

Federal Size and Weight Standards for Commercial Motor Vehicles, United States of America

Introduction

With the advent of a Congressionally mandated, national defense highway system in the 1950's, and through the passage of various Congressional acts thereafter, Federal interest was institutionalized in creating and preserving the integrity of the national highway system and ensuring the safety, productivity, and mobility of passenger and freight commerce moving along it.

The following Federal standards are applied along this national system of roadways:

Commercial Vehicle Weight Standards

The following maximum national weight standards apply to commercial vehicle operations on the "Dwight D. Eisenhower System of Interstate and Defense Highways" (the Interstate System), an approximately 40,000 mile system of limited access, divided highways that span the nation. (Off the Interstate system, the 50 States may set their own commercial vehicle weight standards.)

Federal commercial vehicle maximum standards on the Interstate System are:

Single Axle:	20,000 pounds
Tandem Axle:	34,000 pounds
Gross Vehicle Weight:	80,000 pounds

The Bridge Formula. In addition to the axle and vehicle weight standards, there are also standards that govern the spacing of axles under the commercial vehicle. Known as the "bridge formula," these additional standards were introduced in 1975 to reduce the risk of damage to highway bridges. The formula does this by helping motor carriers and enforcement officials alike to calculate the appropriate spacing of axles, in order to limit the force that any one axle may exert on the road surface or bridge structure.¹

¹ Ref: U.S. Department of Transportation, Federal Highway Administration, *Bridge Formula Weights*. January 1994.

Commercial Vehicle Size (Length and Width) Standards²

*The following national standards apply on what is known as the National Network of truck and bus highways. These include: (1) the above-mentioned Interstate System **and** (2) those highways in each State which the State has certified to the FHWA are capable of safely handling larger commercial motor vehicles. The total National Network system is about 200,000 miles.*

Federal commercial vehicle maximum standards on the National Network are:

Overall vehicle length: No Federal length limit is imposed on most truck tractor-semitrailers operation on the National Network.

Exception: on the National Network, those truck tractor-semi-trailers carrying automobiles or boats in specially designed racks. These may not exceed a designated maximum length of 65 feet, or 75 feet, depending upon the type of connection between the tractor and trailer.

Trailer length: Federal law provides that no State may impose a length limitation of less than 48 feet on a semitrailer operating in any truck tractor-semitrailer combination on the National Network of highways. Note: many States may permit longer trailers (e.g., 53 feet) to operate on those portions of the National Network under their jurisdiction as a result of “grandfathered” rights.

Similarly, Federal law provides that no State may impose a length limitation of less than 28 feet on a semitrailer or trailer operating in a truck tractor-semitrailer-trailer (twin-trailer) combination on the National Network.

Vehicle width: On the National Network, no State may impose a width limitation of more or less than 102 inches. Safety devices (e.g., mirrors, hand holds) necessary for the safe and efficient operation of motor vehicles may not be included in the calculation of width.

Vehicle height: There is no Federal standard for vehicle height. State standards range from 13.6 feet to 14.6 feet.

² Ref: U.S. Department of Transportation, Federal Highway Administration. *Federal Size Regulations for Commercial Motor Vehicles*. 1996

Penalties for non-Compliance with Federal Standards

(1) **Weight Standards.** A State is subject to loss of its *entire* National Highway System (NHS) apportionment if its laws or regulations establish weight limits for commercial motor vehicles operating on the Interstate System that are either higher or lower than the four Federal weight standards mentioned above.³ The only exception relates to changes affecting established “grandfather” limits: although a State may not set weight limits above a grandfathered maximum, it may set them below the maximum, provided such a limit is not below the corresponding Federal standard.

(2) **Size Standards.** A State that violates Federal statutes on commercial vehicle size, or the implementing regulations, is subject to a **civil action** in Federal district court **for injunctive relief**, in accordance with 49 U.S.C. 31115, “Enforcement.” The action will be brought by the Department of Justice on behalf of the Federal Highway Administration.

(3) **Reporting Requirements.** Each year, States must provide the FHWA with both a plan, and a certification of accomplishment of planned size and weight enforcement activities. Failure to certify, or being found to have been inadequately enforcing all State laws affecting maximum size and weight on Federal-Aid highways, *despite the provision of certifying documents to the FHWA*, can result in a **10 percent reduction** of Federal-aid funds to the State for the next fiscal year.

³ See 23 U.S.C. 172(a), as implemented in 23 CFR 658.21, “Procedures for reduction of funds.”