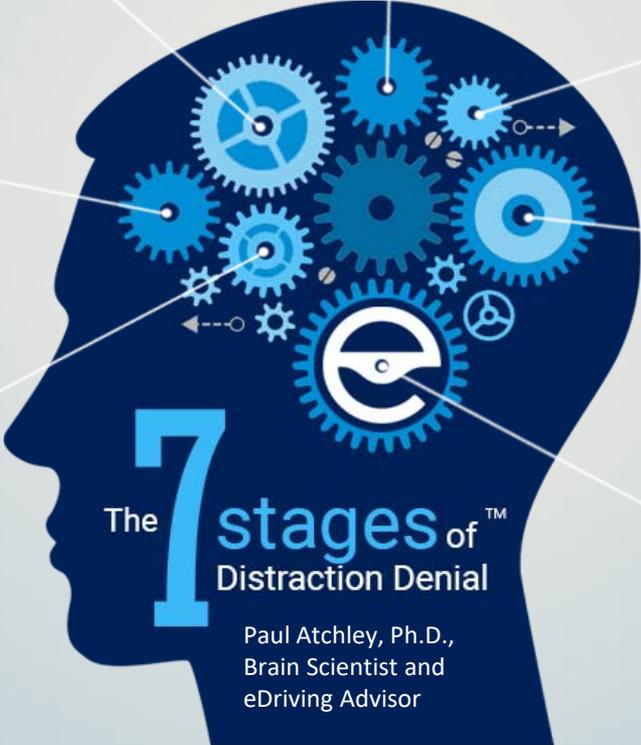




# **The 7 Stages of Distraction Denial**

**Paul Atchley, Ph.D.**

**Brain Scientist and eDriving Advisor**



stage 4

HANDS-FREE CALLS ARE OK & NO WORSE THAN TALKING TO A PASSENGER

stage 5

MY CAR'S TECHNOLOGY MAKES ME SAFE

stage 6

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stage 3

IT'S OK TO TEXT AT STOPLIGHTS

stage 2

I AM REALLY GOOD AT MULTITASKING

stage 1

I AM A BETTER DRIVER THAN MOST

# The 7 stages of Distraction Denial™

Paul Atchley, Ph.D.,  
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## I AM A BETTER DRIVER THAN MOST

**Most drivers think they are good drivers** or at least better than average, which statistically cannot be true. The truth is that most drivers have their “driving demons” and either know what they are and ignore them (bad) or don’t know what they are (also bad). Let’s assume that you ARE a better driver than most. What about the other guy? He is likely to be worse than you are. And he is the one who will cause the problem—THAT YOU NEED TO REACT TO.

**Driving is not just about not CAUSING a crash, it’s about PREVENTING a crash.**

Great drivers engage in a process of hazard perception, constantly updating their situational awareness of their surroundings looking for threats they need to avoid. The other driver doesn’t care about how good you are. They won’t give you a pass for those few seconds of distraction. It takes constant presence of mind to avoid your own mistakes as well as those of the other drivers around you.



## I AM REALLY GOOD AT MULTITASKING

**Our brains do not multitask.** They task-switch. That means when we do anything that requires attention, we focus on it and when we want to attend to something else, we switch focus. We can do this quickly, but not perfectly. When researcher Cliff Nass at Stanford University tested heavy multitaskers and students that didn't like to multitask on measures of multitasking and single tasking, he found the heavy multitaskers did more poorly on both measures.

**The ability to focus is key.**

Play a little game with yourself. Quickly say the alphabet out loud from A through J, then switch and count out loud from 1 to 10. That is performing two tasks in a row, each with different rules, but both you know well. You should be able to do it in 4-5 seconds. Now try the multitasking version. Say a letter ("A") then a number ("1"), then a letter ("B"), then a number ("2"), until you finish through J and 10.

How did you or your friend do? I bet you started to slow down and make errors around "E," or so. Why? Because each time you switch between letters and numbers, each set with its own rules and each requiring you to remember where you were before you switched, you incurred a "task-switch" cost. And driving and talking are a lot more complex than the alphabet and counting. Imagine what the task-switch cost is!

**Studies show that you are 8-23 times more likely to be in a crash if you text. No matter who you are.**



## IT'S OK TO TEXT AT STOPLIGHTS

**Typing into a phone is texting. Reading a phone is texting.**

Both take your eyes and mind off of the world around you. And an intersection is one of the most dangerous parts of the drive—and probably the most dangerous place to text. Here's why. Imagine closing your eyes and counting to four. Now open them and drive into that intersection. Feel good about that decision? Probably not because it takes time to build “situational awareness” and an understanding of what is happening around you.

