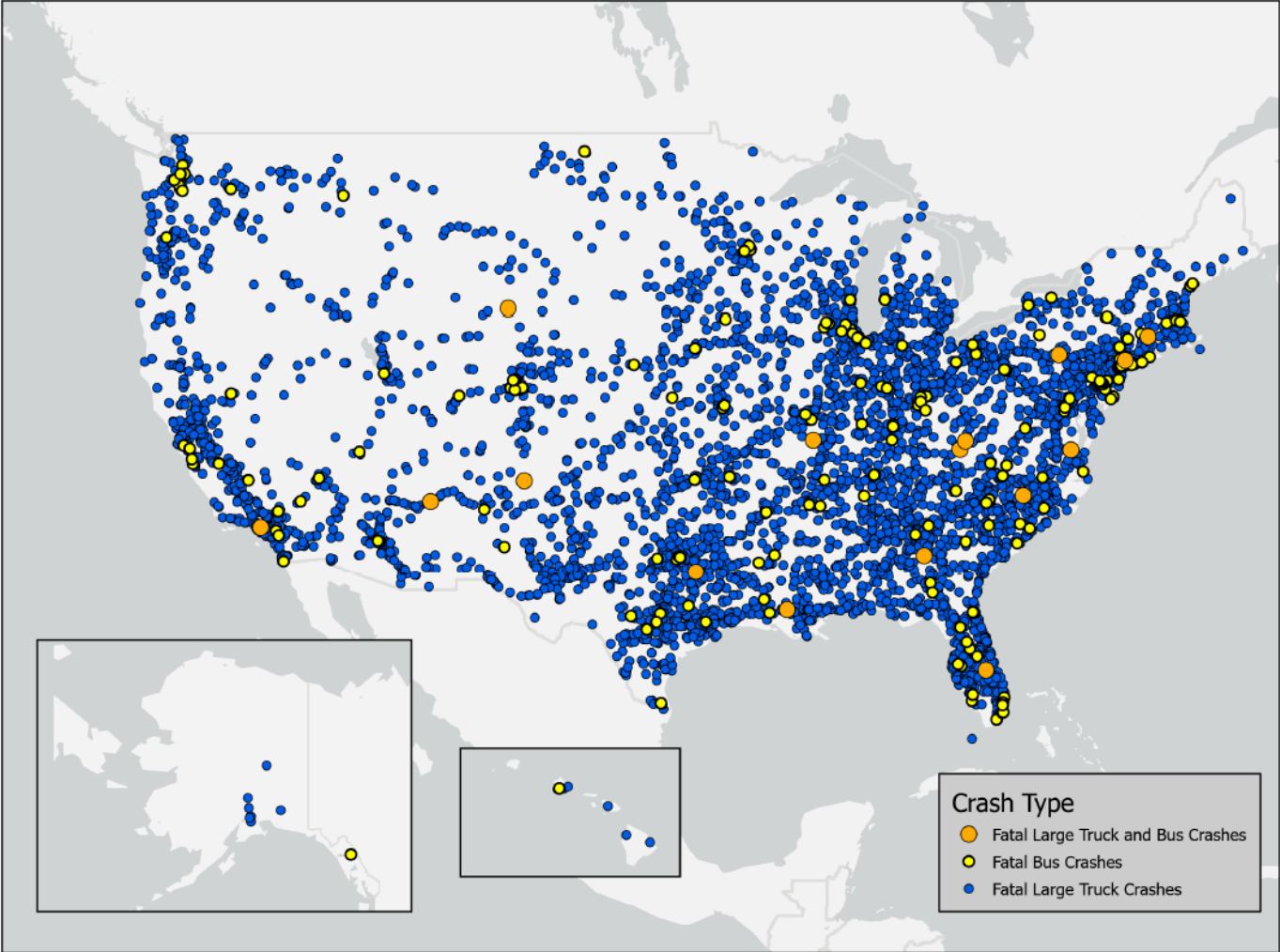
- NHTSA Fatality Analysis Reporting System (FARS)
 - Census of fatal crashes involving motor vehicles traveling on public trafficways.
 - A large truck is defined in FARS as a truck with a gross vehicle weight rating (GVWR) greater than 10,000 pounds.
 - A bus is defined in FARS as any motor vehicle designed primarily to transport nine or more persons, including the driver.
 - FARS data is obtained solely from the States' existing documents: Police Accident Reports, State Vehicle Registration Files, State Driver Licensing Files, State Highway Department Data, Vital Statistics, Death Certificates, Coroner/Medical Examiner Reports, Emergency Medical Service Reports, Other State Records
- FMCSA Motor Carrier Management Information System (MCMIS)
 - System used to collect and maintain records on commercial vehicle safety

Large Truck and Bus Crashes by Crash Type, 2018 – 2023



Source: Federal Motor Carrier Safety Administration (FMCSA), Motor Carrier Management Information System (MCMIS) data snapshot as of January 26, 2024.

