

## **Dry Bulk Truck Loads Need a 10% Axle Variance**

### **Dry Bulk Loads Compact During Braking, Overloading Trailers' Front Axles**

Present law limits the maximum laden weight of a commercial truck to 80,000 lbs., including the weight of the cargo. Most trailers transporting dry bulk goods are tandem axle, limiting each axle to 34,000 lbs. Dry bulk goods include flour, plastic pellets, and other solid substances with tiny individual particles that make up the substance as a whole but easily separate. Bulk loads of dry goods rarely exceed the overall weight limits but they regularly shift during transport and cause the front trailer axle to exceed its maximum 34,000 lbs. The force generated when braking compacts the cargo at the front end of the trailer but the relatively weaker forces from acceleration and forward movement fail to evenly redistribute the load across axles. So, even when the cargo was properly loaded, the truck's natural motion causes the load to become improperly distributed.

### **10% Axle Variance**

The law should account for this issue by granting a 10% axle variance for commercial motor vehicles transporting dry bulk goods. This would increase the maximum variance on any tandem-axle trailer to 37,400 lbs. but would leave the maximum laden vehicle limit untouched at 80,000 lbs.

### **Necessary Flexibility Without Endangering Roads or Competition**

There is little that a carrier can do to avoid trailer-front compacting when transporting dry bulk goods. The goods' structure facilitates its accumulation at the front of the trailer. Baffles are designed to impede the forward-pushing force of liquids while braking, but do little to prevent solids accumulating. Unlike a liquid, the dry bulk goods will not return to a uniform distribution throughout the trailer. Installing multiple compartments in each trailer would solve the weight distribution issue. Unfortunately, shipper facilities are designed to blow bulk loads into the trailer from the rear. Thus, even if the carriers could acquire such trailers, shippers would be unlikely to spend the necessary capital to reconfigure their facilities.

A 10% increase to axle variance would ensure that vehicles properly loaded with dry bulk goods remain within axle limitations during transport. Retaining the current maximum weights and bridge formula provides the necessary flexibility to industry while minimizing damage to roads and bridges. A very small number of dry bulk loads are transported using tri-axle trailers. Current law allows each axle on these trailers to hold up to 50,000 lbs. But, a 10% Variance would still only expand these vehicles' maximum axle-weights by 5,000 lbs. total. Finally, by retaining the overall maximum weight, the trucking industry does not accrue any undue competitive advantages against other modes.