## THE WALL STREET JOURNAL.

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## A Simple Solution for Distracted Driving

A robust Driving Mode on smartphones would reduce distractions and save lives



Adding a simple feature called 'Driving Mode' to all mobile-phone operating systems could do a lot to solve the problem of texting while driving. *ILLUSTRATION: EDMON DE HARO* 

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Oct. 30, 2015 11:18 a.m. ET

Someday soon, cars may drive themselves, and perhaps we will be better off for it. Until then, driving remains a human task, subject to fundamental limits on

our ability to pay attention. The National Safety Council estimates that in 2013 alone, 1.1 million crashes involved using a phone, and the Transportation Department counted more than 3,000 deaths and 400,000 injuries caused by distracted driving that same year.

By now everyone knows about this problem. Adding a simple feature called "Driving Mode" to all mobile phone operating systems could do a lot to solve it.

Other proposed "fixes" are misguided. Several high-end cars now feature "head-up displays" that show instrument and navigation information on the windshield, so you don't have to look away from the road. Other cars connect to your phone's voice control function, allowing you to place calls, send texts or search the Internet. These solutions appeal to our intuitive beliefs about how attention works: that by keeping our eyes on the road and our hands on the wheel, we can avoid distraction.

But our intuition here is wrong, and these purported solutions could make the problem even worse. A head-up display keeps our eyes pointed forward, but it directs our attention away from the road ahead of us. Studies dating back to the 1980s show that head-up displays can make airline pilots less likely to notice unexpected events happening in their field of view. When our attention is diverted, we tend to look without seeing.

Most empirical evidence also shows no great safety advantage to using hands-free phones rather than hand-held ones—both impose cognitive costs. A just-released AAA report found that commonly used voice-controlled, in-vehicle information systems not only consume mental resources while in use, but also continue to distract well afterward. A study by psychologist Cary Stothart and colleagues, published this year, showed that merely being notified of an incoming message, without even reading it, can impair phone users' performance on an attention-demanding task.

For a solution to work, it must respect the limitations of human cognition and the flaws in human intuition. A robust Driving Mode feature on phones would do just that. It would eliminate the most common sources of distraction: phone calls, text messages, games and social media. It should disable all communication between the phone and the outside world, with the exceptions of GPS, navigation apps and emergency notifications.

Windows 8 phones have had an excellent version of this feature for several years, but fewer than 3% of new smartphones run that operating system. Driving Mode isn't built into Apple's iOS or Google's Android phone operating systems. (A feature labeled "driving mode" on some phones merely reads messages aloud, converting one form of distraction into another.)

Driving Mode will be useful only if people use it, and various insights from the behavioral sciences can increase the chances that they will. It must be easy to turn on, ideally with the flick of a physical switch, or at least with as few taps as possible. To minimize the social pressure that we feel to respond immediately, Driving Mode should automatically send a customizable "I'm driving now" reply to texts and calls and hold your messages until you arrive. This feature is also on Windows 8 phones, but it belongs on the other 97% of phones, too.

The biggest challenge may be motivating drivers to turn on Driving Mode in the first place. Service providers or insurance companies could nudge drivers with rewards for using Driving Mode or costs for ignoring it. A better approach would have Driving Mode automatically activate whenever the phone's GPS detects motion over some minimum speed. Drivers will then tend to use it by default, rather than go to the extra trouble of deactivating it.

Still, any sensible Driving Mode feature would be better than none. Ironically, while Airplane Mode probably never saved a life—many travelers don't use it and no planes are known to have crashed as a result—putting Driving Mode on every

phone could pay dividends in saved lives every day.

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