# Governor's Highway Safety Program

# **North Carolina**

# FY 2010 Highway Safety Plan



GOVERNOR BEVERLY EAVES PERDUE STATE OF NORTH CAROLINA

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## **Table of Contents**

Page	Description
2	<b>Executive Summary</b>
6	Media Plan
7	Mission Statement
11	Organization
12	State Performance Measures
15	Performance Plan
24	Highway Safety Plan
78	Certifications
89	Program Cost Summary
99	Appendix

**North Carolina** 

FY 2010 Highway Safety Plan

## **Executive Summary**

Each year, the NC Governor's Highway Safety Program (GHSP) prepares a Highway Safety Plan (HSP) as a guide for the State's federally funded safety activities. A major component in the production of this document is the identification of safety problems within the state through an analysis of crash data. The results of this problem identification effort are then used as one means of justification for determining where safety improvement funds are spent. North Carolina strives to assure that funding is allocated to those areas that can provide the greatest impact on highway safety.

The purpose of this report is to help GHSP in the identification of safety problems within the state. Here is a summary of the findings:

#### Overall Trends in Crashes by Severity in North Carolina

- Fatality rates (fatalities per 100 MVM) in North Carolina have been decreasing in the last 10 years. However, the number of fatalities had remained somewhat consistent until 2007 when we witnessed an abonormal increase and then a significant decrease in 2008.
- During the last 5 years, with the exception in 2007, the total number of injury and fatal crashes has not changed significantly. However, the number of reported property damage only (PDO) crashes has increased significantly. This increase can partially be explained by the dramatic improvement in electronic reporting of citations and crashes. This improved electronic reporting has dramatically increased the number of less severe crashes being reported to the Department of Motor Vehicles (DMV).

#### **Alcohol-Involved Crashes**

- During the last 3 years, North Carolina has seen little change in both the total number of drinking drivers in crashes and the percent of all-crashes involving drivers who had been drinking.
- The 21-24 age groups are represented with the highest percentage of drivers who had been drinking while being involved in a crash.
- Hispanic/Latino drivers have the highest rate of drinking while being involved in a crash. Part of the reason for their high rate is that the North Carolina Hispanic/Latino population is largely male and young the primary group of drinking drivers in all racial/ethnic groups.
- Crashes involving drinking and driving is most common during early morning hours.
- About 54% of drinking driver crashes occurred on rural roadways.

#### **Young Driver Crashes**

- Crashes involving drivers age 15-20 have increased in the last several years. There has been modest change in the severity of crashes during this period.
- Among young drivers, the driver was a contributing factor in 68% of all crashes, while only 48% of drivers age 25-54 contributed to their crash. A substantial proportion of young driver errors are accounted for by three actions: failure to yield, failure to reduce speed, and driving too fast for conditions.
- Alcohol involvement by crash-involved young drivers, all of whom are under the legal drinking age, is lower than for all age groups up to age 50.

#### **Motorcycle Safety**

- The number of motorcycle crashes has been increasing for about 5-years along with the North Carolina population and number of registered motorcycles.
- The typical motorcycle crash occurs between April and October on a Friday, Saturday, or Sunday between 12:00 noon and 7:00 p.m. during clear weather on rural two-lane state secondary road with a 55 MPH speed limit.
- Curved roadway crashes are overrepresented in motorcycle crashes and are associated with greater risk for fatal/severe injury than crashes involving straight roadway segments.
- Rollovers, hitting a fixed object, rear-ending another vehicle, the motorcyclist or another vehicle
  making a left/right turn, and running off the roadway are the most harmful precipitating events of
  motorcycle crashes.
- Fatal/severe injury to the motorcyclist was strongly associated with head-on crashes, hitting a fixed object, left/right turns, and leaving roadways.

#### **Pedestrian Safety**

- Although crashes involving pedestrians represent less than 1% of the total reported motor vehicle crashes in North Carolina, pedestrians are over-represented in fatal and serious injury crashes.
   Approximately 12% of the fatal crashes and 9% of A-type (disabling injury) crashes in North Carolina involved pedestrians.
- Pedestrian crashes are most likely to occur in the afternoon and early evening between the hours of 2 pm to 10 p.m., with over half of pedestrian crashes occurring during these eight hours.
- While most crashes (55%) occurred during daylight conditions, 18% occurred during nighttime on lighted roadways (clear or cloudy) and another 15% occurred during nighttime on unlighted roadways (clear or cloudy conditions).
- The 50 and over group has shown numerical and proportional increases in the pedestrian crashes each of the last five years. On average, adults (30 49) accounted for greater numbers and proportions of pedestrian crashes than other groups. However, the proportions of those killed and seriously injured in a pedestrian crash is higher for the older age groups.
- Blacks are over-represented in pedestrian crashes, and Whites are under-represented based on the population. However, there appears to be a decreasing trend in the proportion of crashes involving black pedestrians.
- The most frequent crash type involves Pedestrian failure to yield. It should be pointed out, however, that this crash type does not necessarily imply fault. For example, a pedestrian may detect a gap at a mid-block area and begin crossing, but a speeding motorist closes the gap sooner than expected and strikes the pedestrian.

#### **Bicyclist Safety**

- Bicyclists represent less than 0.5% of the total reported motor vehicle crashes in North Carolina, but represent 1.5% of the fatal crashes, and 2% of A-type (disabling injury) crashes.
- The number of bicyclist crashes has fluctuated over the past 3 years, but no obvious trend is apparent over this time. However, the number of crashes in 2006 might indicate a downward trend.
- Bicyclist crashes peak on Friday and Saturday.
- While most crashes (74%) occurred during daylight conditions, 17% occurred during nighttime on lighted or unlighted roadways (clear or cloudy conditions).
- There seems to be an increasing in the number of bicycle crashes involving adults' ages 40 to 69, and a decreasing trend among children up to age 15. It is not clear if this may be due to changes in riding patterns among the different age groups and/or change in the population of the specific age groups.
- The most frequent crash type (about one-fifth of bicycle-motor vehicle crashes), involved Sign-controlled intersection violations by bicyclists and motorists.
- Children were most often involved in mid-block ride out crashes, more typically occurring in urban areas.

#### **Older Driver Safety**

- The number of crash-involved older drivers has shown only modest increases over the past 3 years. Although drivers ages 65+ make up only 7.5% of the crash-involved driver population, they comprise 15% of fatally-injured drivers.
- Nearly one in five drivers killed in crashes in the western Mountain region of the state is age 65+. As the North Carolina population ages, this proportion will rise, not only in western North Carolina but in all parts of the State.
- For the most part, older driver crashes tend to mimic the locations and situations where older adults drive, (i.e., on shorter trips, lower speed roadways, about town, during the daytime, under favorable weather conditions, etc.).
- Drivers ages 65+ are more likely to crash while making a left turn, and the crash risk increases along with their age.
- Older drivers are more likely to be cited for contributing to their crash, with the most commonly cited contributing factor being failure to yield to other traffic.

#### **Speed-Related Crashes**

- Speed-related PDO crashes have increased substantially in the last several years. However, the number of injury and fatal speed-related crashes has changed very little during this period.
- Speed-related crashes are in general more severe compared to non-speed-related crashes.
- A higher percentage of crashes in rural areas are speed-related compared to urban areas.
- The 15-17 age group is associated with the highest percentage of speed-related crashes.
- A large number of speed-related crashes occur during the morning peak, the afternoon peak, and between 1:00 and 3:00 a.m.
- Interstates have the lowest number of speed-related crashes, but the highest percentage of speed-related crashes. State Roads have the highest number of speed-related crashes.
- Close to 80% of crashes where a rear-end crash was the first harmful event, are speed-related. A significant percentage of crashes (close to 50%) where the first harmful event is a Jackknife/Overturn/Rollover, collision with a fixed object, or ran-off-the-road, are speed-related.

#### **Occupant Restraint**

- Following the enactment of a primary enforcement seat-belt law in 1985 and the "Click It or Ticket: campaign in 1993, the observed driver seat belt usage rate has increased from approximately 65% in the early 1990's to 89.8% in 2009.
- The latest survey of seat-belt usage was conducted during June 2009. The usage rate at that time was 89.8% of drivers and 88.9% for passengers.
- A larger percentage of women use a seat belt (92.9%) compared to men (88.1%).
- Typically, middle-aged and older drivers have a higher usage rate compared to young drivers.
- Information on restraint usage for individuals involved in an accident is usually self-reported and not reliable, especially for less severe crashes.

#### **Traffic Records and Data Collection**

The data for this year's Highway Safety Plan has been gathered by GHSP directly from NCDOT and FARS. The overall traffic records system is being restructured and streamlined and has seen an increase in reporting by law enforcement agencies. We have made progress in this area and continued to enhance our system with expanded electronic citation and crash data reporting.

## North Carolina Highway Safety Media Plan

The North Carolina Governor's Highway Safety Program (GHSP) media plan will target three areas of immediate concern: seat belt usage, impaired driving and speeding. All media for these areas will utilize paid and earned media.

In the area of seat belt usage, North Carolina will participate in the national "Click It or Ticket" mobilization in May 2010. GHSP will dedicate current allocation to target low seat belt usage areas and demographics. Paid media spots will convey an enforcement message to compliment the national media placement. In addition to paid media spots on television using a state specific public service announcement, the spot will be strategically placed in movie theaters across the state airing prior to the feature presentation.

Earned media will be conducted statewide with planned campaign kickoffs and approximately 1,500 checkpoints planned for the mobilization.

North Carolina will also participate in all national impaired driving mobilizations. A state specific public service announcement will be placed across the state during the holiday campaign, which takes place Dec. 4-January 3, 2010. In addition, the spot will be strategically placed in movie theaters across the state airing prior to the feature presentation.

Earned media will be gained from kickoff events as well as high visibility checkpoints throughout the campaigns.

North Carolina will continue to implement the "R U BUCKLED?" initiative, which targets high school age drivers in FY 2010. This program was launched in the fall of 2005 in 53 high schools across the state and is now in more than 240 schools, impacting more than 75,000 student drivers. North Carolina's goal is to eventually have this initiative in every high school in North Carolina.

GHSP will also utilize sports marketing to reach our target demographics. Currently, GHSP has commitments from the National Hockey League team, the Carolina Hurricanes, Lowe's Motor Speedway and all four Atlantic Coast Conference teams in North Carolina to provide advertising to reach their fan base. Advertising will target all three areas of traffic safety mentioned.

## **Mission Statement**

#### **Our Mission:**

The mission of the Governor's Highway Safety Program (GHSP) is to promote highway safety awareness and reduce the number of traffic crashes and fatalities in the state of North Carolina through the planning and execution of safety programs.

The GHSP mission is one part of the overall State Highway Safety Plan (SHSP) as set forward by the Executive Committee for Highway Safety.

#### **Executive Committee for Highway Safety (ECHS):**

- Comprised of 23 representatives from top management of selected disciplines involved in highway safety who control the current and potentially available resources for utilization in safety efforts.
- Meets on a quarterly basis.
- Responsible for the overall direction and administration of all SHSP activities.
- Responsible for defining high priority issues.
- Coordinate the Department's many safety efforts with an emphasis on efficiency of resources and the prioritization of programs.
- Identify, prioritize, promote and support all emphasis areas in the American Association of State Highway and Transportation Officials (AASHTO) Plan as well as emphasis areas not included in the AASHTO Plan for the coordinated highway safety effort to save lives and reduce injuries.
- Review and approve all actions submitted by the Working Groups and appropriate funds for implementation.
- Establish statewide highway safety goals and objectives.
- Review proposed highway safety legislation.
- Create mechanisms to foster multidisciplinary flows of communication.

# North Carolina Executive Committee for Highway Safety Member List

Gene Conti – Chair Secretary N.C. Department of Transportation

Doug Galyon
Chairman - NCDOT Board of Transportation
N.C. Department of Transportation

Commissioner Michael Robertson NCDOT - Division of Motor Vehicles

Darrell Jernigan
Director
Governor's Highway Safety Program

Kevin Lacy
Director – Transportation Mobility & Safety
N.C. Department of Transportation

Jon Nance Chief Engineer - Operations N.C. Department of Transportation

Colonel Randy Glover N.C. State Highway Patrol

Stan Polanis Director of Transportation City of Winston Salem Susan Coward – Co-Chair Deputy Secretary - Intergovernmental Affairs N.C. Department of Transportation

Jim Westmoreland
Deputy Secretary -Transit
N.C. Department of Transportation

Terry Gibson State Highway Administrator N.C. Department of Transportation

Debbie Barbour Director - Preconstruction N.C. Department of Transportation

Ted Vaden
Director - Public Information Office
N.C. Department of Transportation

Terry Hopkins State Traffic Safety Engineer N.C. Department of Transportation

Commissioner Wayne Goodwin N.C. Department of Insurance

David Harkey Director UNC Highway Safety Research Center

## **ECHS Milestones**

#### **First Meeting of the ECHS**

The first meeting of the Executive Committee for Highway Safety was held on April 24, 2003 in Raleigh, NC. The meeting was an opportunity for the committee members to meet and to be briefed on items such as the purpose of the committee, the need for the committee and what the AASHTO Strategic Highway Safety Plan is and why N.C. needs a SHSP.

#### **Committee Adopts the AASHTO SHSP**

Since the AASHTO SHSP and North Carolina's HSP address similar highway safety related issues, it was recommended that North Carolina formally adopt the AASHTO Strategic Highway Safety Plan, as the Executive Committee's "working plan" and make modifications as appropriate. It was agreed that NC 's SHSP would be a dynamic document that could and would be revised as needed to reflect identified highway safety issues within the State. At the recommendation of former Deputy Secretary Conti (former Committee Chair), the committee adopted the AASHTO plan for use and implementation in North Carolina.

#### **Data Validation of Key Emphasis Areas**

The committee decided that the decision making process should be data driven. The Traffic Safety Unit of the Traffic Engineering and Safety Systems Branch analyzed North Carolina crash data for all 22 key emphasis areas (where appropriate) as outlined in the SHSP. The results of the analyses were presented to the Executive Committee to assist the committee in prioritizing issues needing to be addressed.

#### **Mission & Vision Statements**

Mission and vision statements were created and adopted by the committee.

#### **Mission**

Establish highway safety goals and objectives and prioritize, implement and evaluate coordinated, multi-disciplinary policies and programs to reduce fatalities, injuries and economic losses related to crashes.

#### **Vision**

North Carolina has a multi-disciplinary, multi-agency approach to research, planning, design, construction, maintenance, operation and evaluation of transportation systems, which results in reduced fatalities, injuries and economic losses, related to crashes. In addition, there is a coordinated effort to address emerging safety issues.

#### **Adoption of National Goal for Fatalities**

The Executive Committee unanimously adopted the national goal of 1.0 fatalities/100 MVMT by the year 2008. Presently, NC's rate is approximately 1.41 fatalities/100 VMT.

#### **Establishment of Initial Working Groups**

The Executive Committee reviewed the analysis of the crash data provided as it pertained to the key emphasis areas of the SHSP. The committee then discussed the data with their staff and individually ranked their top five priorities. All of the individual rankings were summarized and the initial six working groups were developed.

#### **Data Validation of Key Emphasis Areas**

To date; most of the working groups have met numerous times and are continuing to research the causes of the target crashes along with developing specific strategies aimed at addressing the identified needs.

Once a strategy is developed, it is prioritized and then in priority order, it is presented to the Executive Committee for approval. Upon approval, the strategy is assigned to the "Host" agency that would normally be responsible for the issue. It is then the responsibility of the host agency (with assistance from the Executive Committee as needed) to take the necessary steps to see that the strategy is implemented.

## **Organization**

GHSP employment is subject to the North Carolina Department of Transportation (DOT) personnel policies and the State Personnel Act. The Governor of North Carolina appoints the Director of the Governor's Highway Safety Program as the official responsible for all aspects of the highway safety program. The Director is the ranking official having authority to administer the highway safety program.

The GHSP is currently staffed with professionals and three support personnel. Administration of the program is the responsibility of the Director. There are three primary sections:

- Planning, Programs and Evaluation
- Finance
- Public Affairs

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#### 1. Planning, Programs and Evaluation Section

The function of the Planning, Programs and Evaluation section is to develop, implement, manage, monitor and evaluate a grants program that effectively addresses the highway safety problems that have been identified as a result of a comprehensive analysis of crash, citation and other empirical data. This program is the basis for the annual Highway Safety Plan. The Planning, Programs and Evaluation section is currently staffed with a Supervisor and four Highway Safety Specialists. Every project is assigned to a specific Highway Safety Specialist. The Highway Safety Specialist is the Project Director's liaison with the GHSP, NHTSA and other highway safety agencies.

#### 2. Finance Section

The function of the Finance section is to manage and coordinate the financial operations of the GHSP. The Finance section is currently staffed with a Finance Officer.

#### 3. Public Affairs Section

The function of the Public Information and Education section is to increase the level of awareness and visibility of highway safety issues and the visibility of the GHSP. The Public Information and Education section is currently staffed with a Public Affairs Manager and a Special Events Coordinator.

## **State Performance Measures**

#### (A) Fatalities (Actual)

To decrease traffic fatalities 10 percent from the 2004 - 2008 average of 1,556 to 1,400 by December 31, 2013.

#### (B) Fatality Rate Per 100M VMT

To decrease fatalities/VMT from the 2004 – 2008 average of 1.55 to 1.30 by December 31, 2013.

		Rate/100 mil
Year	Fatalities	VMT
2004	1573	1.64
2005	1547	1.53
2006	1554	1.53
2007	1675	1.62
2008	1433	1.41

## (C) Number Of Serious Injuries

To decrease serious traffic injuries 25 percent from the 2004 – 2008 average of 3,525 to 2,644 by December 31, 2013.

Serious Injury (A Type)	2004	2005	2006	2007	2008
	4178	3867	3627	3187	2768

#### (D) Alcohol Impaired Driving Fatalities

To decrease alcohol impaired driving fatalities 15 percent from the 2004 – 2008 average of 457 fatalities to 389 by December 31, 2013.

	Operator at .08 or higher total fatalities										
	2004	2005	2006	2007	2008						
.08 or higher	423	429	421	587	423						

#### (E) Unrestrained Passenger Vehicle Occupant Fatalities

To decrease unrestrained passenger vehicle occupant fatalities in all seating positions 15 percent from the 2004 - 2008 average of 505 to 429 by December 31, 2013.

	2004	2005	2006	2007	2008
Unrestrained					
fatalities	516	522	534	540	416

#### (F) Speeding Related Fatalities

To decrease speeding-related fatalities 15 percent from the 2004 – 2008 average of 125 to 106 by December 31, 2013.

Speed related										
2004 2005 2006 2007										
96	138	136	124	133						

#### (G) Motorcyclist Fatalities

To decrease motorcyclist fatalities 20 percent from the 2004 – 2008 average of 162 to 130 by December 31, 2013.

#### (H) Unhelmeted Motorcyclist Fatalities

To decrease unhelmeted motorcyclist fatalities 33 percent from the 2004 - 2008 average of 15 to 10 by December 31, 2013.

	M/C	no
Year	Fatals	Helmet
2004	136	14
2005	152	11
2006	150	14
2007	201	14
2008	170	15

#### (I) Drivers Age 20 Or Younger Involved In Fatal Crashes

To decrease drivers age 20 or younger involved in fatal crashes 15 percent from the 2004 - 2008 average of 279 to 237 by December 31, 2013.

Drivers 20 and under involved in fatal crash										
2004 2005 2006 2007 20										
Drivers =< 20	326	289	267	270	242					

#### (J) **Pedestrian Fatalities**

To reduce pedestrian fatalities 10 percent from the 2004 - 2008 average of 166 to 149 by December 31, 2013.

Year	Ped Fatals
2004	161
2005	164
2006	172
2007	171
2008	160

#### (K) Seat Belt Use Rate

To increase statewide observed seat belt use of front outboard occupants in passenger vehicles 2.5 percentage points from the 2009 calendar base year usage rate of 89.5 percent to 92 percent by December 31, 2013.

Observed Seat Belt Use in North Carolina (%), Weighted

Survey Periods	Driver (D)	Passenger (RF)	Combined (D+RF)
	19	99	
Apr <sup>1</sup>	81.0	77.7	79.9
Jun <sup>1</sup>	83.5	80.8	82.3
Nov <sup>2</sup>	79.7	71.0	78.6
	20	000	
Jun <sup>3</sup>	81.6	76.1	80.5
Sep <sup>3</sup>	80.3	74.7	79.2
	20	001	
May <sup>3</sup>	80.9	74.8	79.6
Jun <sup>3</sup>	83.6	79.1	82.7
Sep <sup>3</sup>	83.0	77.3	81.9
	20	002	
Jun <sup>3</sup>	84.9	80.6	84.1
Sep <sup>3</sup>	84.5	76.5	82.7
	20	003	
Apr <sup>3</sup>	85.1	79.2	84.1
Jun <sup>3</sup>	87.3	81.0	86.1
Sep <sup>3</sup>	85.7	80.4	84.7
	20	004	
Apr <sup>3</sup>	85.2	79.1	83.8
Jun <sup>4</sup>	87.4	74.7	85.4
	20	005	
Apr <sup>5</sup>	86.2	82.2	85.4
Jun <sup>4</sup>	86.9	85.6	86.7
	20	006	
Apr <sup>5</sup>	87.6	84.4	86.9
Jun <sup>4</sup>	88.9	86.3	88.5
	20	007	
Apr <sup>5</sup>	87.4	74.7	85.4
Jun <sup>4</sup>	89.4	84.7	88.8
	20	008	
Apr <sup>5</sup>	89.4	82.8	88.4
Jun <sup>4</sup>	90.4	85.5	89.8
	20	009	
Apr <sup>5</sup>	90.4	83.3	89.2
Jun <sup>4</sup>	89.8	88.8	89.5

<sup>&</sup>lt;sup>1</sup> This survey was conducted at 72 sites. <sup>2</sup> This survey was conducted at 306 sites. <sup>3</sup> This survey was conducted at 152 sites. <sup>4</sup> This survey was conducted at 121 sites. <sup>5</sup> This survey was conducted at 50 sites.

## **Performance Plan**

#### **Problem Identification Process**

North Carolina's Governor's Highway Safety Office (GHSP) conducts extensive problem identification to develop and implement the most effective and efficient plan for the distribution of federal funds. Problem identification is vital to the success of our highway safety program and ensures that the initiatives implemented address the crash, fatality, and injury problems within the state; provides the appropriate criteria for the designation of funding priorities, and provides a benchmark for administration and evaluation of the overall highway safety plan.

The problem identification conducted resulted in the following actions:

- Collection and analysis of traffic crash data The GHSP compares prior year HSP data with current year data. From that data, along with additional information, we determine which goals need to be set or remain the same
- Source of data North Carolina is fortunate to have a centralized source for all traffic data. This data is collected from the Department of Motor Vehicles (DMV) as well as from NCDOT staff members throughout the state. This data is channeled to the State Traffic Safety Engineer with NCDOT and is readily available to the GHSP and to the public. Additionally GHSP has access to the Fatality Analysis Reporting System (FARS) which is another tool for comparison to the national numbers as to our state's problems. North Carolina has a centralized system of courts administered by the Administrative Office of Courts (AOC) and this enables us to have accurate and up to the minute data available on citations, status of cases and disposition.
- GHSP, in conjunction with a team of partner agencies, utilizes specific locality data/problem identification with other North Carolina data, to plan and implement statewide programs to address our highway safety issues including enforcement and awareness campaigns.

Based on this information, a plan is developed that provides funding priority to:

- Projects that support statewide goals.
- Projects that identify problems by High Risk Areas. High Risk Areas are determined using the following methodology: (1) counties/cities/towns are ranked in terms of their crash severity problem, (3) jurisdictions are stratified by type (i.e. county, city and town). Those jurisdictions with the highest ranking in each category are selected as High Risk Areas. The ranking is computed using crashes, vehicle miles traveled, fatalities, injuries, local licensed drivers, total licensed drivers, alcohol-related crashes, alcohol-related fatalities, alcohol-related injuries, speed-related crashes, speed-related fatalities and speed related injuries.
- Projects that creatively incorporate "alcohol awareness and occupant protection safety".
- Innovative projects with potential statewide applications or ability to transfer to other jurisdictions.
- Projects from state, local and nonprofit organizations that have statewide significance and address the federal program areas under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

#### **Setting Goals And Objectives**

The performance measures that will be accomplished utilizing the funds outlined in North Carolina's 2010 Highway Safety Plan/Application for 402 federal highway safety grant funding are based on the GHSP's mission statement, the mission statement of the North Carolina Executive Committee for Highway Safety along with the performance measures outlined under federal guidelines. The GHSP continues to identify, analyze, recommend and implement resolutions for highway safety problems on a statewide basis.

County	2005	2006	2007	2008	County	2005	2006	2007	2008
Alamance	58	59	61	72	Johnston	31	22	26	32
Alexander	56	47	41	64	Jones	65	39	53	34
Alleghany	78	55	46	31	Lee	17	15	11	6
Anson	21	26	9	7	Lenoir	12	12	13	11
Ashe	88	86	81	71	Lincoln	49	33	16	27
Avery	95	93	94	98	Macon	77	88	70	68
Beaufort	9	14	19	38	Madison	82	84	89	90
Bertie	11	10	7	8	Martin	27	43	84	67
Bladen	8	4	4	3	McDowell	93	97	92	85
Brunswick	45	27	28	27	Mecklenburg	47	46	45	48
Buncombe	61	52	49	58	Mitchell	86	71	64	47
Burke	38	51	40	33	Montgomery	87	75	72	50
Cabarrus	71	76	75	76	Moore	42	40	55	61
Caldwell	54	37	39	44	Nash	18	13	23	17
Camden	97	99	98	94	New Hanover	25	25	29	23
Carteret	57	35	54	66	Northampton	15	17	20	36
Caswell	75	80	48	54	Onslow	35	24	21	15
Catawba	58	57	50	43	Orange	92	90	93	91
Chatham	36	66	66	73	Pamlico	84	77	85	89
Cherokee	46	69	77	69	Pasquotank	83	70	73	77
Chowan	73	98	100	100	Pender	49	65	59	62
Clay	33	29	71	80	Perquimans	63	42	78	97
Cleveland	69	38	30	30	Person	53	81	60	62
Columbus	3	2	30	2	Pitt	28	41	34	22
Craven	85	87	96	95	Polk	99	100	97	74
Cumberland	22	19	24	21	Randolph	72	63	65	57
Currituck	78	72	52	51	Richmond	13	21	26	12
Dare	60	78	86	96	Robeson	13	1	1	1
Davidson	70	44	37	41	Rockingham	47	45	42	25
Davidson	91	92	90	78	Rowan	76	67	42	40
Duplin	19	33	31	45	Rutherford	44	28	22	37
Durham	41	50	61	59		6	8	12	14
Edgecombe	30	23	25	24	Sampson Scotland	16	<u> </u>	10	10
Forsyth	74	<u>23</u> 79	<u> </u>	79	Stanly	64	63	80	70
Franklin	23	18	15	19		55	62	63	
	49	53	38	39	Stokes Surry	43	61	56	53 65
Gaston			8		~	67	56		
Gates	7 2	11 3	2	42	Swain	80	85	67 91	86 92
Graham Granville	89	81		5	Transylvania		<u>85</u> 74		
			74	81	Tyrrell	34		47	60
Greene	26	30	56	35	Union	65	68	58	55
Guilford	39	48	50	46	Vance	67 81	73	76	82
Halifax		20	18	13	Wake		83	82	83
Harnett	13	16	17	16	Warren	32	32	33	49
Haywood	94	89	83	87	Washington	90	96	88	99
Henderson	36	54	67	84	Watauga	24	49	42	52
Hertford	3	5	5	4	Wayne	29	36	35	29
Hoke	5	6	6	9	Wilkes	61	60	36	18
Hyde	100	91	95	88	Wilson	10	9	14	<u>26</u>
Iredell	40	58	69	56	Yadkin	96	95	87	75
Jackson	52	30	31	20	Yancey	98	94	99	93

2005 Through 2008 County Rankings

This ranking of counties is based on several factors including reported crashes, crash severity, crash rates based on population, registered vehicles and estimated vehicle miles traveled.

