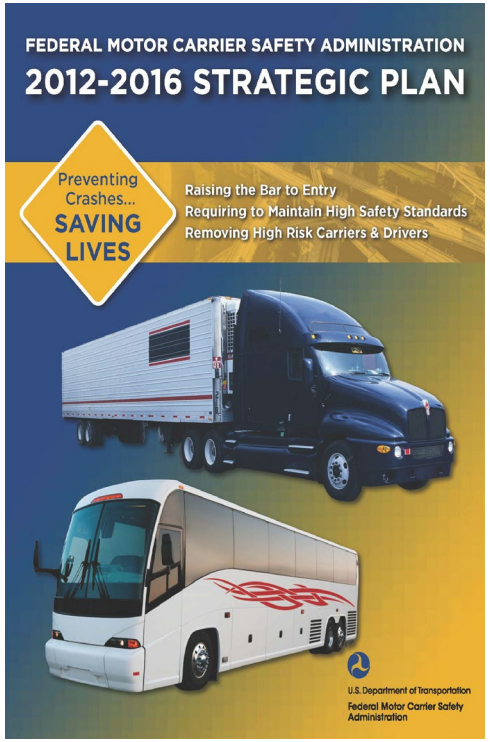
Trends in Commercial Motor Vehicle Safety

March 10, 2021

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

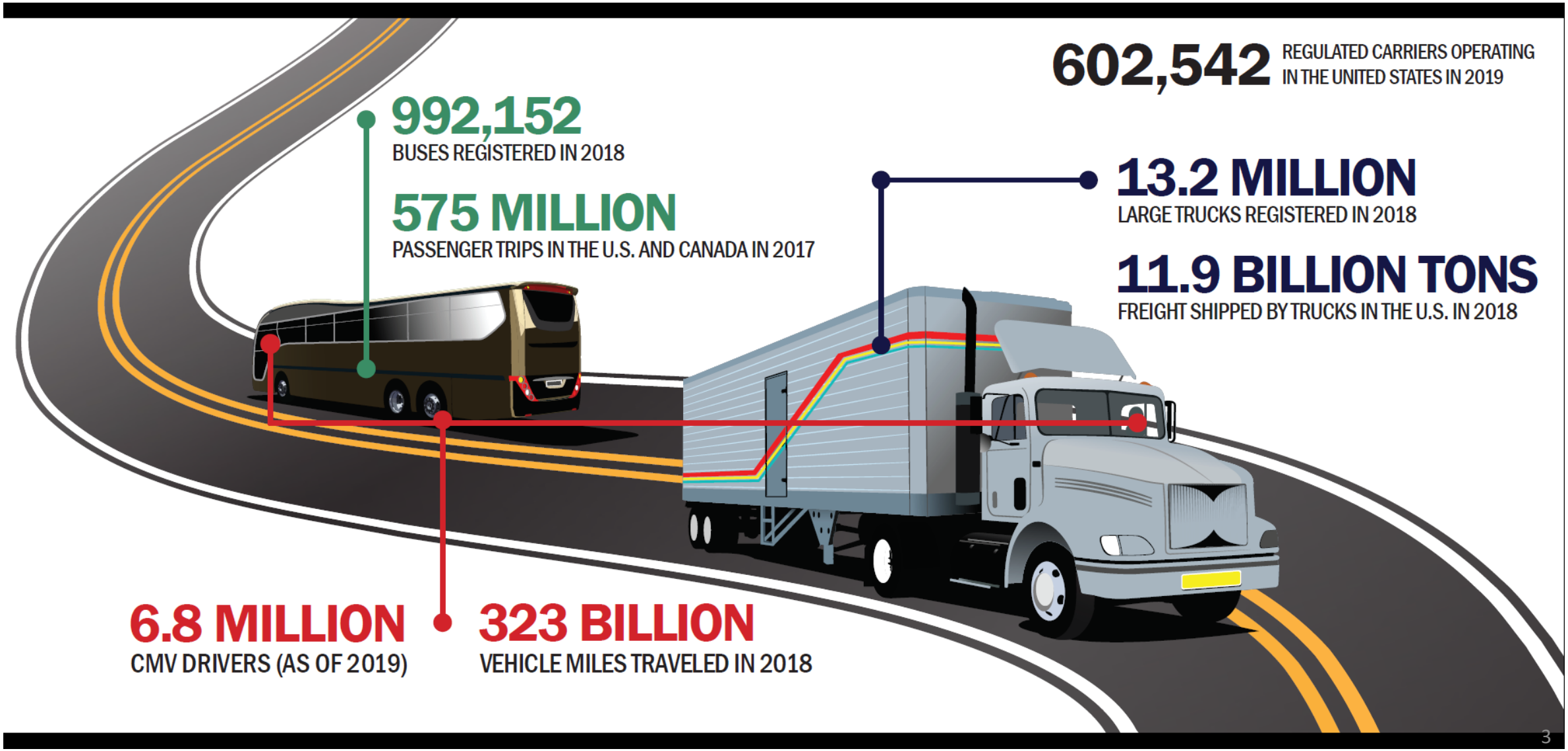
Our Mission



Our highest priority:

