



## The Facts on Heavier Trucks

### **Proposals to allow 91,000 pound and heavier, overweight trucks on our nation's roadways will jeopardize safety and further damage our infrastructure**

Public opinion polls show the American public has consistently affirmed their overwhelming support for truck weight limitations, and firm opposition to holding taxpayers responsible for paying for infrastructure damage caused by heavier trucks. A survey conducted in April 2013 noted that a strong majority of Americans oppose efforts to change the law and allow heavier trucks on our roads and that this opposition spans almost every major demographic, geographic, and partisan group.<sup>i</sup>

### **Heavier Trucks Will Be More Dangerous to Motorists, Motorcyclists, Bicyclists and Pedestrians**

- Every year on average 4,000 people are killed in truck crashes in the United States. Department of Transportation (DOT) data reveals 2015 fatality figures showing an increase in large truck fatalities for the sixth year in a row – a 20 percent increase in truck crash deaths since 2009. Last year, 4,067 people were killed on our roads in large truck crashes.<sup>ii</sup> The number of people injured in these crashes has increased by 57 percent since 2009, from 74,000 to 116,000.<sup>iii</sup> The number of truck crashes has increased by 45 percent since 2009, from 286,000 to 415,000.<sup>iv</sup>
- The annual cost to society from crashes involving Commercial Motor Vehicles (CMVs) is estimated to be over \$103 billion.<sup>v</sup>
- Big rigs carrying loads close to the current Federal Limit (65,000 to 80,000 lbs.) are already twice as likely to be involved in a fatal crash as trucks carrying less than 50,000 lbs.<sup>vi</sup>
- Unmaintained braking systems are already a leading factor in truck crashes. In fact, brakes have been cited in 29.4 percent of commercial motor vehicle crashes as an associated factor. Heavier trucks will increase the rate of wear and amplify the severity of collisions occurring when brakes under-perform from lack of maintenance. According to the Commercial Vehicle Safety Alliance (CVSA), during its annual *Brake Safety Week*, the Out-of-Service (OOS) rate for all brake-related violations was 15.3 percent, which was higher than each of the previous three years.<sup>vii</sup>

### **Heavier Trucks Will Cause More Damage to Our Fragile Infrastructure**

- Our highways and bridges are in dire shape. The Federal Highway Administration (FHWA) estimates that \$170 billion in capital investment would be needed on an annual basis to significantly improve conditions and performance.<sup>viii</sup>
- Overweight trucks disproportionately damage the already deteriorated roads and bridges. An 18,000 lb. truck axle creates over 3,000 times more damage to pavement than a passenger vehicle axle.<sup>ix</sup>
- The American Society of Civil Engineers (ASCE) gave our nation a grade of D+ on our infrastructure. Our roads were graded D and bridges, C+.<sup>x</sup>
- One out of every nine bridges in the United States—a total of 66,503 bridges altogether—is structurally deficient, requiring significant maintenance, rehabilitation or replacement. Additionally, 20,808 bridges are fracture critical, meaning that these bridges do not have redundant protections and are at risk of collapse if a single, vital component fails.<sup>xi</sup>
- A mere 20 percent increase in weight for a heavy truck increases bridge damage by 33 percent.<sup>xii</sup>
- The FHWA estimated the investment backlog for bridges is \$121 billion, which is 60 percent over the current spending levels for bridges.<sup>xiii</sup>

## Heavier Trucks Will Result in Increased Costs to Tax Payers

- The trucking industry underpays its roadway user fees and receives special interest subsidies, ensuring that they do not cover *all* the damages they inflict on roadway and bridge infrastructure, contributing to a chronic deficit.
  - The most recent study to look at federal government subsidies of heavy truck operations revealed that taxpayers contribute almost \$2 billion every year.<sup>xiv</sup>
  - Trucks on the road today would need to pay an additional 28¢ per gallon of diesel just to break even.<sup>xv</sup>
  - The FHWA reported that trucks weighing more than 80,000 lbs. only pay between 40 and 50 percent of the costs for which they are responsible.<sup>xvi</sup>
- Adding a 6<sup>th</sup> axle will not mitigate increased wear and strain on bridges.
  - The projected one-time costs of bridges with posting issues (i.e. the need for strengthening or replacing a bridge) caused by raising truck weights to 91,000 pounds is \$1.1 billion. This weight increase is expected to produce 4,845 bridges with posting issues.<sup>xvii</sup>
  - Heavier trucks will produce higher maintenance and replacements costs due to the reduced bridge life span resulting from increases to stress repetition and the rate of stress repetition.

