



Parents Against Tired Truckers and Citizens for Reliable and Safe Highways

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### **Protect Current Federal Truck Size and Weight Laws: Support SHIPA**

The Truck Safety Coalition, along with consumer, health, safety, environmental, bicycle, labor, and law enforcement groups, strongly support SHIPA, the Safe Highways and Infrastructure Preservation Act. The purpose of SHIPA is to prevent the constant increases in truck sizes and weights on the non-Interstate portion of the federal National Highway System (NHS) that endanger the motoring public as well as our roads and bridges. Enactment of SHIPA will extend the safety and infrastructure protection that was achieved in 1991 when Congress overwhelmingly enacted the freeze on longer combination vehicles (LCV) in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). We urge Congress to retain the current federal size and weight limits by supporting SHIPA and to reject any special interest exemptions.

### **The Facts on Bigger and Heavier Trucks**

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

- Every year on average 4,000 people are killed in truck crashes in the U.S. and another 80,000 are injured. In fact, DOT data shows that **truck crash fatalities increased in 2010 by 9%, and then again in 2011 by 2%.**
- Big rigs carrying loads close to the current Federal Limit (65,000 to 80,000 lb) are already twice as likely to be involved in a fatal crash as trucks carrying less than 50,000 lbs.<sup>1</sup>
- Compared to single-trailer trucks, double-trailer trucks are 32% more often involved in fatal crashes<sup>2</sup> and 200% more likely to be in interstate highway crashes.
- Nearly all of the large multi-trailer combination trucks, as well as single unit trucks, examined in the Comprehensive Truck Size and Weight Study had worse roll stability, in some instances by wide margins, than the standard five-axle semitrailer combination loaded to 80,000 pounds.<sup>3</sup>
- Unmaintained braking systems are already a leading factor in truck crashes. In fact, brakes have been cited in 29.4% of commercial motor vehicle crashes as an associated factor. Allowing bigger, 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 OOS rate for all brake-related violations was 15.3 %. This was higher than each of the previous three years.<sup>4</sup>
- During the Vermont pilot project, when trucks weight limits were increased on the Interstate to 99,000 pounds for a one year period, the final report found that,
  - “On Vermont’s non-Interstate highways, where significant safety gains were expected with the shift of trucks to Interstates, the number of crashes increased by 24 percent.”;
  - “...injury-related truck crashes rose ... on Vermont’s non-Interstate highways, an increase of 28 percent.”; and,
  - “...the total number of truck crashes on Vermont’s Interstate highways increased by 10 percent ...”<sup>5</sup>  
(Vermont Pilot Program Final Report)

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<sup>1</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>2</sup> K.C. Campbell, “Ten Years of Large Truck Safety Research,” presented at Motor Vehicle Manufacturers Association/Department of Transportation Motor Truck Research Symposium, Washington, D.C., July 18, 1990.

<sup>3</sup> Comprehensive Truck Size and Weight, US DOT, Aug. 2000, Vol. 3, Chapter 8, p. VIII-5, <http://www.fhwa.dot.gov/reports/tswstudy/Vol3-Chapter8.pdf>

<sup>4</sup> CVSA Press Release, October 25, 2012, *Brake Safety Week*)

<sup>5</sup> Vermont Pilot Program Report, FHWA, available at [http://www.ops.fhwa.dot.gov/freight/sw/reports/vt\\_pilot\\_2012/vt\\_pilot.pdf](http://www.ops.fhwa.dot.gov/freight/sw/reports/vt_pilot_2012/vt_pilot.pdf)



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### **Bigger and Heavier Trucks Will Cause More Damage to Our Fragile Infrastructure and Increase Costs to Tax Payers.**

- 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>6</sup>
- Allowing giant trucks weighing up to 100,000 pounds on U.S. roads and bridges would radically increase damage to highway pavement and bridges as was seen during the VT pilot program. “The pilot loading results in a 59 percent increase in damage due to Class 10 trucks.”<sup>7</sup>
- Increases in truck weight limits will often exceed the design criteria that were used when a bridge was constructed. Adding an extra axle to 97,000 pound trucks does nothing to limit the increased wear and tear they will cause to bridges.
- “Applying Vermont truck weight data to the national average costs, it was determined that a fully loaded, 80,000-pound 5-axle combination truck incurs 21.5 cents of pavement costs per-mile on the Interstate System and 32.9 cents per mile on other highways. A typical 99,000-pound 6-axle Pilot vehicle requires pavement expenditures of 34.5 cents per mile of travel on the Interstate System and about 53.6 cents per mile of travel on non-Interstate roads. This is about 63 percent more per vehicle mile and about 32 percent more per ton-mile than a fully loaded 5-axle vehicle.”<sup>8</sup>
- “If one assumes that greater than a ten percent ‘overstress’...is unacceptable, *then these results show that every 100,000 lbs. truck is a problem.*” “...the results should cause prudent bridge engineers some concern.” “Relatively large factors of safety are inherent in bridge design, and Maine’s interstate bridges were not designed for 100,000 lbs. trucks. This analysis shows that a significant number of bridges will have their factor of safety reduced significantly.”<sup>9</sup>

### **Bigger and Heavier Trucks Will Inflict More Destruction to the Environment.**

- 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>10</sup>
- “It is interesting to note that the percentage of trucks in that weight category [more than 80,000 lbs. but less than 120,000 lbs.] has not declined on the I-95 Turnpike following the pilot program implementation. ...Truck classification sites count the number of trucks passing...for Sidney and Vassalboro, Maine. These two locations are roughly parallel. The figure shows...a much larger increase in the number of six-axle tractor semitrailers on the Interstate.”<sup>11</sup>
- Heavy trucks are less energy efficient users of diesel fuel compared with other modes of freight shipping. (National Surface Transportation Policy and Revenue Study Commission: Transportation for Tomorrow, December 2007)
- 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>12</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>13</sup>

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<sup>6</sup> ASCE Report Card for America’s infrastructure 2013

<sup>7</sup> Vermont Pilot Program Report, p. 4.

<sup>8</sup> Vermont Pilot Program Report, p. 29.

<sup>9</sup> “A Side-By-Side Analysis of Maine’s Interstate Bridges”, FHWA (non-public), obtained through FOIA Request, October 27, 2010.

<sup>10</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>11</sup> Maine and Vermont Interstate Highway Heavy Truck Pilot Program 6-Month Report, FHWA, available at [http://www.ops.fhwa.dot.gov/freight/sw/reports/me\\_vt\\_pilot\\_2012/me\\_vt\\_pilot.pdf](http://www.ops.fhwa.dot.gov/freight/sw/reports/me_vt_pilot_2012/me_vt_pilot.pdf)

<sup>12</sup> Western Uniformity Scenario Analysis, FHWA, Apr. 2004, available at <http://www.fhwa.dot.gov/policy/otps/truck/wusr/wusr.pdf>

<sup>13</sup> Inventory of Greenhouse Gas Emissions and Sinks: 1990-2007, Environmental Protection Agency (EPA), April 2009, p. A-122.