# Large Truck Crash Overview 2010

U.S. Department of Transportation
**Federal Motor Carrier Safety Administration**
**Analysis Division**

# Large Truck Crash Overview 2010

The mission of the Federal Motor Carrier Safety Administration (FMCSA) is to save lives by reducing crashes, injuries, and fatalities involving commercial vehicles on our Nation's highways. In 2010, there were:

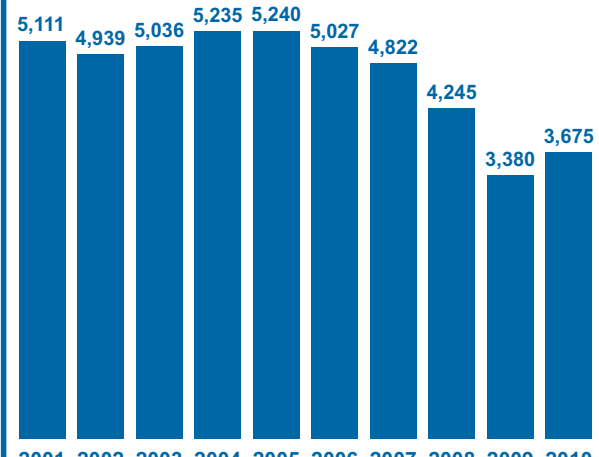
- 3,261 large truck fatal crashes
- 3,484 large trucks in fatal crashes
- 3,675 people killed in large truck fatal crashes (see Figure 1 for fatalities trend, 2001-2010).

Another 80,000 people were injured in crashes involving large trucks. Fourteen percent of those killed, and 25% of those injured, were occupants of large trucks.

## Trends

- **Trucks Involved in Fatal Crashes.** From 2001 through 2010, the number of large trucks involved in fatal crashes dropped from 4,823 to 3,484—down by 28%. From 2007 through

**Figure 1. Fatalities in Crashes Involving Large Trucks**



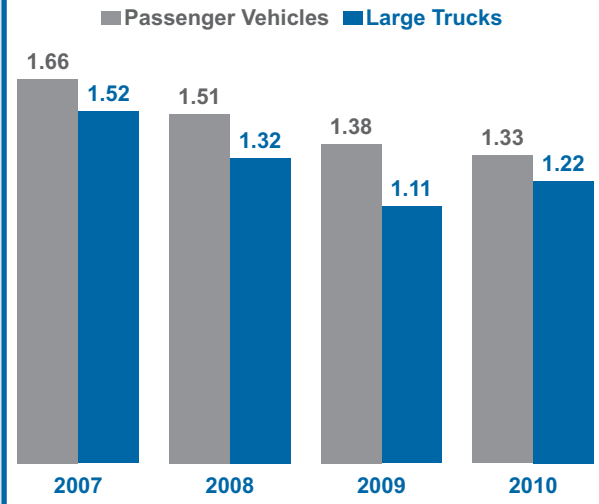
2010, the number of large trucks in fatal crashes per 100 million vehicle miles traveled by large trucks declined from 1.52 to 1.22—down 20%. The corresponding rate for passenger vehicles fell from 1.66 to 1.33—also down 20% (Figure 2).

- **Trucks Involved in Injury Crashes.** From 2007 through 2010, the number of large trucks involved in nonfatal injury crashes per 100 million vehicle miles traveled by large trucks declined by 18%, while the rate for passenger vehicles dropped by 7% (Figure 3).

## Drivers

- Three percent of the drivers of large trucks in fatal crashes had a blood alcohol content (BAC) of 0.01 grams per deciliter (g/dl) or greater. Any measurable BAC for a large truck driver is an FMCSA out-of-service violation.
- Eighty-two percent of the drivers of large trucks involved in fatal crashes were reported by police as wearing their safety belts, compared with 65% of passenger vehicle drivers involved in fatal crashes.

### Figure 2. Vehicles Involved in Fatal Crashes per 100 Million Vehicle Miles Traveled by Vehicle Type



- In fatal crashes involving large trucks, driver-related factors were recorded for 34% of the large truck drivers.

