

# APPENDIX F - Keeping Drivers Alert Action Plan

## Introduction

*Keeping Drivers Alert* is one of nine emphasis areas of the North Carolina Strategic Highway Safety Plan. This emphasis area focuses on crashes in which a driver is drowsy, distracted, or otherwise inattentive to the task of driving.

## State of the Problem

Distracted driving has long been a cause of motor vehicle crashes but has recently gained attention as electronic devices have become increasingly important in peoples' lives, data become more portable, and car manufacturers integrate electronic interfaces into their vehicles. Cell phone use—and in particular smart phone use—has grown at impressive rates over the last decade. Drivers now have more devices available to them that can take attention and eyesight away from the road itself, potentially putting more people at risk of motor vehicle crashes, injuries, and fatalities.

One of the biggest challenges to addressing distracted driving is that accurate data are difficult to obtain. Law enforcement officers responding to the scene often require a witness to establish the presence of a distraction, since drivers may not voluntarily report having been distracted. Privacy laws exist that limit the officer's ability to pull usage information from the phone to determine if the driver was using their phone at the time of a crash. Moreover, electronic devices are a relatively recent phenomena, so accurate collection methods are still being developed, and fewer years of good data exist for historical comparison.

Even as electronic device use has grown, laws and technical fixes have moved quickly to try to limit electronic device use while operating a vehicle. Most States have bans on at least some aspect of phone use for at least some portion of the population. All but 13 States ban cell phone use for younger drivers, and all but 2 States have some form of texting ban. Thirteen States ban handheld cell phone use for all drivers, and 4 States have partial, situational bans on handheld cell phone use (e.g., not allowed in a school zone). North Carolina bans texting for all drivers and cell phone use for drivers under 18.

Drowsiness is another form of driver inattention contributing to motor vehicle crashes. Not operating a vehicle while drowsy is the most obvious solution; however, most drivers will likely drive while drowsy at some point in their driving careers. Engineering countermeasures like rumble strips on highways have proven effective in alerting distracted drivers that they are drifting off the roadway.

Table F-1 shows total crashes, serious injuries, and fatalities where drowsiness or distraction was cited as a factor in the crash for the five-year period from 2009 – 2013. Of note is that 93 percent of fatalities and 92 percent of serious injuries for distracted driving are classified as “inattention” in the crash report. Only two percent of fatalities and one percent of serious injuries for distracted driving are classified as involving an electronic device.

**Table F-1:** North Carolina Crashes due to Drowsy and Distracted Drivers (2009 – 2013).

		2009	2010	2011	2012	2013
<b>DROWSY CRASHES</b>	<b>Crashes</b>	2,828	2,864	3,106	3,203	3,120
	<b>Fatalities</b>	24	29	29	22	24
	<b>Serious Injuries</b>	64	81	101	72	74
<b>DISTRACTED CRASHES</b>	<b>Crashes</b>	48,105	48,420	49,461	49,597	49,405
	<b>Fatalities</b>	141	139	131	135	137
	<b>Serious Injuries</b>	364	352	396	342	282

## Emphasis Area Goal

In 2013, there were 161 fatalities and 356 serious injuries due to distraction and drowsiness. The goal for this emphasis area is to reduce fatalities and serious injuries related to distraction and drowsiness.

## Strategies and Supporting Actions

The following strategies are needed to achieve the goals of the Keeping Drivers Alert emphasis area. Listed below each strategy are several recommended actions to support it, as well as one or more North Carolina agencies identified as having a potentially significant role in its implementation and the current status of the action.

