

# Alabama Transportation Facts

*How Many Do You Know?*



Issue 1 Summer 2009

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## Alabama Traffic Crash Facts

- One traffic crash is reported every **233** seconds.
- One person is killed in a traffic crash every **7 hours and 53 minutes**.
- For each person killed, there are **38** injured.
- For a person sitting in the front seat of a vehicle, the probability of being killed is **9** times higher for those not wearing safety belts than for those wearing safety belts.
- **77%** of motor vehicle crashes occur within 25 miles of the driver's residence.
- Of all drivers involved in fatal crashes, **9%** were under age 20, and **24%** were under age 25.
- There were **69** pedestrians killed by motor vehicles in 2007.

2007 Alabama Traffic Crash Facts, CARE at the Center for Advanced Public Safety

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## Motor Vehicle Crashes: The Cost to Alabamians



According to the most recent data collected by the CDC, unintentional injury is the number one cause of death in people under 50 years of age in the US. Alabama is no exception. In 2006, unintentional injury claimed the lives of 2,506 people in the state of Alabama. Nearly half of these deaths were motor vehicle related. On average, more than 3 people die every day on the roads we drive. Alabama ranks high when compared with the rest of the country in the rate of fatalities from motor vehicle crashes (MVCs). In the Southeast, only Mississippi and South Carolina have higher rates of death due to MVCs (see chart below).



Location	Unintentional Motor Vehicle Death Rates (per 100,000 Million Vehicle Miles Traveled)
United States	1.50
Southeast	1.81
Mississippi	2.33
South Carolina	2.08
<b>Alabama</b>	<b>2.03</b>
Kentucky	1.95
Tennessee	1.95
Florida	1.70
North Carolina	1.68
Georgia	1.54

*Data from CDC & NHTSA, 2006*

In addition to costing lives, MVCs impose a large economic burden on Alabamians. According the National Highway Traffic Safety Administration (NHTSA), the average yearly economic costs of MVC in the state of Alabama is \$2.7 billion. This cost was estimated by evaluating lost productivity, medical costs, legal and court costs, emergency services costs, insurance administration costs, travel delay, property damage, and workplace losses.



• 3 PEOPLE DIE EVERY DAY ON THE ROADS WE DRIVE •  
**MOTOR VEHICLE CRASHES COST ALABAMIANS \$2.7 BILLION EACH YEAR**

# The Golden Hour

According to NHTSA, the largest number of MVCs in the state of Alabama occur in urban areas, but more *fatal* MVCs occur in rural areas. In 2006, 65% of Alabama's MVC fatalities occurred in rural areas.

One possible predictor of higher MVC mortality in rural areas is the response time for Emergency Medical Services (EMS). The sooner a victim can be transported to a trauma center, the better the outcome for the victim. In fact, the first sixty minutes after an injury occurs is referred to as "The Golden Hour" when chances of survival are greatest. In rural areas, long driving distances and unmarked roads may increase the amount of time it takes EMS to arrive at the injury victim and to get the victim to a trauma center.

It has been proposed that the use of Global Positioning System (GPS) in ambulances may help with this problem. Mr. Glenn Cummings and Dr. Richard Gonzalez, both UAB

UTC affiliated scientists working at the University of South Alabama, are investigating ways to increase the use of GPS technology by EMS providers. Their research examines potential time and cost savings that may be associated by the use of GPS by EMS.

High traffic congestion can also delay delivery of a MVC victim to a trauma center. Ambulances are not always able to avoid traffic obstructions. Drs. Virginia Sisiopiku and Gerald McGwin along with other UAB UTC affiliated scientists are conducting research to improve MVC victim outcomes in areas where traffic congestion is a problem. The researchers are exploring a variety of methods to lessen congestion, to better enable emergency vehicles to avoid congested areas, and to get the most appropriate equipment and personnel to a MVC scene. They hope to develop practical programs as well as show cost-benefits that will come from implementation of these programs.



- **The Golden Hour – The first 60 minutes after an injury when chances of survival are greatest**
- **Patient outcomes could be improved by getting them to a trauma center more quickly**
- **More motor vehicle crashes occur in urban areas than rural areas, but more FATAL motor vehicle crashes occur in rural areas**

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## Alabama's Graduated Driver's License

Alabama has a Graduated Driver's License (GDL) program which requires new licensees under the age of 18 to have no more than 4 occupants in the vehicle (excluding the parent or legal guardian of the licensee).

Another restriction of the Alabama GDL includes that newly licensed drivers under the age of 18 may not operate a vehicle between midnight and 6:00 AM unless:

- Accompanied by a parent or legal guardian
- Accompanied by a person over 21, with the parent's consent
- Going to or from their regular workplace or a school sponsored event
- Driving for the purpose of a medical, fire, or law enforcement related emergency



# The UAB University Transportation Center



## Alabama's Primary Seat Belt Law

All occupants in the front seat of a vehicle are required to wear a seat belt. Those in the back seat are not required to be restrained unless under the age of 16.

Established in 2006, the University of Alabama at Birmingham University Transportation Center (UAB UTC) strives to advance US technology and expertise in the multi-disciplinary field of traffic safety and injury control through education, research and technology transfer. The UAB UTC aspires to become the gold standard by which all other transportation safety, trauma care and injury control initiatives, nationally and internationally, are measured. We are also working to prove that there is a legitimate role for medical and public health professionals in transportation-related research, education and technology transfer.

The UAB UTC is studying

- (1) EMS and Congestion
- (2) Traffic Management and Emergency Preparedness
- (3) Motor Vehicle Crash Outcomes in Rural Areas
- (4) The Impact of Cell Phone Distractions on Teen Driving

In addition to our research activities, we also provide educational opportunities for the UAB community, the State, and the Nation. Learn more about us on the web!

[www.uab.edu/utc](http://www.uab.edu/utc)



### ***Did you know...?***

*The Alabama Department of Transportation (ALDOT) has traffic cameras positioned throughout 3 metro areas of Alabama (Birmingham, Mobile, and Baldwin). Anyone who has access to the internet can see the current traffic conditions by viewing the live action traffic cameras online at [www.dot.state.al.us/docs](http://www.dot.state.al.us/docs).*

## Want More Alabama Traffic Information?

Check out *CARE* at the Center for Advanced Public Safety online at <http://care.cs.ua.edu>

The Center for Advanced Public Safety (CAPS) was founded in 2002 to work with federal, state and local agencies to provide access to current research and cutting-edge software technology in the areas of transportation safety, public safety and homeland security. CAPS is part of the Computer Science Department in the College of Engineering at the University of Alabama. Dr. Allen Parrish heads the organization as the Director and Dr. David Brown serves as the Deputy Director.



**Dr. David Brown**

*CAPS Deputy Director  
UAB UTC Advisory  
Board Member*

### CAPS MISSION

To create innovative solutions through information technology research and cutting-edge software development in order to enhance the public safety and security of our state and homeland.