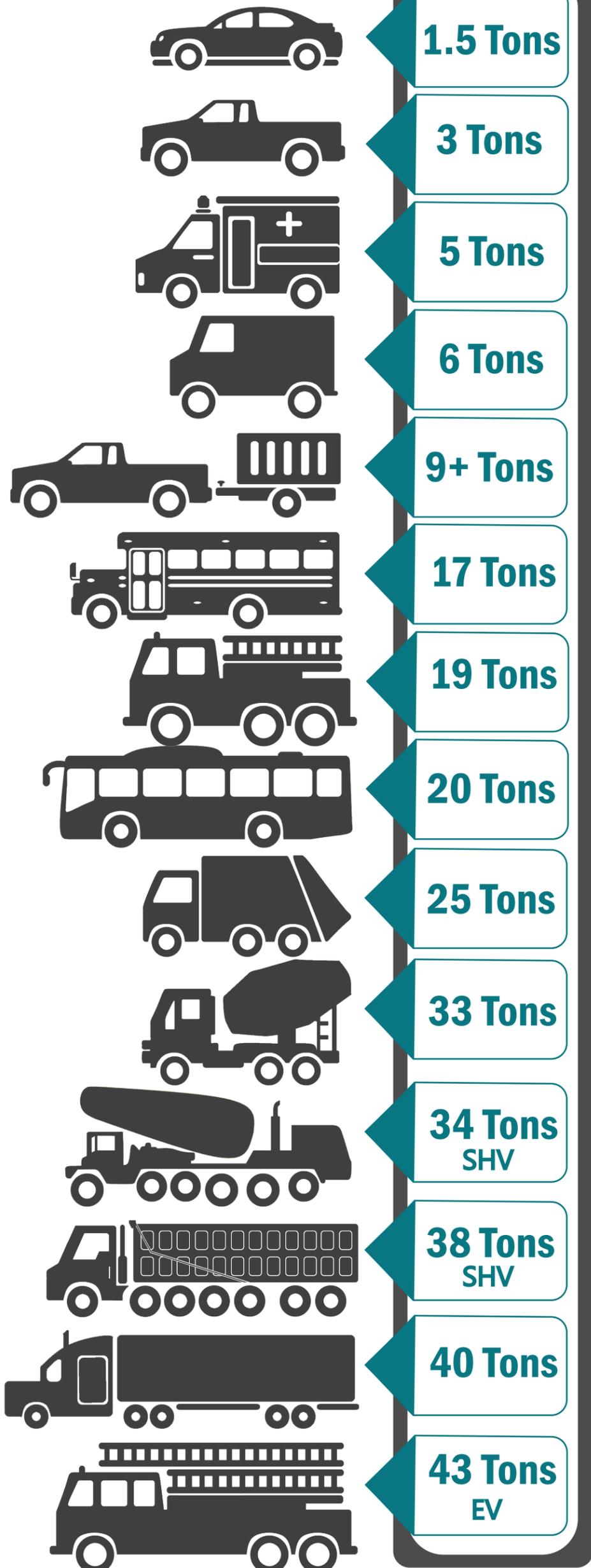


Approximate Vehicle Weights



We are updating the engineering reviews of bridge capacity (load ratings) on Oregon's public bridges under a federal mandate that these reviews address new, heavier vehicles and more traffic on the road. Safety is one of our top priorities. By meeting new standards from the Federal Highway Administration we can help everyone travel safely.

You may wonder:

Why are we load rating bridges?

We are charged with evaluating all public bridges in the state. When that evaluation finds that a bridge doesn't have adequate capacity for standard legal vehicles, (i.e. any vehicle at or below 40 tons with no single axle over 10 tons and no tandem axle over 17 tons) we work with local agency bridge owners to determine if there are ways to minimize impacts before issuing the load restriction letter that initiates posting of the bridge.

Why are the bridges being load rated?

Most older bridges weren't designed to carry the number and weight of vehicles common today. Some bridges have deteriorated. There are two new types of standard legal vehicles that are becoming more common — Specialized Hauling Vehicles (SHVs) and FAST Act Emergency Vehicles (EVs). These bigger, heavier vehicles distribute their weight differently, putting more concentrated force on the bridge structure. This is part of the reason why a comprehensive engineering review of existing bridge capacity using the new federal requirements and criteria was needed.

Why do we need new criteria for the engineering review?

In the 1930's and 40's bridges were designed for single unit vehicles weighing 15 tons (H 15). From the mid 1940's to early 90's the design was based on truck and trailer vehicles weighing 36 tons (HS 20). The majority of Oregon's bridges were designed for one of these two vehicles, not the new SHV and EVs that are on the road today.

H 15 (15 tons)



HS 20 (36 tons)



Are the bridges safe to drive on?

Bridge weight restrictions keep motorists safe and ensure that the bridge remains functional. Posted weight restrictions do not mean a bridge is unsafe to use — as long as vehicles crossing the bridge meet posted limitations.

How is the bridge safe to drive on one day and not the next?

Bridge load postings are required when an engineering review indicates that the structure cannot safely carry standard legal loads.

This review uses the new federal requirements, which evaluate for:

- More and heavier vehicles.
- Newer design and load rating philosophies.
- More extensive analysis of parts and areas of the bridge structure.
- A better understanding of failure modes/scenarios.

These new requirements sometimes result in changes for bridges that appear to be performing well. But that history does not guarantee future performance or safe operation, and the demand for larger vehicles continues to rise.