



**ADVOCATES**  
for Highway & Auto Safety  
1989 • 2014

## Large Trucks

---

3,921 people were killed and 104,000 people were injured in crashes involving large trucks in 2012.<sup>1</sup> In the previous 10 years (2003-2012), 44,204 people were killed and nearly one million were injured in crashes involving large trucks.<sup>2</sup> Every year on average, over 4,000 people are killed and nearly 100,000 are injured in large truck crashes.<sup>3</sup> Of those killed in 2012, 73 percent were occupants of other vehicles in crashes involving large trucks, 18 percent were occupants of large trucks, and 10 percent were non-occupants (pedestrians, pedalcyclists, etc.).<sup>4</sup> Large truck crash fatalities increased by 4 percent in 2012.<sup>5</sup> This follows a 2 percent increase in 2011 and a 9 percent increase in 2010, despite a decline in overall motor vehicle deaths.<sup>6</sup> Further, there was an 18 percent increase in 2012 of those injured in large truck crashes.<sup>7</sup>

### LARGE TRUCK SAFETY FACTS

- Annual truck crash fatalities are equivalent to a major airplane crash every other week of the year.
- The annual cost to society from crashes involving commercial motor vehicles is estimated to be over \$83 billion.<sup>8</sup>
- A May 2013 public opinion poll by Lake Research Partners found that 68 percent of Americans oppose heavier trucks and 88 percent of Americans do not want to pay higher taxes for the damage caused by heavier trucks.<sup>9</sup>
- Tractor-trailers moving at 60 mph are required to stop in 310 feet – the length of a football field – once the brakes are applied.<sup>10</sup> Actual stopping distances are often much longer due to driver response time before braking and the common problem that truck brakes are often not in top working condition.
  - In 2013, violations related to tires and/or brakes accounted for 5 of the top 10 most common vehicle out-of-service (OOS) violations.<sup>11</sup>
- More than one in every five trucks that is inspected is placed out of service for vehicle deficiencies that prevent it from continuing to operate.<sup>12</sup>
- In fatal two-vehicle crashes between a large truck and a passenger motor vehicle, 97 percent of the fatalities were occupants of the passenger vehicle.<sup>13</sup>
- Overweight trucks disproportionately damage our badly deteriorated roads and bridges. An 18,000 pound truck axle does over 3,000 times more damage to pavement than a typical passenger vehicle axle.<sup>14</sup>

- Thirty-two percent of America’s major roads are in poor or mediocre condition and 24.9 percent of our bridges are structurally deficient or functionally obsolete.<sup>15</sup> The Federal Highway Administration estimates that \$146 billion in capital investment would be needed on an annual basis over the next 20 years to significantly improve conditions and performance.<sup>16</sup>
- Increasing the weight of a heavy truck by only 10 percent increases bridge damage by 33 percent.<sup>17</sup> The FHWA estimated that the investment backlog for bridges, to address all cost-beneficial bridge needs, is \$106.4 billion. The U.S. would need to increase annual funding for bridges by 18% over current spending levels to eliminate the bridge backlog by 2030.<sup>18</sup>
- The U.S. taxpayer unfairly subsidizes bigger, heavier trucks:
  - According to the FHWA, a truck weighing over 80,000 pounds only pays between 40 and 50 percent of its cost responsibility.<sup>19</sup>
  - The 2007 Transportation for Tomorrow report, mandated by Congress, confirmed that heavy trucks were underpaying their fair share for highway use, that user fee fairness could be achieved through weight-distance taxes, that heavy trucks should pay an infrastructure damage fee, and that the Heavy Vehicle Use Tax—which only contributes \$1 billion annually to the Highway Trust Fund—had not been changed since the early 1980s.<sup>20</sup>
- The nation’s deteriorating surface transportation infrastructure has severe effects on America’s economy. The American Society of Civil Engineers found the cost to the economy from the state of the surface transportation infrastructure will be approximately 877,000 jobs lost and suppressed GDP growth of \$897 billion by the year 2020. Further, the impact on each American family’s budget would be \$3,100 per year, based on lower earnings and higher spending.<sup>21</sup>
- Research and experience show that allowing bigger, heavier trucks will not result in fewer trucks:
  - Since 1982, when Congress last increased the gross vehicle weight limit, truck registrations have increased 84 percent.<sup>22</sup>
  - Increases in truck size and weights over more than 35 years have never resulted in fewer heavier trucks on the roads.<sup>23</sup>
- Heavy trucks account for 17 percent of our nation’s transportation energy use.<sup>24</sup>
- Trucks with heavier gross weights require larger engines that decrease fuel economy on a miles-per-gallon basis.<sup>25</sup>