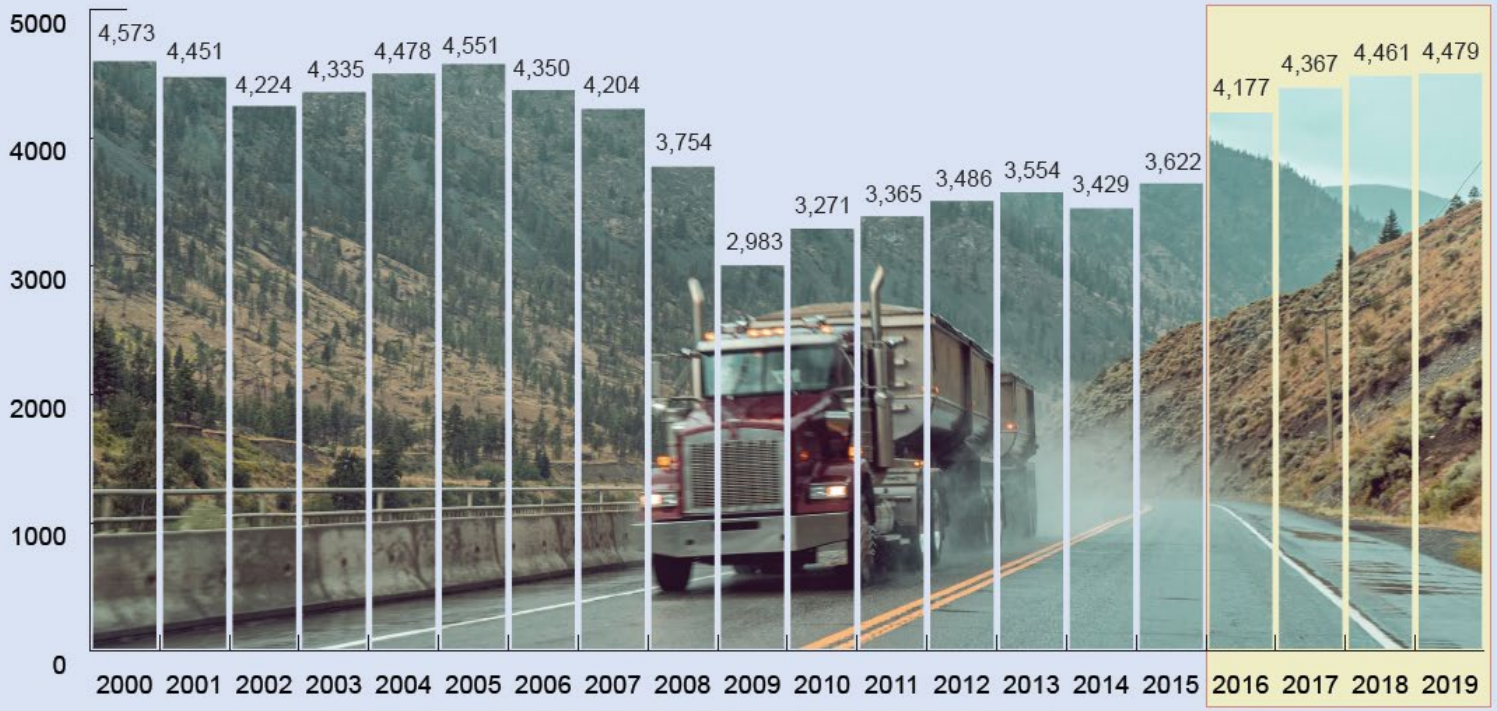
Reducing crashes, injuries, and fatalities involving CMV transportation through education, innovation, regulation, enforcement, financial assistance, partnerships, and full accountability.