Large Truck and Bus Fatal Crashes, 2022



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

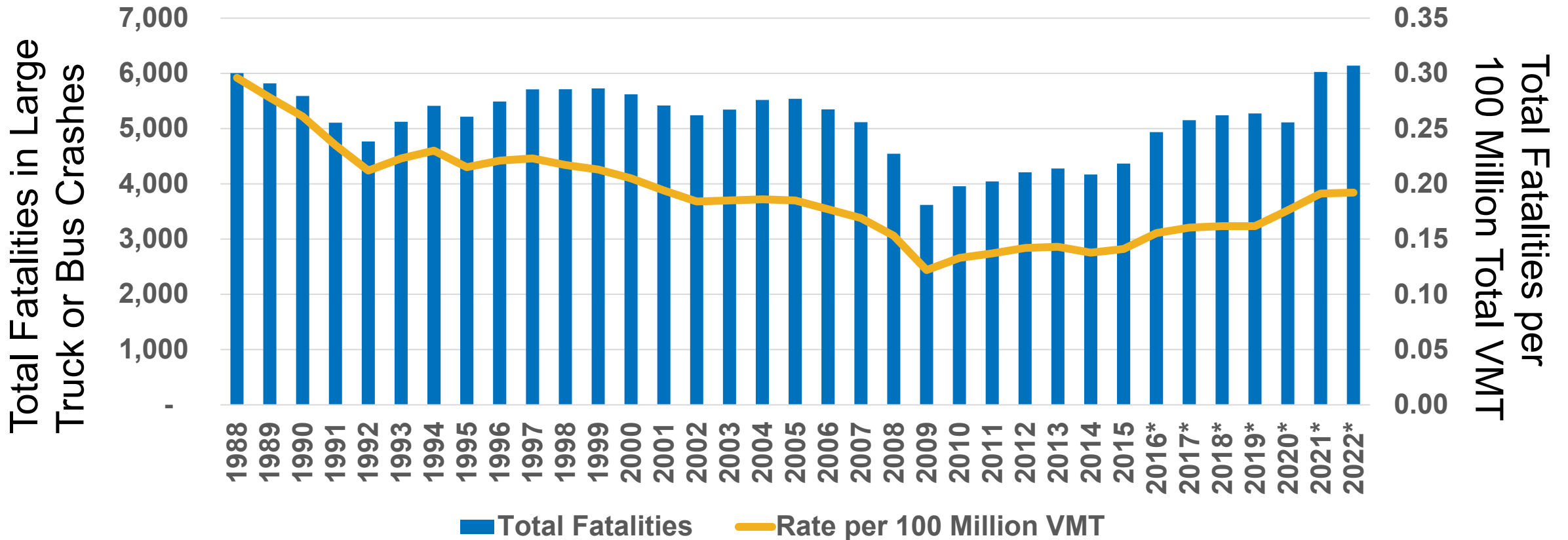
Fatal Crashes Involving Large Trucks and Buses, 2010 – 2022

Year	Fatal Crashes Involving Large Trucks and Buses	Large Trucks and Buses Involved in Fatal Crashes	Large Truck and Bus Occupant Fatalities	Total Fatalities in Large Truck and Bus Crashes
2010	3,512	3,745	574	3,957
2011	3,593	3,878	695	4,043
2012	3,726	4,078	736	4,208
2013	3,821	4,203	749	4,278
2014	3,656	3,985	700	4,168
2015	3,864	4,337	714	4,366
2016	4,396	4,796	879	4,936
2017	4,587	5,039	921	5,152
2018	4,678	5,147	934	5,241
2019	4,722	5,268	928	5,274
2020	4,574	4,986	841	5,113
2021	5,370	5,938	1,026	6,025
2022	5,476	6,050	1,123	6,139

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

**In 2016, NHTSA made changes to revise the light pickup truck classification and reclassified 329 vehicles as large trucks (based on GVWR). Due to this methodology change, comparisons of 2016 FARS large truck data with prior years should be performed with caution.*

