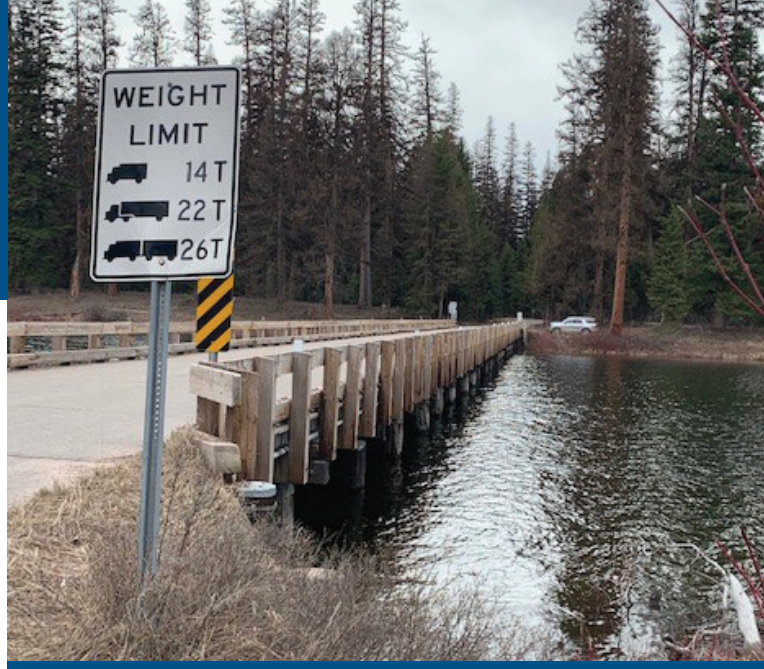
Bridge Load Posting
Montana Timber Bridges
Fact Sheet



The Montana Department of Transportation (MDT) has begun placing new load posting signs at some of its bridges around the state. Bridge load posting is a matter of public safety and will help MDT safeguard vital transportation infrastructure. Based on recent safety-based bridge engineering evaluations, new vehicle types, and updated guidance from the Federal Highway Administration (FHWA), the new load postings will indicate the maximum amount of weight that can legally cross a bridge for different vehicle types.

Bridge load posting means restricting weight on Montana's bridges

Bridge weight restrictions are required when the engineering analysis of a bridge, known as a load rating, indicates that it cannot carry standard, legal loads. Load ratings provide information about how much distributed weight can safely pass over a bridge. Load posting of bridges is required when a load rating indicates that a bridge cannot safely carry certain loads that would otherwise be legal in the state of Montana. Load posting signs show maximum weight limits for different vehicle types, depending on their axle configuration.

Weight restrictions are required and are important for Montana's bridges

Load posting of bridges is essential to the safety of the traveling public. Not all bridges were designed to carry today's standard, legal loads, and some bridges have deteriorated over time. Load posting, or weight restriction signs are installed to keep motorists and their vehicles safe. They are also posted to prevent certain loads from crossing and over-stressing the bridge, which could lead to both visible and hidden damage, and eventual closure or failure of the bridge.

A posted bridge is safe to use, but the weight of certain vehicles must be limited accordingly. MDT needs your help to prevent overload and damage, maintain the integrity of the bridge, and safeguard bridge longevity.

BRIDGE LOAD WEIGHT LIMIT • POSTING PROGRAM •

Safeguarding Montana's vital connections

History of Timber Bridges

The Great Depression began in 1929 with the stock market crash and was made worse by the 1930s Dust Bowl. When President Franklin D. Roosevelt (FDR) took office in 1933, he responded to the Nation's economic disaster with programs known as the New Deal. FDR's New Deal directed funds to stimulate recovery through public works construction programs aimed at employing as many people as possible, and it changed Montana's transportation landscape.

During the New Deal, about 3,000 miles of new roads and over 1,200 timber bridges were built in Montana. At one time timber bridges were built at a rate of 100 bridges per year. These timber bridges were built in all four corners of the state making many of them more than 70 years old. There are roughly 440 timber bridges in-service today on MDT routes.







Montana Historical Society Research Center
Photograph Archives, Helena, Montana



MDT's bridge management program and timber bridges

MDT's bridge management program extends bridge service life and prevents potential failures. The program is responsible for inspecting all bridges on Montana's public roadways for deterioration or damage, determining if changes in conditions warrant a reduced load rating, and implementing weight restrictions when required. Montana's timber bridges may require more restrictive posting because of the following:

- **Age of the timber bridges** – most are more than 70 years old
- **What they are made of** – timber is a material that is particularly susceptible to environmental degradation, impact damage – from ice or stream debris or vehicles – and is difficult to repair
- **Weight and length of loads** – many trucks using these bridges today are significantly heavier than those for which the bridge was designed, and more vehicle weight is concentrated in a smaller area

What's new?

Truck manufacturers are building specialized hauling vehicles (SHVs) capable of legally carrying heavier loads than typical vehicles have in the past. These vehicles may increase stress on bridges, so current weight restrictions may not be sufficient to ensure safe operations.

FHWA has determined that all States must include these new, short, heavy vehicles when evaluating the safe limits of bridge capacity. Accordingly, MDT is in the process of updating load ratings for 4,500 public bridges across the state, including approximately 2,500 owned by MDT. For this reason and for the safety of the traveling public, motorists will start to notice some bridges with new bridge load posting, or weight restriction signs. This effort is expected to take about four years to complete.

Next Steps

Although load restrictions may apply to all bridge types, timber bridges that were designed to older standards and are at the end of their useful service life are more likely to require load posting. MDT is exploring every feasible and fundable opportunity including expedited projects, innovative contracting, and potential public/private partnerships to repair or replace these timber bridges.

MDT is also in the process of creating interactive map(s) for the public's use, and other information will be posted on our website as MDT continues its bridge load posting program.

For the most up-to-date information and additional resources, visit MDT's Bridge Load Posting Program webpage at bit.ly/bridgeload or email MDTbridgeloadposting@mt.gov.

Scan for more information

MONTANA
Department of Transportation

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