Snapshot of the CMV Industry



Large Truck Fatal Crashes, 2000–2019

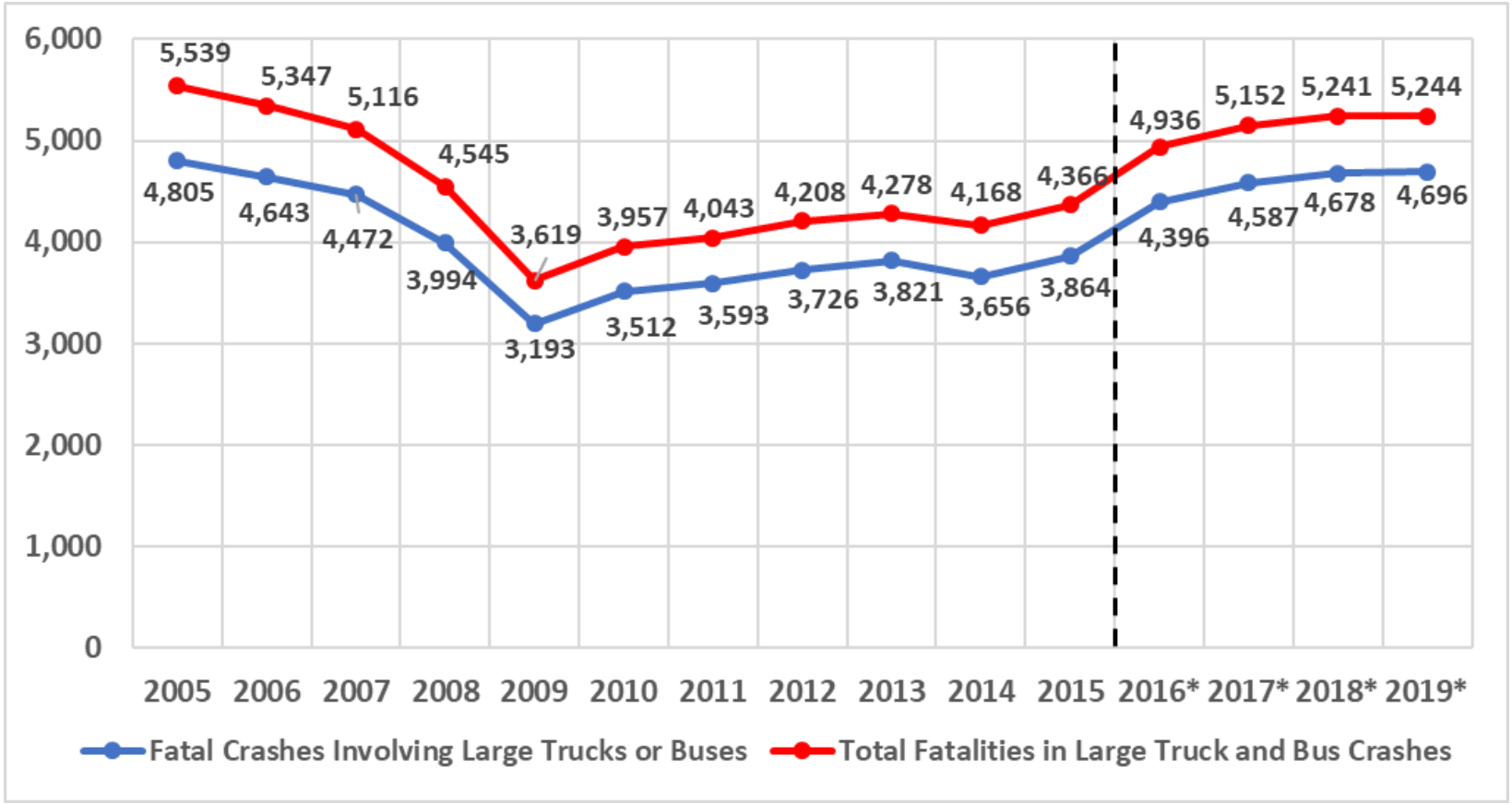
Fatal Large Truck Crashes, 2000-2019



Note: In 2016, NHTSA made changes to revise the light pickup truck classification, reclassifying certain vehices as large trucks based on gross vehicle weight rating. This has resulted in higher counts of fatalities involving large trucks beginning with the 2016 FARS data. Due to this methodology change, comparisons of 2016 FARS large truck data with prior years should be performed with caution.

2000		2019	% Change
8,022,649	Registered Large Trucks	13,085,643	63.1% ↑
205,520	Million Vehicle Miles Traveled (VMT) by Large Trucks	300,050	46.0% ↑
131,005,000	U.S. Employment	150,145,000	14.6% ↑
$10.3 trillion	U.S. Real GDP (current dollars)	$21.4 trillion	107.8% ↑
$27.6 billion	e-Commerce (current dollars)	$578.5 billion	1996.0% ↑
74.2	Truck Tonnage Index (month of December, seasonally adjusted)	116.3	56.7% ↑
13,945	Investigations Conducted (truck and bus)	13,037	-6.5% ↓
2,453,776	Roadside Inspections Conducted (truck and bus)	3,469,717	41.4% ↑
4,793	Closed Enforcement Cases (truck and bus)	3,794	-20.8% ↓

Large Truck and Bus Fatal Crashes, 2005–2019



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 Trucks in Fatal Crashes by Truck Weight Rating, 2015–2019

