



W Poplin Engineering

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**Following Too Close?  
Tailgating - "Back Off, I need My Space"**



"TWO SECOND" Rule at 40 mph = 40 yds

"TWO SECOND" Rule - Speed in mph = Following Distance in yds

Many drivers follow much too closely simply because they think the distance they are using is appropriate. Driver manuals have sometimes recommended only one vehicle length for every 10 mph. A typical automobile is approximately 15 feet long. Therefore, this is basically a one second distance. Typical perception response times for drivers responding to traffic situations are 1 to 2 seconds. A following distance of only one second leaves no margin for error. For passenger vehicles, i.e. automobiles, vans, pickups and SUV's the most common and best guide is the "**Two Second Rule**". You should follow at least two seconds behind the vehicle ahead.

Unfortunately, many drivers have difficulty in assessing what distance two seconds represents and it varies with speed. An easy approach is to **take your speed in mph and this equals the number of yards for your following distance**. Therefore at 60 mph, the appropriate two second following distance is 60 yards or 180 feet. Similarly at 40 mph, the appropriate following distance is 40 yards or 120 feet. What does this look like on the highway? On most roadways, the centerline stripes are 10 yards apart, so if you count stripes and you can see one stripe for every 10 mph, you will have the recommended following distance.

Now let's discuss what following at two seconds will do and what it will not do.

**What it will do:**

**The two second rule will allow you time and distance to avoid collision with the vehicle ahead by responding in a similar manner.** That is, if the driver ahead has to panic brake and stop, then you should have sufficient time and distance to also panic brake and stop without a collision.

**What it will not do:**

**It will not allow you time and distance to avoid collision if you cannot respond the same way or if the vehicle ahead is not slowing under its own power.** For example, if the vehicle ahead has a collision and stops much more rapidly than normal, you may not have sufficient time and distance to stop before collision. Similarly, if the vehicle ahead changes lanes quickly to avoid a line of stopped cars and you cannot also change lanes you may not have enough time and distance to stop.

Large trucks and tractor trailers require significantly greater following distances. Air brakes have a short time delay before they are fully applied and the higher tire pressures and rubber compounds of large truck tires do not allow as rapid a deceleration as smaller vehicles. Additionally, truck drivers have more concerns about losing control of the vehicle while trying to stop quickly. The

Commercial Driver's Manual has a relatively complex recommendation for following distance that suggests "one second for each 10 feet of vehicle length at speeds below 40 mph. At greater speeds you must add one second for safety." Unfortunately, following this rule creates a situation where a 30 foot dump truck and a 70 foot tractor trailer have grossly different following distance recommendations even though the vehicle braking capabilities are nearly identical.

For large trucks a 4 second following distance is the minimum amount to account for all of the differences between large truck braking capabilities and small vehicle capabilities. Recognizing the damage potential of a large truck is great even at slow speeds, *a reasonable recommendation for these vehicles is a 5 second guideline. Following at 5 seconds, the driver of a large truck needs 25 yards of separation for each 10 mph of vehicle speed.* For example at 40 mph, 100 yards or a football field length is an appropriate following distance for a large truck. At 70 mph this becomes 175 yards or almost two football field lengths. If a large truck behind you is closer than this, you may be in trouble if you have to make a panic stop.

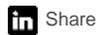
#### **Automobiles, Vans, Pickups & SUV's**

- **Two Second Rule**
- **Speed in MPH = Sep. in Yards**
- **One Centerline Stripe/10 MPH**

#### **Large Trucks and Tractor Trailers**

- **Five Second Rule**
- **25 Yds. Separation/10 MP**
- **40 MPH Needs A Football Field**

[Truck Event Data Downloads - Online Reference](#)



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