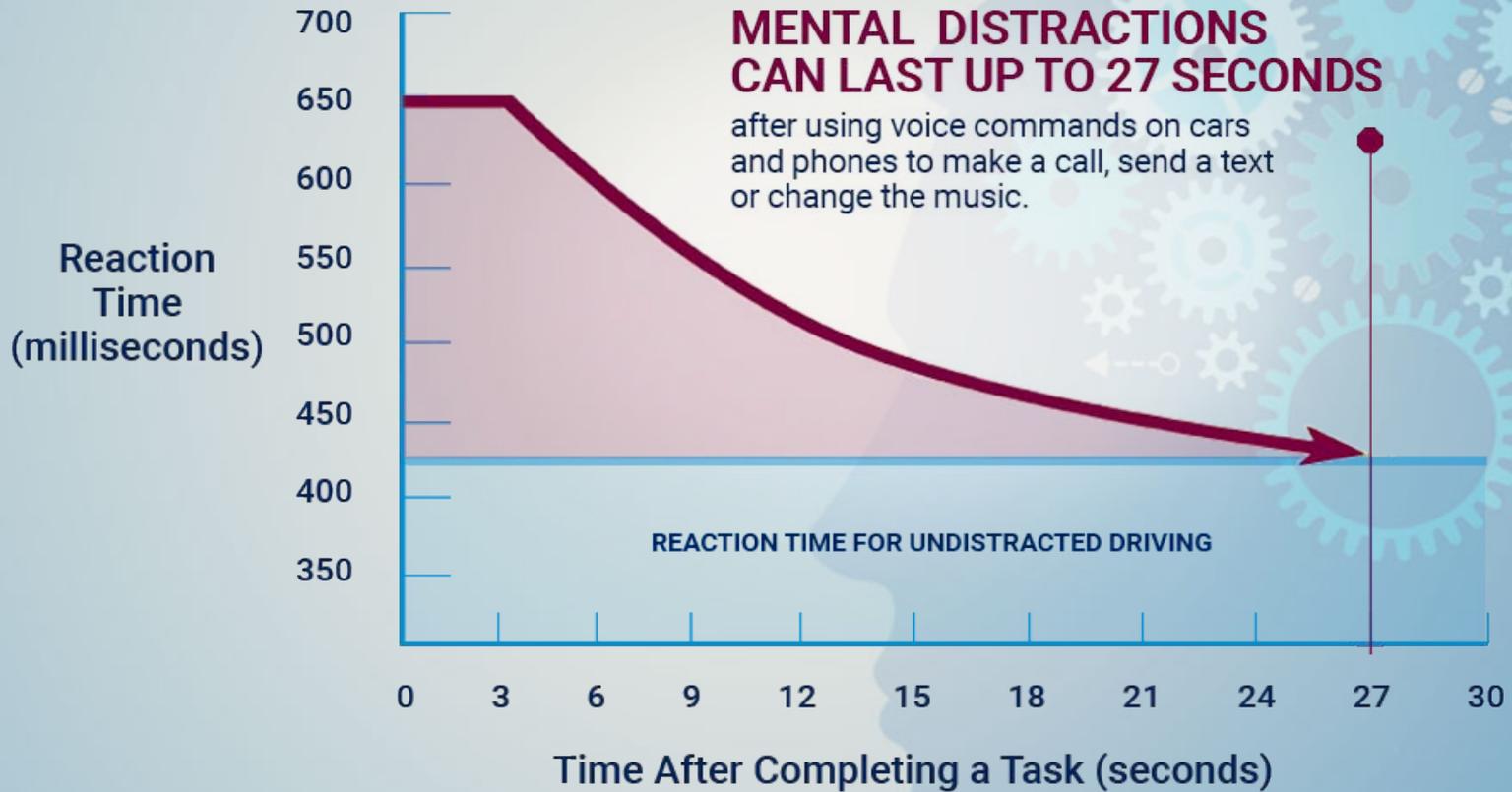
When Dr. Paul Atchley and colleagues at the University of Kansas asked drivers in a simulator to text “safely” at stoplights and at the last light a car drove into their lane, 14 of 15 texting drivers failed to notice as they drove into the intersection, while all of the attentive drivers stopped safely. David Strayer and colleagues at the University of Utah estimate that:

