

Manage your driving speed

There are some important rules to remember when driving heavy construction vehicles on public roads. One of those rules is to maintain the proper speed to allow you to stop safely.

There are three factors involved in stopping a vehicle:

- Perception distance,
- Reaction distance, and
- Braking distance.

Perception distance is the distance a vehicle travels from the time the driver's eyes see a hazard until his/her brain recognizes it. The perception time for an alert driver is 3/4 of a second. At 55 mph this accounts for 60 feet traveled.

Reaction distance is the distance traveled from the time the driver's brain tells his/her foot to move from the accelerator until the foot hits the brake pedal. The average driver has a reaction time of 3/4 of a second. That accounts for 60 feet traveled at 55 mph.

Braking distance is the distance it takes to stop once the brakes are applied. Braking distance is affected by weight, length, and speed of the vehicle as well as road conditions.

Remember, a heavy vehicle's components (brakes, tires, and springs) are designed to work best when a vehicle is fully loaded. At 55 mph a heavy vehicle can stop in about 250 to 300 feet. An empty vehicle traveling at the same speed can stop in about 300 and 400 feet.

High speeds increase stopping distances. By slowing down, braking and stopping distances are reduced. Also, the heavier the vehicle, the more work brakes must do to stop.

Speed and road conditions

Traction is necessary for vehicle control. Certain road conditions reduce traction and lower speeds are necessary. These include the following:

- *Ice, snow, rain:* A slippery road can increase a vehicle's stopping distance and make turning difficult. In order to stop safely, reduce speed by 1/3 on wet roads and 1/2 on snow covered roads. If the surface is ice, get off the road as soon and as safely possible.
- *Shady roads:* Shady portions of the road can remain slippery for a long time after ice on sunny areas of the road has melted and the pavement is dry.
- *Bridges:* When the temperature drops, bridges can freeze before the road does. If slippery conditions are likely, avoid any change (acceleration or braking) in driving habits while crossing the bridge.
- *Traffic flow:* When in heavy, constantly moving traffic, the safest speed is usually the speed other vehicles are traveling. Vehicles going in the same direction at the same speed are less likely to run into one another.
- *Curves:* Remember that posted speed limits on curves are designed with cars in mind. Hitting a curve with a dump truck or semi-and-lowboy combination at the posted speed limit can cause several problems including skidding off the road or vehicle roll over.