	2015		2016*		2017*		2018*		2019*	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Class 1: < 6,000 lb	1	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Class 2: 6,001 - 10,000 lb	5	0.1%	4	0.1%	1	0.0%	1	0.0%	1	0.0%
Class 3: 10,001 - 14,000 lb	144	3.5%	502	11.0%	593	12.3%	637	13.0%	656	13.1%
Class 4: 14,001 - 16,000 lb	70	1.7%	122	2.7%	102	2.1%	115	2.3%	131	2.6%
Class 5: 16,001 - 19,500 lb	85	2.1%	125	2.7%	151	3.1%	174	3.5%	163	3.3%
Class 6: 19,501 - 26,000 lb	221	5.4%	264	5.8%	246	5.1%	287	5.8%	275	5.5%
Class 7: 26,001 - 33,000 lb	257	6.3%	234	5.1%	271	5.6%	229	4.7%	238	4.8%
Class 8: 33,001 lb and Up	3,191	78.3%	3,210	70.4%	3,319	69.1%	3,327	67.8%	3,424	68.4%
Unknown	100	2.5%	101	2.2%	122	2.5%	139	2.8%	117	2.3%
Total	**4,074**	**100.0%**	**4,562**	**100.0%**	**4,805**	**100.0%**	**4,909**	**100.0%**	**5,005**	**100.0%**

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

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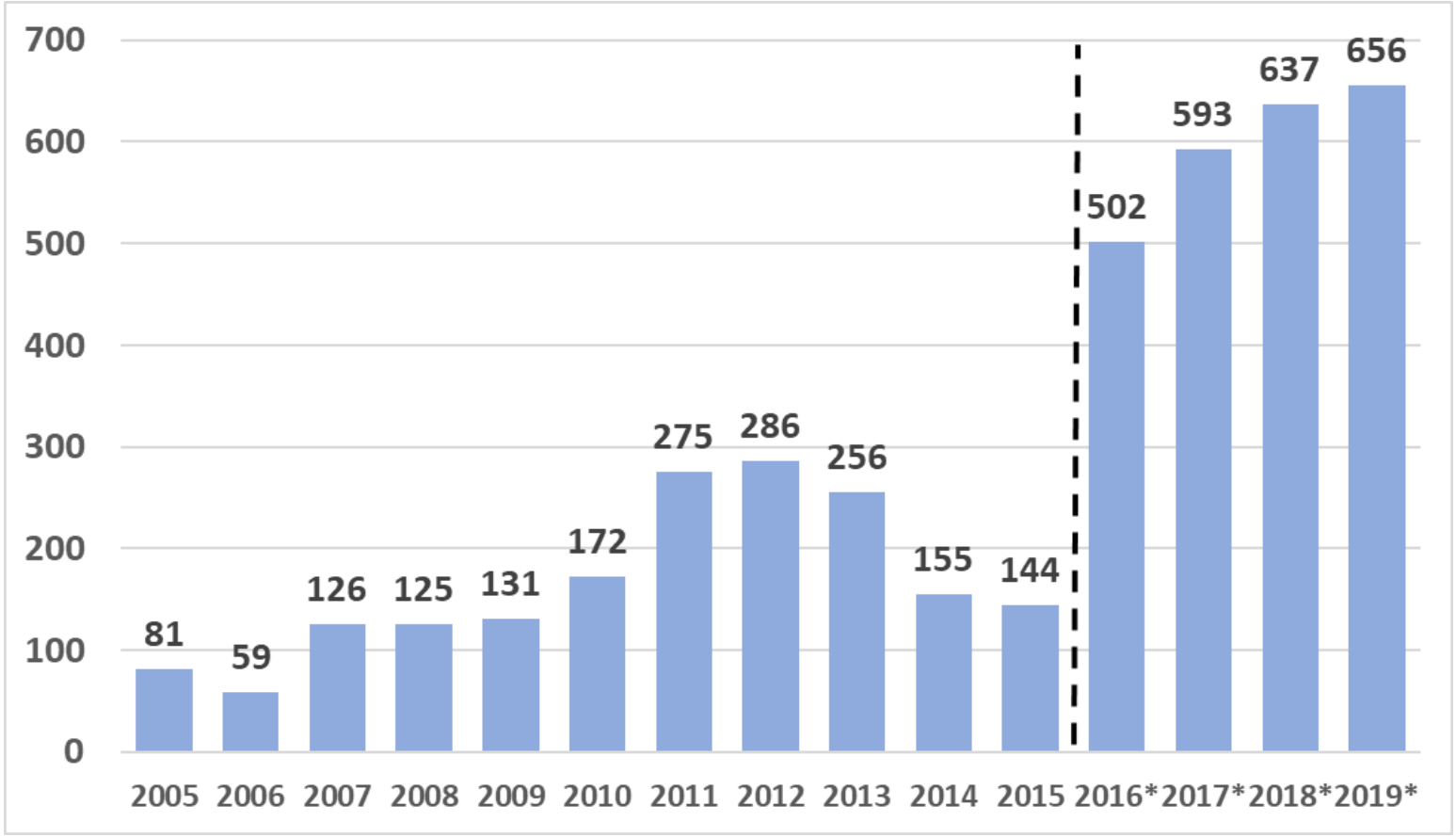
- From 2015 to 2019:
  - The number of large trucks in a fatal crash with a weight rating between 10,001 and 14,000 lbs increased *356 percent* (144 to 656).
  - The number of large trucks in a fatal crash with a weight rating greater than 26,000 lbs increased *7.3 percent* (3,191 to 3,424).