**It takes your brain up to 27 seconds to get back to baseline attentional capacity after you stop texting.**

That is your brain building up that situational awareness so it can avoid the other driver who is about to do something stupid at the stoplight you were texting at.

stage **3**

## Lasting Effects of Mental Distraction



Source: AAA Foundation for Traffic Safety



## stage 4

### HANDS-FREE CALLS ARE OK & NO WORSE THAN TALKING TO A PASSENGER

**It's your brain that is the problem, not your hands.** If it was your hands then we would have outlawed stick shifts many years ago. Have you ever turned off the radio because you were trying to do something complex while you were driving, like navigate in a new area? You could tell the radio was tapping your brain and distracting you, even though you weren't touching the radio. A conversation is worse.

When Paul Atchley and colleagues at the University of Kansas looked at hundreds of measurements across a multitude of studies on the effect of hand-held or hands-free phones, there was less than a 1% difference between the two on whether they hurt driving performance.

Studies show that you are 4x more likely to crash if you are using your phone.

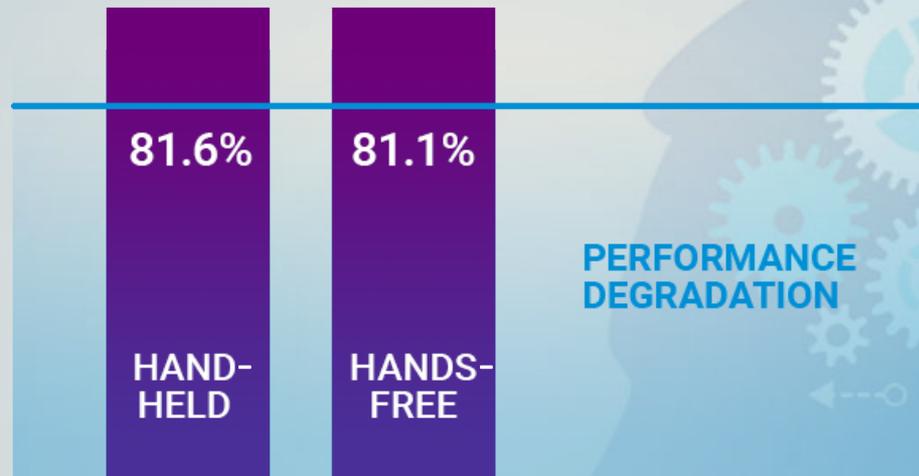
**There is virtually no difference in that statistic if it is hands-free or hand-held.**

It's true that talking consumes part of your brain. Even passengers can distract us. But what happened to that conversation in the car the last time traffic became really heavy? It stopped. Or if kids in the back seat keep talking, you probably "encouraged" them to stop.

A passenger who is an experienced driver shares your view of the road. They know when to modulate that conversation. Plus, they may even help you see something you miss! In work in the United Kingdom, drivers on the busy London outer belt who were talking to a passenger stopped talking when traffic got heavy. But the cell phone conversations went on and on and were always more mentally demanding than the ones with a passenger.

stage **4**

## Hand-Held vs. Hands-Free NO SIGNIFICANT DIFFERENCE



Between 1969 and 2016, there have been **131 studies** of the effect of hands-free and hand-held phone use on driving performance, with over **10,000 drivers**. A performance degradation was found **81.6% of the time for hand-held phone use** and **81.1% of the time for hands-free phone use**, or a difference of **only 0.5%**.

In other words, studies of phone use show **using a phone in any manner poses a risk to the driver and those around them.**



