

Truck Size & Weight Limits

Key Takeaway: Congress should not consider changes to federal truck size or weight (TSW) limitations until the full extent of the impacts of different truck configurations are thoroughly understood and trucks are paying for the damage they cause to our nation's roads and bridges.

Congress has long maintained reasonable limits on the size of trucks operating on the Interstate Highway System — no more than 80,000 pounds for weight and two 28-foot trailers for length. However, some are consistently pushing to increase federal limits on truck weight to at least 91,000 pounds — a jump of almost 14% — while calling for Congress to force states to permit the operation of double 33-foot trailer trucks, or “Twin 33s.”

Over the years, this legislation has repeatedly failed because permitting longer or heavier trucks on our nation's roads is bad policy. Furthermore, as directed by the Moving Ahead for Progress in the 21st Century Act (section 32801 of P.L. 112-141), in 2016, the U.S. Department of Transportation (DOT) examined the impacts of increasing current federal TSW limits in its [Comprehensive TSW Limits Study](#) and agreed that no changes to federal policy should be made. Increasing TSW limits would further damage infrastructure, distort rail competition, lead to more road traffic and increase greenhouse gas emissions.

Infrastructure Damage

Increasing TSW limits would put additional larger trucks on our nation's highway system, causing further damage to infrastructure and substantially increasing highway lifecycle costs due to accelerated pavement deterioration. A [study using decades](#) of actual truck and rail pricing and demand data found that increasing TSW limits would “lead to unaffordable wear and tear on highways and the diversion of freight traffic from congestion-reducing, environmentally friendlier non-highway alternatives to all-highway truck routings.”

The [American Society of Civil Engineers \(ASCE\)](#) most recent assessment of U.S. infrastructure gave roads a “D” grade. To make matters worse, ASCE found that about half of U.S. bridges are structurally deficient or over 50 years old. DOT has found that infrastructure degradation would be exacerbated by bigger trucks, with 91,000-pound trucks negatively impacting more than 4,800 bridges and Twin 33s, causing \$1.1 billion in immediate damage to bridges on the highway system and \$1.2-\$1.8 billion in estimated pavement damage per year.

Taxpayer Burden

The current tax of 18.4 cents per gallon of gasoline and 24.4 cents per gallon of diesel fuel was last increased in 1993 and has failed to keep pace with highway maintenance costs, changing fuel prices, and more fuel-efficient vehicles. Since 2008, policymakers have been forced to transfer a total of \$275 billion of general taxpayer funds into the [Highway Trust Fund \(HTF\)](#) to cover this shortfall, including \$118 billion in the 2021 Infrastructure Investment and Jobs Act (IIJA), which will only cover the HTF shortfall through 2026.

The [Government Accountability Office has found](#) that underpayment into the HTF by the trucking industry distorts the [competitive environment](#) within the freight transportation sector "by making it appear that heavier trucks are...less expensive...than they actually are, and puts other modes, such as rail and maritime, at a disadvantage."

Less Rail, More Traffic

Congress last increased the federal weight limit in 1982. Then, as now, those pushing for longer and heavier trucks said it would result in fewer trucks on the road, but that never happened. In fact, the number of trucks registered in the U.S. and the mileage of trucks traveled has [increased by 91%](#). Recent studies have highlighted the impact of permitting different truck configurations on the amount of freight transported by the various modes of transportation.

- Increasing allowable total gross truck weights from [80,000 to 91,000 pounds](#) (but with no change in trailer length) is estimated to result in the diversion of 2.6 million annual railroad carloads and 1.8 million intermodal units.
- Increasing allowable truck weight from [80,000 pounds to 97,000](#) pounds could reduce merchandise traffic on Class I railroads by up to 50% and overall Class I rail traffic by up to 19%.
- [Increasing truck weight to 120,000 pounds](#), combined with twin 33-foot trailers, would lead to a diversion of 7.5 million annual rail carloads and 8.5 million intermodal shipments. The diversion of this traffic would represent an even more significant burden on taxpayers.

Negative Environmental Impact

Freight [railroads offer a sustainable](#), efficient way to move cargo across the country on infrastructure that railroads have spent well over \$23 billion a year over the last five years to maintain and improve. While freight rail accounts for 40% of long-distance freight ton-miles, it only accounts for 1.7% of U.S. transportation-related emissions. Moving freight by rail instead of truck lowers greenhouse gas emissions by up to 75%, on average.

AAR analysis of federal data finds: If 25% of the truck traffic moving at least 750 miles went by rail instead, annual greenhouse gas emissions would fall by approximately 13.6 million tons; If 50% of the truck traffic moving at least 750 miles went by rail instead, greenhouse gas emissions would fall by approximately 27.2 million tons.

More Research Needed

Congressionally-directed research needs to be conducted to fully understand the extent of the impacts of different truck configurations on driver safety, the service life and deterioration rates of bridges, pavement condition and the potential impacts of such changes on long-term solvency of the HTF.

In a [2016 study](#), DOT noted the difficulties encountered in studying the effects of the size or weight of various truck configurations and requested that the Transportation Research Board (TRB) develop a program of research to overcome limitations in data analysis and modeling of impacts.

In 2018, TRB released its [TSW Research Plan](#), which outlined 27 research projects. The completion of these projects would contribute to the improved evaluation of potential changes to TSW limitations. In its FY20 and FY21 omnibus appropriations bills (P.L. 116-94; P.L. 116-260), Congress directed DOT to expeditiously develop an implementation plan — including projected timelines for conducting the research — and noted that the research should be completed before any changes in federal TSW policy are considered. However, DOT has not yet submitted this implementation plan, a plan that would ensure that this research is successfully completed in a timely, cost-efficient manner.

Completion of this research could better inform the highway cost allocation study being undertaken by DOT pursuant to the Infrastructure Investment and Jobs Act (section 11530 of P.L. 117-58). This cost allocation study will provide an essential baseline for the direct costs of highway use by various types of users, including commercial motor vehicles.

The study will also review a broad range of costs — including those related to safety, emissions, congestion and noise — to determine the proportionate share of the costs attributable to each class of highway user. The study will then compare those costs with the user fee revenue contributed to the HTF by those users. DOT will then develop recommendations for a set of revenue options to fully cover the costs occasioned by highway users.