10,001–14,000 lb. Large Trucks in Fatal Crashes, 2005–2019



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

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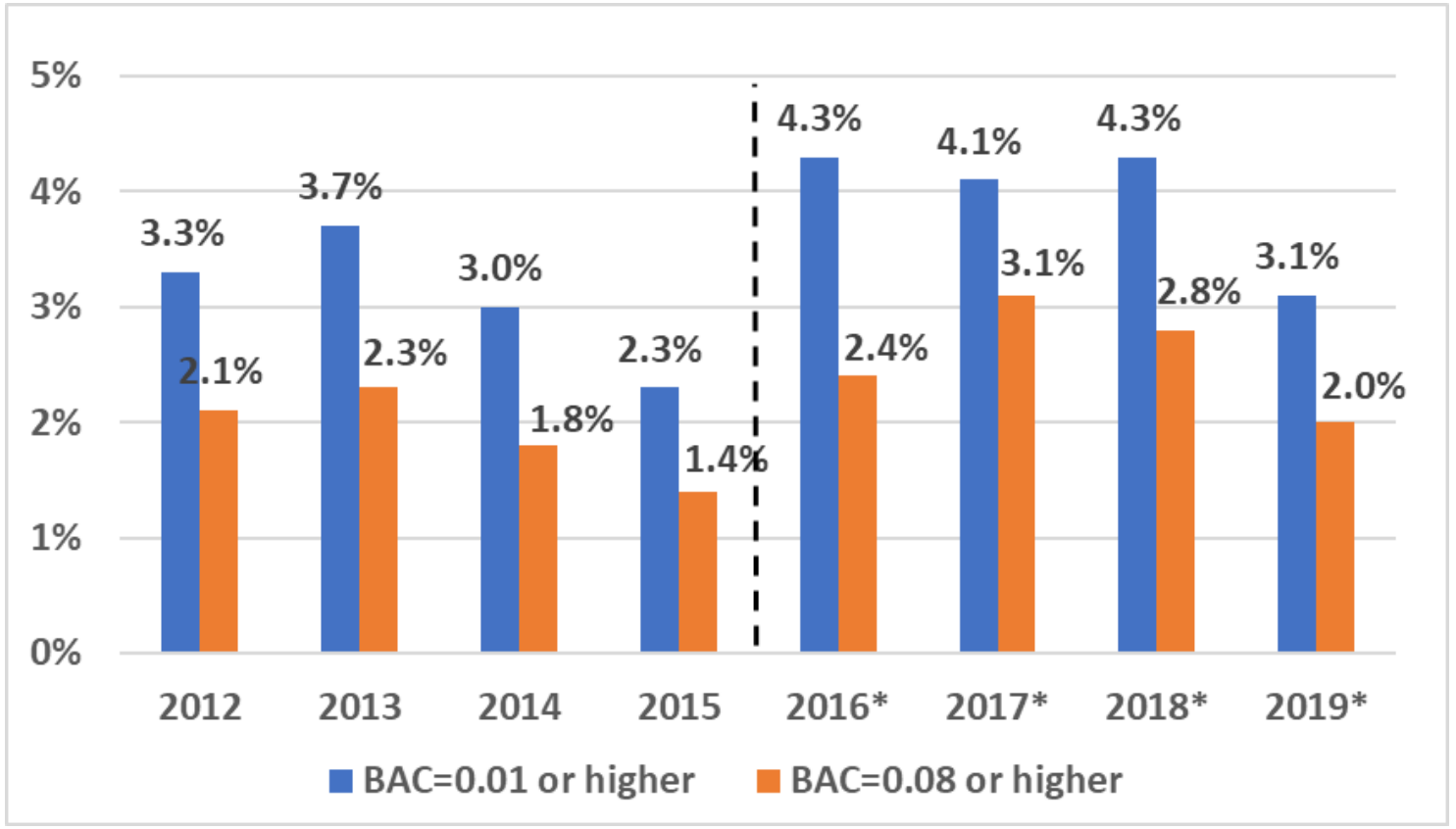
Large Truck Drivers in Fatal Crashes by BAC, 2012–2019