#### 2008 Ranking of Cities with Populations of 10,000 or More

Based on All Reported Crashes From January 1, 2006 through December 31, 2008

	Total %	6 Alcohol Related	l Fatal N	Ion Fotal Ir		Ran	kin			Total	% Alcohol Relate	d Fatal	Non-Fatal Injur	v	Ranl	k i n g	
City	Crashes	Crashes	Crashes	Crashes	ıjury	2006	2007	2008	City	Crashes	Crashes	Crashes	Crashes		2006	2007	2008
ALBEMARLE	1,791	3.46%	3	454	42	42	56	52	KERNERSVILLE	2,591	4.98%	7	693	24	30	29	36
APEX	2,341	2.48%	5	530	62	60	57	56	KINGS MOUNTAIN	1,331	2.93%	5	217	47	56	55	50
ASHEBORO	3,194	3.41%	3	838	18	22	40	40	KINSTON	1,682	4.88%	8	874	31	26	28	29
ASHEVILLE	9,337	4.91%	25	3453	3	3	1	4	LAURINBURG	596	6.54%	6	310	56	58	51	55
BOONE	3,764	3.21%	2	397	55	53	49	49	LELAND	703	5.26%	3	155				65
BURLINGTON	5,769	4.07%	6	1904	11	12	18	24	LENOIR	2,469	6.32%	11	783	27	16	16	11
CARRBORO	514	12.26%	1	191	69	68	69	73	LEWISVILLE	544	6.25%	2	167	64	65	68	69
CARY	12,164	2.98%	9	2183	40	40	42	43	LEXINGTON	2,512	5.06%	10	887	17	11	9	13
CHAPEL HILL	3,743	4.62%	10	870	50	50	50	48	LINCOLNTON	1,353	5.76%	4	394	33	34	30	39
CHARLOTTE	96,676	3.30%	221	24354	2	4	2	2	LUMBERTON	5,668	2.59%	24	1294	7	7	7	7
CLAYTON	1,958	3.47%	5	364	56	54	43	41	MATTHEWS	3,956	2.60%	5	870	35	35	36	38
CLEMMONS	1,545	4.34%	3	368	53	52	53	57	MINT HILL	1,142	6.57%	4	277	46	48	61	58
CONCORD	7,875	3.81%	18	2188	13	18	21	22	MONROE	4,719	4.32%	9	1388	12	9	15	16
CORNELIUS	1,207	5.80%	4	234	67	70	71	70	MOORESVILLE	3,500	5.03%	5	971	25	27	33	30
DUNN	1,165	2.66%	3	384				44	MORGANTON	2,359	3.39%	7	588	21	23	31	25
DURHAM	30,740	2.91%	39	5902	9	12	19	21	MORRISVILLE	1,361	1.84%	2	242	65	66	64	66
EDEN	1,260	8.10%	11	424	43	43	38	34	MOUNT HOLLY	862	4.64%	3	203				60
ELIZABETH CITY	1,697	3.48%	5	504	58	55	47	46	NEW BERN	2,570	3.11%	3	665	52	455	9 48	53
FAYETTEVILLE	23,378	3.29%	76	6146	4	1	5	3	NEWTON	1,107	4.43%	2	309	48	57	59	60
FORT BRAGG	87	1.15%	0	16		71	72	75	PINEHURST	657	3.20%	2	193	63	67	63	68
FUQUAY-VARINA	2,030	2.27%	2	289	59	61	58	59	RALEIGH	57,771	3.17%	86	10447	16	14	13	12
GARNER	2,752	2.94%	7	793	39	46	35	35	REIDSVILLE	1,249	5.04%	6	359	50	44	52	45
GASTONIA	7,838	4.04%	23	3375	5	5	4	6	ROANOKE RAPIDS	1,690	3.91%	8	518	45	48	32	27
GOLDSBORO	3,868	3.26%	8	1161	29	29	26	27	ROCKY MOUNT	8,182	3.34%	21	1875	22	21	12	10
GRAHAM	1,433	4.68%	3	393	49	37	44	53	SALISBURY	5,215	3.18%	14	1075	28	25	17	14
GREENSBORO	23,789	4.40%	69	8207	6	8	8	8	SANFORD	3,463	3.96%	14	858	14	20	23	15
GREENVILLE	9,546	3.04%	21	2213	19	24	25	19	SHELBY	2,858	3.78%	16	878	23	15	9	9
HAVELOCK	1,347	3.64%	1	236	68	69	70	74	SMITHFIELD	2,525	3.25%	5	491	41	38	27	31
HENDERSON	1,118	4.20%	3	303	54	51	53	62	SOUTHERN PINES	1,243	4.18%	4	423	32	32	46	42
HENDERSONVILLE	3,079	3.44%	5	725	30	28	22	23	STALLINGS	1,044	5.17%	1	261				67
HICKORY	10,801	2.58%	21	2134	10	6	6	5	STATESVILLE	2,678	4.74%	10	1065	8	10	11	18
HIGH POINT	7,423	5.17%	27	2784	14	17	20	17	TARBORO	431	5.34%	1	191	66	64	67	71
HOLLY SPRINGS	942	3.61%	4	170	70	63	65	72	THOMASVILLE	2,428	3.62%	12	632	36	38	40	37
HOPE MILLS	1,276	3.53%	2	277	61	62	66	64	WAKE FOREST	1,672	3.41%	2	402	60	59	62	63
HUNTERSVILLE	3,290	3.98%	9	772	34	33	34	46	WILMINGTON	12,100	5.38%	39	4278	1	2	2	1
INDIAN TRAIL	2,065	3.58%	6	536	44	46	45	51	WILSON	5,960	3.24%	13	1403	26	31	24	26
JACKSONVILLE	6,754	3.79%	19	1585	36	36	39	33	WINSTON-SALEM	20,990	4.03%	55	5721	20	19	14	20
KANNAPOLIS	3,659	4.07%	12	957	36	41	36	32									

This ranking of cities is based on several factors including reported crashes, crash severity, and crash rates based on population. For a complete listing of factors and data, contact Brian Murphy, PE with the Traffic Safety Systems Management Unit in the Department of Transportation.

## 2008 Ranking of Cities Less Than 10,000 Population

City	Total Crashes	% Alcohol Related Crashes	Fatal Crashes	Non-Fatal Injury Crashes	2005	Ran 2006	king	2008	City	Total Crashes	% Alcohol Related Crashes	Fatal Crashes	Non-Fatal Injury Crashes	2005	Ran 2006	king	2008
ABERDEEN	1 103	1.63%	2	242	8	13	10	13	BOONVILLE	23	8.70%	0	2	437	453	456	417
AHOSKIE	384	3.65%	2	110	19	15	24	36	BOSTIC	21	9.52%	0	7	216	233	237	276
ALAMANCE	29	13.79%	0	11	252	241	226	211	BREVARD	655	5.04%	0	196	43	42	70	68
ALLIANCE	72	1.39%	0	25	134	125	165	163	BRIDGETON	43	2.33%	1	14	32	93	47	59
ANDREWS	79	5.06%	0	12	75	283	334	313	BROADWAY	32	6.25%	0	4	435	462	421	325
ANGIER	360	6.11%	1	74	153	140	99	105	BROOKFORD	25	0.00%	0	16	291	285	208	182
ANSONVILLE	25	4.00%	0	7	361	319	280	320	BRUNSWICK	17	5.88%	0	4	316	330	318	404
ARAPAHOE	18	5.56%	1	4	368	148	180	171	BRYSON CITY	369	2.71%	0	52	56	102	118	111
ARCHDALE	915	4.59%	3	227	21	24	30	23	BUNN	36	2.78%	0	10	152	156	185	233
ARLINGTON	1	0.00%	1	0		302	297	292	BURGAW	65	4.62%	0	13	183	175	209	307
ASKEWVILLE	5	20.00%	0	0	462	456	451	447	BUTNER	235	2.98%	1	38	219	158	204	203
ATKINSON	14	0.00%	0	0	402	405	398	432	CALABASH	165	4.24%	1	23	268	235	134	119
ATLANTIC	67	5.97%	0	9			340	216	CALYPSO	10	10.00%	1	5	244	290	364	193
ATLANTIC BEACH	204	9.80%	1	37	261	237	121	91	CAMERON	24	0.00%	0	5	293	289	299	298
AULANDER	12	25.00%	0	4	371	358	403	389	CANDOR	4	0.00%	0	2	351	393	363	368
AURORA	12	0.00%	1	3	405	224	214	221	CANTON	501	4 59%	1	96	69	59	78	56
AUTRYVILLE	10	10.00%	0	4	129	99	200	250	CAPE CARTERET	64	3.13%	1	18	201	236	147	128
AYDEN	49	4.08%	0	15	289	298	335	330	CAROLINA BEACH	394	10.41%	0	70	155	150	169	170
BADIN	3	0.00%	0	1	410	442	450	442	CAROLINA SHORES	33	6.06%	0	10	322	382	316	311
BAILEY	67	2.99%	0	11	331	304	264	254	CARTHAGE	272	1.47%	1	63	66	121	148	70
BAKERSVILLE	32	6.25%	0	6	245	257	324	290	CASAR	22	13.64%	0	4	279	295	256	331
BALD HEAD ISLAND	2	0.00%	0	1	437	463	457	421	CASTALIA	8	25.00%	0	2	276	310	390	414
BANNER ELK	38	2.63%	0	4	292	414	454	371	CATAWBA	48	4.17%	0	14	208	220	267	240
BATH	5	0.00%	0	2	369	387	380	400	CEDAR POINT	50	8.00%	0	15	224	252	222	244
BAYBORO	71	4.23%	0	19	185	202	163	191	CENTERVILLE	6	0.00%	0	3	330	326	401	293
BEAUFORT	551	5.44%	1	113	99	96	62	57	CERRO GORDO	11	9.09%	0	6	249	314	262	283
BEECH MOUNTAIN	35	2.86%	0	6	248	311	343	284	CHADBOURN	233	3.86%	0	65	87	90	110	116
BELHAVEN	39	5.13%	0	9	260	320	346	346	CHADBOURN	436	2.75%	1	93	172	172	185	109
BELMONT	2.028	3.35%	5	309	30	31	16	16	CHERRY VILLE CHIMNEY ROCK	7	0.00%	0	3	137	264	432	275
	,									453							
BELWOOD	42 44	7.14% 11.36%	0	5 20	192 228	238 196	362 230	371 214	CHINA GROVE CHOCOWINITY	74	4.64% 1.35%	0	87 20	127	81 141	63 153	152
		4.73%	- 0	71													
BENSON	338		1		67	34	78	93	CLAREMONT	156	5.13%	0	39	170 70	170	152	133
BERMUDA RUN	73	8.22%	0	11	355	318	301	308	CLARKTON	63	1.59%	1	32		47	51	48
BESSEMER CITY	179	6.70%	0	54	212	191	174	201	CLEVELAND	86	6.98%	0	31	83	59	54	139
BETHANIA	20	20.00%		5	202	232	259	335	CLINTON	1,051	2.95%	4	306	200		,	7
BETHEL	1	0.00%	0	1	463	449	445	429	CLYDE	12	0.00%	0	4	389	432	413	402
BEULAVILLE	142	4.23%	0	22	109	160	173	189	COATS	93	5.38%	0	24	329	357	269	228
BILTMORE FOREST	18	11.11%	0	6	349	375	394	367	COFIELD	11	9.09%	0	5	164	165	167	328
BISCOE	100	4.00%	0	13	181	194	250	269	COLERAIN	10	0.00%	0	3	333	296	271	271
BLACK CREEK	1	0.00%	0	0	427	427	431	458	COLUMBIA	65	6.15%	0	12	154	136	156	228
BLACK MOUNTAIN	249	9.24%	2	90	123	119	117	103	COLUMBUS	69	1.45%	0	18	340	369	321	235
BLADENBORO	23	4.35%	1	6	319	293	213	237	COMO	9	0.00%	0	3	179	184	273	260
BLOWING ROCK	269	2.97%	0	40	148	155	170	125	CONETOE	10	10.00%	0	4	343	422	361	355
BOARDMAN	18	5.56%	0	5	236	223	430	199	CONNELLY SPRINGS	54	12.96%	1	25	211	177	242	145
BOGUE	11	0.00%	0	3	186	186	196	401	CONOVER	2,036	4.42%	3	410	23	27	15	11
BOILING SPRING LAKES	140	6.43%	0	39	195	179	211	243	CONWAY	11	0.00%	0	4	396	400	410	385
BOILING SPRINGS	222	1.80%	1	33	441	268	221	185	COOLEEMEE	15	6.67%	0	4	367	437	420	397
BOLIVIA	32	6.25%	0	8	288	262	254	210	COVE CITY	13	0.00%	0	3	295	325	415	388
BOLTON	25	12.00%	0	8	232	342	323	282	CRAMERTON	175	8.57%	4	52	230	192	80	46

City	Total %	6 Alcohol Related Crashes	Fatal Crashes	Non-Fatal Injury Crashes	2005	Ran 2006	king 2007	2008	City	Total % Crashes	6 Alcohol Related Crashes	Fatal Crashes	Non-Fatal Injury Crashes		Ran 2006	king 2007	2008
CREEDMOOR	268	2.61%	0	54	186	134	107	155	FOXFIRE VILLAGE	14	0.00%	0	3	417	424	315	325
CRESWELL	3	0.00%	0	1	257	352	324	435	FRANKLIN	588	5.10%	0	140	60	80	87	80
CROSSNORE	9	0.00%	1	0	302	334	439	252	FRANKLINTON	98	11.22%	2	21	209	129	120	124
CULLOWHEE	34	8.82%	1	11	458	337	314	246	FRANKLINVILLE	48	14.58%	0	13	270	321	307	299
DALLAS	539	1.11%	0	131	58	56	64	86	FREMONT	40	2.50%	0	7	337	340	350	352
DANBURY	25	8.00%	0	6	239	229	155	147	GARLAND	30	3.33%	0	13	316	380	312	261
DAVIDSON	348	2.59%	0	85	272	284	220	182	GARYSBURG	43	4.65%	0	16	217	226	251	218
DENTON	91	2.20%	0	28	144	147	144	165	GASTON	44	6.82%	0	21	124	238	265	205
DILLSBORO	2	0.00%	0	0		464	458	456	GATESVILLE	17	0.00%	0	6	235	297	246	224
DOBBINS HEIGHTS	19	15.79%	0	8	363	349	368	329	GIBSON	16	12.50%	0	4	300	339	407	383
DOBSON	280	2.14%	0	38	215	137	139	129	GIBSONVILLE	170	6.47%	0	45	262	207	210	206
DORTCHES	100	3.00%	1	33	117	65	57	28	GLEN ALPINE	43	0.00%	0	14	150	271	241	232
DOVER	8	12.50%	0	1	445	446	442	442	GODWIN	10	0.00%	0	7	275	286	232	207
DREXEL	15	13.33%	0	3	431	440	438	430	GOLDSTON	7	0.00%	0	3	386	409	416	369
DUBLIN	41	4.88%	0	16	273	133	127	106	GRANITE FALLS	250	3.60%	0	67	181	216	215	181
DUCK	50	6.00%	0	7	141	215	206	280	GRANITE PALES GRANITE QUARRY	23	0.00%	0	7	296	305	290	374
EARL	7	14.29%	0	2	243	263	327	392	GRANTSBORO	85	8.24%	0	29	144	200	143	112
EAST ARCADIA	30	3.33%	0	17	237	267	248	187	GREEN LEVEL	29	10.34%	0	15	242	246	317	305
EAST BEND	36	8.33%	1	5	323	362	372	185	GRIFTON	16	6.25%	0	6	264	261	303	381
EAST LAURINBURG	9	0.00%	0	4	284	391	294	288	GRIMESLAND	36	2.78%	0	12	233	211	190	213
EAST SPENCER	78	1.28%	0	28	220	183	158	180	GROVER	36	16.67%	1	10	115	112	101	132
EASTOVER	16	0.00%	0	6	220	163		386	HALIFAX	33	3.03%	0	11	238	227	272	162
		5.06%		47	02	135	191				9.09%		2	385			422
EDENTON	158 257		0	76	92 59	120		225 92	HAMILTON	11 458	9.09% 4.15%	3		17	371 51	385 26	29
ELIZABETHTOWN		3.11%	1				59		HAMLET				141				
ELK PARK	17	5.88%	0	6	359	299	285	327	HARKERS ISLAND	0	0.00%	0	0		448	435	460
ELKIN	434	1.38%	0	95	46	72	123	117	HARMONY	35	2.86%	0	10	88	98	338	266
ELLENBORO	41	7.32%	2	16	214	75	91	81	HARRELLS	38	5.26%	0	15	63	153	203	120
ELLERBE	84	9.52%	1	31	162	154	116	54	HARRELLSVILLE	6	0.00%	0	3	394	394	341	293
ELM CITY	23	8.70%	0	8	312	332	354	349	HARRISBURG	657	3.35%	4	118	118	100	71	34
ELON COLLEGE	309	6.15%	2	66	158	162	98	130	HAW RIVER	205	3.41%	1	54	193	185	66	60
EMERALD ISLE	451	6.65%	0	65	81	64	56	122	HAYESVILLE	36	2.78%	0	14	357	300	235	198
ENFIELD	146	8.22%	0	53	120	103	129	137	HEMBY BRIDGE	139	4.32%	0	46	165	124	122	133
ERWIN	194	3.61%	1	87	131	89	95	98	HERTFORD	10	0.00%	0	2	269	279	409	440
EUREKA	8	0.00%	0	1	373	398	449	434	HIGH SHOALS	19	21.05%	1	12	384	181	154	159
EVERETTS	3	0.00%	0	1	400	390	379	419	HIGHLANDS	0	0.00%	0	0	314	399	447	460
FAIR BLUFF	20	10.00%	0	8	401	426	418	338	HILDEBRAN	153	2.61%	0	55	35	41	113	115
FAIRMONT	198	4.04%	0	35	453	322	227	219	HILLSBOROUGH	257	4.28%	1	58	31	46	119	177
FAIRVIEW	177	6.78%	3	66	90	76	82	87	HOBGOOD	4	25.00%	0	2	408	421	389	399
FAISON	63	4.76%	0	15	354	247	239	192	HOFFMAN	32	3.13%	1	11	169	108	138	138
FAITH	10	10.00%	1	4	321	335	197	226	HOLDEN BEACH	3	0.00%	0	0	459	465	453	457
FALCON	22	9.09%	0	9	336	361	321	241	HOLLY RIDGE	89	7.87%	1	9	157	142	146	143
FALKLAND	8	0.00%	0	3	172	288	278	314	HOOKERTON	8	12.50%	0	3	393	388	402	394
FALLSTON	55	0.00%	0	13	64	70	107	233	HOT SPRINGS	18	11.11%	0	5	311	345	309	302
FARMVILLE	345	4.35%	0	56	116	166	176	197	HUDSON	338	2.66%	0	116	34	63	68	74
FLAT ROCK	17	11.76%	0	6	452	454	412	384	ICARD	9	0.00%	0	3	439	455	427	420
FLETCHER	395	2.53%	0	59	163	139	145	176	INDIAN BEACH	9	0.00%	0	1	278	355	344	377
FOREST CITY	1,005	2.89%	2	303	5	7	20	10	IVANHOE	0	0.00%	0	0		466	460	460
FOUNTAIN	7	14.29%	0	1	335	423	408	445	JACKSON	15	0.00%	0	3	432	403	397	411
FOUR OAKS	20	5.00%	0	4	241	250	236	410	JAMESTOWN	311	4.18%	0	66	53	69	97	151
TOUR OAKS	20	3.0070	U	4	241	230	230	410	JAMESTOWN	311	4.10/0	U	00	23	0,5	71	131

City	Total Crashes	% Alcohol Related Crashes	Fatal Crashes	Non-Fatal Injury Crashes	2005	Ran 2006	king 2007	2008	City	Total Crashes	% Alcohol Related Crashes	Fatal Crashes	Non-Fatal Injury Crashes	2005	Ran 2006	iking 2007	2008
JAMESVILLE	29	0.00%	0	8	406	356	320	287	MAYODAN	1	0.00%	0	0	415	451	463	459
JEFFERSON	270	2.96%	1	38	353	230	162	84	MAYSVILLE	21	4.76%	0	6	341	343	347	358
JONESVILLE	276	3.99%	0	37	114	126	134	169	MCADENVILLE	83	2.41%	1	24	265	209	86	64
KELFORD	4	0.00%	0	4	222	305	281	342	MCFARLAN	5	0.00%	0	2	394	347	388	312
KENANSVILLE	34	0.00%	0	8	280	282	281	345	MCLEANSVILLE	7	14.29%	0	3	420	444	441	405
KENLY	222	3.60%	1	21	324	258	159	153	MEBANE	863	2.09%	1	183	71	79	61	76
KILL DEVIL HILLS	779	7.19%	2	167	24	32	19	27	MESIC	6	33.33%	1	2	392	373	337	221
KING	590	2.88%	1	144	55	83	115	75	MICRO	20	0.00%	0	3	399	333	330	316
KINGSTOWN	7	14.29%	0	2	448	445	455	430	MIDDLEBURG	5	0.00%	0	1	426	419	417	427
KITTRELL	5	0.00%	0	2	196	384	373	362	MIDDLESEX	4	0.00%	0	2	409	417	464	412
KITTY HAWK	524	4.77%	3	119	28	14	7	5	MIDLAND	196	10.71%	0	73	50	53	77	108
KNIGHTDALE	740	5.00%	3	145	62	55	105	85	MILLS RIVER	345	6.67%	2	104	166	87	50	46
KURE BEACH	37	13.51%	0	10	332	302	355	344	MILTON	2	0.00%	0	2	404	404	349	348
LA GRANGE	54	3.70%	0	16	307	328	311	310	MINERAL SPRINGS	94	9.57%	0	17	189	198	244	267
LAKE LURE	109	8.26%	1	32	137	171	69	40	MINNESOTT BEACH	3	0.00%	0	0	460	467	462	451
LAKE PARK	10	10.00%	0	1	425	439	437	448	MISENHEIMER	2	50.00%	0	2	428	436	399	406
LAKE WACCAMAW	3	0.00%	0	1	398	402	443	441	MOCKSVILLE	376	4.52%	1	101	85	62	85	83
LANDIS	203	2.96%	2	50	121	74	88	94	MOMEYER	6	0.00%	0	1	442	441	436	439
LANSING	14	0.00%	0	2	285	275	194	255	MONTREAT	3	0.00%	0	0	424	447	446	455
LATTIMORE	5	0.00%	0	0	365	360	366	449	MOORESBORO	37	5.41%	0	16	105	90	112	113
LAUREL PARK	5	20.00%	0	4	402	407	414	396	MOREHEAD CITY	1672	4.19%	0	413	2	10	13	25
LAWNDALE	31	3.23%	0	6	366	374	353	341	MORVEN	26	3.85%	0	413	381	396	386	363
LEGGETT	11	0.00%	0	3	259	243	279	267	MOUNT AIRY	1,074	5.77%	3	406	3	8	14	8
LEWISTON WOODVILLE	21	9.52%	0	12	136	178	187	257	MOUNT GILEAD	1,074	7.69%	0	5	315	327	359	387
LIBERTY	86	4.65%	0	24	298	292	293	272	MOUNT OLIVE	282	2.48%	2	79	140	86	102	65
			-				-/-					0					227
LILESVILLE	34	2.94%	0	17	94	210	216	172	MOUNT PLEASANT	95	3.16%		24	119	152	202	
LILLINGTON	636	2.36%	0	126	11	15	39	72	MURFREESBORO	92	3.26%	0	26	240	221	247	259
LINDEN	11	0.00%	0	4	287	258	243	279	MURPHY	331	2.42%	1	81	51	67	60	21
LITTLETON	1	0.00%	0	1	390	408	404	424	NAGS HEAD	270	11.48%	2	71	10	25	40	37
LOCUST	212	1.89%	0	48	229	219	184	160	NASHVILLE	147	4.08%	0	38	379	266	234	214
LONG VIEW	277	4.69%	1	69	84	78	103	122	NAVASSA	41	9.76%	0	19	345	350	285	264
LOUISBURG	616	2.92%	1	120	57	33	43	41	NEW LONDON	86	5.81%	1	23	47	40	37	50
LOWELL	320	5.63%	0	98	18	37	35	90	NEWLAND	129	0.00%	0	12	135	163	198	209
LUCAMA	22	4.55%	1	7	206	159	179	184	NEWPORT	244	6.97%	2	73	190	132	44	61
LUMBER BRIDGE	87	4.60%	1	25	77	145	55	43	NEWTON GROVE	35	5.71%	0	7	297	278	291	318
MACCLESFIELD	12	8.33%	0	4	407	437	396	357	NORLINA	1	0.00%	0	1		430	428	426
MACON	1	0.00%	0	0	387	392	391	453	NORMAN	19	10.53%	0	9	302	138	141	127
MADISON	468	1.92%	1	110	61	23	17	17	NORTH TOPSAIL BEACH	68	8.82%	0	11	270	201	192	202
MAGGIE VALLEY	24	8.33%	0	11	193	251	251	304	NORTH WILKESBORO	556	3.78%	1	219	16	6	8	15
MAGNOLIA	22	0.00%	0	7	374	406	371	350	NORTHWEST	11	0.00%	0	4	358	411	411	380
MAIDEN	212	4.25%	0	52	86	142	104	141	NORWOOD	126	8.73%	1	22	247	242	193	194
MANTEO	175	4.00%	0	26	133	175	165	167	OAK CITY	13	15.38%	0	1	343	377	364	428
MARIETTA	3	0.00%	0	1	456	416	425	416	OAK ISLAND	354	12.43%	2	87	128	113	133	100
MARION	15	13.33%	0	5	98	167	356	398	OAK RIDGE	330	4.24%	1	101	48	54	64	68
MARS HILL	88	3.41%	0	9	305	312	305	301	OAKBORO	41	2.44%	0	10	342	351	330	317
MARSHALL	3	0.00%	0	2	450	434	406	413	OCEAN ISLE BEACH	5	40.00%	1	2	221	281	228	249
MARSHVILLE	176	7.39%	0	42	68	85	76	174	OLD FORT	70	2.86%	0	25	227	187	168	177
MARVIN	107	10.28%	0	29	178	218	302	251	ORIENTAL	14	7.14%	0	2	423	435	423	433
MAXTON	104	3.85%	2	44	191	131	131	89		10	0.00%	0	2	434	450	369	309
WAATUN	104	3.83%	2	44	191	131	131	89	ORRUM	10	0.00%	U	2	454	450	309	309