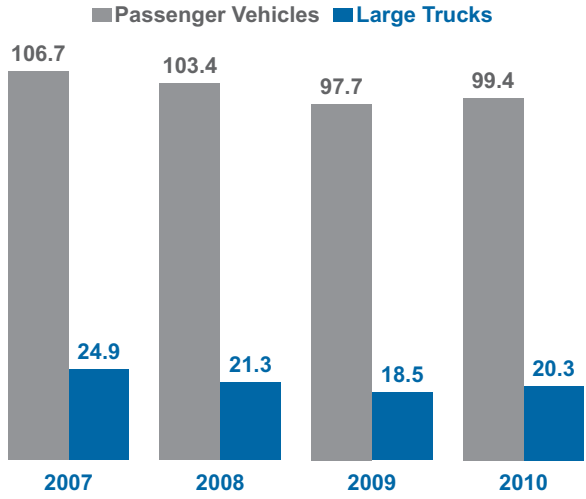
- The top five driver-related factors for large trucks in fatal crashes were speeding-related, distraction/inattention, failure to keep in proper lane, vision obscured, and failure to yield right-of-way.

## Vehicles

- In 2010, large trucks accounted for 10% of all vehicle miles traveled and 4% of all registered vehicles in the United States. In motor vehicle crashes, large trucks represented:
  - 8% of vehicles in fatal crashes
  - 2% of vehicles in injury crashes
  - 3% of vehicles in property-damage-only crashes.

- Large truck tractors pulling semi-trailers accounted for 62% of the large trucks involved in fatal crashes and 48% of the large trucks involved in nonfatal crashes.

### Figure 3. Vehicles Involved in Injury Crashes per 100 Million Vehicle Miles Traveled by Vehicle Type



- Doubles (truck tractors pulling a semi-trailer and a full trailer) accounted for 3% of large trucks involved in fatal and nonfatal crashes. Triples (truck tractors pulling three trailers) accounted for 0.1% of all large trucks involved in fatal and nonfatal crashes.
- Three percent of large trucks involved in fatal crashes and 2% of large trucks involved in nonfatal crashes were carrying hazardous materials (HM). HM was released from the cargo compartment in 34% of the HM fatal crashes and 10% of the HM nonfatal crashes.
- Four percent of large trucks in fatal crashes were coded with vehicle-related crash factors. Brakes and tires accounted for more than 50% of the factors coded.

## Crashes

- Adverse weather conditions were reported for 14% of the fatal and nonfatal crashes involving large trucks. Rain was the most common adverse weather condition.
- In 76% of fatal crashes involving large trucks and 80% of injury crashes involving large trucks, the first harmful event (the first event during a crash that caused injury or property damage) was a collision with another motor vehicle. Passenger vehicles were involved in 91% of these fatal crashes and 94% of these injury crashes.
- For two-vehicle fatal crashes in 2010 involving a large truck and a passenger vehicle:
    - Of the 398 fatal head-on crashes, the large truck crossed the center line in 13% and the passenger vehicle crossed the center line in 87% of the crashes.
    - Of the 318 fatal rear-end crashes, the large truck hit the passenger vehicle in the rear in 24% and the passenger vehicle hit the large truck in the rear in 76% of the crashes.

- Rollover was the first harmful event for 4% of the fatal crashes and 2% of the nonfatal crashes involving large trucks.
- Twenty-two percent of all fatal crashes that took place in work zones—areas of construction, maintenance, or utility activity—involved a large truck.

## Definitions

**Large Trucks:** Trucks over 10,000 pounds gross vehicle weight rating (GVWR).

**Passenger Vehicles:** Passenger cars and light trucks—vans, sport utility vehicles, and pickup trucks—with 10,000 pounds GVWR or less.

## Data Sources

**Fatal Crash Data:** National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS).

**Nonfatal Crash Data:** National Highway Traffic Safety Administration, General Estimates System (GES); and FMCSA, Motor Carrier Management Information System (MCMIS) crash file, as of November 18, 2011.

**Vehicle Miles Traveled and Registered Vehicles:** Federal Highway Administration, *Highway Statistics 2010*.

**For more information, contact the Analysis Division at (202) 366-0324, or visit our web sites at www.fmcsa.dot.gov and ai.fmcsa.dot.gov.**

**Publication No. FMCSA-RRA-12-023** **June 2012**