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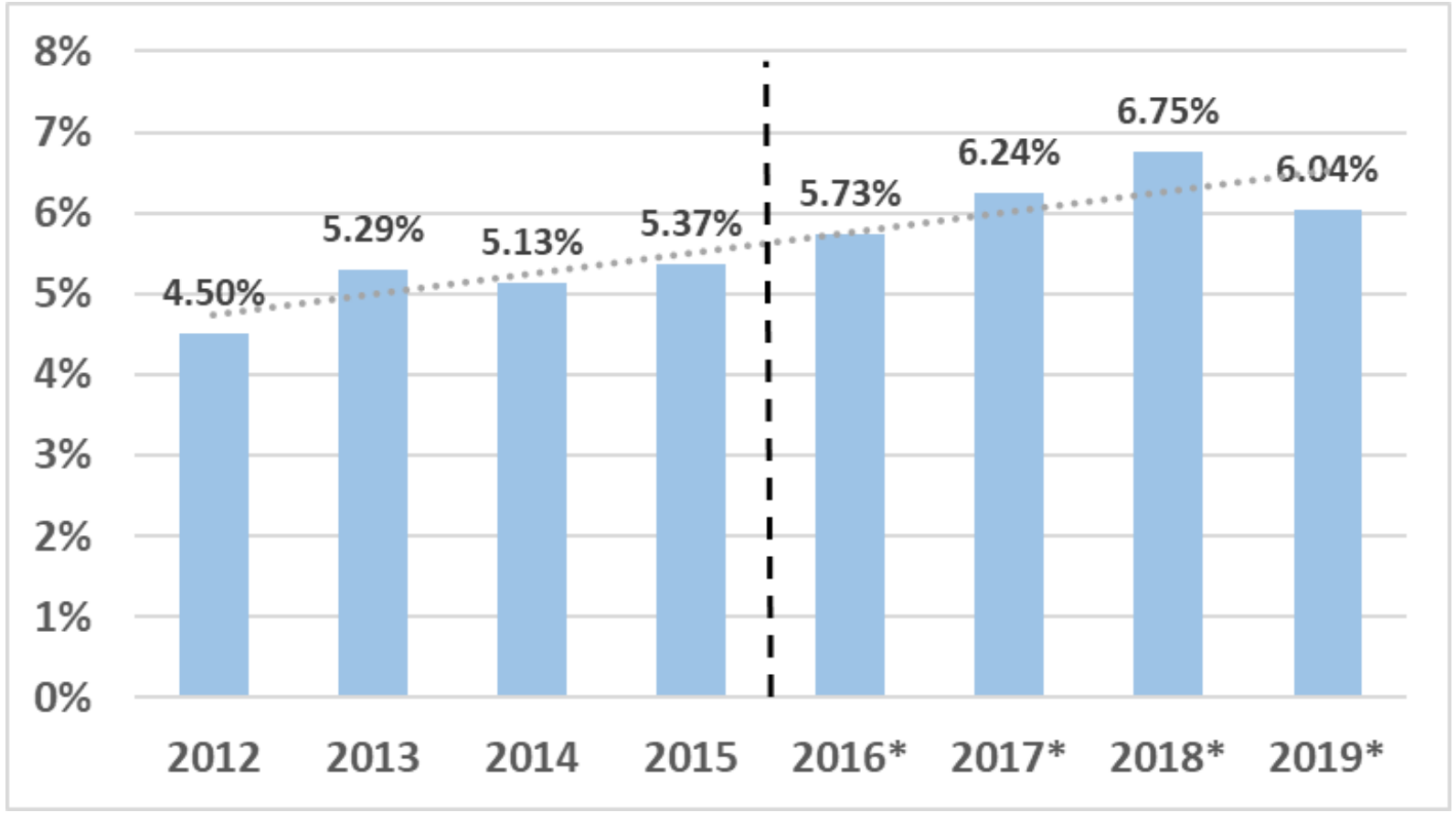
Large Truck Drivers with Positive Drug Test Results in Fatal Crashes, 2012–2019