		Total	% Alcohol Related	Fatal	Non-Fatal Injury		Ran	king			Total	% Alcohol Related	Fatal	Non-Fatal Injury		Ran	ıking	
	City	Crashes	Crashes	Crashes	Crashes	2005	2006	2007	2008	City	Crashes	Crashes	Crashes	Crashes	2005	2006	2007	2008
OXFORD		162	8.64%	1	83	79	88	172	164	ROXBORO	1426	3.30%	2	242	39	68	45	32
PANTEGO		7	0.00%	0	3	327	324	289	340	ROXOBEL	10	20.00%	0	3	313	383	377	361
PARKTON		26	7.69%	0	10	421	368	318	270	RURAL HALL	240	5.83%	2	65	26	26	22	35
PARMELE		6	0.00%	0	3	430	379	400	364	RUTH	9	0.00%	0	2	218	249	308	409
PATTERSON	SPRINGS	28	3.57%	0	11	204	228	261	262	RUTHERFORD COLLEGE	58	3.45%	0	17	198	169	189	208
PEACHLANI	D	31	9.68%	1	11	105	101	83	114	RUTHERFORDTON	251	3.98%	0	71	78	146	157	158
PELETIER		10	0.00%	0	8	360	291	268	258	SAINT JAMES	51	9.80%	0	20	375	323	260	246
PEMBROKE		481	3.95%	2	136	29	19	27	14	SAINT PAULS	18	11.11%	0	5	380	372	360	402
PIKEVILLE		32	6.25%	0	13	283	276	336	253	SALEMBURG	20	5.00%	0	8	346	240	228	242
PILOT MOU	NTAIN	26	0.00%	0	3	130	168	275	408	SALUDA	7	0.00%	0	1	412	397	426	444
PINE KNOLI	SHORES	61	8.20%	0	7	397	380	374	343	SANDY CREEK	3	0.00%	0	2		260	233	382
PINEBLUFF		89	7.87%	1	28	112	58	81	97	SANDYFIELD	21	9.52%	0	6	356	348	296	303
PINETOPS		50	6.00%	0	10	429	460	448	319	SARATOGA	10	0.00%	0	2	411	420	440	415
PINEVILLE		2,002	3.40%	3	417	13	12	9	5	SCOTLAND NECK	83	8.43%	0	27	197	199	211	200
PINK HILL		17	0.00%	0	3	334	367	382	395	SEABOARD	11	18.18%	0	4	348	331	329	373
PITTSBORO		445	2.47%	0	50	170	204	177	136	SEAGROVE	20	5.00%	0	4	234	234	266	321
PLEASANT (	GARDEN	187	3.74%	1	62	97	151	151	154	SEDALIA	43	2.33%	0	14	147	149	150	238
PLYMOUTH		133	7.52%	2	62	122	95	105	102	SELMA	682	4.25%	1	179	25	39	48	52
POLKTON		154	4.55%	2	38	99	189	132	110	SEVEN DEVILS	19	5.26%	0	4	451	443	366	285
POLKVILLE		33	3.03%	0	8	188	222	300	295	SEVEN LAKES	6	0.00%	0	0	370	369	352	452
POLLOCKSV	/ILLE	10	10.00%	0	4	290	301	283	337	SEVEN SPRINGS	8	25.00%	0	2	350	344	284	322
POWELLSVI	ILLE	11	9.09%	0	5	174	197	270	297	SEVERN	6	16.67%	0	3	433	461	387	352
PRINCETON		4	0.00%	0	0	422	418	428	454	SHALLOTTE	239	5.44%	2	136	36	11	2	3
PRINCEVILI	Æ	32	15.63%	0	13	258	277	333	291	SHANNON	28	7.14%	1	10	231	190	72	73
RAEFORD		297	4.71%	1	73	111	128	90	101	SHARPSBURG	73	13.70%	0	11	200	244	357	306
RAMSEUR		111	5.41%	0	40	210	163	161	147	SILER CITY	890	4.83%	4	147	43	38	38	39
RANDLEMA	.N	636	4.40%	0	101	45	36	84	95	SIMPSON	12	0.00%	0	5	382	401	351	347
RAYNHAM		1	0.00%	0	1	351	395	393	378	SIMS	11	27.27%	0	4	132	116	126	274
RED CROSS		89	3.37%	0	36	101	122	124	120	SNOW HILL	75	4.00%	0	22	255	255	240	195
RED OAK		108	3.70%	0	33	301	313	277	223	SOUTHERN SHORES	84	5.95%	1	21	320	206	219	190
RED SPRING	SS	306	2.94%	1	90	110	50	32	45	SOUTHPORT	70	4.29%	0	11	175	173	201	338
RENNERT		27	18.52%	2	16	206	70	52	57	SPARTA	118	4.24%	0	30	253	205	175	188
RHODHISS		32	6.25%	0	11	143	157	249	236	SPEED	4	0.00%	0	1	274	389	378	370
RICH SQUAI	RE	33	3.03%	0	5	177	194	345	359	SPENCER	267	4.49%	0	59	281	256	195	168
RICHFIELD		67	2.99%	0	22	107	123	137	146	SPENCER MOUNTAIN	8	12.50%	0	4	377	365	295	216
RICHLANDS	3	275	1.45%	0	37	80	92	74	126	SPINDALE	166	7.23%	2	79	159	104	67	55
RIVER BENI	)	13	23.08%	0	6	309	316	310	331	SPRING HOPE	59	10.17%	0	20	294	294	223	245
ROBBINS		17	5.88%	0	3	391	415	460	418	SPRING LAKE	1475	5.08%	2	283	33	28	18	24
ROBBINSVII	LLE	100	7.00%	0	31	108	93	92	96	SPRUCE PINE	151	7.95%	1	47	96	127	142	88
ROBERSON	VILLE	22	0.00%	0	10	383	386	375	333	STALEY	16	0.00%	0	4	263	230	298	354
ROCKINGHA		777	4.50%	6	322	15	17	12	4	STANFIELD	33	3.03%	0	5	372	376	405	375
ROCKWELL		150	6.00%	0	27	91	107	207	231	STANLEY	241	4.56%	0	69	444	315	217	140
ROLESVILL	E	213	4.23%	0	45	249	245	171	150	STANTONSBURG	7	0.00%	1	2	446	253	263	256
RONDA		38	2.63%	0	15	265	273	224	156	STAR	2	0.00%	0	1	416	428	434	437
ROPER		14	14.29%	0	9	199	193	257	296	STEDMAN	64	0.00%	0	21	54	130	136	144
ROSE HILL		103	2.91%	0	32	103	110	182	157	STEM	23	0.00%	0	4	362	358	312	322
ROSEBORO		29	10.34%	0	7	347	317	384	356	STOKESDALE	295	5.76%	2	106	37	43	27	21
ROSMAN		13	0.00%	0	2	388	384	424	425	STONEVILLE	9	0.00%	0	1	328	340	348	446
ROWLAND		58	3.45%	0	18	205	269	231	196	STONEWALL	20	10.00%	0	6	224	271	276	278
KOWLAND		36	3.4370	U	10	203	209	231	190	STONEWALL	20	10.0070	U	O	224	2/1	2/0	210

	Total %	Alcohol Related	Fatal	Non-Fatal Injury		Ran	king			Total	% Alcohol Related	Fatal	Non-Fatal Injury		Ran	king	
City	Crashes	Crashes	Crashes	Crashes	2005	2006	2007	2008	City	Crashes	Crashes	Crashes	Crashes	2005	2006	2007	2008
STOVALL	23	4.35%	0	6	223	179	218	315	WALSTONBURG	3	0.00%	0	0	457	459	452	450
SUGAR MOUNTAIN	2	0.00%	0	2	304	413	392	390	WARRENTON	80	1.25%	0	9	449	451	376	285
SUMMERFIELD	466	4.51%	2	138	42	44	34	53	WARSAW	102	6.86%	1	50	176	144	109	118
SUNSET BEACH	120	4.17%	1	21	306	208	183	203	WASHINGTON	1,379	2.54%	2	453	4	4	11	12
SURF CITY	10	0.00%	1	2	282	265	274	277	WASHINGTON PARK	1	0.00%	0	1	443	364	369	379
SWANSBORO	309	3.88%	1	37	267	214	113	104	WATHA	3	0.00%	0	1		410	419	423
SWEPSONVILLE	34	5.88%	0	9	325	336	328	334	WAXHAW	350	5.71%	2	79	93	109	93	33
SYLVA	668	5.69%	0	185	14	20	31	31	WAYNESVILLE	436	7.11%	5	195	65	30	23	30
TABOR CITY	167	5.39%	2	53	161	161	46	42	WEAVERVILLE	235	5.53%	2	47	160	174	149	78
TAR HEEL	18	5.56%	0	9	179	213	188	173	WEDDINGTON	641	4.37%	2	172	72	52	58	49
TAYLORSVILLE	161	4.35%	0	27	74	111	199	220	WELDON	63	12.70%	0	37	439	431	395	149
TAYLORTOWN	34	0.00%	0	5	375	378	358	360	WENDELL	504	4.37%	2	126	151	115	53	51
TEACHEY	3	0.00%	0	1	308	412	443	438	WENTWORTH	269	3.35%	2	73	88	61	49	38
TOBACCOVILLE	147	8.16%	2	45	112	117	128	82	WESLEY CHAPEL	347	4.03%	4	106	48	45	25	19
TOPSAIL BEACH	3	0.00%	0	1	418	366	383	375	WEST JEFFERSON	295	3.73%	1	79	139	106	100	26
TRENT WOODS	25	12.00%	0	5	414	433	422	406	WHISPERING PINES	42	7.14%	0	7	364	353	381	365
TRENTON	19	10.53%	0	5	149	346	291	300	WHITAKERS	13	7.69%	0	2	226	248	433	351
TRINITY	679	5.89%	7	226	9	5	5	2	WHITE LAKE	33	21.21%	0	9	184	203	255	289
TROUTMAN	128	2.34%	0	44	168	188	178	175	WHITEVILLE	936	2.78%	0	345	6	1	4	18
TROY	271	5.54%	5	85	102	49	41	20	WHITSETT	71	8.45%	0	23	251	224	205	165
TRYON	13	7.69%	0	6	316	329	326	366	WILKESBORO	829	2.90%	2	207	1	3	6	9
TURKEY	19	5.26%	0	7	213	212	304	263	WILLIAMSTON	138	4.35%	2	54	40	77	163	135
UNIONVILLE	326	5.52%	3	103	82	73	73	70	WILSONS MILLS	82	3.66%	1	28	73	83	125	107
VALDESE	315	4.13%	3	66	124	118	94	77	WINDSOR	194	2.06%	2	49	142	105	96	99
VANCEBORO	37	0.00%	0	13	277	307	253	265	WINFALL	28	0.00%	0	12	253	279	238	239
VANDEMERE	5	20.00%	0	2	454	457	459	393	WINGATE	23	8.70%	1	5	203	216	225	281
VARNAMTOWN	15	13.33%	0	1	299	354	330	436	WINTERVILLE	626	3.04%	2	140	38	35	42	66
VASS	49	6.12%	0	10	286	308	257	248	WINTON	24	4.17%	0	8	338	270	288	336
WACO	29	10.34%	0	7	256	287	306	273	WOODFIN	200	9.50%	1	55	156	82	140	130
WADE	22	0.00%	0	3	326	338	341	391	WOODLAND	25	8.00%	1	9	310	309	160	161
WADESBORO	750	2.93%	4	247	20	9	1	1	WRIGHTSVILLE BEACH	297	8.75%	0	39	167	182	181	179
WAGRAM	29	3.45%	0	8	338	363	339	324	YADKINVILLE	451	3.10%	1	85	95	114	129	62
WALKERTOWN	533	5.07%	0	163	12	18	36	43	YANCEYVILLE	141	3.55%	0	30	378	273	245	212
WALLACE	391	2.30%	0	96	104	97	75	79	YOUNGSVILLE	102	1.96%	0	19	246	254	287	228
WALNUT COVE	66	4.55%	1	20	124	65	111	142	ZEBULON	564	3.72%	1	121	27	22	29	63

## **Highway Safety Plan**

A sampling of the various projects for 2010 and their descriptions can be found in the **Appendix.** These are a small number of the approximately 150 projects currently being worked on for 2010 but they are representative of the uses of the various types of funding available to North Carolina in 2010 (402, 405, 410, 2011, 2010, 408 and 406).

#### **Problem ID Summary**

The objective of this report is to help this agency in the identification of highway safety problems within the state. This section gives an overview of the frequency and severity of crashes in North Carolina during the last several years. In the subsequent sections, the following areas that are of interest to GHSP are discussed in more detail:

- Alcohol related crashes
- Young driver crashes
- Motorcycle crashes
- Pedestrian crashes
- Bicycle crashes
- Older driver crashes
- Speed-related crashes
- Occupant restraint usage
- Commercial Motor Vehicles

#### 1. Fatalities and Fatality Rates

The fatality rates in North Carolina and Nation during the last several years are presented in Table 1.1. Fatality rates for the nation were obtained from the Fatality Analysis Reporting System (FARS).

**Table 1.1: Fatalities and Fatality Rates** 

Year	National Rate per 100 MVM	NC Rate per 100 MVM	NC Fatalities
1966	5.5	6.78	1724
1967	5.26	6.57	1751
2000	1.53	1.74	1557
2001	1.51	1.67	1530
2002	1.5	1.7	1573
2003	1.48	1.66	1553
2004	1.46	1.64	1573
2005	1.47	1.53	1547
2006	1.41	1.53	1554
2007	1.36	1.62	1676
2008	1.27	1.41	1433

#### Frequency and Severity of Crashes during the Last 5 Years

**Table 1.2** shows the frequency and severity of crashes in North Carolina during the last 5 years. The number of injury crashes does not seem to have changed significantly during the last 5 years, but the number of property damage only crashes (PDO) has increased significantly while the number of fatal crashes has actually decreased. This would indicate that the fatal crashes may be decreasing but the number of fatalities per crash is leveling off for the present.

Table 1.2 Crash Frequency and Severity

Severity	2004	2005	2006	2007	2008
PDO	145,774	287,261	284,562	241,908	398,397
Injury	83,044	83,135	80,304	120,036	112,384
Fatal	1,557	1,546	1,559	1,705	1,450
Total	230,241	373,947	368,431	365,656	514,239

**Table 1.3** shows the number of crashes, number of injury and fatal crashes, crash rate, and the rate of injury and fatal crashes for all 100 counties in North Carolina. The table also highlights the 25 counties that have the highest crash rates, high rate of injury and fatal crashes, and high frequency of total crashes, and a high frequency of total injury and fatal crashes.

Table 1.3 County Rates for all Injury/fatal Crashes									
County	Total Crashes	Per Crash Rate 1000 Population	Total Injury/Fatals	Rate Per Injury/Fatality 1000 Population					
ALAMANCE	8087	57.9	1934	13.8					
ALEXANDER	1047	28.8	336	9.3					
ALLEGHANY	435	39.5	137	12.5					
ANSON	1354	53.4	341	13.4					
ASHE	1208	46.9	315	12.2					
AVERY	648	35.7	145	8.0					
BEAUFORT	2290	49.4	589	12.7					
BERTIE	850	43.9	264	13.6					
BLADEN	1412	43.0	550	16.7					
BRUNSWICK	4400	46.3	1074	11.3					
BUNCOMBE	11620	52.5	2950	13.3					
BURKE	4226	47.7	1064	12.0					
CABARRUS	10584	67.3	2178	13.9					
CALDWELL	4055	51.1	1119	14.1					
CAMDEN	310	33.3	81	8.7					
CARTERET	2733	43.0	731	11.5					

County	Total Crashes	Per Crash Rate 1000 Population	Total Injury/Fatals	Rate Per Injury/Fatality 1000 Population
CASWELL	748	31.8	173	7.3
CATAWBA	10585	70.0	2309	15.3
СНАТНАМ	2548	44.2	584	10.1
CHEROKEE	876	32.8	276	10.3
CHOWAN	464	31.6	123	8.4
CLAY	264	26.1	73	7.2
CLEVELAND	5060	52.3	1241	12.8
COLUMBUS	3137	57.4	1005	18.4
CRAVEN	4685	49.0	1088	11.4
CUMBERLAND	21386	69.8	5684	18.5
CURRITUCK	881	37.4	215	9.1
DARE	2164	62.3	372	10.7
DAVIDSON	7010	45.1	1930	12.4
DAVIE	1771	44.5	366	9.2
DUPLIN	2948	55.9	759	14.4
DURHAM	19108	77.4	3517	14.2
EDGECOMBE	2562	48.7	709	13.5
FORSYTH	19568	59.0	4113	12.4
FRANKLIN	2316	41.9	557	10.1
GASTON	11157	56.6	2915	14.8
GATES	403	34.9	107	9.3
GRAHAM	268	33.1	121	14.9
GRANVILLE	2251	41.8	528	9.8
GREENE	920	44.1	235	11.3
GUILFORD	28492	63.4	6768	15.1
HALIFAX	3076	55.3	845	15.2
HARNETT	4678	45.1	1312	12.6
HAYWOOD	2439	43.0	631	11.1
HENDERSON	5270	52.6	1040	10.4
HERTFORD	1069	44.7	315	13.2
HOKE	1645	39.0	479	11.4
HYDE	184	33.4	24	4.4
IREDELL	9392	64.7	2111	14.5
JACKSON	1698	46.8	450	12.4

County	Total Crashes	Per Crash Rate 1000 Population	Total Injury/Fatals	Rate Per Injury/Fatality 1000 Population
JOHNSTON	7511	49.5	1815	12.0
JONES	601	58.2	166	16.1
LEE	3768	68.2	983	17.8
LENOIR	2901	49.9	2639	45.4
LINCOLN	3549	49.8	919	12.9
MACON	1456	33.4	398	9.1
MADISON	640	19.3	132	4.0
MARTIN	944	46.2	257	12.6
MCDOWELL	1620	66.4	456	18.7
MECKLENBURG	68753	83.1	14564	17.6
MITCHELL	590	37.1	162	10.2
MONTGOMERY	1035	37.6	293	10.7
MOORE	4123	50.1	989	12.0
NASH	5949	64.5	1623	17.6
NEW HANOVER	12613	68.5	3256	17.7
NORTHAMPTON	891	41.4	300	13.9
ONSLOW	9525	59.1	1990	12.3
ORANGE	5927	47.9	1024	8.3
PAMLICO	409	31.2	93	7.1
PASQUOTANK	1827	45.7	466	11.7
PENDER	2073	42.5	561	11.5
PERQUIMANS	336	27.0	75	6.0
PERSON	1781	47.6	395	10.6
PITT	10870	74.2	2367	16.2
POLK	747	39.1	197	10.3
RANDOLPH	7140	51.5	1643	11.9
RICHMOND	2074	44.4	610	13.1
ROBESON	8233	63.8	2850	22.1
ROCKINGHAM	3981	43.3	1000	10.9
ROWAN	7213	53.6	1641	12.2
RUTHERFORD	2661	42.1	790	12.5
SAMPSON	3047	47.6	874	13.6
SCOTLAND	1537	41.5	478	12.9
STANLY	2721	46.0	728	12.3

		Per Crash Rate 1000	Total	Rate Per Injury/Fatality
County	Total Crashes	Population	Injury/Fatals	1000 Population
STOKES	1705	36.8	417	9.0
SURRY	3365	46.1	818	11.2
SWAIN	484	34.7	131	9.4
TRANSYLVANIA	1136	37.4	286	9.4
TYRRELL	192	45.2	31	7.3
UNION	9648	56.1	1976	11.5
VANCE	2139	48.7	632	14.4
WAKE	56220	71.2	10170	12.9
WARREN	660	33.1	151	7.6
WASHINGTON	563	42.1	123	9.2
WATAUGA	3158	72.8	560	12.9
WAYNE	5909	51.4	1459	12.7
WILKES	3070	45.9	894	13.4
WILSON	3717	48.0	1028	13.3
YADKIN	1679	44.4	417	11.0
YANCEY	545	29.7	164	8.9
TOTAL	519518	58.6	121121	13.7

#### 2. Alcohol-Involved Crashes

Driving after drinking continues to be one of the major causes of motor vehicle crashes in North Carolina as well as the U.S. as a whole. As shown in Table 2.A, both the total number of drinking drivers in crashes and the percent of all crash-involved drivers who had been drinking have remained somewhat steady over the last four years with a slight decrease in 2004 and 2005 as compared to 2001. Unfortunately 2006 - 2007 shows a slight upward movement to the highest level in the last five years. The increase in the number of total crashes in the 2008 year is attributable to better electronic reporting of more smaller crashes.

Table 2.A: Number and percentage of drivers involved in crashes judged to have been drinking- by year

	# of Drinking Drivers	Total Driver \Crashes	% of Drinking Drivers
Oct 2001 - Sep 2002	12,952	372,426	3.48%
Oct 2002 - Sep 2003	10,944	384,447	2.85%
Jan 2004 - Dec 2004	11,376	381,183	2.98%
Jan 2005 - Dec 2005	10,986	371,414	2.96%
Jan 2006 - Dec 2006	13,390	365,879	3.66%
Jan 2007 - Dec 2007	11,778	365,656	3.22%
Jan 2008 - Dec 2008	15,945	514,239	3.10%

#### **Demographic Difference in Alcohol Use by Drivers**

**Driver Age:** Alcohol use is strongly related to age and that is also seen in drinking by crash-involved drivers. The very youngest drivers have very low levels of alcohol use, but the prevalence of drinking among crash-involved drivers increases sharply with each year of age to a peak among the 21-24 year-old age group. As is seen in Table 2.B, the likelihood a crash-involved driver has been drinking decreases again by age 25 and then declines until reaching a stable, relatively low level among drivers 60 and older.

**Driver Alcohol Assessment (2008)** 

Table 2.B:	No Alcol	A			
Age	Number	Percentage	Number	Percentage	Total
Under 16	755	98.44%	12	1.56%	767
16-17	16562	98.30%	286	1.70%	16,848
18-20	35868	95.96%	1,509	4.04%	37,377
21-24	40089	93.81%	2,645	6.19%	42,734
25-29	40005	93.91%	2,593	6.09%	42,598
30-39	68427	95.11%	3,516	4.89%	71,943
40-49	61074	95.50%	2,875	4.50%	63,949
50-59	45588	96.63%	1,588	3.37%	47,176
60 and Above	43896	97.95%	919	2.05%	44,815
Unknown	10	83.33%	2	16.67%	12
TOTAL	352274	95.67%	15,945	4.33%	368,219

Race/Ethnicity: The use of alcohol varies substantially within the various subcultures in North Carolina and this is also apparent in the involvement of alcohol in crashes. Table 2.C shows the percent of crash-involved drivers who had been drinking by race/ethnicity. The most striking finding is the extremely high rate of drinking by Hispanic/Latino drivers. This is inconsistent with national data which consistently show that Native Americans have the highest rates of driving after drinking and that Hispanic/Latino rates fall in between those of Native Americans and whites.

Table 2.C: Table of Race of Driver Alcohol Assessment 2008

	No Alcohol		Alcohol		
Race	Number	Number Percentage		Percentage	Total
White	219,807	95.6%	10,231	4.4%	230038
Black	81,516	95.8%	3,566	4.2%	85082
Native					
American	2,718	93.2%	198	6.8%	2916
Hispanic	17,825	91.6%	1,638	8.4%	19463
Asian	3,756	97.5%	96	2.5%	3852
Other	1,157	87.7%	163	12.3%	1320
Unknown	932	94.6%	53	5.4%	985
Total	327,711	95.4%	15,945	4.6%	343656

The explanation for the abnormally high rate among Hispanic drivers in North Carolina lies in the nature of this population subgroup. Unlike Hispanics in most other regions of the U.S., the North Carolina Latino population is composed mostly of first generation immigrants, a large number of whom have located to the state in the past decade. As such this group is largely male and young – the primary group of drinking drivers among all racial/ethnic groups. Forty-nine percent of Hispanic drivers in crashes were 20 - 29 years old, compared to 26% of blacks and 21% of whites. Thus, whereas white and black crash-involved drivers include many older drivers who are less likely to drink and drive, Hispanic drivers are mostly young males (only 2% of Hispanic drinking driver crashes were females whereas 26% of black and white drinking drivers were females).

Table 2.D Percent of Crash-Involved Drivers Who Had been Drinking

By Race/Ethnicity and Age - 2008

	White	Black	Nat Amer	Hispanic	Asian	Other	Unknown	Totals
15-20	3.42%	2.53%	3.94%	7.53%	1.05%	1.34%	3.76%	3.37%
21-24	6.91%	4.46%	7.63%	11.66%	4.18%	4.05%	8.39%	6.60%
25-29	6.36%	5.57%	8.83%	9.96%	2.70%	5.22%	3.13%	6.48%
30-39	5.22%	4.48%	8.89%	7.23%	1.94%	3.46%	3.75%	5.14%
40-49	4.83%	4.48%	7.61%	5.56%	2.69%	2.20%	3.17%	4.71%
50-59	3.25%	4.04%	5.52%	5.75%	2.65%	1.54%	1.53%	3.48%
60 and above	1.90%	2.66%	2.77%	6.47%	0.99%	2.90%	2.74%	2.09%
Unknown	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	25.00%	20.00%
Totals	4.40%	4.12%	6.65%	8.30%	2.47%	2.98%	3.79%	4.53%

The following table, Table 2.E, illustrates the presence of alcohol in crashes by county. The twelve counties with the highest rate of alcohol involvement in crashes account for only 4.36% of all drinking driver crashes in North Carolina. This is because alcohol-related crashes are much more likely in rural locations and these rural counties have less traffic, hence fewer crashes in general. In contrast, the top 10 counties in number of drinking driver crashes account for close to half (40.64%) of all drinking driver crashes in North Carolina, yet they are among the lowest in alcohol-involved crash rates (representing 6 of the 12 counties with the lowest rates of drinking driver crashes.