## Heavier Trucks Will Inflict More Destruction to the Environment

- Heavy trucks account for 17 percent of U.S. transportation energy use.<sup>xviii</sup>
- Heavy trucks are less energy efficient users of diesel fuel compared with other modes of freight shipping.<sup>xix</sup>
- U.S. DOT found that a 5- or 6-axle semi-trailer combination truck weighing 100,000 pounds rather than 80,000 pounds suffered a 10.4 percent reduction in diesel fuel mileage.<sup>xx</sup>
- Since 1990, the rate of growth of greenhouse gas emissions from freight sources has been more than twice as fast as emissions from passenger sources, “due largely to the rapid increase in emissions associated with medium- and heavy-duty trucks.”<sup>xxi</sup>
- A recent study showed that approximately 10 percent of miles driven are “deadhead” miles, meaning that the truck is driving with an empty trailer. Larger engines necessary to pull heavier weights will contribute to increased emissions during non-productive hauling periods.<sup>xxii</sup>

## Heavier Trucks Will Result in More Trucks, Not Less

- Increases to truck size and weight will not decrease the number of trips, result in fewer miles traveled, or improve safety by reducing the number of trucks on the highways. The number of trucks and miles traveled on U.S. highways has consistently grown over the past few decades even after several increases in both the sizes and weights of large trucks.<sup>xxiii</sup>
- A 2010 study on freight diversion concluded that increasing truck weights to 97,000 pounds would result in a net increase of nearly 8 million more trucks on our roads and bridges, a 56 percent increase.<sup>xxiv</sup>

## Any So-Called “States Option” For Heavier Trucks is a *De-Facto* Nationwide Increase

- Legislation to increase truck size and weight limits state-by-state is merely a back door attempt by trucking interests to come back to Congress in a few years and push for heavier truck weights nationwide.
- The “state option” was tried once before and history reveals that it resulted in heavier trucks in every state.
  - In 1974, trucking interests went to Congress and lobbied for bigger trucks as a state option.
  - Eight years later, in 1982, trucking interests came calling again and this time complained about several states not allowing 80,000 lbs. trucks.
  - As a result, Congress preempted states and increased weights to 80,000 lbs. in every state.
- As the Democratic and Republican leaders of the Pennsylvania State Senate Transportation Committee stated in a November 14, 2011, letter to Congress, “*If all states bordering Pennsylvania allow for 100,000 pound trucks, how can our state withstand the economic pressures to match this limit, even if we do not have enough funding to fully maintain our highways at an 80,000 pound weight limit? Allowing states to individually decide truck limits on federal highways ignores the critical role the federal government should be playing in facilitating interstate commerce and avoid a balkanized approach to interstate transportation.*”

## Both Law Enforcement Officers and Truck Drivers Consider Heavier Trucks More Dangerous

- In a survey conducted by the Multimodal Transportation & Infrastructure Consortium, 21 of the 20 Officers were interviewed indicated that longer and heavier trucks would be “more dangerous” because the additional length and weight would add “new factors to an already complicated chain of events.”<sup>xxv</sup>
- In that same survey, officers noted that larger trucks almost always increase the severity of the crash.<sup>xxvi</sup>
- Likewise, surveyed truck drivers are consistent in their opinion that heavier and/or longer trucks impact safety. In fact, 90 percent of those surveyed believed that the increased use of 97,000-lb., six-axle trucks would negatively impact highway safety.<sup>xxvii</sup>

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<sup>i</sup> Ulibarri, Joshua. *Increasing the Legal Weight for Trucks in the U.S.* Rep. Washington, DC: Lake Research Partners, 2013. Print.

<sup>ii</sup> Traffic Safety Facts: 2013 Motor Vehicle Crashes: Overview, DOT HS 812 101, NHTSA (Dec., 2014); FARS

<sup>iii</sup> Large Truck and Bus Crash Facts 2015, FMCSA-RRA-16-021, FMCSA (Nov., 2016); FARS; NASS GES

<sup>iv</sup> Ibid.

<sup>v</sup> FMCSA March 2013

<sup>vi</sup> K.L. Campbell, et al., “Analysis of Accident Rates of Heavy-Duty Vehicles,” UMTRI-88-77, University of Michigan Transportation Research Institute, Ann Arbor, MI, April 1988. <http://deepblue.lib.umich.edu/handle/2027.42/770> (page 71).