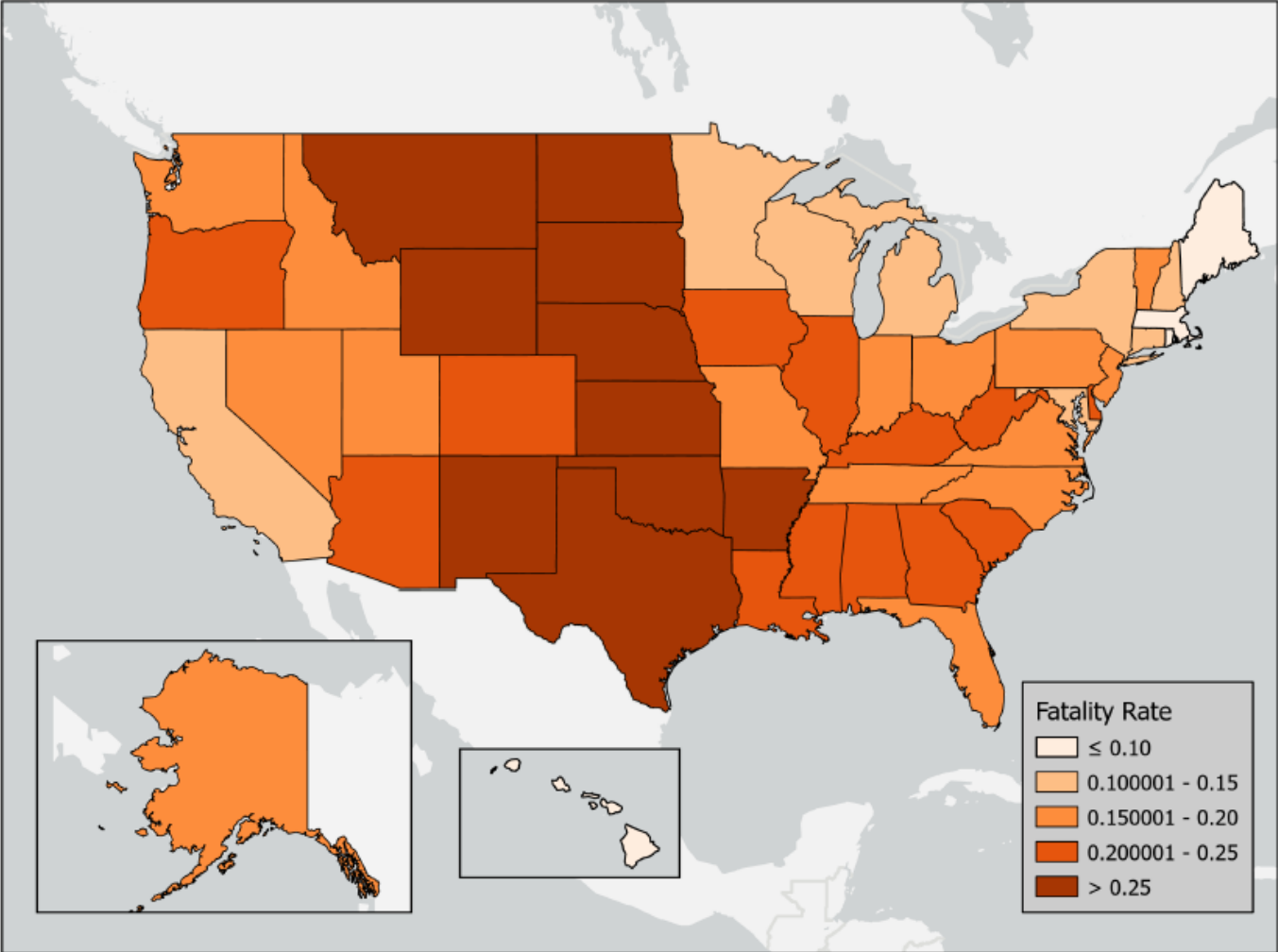
Large Truck and Bus Fatality Rate, 1988 – 2022



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

**In 2016, NHTSA made changes to revise the light pickup truck classification and reclassified 329 vehicles as large trucks (based on GVWR). Due to this methodology change, comparisons of 2016 FARS large truck data with prior years should be performed with caution.*

