

# Heavier Trucks Endanger Motorists and Damage Infrastructure

Prepared by CABT, January 2020

Certain business interests have lobbied Congress for years to raise federal truck weight limits from 80,000 pounds to 91,000 pounds. Congress has consistently rejected these proposals because of concerns for public safety and infrastructure damage. In 2015, the House voted on a bipartisan basis to maintain the federal limits.<sup>1</sup> Heavier-truck proponents are yet again lobbying for the identical 91,000-pound heavier-truck configuration, but now for multiple states over at least 10 years. Their proposal has been slightly modified but their objective remains the same: 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.<sup>2</sup>

## 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 data<sup>3</sup>:

Washington	-	<b>47 percent higher</b> crash rates for six-axle trucks up to 91,000 pounds
Idaho	-	<b>99 percent higher</b> crash rates for six-axle trucks up to 97,000 pounds
Michigan	-	<b>400 percent higher</b> 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.<sup>4</sup> 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 oftentimes stacked vertically. Raising the center of gravity increases the risk of rollovers.<sup>5</sup>

**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.<sup>6</sup> 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.**<sup>7</sup>

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<sup>1</sup> 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

<sup>2</sup> USDOT; 2016. *Comprehensive Truck Size and Weight Limits Study, Final Report to Congress*

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

<sup>5</sup> USDOT; 2000. *Comprehensive Truck Size and Weight Study*

<sup>6</sup> USDOT; 2016. *Comprehensive Truck Size and Weight Limits Study, Final Report to Congress*

<sup>7</sup> 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.<sup>8</sup> 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.

## **Patchwork Exceptions Undermine Enforcement and Compliance**

Some bigger-truck proponents have sought to remove the federal weight limits for individual states. USDOT has criticized this kind of piecemeal approach for our Interstate Highway System, finding that it makes enforcement and compliance more difficult, contributes little to productivity, and may have unintended consequences for safety and highway infrastructure.<sup>9</sup> USDOT explained that bigger-truck pilot programs “would involve conducting experiments with vehicles that were not known to be safe.”<sup>10</sup>

## **“Pilot Programs” for Heavier Trucks Means Experimenting with Motorists**

“Pilot programs” for heavier trucks are also unworkable because of the uncertainty of their safety and infrastructure outcomes. These so-called “pilot programs” amount to little more than experimenting with heavier trucks on public roads and bridges with other 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.

## **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 USDOT and the Transportation Research Board.<sup>11</sup> 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:

- Reinststitute the collection of higher-quality, impartial data nationwide (i.e., TIFA and VIUS), including vehicle miles traveled (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 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.

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<sup>8</sup> USDOT; 2016. *Comprehensive Truck Size and Weight Limits Study, Final Report to Congress*

<sup>9</sup> USDOT; 2004. *Western Uniformity Scenario Analysis: A Regional Truck Size and Weight Scenario Requested by the Western Governors’ Association*

<sup>10</sup> Ibid.

<sup>11</sup> On July 27, 2017, the U.S. Senate Committee on Appropriations released its Transportation, Housing and Urban Development appropriations report that indicated comprehensive research plans were underway by USDOT and the Transportation Research Board.