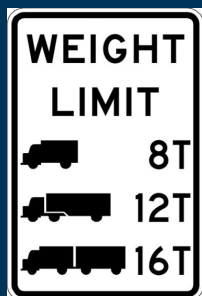


## BRIDGE LOAD POSTING

Load posting is often required for bridges when the structure does not have enough capacity to safely carry the State of Kansas Legal Loads. Their purpose is to prevent heavy loads that cause stresses above the safe limit from crossing the bridge. Government agencies may post a bridge using one of two different sign designs according to the Manual of Traffic Control Devices (MUTCD).

### SIGN R12-5

Posting sign R12-5 shows three different truck silhouettes with the corresponding maximum gross vehicle weight (GVW) for each truck configuration. It is important to note that the number of axles shown on each figure is a representative example only and the actual axle configuration may be different.



**Single Unit Truck:** A multi-axle single unit vehicle. The example shown on this sign indicates that the bridge can only carry a truck of this configuration weighing a maximum of 8 tons (16,000 lbs).

**Standard Semi-Truck:** A multi-axle semi-tractor and trailer. The example shown on this sign indicates that the bridge can only carry a truck of this configuration weighing a maximum of 12 tons (24,000 lbs).

**Combination Truck:** A combination of a single-unit vehicle pulling a trailer. The example shown on this sign indicates that the bridge can only carry a truck of this configuration weighing a maximum of 16 tons (32,000 lbs).

### SIGN R12-1

Posting sign R12-1 only provides a single posting limit. This weight limit applies to all vehicles regardless of the number of axles or axle configuration that the vehicle has. The gross vehicle weight (GVW) of the entire vehicle including separate trailers being pulled must be equal to or less than the limit on this sign.



**All Vehicles:** This weight limit applies to ALL vehicles regardless of the number of axles and axle spacing. The example shown on this sign indicates that the bridge can only carry a GVW of 10 tons (20,000 lbs).

## KANSAS TRUCK WEIGHT LAWS

- Maximum gross vehicle (GVW) in Kansas is 85,500 lbs on non-interstate highways and 80,000 lbs on interstate highways.
- GVW is defined as the total weight of the vehicle or vehicles and the load thereon.
- Maximum single axle weight is 20,000 lbs (10 tons).
- Maximum tandem axle weight is 34,000 lbs (17 tons).
- Maximum gross vehicle weight (GVW) for a particular truck is dependent on the number of axles and the axle spacing. More information can be found on the Kansas Highway Patrol website at <https://www.kansashighwaypatrol.org/DocumentCenter/View/178/Weight-Enforcement-Facts-PDF>.

## WHY ARE WEIGHT LIMITS ENFORCED?

- Overweight vehicles damage roads and bridges and shorten their life.
- One five-axle truck weighs about the same as 20 automobiles, but its impact on the roadway is the same as 9,600 automobiles.
- An axle weight of 26,000 lbs is only 30% greater than an axle weight of 20,000 lbs, but the effect on the roadway is 200% greater.

## CONTACT US

☎ 785-864-5658

✉ [kutc\\_training@ku.edu](mailto:kutc_training@ku.edu)

🌐 [www.ksltap.org](http://www.ksltap.org)

📍 M2SEC Building  
1536 W 15th St, Suite G 520  
Lawrence, KS 66046

# BRIDGE LOAD POSTING



# LTAP

**KANSAS LOCAL TECHNICAL  
ASSISTANCE PROGRAM**

Understanding Bridge  
Weight Signs

Published: September 2022



## SINGLE UNIT TRUCK

The first silhouette is a single unit vehicle. The single unit vehicle has a power unit and trailer that form one vehicle. The power unit and trailer are not designed to be detachable. The following are examples of vehicles governed by the single unit silhouette. Specialized Hauling Vehicles (SHVs) fall under this category, as well as firetrucks.



## STANDARD SEMI-TRUCK

The second silhouette is a two-unit vehicle. The vehicle consists of a power unit and a trailer. The power unit or single unit truck for this vehicle is detachable from the trailer. The following are examples of vehicles governed by the two-unit silhouette.



## COMBINATION TRUCK

The third silhouette is a three-unit vehicle. It consists of a power unit and two trailers that are detachable from one another. The following are examples of vehicles governed by the three-unit silhouette.