Large Truck & Bus Fatality Rates Per 100 Mil. Total VMT, 2022



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

Bus Fatal Crashes, 2014 – 2022

Type	2014	2015	2016	2017	2018	2019	2020	2021	2022	Percentage	
										2020-2022	2021-2022
School Bus	91	99	88	73	82	86	43	80	87	102%	9%
Intercity Bus (Motorcoach)	32	34	17	13	15	15	13	17	14	8%	-18%
Transit Bus	79	93	98	97	86	79	81	78	74	-9%	-5%
Van-Based Bus	9	14	6	31	30	32	-	-	-	-	-
Other/Unknown Bus Type	25	23	25	20	25	23	28	29	38	36%	31%
Total	236	263	234	234	238	235	165	204	213	29%	4%

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

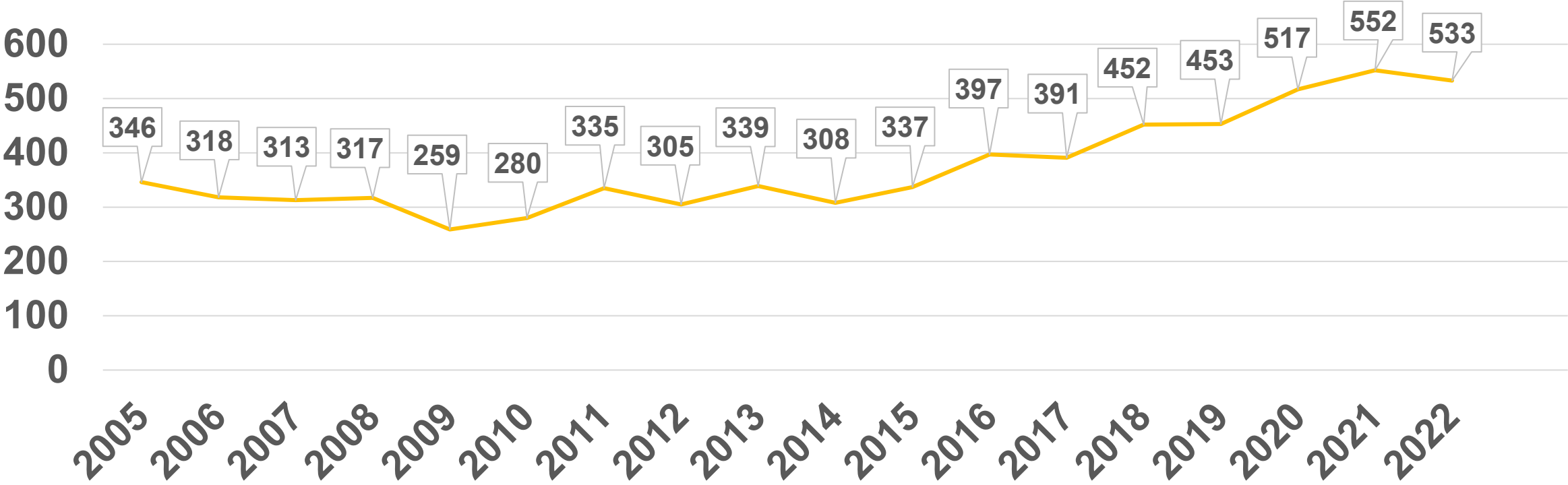
In 2020, NHTSA made changes to their coding methodology, which reclassified “Van-Based Buses” as “Other/Unknown.”

Large Trucks in Fatal Crashes by Truck Weight, 2018 – 2022

Truck Weight Rating	2018		2019		2020		2021		2022	
	Num	Perc	Num	Perc	Num	Perc	Num	Perc	Num	Perc
Class 1: < 6,000 lb	0	0%	0	0%	0	0%	0	0%	0	0%
Class 2: 6,001 - 10,000 lb	1	*	1	0%	0	0%	0	0%	0	0%
Class 3: 10,001 - 14,000 lb	637	13%	658	13%	722	15%	871	15%	909	15%
Class 4: 14,001 - 16,000 lb	115	2%	132	2%	125	2%	143	2%	145	2%
Class 5: 16,001 - 19,500 lb	174	3%	163	3%	160	3%	232	4%	234	4%
Class 6: 19,501 - 26,000 lb	287	5%	274	5%	295	6%	388	7%	406	7%
Class 7: 26,001 - 33,000 lb	229	4%	235	4%	290	6%	326	6%	300	5%
Class 8: > 33,000 lb	3,327	67%	3,353	66%	3,229	67%	3,773	66%	3,843	65%
Unknown	139	2%	217	4%	0	0%	0	0%	0	0%
Total	4,909	100%	5,033	100%	4,821	100%	5,733	100%	5,837	100%

