Apps to curb texting while driving have tough task

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(AP) -- Cars use lights, bells and buzzers to remind drivers to fasten their seat belts as they start their engines. It would seem natural, then, to offer motorists friendly, yet stern warnings about another bad habit: holding a cell phone while driving, whether for texting or talking.

Several software and gadget companies - many of them at the country's biggest trade show for the wireless industry last week in Las Vegas - have sprung up to address that challenge. But creating an effective, widespread solution looks a lot harder than putting in reminders for seat belts.

Furthermore, we're only just beginning to figure out what constitutes a dangerous distraction, and how best to curb it. Are handsfree conversations dangerous? What about dictating text messages to your phone? Does everyone need help staying away from the phone while driving, or just teens and employees?

Many states ban drivers from using cell phones without handsfree devices, but a recent insurance industry study found that such laws haven't reduced crashes. It's not clear why, but one reason might be that drivers flout the laws.

At least a dozen startups have produced phone applications designed to curb the temptation to use the phone while driving.

But these applications work only on some phones and have a hard time

figuring out if the user is actually driving. Potentially important players - wireless carriers, cell phone makers, auto manufacturers and the federal government - have yet to step in, leaving the field to smaller companies that lack the clout to put services in widespread use.

And some of the tools might not even improve safety.

"Technology without a clear vision for how it's going to actually help drivers could end up doing more harm than good," said John Lee, professor of industrial and systems engineering at the University of Wisconsin in Madison.

For instance, Drive Safely Corp. proposes to put software on phones to detect, using a built-in GPS chip, when a device is moving faster than 15 miles per hour. To figure out whether the phone is being used by a driver or a passenger, who can safely text in the car, Drive Safely intends to have the phone flash a series of numbers and letters that the user has to match on the keypad. The assumption is that drivers won't be able to match the sequence while watching the road, so they won't be able to unlock it for texting.

Lee suspects that won't deter teens, and perhaps other motorists, from trying.

"They will try to do that task while they drive," Lee said. "And by making that task really difficult, you make it more dangerous for them."

A half-dozen other services are either available or in the works to use the phone's GPS chip to figure out if the device is moving. With names such as ZoomSafer, TxtBlocker, CellSafety and Textecution, these software tools can respond in a number of ways, such as holding incoming text messages in quarantine until after the trip or by blocking the writing of new ones.

They're expensive compared with regular downloadable applications, possibly because the startups figure that parents of teens will pay for a feeling of security. Some cost $40 to buy, then charge recurring fees of $4 or so per month.

None of them can tell, however, whether the owner is in a bus or a train rather than an automobile, or if someone in a car is just a passenger and not the driver. So most of these tools have an override option - which a determined motorist can take advantage of even while driving.

Power consumption from constant GPS use is also a concern, possibly draining the battery twice as fast on some phones and applications.

Another approach is to dispense with using the GPS chip and rely on the car to tell the phone that it's in a moving car.

Services such as Cellcontrol and Key2SafeDriving come with a small gadget that plugs in to a port generally found under the car's steering column. It's intended to help mechanics diagnose problems with the car, but it can also tell the gadget how fast the car is moving. If it's above a certain speed, a wireless signal is sent to the phone's Bluetooth receiver. The application then goes into "drive mode," locking out some features.

This method avoids the battery drain of GPS. But it adds the element of hardware installation, and the cost of the Bluetooth transmitter. If the phone isn't set up to use a particular transmitter, the software doesn't work. That assures that you can pair your phone with a particular vehicle, but it means you'll have to remember to turn off the phone when you're borrowing a car.

A problem common to both GPS and Bluetooth approaches is that the applications will only run on certain phones. The phones most commonly supported by the distracted-driving apps are BlackBerrys, high-end

Nokia phones and devices running Microsoft Corp.'s Windows Mobile or Google Inc.'s Android software.

Phones that lack "smart" operating systems are out of luck, as is Apple Inc.'s iPhone. Apple doesn't allow third-party software to run "in the background," so it can't figure out if the iPhone is in a moving car.

"It's going to be expensive for companies like our own to continually try to catch up with the multitude of phones," said Joe Brennan at Trinity-Noble, which has a GPS-based app called Guardian Angel MP.

Brennan believes the only viable long-term solution is to install a radio jammer that blocks all communication between the driver's phone and the outside world. The company has been developing such a jammer for years, but it's illegal in the United States. Brennan says its effect is so specific that passengers can still use their phones.

Lee believes that eventually, some sort of solution will be built into cars and take advantage of their electronics, displays and controls to reduce phone distractions. Ford Motor Co.'s optional Sync system already links cell phones to the car's controls, reads out text messages and understands spoken commands.

It's questionable whether replacing manual manipulation of the phone with voice commands is safer, though. Research has shown that cell phone conversations are distracting to drivers whether they're holding the phone or using a handsfree system.

The Department of Transportation's Research and Innovative Technology Administration is looking at ways to reduce phone distractions, but it wants to make sure that technology promising better safety won't also create an additional distraction.

Peter Appel, the agency's head, warned against waiting for technology to solve what's really a problem of behavior: "The real challenge that we face is: How do you get drivers to just drive?"