Table 2.E Table of County by Driver Alcohol Assessment

	No Alcohol		Al		
County	Number	Percentage	Number	Percentage	Total
Alamance	6020	97.10%	180	2.90%	6200
Alexander	804	94.04%	51	5.96%	855
Alleghany	318	95.21%	16	4.79%	334
Anson	899	95.94%	38	4.06%	937
Ashe	893	95.41%	43	4.59%	936
Avery	489	96.07%	20	3.93%	509
Beaufort	1663	96.97%	52	3.03%	1715
Bertie	629	95.88%	27	4.12%	656
Bladen	1164	96.44%	43	3.56%	1207
Brunswick	3475	95.60%	160	4.40%	3635
Buncombe	9162	96.77%	306	3.23%	9468

	No Alcohol	Alcohol	No Alcohol	Alcohol	
County	Number	Percentage	Number	Percentage	Total
Cabarrus	7222	97.44%	190	2.56%	7412
Caldwell	2669	95.87%	115	4.13%	2784
Camden 198		95.19%	10	4.81%	208
Carteret	2371	96.70%	81	3.30%	2452
Caswell	513	96.43%	19	3.57%	532
Catawaba	7465	96.92%	237	3.08%	7702
Chatham	1725	95.57%	80	4.43%	1805
Cherokee	653	94.36%	39	5.64%	692
Chowan	293	96.38%	11	3.62%	304
Clay 237		95.18%	12	4.82%	249
Cleveland	3632	96.62%	127	3.38%	3759
Columbus	2114	94.50%	123	5.50%	2237
Craven	3102	96.70%	106 362	3.30%	3208 14035
Cumberland	13673	97.42%		2.58%	
Currituck 563		95.75% 25		4.25%	588
Dare	1384	95.65%	63	4.35%	1447
Davidson	5555	96.73%	188	3.27%	5743
Davie	1296	95.93%	55	4.07%	1351
Duplin	2023	96.38%	76	3.62%	2099
Durham	13798	97.70%	325	2.30%	14123
Edgecombe	1708	95.26%	85	4.74%	1793
Forsyth	14087	97.23%	402	2.77%	14489
Franklin	1599	95.63%	73	4.37%	1672
Gaston	8773	97.08%	264	2.92%	9037
Gates	329	97.63%	8	2.37%	337
Graham	255	96.59%	9	3.41%	264
Granville	1285	95.61%	59	4.39%	1344
Greene	611	95.92%	26	4.08%	637
Guilford	19802	96.77%	660	3.23%	20462
Halifax	1839	94.99%	97	5.01%	1936
Harnett	3106	94.70%	174	5.30%	3280
Haywood	1717	95.76%	76	4.24%	1793
Henderson	4215	96.79%	140	3.21%	4355

	No Alcohol	Alcohol	No Alcohol	Alcohol	
County	Number	Percentage	Number	Percentage	Total
Hertford	708	96.46%	26	3.54%	734
Hoke	1039	94.80%	57	5.20%	1096
Hyde	143	97.95%	3	2.05%	146
Iredell	6483	96.89%	208	3.11%	6691
Jackson	1346	94.72%	75	5.28%	1421
Johnston	6057	96.51%	219	3.49%	6276
Jones	410	96.70%	14	3.30%	424
Lee	2620	96.86%	85	3.14%	2705
Lenoir	2250	97.28%	63	2.72%	2313
Lincoln	2618	96.32%	100	3.68%	2718
Macon	897	95.32%	44	4.68%	941
Madison	426	95.95%	18	4.05%	444
Martin	725	95.52%	34	4.48%	759
McDowell	1020	94.01%	65	5.99%	1085
Mecklenburg	43412	97.66%	1,041	2.34%	44453
Mitchell	475	96.54%	17	3.46%	492
Montgomery	673	95.60%	31	4.40%	704
Moore	2842	97.46%	74	2.54%	2916
Nash	3830	96.11%	155	3.89%	3985
New Hanover	9929	96.88%	320	3.12%	10249
Northampton	579	95.07%	30	4.93%	609
Onslow	6429	95.80%	282	4.20%	6711
Orange	4566	96.78%	152	3.22%	4718
Pamlico	355	95.17%	18	4.83%	373
Pasquotank	1387	97.54%	35	2.46%	1422
Pender	1809	95.56%	84	4.44%	1893
Perquimans	252	96.18%	10	3.82%	262
Person	1205	95.79%	53	4.21%	1258
Pitt	7274	97.61%	178	2.39%	7452
Polk	449	96.15%	18	3.85%	467
Randolph	4970	96.52%	179	3.48%	5149
Richmond	1508	96.42%	56	3.58%	1564
Robeson	5464	95.57%	253	4.43%	5717
Rockingham	3103	94.95%	165	5.05%	3268

	No Alcohol	Alcohol	No Alcohol	Alcohol	
County	Number	Percentage	Number	Percentage	Total
Rowan	5359	97.12%	159	2.88%	5518
Rutherford	1823	95.60%	84	4.40%	1907
Sampson	2138	95.53%	100	4.47%	2238
Scotland	935	95.80%	41	4.20%	976
Stanly 1734 S		96.49%	63	3.51%	1797
Stokes	1215	95.00%	64	5.00%	1279
Surry	2461	96.13%	99	3.87%	2560
Swain	294	91.30%	28	8.70%	322
Transylvania	814	95.09%	42	4.91%	856
Tyrrell	139	97.89%	3	2.11% 2.96% 3.45%	142
Union	6730 1623 41156	97.04%	205		6935
Vance		96.55%	58		1681
Wake		97.69%	972	2.31%	42128
Warren	394	95.86%	17	4.14%	411
Washington	338	95.48%	16	4.52%	354
Watauga	2184	96.89%	70	3.11%	2254
Wayne	4088	96.37%	154	3.63%	4242
Wilkes	2131	95.35%	104	4.65%	2235
Wilson	3247	96.93%	103	3.07%	3350
Yadkin	1040	95.50%	49	4.50%	1089
Yancey	399	96.38%	15	3.62%	414
STATE TOTAL	366101	96.83%	11,968	3.17%	378069

#### 3. Young Drivers

Drivers ages 15-20 account for 15.7% of all motor vehicle crashes in North Carolina. Only among the very oldest drivers is it as important to differentiate between single years of age to understand the fundamental issues underlying these crashes. Accordingly analyses presented below show results by single year of age, including 15 year-olds. Although no 15 year-old can legally drive without an adult supervisor in North Carolina some do so, and there are a substantial number who are driving with a supervisor though few of them crash while doing so.

# Injury Severity by Year and Driver Age

There was no meaningful change in the severity of young driver injuries from 2001 to 2006. Table 3.A shows, somewhat surprisingly, that injury severity does not differ for young drivers of varying ages.

Table 3.A: Number and Percent of Crash-Involved Young Drivers by Driver Injury Severity and Age 2008

					1
Driver Age	PDO	Minor/Moderate	Severe/Fatal	Unknown	Total
15	46.7%	48.3%	4.1%	0.8%	1474
16	76.8%	21.4%	1.0%	0.8%	8373
17	76.2%	21.8%	1.0%	1.0%	11133
18	76.2%	21.9%	0.8%	1.1%	13049
19	76.4%	21.6%	0.8%	1.3%	12463
20	81.6%	16.7%	0.3%	1.4%	11141
					57633

#### Other Demographic Characteristics of Crash-Involved Young Drivers

As is shown in Table 3.B, among the youngest drivers, males and females are about equally likely to crash. However, among 18 through 20 year-old drivers, females represent only about 43% of crashes. It is not known what accounts for this differential. Research on sex differences in crash rates among the general driving population indicates that much of the difference between the number of males and females in crashes results from the greater amount of driving done by males. That undoubtedly explains some, though perhaps not all, of the sex difference in young driver crashes as well.

Table 3.B

Table of crashes by age and sex 2008

Driver								
Age	Male	Female	Unknown	Total				
15	435	318	2	755				
16	3447	3363	8	6818				
17	5124	4612	8	9744				
18	7085	5605	9	12699				
19	6647	5263	9	11919				
20	6266	4969	15	11250				
Total	29004	24130	51	53185				

Table 3.C

Drivers Age by Crashes by Severity 2008

Driver Age	PDO	Fatal	Injury	Unknown	Totals
15	527	3	207	18	755
16	5430	7	1310	71	6818
17	7766	16	1853	109	9744
18	9786	22	2744	147	12699
19	9151	33	2587	148	11919
20	8634	18	2457	141	11250
Totals	41294	99	11158	634	53185

## **Summary Points**

- Approximately 77% of young driver crashes involved no injury to the driver.
- Driver injuries were equally (non) severe at each age among young drivers.
- Although the number of young driver crashes increased, this is completely explained by population growth in this age group.
- The number of crashes increases as more young drivers are driving without an adult supervisor in the vehicle.
- Among the youngest drivers females have nearly as many crashes as males
- Among drivers 18 through 20, males account for 56% of crashes.

## Time of day, week and year of Young Driver Crashes

Young driver crashes exhibit a distinct pattern throughout the day. This clearly reflects the life conditions that determine the driving patterns of young adults. For 16 and 17 year-old drivers there are sharp peaks during the hours immediately before and after school and lows in the late evening and early morning hours. Nineteen and 20 year-old drivers show a very different pattern, with crashes reaching the highest point during the evening commuting period from 5 to 6 p.m. Eighteen year-old driver crashes represent the fact that this age group is in transition between high school and work worlds, falling between younger and older drivers.

The low percent of 16 & 17 year-old crashes during the day reflect reduced driving during school hours, and this difference would be greater if crashes were looked at only on weekdays during months when school is in session. The lower number of crashes after 9 p.m. clearly reflects the effect of the night driving restriction that applies for 6 months to many 16 and 17 year-old drivers.

Crashes among the youngest drivers (ages 16 & 17) are distributed differently than other driver crashes across months of the year. This is due partly to the effects of the school year, which result in more driving by the youngest drivers. Crashes then decline markedly in June and July, followed by a rise in the fall months.

Despite the influence of school on 16 & 17 year-old driving, the weekday vs. weekend crash distribution for young drivers is essentially the same as for older drivers. Among all drivers 24% of crashes occur on weekends; among 16 & 17 year-olds 23% of crashes occur on weekends and 26% of 18-20 year-old driver crashes happen on weekends.

## Nature of Driver Errors/Crash Causes Among Young Drivers

Among young driver crashes, the driver contributed to the crash in 68% of all crashes, ranging from 74% for 16 year-olds to 63% for 20 year-old drivers. By comparison, only 48% of drivers ages 25-54 contributed to their crash. A substantial proportion of young driver errors are accounted for by just three actions: Failure to yield, failure to reduce speed and driving too fast for conditions. With each additional year of age there are fewer cases of each of these driver errors.

Young drivers are much more likely than older drivers to have had a speed-related crash. Whereas 19% of crashes among drivers age 25 - 54 involved speed, 33% of 15 - 20 year-old drivers were involved in a speed-related crash. Speed involvement in crashes decreases with each year of driver age. It is important to note that in most of these cases, exceeding the speed limit was not considered to be the problem. Rather it was a failure to appropriately manage the vehicle's speed that contributed to the crash. In most cases for young drivers, it was the failure to reduce speed as needed that caused the problem, rather than the driver exceeding the posted speed limit. This is an important point because it indicates that speed-related crashes among young drivers are not so much a matter of violating the speed limit as they are a case of the young driver not doing a good enough job assessing the situation and responding appropriately.

### **Roadway Characteristics and Location**

In view of the lack of experience and different driving tendencies of the youngest drivers we might expect that crashes at certain roadway locations or in conjunction with particular roadway characteristics would be different among young drivers. That is in fact the case, although it appears that most of the difference is merely a result of differential exposure. That is, as drivers get older they tend to do more driving in some situations than others. For example, there is a substantial increase in the proportion of crashes that occur on multi-lane roadways. In general, multilane roads are safer than 2-lane roads. Hence the only apparent reason that 'older' young drivers have more crashes on these roads is simply that they do more driving there.

With each additional year of age the proportion of crashes that occur in rural locations decreases. The only explanation we can find for this is that rural roadways are more dangerous and that 16 and 17 year-old drivers are particularly vulnerable to errors in judgments that rural roads require and are lacking in skills necessary to safely maneuver many of these roads.

Between age 16 and 20, the proportion of crashes that occur at an intersection with a traffic light increases from 17% to 22% (a 28% increase). The percent of crashes that occur in this setting continues to climb until age 45 at which point it levels off at 26%. It may be that this reflects an increasing boldness in driving as a result of experience and other changing life conditions that result in a slight increase in risky behaviors at intersections (e.g., running yellow and red lights, right turns on red without stopping, etc.).

Despite the difference in crashes at signalized intersections, there is no overall difference in intersection crashes among younger and older drivers. Among drivers under age 45, about 31% of crashes occur at intersections; young drivers have an essentially identical proportion of crashes at intersections (30%). Moreover there is little variation in the proportion of intersection crashes by age among young drivers, ranging from 32% for 16 year-olds to 30% for 20 year-old drivers.

### **Alcohol Use by Young Drivers in Crashes**

Drinking among young drivers is often misunderstood to be far more common than is actually the case. Among the youngest drivers, alcohol use is quite uncommon, but with each year of age it increases. From this it is clear that drinking among "teen" drivers is not a meaningful notion. The lives of young teens differ dramatically from those of older teens and this is reflected in the dramatically different rates of alcohol-involvement in crashes. Whereas alcohol is very rarely involved in crashes of 16 and 17-year old drivers, involvement by 19 year-old drivers is nearly as common as among drivers ages 30-45.

In contrast, alcohol involvement in crashes of 16 & 17 year-olds is lower than for any age group – even those older than 85. Because younger drivers have a higher crash risk at comparable blood alcohol concentration levels, these data suggest that the actual amount of driving after drinking is even lower in comparison to older drivers than the crash data would indicate. This is consistent with national research. Table 3.D shows the average number of yearly crashes by age and the investigating officer's assessment of whether the young driver had been drinking

Table 3.D Alcohol Involvement in Young Driver Crashes by Age 2008

	No Alcohol		$\mathbf{A}$	lcohol	
Driver					
Age	Number	Percentage	Number	Percentage	Total
15	743	98.41%	12	1.59%	755
16	6,735	98.78%	83	1.22%	6818
17	9,541	97.92%	203	2.08%	9744
18	12,286	96.75%	413	3.25%	12699
19	11,402	95.66%	517	4.34%	11919
20	10,328	91.80%	922	8.20%	11250
Total	51,035	95.96%	2,150	4.04%	53185

## **Summary Points**

- Alcohol use by crash-involved young drivers, all of whom are under the legal drinking age, is lower than for all age groups up to age 50.
- Alcohol use among underage persons involved in crashes varies dramatically by driver age. From age 16 thorough 20, alcohol involvement in crashes increases in nearly linear fashion.

# **Young Driver Crashes by County**

Crash rates per capita vary widely across North Carolina counties. It is not known why this is the case, however, there are several partial causes. Since crash rates are based on population rather than licensed drivers, it is likely that those counties where the driver education system is able to move young drivers through at earlier ages will have more young drivers and, as a result more crashes. Conversely, counties where the driver education system is backlogged will delay licensure among the youngest drivers and reduce the number of crashes they experience as a result.

Another factor in young driver crash rates is the road system on which they drive. Those counties with more dangerous roads will experience more crashes overall and this will apply to young drivers as well. It is not clear whether a greater proportion of narrow rural, mountainous roads will produce more young driver crashes or whether a preponderance of heavily congested urban roadways will result in more crashes. Certainly the latter will result in fewer serious crashes because crash speeds will be lower.

Finally, those counties that attract young drivers from other areas, including other states, will exhibit higher crash rates because of more travel within their borders by young drivers. This would be the case in border counties as well as resort communities; it may explain the particularly high crash rates in Dare and New Hanover counties.

Table 3.E provides detailed information about young driver crashes by county as compared to the population of the county for the period from January, 2008 through December, 2008. In addition to showing where crash rates are high this table also indicates where the majority of young driver crashes occur.

Table 3.E 15-20 y/o Driver involved Crashes As a percentage of the population

1 able 3.E 15-20 y/o Driver involved Crasnes As a percentage of the population							
County	Number of Crashes	Percent of Population		County	Number of Crashes	Percent of Population	
Watauga	445	1.03%		Orange	704	0.57%	
Pitt	1351	0.92%		Craven	543	0.57%	
New Hanover	1608	0.87%		Stokes	263	0.57%	
Catawba	1267	0.84%		Wilkes	379	0.57%	
Alamance	1121	0.80%		Clay	57	0.56%	
Cabarrus	1240	0.79%		Jones	58	0.56%	
Onslow	1261	0.78%		Richmond	260	0.56%	
McDowell	190	0.78%		Beaufort	256	0.55%	
Mitchell	120	0.76%		Harnett	569	0.55%	
Jackson	273	0.75%		Haywood	309	0.55%	
Iredell	1090	0.75%		Bladen	176	0.54%	
Lee	409	0.74%		Rutherford	338	0.54%	
Wake	5600	0.71%		Edgecombe	280	0.53%	
Carteret	449	0.71%		Brunswick	505	0.53%	
Gaston	1377	0.70%		Person	199	0.53%	
Guilford	3124	0.70%		Vance	233	0.53%	
Union	1196	0.69%		Avery	94	0.52%	
Ashe	179	0.69%		Yadkin	192	0.51%	
Johnston	1050	0.69%		Franklin	275	0.50%	
Burke	611	0.69%		Yancey	91	0.50%	
Duplin	363	0.69%		Transylvania	149	0.49%	
Cumberland	2104	0.69%		Currituck	114	0.48%	
Henderson	669	0.67%		Halifax	263	0.47%	
Lincoln	475	0.67%		Tyrrell	20	0.47%	
Nash	610	0.66%		Washington	62	0.46%	
Rowan	889	0.66%		Cherokee	123	0.46%	
Pasquotank	263	0.66%		Greene	95	0.46%	
Martin	134	0.66%		Hyde	25	0.45%	
Wilson	505	0.65%		Camden	41	0.44%	
Cleveland	630	0.65%		Polk	83	0.43%	
Buncombe	1439	0.65%		Chatham	250	0.43%	
Wayne	746	0.65%		Alexander	156	0.43%	
Durham	1592	0.64%		Hertford	102	0.43%	
Surry	470	0.64%		Montgomery	112	0.41%	
Davie	256	0.64%		Northampton	86	0.40%	
Stanly	379	0.64%		Swain	54	0.39%	
Robeson	826	0.64%		Granville	204	0.38%	
Alleghany	70	0.64%		Hoke	159	0.38%	
Mecklenburg	5222	0.63%		Perquimans	46	0.37%	
Anson	159	0.63%		Scotland	134	0.36%	
Sampson	396	0.62%		Macon	152	0.35%	
Pender	303	0.62%		Caswell	79	0.34%	
Columbus	334	0.61%		Warren	55	0.28%	
Lenoir	341	0.59%		Pamlico	34	0.26%	
Caldwell	463	0.58%		Madison	86	0.26%	
Graham	47	0.58%		Chowan	34	0.23%	
Rockingham	528	0.57%		Forsyth	450	0.14%	
Moore	473	0.57%		Total	11883	0.13%	

# **Summary Points**

• Three counties (Mecklenburg, Wake, and Guilford) account for 24% of all young driver crashes. Mecklenburg and Wake account for more crashes than the 63 bottom-ranked counties combined.

## 4. Motorcycle Safety

# **Motorcycle Crashes by Injury Severity Level**

North Carolina has more than 193,000 registered motorcycles in 2008 which is less than 2% of all registered vehicles, however, motorcyclist crashes represent over 1% of our overall crashes statewide and 12.8% of our fatal crashes. When motorcycle drivers are involved in crashes, the outcome is usually more serious in terms of injury and death, as is demonstrated in Table 4.A for Year 2008.

Table 4.A 2008 Motorcycle vs All Vehicle Crashes

	Number of	Percent	Number	Percent of
	Motorcycle	of Total	All Vehicle	Total Veh
Type Crash	Crashes	M/C Crashes	Crashes	Crashes
PDO	643	14.59%	280241	76.55%
Type A Injury	419	9.51%	2496	0.68%
Type B Injury	2,098	47.61%	19,106	5.22%
Type C Injury	1,085	24.62%	58,907	16.09%
Fatals	135	3.06%	1,015	0.28%
Unknown	27	0.61%	4,336	1.18%
Total	4,407	100.00%	366,101	100.00%

- Approximately 85% of motorcyclist crashes involves death or injury for the driver as compared to only 22% for all other vehicles. This is not surprising as motorcycles offer no protection to the rider and the rider is almost always ejected having to rely solely on personal protective gear.
- The number of motorcycle crashes has been increasing for the last five years along with the North Carolina population and number of registered motorcycles, the crash rate for 2008 suggests a continuation of this trend with expectations of it increasing as the number of miles ridden will most likely increase due to the increasing number of riders and rising fuel costs.
- Fatal/severe injury crashes were lower by over 15% during 2008 and as expected are 21% below last years year-to-date numbers. NC tightened the helmet law in 2008 and increased enforcement of that law causing a decrease in the novelty type helmets being worn by riders. Also increased rider education to include the new BikeSafe NC program.

## **Crash-Involved Motorcycle Driver Demographic Characteristics**

The motorcycle crashes over the years were analyzed as a function of a number of demographic variables such as sex, age, and ethnicity of the driver. The age distribution of crash-involved motorcycle drivers over the year 2008 is shown in Table 4.B as a function of crash injury severity.

Table 4.B Motorcycle Drivers by Age and Injury 2008

Age	F at al	A Injury	B Injury	C Injury	No Injury	Unknown	Totals	Percent
15 or Less	0	3	9	1	0	1	14	0.32%
16-17	0	5	25	8	5	1	44	1.00%
18-19	7	17	106	36	33	3	202	4.58%
20-24	19	55	339	177	108	5	703	15.95%
25-29	13	52	254	119	81	2	521	11.82%
30-39	37	87	399	238	129	7	897	20.35%
40-49	21	101	466	237	127	5	957	21.72%
50-59	26	66	355	192	113	2	754	17.11%
60 or Above	12	36	154	78	47	2	329	7.47%
Totals	135	419	2098	1085	643	27	4407	100.00%

## **Findings**

- Motorcycle drivers between the ages of 30 and 49 accounted for 42.1% of all motorcycle crashes and the majority of crashes in each crash severity level.
- There has been a steady shift in the average age of motorcycle drivers, with 40-59 aged motorcyclists becoming an increasingly greater percentage of the riding population.
- Male motorcycle drivers were involved in 94-95% of crashes across the three severity levels. The involvement rates for both sexes remained fairly constant over the 3 years.

## **Motorcycle Passengers by Crash Injury Severity**

Motorcycle drivers are not the only persons at increased risk of injury or death when crashes occur. Passengers on motorcycles are also at higher risk for serious injury

Table 4.C Motorcycle Operator/Passenger by Injury Type

2008 Type Injury Operator **Percent** Passe nger **Percent** T ot als A INJURY 419 9.5% 30 7.4% 449 **B** INJURY 2098 47.6% 200 49.5% 2298 C INJURY 1085 24.6% 96 23.8% 1181 KILLED 135 3.1% 10 2.5% 145 **UNKNOWN** 0.6% 0.2% 28 27 1 NO INJURY 643 14.6% 67 16.6% 710 TOTAL 4407 100.0% 404 100.0% 4811

# **Findings**

- 3404 motorcycle passengers were involved in crashes in 2008, in which 9.9% received fatal/severe injuries, 73% received moderate/minor injuries, and 16.6% were not injured. These percentages are very similar to those for motorcycle drivers. There appears to be no significant difference between the injury/fatal frequency of passengers vs. drivers.
- The overwhelming majority of crash-involved passengers (83%) are women, who appear to be somewhat less likely to escape injury in the crash (15%) than are men passengers (23%).

# **Number of Parties Involved in Motorcycle Crashes**

Single-vehicle automobile crashes are often considered to be more strongly related to driver inexperience, immaturity, and risk-taking factors, given that the primary cause of these crashes would seemingly be the drivers themselves, rather than the actions of another party. Although this may also be true for single-vehicle motorcycle crashes, a higher percentage of such crashes for motorcyclists are likely causatively related to weather, environment, and road conditions than is the case for automobile crashes.

# **Findings**

- Single vehicle (motorcyclist only) crashes historically have represented about 50% of all motorcycle crashes each year, and over 50% of all moderate/minor and fatal/severe injury crashes. However, recent trends seem to be changing with only about 43% of 2008 fatal crashes involving another vehicle. Weather, environment, and road conditions, in addition to the usual inexperience, risk-taking, and immaturity factors may influence these high percentages of single-vehicle fatal/injury motorcycle crashes.
- Motorcycle drivers involved in single-vehicle crashes are more likely to have moderate/minor injuries (74%) and less likely to have no injuries (9%) than are motorcycle drivers involved in multiple vehicle crashes (66% and 19%, respectively). Drivers involved in single and multiple vehicle crashes were equally as likely to be fatally or severely injury.

## **Road Size and Locality of Motorcycle Crashes**

Number of roadway lanes, road class (e.g., interstate, U.S. route, local street) and locality (i.e., urban vs. rural) were both associated with crash injury severity level. Table 4.D presents the statistics as a function of the class of road on which the crash occurred.

Table 4.D Motorcycle Drivers by Road Class and Injury

2008											
Road	Fatal	A Injury	B Injury	C Injury	No Injury	Unknown	Total	Perc ent			
Interstate	6	17	83	38	37	2	183	4.2%			
US Route	16	69	341	200	99	3	728	16.8%			
NC Route	21	89	333	180	107	5	735	16.9%			
State Secondary Rte	68	156	714	330	163	2	1433	33.0%			
Local Route	22	84	595	323	201	14	1239	28.6%			
Public Veh Area	0	0	8	1	1	1	11	0.3%			
Other/Unknown	0	0	3	1	4	0	8	0.2%			
Total	133	415	2,077	1,073	612	27	4,337	100.0%			

## **Findings**

- The majority (79%) of all motorcycle crashes, and 80% of all fatal/severe injury crashes, occurs on two-lane roadways.
- Whereas moderate/minor injury crashes were equally likely to occur on roadways with any number of lanes, fatal/severe injury crashes were less likely to occur on 3-lane (17%) and 4-lane (3.8%) roadways and more likely to occur on those with 2-lanes (49.4%).
- About 72% of all fatal crashes occur on state secondary roads and on local streets.

