## The Yellow Light

## Holding the Center

How getting rid of the double yellow line reduces crashes

By Jonathan J. Chiarella / May 17, 2025

Among head-on collisions, how many happened because the drivers hadn't noticed the center line? On a snowy day that hides the stripes on the roadways, how likely is it for someone to drive on the left instead of the right? In winter, when a car slides into another car, would a more obvious center line have stopped it? When two drivers approach each other, is a yellow line the only thing that stops them from ramming each other at top speed?

With reflective paint, any lane marker helps to see at night on mountain roads. One could make a stronger case, however, that the *outer* edge of the traffic lanes need to be visible. If the outer line isn't visible because the edge of the road is crumbling, then—wait, why is there no shoulder? You probably marked the lanes too wide.

For the well-lit street, the place with residences and (I would hope) slower car speeds, the double yellow line may even do more harm than good.

Removing the dividing line may not be a panacea, but it slows down most people. It lowers the average speed by about seven miles per hour, as it creates a feeling of danger, which compels people to drive safer. Similarly, you can shrink lanes from twelve feet to ten or merely add trees to the street to induce a similar reaction. <sup>1</sup>

This mimics what Hans Monderman saw when an electrical outage took out a traffic light, and then he consciously removed another one. When you force people to be aware of their surroundings, they tend to be pretty smart. On the flip side, he noted, "When you treat people like idiots, they'll behave like idiots." And Monderman tried out his cockamamie ideas of removing all sorts of curbs and markings in the street decades ago. Dutch drivers are not supermen, and the scenes of Dutch traffic in the 1980s were indistinguishable from those of Houston today.

Growing up on an unmarked suburban street, I saw this daily. People driving cars would give a wide berth while passing someone walking. They didn't robotically stay in the painted lane and run you off the road. Cars coming from opposite directions would slow down a bit when they neared each other and watch each other and anyone else nearby.

It wasn't some quirk of my town in upstate New York in the early 1990s. When I lived in South Korea, I noticed the same thing in both rural and urban areas. Before an overhaul of the address system in 2011, most side streets and paths between farming plots had no official names.<sup>3</sup> Many still don't.

<sup>1.</sup> These are interventions that Jeff Speck of Speck Dempsey advocates (Max J. Krupnick, "Safe Streets," *Harvard Magazine*, March–April 2025).

<sup>2.</sup> Stephen Johnson, "Want Fewer Car Accidents? Remove Traffic Signals and Road Signs," *Big Think*, August 31, 2017.

<sup>3.</sup> Traditionally, a building's address was the name of the neighborhood, followed by the number of the plot on which the building sat. As land was sold and resold and divided, the numbers of #1, #2, #3, #3-1, #4, #7, etc. would be arranged in a way that only local history could explain.

The car crashes happened on arterial roads and in slip lanes, not on the narrower paths where people had to slow way down. When a sloppy maneuver would send your car down into a rice paddy, you stepped up to the occasion. When your *mind*—and not your engine—is firing on all cylinders, you do a great job. It's when you think you can let your guard down that disaster strikes.

Visual cues shape how we act without our noticing it. Stand up on one leg. What are you staring at? What are you thinking about? Are you calculating the angle of the horizon? You would think that your field of view is unimportant. You could perform this balancing feat in front of a kitchen fridge as easily as in a library. Now try standing on foot again, but close your eyes.

It's harder because your brain was automatically and very quickly interpreting the slightest changes in the field of view. In response, your body adjusted its muscles slightly to compensate when you were drifting away from perfect balance.

The other thing to remember is that we do not respond to visual cues in the ways that some designers want. Imagine if, instead of looking at the room while you stood one on foot, someone held a giant poster right in front of you that said "Don't Lose Your Balance." Would this help? You already have the desire to not fall down. If anything, this sign could be distracting, especially if you have to devote some of your attention to decoding what you see.

Americans are so used to the various signs, lines, and lights that it seems normal when driving. When you walk through the aisles of a store, however, do you need "shopper's lanes"? Without a paint line, do you crash face-first into oncoming shoppers? We don't need someone to make special notices that tell us to not walk into other people.

Some may still push back and say, "Even if the center lines are not magical, I still would know to move around carriages, bicycles, and people on foot. The line doesn't cause any harm." It is true that you wouldn't intentionally crash into an obstacle in your lane, but you have probably never stubbed your toe intentionally.

You may have hit your toe on the dinosaur toy that your son left in the middle of the hallway, even though you told him that his things don't belong there. When you visit another house, you are less likely to accidentally bash your foot like that.

At home, the hallway signaled to you that you could go on autopilot and feel comfortable while walking. In theory, you could've avoided walking into the toy if you had been looking for it, but you were focusing on your task or looking at things at eye level. This is because you had expected your path to be clear of obstacles. Likewise, the double yellow on your left and the white on your right tell you that you are driving within *your* lane. Go ahead.

When you have your own lane, with clearly defined borders, you tend to subtly "obey" the lines of paint. When you are passing a person walking or on a bike, you are less likely to do the sensible thing, which is to wait until there's no oncoming car and then move

to the left and give a wide berth as you overtake the other person. You don't "buzz" the slowpoke.

When an impermeable yellow line exists, however, the person in the car may try to "split the lane." This is when someone drives a car side by side with someone on a bike within the same lane, even though the lane is not supposed to accommodate both at the same time. Someone will drive a two-ton vehicle within inches of a human's elbow, but at least no one will violate the yellow line!

This style of passing is irrational and dangerous, but it is exactly what the painted lines encourage the person driving to do.

What we see influences our behavior, but we humans do not necessarily read the cues as street designers wish. They must observe how humans react to various cues. Then, they must pick the cues that bring out the behavior that designers want to elicit. It will not work to paint a double yellow line and then define what it means and what drivers should do in response. On many streets, in fact, the double yellow line puts us in more danger.