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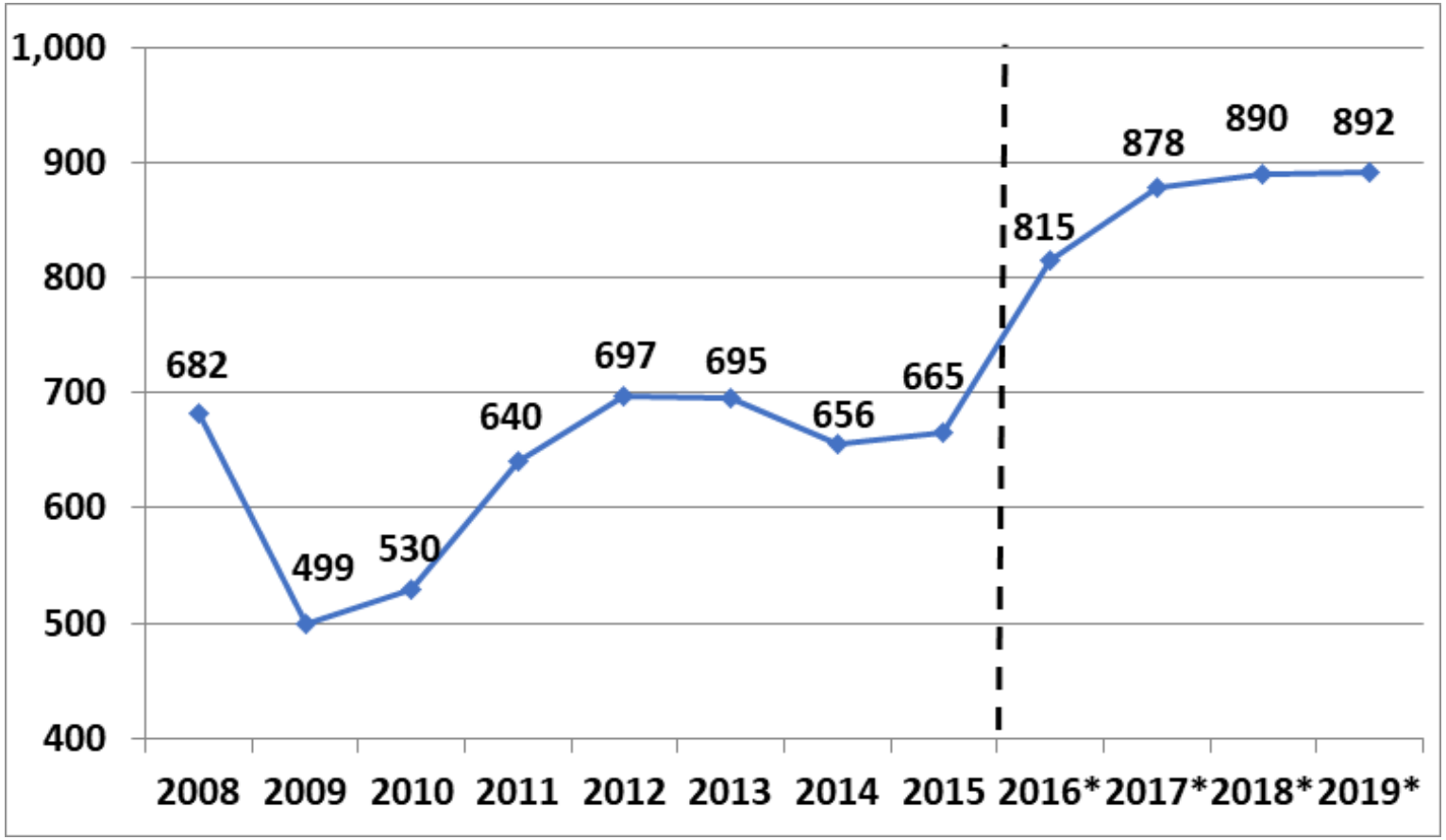
Large Truck Occupant Fatalities, 2008–2019



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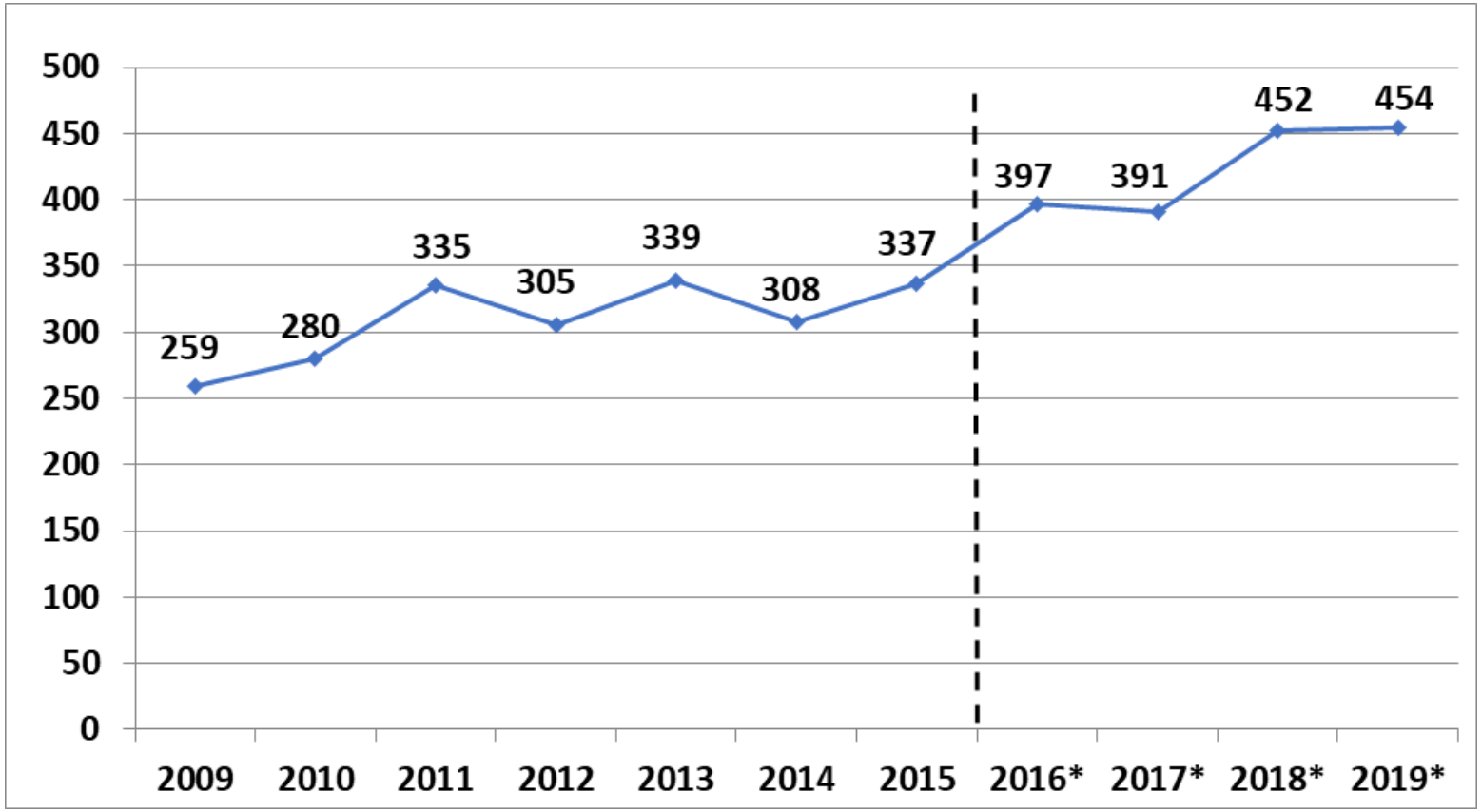
Large Truck Occupants in Fatal Crashes by Injury Severity and Restraint Use, 2019