# **Speed Limits and Travel Speed in Motorcycle Crashes**

The motorcycle crashes were analyzed as a function of the roadway speed limit where the crash occurred and the estimated travel speed of the motorcycle prior to impact. Table 4.E presents the percentage of crashes combined as a function of crash injury severity and estimated speed of travel.

# **Findings**

- Not surprisingly, the risk of fatal/severe injury increases linearly as a function of increasing speed limit. In fact, more than 80% of fatal/severe injury crashes occurred at speeds of 40 MPH or higher.
- Moderate/minor injury crashes were the less likely to occur on roadways with 60-65 MPH and 70 MPH roadways, because even more severe injury was likely on these roads.
- Estimated speed of travel was strongly associated with crash injury severity level with higher speeds almost uniformly associated with greater risk of injury.
- Whereas 13% of all motorcyclist crashes occurred at speeds above 60 MPH, 21% of the fatal/severe injury crashes were associated with such speeds.

## Roadway Characteristics, Composition, and Condition in Motorcycle Crashes

To determine the effect of road-related factors, motorcycle crashes were analyzed as a function of the type of road surface (i.e., smooth concrete/asphalt vs. more adverse road surface), condition of road surface (i.e., dry road vs. wet, sandy, icy, etc.), road characteristics (i.e., straight vs. curve or other), and special road features (in particular, work zones, bridges, and railroad crossings).

- The type of road surface (i.e., smooth concrete/asphalt vs. grooved pavement or other more adverse road surface) was not found to be related to crash severity.
- Adverse roadway surface conditions (e.g., water, gravel, or ice) were found to be associated with higher risk for non-injury crashes (20%) and lower risk for fatal/severe injury crashes (11%) than would be expected if roadway surface condition and crash severity were unrelated. This could be associated with lower travel speeds under these conditions. Risk for other injury was the same as for dry/clean roads (69%).
- About 34% of all motorcycle crashes occur on curved roadway segments, though 46% of fatal/severe injury crashes occur on curved segments. Curved segment crashes are more likely to result in fatal/severe injury (23%) than are crashes on straight segments (14%).

- Intersection was the special roadway feature most often associated with motorcycle crashes of all types (24%), but was not related to crash severity. Although crashes at driveway intersections represented only a small percentage of motorcycle crashes (8%), they were somewhat overrepresented in fatal/severe injury crashes (10%).
- Although railroad crossings and bridges are considered to be more treacherous for motorcycles than for automobiles, only small percentages of crashes (0-1%) were found to coincide with these special road features, and neither was related to crash severity.
- Similarly, road work zones are considered to be more dangerous for motorcyclists because of road debris and changes in the road grade associated with such areas, but only very small percentages of motorcyclist crashes were found to occur in work zones across the 3 years (1-2%), and crashes in work zones were not associated with any higher severity level for the motorcyclist.

# **Alcohol and Drug Use in Motorcycle Crashes**

The motorcycle crashes were analyzed as a function of whether alcohol, illegal drugs, or medications were considered to be a factor in the crash by law enforcement. Table 4.F presents the percentage of

Table 4.F Motorcycle Drivers by Age/Injury by DRINTOX 2008

							Alcohol I	nv olved	No Alcohol l	Involved
Age	Fatal	A Injury	B Injury	C Injury	No Injury	Unknown	Totals	Percent	Totals	Percent
>=15	0	0	0	0	0	0	0	0.0%	14	0.3%
16-17	0	0		1		0	1	0.3%	43	1.1%
18-19	2	0	8		1	0	11	3.4%	191	4.7%
20-24	6	6	14	2		0	28	8.7%	675	16.5%
25-29	5	8	24	5	2	0	44	13.6%	477	11.7%
30-39	11	18	41	8	2	1	81	25.1%	816	20.0%
40-49	5	13	57	17	7	1	100	31.0%	857	21.0%
50-59	10	5	24	9	4	0	52	16.1%	702	17.2%
<=60			5	1		0	6	1.9%	323	7.9%
Totals	39	50	173	43	16	2	323	100.0%	4,084	100.0%

crash-involved motorcycle drivers as a function of alcohol/drug use.

- Alcohol use was reportedly involved in 8% of all motorcycle crashes, but 16% of fatal/severe injury crashes.
- Whereas only 13% of crashes not reporting alcohol or illegal drug involvement resulted in fatal/severe injury, 28% of crashes reporting alcohol use resulted in fatal/severe injury.

## Safety Equipment Use and Vehicle Defects in Motorcycle Crashes

The motorcycle crashes were analyzed as a function of helmet usage and vehicle defects identified by law enforcement during the crash investigation

- The percentages of crash-involved motorcyclists wearing helmets was uniformly high (91%) across all years and levels of crash injury severity. However, it is not known to what extent novelty (i.e., non-FMVSS 218 compliant) motorcycle helmets are being worn, or how these are identified and coded by law enforcement officers. It is also not known whether improperly worn helmets (e.g., strap unbuckled) are coded as helmeted or no helmet.
- Probably due to the high helmet usage rate, there was little evidence of a relationship between helmet usage and crash injury severity.
- The most common motorcycle defect associated with the crashes coded by law enforcement officers were tire defects, which were noted for about 2% of the crashes and were somewhat overrepresented (3.5%) in fatal/severe injury crashes.

Table 4.F Motorcycle Crashes by **County Motorcycle Crash Rate** Table 4.G (Top 15 Counties by (Top 15 Counties by crash rate) crash count) 2008 2008 Crash Crash Rate Rate Number Number Per 100 Per 100 of of **County** Crashes **Population County** Crashes **Population** Mecklenburg 70 327 0.038 0.860 Graham Wake 295 0.035 32 0.230 Swain 230 0.073 39 Cumberland **McDowell** 0.163 47 Guilford 166 0.036 0.107 Macon Onslow 155 0.092 11 0.099 Alleghany 130 0.058 30 0.098 Buncombe Transylvania Forsyth 117 0.035 Currituck 23 0.097 New Hanover 113 0.059 Onslow 155 0.092 103 Alexander 33 0.090 Gaston 0.051 95 16 Catawba 0.062 Avery 0.087 92 0.066 9 Randolph Clay 0.087 90 Polk 15 0.079 Rowan 0.066 Iredell 88 0.059 Cherokee 21 0.078 84 Wilkes 50 Durham 0.033 0.074 79 230 Cabarrus 0.048 Cumberland 0.073

# **Findings**

• Although counties Graham, Swain, McDowell and Macon represent lower counts of crashes, they are the four highest ranked by far as compared to the population of each county. Each of these counties are in the mountains with tight, twisty roads popular with many motorcyclists. Graham County contains Highway 129, commonly known as "The Dragon" because of its 318 turns in an eleven mile stretch. Riders as well as sports car enthusiasts ride/drive this road at excessive speeds for the roads, frequently causing crashes due to over riding the curves. Even with increased law enforcement from North Carolina and Tennessee which shares a section of this road, there are still excessive crashes in this area.

## **Summary of Motorcycle Crash Findings**

- The overwhelming majority of motorcycle crashes involve death or injury for the driver. Most crash-involved motorcycle drivers are men between the ages of 20 and 54.
- The typical motorcycle crash occurs between April and October on a Friday, Saturday, or Sunday between 12:00 noon and 7:00 p.m. during clear weather on a rural two-lane state secondary road with a 55 MPH speed limit.
- Single vehicle (motorcyclist only) crashes represent about half of all motorcycle crashes, and over half of all moderate/minor and fatal/severe injury crashes.
- Both higher speed limits and higher speeds of travel were associated with greater risk of injury in the crash to the driver.
- Curved roadway crashes are overrepresented in motorcycle crashes and are associated with greater risk for fatal/severe injury than straight roadways.
- Although railroad crossings, bridges, and highway work zones are considered to be more treacherous for motorcycles than for automobiles, only small percentages of crashes (0-2%) were found to coincide with these special road features, and none were related to severity.
- Rollovers, hitting a fixed object, rear-ending another vehicle, the motorcyclist or another vehicle
  making a left/right turn, and running off the roadway are the most harmful precipitating events of
  motorcycle crashes.
- Fatal/severe injury to the motorcyclist was strongly associated with head-on crashes, hitting a fixed object, left/right turns, and leaving roadways.
- The percentages of crash-involved motorcyclists wearing helmets were uniformly high across all levels of crash injury severity. This does not identify if helmets worn wore of the type that met DOT standards or were the novelty type.
- Over 400 motorcycle passengers were involved in crashes in 2008, many of which are women who are injured or killed as a result.
- The following 20 counties had both an overrepresentation of crashes and severe injury / fatalities: Buncombe, Burke, Catawba, Cumberland, Durham, Forsyth, Graham, Guilford, Hanover, Iredell, Mecklenburg, Onslow, Pitt, Randolph, Wake, Cabarrus, Davidson, Gaston, Johnston, Robeson, and Union. These counties are in the greatest need of motorcycle crash interventions.

### 5. Pedestrian Safety

In 2008 there were 1,716 pedestrian-motor vehicle crashes that were reported to the NC Division of Motor Vehicles.

Although crashes involving pedestrians represent less than 1% of the total reported motor vehicle crashes in North Carolina, pedestrians are highly over-represented in fatal and serious injury crashes. Approximately 17% of the fatal crashes in North Carolina involved pedestrians. On average, 170 (10% of those struck) pedestrians were killed and an additional 354 were seriously injured each year from 2000 to 2002.

Although the number of pedestrian crashes has remained somewhat steady over the last few years, an apparent declining trend in the proportion of disabling (A-type) injuries reported has continued. These changes, which began with the year 2000, and echo those for all crashes, may result at least in part from new reporting practices (perhaps more stringent definition of A-type injuries) instituted with the new crash report form and instruction manual in use beginning with the year 2000. The proportion of reported A-type injuries has dropped from 15% in 2000 to 10% in 2002. The proportions of B type, C type, and no injury crashes have increased proportionally.

Pedestrians should be expected to walk anywhere they are not strictly prohibited and reasonable accommodation for their safety and access should be provided on all roadways. Even on interstates, motorists may have to walk from disabled vehicles, or pedestrians may try to cross busy interstates that pass through urban areas. The tables, figures, and text that follow are intended to illuminate the characteristics of pedestrian crashes and highlight some of the pedestrian safety issues across North Carolina. Some discussion of potential countermeasures is included. Nevertheless, more in depth analyses of particular locations and conditions are required in most cases, before definite countermeasures can be implemented.

# **Temporal Factors**

There are slight year to year fluctuations, but pedestrian crashes in North Carolina are fairly evenly distributed throughout the year each year. The highest proportions occurred during the months of October) followed by September and May for the years 2005 - 2008. The lowest total occurred in February, followed by July for the six years. Other months account for about 8 to 9%.

Pedestrian crashes peak on Friday (17.9%) and Saturday (16.5%), with the lowest proportion occurring on Sunday (10.1%) for the three-year. Thursday also accounts for a slightly higher proportion than other weekdays at 14.7%.

Pedestrian crashes are most likely to occur in the afternoon and early evening between the hours of 2 pm to 6 pm and 6 pm to 10 p.m., with over half of pedestrian crashes occurring during these eight hours. The mid-day period of 10 am to 2 pm accounts for the third highest proportion of crashes. There is no significant year to year variability in these trends.

Temporal factors are doubtlessly related to exposure. For greatest effect, enforcement or other safety measures would be targeted toward afternoon to evening hours, with an emphasis on Fridays and Saturdays (evenings), and, with particular emphasis during the months of September – October, and May. The fall peaks in pedestrian crashes are likely related to back-to-school periods, so special emphasis on enforcement around schools during these time periods could pay off.

#### **Environmental Factors**

About 40% of pedestrian crashes over the last three years have occurred during non-daylight conditions, including dusk and dawn. Most non-daylight crashes occurred under conditions of darkness. Over half of night-time crashes occurred on lighted roadway segments, although almost as many occurred in unlighted areas. The remaining 58% of pedestrian crashes occurred during daylight hours. Trends are fairly consistent across years, but there are slight year-to-year fluctuations.

The vast majority (above 93%) of pedestrian crashes occur under clear or cloudy weather conditions on average no doubt reflecting exposure (fig. 5.D. Year to year variation in the number of crashes occurring under rainy, or other conditions (frozen precipitation, or foggy/smoky, etc.) conditions, is also likely a reflection of exposure to these conditions (e.g., more pedestrian crashes under snowy conditions in years when the state received more snowfall).

While most crashes (55%) occurred during clear or cloudy weather and under daylight conditions, 18% occurred during night-time on lighted roadways (clear or cloudy) and another 15% occurred during night-time on unlighted roadways (clear or cloudy conditions). Countermeasures include adding lights to non-lighted areas where pedestrians may be expected, as well as education about pedestrian conspicuity: wear bright clothing, carry lights at night, walk facing traffic.

#### **Pedestrian Characteristics**

It is difficult to draw any conclusions about the year-to-year fluctuations in crash proportions by age group. The 51 to 60 year group has, however, shown numerical and proportional increases each of the three years while the 26 to 30 year group has shown a decline. These changes may reflect increases in the proportion of the population in this age group, as well as possible changes in exposure (more walking) and/or simply random variation. On average, older teens (16 to 20) and young adults (21 to 25), accounted, however, for greater numbers and proportions of pedestrian crashes than other groups, probably reflecting greater pedestrian mobility among these ages. Beginning with the 41 to 50 year group, the proportion of crash involvement starts declining as age increases.

The proportions of those killed and seriously injured (disabling type injuries) is, however, higher than the overall crash involvement for age groups beginning with the 31 to 40 age group and above. These results probably ensue for the most part, from differences in crash location and types of crashes that different age groups tend to be involved in, and thus discussion of countermeasures will be included in the section on crash type involvement. The results of increasing crash seriousness with increasing age also likely reflect to some extent increasing vulnerability, particularly of the oldest age group.

Males consistently accounted for nearly 2/3 (63%) of the pedestrians reported involved in crashes in each of the 3 years while females were involved in a little over 1/3 or 37% of pedestrian crashes.

Although pedestrian crashes in North Carolina are most likely to involve pedestrians of White racial background (approximately 48%), Blacks are almost as likely to be victims (approximately 40% - Table 5.A). Considering they comprise about 22% of persons living in the State (2000 census data), Blacks are clearly over-represented in pedestrian crashes, and Whites are under-represented based on the population (about 72%). There appears, however, to be a decreasing trend in the proportion of crashes involving black pedestrians, from around 45% in 1998 to about 40% in 2008, while involvement by other groups has increased slightly. Whether these trends reflect changes in exposure (the amount or conditions of walking) or other factors is unknown. Asians and Native Americans each account for less than 2% of the total pedestrian crashes. Since the year 2000, when the state began identifying Hispanics and persons of Asian descent on crash report forms, Hispanics have accounted for about 5 – 7% of the pedestrian crashes each year, and a comparable proportion of the population, 4.7% in 2000.

Table 5.A

# Table of Pedestrian Age by Race 2008

				Native				
Age	White	Black	Hispanic	American	Asian	Other	Unknown	Total
15 and Under	92	143	37	2	2	2	2	280
16 to 20	111	96	12	4	1	1	1	226
21 to 29	159	99	25	6	2	2	3	296
30 to 39	141	84	26	5	1	4	4	265
40 to 49	131	127	12	8	1	4	4	287
50 to 59	104	90	7	3	0	1	2	207
Over 60	86	52	5	1	3	3	6	156
Total	824	691	124	29	9	17	22	1716

The investigating officer indicated alcohol use by about 16% of the pedestrians struck by motor vehicles over this period with the proportion apparently declining from around 13% in 2000 to 7% in 2005 but rising to 16% again in 2008. (Table 5.B). Indicated use does not necessarily imply that the pedestrian was intoxicated at the time of the crash, only that alcohol use was detected.

Table 5.B Pedestrian by Age by DRINTOX 2008

	Alcohol	Involved	No	Alcohol	
Age	Number	Percent	Number	Percent	Total
15 and under	2	0.71%	278	99.29%	280
16 to 20	20	8.85%	206	91.15%	226
21 to 29	60	20.27%	236	79.73%	296
30 to 39	51	19.25%	214	80.75%	265
40 to 49	84	29.27%	203	70.73%	287
50 to 59	53	25.60%	154	74.40%	207
60 and above	6	3.85%	150	96.15%	156
Total	276	16.08%	1440	83.92%	1716

Driver use of alcohol was detected in an average of 4% of the drivers involved in collisions with pedestrians over the period. This rate is slightly lower than alcohol detection reported for crashes overall over the same period (5.7%).

## Roadway and Location Characteristics of Pedestrian Crashes

Although rural crashes accounted for about 47% of crashes in 2006 (and 47% of all injuries), they tend to be more serious, comprising 44% of the A type (disabling) injuries and 72% of those killed in pedestrian crashes.

Crash severity also tends to vary by roadway classification, as might be expected (Table 5.C).

Table 5.C Pedestrian Injury by Road class 2008

Road class	Fatal	Injury	PDO	Unknown	Total
Interstate	12	40	1	1	54
US	43	140	5	2	190
NC	26	122	5	1	154
SSR	39	253	11	1	304
Local Street	36	867	16	11	930
Private road/drive	0	33	0	1	34
PVA	1	13	0	0	14
Unknown	1	2	0	0	3
Total	158	1470	38	17	1683

The majority of reported pedestrian roadway crashes occurred on two-lane roads, while approximately 28% occurred on roadways with four or more through travel lanes. There are year-to-year fluctuations in most categories, but an apparent increasing trend in the number of pedestrian crashes on single-lane roads (avg. of 5%), and a slight downward trend in the proportion occurring on three-lane roadways (data not shown). These changes may reflect changes in the extent of roadways in operation with these numbers of lanes, extent of walking on such roadways, or other factors.

When typing crashes, reviewers coded on average, approximately one-fourth of pedestrian crashes for the three years as having occurred at intersections, slightly less than ½ occurred at non-intersection roadway locations, with the remainder (29%) occurring at non-roadway locations. These proportions vary considerably by rural and urban location, with 64% of rural crashes occurring at non-intersection locations compared to 38% of urban crashes. Only 11% of rural crashes occurred at intersections, while 31% of urban crashes took place at intersections.

Understanding the location characteristics of crashes (both numbers and severity) can help in determining where to direct resources and countermeasures. Additional information by county will also be provided below. The types of countermeasures that may be implemented depend, however, on the types of crashes occurring at urban / rural locations, by roadway type, intersection versus non-intersection, as well as other location variables. These characteristics are discussed below.

#### **Counties**

Obviously, the more urbanized areas tend to account for the highest numbers and percentages of crashes in the state. The ten counties that account for the highest percentages of pedestrian-motor vehicle crashes for the year 2008 were:

Table 5.D Top Ten Pedestrian Involved
Crash Counties 2008

	Pedestrian	Percent of
County	Crashes	Total
MECKLENBURG	274	15.97%
WAKE	166	9.67%
CUMBERLAND	95	5.54%
GUILFORD	86	5.01%
DURHAM	81	4.72%
NEW HANOVER	54	3.15%
FORSYTH	45	2.62%
BUNCOMBE	36	2.10%
GASTON	36	2.10%
ONSLOW	35	2.04%
Total		52.91%

The ten highest crash counties accounted for 52.9% of NC's reported pedestrian / motor-vehicle crashes.

## **Summary of Findings**

While pedestrian crash rates may seem low compared with overall crash rates, the high proportions of fatalities and serious injuries and the need to provide a safe and encouraging environment for pedestrians on the roadways warrants a serious effort to address pedestrian safety on the state's roadways. While more crashes occurred in urbanized areas, rural crashes tend to be particularly serious, with nearly 28% of those hit in rural areas killed or seriously injured.

Crashes typically occur during daylight hours (58%) but nighttime crashes are probably over-represented. We have, however, no exposure data to test this hypothesis. Crashes also occurred the majority of the time during clear or cloudy weather, also no doubt reflecting the greater amounts of walking / exposure that occur under these conditions.

The most frequent crash type involves Pedestrian failure to yield. It should be pointed out, however, that this crash type does not necessarily imply fault. For example, a pedestrian may detect a gap at a mid-block area and begin crossing, but a speeding motorist closes the gap sooner than expected and strikes the pedestrian. While the pedestrian may not have been visible, and strictly speaking, may not have had the right-of-way, the motorist was clearly at fault under these circumstances by speeding, and failing to slow and avoid the crash.

Actual speed has not been directly addressed to this point, due to the difficulty in obtaining meaningful speed data from the limited number of pedestrian crash reports. The evidence, based on national data suggests that speeding is a contributing factor in 31% of crashes of all types, nationally, and in 38% in NC. Lowering travel speeds may therefore help prevent crashes and reduce the occurrence of pedestrians being struck. Additionally, a widely cited study found that when a crash does occur, the chance of death increases dramatically as speed of the vehicle involved increases. The chance of death is 5% at 20 mph, increasing to a 45% chance at 30 mph, and an 85% chance of death, if the vehicle is traveling at 40 mph.

The NC data included in this report, including the greater seriousness of crashes in rural areas, the higher proportions killed and seriously injured on 50 mph and above roadways, and on interstate, NC, and US highways, where speeds are significantly higher than in urban areas and on local streets, also suggest that speed has a serious effect on pedestrian crash outcomes, given that a crash occurs. Thus, addressing the problem of speeding statewide is a key to improving pedestrian safety as well as the safety of all road users.

Pedestrian Dart / dash crashes which typically (but not always) involve children, and occur mid-block on local streets is another crash type that warrants attention through calming these streets. Walking along roadway crashes occur most often at night on unlit roadways where sidewalks are lacking and occur in greater proportion and number in rural areas than urban. Other high frequency crash types include unusual circumstance, unusual pedestrian, and unusual vehicle type crashes. While these may not seem to lend themselves to intervention, they illustrate that pedestrians are likely to be found in a variety of places and circumstances doing a variety of things. Virtually everyone becomes a pedestrian at some time and under some circumstances. Therefore, pedestrian safety improvements to the states roadways are warranted to protect all users, many of whom may not be readily apparent as pedestrians.

Providing space for pedestrians, facilities to assist safe crossing of busy roadways, calming neighborhood streets, and instituting appropriate speed limits and ensuring that motorists comply with them either through enforcement or engineering countermeasures, will help provide protection for pedestrians and enhance the quality of life throughout the state. Pedestrians should not feel unable to move about due to barriers of high-speed, and increasingly high-volume roadways with no place to safely walk.

# 6. Bicyclist Safety

More than 700 bicyclist-motor vehicle crashes have been reported to the NC Division of Motor Vehicles during each of the years 2003 and 2004 (773 and 818 crashes, respectively). This number jumped to 757 in 2007 and increased slightly to 774 in 2008.

Although crashes involving bicyclists represent less than ½% of the total reported motor vehicle crashes in North Carolina, bicyclists are over-represented in fatal and serious injury crashes. Approximately 1% of the fatal crashes in North Carolina involved bicyclists.

On average, 33 bicyclists were killed and an additional 67 were seriously injured each year between 2003 and 2005. Fortunately most bicyclist crashes do not result in serious or fatal injuries, with about 93% in 2008 resulting in injuries and about 4% resulting in a fatality.

The number of bicyclist crashes has fluctuated over the past three years, but no obvious trend is apparent over this time period. Over a longer period, crashes appeared to be declining in North Carolina until 2006 with the downward trend ending in 2007. This trend may be a result of decreasing exposure, particularly among children. The proportion of disabling (A-type) injuries has not declined as consistently as A-type injuries in other categories. This general downward trend in A-type injuries, which began with a significant decrease from 1999 to 2000, and echo those for all crashes, may result at least in part from new reporting practices (perhaps more stringent definition of A-type injuries) instituted with the new crash report form and instruction manual in use beginning with the year 2000. The proportions of B type (evident) and C type (possible) injuries have remained relatively constant. The proportion of no injury crashes have increased from 5.3 to 11.3% over this time period.

Bicyclists should be expected to ride anywhere they are not strictly prohibited and reasonable accommodation for their safety and access should be provided on all roadways. An increasing emphasis on health and physical activity and improving multi-modal access to roadways warrants consideration of bicyclists whenever new roadways are developed or old ones improved. The tables, figures, and text that follow are intended to illuminate the characteristics of bicyclist crashes and highlight some of the bicycle safety issues across North Carolina.

## **Temporal Factors**

Crashes involving bicyclists vary seasonally with the highest levels during the spring and summer months, and the lowest percentages during late fall and winter months. These trends no doubt reflect seasonal riding trends. The peak months are July and August at approximately 12%, followed closely by May, June and September. December and January are the lowest crash months.

Bicyclist crashes peak on Friday (16.3%) and Saturday (15.2%), with the lowest proportion occurring on Sunday (11.3%). Other weekdays account for about 14 to 15% of crashes, with Monday being slightly lower (13.9%).

Forty percent of bicycle – motor vehicle crashes occurred in the afternoon hours of 2 pm to 6 pm over this two year period. Twenty-six percent of crashes occurred during early evening between 6 pm to 10 pm, followed by 20% around midday. Slight year to year fluctuations in these proportions may reflect differences in exposure due to weather and other factors.

Temporal factors are doubtlessly related to exposure or when bicyclists ride most.

#### **Environmental Factors**

The vast majority of crashes occur under daylight conditions. Three-fourths of bicycle crashes with motor vehicles occurred under daylight conditions. Eighteen percent occurred at night, with10% on lighted roadway segments and 8% on unlighted. There was a drop from 15 crashes (about 2%) to 2 crashes (0.2%) that occurred during early morning (dawn) hours from 2000 to 2002 and slight year-to-year increases in crashes at nighttime (on both lighted and unlighted roadways). These results may be due to random variation or may reflect exposure differences – more or less riding under those conditions.

The vast majority of bicyclist crashes occurred under dry weather conditions (clear or cloudy) on average no doubt reflecting exposure. Only 3% occurred during rain and less than 1% occurred under all other conditions (freezing precipitation, fog/smog/smoke, and other). Slight year to year fluctuations in the number of crashes occurring under rainy and other conditions, is also likely a reflection of exposure to these conditions (e.g., more bicyclist crashes under rainy conditions in years when the state received more rainfall).

While most crashes occurred during clear or cloudy weather and under daylight conditions, 17% occurred during nighttime on lighted or unlighted roadways (clear or cloudy conditions). Most bicyclists apparently try to avoid riding during rain or other precipitation with only about 1½% of crashes occurring during rain in daylight hours and slight more than 1% occurring during rain at night, dusk or dawn. The highest proportions of nighttime crashes occur during the fall months of September to November, with the lowest proportion occurring during winter months. Countermeasures for night-time crashes include adding lights to non-lighted areas where bicyclists may be expected, as well as education about bicyclist conspicuity: wear bright clothing, and use lights at night, and perhaps including reminders of decreasing day length as fall approaches in safety publications.