### Strategy 1

**Explore the specifics of instituting a handheld cell phone ban while operating a motor vehicle that is in motion.**

#### Supporting Actions

1. Investigate legislative solutions in other States to determine the specifics of a ban.

*Potential Implementing Agencies:* Advocacy groups  
*Status:* Needed

2. Identify a champion in the legislature who could push for this legislative change.

*Potential Implementing Agencies:* Advocacy groups  
*Status:* Needed

3. Support the move for a nationwide ban on cell phone use.

*Potential Implementing Agencies:* NCDOT  
*Status:* Needed

### Strategy 2

**Promote the existing ban on texting while driving by increasing the visibility of law enforcement and the frequency of high-visibility enforcement campaigns.**

#### Supporting Actions

1. Establish a high-visibility enforcement campaign in North Carolina to deter drivers from texting while driving.

*Potential Implementing Agencies:* NCSHP  
*Status:* Needed

2. Examine best enforcement practices from other States (e.g., Minnesota and New York) to devise an effective enforcement plan.

*Potential Implementing Agencies:* NCSHP

*Status:* Needed

3. Encourage NHTSA and national laws allowing law enforcement to access phone usage data to determine if the phone was being used around the time of a crash.

*Potential Implementing Agencies:* NCDOT

*Status:* Needed

## Strategy 3

**Investigate new and emerging technologies to prevent distracted driving.**

### *Supporting Actions*

1. Explore applications that could be used to disable the phone while the vehicle is moving.

*Potential Implementing Agencies:*

HSRC, ITRE, NCDOT

*Status:* Needed

2. Explore options for how to effectively require drivers to use an app or other technological solution that disables the phone while driving.

*Potential Implementing Agencies:*

HSRC, ITRE, NCDOT

*Status:* Ongoing

3. Partner with telecommunications companies, cell phone manufacturers, app developers, insurers, and vehicle manufacturers to investigate possibilities for a technological means to disable handheld phone use while driving.

*Potential Implementing Agencies:*

HSRC, ITRE, NCDOT

*Status:* Needed

## Strategy 4

**Continue implementing rumble strips on highway shoulders and investigate additional engineering counter measures and programs that can alert drowsy or distracted drivers.**

### *Supporting Actions*

1. Continue implementing rumble strips and guardrails on highways that may be missing these countermeasures.

*Potential Implementing Agencies:* NCDOT

*Status:* Needed

2. Investigate the effectiveness of alternative measures (e.g., flashing lights) that can alert drivers.

*Potential Implementing Agencies:* NCDOT

*Status:* Needed

3. Investigate cost and feasibility of free coffee at rest stops.

*Potential Implementing Agencies:* NCDOT

*Status:* Needed

4. Investigate possibility of partnering with hotel chains with locations along interstates to offer rooms at reduced rates after a certain hour to encourage drivers to pull over and sleep.

*Potential Implementing Agencies:* NCDOT

*Status:* Needed

## Strategy 5

**Improve the quality of data on driver distraction to demonstrate the extent of the problem and need for a solution.**

### *Supporting Actions*

1. Work with NHTSA to identify and review cutting edge research and target opportunities for new research.

*Potential Implementing Agencies:* HSRC, ITRE  
*Status:* Needed

2. Cultivate discussion among multiple groups to identify ways of improving the collection of distracted and drowsy driving data in North Carolina.

*Potential Implementing Agencies:*  
NCDMV, NCSHP, TRCC  
*Status:* Needed

3. Analyze crash reports and citation data to better understand distraction-related crashes, particularly in relation to electronic devices.

*Potential Implementing Agencies:*  
NCDMV, NCDOT, NCSHP  
*Status:* Needed

## Working Group Members

The working group for this emphasis area includes the following representatives from eight agencies committed to achieving the goals of this Action Plan:

- Kelsie Ballance, North Carolina Indian Economic Development Initiative
- Julian Council, North Carolina Division of Motor Vehicles

- Henrietta Coursey, AARP
- Chris Cunningham, NCSU Institute for Transportation Research and Education
- Adam Fischer, City of Greensboro
- Roger Garrett, North Carolina Department of Transportation
- Arthur Goodwin, UNC Highway Safety Research Center
- Terry Hopkins, North Carolina Department of Transportation
- Hubie Mercado, Governor's Highway Safety Program
- Chris Oliver, North Carolina Department of Transportation

## Supporting Material

Data on State-by-State laws on cell phone use:

<http://bit.ly/1wbmw5L>