- 
- <sup>1</sup> Traffic Safety Facts 2012 Data: Large Trucks, NHTSA, Jan. 2014, DOT HS 811 868, available at <http://www-nrd.nhtsa.dot.gov/Pubs/811868.pdf>.
  - <sup>2</sup> Traffic Safety Facts: Large Trucks, NHTSA reports from 2003-2012, DOT HS 809 763 (2003), DOT HS 809 907 (2004), DOT HS 810 619 (2005), DOT HS 810 805 (2006), DOT HS 810 989 (2007), DOT HS 811 158 (2008), DOT HS 811 388 (2009), DOT HS 811 628 (2010), DOT HS 811 868 (2011) available at <http://www-nrd.nhtsa.dot.gov/CATS/listpublications.aspx?Id=16&ShowBy=Category>.
  - <sup>3</sup> Traffic Safety Facts: Large Trucks, NHTSA reports from 2003-2012.
  - <sup>4</sup> Traffic Safety Facts 2012 Data: Large Trucks, NHTSA, Jan. 2014, DOT HS 811 868, available at <http://www-nrd.nhtsa.dot.gov/Pubs/811868.pdf>.
  - <sup>5</sup> Traffic Safety Facts 2012 Data: Large Trucks, NHTSA, Jan. 2014, DOT HS 811 868, available at <http://www-nrd.nhtsa.dot.gov/Pubs/811868.pdf>.
  - <sup>6</sup> Traffic Safety Facts 2010 Data: large Trucks, NHTSA, Jun. 2012, DOT HS 811 628, available at <http://www-nrd.nhtsa.dot.gov/Pubs/811628.pdf>; and Traffic Safety Facts 2011 Data: Large Trucks, NHTSA, Apr. 2013, DOT HS 811 752, available at <http://www-nrd.nhtsa.dot.gov/Pubs/811752.pdf>.
  - <sup>7</sup> Traffic Safety Facts 2012 Data: Large Trucks, NHTSA, Jan. 2014, DOT HS 811 868, available at <http://www-nrd.nhtsa.dot.gov/Pubs/811868.pdf>.
  - <sup>8</sup> Commercial Motor Vehicle Facts-March 2013, FMCSA, available at <http://www.fmcsa.dot.gov/documents/facts-research/CMV-Facts.pdf>.
  - <sup>9</sup> Memo Re: Increasing the legal weight for trucks in the U.S., Lake Research Partners, May 7, 2013, available at <http://www.trucksafety.org/images/sts2013/sts2013-lr-memo-tsc.pdf>.
  - <sup>10</sup> Code of Federal Regulations (CFR) Title 49 Part 571 Section 121: Standard No. 121 Air brake systems (FMVSS 121).
  - <sup>11</sup> Roadside Inspections, Vehicle Violations: All Trucks Roadside Inspections, Vehicle Violations (2013 – Calendar), FMCSA, available at <http://ai.fmcsa.dot.gov/SafetyProgram/spViolation.aspx?rpt=RDVV>.
  - <sup>12</sup> Motor Carrier Safety Progress Report (as of 8/30/13), FMCSA, available at <http://www.fmcsa.dot.gov/facts-research/art-safety-progress-report.htm>.
  - <sup>13</sup> Traffic Safety Facts 2011: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System, NHTSA, DOT HS 811 754, available at <http://www-nrd.nhtsa.dot.gov/Pubs/811754AR.pdf>.
  - <sup>14</sup> Equivalent Single Axle Load, Pavement Interactive, Aug. 15, 2007, available at <http://www.pavementinteractive.org/article/equivalent-single-axle-load/>.
  - <sup>15</sup> 2013 Report Card for America’s Infrastructure, American Society of Civil Engineers (ASCE), available at <http://www.infrastructurereportcard.org/>.
  - <sup>16</sup> 2013 Status of the Nation’s Highways, Bridges, and Transit: Conditions and Performance, Chapter 8, FHWA 2014, available at <http://www.fhwa.dot.gov/policy/2013cpr/pdfs/cp2013.pdf>.
  - <sup>17</sup> Effect of Truck Weight on Bridge network Costs, NCHRP Report 495, National Cooperative Highway Research Program, 2003, available at [http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\\_rpt\\_495.pdf](http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_495.pdf).
  - <sup>18</sup> 2013 Status of the Nation’s Highways, Bridges, and Transit: Conditions and Performance, Chapter 7, p. 7-30, FHWA 2014, available at <http://www.fhwa.dot.gov/policy/2013cpr/pdfs/cp2013.pdf>.
  - <sup>19</sup> 2000 Federal Highway User Fee Equity Ratios, Addendum to the 1997 Federal Highway Cost Allocation Study Final Report, FHWA, May 2000, available at <http://www.fhwa.dot.gov/policy/hcas/addendum.htm>.
  - <sup>20</sup> Report of the National Surface Transportation Policy and Revenue Study Commission, Transportation for Tomorrow, Dec. 2007, available at [http://transportationfortomorrow.com/final\\_report/pdf/final\\_report.pdf](http://transportationfortomorrow.com/final_report/pdf/final_report.pdf).
  - <sup>21</sup> American Society of Civil Engineers, “Failure to Act: The Economic Impact of Current Investment Trends in Surface Transportation Infrastructure,” January 2013, available at [http://www.asce.org/uploadedFiles/Infrastructure/Failure\\_to\\_Act/Failure\\_to\\_Act\\_Report.pdf](http://www.asce.org/uploadedFiles/Infrastructure/Failure_to_Act/Failure_to_Act_Report.pdf)
  - <sup>22</sup> Traffic Safety Facts 2011 Data: Large Trucks, NHTSA, Apr. 2013, DOT HS 811 752, available at <http://www-nrd.nhtsa.dot.gov/Pubs/811752.pdf>; Trends in Large Truck Crashes, NHTSA, DOT HS 806 690, available at <http://www-nrd.nhtsa.dot.gov/Pubs/809-690.PDF>.
  - <sup>23</sup> Advocates for Highway and Auto Safety, analysis of for-hire truck registrations in the Truck Inventory and Use Survey / Vehicle Inventory and Use Survey, FHWA data, and Maine-Vermont Pilot Program data.
  - <sup>24</sup> Transportation Energy Data Book: Edition 31, U.S. Department of Energy, Jul. 2012, available at [http://cta.ornl.gov/data/tedb31/Edition31\\_Full\\_Doc.pdf](http://cta.ornl.gov/data/tedb31/Edition31_Full_Doc.pdf).
  - <sup>25</sup> Western Uniformity Scenario Analysis: A Regional Truck Size and Weight Scenario Requested by the Western Governor’s Association, Apr. 2004, available at <http://www.fhwa.dot.gov/policy/otps/truck/wusr/wusr.pdf>.