# **Bicyclist Characteristics**

It is difficult to draw firm conclusions about the year-to-year fluctuations in crash proportions by age group (Table 6.B). There seems, however, to be an increasing trend across the board within all age groups. Whether these trends will be sustained or are due to more than random variation is unknown; we do not have information about the amount of riding or exposure that goes on in the state or among different age groups. There are, however, some suggestions that child bicycling may be decreasing while that among adults may be increasing.

Table 6.B Pedalcyclists Age by Crash Year

Age Group	2003	2004	2005	2006	2007	2008	Total
15 and under	250	267	220	174	186	174	911
Age 16-20	105	102	66	89	122	96	273
Age 21-29	111	111	71	51	90	111	293
Age 30-39	109	116	192	93	113	92	604
Age 40-49	119	130	72	106	116	145	417
Age 50-59	44	50	30	63	92	94	124
60+ or unknown	35	42	25	37	38	62	102
Total	773	818	675	613	757	774	2723

It is also difficult to draw firm conclusions about relationship of seriousness of bicyclist injuries to age. There is, however, apparently over-involvement of children 6 to 10 and young teens 11 to 15 in serious (type A) injury crashes, although not in fatal crashes. Adults twenty-five and up seem, however to be over-involved in crashes resulting in fatal injuries, particularly the 50 to 59 year group. These results may result primarily from differences in crash location and types of crashes that different age groups tend to be involved in, rates of helmet wearing by different age groups, and other factors. The apparent results of increasing crash seriousness with increasing age may also likely reflect to some extent, increasing vulnerability with age, particularly of the oldest age group.

Males consistently accounted for the vast majority (85%) of bicyclists involved in crashes with motor vehicles. These results are consistent with national data.

Although bicycle crashes in North Carolina are most likely to involve bicyclists of White racial background (48% on average), Blacks are involved in almost as many crashes (approximately 43% - Table 6.C). Considering they comprise about 22% of persons living in the State (2000 census data), Blacks are clearly over-represented in bicycle crashes, and Whites are under-represented based on the population (about 72%). There has been a slight decrease in the proportion of crashes involving black bicyclists, from around 44% in 2003 to about 42% in 2006. Asians and Native Americans account for less than ½% and about 1½%, respectively of the total bicyclist crashes.

Since the year 2000, when the state began identifying Hispanics and persons of Asian descent on crash report forms, Hispanics have accounted for about 1 –6% of the bicyclist crashes each year, and a comparable proportion of the population, 4.7% (in 2000).

Table 6.C Pedacyclists by Race by Year

Race	2003	2004	2005	2006	2007	2008
White	364	400	371	331	403	432
Black	345	364	337	280	287	274
Hispanic	11	17	45	30	43	43
Native	31	28	13	12	8	12
Asian	9	1	5	7	9	8
Other	7	1	3	2	4	2
Unknown	9	7	14	5	3	3
Total	776	818	788	667	757	774

Reported helmet use for bicyclists involved in crashes is extremely low, <2% on average. These data are not, however, considered to be extremely reliable since often an injured bicyclist is transported from the crash scene prior to the reporting officer's arrival. Nevertheless we know from a 2002 statewide observational helmet use survey that bicycle helmet use is unacceptably low. Over all ages, helmet use was estimated to be 24% among those riding on streets. Observed use for those 15 and under was, however, only 16%. Use was lowest in the coastal plain region, followed by the Piedmont region, and highest in the mountain region. It is possible that those involved in crashes use helmets at a lower rate than overall.

The investigating officer indicated alcohol use by only about 1% of the bicyclists involved in collisions with motor vehicles over a 5 year period. Indicated use does not necessarily imply that the bicyclist was intoxicated at the time of the crash, only that alcohol use was detected.

Driver use of alcohol was detected for an average of 2% of the drivers involved in collisions with bicyclists over the three year period. This rate is lower than alcohol detection reported for crashes overall over the same period (5.7%).

## Roadway and Location Characteristics of Bicyclist Crashes

Although approximately 39% of bicyclist crashes occurred at rural locations last year, they are more serious, more often than urban crashes.

In 2003 and 2004, above 55%, on average, of bicycle – motor vehicle crashes occurred on local streets, likely reflecting more riding in urbanized areas and in neighborhoods. This trend continued in 2008 with 60% of the crashes occurring on local streets. (Table 6.D) There were year-to-year fluctuations, but no obvious trends over time. Nearly 20% of bicycle crashes occurred along state secondary routes (which include the former categories Rural Paved and Rural Unpaved) between 2003 and 2005. Around 6 - 7% occurred on US Routes and NC Routes between 2003 and 2005 but increase to 20% in 2008.

Crash severity also tends to vary by roadway classification, as might be expected, with higher proportions of struck bicyclists being killed on state secondary routes and local streets.

The majority of reported bicyclist roadway crashes occurred on two-lane roads and local streets, while approximately 21% occurred on roadways with four or more through travel lanes (fig. 6.D). These trends were largely consistent from year-to-year

Understanding the location characteristics of crashes (both numbers and severity) can help in determining where to direct resources and countermeasures. Additional information by county will also be provided below

Table 6.D	Bicycle Injury by Road class 2008
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Road class	Fatal	Injury	PDO	Total
Interstate	0	1	0	1
US	5	64	1	72
NC	6	77	3	86
SSR	9	134	2	145
<b>Local Street</b>	10	423	12	448
Private road/drive	0	8	0	8
PVA	0	2	0	3
Total	30	709	18	763

## **Crash Types**

As with pedestrian crashes, the development of effective countermeasures to help prevent bicyclist crashes is aided by an understanding of events leading up to a crash and contributing factors. Analysis of the data from state crash report forms that are stored in electronic databases can provide information on where bicyclist-motor vehicle crashes occur (city street, two-lane roadway, intersection location, etc.), when they occur (time of day, day of week, etc.), and to whom they occur (age of victim, gender, level of impairment, etc.), but can provide very little information about the actual sequence of events leading to the crash.

Each identified crash type is defined by a specific sequence of events, and each has precipitating actions, predisposing factors, characteristic locations, and sometimes characteristic populations, that can be targeted for interventions.

Factors that may contribute to bicycle crashes with motor vehicles include the position and direction the bicyclist is riding. As vehicles, bicyclists should travel in the direction of other vehicular traffic. Motorists do not expect bicyclists to be approaching from the right, nor do they expect them on the sidewalk

- Thirty-three percent of those involved in crashes with motor vehicles, and for whom this information was relevant (i.e., they were not on PVAs, driveways, trails, or other off-road areas) were riding facing traffic.
- 8% were riding on the sidewalk.
- And when bicyclists involved in crashes were reported to be riding on the sidewalk, in more than <sup>3</sup>/<sub>4</sub> of the occasions they were also riding against the direction of traffic (fig. 6.10).
- When riding on the street in either a shared lane or bike lane or shoulder, bicyclists involved in crashes with motor vehicles were riding against traffic 24% and 31% of the time, respectively.
- Adults were about equally as likely as children to be riding facing traffic.

Over the most recent three years of data, the five crash groups responsible for the highest proportions of crashes in NC (not including "Other" which includes a variety of crash types) were the following types:

•	Sign-controlled intersection	- 19.8%
•	Bicyclist turn / merge	- 13.5%
•	Bicyclist ride-out - mid-block	- 11.8%
•	Motorist overtaking	- 11.7%
•	Motorist turn / merge	- 9.8%

• The above five groups accounted for two-thirds of the bicycle – motor-vehicle crashes in NC.

### **Counties**

From 2003 through 2005 the ten highest crash rate counties accounted for only 19% of the states bicycle crashes. In 2008, the eight highest crash rate counties accounted for 53% of the states bicycle crashes. This would tend to indicate that bicycling is becoming more popular in the urban areas. This is something that will need to be watched in future data collections.

 Table 6.F
 Pedacylist by County by Year

Table		1 cuacy				
County	2003	2004	2005	2006	2007	2008
Alamance	5	14	9	14	10	2
Alexander	0	2	0	0	0	0
Alleghany	0	0	0	0	0	0
Anson	4	1	2	0	2	1
Ashe	0	0	0	1	1	1
Avery	0	0	0	0	0	1
Beaufort	6	12	14	7	5	1
Bertie	0	2	1	0	2	1
Bladen	2	3	4	0	0	0
Brunswick	6	8	7	4	7	9
Buncombe	22	14	30	21	29	30
Burke	4	0	5	3	5	3
Cabarrus	12	2	18	6	9	13
Caldwell	2	5	2	4	5	5
Camden	1	0	2	0	1	1
Carteret	5	8	11	12	15	15
Caswell	0	2	3	0	2	2
Catawba	10	8	20	8	13	7
Chatham	5	3	2	2	3	8
Cherokee	0	1	0	1	0	1
Chowan	0	1	3	1	0	0
Clay	0	0	0	1	1	0
Cleveland	4	4	10	3	4	6
Columbus	8	3	7	4	3	5
Craven	6	15	15	6	5	9
Cumberland	38	35	41	27	28	34
Currituck	0	5	4	1	2	1
Dare	19	9	19	7	14	6
Davidson	8	7	14	5	8	7
Davie	0	1	2	2	2	1
Duplin	3	5	2	4	5	3
Durham	21	20	42	23	35	30
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County	2003	2004	2005	2006	2007	2008
Edgecombe	14	9	16	11	9	8
Forsyth	20	34	34	20	19	13
Franklin	4	3	2	1	1	1
Gaston	14	29	25	11	14	15
Gates	2	1	0	0	0	1
Graham	0	1	1	0	1	0
Granville	3	4	3	2	3	2
Greene	1	1	0	2	0	0
Guilford	51	63	105	68	67	72
Halifax	7	9	4	2	7	7
Harnett	8	9	9	9	3	2
Haywood	4	0	3	1	2	2
Henderson	5	8	5	1	3	3
Hertford	3	4	1	2	2	1
Hoke	0	4	4	0	4	1
Hyde	1	1	1	2	2	2
Iredell	14	12	19	7	10	13
Jackson	0	0	0	1	1	1
Johnston	9	9	18	11	13	15
Jones	0	1	1	1	2	0
Lee	4	6	7	4	2	5
Lenoir	12	9	14	7	10	11
Lincoln	1	1	1	1	3	1
Macon	0	0	0	3	1	0
Madison	2	0	0	0	1	1
Martin	3	2	6	1	2	1
McDowell	2	0	1	1	3	1
Mecklenburg	66	91	123	83	83	92
Mitchell	0	0	1	0	0	0
Montgomery	0	3	1	1	2	1
Moore	0	1	9	5	6	7
Nash	11	6	23	7	9	9
New Hanover	50	37	70	25	35	47
Northampton	1	2	0	1	1	1

County	2003	2004	2005	2006	2007	2008
Onslow	16	23	24	14	12	14
Orange	16	15	45	17	13	21
Pamlico	0	1	0	1	2	3
Pasquotank	8	4	5	0	7	7
Pender	1	2	5	0	2	4
Perquimans	2	0	0	1	0	0
Person	0	1	2	0	1	2
Pitt	24	25	8	6	10	7
Polk	0	0	0	0	1	1
Randolph	13	6	4	11	5	6
Richmond	6	7	5	2	3	6
Robeson	20	21	40	22	12	15
Rockingham	8	5	9	7	5	2
Rowan	14	7	10	8	10	12
Rutherford	2	2	5	2	0	4
Sampson	4	5	5	1	0	4
Scotland	9	11	13	2	1	0
Stanly	6	4	5	0	2	1
Stokes	2	0	2	3	0	0
Surry	1	4	6	5	2	0
Swain	0	0	3	0	0	0
Transylvania	0	2	1	0	2	0
Tyrrell	0	0	0	0	1	0
Union	13	6	15	5	7	6
Vance	0	1	3	1	2	3
Wake	69	77	113	79	84	87
Warren	0	0	2	0	0	0
Washington	1	3	4	0	2	1
Watauga	6	3	4	0	4	5
Wayne	15	11	18	10	8	15
Wilkes	2	3	2	1	1	1
Wilson	13	19	20	10	20	8
Yadkin	2	0	0	0	1	0
Yancey	0	0	0	1	0	0
State Total	776	818	1174	667	757	774

## **Summary of Findings**

As with pedestrian crashes, bicycle – motor vehicle crashes are a low percentage of overall crashes. But when collisions between bikes and motor vehicles occur, they are often serious with 2.7% of those struck being killed and another 94.8% being injured. More crashes occur in urbanized areas and on local streets, but rural crashes tend to be more serious, likely because more occur on higher speed roadways, predominantly state secondary roads.

When motorists drove out into the path of a bicyclist, the cyclist was most often traveling against the direction of traffic. Wrong-way riding was also implicated in Signal-controlled intersection crashes as well as Motorist drive-out – mid-block crashes. All of these crash types occur most often in urban areas. Sidewalk riding is particularly over-represented in Signal-controlled intersection crashes as well as Motorist turn / merge crashes.

Reducing crashes involving crossing paths and turning vehicles is a challenge. Obviously, reducing sidewalk riding and wrong-way riding should help to reduce certain crash types, particularly those involving motorists pulling out to turn right at intersections or mid-block locations. Calming intersections by tightening turn radii, enhancing intersection markings, and other measures may help to reduce turning vehicle crashes. Replacing traditional intersections with low-speed roundabouts or minitraffic circles could help to reduce the frequency and severity of intersection crashes with bicycles by forcing slow speeds through intersections and reducing the overall number of conflict points. Consideration must be given, however, to the best way to accommodate bicycles through a traffic circle – particularly if multiple lanes are involved.

Children were most often involved in mid-block ride out crashes, also more typically occurring in urban areas, but proportional to the overall urban crash rate. Calming speeds on local streets is one recommended countermeasure for this crash problem.

Crashes that occurred in a greater proportion in rural areas than urban, include Motorist overtaking crashes, and Bicyclist turn/merge crashes (about 61% each). Adults were over-represented in the former and youth, 11-15 were over-represented in the latter. Many of the bicyclists turn / merge crashes involving young riders crashes seem to involve the bicyclist changing lanes to avoid an overtaking vehicle. In particular, narrow, high speed roadways in rural areas need improvements to help bicyclists. Providing space on the roadway for bicyclists through adding paved shoulders, and in urban areas, through bike lanes or wide outside lanes, and educating motorists and bicyclists about traffic rules, proper passing, and sharing the road are countermeasures for these two problems. Lower speeds would also help, since rapidly overtaking motor vehicles may have insufficient time to slow to wait for an appropriate gap to pass. Lower speeds also would assist bicyclists that have legitimate need to change lanes or turn, to merge with traffic.

Reducing speeds would help all crash types, since lower speeds help motorists to avoid crashes and also reduces the seriousness if a crash does occur. Lower speeds would help to create, not only a safer bicycling environment, but a more welcoming one.

Although ideally, most bicycle crashes would be prevented through implementation of appropriate countermeasures, when a crash does occur, a properly used safety helmet provides the best protection from serious and fatal injuries. Helmet use is very low in NC, only 24% over all, and even lower among children and the 11 to 15 year group most involved in crashes. Efforts to strengthen support of the statewide helmet law, and promote greater helmet use are therefore strongly recommended.

As public health agencies are increasingly advocating for more active forms of transportation, i.e. bicycling and walking, demand for safe multi-modal roadways will increase over the coming years. Adult bicycling already seems to be on the rise. Providing for the needs of bicyclists and pedestrians on the states roadways should be a key priority over the next period of road-building and improvements.

### 7. Older Driver Safety

### Introduction

Over 42,000 drivers age 60 or older were reported to have been involved in reported crashes in North Carolina in 2006. This number includes a large number of drivers age 75 or older. Older adults are of particular interest because:

- 1) Their numbers are increasing, and can be expected to continue to increase over the next 30+ years. Whereas the overall North Carolina population is projected to increase 46% by 2030, the age 60+ population will more than double, from just over 1 million to 2.2 million persons age 60+.
- 2) Declining functional abilities and health in older adults contribute to increased crash rates per mile driven. Only 16-19-year-old drivers have higher overall crash rates than do drivers age 80+.
- 3) Once in a crash, older adults are much more vulnerable to injury. Despite their generally lower speeds and less severe crashes, older adults are 4 to 6 times more likely to die as a result of their crash.

This section highlights characteristics of older driver crashes in North Carolina and identifies potential approaches for improving the safety of this vulnerable population.

#### **Older Drivers Involved in Crashes**

On average over the past year, 11.6% of crash-involved drivers in North Carolina were age 60 or older (see Table 7.A). This is pretty much in line with their 11.9% representation in the overall population.

Information on the injury status of drivers involved in crashes is shown in Table 7.A. In 2008 we find that the 60 and over age group accounts for only 10-12% of the injuries and PDO crashes but is overrepresented in the fatal category at 21.8%. These percentages have fluctuated across crash years, due to the relative rarity of severe and fatal injuries, coupled with the relatively small numbers of crash-involved drivers in the oldest age categories.

Table 7.A	Age Group by Injury Level 2008
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Age Group	Fatal	Col %	A	Col %	В+С	Col %	PDO	Col %	Unknown	Col %	Total	Col %
24 or less	225	22.2%	726	29.1%	21868	28.0%	76219	27.2%	1204	27.8%	100242	27.4%
25 - 39	270	26.6%	756	30.3%	24249	31.1%	88012	31.4%	1450	33.4%	114737	31.3%
40 - 59	299	29.5%	761	30.5%	23185	29.7%	83126	29.7%	1164	26.8%	108535	29.6%
60 and above	221	21.8%	253	10.1%	8711	11.2%	32904	11.7%	510	11.8%	42599	11.6%
Unknown							1	0.0%	8	0.2%	9	0.0%
Total	1015	100.0%	2496	100.0%	78013	100.0%	280262	100.0%	4336	100.0%	366122	100.0%

## **Summary of Findings**

- The number of crash-involved older drivers has shown only modest increases over the past 3 years. ("Baby boomers" have not yet entered the ranks of older drivers.)
- Once involved in a crash, older drivers are more likely than their younger counterparts to be severely injured or killed.
- Although drivers ages 60+ make up only 7.5% of the crash-involved driver population, they comprise 21.8% of fatally-injured drivers.

### **Temporal Characteristics of Older Driver Crashes**

Three out of four crashes involving older drivers occurred between the hours of 10:00 a.m. and 6:00 p.m., and older drivers were especially overrepresented in crashes between 10:00 a.m. and 2:00 p.m. Very few, only about two percent, occurred at nighttime after 10:00 p.m. Again, these findings reflect the times when older adults are most likely to be on the road driving. As drivers age, this pattern of midday crashes becomes even more pronounced.

Older driver crashes are also more likely to occur on weekdays, although here the differences are relatively small. Overall in North Carolina, 78% of crashes occurred on weekdays (Monday – Friday) and 22% on weekends (Saturday or Sunday). For drivers ages 65+, 81% occurred on weekdays and 19% on weekends.

## **Summary of Findings**

• Not surprisingly, older drivers tend to be involved in crashes during midday hours and on weekdays, reflecting the times they are most likely to be driving.

# Roadway and Location Characteristics of Older Driver Crashes

Overall, 62% of North Carolina crashes occur in the state's more highly populated Piedmont counties, 26% in its eastern coastal counties, and only 12% in its western mountain region counties. However, the western part of the state is home to a disproportionate number of older adults, and this is reflected in their crash data. With increasing age, the percentage of crashes occurring in the Mountain region counties increases, while the percentage occurring in the Piedmont counties declines. For drivers ages 85+, nearly one in five crashes (19%) are in the western Mountain region of the state.

Although older adults are under represented in crashes in the more urban Piedmont counties, their crashes are about equally likely to occur in urban areas, and increasingly so with age. Again, this likely reflects their greater exposure to potential crashes in urban driving environments and on urban roadways.

As drivers age, they are much less likely to be involved in crashes on Interstate and Secondary State Roads. Conversely, they are more likely to be involved in crashes on U.S. Route roadways and on local streets. Their crashes are also somewhat more likely to occur on private roadways, in parking lots, and so forth, especially for the oldest drivers.

Information with respect to the speed limits on roads mimics that of road type, with older drivers less likely to be involved in crashes on higher speed roadways, and more likely to be involved in crashes on lower speed roadways of 35 mph or less.

The crashes of older drivers are also much more likely than those of younger drivers to occur at intersections and especially those involving stop sign controls.

# **Summary of Findings**

- Nearly one in five drivers killed in crashes in the western Mountain region of the state is age 65+. As the North Carolina population ages, this proportion will rise, not only in western North Carolina but in all parts of the State.
- For the most part, older driver crashes tend to mimic the locations and situations where older adults drive, (i.e., on shorter trips, lower speed roadways, about town, during the daytime, under favorable weather conditions, etc.). Without more detailed driving exposure data, however, it is not possible to identify what driving situations pose the greatest risk for older drivers. For example, without knowing how many miles older adults drive on interstate roadways or at nighttime, it is not known whether these situations pose greater risk to their safety.

# Maneuvers, Contributing Factors, and Physical Conditions in Older Driver Crashes

The majority of all drivers (57%) are going straight ahead when they crash. Older drivers, however, are less likely to be going straight ahead and much more likely to be making a left turn. In fact, older drivers are nearly twice as likely as younger drivers to be engaged in a left turn maneuver at the time of their crash. Other types of maneuvers where older drivers are overrepresented include right turns, changing lanes, and starting in the roadway (e.g., when starting up at a green light).

Like the youngest drivers, older drivers are more likely to be cited for one or more contributing factors to their crash. At least by this measure, middle-aged drivers, ages 45-64, are the "safest" drivers on the road. Moreover, the likelihood of contributing to their crash increases with age. Nearly four out of five crash-involved drivers age 85 or above were cited for some contributing factor to their crash.

Based on the first contributing factor noted when more than one factor is cited, failure to reduce speed is the most frequently cited contributing factor, but is most prominent for drivers in the younger two age categories. For older adults, by far the most commonly cited contributing factor is failure to yield. While only cited for 17.6% of drivers overall, it is cited for 31% of drivers ages 65-74, increasing to 41% for drivers ages 85+. Other contributing factors that are over represented among older drivers include improper turning, disregard of traffic signal, and disregard of stop or yield signs (primarily the former). In contrast, older drivers are less likely to be cited for speeding, careless/aggressive driving, alcohol or drug use, or following too closely.

A final "crash characteristic" factor examined is the driver's physical condition at the time of the crash. Although in reality a driver variable, this variable can provide insight into potential causative factors in crashes. Although the vast majority of older drivers are identified as being in a "normal" physical condition at the time of their crash, they are more likely to be impaired by a medical condition or by some other physical impairment. Interestingly, even though older adults are much greater consumers of medications, medication use does not appear in these data to be a factor in their crashes.

### **Summary of Findings**

- Drivers ages 65+ are more likely to crash while making a left turn, and the crash risk increases along with their age.
- Older drivers are more likely to be cited for contributing to their crash, with the most commonly cited contributing factor being failure to yield to other traffic.

### **Conclusions**

In terms of number of crashes, older adults do not yet represent a significant safety problem in North Carolina. However, this situation will change over the next decade as the large swell of baby boomers hits retirement age. Based on population growth alone, older driver crashes will more than double over the next 25 years. Older adults are by far the fastest growing segment of the North Carolina population.

If one is concerned about reducing traffic fatalities, older drivers already demand attention. The data analysis showed that while older adults represent 7.5% of all crash-involved drivers, they represent 15% of drivers killed in crashes. They also represent about 15% of pedestrians killed in crashes.

To reduce these numbers, most safety experts recommend a comprehensive approach that includes improvements to the driving environment (e.g., roadway markings, signage, traffic control, etc.), driver licensing practices (e.g., increased screening and licensing restrictions based on driver functional abilities), driver training and rehabilitation (e.g., driver refresher courses, adaptive vehicle equipment), increased public awareness, improved vehicle design, and greater access to alternative modes of transportation. Many excellent materials and resources exist.

## 8. Speed-Related Crashes

Driver speed is a function of several factors, e.g., posted speed limits, alignment, lane and shoulder width, design speed, land use, surrounding land use, traffic volumes, percentage of trucks in the traffic stream, weather, time of day, enforcement, visibility, vehicle operating characteristics, and driver factors such as risk taking behavior. Despite several studies that have attempted to establish relationships between driver speed and crash rates, the results are not consistent. Although there is some evidence to indicate that, on a given road segment, crash involvement rates of individual vehicles rise with their speed of travel, it is not clear if across all roads crash involvement rates rise with the average speed of traffic, i.e., we cannot assume that roads with higher average traffic speeds have higher crash rates than roads with lower average traffic speeds. Many have argued that there is a relationship between crash involvement rates and deviation from average speed. Speed is however directly related to the severity of a crash.

In North Carolina, for each driver involved in a crash, the investigating officer can indicate a maximum of three contributing circumstances. These contributing factors are intended to provide information on driver actions that probably lead to their involvement in the crash. These contributing factors are not necessarily listed in any particular order, i.e., it is not necessarily that the first contributing factor was the most critical. There are 31 possible driver contributing factors, and three of these relate to speed: exceeding the posted speed limit, driving too fast for conditions, and failure to reduce speed. It is important to note that it is very difficult to get an objective measure of the true crash speeds of crash-involved vehicles. Numbers are typically based on estimates by the investigating officer and/or self-reports by the driver.

In the following discussion, 'speed related crashes' were identified by selecting all crashes where at least one of the contributing circumstances for at least one of the drivers was coded as exceeding the posted speed limit, driving too fast for conditions, and failure to reduce the speed.

# **Severity of Speed Related Crashes**

Between 10% and 15% of fatal and injury crashes are speed related, whereas, just 4.3% of PDO crashes are speed related (Table 8.A).

Table 8.A Speed Related Crashes by Severity 2008

	Non- Speed	Percent of	Speed	Percent of	
Severity	Related	Total	Related	Total	Total
PDO	268061	95.7%	12171	4.3%	280232
Injury	72231	89.9%	8073	10.1%	80304
Fatal	684	67.5%	329	32.5%	1013
Unknown	3963	91.5%	367	8.5%	4330
Total	344939	94.3%	20940	5.7%	365879

# Area Type

A higher percentage of crashes in rural areas are associated with speed compared to urban areas (Table 8.B). This is to be expected since roads in rural areas are usually associated with lower traffic volumes and allow speeding.

Table 8.B Speed Related Crashes By Area Type 2008

	Fatal	Injury	PDO	Unknown	Total
Rural	278	6583	9559	202	16872
%	85.0%	82.7%	79.6%	55.6%	81.7%
Urban	49	1376	2453	161	3789
	15.0%	17.3%	20.4%	44.4%	18.3%
Total	327	7959	12012	363	20661

# **Driver Age**

The under 24 age group is associated with the highest percentage of speed related crashes (Table 8.C). As drivers mature, the percentage of speed related crashes come down. Older drivers are associated with the least number of speed related crashes.