Injury Severity	Restraint Use							
	None		Yes		Unknown		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Fatal Injury	337	42.4%	393	8.3%	162	35.8%	**892**	**15.0%**
Injury	169	21.3%	694	14.7%	44	9.7%	**907**	**15.2%**
Unknown Injury Severity	74	9.3%	550	11.7%	60	13.2%	**684**	**11.5%**
No Apparent Injury	215	27.0%	3,075	65.3%	187	41.3%	**3,477**	**58.3%**
Total	**795**	**100.0%**	**4,712**	**100.0%**	**453**	**100.0%**	**5,960**	**100.0%**

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

Pedestrian Fatalities in Large Truck Crashes, 2009–2019



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Fatal Crashes by Work Zone, 2015–2019

Work Zone	2015	2016*	2017*	2018*	2019*
Crashes Involving Large Trucks					
Fatal Crashes in Work Zones	175	194	221	207	248
Fatalities in Crashes in Work Zones	195	242	270	233	289
Total	**3,622**	**4,177**	**4,367**	**4,461**	**4,479**
All Crashes					
Fatal Crashes in Work Zones	653	687	720	672	762
Fatalities in Crashes in Work Zones	711	781	809	756	842
Total	**32,539**	**34,748**	**34,560**	**33,919**	**33,244**
Percentage of Fatal Work Zone Crashes That Involved at Least One Large Truck	26.8%	28.2%	30.7%	30.8%	32.5%
Percentage of All Fatal Crashes That Involved at Least One Large Truck	11.1%	12.0%	12.6%	13.2%	13.5%

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Top Ten Driver-Related Factors for Large Truck Drivers in Fatal Crashes, 2019

Driver-Related Factors	Number	Percent
Speeding of Any Kind	374	7.6%
Distraction/inattention (Cell Phone, Lost in Thought, Eating, etc.)	261	5.3%
Impairment (Fatigue, Alcohol, Illness, etc.)	232	4.7%
Failure to Yield Right of Way	229	4.6%
Careless Driving	219	4.4%
Vision Obscured (by Weather, Roadway Design, Vehicles, etc.)	167	3.4%
Improper Lane Usage	146	3.0%
Failure to Obey Actual Traffic Sign, Devices, Officers, Laws	116	2.3%
Following Improperly	108	2.2%
Ice, Water, Snow, Slush, Sand, Dirt, Oil, Wet Leaves on Road	77	1.6%
At Least One Driver-Related Factor Recorded	1,628	32.9%
No Driver-Related Factors Recorded	3,321	67.1%
Total Large Truck Drivers in Fatal Crashes	**4,949**	**100.0%**
At Least One Moving Violation Recorded	464	9.4%
No Moving Violations Recorded	4,485	90.6%
Total Large Truck Drivers in Fatal Crashes	**4,949**	**100.0%**

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

Driving Behaviors

- Occupant Restraints
- Cell Phone Use & Texting
- Distraction
- Unsafe Driving – Speed
- Unsafe Driving – Impairment

Seeking Solutions: What can FMCSA do differently?

- Truck and bus roadside inspections – 3.5 million
- Risk-based carrier safety investigations – 8,000
- Rulemaking
  - Drug & Alcohol Clearinghouse
  - Electronic logging devices
  - Hours of service reform
- **Our Roads Our Safety Campaign**
- **Traffic enforcement** – Highly visible traffic enforcement changes behavior and saves lives
  - Unsafe speed
  - Cell phone use & texting
  - Impaired driving – alcohol & drugs
  - Occupant restraint use
- **CDL driver disqualification**
- **CMV technology**

Contact Information

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