

Latest distracted driving studies from AAA/U. of Utah:

These studies are a followon to a study that was done in early 2013 which we discussed in the June 2013 issue of ASRNews. The latest studies conclude that complex activities, performed by drivers that have never done them before, are distracting. Not a surprising finding. These forced behavior studies are not very meaningful. You have drivers doing a task for the 1st time and we measure this and conclude that they are not very good at it. It ignores the reality that people can get pretty good at doing complex tasks if they do them often enough. The naturalistic studies that just observe a drivers normal behavior are much more useful since they show what people really do.

The studies invest a lot of time in analyzing voice applications that are virtually never actually ever done by anyone. For example, e-mail reading via voice is rarely ever done by anyone (driver or non-driver). It is a painful and distracting process. You do it once and then never do it again. Why bother to study it, since no one is doing it.

In one of the studies, in-car voice implementations from six (6) different automobile manufacturers were tested for driver distraction. This study evaluated the two most common voice-based interactions in which drivers engage – changing radio stations and voice dialing. A significant variation existed between the vehicle with the lowest distracted driving rank (Toyota Entune at 1.7) and one with the highest distracted driving rank (Chevrolet MyLink at 3.70). The conclusion from this is that the distracted driving issues that are caused by using speech while driving have more to do with the quality of the application implementation than the use of speech per se. This would suggest that the place to focus would be on getting the automobile suppliers to improve the quality of their speech interface implementation. If Toyota is able to deliver a speech interface that has a low distracted driving rank, then Chevrolet should be able to do the same.

The impact of using TTS vs recorded speech on distraction was also studied. The finding was that the use of TTS had an insignificant impact on distraction.

It was also found that the use of Siri while driving was highly distracting. This was not terribly surprising since Siri functions best as an entertainment device. I've not found any users that would seriously use Siri as a navigator