Table 8.C

**Driver Age By Speed 2008** 

	Not Speed	Percent	Speed	Percent	Total
Age Group	Related	of Total	Related	of Total	
Age 15 And Under	945	91.0%	93	9.0%	1038
Age 16	7343	88.8%	924	11.2%	8267
Age 17	9803	89.7%	1120	10.3%	10923
Age 18	11565	88.2%	1548	11.8%	13113
Age 19	11185	89.2%	1361	10.8%	12546
Age 20	10686	89.9%	1197	10.1%	11883
Age 21-24	38925	91.6%	3547	8.4%	42472
Age 25-29	39484	93.6%	2716	6.4%	42200
Age 30-39	68975	95.1%	3562	4.9%	72537
Age 40-49	60652	96.0%	2499	4.0%	63151
Age 50-59	43940	96.8%	1444	3.2%	45384
Age 60+ or Unknown	41658	97.8%	929	2.2%	42587
Total	345161	94.3%	20940	5.7%	366101

## Time of Day

More crashes are speed related between 7:00 and 8:00 a.m., 3:00 and 5:00 p.m., and 1:00 and 3:00 a.m. It is possible that the relative high percentage of speed related crashes between 7:00 and 8:00 a.m. and between 3:00 and 5:00 p.m. is partly due to young drivers who drive to school in the morning and drive from school in the afternoon during these periods but a more likely reason might be adults commuting to and from work each day. The relatively high percentage of speed related crashes between 1:00 and 3:00 a.m. could be associated with alcohol.

### Month of Year

In the last three years, January has seen a significant increase in the percentage of crashes that are speed related. It is not clear if this is a random variation or a systematic change in the pattern for speed related crashes.

## Day of Week

Friday is associated with the highest number of speed related crashes. However, Fridays are also associated with the highest number of crashes. The percentage of speed related crashes are quite uniform over different days of the week.

#### **Road Class**

Interstate highways are associated with the highest speeds because they are designed to the highest standards. The information in (Table 8.D) shows that the highest number and percentage of speed related crashes occurs on SSR's. Local streets have the next highest number of speed related crashes.

 Table 8D
 Speed Related Crashes By Road Type 2008

Road Class	Fatal	Injury	PDO	Unknown	Total
Interstate	22	688	1950	18	2678
US	34	850	1802	16	2702
NC	48	1075	1308	36	2467
SSR	174	3970	4499	132	8775
LCL	49	1347	2394	156	3946
PP	0	20	30	2	52
PVA	0	6	30	2	38
Other	0	3	17	14	34
Total	327	7959	12030	376	20692

### **Speed Related Crashes by County**

The rate of speed related crashes vary widely across North Carolina counties. There are several factors that may influence why a particular county may have a high or low rate of speed related crashes including: number of young drivers in the county, extent of tourist traffic, and the type of road system in the county including the number of rural roads.

**Table 8.E** shows the county listing in descending order by each county's speed related crashes shown as a percentage of their total crashes for the 2008 year. This ranking gives a better picture of the problem areas rather than simply looking at a total number. It ranks by action rather than by population.

Table 8 E Speed Related Crashes by County
Descending Order by Percentage 2008

County	Total	Speed	Percent
ALLEGHANY	317	101	31.86%
GRAHAM	270	73	27.04%
SWAIN	294	79	26.87%
POLK	449	111	24.72%
MCDOWELL	1013	208	20.53%
CHOWAN	289	56	19.38%
CASWELL	514	98	19.07%
MONTGOMERY	676	116	17.16%
MACON	902	153	16.96%
BERTIE	626	105	16.77%
TRANSYLVANIA	809	133	16.44%
HAYWOOD	1718	280	16.30%
CAMDEN	198	32	16.16%
WARREN	393	61	15.52%
ALEXANDER	803	124	15.44%
MADISON	425	65	15.29%
GATES	334	51	15.27%
AVERY	491	70	14.26%
STOKES	1213	166	13.69%
ASHE	893	122	13.66%
JACKSON	1348	184	13.65%
PERSON	1201	154	12.82%
RUTHERFORD	1825	225	12.33%
GREENE	608	72	11.84%
YANCEY	397	47	11.84%
DAVIE	1295	149	11.51%
COLUMBUS	2112	243	11.51%

MARTIN	728	83	11.40%
NORTHAMPTON	580	66	11.38%
SURRY	2463	280	11.37%
YADKIN	1043	118	11.31%
CHEROKEE	649	72	11.09%
SAMPSON	2139	235	10.99%
JONES	404	43	10.64%
HARNETT	3088	324	10.49%
HYDE	143	15	10.49%
TYRRELL	136	14	10.29%
CLAY	238	24	10.08%
ROCKINGHAM	2968	288	9.70%
CALDWELL	2657	255	9.60%
WILKES	2135	204	9.56%
FRANKLIN	1603	153	9.54%
RANDOLPH	4973	474	9.53%
SCOTLAND	934	87	9.31%
STANLY	1737	160	9.21%
BLADEN	1164	107	9.19%
GRANVILLE	1266	115	9.08%
WASHINGTON	342	31	9.06%
ANSON	897	81	9.03%
MITCHELL	477	42	8.81%
СНАТНАМ	1722	148	8.59%
EDGECOMBE	1712	146	8.53%
BURKE	3274	277	8.46%
HERTFORD	710	60	8.45%
RICHMOND	1508	127	8.42%
JOHNSTON	6068	510	8.40%
PAMLICO	361	30	8.31%
DUPLIN	2020	167	8.27%

County	Total	Speed	Percent
DAVIDSON	5554	450	8.10%
ORANGE	4566	342	7.49%
CURRITUCK	567	41	7.23%
HENDERSON	4214	301	7.14%
HOKE	1042	73	7.01%
NASH	3842	268	6.98%
LINCOLN	2607	180	6.90%
CLEVELAND	3626	249	6.87%
WATAUGA	2200	148	6.73%
CRAVEN	3112	209	6.72%
HALIFAX	1838	119	6.47%
ROBESON	5470	352	6.44%
LEE	2638	162	6.14%
BRUNSWICK	3473	211	6.08%
ONSLOW	6447	378	5.86%
UNION	6717	393	5.85%
PASQUOTANK	1383	80	5.78%
PENDER	1810	104	5.75%
BUNCOMBE	9150	523	5.72%
WAYNE	4085	232	5.68%
ALAMANCE	6036	335	5.55%
ROWAN	5360	291	5.43%
GASTON	8787	472	5.37%
VANCE	1620	85	5.25%
DARE	1382	71	5.14%
MOORE	2835	144	5.08%
IREDELL	6486	324	5.00%
CARTERET	2366	116	4.90%
BEAUFORT	1665	81	4.86%
WILSON	3252	157	4.83%
GUILFORD	19737	944	4.78%
CUMBERLAND	13658	652	4.77%
LENOIR	2243	107	4.77%
CATAWBA	7464	355	4.76%
FORSYTH	14113	650	4.61%

Totals	366823	21642	5.90%
NEW HANOVER	9904	232	2.34%
WAKE	41283	1308	3.17%
MECKLENBURG	43245	1401	3.24%
DURHAM	13779	473	3.43%
PITT	7288	267	3.66%
CABARRUS	7226	294	4.07%
PERQUIMANS	1201	54	4.50%

# **Summary of Findings**

- Speed-related crashes are in general more severe compared to non-speed-related crashes.
- Speed-related PDO crashes have increased substantially in the last two years. However, the number of injury and fatal speed-related crashes has changed very little during this period.
- A higher percentage of crashes in rural areas are associated with speed compared to urban areas.
- The 15-20 age group is associated with the highest percentage of speed-related crashes.
- A large number of speed related crashes occur during the morning peak, the afternoon peak, and between 1:00 and 3:00 a.m.
- Interstates have the lowest number of speed-related crashes, but the highest percentage of speed-related crashes. NC routes and SSR's have the highest number of speed-related crashes, but the lowest percentage of speed-related crashes.
- Close to 80% of crashes where a rear-end crash was the first harmful event, are speed-related. A significant percentage of crashes (close to 50%) where the first harmful event is a Jackknife/Overturn/Rollover, collision with a fixed object, or ran-off-the-road, are speed-related.

#### **Enforcement and Public Information**

Enforcement will be an effective speed management tool as long as the posted speed limits are credible. The problem with traditional enforcement is their short-lived effect in deterring speeding. It may be possible to boost the longevity of the deterrence effect if it is through a public information campaign coupled with enforcement. It would be worthwhile to target enforcement efforts on those roads and times when speed-related crashes are most common. Automated enforcement (e.g., photo radar) can be used to complement traditional enforcement techniques.

## 9. Occupant Restraint

Seat-belt usage in North Carolina is among the highest in the nation due to the primary enforcement law and successful 'Click It or Ticket' and 'RU Buckled' campaigns. The observed driver seat belt usage rate has increased from approximately 65% in the early 1990's to 89.8% in 2008.

Each year, GHSP conducts statewide a survey to determine the safety belt usage rates for the state. This survey is conducted in accordance with NHTSA guidelines and policy. The latest survey was conducted following the Memorial Day 2008 campaign. The usage rate for drivers at that time was determined to be 90.4%. The corresponding usage rate for passengers was 85.5%.

Typically, the Piedmont and Coastal areas have a higher belt usage rate compared to the Mountain region. This year there was a shift in the usage rates during the Memorial Day survey. The usage rate in the Piedmont region was 91.0% and the Mountain Region was 91.3% while the Coastal region was 88.0% during this survey. Cars and SUVs, again have the highest usage rates – both over 90.0% during the Memorial Day survey. The usage rates also increase with increase in age: middle-aged and older drivers typically having a higher usage rate compared to young drivers. There is a significant difference in the seat belt usage rates among men and women. The latest survey found that approximately 91.9% of women used a seat belt while 88.9% of men used a seat belt.

## **Restraint Usage in Crashes**

The investigating officer provides information on restraint usage for individuals involved in a crash. Based on 2003 North Carolina Traffic Crash Facts, over 97% of drivers involved in a crash in 2003 had used a belt. Unfortunately, this information does not match the usage rate that is estimated from the statewide surveys. It is possible that in many cases, especially in PDO crashes, the investigating officer asks the driver or passenger if they were using a seat belt and a significant number of people who were not wearing a seat belt would probably not admit to their non-compliance. In the case of fatal crashes, a more detailed investigation is usually conducted, and can provide more accurate information on whether a seat belt was used when the crash occurred. According to the 2003 North Carolina Traffic Crash Facts, close to 58% of drivers who were killed in a crash were wearing a seat belt (law enforcement reported). For A level injuries, the corresponding usage rate was around 97% (self reported). For B and C injuries, and the No-Injury cases, the usage rate was between 89% and 99% (self reported).

Table 1. North Carolina Seat Belt Usage Rates, Unweighted & Weighted: 121- Site June 2009 Survey

	Unweighted	Weighted		
Category	Use %	Use %	SE %	Sample Size
Overall				
Driver	90.2	89.8	0.7	17,097
Passenger	86.6	88.8	1.0	4,610
Combined	89.5	89.5	0.7	21,707
Urban/Rural				
Urban	90.4	89.8	0.8	11,908
Rural	89.8	89.8	1.6	5,189
Region				
Mountain	92.9	89.3	2.3	2,997
Piedmont	91.2	91.2	0.8	8,586
Coast	87.3	86.2	1.3	5,514
Vehicle Type				
Car	91.6	91.2	0.8	8,381
Van	76.1	75.7	4.2	414
Minivan	93.5	91.1	2.2	1,033
Pickup Truck	85.0	85.5	1.6	3,261
Sport Utility	92.1	90.8	0.9	3,903
Sex of Driver				
Male	86.8	88.1	1.8	2,390
Female	93.6	92.9	1.2	1,756
Race/Ethnicity of Driver				
White	90.5	91.1	1.3	3,090
Black	86.4	83.6	3.5	763
Hispanic	88.1	96.2	1.4	193
Native American	a	a	a	14
Asian	a	a	a	50
Age of Driver				

16–24	88.0	92.2	1.5	424
25–44	89.7	89.6	1.6	2,289
45–64	90.1	92.5	1.6	1,154
65+	89.6	81.0	10.3	260

<sup>&</sup>lt;sup>a</sup> Estimates and standard errors are suppressed due to small sample size

Table 2. North Carolina Seat Belt Usage Rates by County, Weighted: 121-Site June 2009 Survey

County Name	Driver	Passenger	Combined	Sample Size
Overall	89.8	88.8	89.5	17,097
Alamance	92.3	90.4	91.9	1,403
Buncombe	89.9	86.6	89.3	1,030
Burke	92.7	90.1	91.9	1,088
Craven	92.5	89.5	91.9	624
Cumberland	83.5	82.8	83.3	1,050
Gaston	90.2	88.2	89.8	1,731
Granville	87.1	83.1	86.3	1,166
Mecklenburg	90.9	91.5	90.8	1,759
New Hanover	89.7	86.5	89.2	812
Pitt	87.2	83.0	86.3	1,331
Robeson	78.6	72.2	77.2	646
Stanly	89.0	86.8	88.5	1,041
Wake	93.9	91.7	93.5	1,486
Wayne	87.5	80.3	86.2	1,051
Wilkes	93.4	82.6	90.6	972

Table 3. Observed Seat Belt Use in North Carolina (%), Weighted

Survey Periods	Driver (D)	Passenger (RF)	Combined (D+RF)
1999			
$Apr^{l}$	81.0	77.7	79.9
Jun <sup>1</sup>	83.5	80.8	82.3
$Nov^2$	79.7	71.0	78.6
2000			
Jun <sup>3</sup>	81.6	76.1	80.5
Sep <sup>3</sup>	80.3	74.7	79.2
2001			
May <sup>3</sup>	80.9	74.8	79.6
Jun <sup>3</sup>	83.6	79.1	82.7
Sep <sup>3</sup>	83.0	77.3	81.9
2002			
Jun <sup>3</sup>	84.9	80.6	84.1
Sep <sup>3</sup>	84.5	76.5	82.7
2003			
Apr <sup>3</sup>	85.1	79.2	84.1
Jun <sup>3</sup>	87.3	81.0	86.1
Sep <sup>3</sup>	85.7	80.4	84.7
2004			
Apr <sup>3</sup>	85.2	79.1	83.8
Jun <sup>4</sup>	87.4	74.7	85.4
2005			
Apr <sup>5</sup>	86.2	82.2	85.4
Jun <sup>4</sup>	86.9	85.6	86.7
2006			
Apr <sup>5</sup>	87.6	84.4	86.9
Jun <sup>4</sup>	88.9	86.3	88.5
2007			
Apr <sup>5</sup>	87.4	74.7	85.4
Jun <sup>4</sup>	89.4	84.7	88.8
2008			
Apr <sup>5</sup>	89.4	82.8	88.4
Jun <sup>4</sup>	90.4	85.5	89.8
2009			
Apr <sup>5</sup>	90.4	83.3	89.2
Jun <sup>4</sup>	89.8	88.8	89.5

<sup>&</sup>lt;sup>1</sup> This survey was conducted at 72 sites. <sup>2</sup> This survey was conducted at 306 sites. <sup>3</sup> This survey was conducted at 152 sites. <sup>4</sup> This survey was conducted at 121 sites. <sup>5</sup> This survey was conducted at 50 sites.

Table 4. Seat Belt Use Trends in North Carolina (%), Weighted

	20	06	20	07	20	08	20	09
	Apr <sup>1</sup>	Jun <sup>2</sup>						
Overall (D+RF) Rate	86.9	88.5	85.4	88.8	88.4	89.8	89.2	89.5
Region								
Mountains	86.7	88.2	88.7	90.6	90.4	91.3	90.7	89.3
Piedmont	89.1	90.2	87.5	88.7	89.4	91.0	91.5	91.2
Coast	84.5	85.8	85.8	90.9	88.5	88.0	87.3	86.2
Vehicle Type								
Car	90.0	91.2	88.6	90.4	90.3	91.4	92.1	91.2
Van	63.6	85.5	80.4	87.1	81.6	84.4	77.2	75.7
Pickup	79.7	78.9	83.3	84.0	80.7	86.1	85.9	85.5
Sport Utility	89.5	91.5	87.8	90.2	92.5	91.0	90.6	90.8
Sex of Driver								
Male	84.7	89.2	85.7	87.4	89.8	88.9	89.7	88.1
Female	92.6	93.7	93.9	94.7	92.0	91.9	93.7	92.9
Age of Driver								
16–24	86.1	92.0	94.1	88.8	95.6	86.9	85.8	92.2
25–44	88.1	90.4	88.7	89.6	89.8	90.5	91.4	89.6
45–64	91.1	92.6	86.0	91.7	91.2	89.5	93.1	92.5
65+	91.5	90.7	68.4	87.7	77.5	98.0	93.2	81.0
Race/Ethnicity								
White	88.3	90.6	89.2	90.9	90.1	91.2	92.6	91.1
Black	83.2	89.3	89.9	87.4	94.6	85.8	84.9	83.6
Hispanic	97.0	93.5	92.2	99.3	96.2	96.0	93.2	96.2

<sup>&</sup>lt;sup>1</sup> This survey used an updated 50-site baseline. <sup>2</sup> This survey was conducted at 121 sites.

## 10. Commercial Motor Vehicles (CMV)

Table 10.A CMV Crashes vs All Vehicle Crashes (All Occupants) 2008

			Number	Percent	CMV as a
	Number	Percent of	All	of Total	Percent of
Type	of CMV	Total CMV	Vehicle	Veh	Total
Crash	Crashes	Crashes	Crashes	Crashes	Crashes
PDO	20,028	79.63%	398397	76.69%	5.03%
Injury	4734	18.82%	112384	21.63%	4.21%
Fatals	160	0.64%	1450	0.28%	11.03%
Unknown	228	0.91%	7287	1.40%	3.13%
Total	25,150	100.00%	519518	100.00%	4.84%

## **Summary of Findings**

- It is apparent that due to their size and weight, CMV involved crashes are more violent as they represent 8.34% of all crashes in NC, but account for 16.39% of all fatalities in NC.
- It is also apparent that the when another vehicle is involved in a crash with a CMV that the occupants of that other vehicle are at higher risk of injury or death as 86% of the fatalities were in the other vehicle.

Table 10.B CMV Crashes by Road Class and Injury (All Vehicles All Passengers) 2008

		A	В	С	No			
Road	Fatal	Injury	Injury	Injury	Injury	Unknown	Total	Percent
Interstate	28	24	220	742	4386	24	2963	19.94%
US Route	58	45	258	744	3655	47	3030	20.40%
NC Route	33	39	245	545	2793	31	2373	15.97%
State Secondary Rte	21	31	207	479	2380	7	2229	15.00%
Local Route	19	18	225	907	6622	116	4016	27.03%
Public Veh Area	0	0	0	2	118	3	168	1.13%
Other/Unknown	1	0	0	3	74	0	77	0.52%
Total	160	157	1155	3422	20028	228	14856	100.00%

### **Summary of Findings**

• Even though the highest percentage (27%) of CMV involved crashes occur on local routes, the higher number of fatalities and "An" injuries occur on US, NC, and State secondary routes, which are typically two lane and higher speed limits, yet still have high incidence of intersections/access areas.

Table 10.C

Type CMV by Crash Involvement 2008

CMV Type	Number	Percent
2 axle, 6 Tire	3760	33.98%
3 Axle	1349	12.19%
Truck/Trailer	1481	13.38%
Tractor	201	1.82%
Tractor/Semi-Trl	3909	35.32%
Tractor/Doubles	92	0.83%
Unknown CMV	274	2.48%
Total	11066	100.00%

## **Summary of Findings**

• Tractor/Semi-trailer and 2 axles, 6 tires CMV's seem to be over represented in crashes with 36.1% and 32.2% involved respectfully.

### STATE CERTIFICATIONS AND ASSURANCES

Failure to comply with applicable Federal statutes, regulations and directives may subject State officials to civil or criminal penalties and/or place the State in a high risk grantee status in accordance with 49 CFR §18.12.

Each fiscal year the State will sign these Certifications and Assurances that the State complies with all applicable Federal statutes, regulations, and directives in effect with respect to the periods for which it receives grant funding. Applicable provisions include, but not limited to, the following:

- 23 U.S.C. Chapter 4 Highway Safety Act of 1966, as amended;
  - 49 CFR Part 18 Uniform Administrative Requirements for Grants and Cooperative
- Agreements to State and Local Governments
  - 49 CFR Part 19 Uniform Administrative Requirements for Grants and Agreements with
- Institutions of Higher Education, Hospitals and Other Nonprofit Organizations
- 23 CFR Chapter II (§§1200, 1205, 1206, 1250, 1251, & 1252) Regulations governing
- highway safety programs
  - NHTSA Order 462-6C Matching Rates for State and Community Highway Safety Programs
  - Highway Safety Grant Funding Policy for Field-Administered Grants

#### **Certifications and Assurances**

The Governor is responsible for the administration of the State highway safety program through a State highway safety agency which has adequate powers and is suitably equipped and organized (as evidenced by appropriate oversight procedures governing such areas as procurement, financial administration, and the use, management, and disposition of equipment) to carry out the program (23 USC 402(b) (1) (A));

The political subdivisions of this State are authorized, as part of the State highway safety program, to carry out within their jurisdictions local highway safety programs which have been approved by the Governor and are in accordance with the uniform guidelines promulgated by the Secretary of Transportation (23 USC 402(b) (1) (B));

At least 40 per cent of all Federal funds apportioned to this State under 23 USC 402 for this fiscal year will be expended by or for the benefit of the political subdivision of the State in carrying out local highway safety programs (23 USC 402(b) (1) (C)), unless this requirement is waived in writing;

The State will implement activities in support of national highway safety goals to reduce motor vehicle related fatalities that also reflect the primary data-related crash factors within the State as identified by the State highway safety planning process, including:

- National law enforcement mobilizations.
- Sustained enforcement of statutes addressing impaired driving, occupant protection, and driving in excess of posted speed limits,
- An annual statewide safety belt use survey in accordance with criteria established by the Secretary for the measurement of state safety belt use rates to ensure that the measurements are accurate and representative,
- Development of statewide data systems to provide timely and effective data analysis to support allocation of highway safety resources.

The state shall actively encourage all relevant law enforcement agencies in the state to follow the guidelines established for vehicular pursuits issued by the International Association of Chiefs of Police that are currently in effect.

This State's highway safety program provides adequate and reasonable access for the safe and convenient movement of physically handicapped persons, including those in wheelchairs, across curbs constructed or replaced on or after July 1, 1976, at all pedestrian crosswalks (23 USC 402(b) (1) (D));

Cash draw downs will be initiated only when actually needed for disbursement, cash disbursements and balances will be reported in a timely manner as required by NHTSA, and the same standards of timing and amount, including the reporting of cash disbursement and balances, will be imposed upon any secondary recipient organizations (49 CFR 18.20, 18.21, and 18.41). Failure to adhere to these provisions may result in the termination of drawdown privileges);

The State has submitted appropriate documentation for review to the single point of contact designated by the Governor to review Federal programs, as required by Executive Order 12372 (Intergovernmental Review of Federal Programs);

Equipment acquired under this agreement for use in highway safety program areas shall be used and kept in operation for highway safety purposes by the State; or the State, by formal agreement with appropriate officials of a political subdivision or State agency, shall cause such equipment to be used and kept in operation for highway safety purposes (23 CFR 1200.21);

The State will comply with all applicable State procurement procedures and will maintain a financial management system that complies with the minimum requirements of 49 CFR 18.20.

The State highway safety agency will comply with all Federal statutes and implementing regulations relating to nondiscrimination.

These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin (and 49 CFR Part 21); (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§ 1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps (and 49 CFR Part 27); (d) the Age Discrimination Act of 1975, as amended (42U.S.C. §§ 6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970(P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse of alcoholism; (g) §§ 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§ 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§ 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

#### The Drug-free Workplace Act of 1988 (49 CFR Part 29 Sub-part F):

The State will provide a drug-free workplace by:

- a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- b) Establishing a drug-free awareness program to inform employees about:
  - 1. The dangers of drug abuse in the workplace.
  - 2. The grantee's policy of maintaining a drug-free workplace.
  - 3. Any available drug counseling, rehabilitation, and employee assistance programs.
  - 4. The penalties that may be imposed upon employees for drug violations occurring in the workplace.
- c) Making it a requirement that each employee engaged in the performance of the grant be given a copy of the statement required by paragraph (a).
- d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will
  - 1. Abide by the terms of the statement.
  - 2. Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction.
- e) Notifying the agency within ten days after receiving notice under subparagraph (d) (2) from an employee or otherwise receiving actual notice of such conviction.

- f) Taking one of the following actions, within 30 days of receiving notice under subparagraph (d) (2), with respect to any employee who is so convicted
  - 1. Taking appropriate personnel action against such an employee, up to and including termination.
  - 2. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by Federal, State, or local health, law enforcement, or other appropriate agency.
- g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e), and (f) above.

#### **BUY AMERICA ACT**

The State will comply with the provisions of the Buy America Act (23 USC 101 Note) which contains the following requirements:

Only steel, iron and manufactured products produced in the United States may be purchased with Federal funds unless the Secretary of Transportation determines that such domestic purchases would be inconsistent with the public interest; that such materials are not reasonably available and of a satisfactory quality; or that inclusion of domestic materials will increase the cost of the overall project contract by more than 25 percent. Clear justification for the purchase of non-domestic items must be in the form of a waiver request submitted to and approved by the Secretary of Transportation.

## POLITICAL ACTIVITY (HATCH ACT)

The State will comply with the provisions of 5 U.S.C. §§ 1501-1508 and implementing regulations of 5 CFR Part 151, concerning "Political Activity of State or Local Offices, or Employees".

### CERTIFICATION REGARDING FEDERAL LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

- 1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- 2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 3. The undersigned shall require that the language of this certification be included in the award documents for all sub-award at all tiers (including subcontracts, sub-grants, and contracts under grant, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

## RESTRICTION ON STATE LOBBYING

None of the funds under this program will be used for any activity specifically designed to urge or influence a State or local legislator to favor or oppose the adoption of any specific legislative proposal pending before any State or local legislative body. Such activities include both direct and indirect (e.g., "grassroots") lobbying activities, with one exception. This does not preclude a State official whose salary is supported with NHTSA funds from engaging in direct communications with State or local legislative officials, in accordance with customary State practice, even if such communications urge legislative officials to favor or oppose the adoption of a specific pending legislative proposal.

