

Not All Freight Is Measured by Weight

Distance and weight are two of the most visible factors in freight pricing, but they are not the only ones that matter. In many cases, the amount of trailer space a shipment occupies can be just as important as how much it weighs. This is known as dimensional, volumetric, or "cube" pricing, a concept that recognizes that transportation capacity is limited by both weight and available space.

A trailer can run out of room long before it runs out of payload.

Markets change quickly. Capacity shifts, and every trailer has two constraints: how much weight it can legally carry and how much cargo it can physically hold. While some shipments reach the weight limit first, others consume available space long before the trailer approaches its maximum payload. This is particularly common with low-density freight. Products such as furniture, insulation, packaging materials, assembled equipment, and certain consumer goods can occupy a significant portion of a trailer while contributing relatively little weight. In these situations, the carrier's limiting factor is not payload capacity, but cubic capacity.

In freight, space is a commodity.

Consider two shipments traveling the same distance. One may weigh 10,000 kilograms and occupy a small portion of the trailer. Another may weigh only 2,000 kilograms but take up half the available space. Although lighter, the second shipment may consume more of the carrier's available capacity and therefore command a higher transportation cost.

For shippers, understanding density can have a meaningful impact on transportation spend. Packaging design, pallet configuration, and load optimization can influence how efficiently freight utilizes trailer space.

Small improvements in density can create significant savings.

For carriers, dimensional pricing helps ensure that capacity is valued appropriately. A trailer that cubes out before it weighs out still represents a fully utilized asset, even if unused payload capacity remains.

Freight is sold on capacity, not simply weight.

The key takeaway is that freight is not simply sold by the kilogram or by the kilometer.

Freight pricing is based on overall carrying capacity. This is determined by both how much a shipment weighs and how much space it occupies.

**Because at the end of the day, an empty cubic foot generates
just as little revenue as an empty mile.**