

Technology: Keep eyes on the road, not flat screen

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SO Magazine

Posted Nov 02, 2012 @ 02:00 AM

During my Tuesday evening commutes, when the talk on 1450 AM gets a little too baseball-y for my tastes, I bid Larry and John adieu and head over to hear what left-of-the-dial tunes Noodles and Eggs are playing on WQNA FM. Thanks to decades-old technology and well-honed tactile memory, I can make the switch without ever taking my eyes off the road.

So at least in one regard, my 11-year-old Odyssey with the failing transmission is a safer ride than the brand new, state-of-the-art Cadillac XTS.

Just as states are starting to outlaw texting while driving, car manufacturers are introducing flat screens in their dashboards to control the stereo, climate control and navigation systems, while also providing access to diagnostic information and even Internet access. Most have buttons on the steering wheel that help control the system, but a good deal of the navigation of menus and options is done just as you would on a smartphone — through tapping, sliding and stretching. In other words, activities that require the driver to take his eyes off of the road, much like texting.

We'll consult an industry expert about the safety issues in a second, but first let me say that these systems are undeniably cool. It will probably be another 10 to 15 years before I own a car that has a flat screen (my current ride features cassette deck technology), but there are online videos that demonstrate the systems in action. It's not hard to imagine them going from high-end option to standard equipment in less time than it took laser discs to come and go.

For now, however, reviews have focused on the negative. Ford's MyFord Touch infotainment system was heavily criticized by Consumer Reports and J.D. Power for being too complex, and thus, too distracting. Cadillac released its CUE (customer user experience) system to slightly better reviews, but there still are major concerns.

Two-second rule

I talked to Tom Mutchler, a senior engineer in the Automotive Test Center at Consumers Report, about what they have found during their tests. What follows is his take on where these systems are at and where they need to go.

Mutchler is quick to point out that these systems aren't dangerous in and of themselves, but it's the way in which they integrate into the operation of the vehicle that can present problems. And here he cites the two-second rule. This has nothing to do with the edibility of a french fry that has fallen to the floorboard.

Rather, studies have shown that two seconds is about the maximum amount of time that a driver can safely take his eyes off of the road, after that, the chances of a crash go up greatly.

“Most of the manufacturers design these onboard systems within the specific guidelines created by the Automotive Alliance, which is a consortium of different manufacturers. These systems are designed so that you can do things for two seconds and then look back to the road,” Mutchler says.

Performing certain tasks, however, may require several two-second steps and careless or impatient drivers will attempt to carry them all out at once without looking up.

That’s why Mutchler would like to see them integrated with traditional buttons and knobs so that common tasks still can be carried out without fuss or danger. In an attempt to replicate the tactile sensations of touching a button, the CUE system provides haptic feedback, a slight vibration felt through the fingertip when a control is touched. This is an improvement over a non-responsive screen, but doesn’t replicate the feeling of reaching out for a knob that protrudes from the dash.

Voice command one solution

An increased use of voice command can make these systems safer. Two of the more distracting activities to undertake while driving are typing in a destination to a GPS system and scrolling through a long list of songs for a particular track. Voice-activated controls are a safer alternative for both, but it isn’t the answer for everything.

“We don’t think that voice command systems should be used as a substitute for crummy controls. You shouldn’t have to use voice command to raise the temperature of a car one degree. That can easily be done with a button,” he says.

Manufacturers are taking additional steps to help buyers acclimate themselves to what is clearly a more complicated method for controlling a vehicle’s interior systems.

The CUE-enhanced Cadillacs come with a free iPad and app that will teach drivers how to navigate the system while in the safety of their living room. The manufacturer also will station specialists at major dealers throughout the country to provide tech support to new buyers.

This seems the responsible thing to do, but it also speaks to just how distracting these systems can be, or at the very least, what a pain in the butt they are to operate. Although the age of the average Caddy owner doesn’t skew as old as it once did, it probably still has been at least a couple of decades since they’ve sat through driver’s ed and it’s doubtful that they’ll want to repeat the experience just so they can find the oldies station.

No matter how much drivers may prefer their buttons and knobs, the in-dash flat screens are poised to take over. The systems do offer enhanced features, in particular the more detailed diagnostic information, and will improve safety in some respects. Many accidents and fatalities will be avoided when all cars have a large in-dash screen and a backup camera system.

Perhaps someday, when the Google car is doing the driving for us (Mutchler says the technology is there), then such devices will help to distract us from the boredom of being on the road. Until then, our undivided attention still is required to safely navigate the road.