<sup>vii</sup> CVSA Press Release, October 25, 2012, *Brake Safety Week*

<sup>viii</sup> 2010 Status of the Nation’s highways, Bridges, and Transit: Conditions and Performance, Chapter 8, FHWA 2010, available at <http://www.fhwa.dot.gov/policy/2010cpr/pdfs/cp2010.pdf>.

<sup>ix</sup> Equivalent Single Axle Load, Pavement Interactive, Aug. 15, 2007, available at <http://www.pavementinteractive.org/article/equivalent-single-axle-load/>.

<sup>x</sup> ASCE Report Card for America’s infrastructure 2013

<sup>xi</sup> “Many U.S. Bridges Old, Risky and Rundown: Report.” *NY Daily News*. Associated Press, 15 Sept. 2013. Web. 05 Oct. 2013.

<<http://www.nydailynews.com/news/national/u-s-bridges-old-risky-rundown-report-article-1.1456784>>.

<sup>xii</sup> Effect of Truck Weight on Bridge Network Costs, NCHRP Report 495, National Cooperative Highway Research Program, 2003, available at [http://www.onlinepubs.trb.org/onlinepubs/nchrp/nchrp\\_rpt\\_495.pdf](http://www.onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_495.pdf).

<sup>xiii</sup> 2010 Status of the Nation’s highways, Bridges, and Transit: Conditions and Performance, Chapter 7, FHWA 2010, available at <http://www.fhwa.dot.gov/policy/2010cpr/pdfs/cp2010.pdf>.

<sup>xiv</sup> FHWA Addendum to Highway Cost Allocation Study, 2000.

<sup>xv</sup> *Full Recovery of Highway Costs Associated with Bigger Trucks*, Norbridge, 2007.

<sup>xvi</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/2010cpr/pdfs/cp2010.pdf>.

<sup>xvii</sup> Technical Reports, MAP-21 Comprehensive Truck Size & Weight Limits Study, FHWA, June 2014, available at

[http://ops.fhwa.dot.gov/freight/sw/map21tswstudy/technical\\_rpts/vol1technicalsummary.pdf](http://ops.fhwa.dot.gov/freight/sw/map21tswstudy/technical_rpts/vol1technicalsummary.pdf)

<sup>xviii</sup> Transportation Energy Data Book: Edition 31, U.S. Department of Energy, Jul. 2012, available at [http://cta.ornl.gov/data/tebd31/Edition31\\_Full\\_Doc.pdf](http://cta.ornl.gov/data/tebd31/Edition31_Full_Doc.pdf).

<sup>xix</sup> National Surface Transportation Policy and Revenue Study Commission: Transportation for Tomorrow, December 2007.

<sup>xx</sup> Western Uniformity Scenario Analysis, FHWA, Apr. 2004, available at <http://www.fhwa.dot.gov/policy/otps/truck/wusr/wusr.pdf>

<sup>xxi</sup> Inventory of Greenhouse Gas Emissions and Sinks: 1990-2007, Environmental Protection Agency (EPA), April 2009, p. A-122.

<sup>xxii</sup> OODA Research Study.

<sup>xxiii</sup> Large Truck and Bus Crash Facts 2010, Table 4 Large Truck Fatal Crash Statistics, 1975-2010, 1975-2010, FMCSA, Aug. 2012, [http://www.fmcsa.dot.gov/facts-research/research-technology/report/LTCC\\_Report\\_LargeTruckandBusCrashFacts2010.pdf](http://www.fmcsa.dot.gov/facts-research/research-technology/report/LTCC_Report_LargeTruckandBusCrashFacts2010.pdf).

<sup>xxiv</sup> Martland, Carl D. *Estimating the Competitive Effects of Larger Trucks on Rail Freight Traffic*. Rep. Final Report ed. N.p.: n.p., n.d. Print. October 26, 2010.

<sup>xxv</sup> Multimodal Transportation & Infrastructure Consortium (May 15, 2013), “An Analysis of Truck Size and Weight: Phase I – Safety: Summary of Preliminary Findings.”

<sup>xxvi</sup> Multimodal Transportation & Infrastructure Consortium (May 15, 2013), “An Analysis of Truck Size and Weight: Phase I – Safety: Summary of Preliminary Findings.”

<sup>xxvii</sup> Multimodal Transportation & Infrastructure Consortium (May 15, 2013), “An Analysis of Truck Size and Weight: Phase I – Safety: Summary of Preliminary Findings.”