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

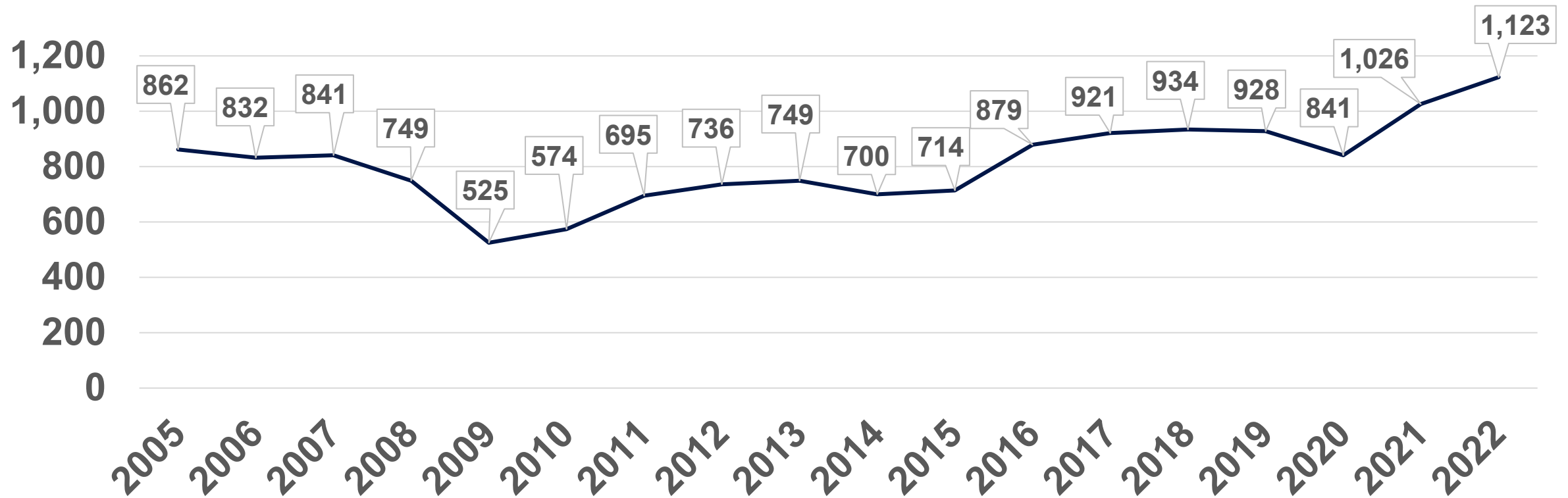
Pedestrian Fatalities in Large Truck Crashes, 2005 – 2022



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

**In 2016, NHTSA made changes to revise the light pickup truck classification and reclassified 329 vehicles as large trucks (based on GVWR). Due to this methodology change, comparisons of 2016 FARS large truck data with prior years should be performed with caution.*

Large Truck and Bus Occupant Fatalities, 2005 – 2022



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

**In 2016, NHTSA made changes to revise the light pickup truck classification and reclassified 329 vehicles as large trucks (based on GVWR). Due to this methodology change, comparisons of 2016 FARS large truck data with prior years should be performed with caution.*

Large Truck Fatalities, 2017 – 2022

Year	Number of Fatal Crashes	Number of Total Fatalities	Number of Driver Fatalities	Number Not Wearing Seatbelt	% of Driver Fatalities Not Wearing Seatbelt
2017	4,367	4,906	740	463	62.6%
2018	4,461	5,006	740	465	62.8%
2019	4,502	5,032	768	456	59.4%
2020	4,423	4,945	718	528	73.5%
2021	5,178	5,821	860	546	63.5%
2022	5,279	5,936	916	635	69.3%

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

Fatal Crashes by Work Zone, 2018 – 2022

Fatal Crashes by Work Zone, 2018 – 2022					
Work Zone	2018	2019	2020	2021	2022
Crashes Involving Large Trucks					
Fatal Crashes in Work Zones	207	249	205	291	241
Fatalities in Crashes in Work Zones	233	290	240	321	274
All Crashes					
Fatal Crashes in Work Zones	672	765	780	878	821
Fatalities in Crashes in Work Zones	756	845	863	961	891
Percentage of Fatal Work-Zone Crashes that Involved at Least One Large Truck	30.8%	32.5%	26.3%	33.1%	29.4%
Percentage of ALL Fatal Crashes that Involved at Least One Large Truck	13.2%	13.4%	12.3%	13.0%	13.5%

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

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