WEIGHT LIMITS

Weight limit signs on bridges are meant to prevent loads from crossing a bridge that cause stresses above the safe limit. The Iowa Department of Transportation uses the Manual for Uniform Traffic Control Devices (MUTCD) to determine what signs are allowed for posting purposes. The MUTCD is very specific about what information should be on a sign. One of the most restrictive items the MUTCD addresses are the symbols that can be used on signs. The vehicle symbols shown in the MUTCD cannot be altered without special approval of the FHWA.

The symbols shown below are the only vehicle silhouettes allowed on a posting sign.

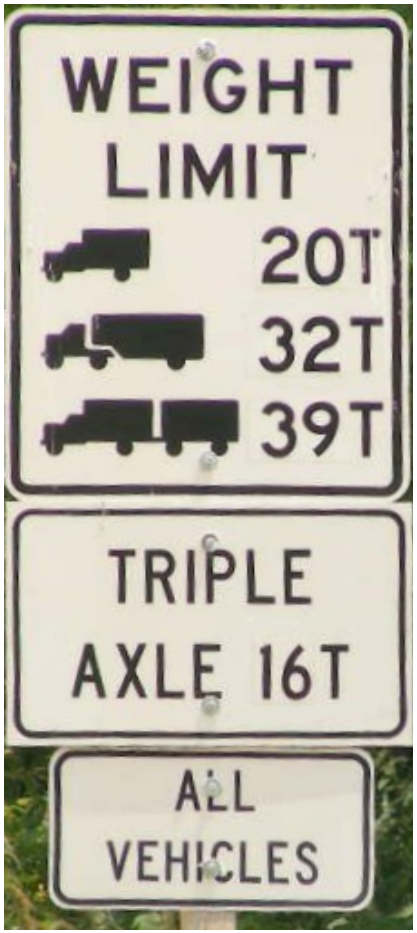
R12-5

Because every possible vehicle configuration cannot be represented on a sign, these typical configurations are used to show easily recognizable vehicles. The number of axles shown on each silhouette is not to be interpreted as the only possibility for that particular vehicle. Unfortunately, the intent of these silhouettes has been misinterpreted as being the actual configuration of the vehicles being restricted. This is especially problematic with the FHWA requirement to rate all bridges for the Special Hauling Vehicles (SHV) in the Manual for Bridge Evaluation (MBE). These SHV's are difficult to restrict without using a silhouette. SHV's generally fall under the top silhouette showing a straight truck. The SHV's have 4 to 7 axles, which makes interpretation of the sign essential for proper enforcement.

Below and to the right are examples of vehicles governed by a given silhouette.

IOWA LAW

Iowa has laws that allow some heavier loads on non-Interstate highways. These heavier loads can be above the 40 ton gross weight limit applied to legal loads traveling on the Interstate system. To provide restrictions on the Iowa Legal vehicles over 40 tons, Iowa may use a "Triple Axle" limit sign along with the conventional weight limit sign showing vehicle silhouettes. A typical sign is shown below.



The "All Vehicles" sign is to communicate to Implements of Husbandry that they are also restricted by these weight limits.

The maximum gross weight allowed for each legal truck configuration is as follows:

= 38 tons

= 48 tons

= 48 tons

Regardless of how much of the total weight of a vehicle is actually on the bridge, the gross weight of the entire vehicle must be equal to or less than the limit on the sign.

No axle on a vehicle crossing the bridge can have a weight above the limit on the sign.

MM 805 03/10/2020

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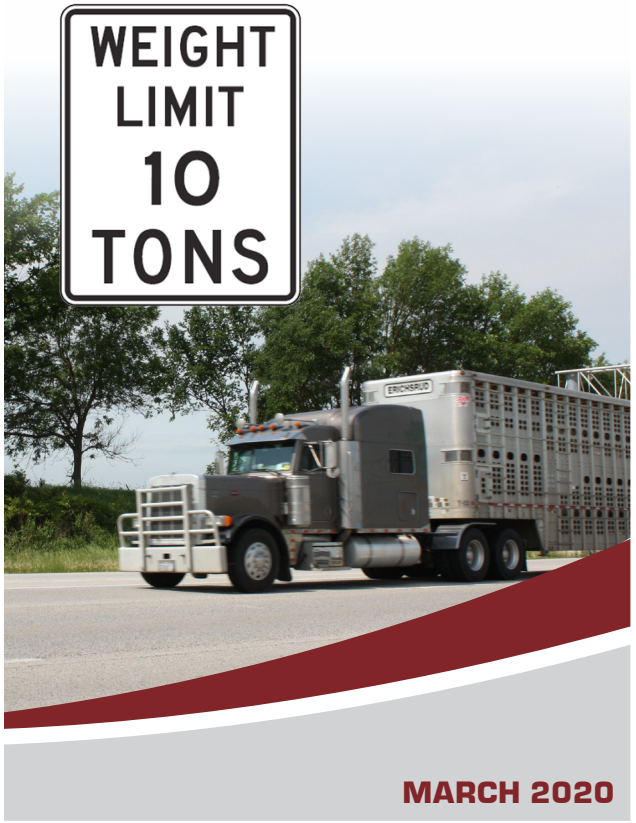
WEIGHT RESTRICTION SIGNS

AND WHAT THEY MEAN



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