Heavier Trucks Endanger Motorists and Damage Infrastructure

Prepared by CABT, January 2024

Certain business interests are lobbying Congress to raise federal truck weight limits from 80,000 pounds to as much as 97,000 pounds. Congress has consistently rejected any increase in national truck weight limits because of concerns for public safety and infrastructure damage. In 2015, the House voted on a bipartisan basis to maintain the federal limits. In addition to a bill introduced to increase the nationwide weight limit to 97,000 pounds in recent years, heavier truck proponents are yet again lobbying for a 91,000-pound heavier-truck pilot project. Both proposals have the same objective: nationwide operation of heavier trucks.

In 2016, the U.S. Department of Transportation (USDOT) delivered its three-year Comprehensive Truck Size and Weight Limits Study Report requested by Congress. That report found that heavier trucks had serious safety problems and would impose additional costs to our highway infrastructure. The Department recommended that Congress not approve any heavier trucks.²

Heavier Trucks Have Dramatically Higher Crash Rates

The 2016 USDOT study found that heavier trucks with six axles—both 91,000-pound and 97,000-pound configurations—had higher crash rates in the three states where there was sufficient data³:

Washington - 47 percent higher crash rates for six-axle trucks up to 91,000 pounds

Idaho - **99 percent higher** crash rates for six-axle trucks up to 97,000 pounds

Michigan - **400 percent higher** crash rates for six-axle trucks up to 97,000 pounds

The Problems with Heavier Trucks

More severe crashes. The severity of a crash is determined by the velocity and mass of a vehicle. If its weight increases, so does the potential severity of a crash. Any increase in crash severity increases the likelihood of injuries becoming more serious or resulting in fatalities.

More likely to roll over. Heavier trucks tend to have a higher center of gravity because the additional weight is often stacked vertically. Raising the center of gravity increases the risk of rollovers.⁴

Increased wear and tear. Increasing the weight of trucks causes additional wear and tear on key safety components. The 2016 USDOT study found that trucks weighing over 80,000 pounds had higher overall out-of-service (OOS) rates and **18 percent higher brake violation rates** compared to those at or below 80,000 pounds. This is especially important because a 2016 study by the Insurance Institute for Highway Safety found that trucks with any out-of-service violation are **362 percent more likely to be involved in a crash.**

¹ On Nov. 3, 2015, an amendment offered by Rep. Reid Ribble (R-Wis.) to the Transportation Reauthorization Act was defeated on a bipartisan vote, 236 to 187

² USDOT; 2016. Comprehensive Truck Size and Weight Limits Study, Final Report to Congress

³ Ibid.

⁴ USDOT; 2000. Comprehensive Truck Size and Weight Study

⁵ USDOT; 2016. Comprehensive Truck Size and Weight Limits Study, Final Report to Congress

⁶ Insurance Institute for Highway Safety; 2016. Crash Risk Factors for Interstate Large Trucks in North Carolina

Heavier Trucks Would Cause Significant Infrastructure Damage

USDOT found in its 2016 study that thousands of Interstate and other National Highway System bridges could not accommodate heavier trucks. These bridges would need to be reinforced or replaced, costing billions of dollars. USDOT estimates the 91,000-pound, six-axle configuration would negatively affect more than 4,800 bridges, costing \$1.1 billion. A recent report that evaluated local bridges the USDOT did not examine found more than 72,000 bridges that are not rated to safely handle 91,000-pound trucks. These bridges would cost \$60.8 billion to replace, leaving taxpayers to foot the bill.

"Pilot Project" for Heavier Trucks Means Experimenting with Motorists

A "pilot project" for heavier trucks is also unworkable because of the uncertainty of its safety and infrastructure outcomes. So-called "pilot projects" amount to little more than experimenting with heavier trucks on public roads and bridges with motorists. The information they seek is the number of crashes, injuries and fatalities caused by heavier trucks, and the damage caused to the nation's bridges over which they would run. As discussed below, USDOT has recommended better ways of obtaining this information without further endangering motorists or damaging our infrastructure.

Heavier Trucks Bad for the Environment

Proponents of heavier trucks claim significant environmental benefits but rely on the false premise that bigger trucks mean fewer trucks. A recent study⁹ found that heavier trucks will in fact mean more trucks on our nation's roads, setting back efforts to reduce emissions in the battle against climate change.

The single biggest contributor to climate change is carbon emissions and research has shown heavier trucks would dramatically increase CO2 into the atmosphere. A study found that proposals for heavier trucks could lead to an increase of as much as 17.49 billion truck vehicle miles traveled (VMT), resulting in an additional 3.53 billion gallons of fuel burned and 37.49 million tons of carbon emissions.¹⁰

A Safe Alternative

If proponents are serious about collecting more comprehensive information about the impacts of heavier trucks, they should support the comprehensive research plans initiated by USDOT¹¹ and the Transportation Research Board.¹² Improving the collection of crash and travel data in the states where heavier trucks already operate is the logical next step as opposed to expanding the operation of more dangerous trucks. Specific recommendations include the following:

- Reinstitute the collection of higher-quality, impartial data nationwide (i.e., TIFA and VIUS), including VMT, and implement a uniform crash report form that accurately collects the number of trailers and axles, truck weight and length, and road type where the crash occurred.
- Collect and analyze data on the impacts of bigger-truck operations on local roads and bridges.
- Conduct off-road operational tests of bigger-truck configurations, fully evaluating vehicle dynamics in real-world conditions.

⁷ USDOT; 2016. Comprehensive Truck Size and Weight Limits Study, Final Report to Congress

⁸ Bailey, Harvill et al; 2023. The Impacts of Heavier Trucks on Local Bridges

⁹ Burton, Mark; June 2020. Estimating the Rail-to-Truck Traffic Diversions Attributable to Increased Truck Size and Weight. Marshall University, Appalachian Transportation Institute

¹⁰ Mingo, Roger D; December 2020. Another Look at FHWA's Analysis of Twin 33 and Six-axle Single Combination Vehicles in the 2015 Comprehensive Truck Size and Weight Study

¹¹ USDOT; 2016. Comprehensive Truck Size and Weight Limits Study, Final Report to Congress

¹² Transportation Research Board; 2019. Research to Support Evaluation of Truck Size and Weight Regulations