## MY CAR'S TECHNOLOGY MAKES ME SAFE

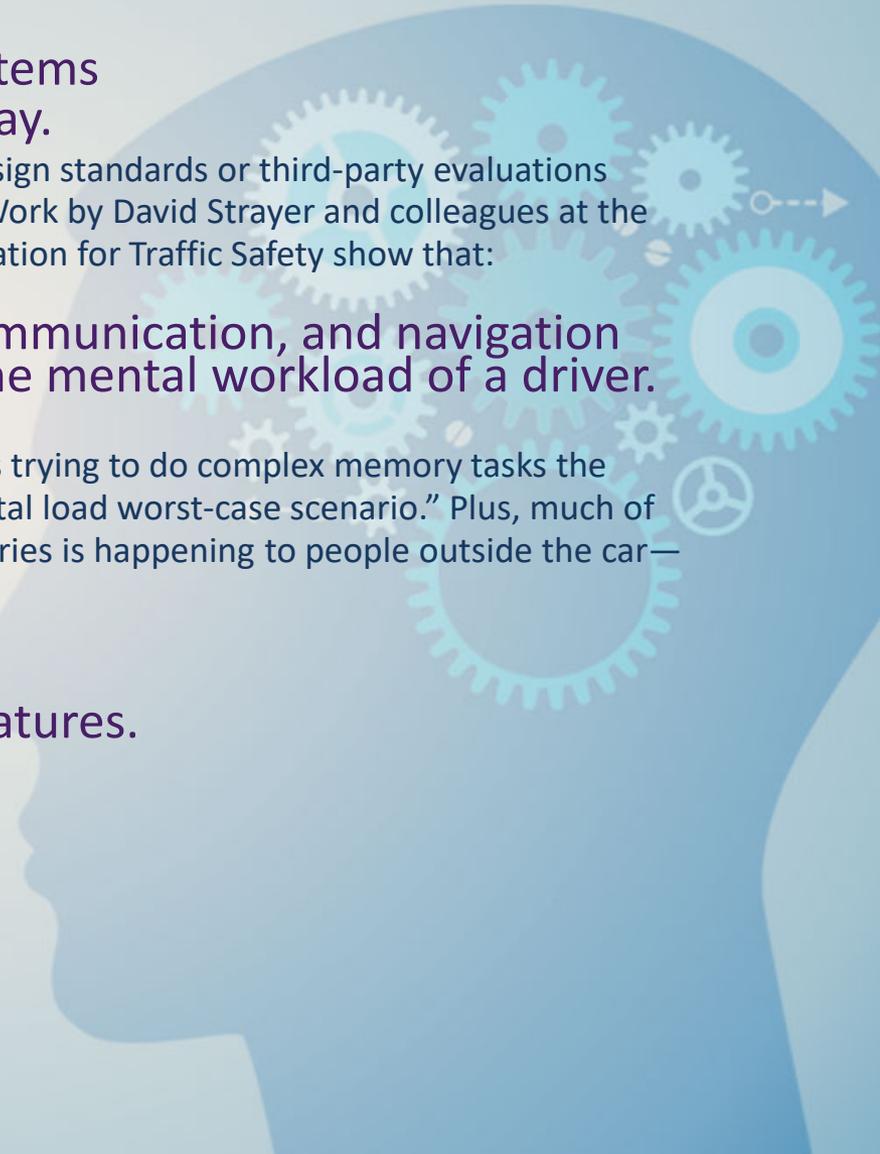
The fact is that built-in systems are not regulated in any way.

Design varies widely. There are no design standards or third-party evaluations prior to the systems being installed. Work by David Strayer and colleagues at the University of Utah for the AAA Foundation for Traffic Safety show that:

**Built-in entertainment, communication, and navigation systems always increase the mental workload of a driver.**

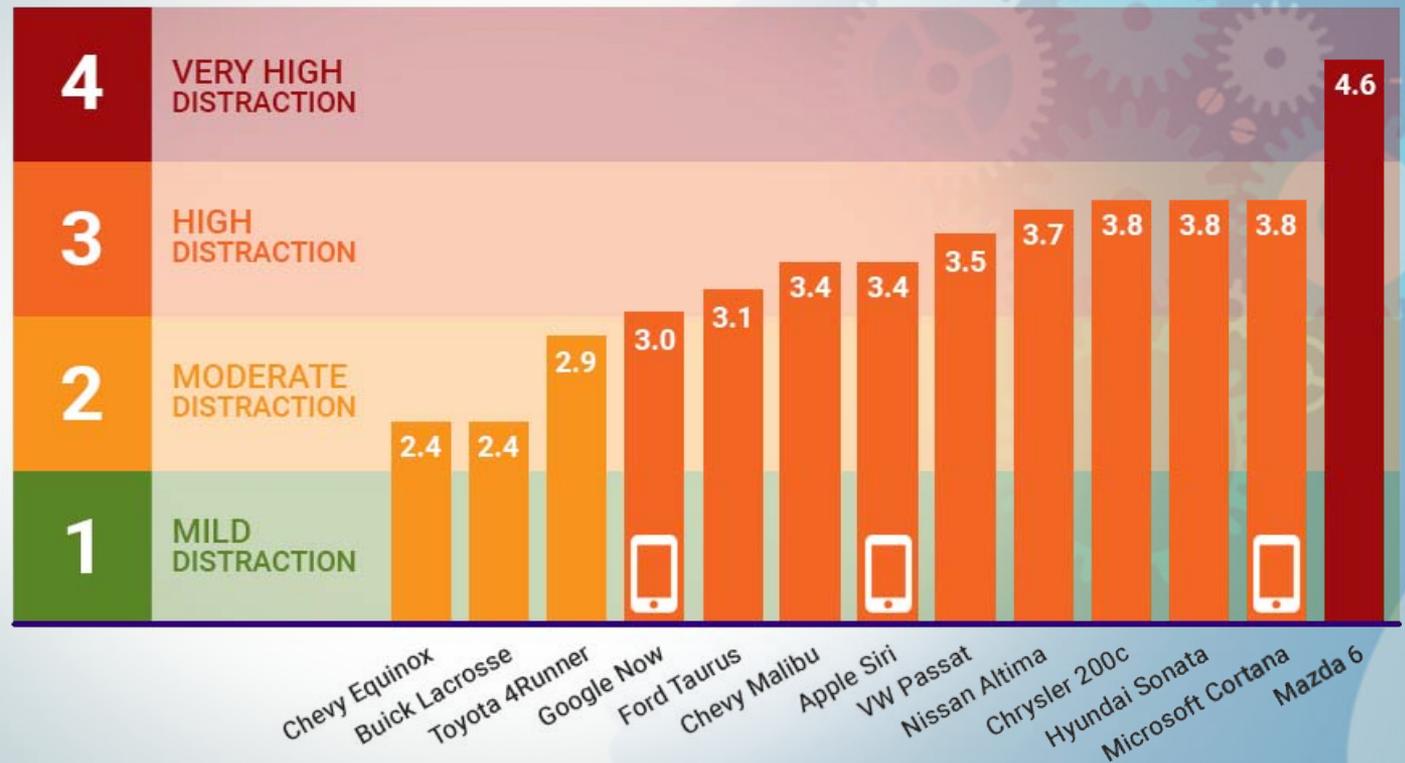
Sometimes this increase is as much as trying to do complex memory tasks the researchers use to simulate the “mental load worst-case scenario.” Plus, much of the increase in road fatalities and injuries is happening to people outside the car—like pedestrians and cyclists.

**So it's not just about you wrapped by your safety features.**



stage **5**

## Mental Distraction Rankings of Voice-Activated Systems\*



Source: AAA Foundation for Traffic Safety

\* Mental distraction rankings when using voice-commands to make calls or change music while driving. Includes 2015 model-year vehicles.



## I CAN'T AFFORD TO LOSE PRODUCTIVITY IN THE CAR I'LL TAKE THE RISK

In addition to the almost entirely avoidable risk of crashing, leaving the phone calls until you arrive might just make you more productive. When the National Safety Council surveyed companies with cell phone bans and asked what happened to productivity, they found productivity went up, not down.

### Of the Fortune 500s with bans

7% said productivity decreased  
19% said productivity increased

### Other corporate members with bans

1.5% report productivity decreased  
10% report productivity increased

When researchers at University of Kansas (Atchley et al.) asked people to negotiate while driving, drivers lost 30% on the value of the deal.





## ACCEPTING THE FACTS

Really, the only thing you will lose is almost any chance of being in a crash.  
**Literally.**

**94% of crashes are caused by driver behavior and attitude.**  
The many choices we make every time we get behind the wheel.

Failing to do so means we keep causing roughly the same number of road deaths as if **15 planes crashed each month** in the U.S. Or the number of **breast cancer deaths each year**. Multiply by over 100 to add in the number of people injured.

We don't need to do really hard stuff to fix this. Like curing cancer or losing weight.  
**We just need to lose our bad habits.**  
And our arrogance about being better than everyone else. And our fear of missing out.

**Do it...**

for yourself.

for your family.

for your kids who are watching and learning from you in the backseat.

for the other people on the road whom you put at risk each moment

you

choose to be distracted.



## About eDriving

eDriving helps organizations to reduce collisions, injuries, license violations and Total Cost of Ownership (TCO) through a patented driver risk management program. Mentor by eDriving's comprehensive solution provides actionable behavioral insights to help organizations build a total view of driver risk within a company-wide crash-free culture® to ensure all drivers return home safely to their loved ones at the end of each day.

eDriving is the global risk management partner of choice for many of the world's largest organizations, supporting over 1,000,000 drivers in 96 countries. Over its 23-year history, eDriving's programs have been recognized with 70+ awards around the world.

[www.edriving.com](http://www.edriving.com)