#### CERTIFICATION REGARDING DEBARMENT AND SUSPENSION

#### **Instructions for Primary Certification**

- 1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
- 2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
- 3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.
- 4. The prospective primary participant shall provide immediate written notice to the department or agency to which this proposal is submitted if at any time the prospective primary participant learns its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 5. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this clause, have the meaning set out in the Definitions and coverage sections of 49 CFR Part 29. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
- 6. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

- 7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the list of Parties Excluded from Federal Procurement and Non-procurement Programs.
- 9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 10. Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

# <u>Certification Regarding Debarment, Suspension, and Other Responsibility Matters-Primary Covered Transactions</u>

- 1. The prospective primary participant certifies to the best of its knowledge and belief, that its principals:
  - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency;
  - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of record, making false statements, or receiving stolen property;
  - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
  - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.
- 2. Where the prospective primary participant is unable to certify to any of the Statements in this certification, such prospective participant shall attach an explanation to this proposal.

#### **Instructions for Lower Tier Certification**

- 1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
- 2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- 2. The prospective lower tier participant shall provide immediate written notice to the person to whom this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 4. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this clause, have the meanings set out in the Definition and Coverage sections of 49 CFR Part 29. You may contact the person to whom this proposal is submitted for assistance in obtaining a copy of those regulations.
- 5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- 6. The prospective lower tier participant further agrees by submitting this proposal that is it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -- Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions. (See below)
- 7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the List of Parties Excluded from Federal Procurement and Non-procurement Programs.
- 8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

## <u>Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -- Lower Tier</u> <u>Covered Transactions:</u>

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

## **ENVIRONMENTAL IMPACT**

The Governor's Representative for Highway Safety has reviewed the State's Fiscal Year 2008 highway safety planning document and hereby declares that no significant environmental impact will result from implementing this Highway Safety Plan. If, under a future revision, this Plan will be modified in such a manner that a project would be instituted that could affect environmental quality to the extent that a review and statement would be necessary, this office is prepared to take the action necessary to comply with the National Environmental Policy Act of 1969 (42 USC 4321 et seq.) and the implementing regulations of the Council on Environmental Quality (40 CFR Parts 1500-1517).

Governor's Representative for Highway Sa	ety
Date	

## **EQUIPMENT REQUESTS \$5,000 AND OVER**

## 2010 Grant Year Equipment List

AGENCY	PROJECT #	<u>EQUIPMENT</u>	COST
Anson Co Sheriffs Office	K4-10-04-04	Vehicle	\$30,000
Anson Co Sheriffs Office	K4-10-04-04	MDT	\$8,000
Anson Co Sheriffs Office	K4-10-04-04	In car camera	\$6,000
Aberdeen Police Department	K4-10-04-02	Vehicle	\$30,000
Aberdeen Police Department	K4-10-04-02	MDT	\$8,000
Raleigh Police Department	PT-10-03-03-23	Mobile License Plate Readers	. ,
Raleigh Police Department	PT-10-03-03-23	2@ \$23,725	\$47,450
Wingate Police Department	K4-10-04-16	Vehicle	\$30,000
Wingate Police Department	K4-10-04-16	In-car-camera	\$6,000
Wingate Police Department	K4-10-04-16	MDT	\$8,000
Laurinburg Police Department	K4-10-04-07	Vehicle	\$30,000
Laurinburg Police Department	K4-10-04-07	MDT	\$8,000
Laurinburg Police Department	K4-10-04-07	In-car-camera	\$6,000
Guilford County Sheriff Office	PT-10-03-04-15	Vehicles 2@30,000	\$60,000
Guilford County Sheriff Office	PT-10-03-04-15	MDT 2@8,000	\$16,000
Guilford County Sheriff Office	PT-10-03-04-15	In-car-camera 2@6,000	\$12,000
GHSP-Points System	K2-10-07-02	In-car-camera 15@6,000	\$90,000
Marshville Police Department	PT-10-03-04-11	Vehicle	\$30,000
Marshville Police Department	PT-10-03-04-11	MDT	\$6,700
Marshville Police Department	PT-10-03-04-11	In-car-camera	\$5,600
Maggie Valley Police Department	PT-10-03-03-17	In-car-camera2@5,425	\$10,850
Maggie Valley Police Department	PT-10-03-03-17	Motorcycle	\$16,345
Kill Devil Hills Police Department	K4-10-04-20	Trailer	\$5,000
Kill Devil Hills Police Department	K8-10-02-35	Vehicle 3@30,000	\$90,000
Kill Devil Hills Police Department	K8-10-02-35	In-car-camera 3@6,000	\$18,000
Kill Devil Hills Police Department	K8-10-02-35	MDT 3@8,000	\$24,000
Weldon Police Department	PT-10-03-03-26	In-car-camera 2@6,000	\$12,000
Holly Ridge Police Department	PT-10-03-03-20	Radar Trailer	\$7,105
Pittsboro Police Department	K4-10-04-24	Vehicle	\$30,000
Pittsboro Police Department	K4-10-04-24	In-car-camera	\$6,000
Pittsboro Police Department	K4-10-04-24	MDT	\$8,000
Garner Police Department	K4-10-04-01	Vehicle	\$30,000
Garner Police Department	K4-10-04-01	In-car-camera	\$5,000
Statesville Police Department	K4-10-04-12	Vehicles 2@30000	\$60,000
Statesville Police Department	K4-10-04-12	MDT 2@6000	\$12,000
Statesville Police Department	K4-10-04-12	In-car-camera 2@6000	\$12,000
Sharpsburg Police Department	K4-10-04-25	Vehicle	\$30,000
Sharpsburg Police Department	K4-10-04-25	In-car-camera	\$5,000
Sharpsburg Police Department	K4-10-04-25	MDT	\$8,000
Hoke County Sheriffs Office	K4-10-04-29	Vehicle	\$30,000
Hoke County Sheriffs Office	K4-10-04-29	MDT	\$8,000
Hoke County Sheriffs Office	K4-10-04-29	In-car-camera	\$6,000
Landis Police Department	K4-10-04-06	Vehicle MDT	\$30,000
Landis Police Department	K4-10-04-06	In-car-camera	\$8,000
Landis Police Department Mint Hill Police Department	K4-10-04-06 K4-10-04-10	Vehicle 2@30000	\$6,000 \$60,000
		<u> </u>	
Mint Hill Police Department Nashville Police Department	K4-10-04-10 K4-10-04-22	In-car-camera 2 @6000 Vehicle 2@25042	\$12,000 \$50084
Lenoir Police Department	PT-10-03-03-07	Seat Belt Convincer	\$14,500
Lenoir Police Department	K9-10-11-04	MDT 11 @ 8000	\$88,000
Troutman Police Department	PT-10-03-04-12	Vehicle	\$30,000
Troutman Police Department	PT-10-03-04-12	MDT	\$8,000
110atilian 1 once Department	11 10 05 01 12	111111	\$0,000

## Equipment List Page Two

Troutman Police Department	PT-10-03-04-12	In-car-camera	\$6,000
China Grove Police Department	PT-10-03-04-14	Vehicle	\$30,000
China Grove Police Department	PT-10-03-04-14	MDT	\$8,000
China Grove Police Department	PT-10-03-04-14	In-car-camera	\$6,000
UNC-Wilmington Police Dept.	K8-10-02-38	Trailer	\$5,000
UNC-Wilmington Police Dept.	K8-10-02-38	Generator	\$5,000
UNC-Wilmington Police Dept.	PT-10-03-03-25	Radar speed trailer	\$12,000
Wendell Police Department	K8-10-02-40	Light tower	\$8,000
Wendell Police Department	K8-10-02-40	Trailer	\$5,000
Wendell Police Department	K4-10-04-26	Vehicle 2@30000	\$60,000
Wendell Police Department	K4-10-04-26	MDT 2@8000	\$16,000
Wendell Police Department	K4-10-04-26	In-car-camera 2@6000	\$12,000
Wilkesboro Police Department	K4-10-04-15	Vehicle	\$30,000
Kannapolis Police Department	PT-10-03-03-15	Portable speed device	\$5,280
Lexington Police Department	K4-10-04-08	Vehicle	\$30,000
Lexington Police Department	K4-10-04-08	In-car-camera	\$6,000
Lexington Police Department	K4-10-04-08	MDT	\$8,000
Rockingham Police Department	K8-10-02-26	Trailer	\$5,000
Rockingham Police Department	K8-10-02-26	Light tower	\$8,000
Burgaw Police Department	K4-10-04-18	Vehicle	\$20,000
Burgaw Police Department	K4-10-04-18	In-car-camera	\$6,000
Knightdale Police Department	PT-10-03-03-21	Radar speed unit 2@6000	\$12,000
Cramerton Police Department	K8-10-02-19	In-car-camera 3@5300	\$15,900
Cabarrus County Sheriffs Office	K4-10-04-31	Vehicle 2@30000	\$60,000
Cabarrus County Sheriffs Office	K4-10-04-31	MDT 2@5000	\$10,000
Cabarrus County Sheriffs Office	K4-10-04-31	In-car-camera 2@5000	\$10,000
Cabarrus County Sheriffs Office	K4-10-04-31	Radar trailer	\$10,000
Nash County Sheriffs Office	K8-10-02-36	Trailer	\$5,000
Nash County Sheriffs Office	K8-10-02-36	Light tower	\$8,000
Cornelius Police Department	K4-10-04-28		\$60,000
Cornelius Police Department	K4-10-04-28	Vehicle 2@30000	
		In-car-camera 2@6000	\$12,000
Cornelius Police Department	K4-10-04-28 K4-10-04-03	MDT 2@8000	\$16,000
Alexander County Sheriffs Office Alexander County Sheriffs Office	K4-10-04-03 K4-10-04-03	Vehicle MDT	\$30,000
•			\$8,000
Alexander County Sheriffs office	K4-10-04-03	In-car-camera	\$6,000
Eden Police Department	K8-10-02-20	Light tower Trailer	\$8,000
Eden Police Department	K8-10-02-20		\$5,000
Scotland County Sheriffs Office	K4-10-04-11	Vehicle	\$30,000
Scotland County Sheriffs Office	K4-10-04-11	MDT	\$8,000
Scotland County Sheriffs Office	K4-10-04-11	In-car-camera	\$6,000
Oakboro Police Department	K8-10-02-25	Trailer	\$5,000
Oakboro Police Department	K8-10-02-25	Light tower	\$8,000
Macon County Sheriffs Office	K9-10-11-05	MDT 4@8000	\$32,000
Macon county Sheriffs Office	PT-10-03-03-16	In-car-camera 4@6000	\$24,000
Wake county Sheriffs Office	K4-10-02-39	Trailer	\$5,000
Wake County Sheriffs Office	K4-10-02-39	Light tower	\$8,000
New Bern Police Department	PT-10-03-03-22	Vehicle	\$30,000
New Bern Police Department	PT-10-03-03-22	In-car-camera	\$6,000
New Bern Police Department	PT-10-03-03-22	MDT	\$8,000
Coats Police Department	PT-10-03-04-16	Vehicle	\$30,000
Coats Police Department	PT-10-03-04-16	MDT	\$5,000
Coats Police Department	PT-10-03-04-16	In-car-camera	\$5,000
Jacksonville Police Department	PT-10-03-03-29	Vehicle 2@30000	\$60,000
Jacksonville Police Department	PT-10-03-03-29	In-car-camera 2@5500	\$11,000
Jacksonville Police Department	PT-10-03-03-29	MDT 2@8000	\$16,000

## Equipment List Page Three

	ruge rm	00	
Jones County Sheriffs Office	K8-10-02-33	Trailer	\$5,000
Wadesboro Police Department	K4-10-04-14	Vehicle 2@30000	\$60,000
Wadesboro Police Department	K4-10-04-14	MDT 2@8000	\$16,000
Wadesboro Police Department	K4-10-04-14	In-car-camera 2@6000	\$12,000
Durham Police Department	PT-10-03-03-19	Radar trailer	\$12,000
Locust Police Department	K4-10-04-09	Vehicle	\$30,000
Locust Police Department	K8-10-02-33	Trailer	\$5,000
Highlands Police Department	PT-10-03-03-14	Radar trailer	\$8,160
Morehead City Police Department	K4-10-04-21	Vehicle	\$30,000
Morehead City Police Department	K4-10-04-21	MDT	\$8,000
Morehead City Police Department	K4-10-04-21	In-car-camera	\$6,000
Roxboro Police Department	K8-10-02-37	In-car-camera 7@5143	\$36,000
Avery County Sheriffs Office	K4-10-04-27	Vehicle	\$30,000
Avery County Sheriffs Office	K4-10-04-27	In-car-camera	\$6,000
UNC-Greensboro Police Dept.	PT-10-03-03-12	Vehicles 3leased@8418	\$25,254
UNC-Greensboro Police Dept.	PT-10-03-03-12	MDT	\$7,000
Transylvania County Sheriff	K4-10-04-13	Vehicle 2@30000	\$60,000
Transylvania County Sheriff	K4-10-04-13	In-car-camera 2@6000	\$12,000
NC State Highway Patrol	K9-10-11-07	MDT 64@5175	\$321,240
NC State Highway Patrol	MC-10-08-01	Bikes instructor 3@12000	\$36,000
NC State Highway Patrol	MC-10-08-01	Bikes student 3@8000	\$24,000
Conover Police Department	K4-10-04-08	Vehicle	\$30,000
Conover Police Department	K4-10-04-08	MDT	\$8,000
Conover Police Department	K4-10-04-08	In Car Camera	\$6,000
Conover Police Department	K4-10-04-08	Trailer	\$12,000
Richmond County Sheriff's Office	K4-10-04-32	Motorcycle	\$24,000
Waxhaw Police Department	PT-10-03-04-13	Vehicle 2@30,000	\$60,000
Waxhaw Police Department	PT-10-03-04-13	In Car Camera 2@6,000	\$12,000
Waxhaw Police Department	PT-10-03-04-13	MDT 2@5,000	\$10,000

## **PROGRAM COST SUMMARY**

The Program Cost Summary for the State of North Carolina consists of the GTS -217 form as required by NHTSA. The hard copy of this application includes a printed copy of this report. The electronic copy of this application does not have the GTS -217 included but can be accessed by those approved to view the GTS -217 report by NHTSA.

#### Department of Transportation National Highway Traffic Safety Administration

## **Highway Safety Plan Transaction**

2010-HSP-1

Report Date: 08/31/2009

Page: 1

For Approval

Program Area	Line	Action	Project	Description	State	Current Fiscal Year Funds	Carry Forward Funds	Share to Local
NHTSA								
NHTSA 402								
Planning and A								
		Plan	PA-2010-00-01-00	GHSP In-house PA	\$311,652.00	\$311,652.00	\$.00	\$.00
Planning and A	dministi	ation Total			\$311,652.00	\$311,652.00	\$.00	\$.00
Alcohol								
	2	Plan	AL-2010-01-01-00	GHSP In-house AL PI&E	\$.00	\$562,000.00	\$.00	\$.00
Alcohol Total					\$.00	\$562,000.00	\$.00	\$.00
Motorcycle Safe	ety							
	142	Plan	MC-2010-08-01-00	NCSHP Motorcycle Training	\$.00	\$60,000.00	\$.00	\$60,000.00
Motorcycle Safe	ety Total	I			\$.00	\$60,000.00	\$.00	\$60,000.00
Occupant Protect	ction							
	130	Plan	OP-2010-05-01-00	GHSP In-house Support	\$.00	\$287,600.00	\$.00	\$287,600.00
	131	Plan	OP-2010-05-02-00	GHSP In-house PI&E	\$.00	\$365,700.00	\$.00	\$365,700.00
	132	Plan	OP-2010-05-03-00	El Pueblo	\$.00	\$83,361.00	\$.00	\$41,680.00
	133	Plan	OP-2010-05-04-00	RTI	\$.00	\$195,000.00	\$.00	\$.00
	134	Plan	OP-2010-05-05-00	GHSP In-house Expo	\$.00	\$76,800.00	\$.00	\$.00
	135	Plan	OP-2010-05-06-00	WNC Safe Kids	\$39,950.00	\$83,943.00	\$.00	\$83,943.00
	136	Plan	OP-2010-05-07-00	UNC HSRC	\$.00	\$136,000.00	\$.00	\$136,000.00
Occupant Prote	ection To	tal			\$39,950.00	\$1,228,404.00	\$.00	\$914,923.00
Police Traffic S	ervices							
	47	Plan	PT-2010-03-01-00	GHSP In-house PT Support	\$.00	\$288,500.00	\$.00	\$.00
	48	Plan	PT-2010-03-02-00	NC Justice Academy	\$.00	\$80,350.00	\$.00	\$80,350.00
	51	Plan	PT-2010-03-03-01	Ayden Police Department	\$.00	\$10,000.00	\$.00	\$10,000.00

#### U.S. Department of Transportation National Highway Traffic Safety Administration

State: North Carolina **Highway Safety Plan Transaction** 

State: North Carolina

2010-HSP-1

Page: 2 Report Date: 08/31/2009

For Approval

Current Fiscal **Program** Share to **Carry Forward Funds** Line Project Description Action State Area Year Local Funds PT-2010-03-03-02 Garner Police Department \$.00 \$10,000.00 52 Plan \$.00 \$10,000.00 53 Plan PT-2010-03-03-03 Guilford County Sheriff's Office \$.00 \$10,000.00 \$.00 \$10,000.00 54 Plan PT-2010-03-03-04 Henderson County Sheriff's Office \$.00 \$10,000.00 \$.00 \$10,000.00 \$.00 \$10,000.00 55 Plan PT-2010-03-03-05 Jackson County Sheriff's Office \$.00 \$10,000.00 \$.00 \$10,000.00 \$.00 \$10,000.00 56 Plan PT-2010-03-03-06 Kitty Hawk Police Department

57 Plan	PT-2010-03-03-07 Lenior Police Department	\$.00 \$24,500.00	\$.00 \$24,500.00
58 Plan	PT-2010-03-03-08 Mooresville Police Department	\$.00 \$10,000.00	\$.00 \$10,000.00
59 Plan	PT-2010-03-03-09 New Hanover County Sheriff's Office	\$.00 \$10,000.00	\$.00 \$10,000.00
60 Plan	PT-2010-03-03-10 Rockingham Police Department	\$.00 \$10,000.00	\$.00 \$10,000.00
61 Plan	PT-2010-03-03-11 Tarboro Police Department	\$.00 \$10,000.00	\$.00 \$10,000.00
62 Plan	PT-2010-03-03-12 UNC G Campus Police	\$16,627.00 \$16,627.00	\$.00 \$16,627.00
63 Plan	PT-2010-03-03-13 Gastonia Police Department	\$.00 \$17,600.00	\$.00 \$17,600.00
64 Plan	PT-2010-03-03-14 Highlands Police Department	\$2,040.00 \$6,120.00	\$.00 \$6,120.00
65 Plan	PT-2010-03-03-15 Kannapolis Police Department	\$1,320.00 \$3,960.00	\$.00 \$3,960.00
66 Plan	PT-2010-03-03-16 Macon County Sheriff's Office	\$8,650.00 \$25,950.00	\$.00 \$25,950.00
67 Plan	PT-2010-03-03-17 Maggie Valley Police Department	\$14,098.00 \$14,097.00	\$.00 \$14,097.00
68 Plan	PT-2010-03-03-18 Morganton Police Department	\$2,713.00 \$8,140.00	\$.00 \$8,140.00
69 Plan	PT-2010-03-03-19 Durham Police Department	\$.00 \$9,000.00	\$.00 \$9,000.00
70 Plan	PT-2010-03-03-20 Holly Ridge Police Department	\$1,776.00 \$5,329.00	\$.00 \$5,329.00
71 Plan	PT-2010-03-03-21 Knightdale Police Department	\$.00 \$9,000.00	\$.00 \$9,000.00
72 Plan	PT-2010-03-03-22 New Bern Police Department	\$15,375.00 \$46,125.00	\$.00 \$46,125.00
73 Plan	PT-2010-03-03-23 Raleigh Police Department	\$32,300.00 \$32,300.00	\$.00 \$32,300.00
74 Plan	PT-2010-03-03-24 Street Safe	\$.00 \$6,500.00	\$.00 \$6,500.00
75 Plan	PT-2010-03-03-25 UNC W Campus Police	\$.00 \$12,000.00	\$.00 \$12,000.00

### U.S. Department of Transportation National Highway Traffic Safety Administration

State: North Carolina Highway Safety Plan Transaction Page: 3

	State: North	Carolina		Highway Safety Plan Transac	ction		Page: 3	
Program Area	Line	Action	Project	Description	State	Current Fiscal Year Funds	Carry Forward Funds	Share to Local
•	76	Plan	PT-2010-03-03-26	Weldon Police Department	\$4,250.00	\$12,750.00	\$.00	\$12,750.00
	77	Plan	PT-2010-03-03-27	Hendersonville Police Department	\$.00	\$30,800.00	\$.00	\$30,800.00
	78	Plan	PT-2010-03-03-28	Pinehurst Police Department	\$.00	\$23,900.00	\$.00	\$23,900.00
	79	Plan	PT-2010-03-03-29	Jacksonville Police Department	\$23,625.00	\$70,875.00	\$.00	\$70,875.00
	80	Plan	PT-2010-03-03-30	NC State Highway Patrol	\$.00	\$78,392.00	\$.00	\$.00
	81	Plan	PT-2010-03-03-31	Kinston Police Department	\$.00	\$3,000.00	\$.00	\$3,000.00
	82	Plan	PT-2010-03-04-01	Henderson County Sheriff's Office	\$.00	\$32,700.00	\$.00	\$32,700.00
	83	Plan	PT-2010-03-04-02	Mooresville Police Department	\$.00	\$39,000.00	\$.00	\$39,000.00
	84	Plan	PT-2010-03-04-03	Ayden Police Department	\$.00	\$5,600.00	\$.00	\$5,600.00
	85	Plan	PT-2010-03-04-04	Hickory Police Department	\$101,130.00	\$101,130.00	\$.00	\$101,130.00
	86	Plan	PT-2010-03-04-05	Whispering Pines Police Department	\$27,291.00	\$27,291.00	\$.00	\$27,291.00
	87	Plan	PT-2010-03-04-06	Brunswick County Sheriff's Office	\$.00	\$172,700.00	\$.00	\$172,700.00
	88	Plan	PT-2010-03-04-07	Nash County Sheriff's Office	\$114,690.00	\$114,690.00	\$.00	\$114,690.00
	89	Plan	PT-2010-03-04-08	Oxford County Sheriff's Office	\$.00	\$24,700.00	\$.00	\$24,700.00
	90	Plan	PT-2010-03-04-09	Wake County Sheriff's Office	\$126,765.00	\$126,765.00	\$.00	\$126,765.00
	91	Plan	PT-2010-03-04-10	Wilmington Police Department	\$57,121.00	\$57,121.00	\$.00	\$57,121.00
	92	Plan	PT-2010-03-04-11	Marshville Police Department	\$13,467.00	\$76,315.00	\$.00	\$76,315.00
	93	Plan	PT-2010-03-04-12	Troutman Police Department	\$16,501.00	\$93,507.00	\$.00	\$93,507.00
	94	Plan	PT-2010-03-04-13	Waxhaw Police Department	\$.00	\$157,500.00	\$.00	\$157,500.00

95 Plan	PT-2010-03-04-14 China Grove Police Department	\$13,741.00 \$77,864.00	\$.00	\$77,864.00
96 Plan	PT-2010-03-04-15 Guilford County Sheriff's Office	\$31,800.00 \$180,200.00	\$.00	\$180,200.00
97 Plan	PT-2010-03-04-16 Coats Police Department	\$14,170.00 \$80,294.00	\$.00	\$80,294.00
160 Plan	PT-2010-03-05-00 NC Sheriff's Association	\$.00 \$28,019.00	\$.00	\$28,019.00
161 Plan	PT-2010-03-03-32 Rutherfordton Police Department	\$2,500.00 \$7,500.00	\$.00	\$7,500.00

## U.S. Department of Transportation National Highway Traffic Safety Administration

## **Highway Safety Plan Transaction**

State: North Carolina Page: 4 2010-HSP-1 Report Date: 08/31/2009

Program Area Line Action	Project	Description	State	Current Fiscal Year Funds	Carry Forward Funds	Share to Local
Police Traffic Services Total			\$641,950.00	\$2,328,711.00	\$.00	\$1,961,819.00
Traffic Records						
147 Plan	TR-2010-10-01-00	UNC HSRC	\$14,787.00	\$42,807.00	\$.00	\$.00
148 Plan	TR-2010-10-02-00	UNC HSRC	\$17,644.00	\$51,075.00	\$.00	\$.00
149 Plan	TR-2010-10-03-00	Ayden Police Department	\$.00	\$16,000.00	\$.00	\$16,000.00
150 Plan	TR-2010-10-04-00	Lumberton Police Department	\$.00	\$13,200.00	\$.00	\$13,200.00
Traffic Records Total			\$32,431.00	\$123,082.00	\$.00	\$29,200.00
Railroad/Highway Crossings						
157 Plan	RH-2010-12-01-00	NC Operation Lifesaver	\$.00	\$80,000.00	\$.00	\$59,000.00
Railroad/Highway Crossings Total			\$.00	\$80,000.00	\$.00	\$59,000.00
Roadway Safety						
159 Plan	RS-2010-15-01-00	NCDOT-Safety	\$.00	\$12,500.00	\$.00	\$.00
Roadway Safety Total			\$.00	\$12,500.00	\$.00	\$.00
School Bus						
158 Plan	SB-2010-13-01-00	NC DPI-School Bus Program	\$11,000.00	\$23,700.00	\$.00	\$23,700.00
School Bus Total			\$11,000.00	\$23,700.00	\$.00	\$23,700.00
NHTSA 402 Total			\$1,036,983.00	\$4,730,049.00	\$.00	\$3,048,642.00
405 OP SAFETEA-LU						
138 Plan	K2-2010-07-01-00	GHSP In-house LE Network	\$.00	\$90,000.00	\$.00	\$60,000.00
139 Plan	K2-2010-07-02-00	GHSP In-house Points	\$.00	\$647,500.00	\$.00	\$647,500.00
140 Plan	K2-2010-07-03-00	GHSP In-house Media Buys	\$.00	\$250,000.00	\$.00	\$.00
141 Plan	K2-2010-07-04-00	GHSP In-house Theater Advertising	\$.00	\$32,500.00	\$.00	\$32,500.00
405 Occupant Protection Total			\$.00	\$1,020,000.00	\$.00	\$740,000.00
405 OP SAFETEA-LU Total			\$.00	\$1,020,000.00	\$.00	\$740,000.00

# U.S. Department of Transportation National Highway Traffic Safety Administration Highway Safety Plan Transaction

State: North Carolina Highway Safety Plan Transaction Page: 5
2010-HSP-1 Report Date: 08/31/2009

Program Area	Line	Action	Project	Description	State	Current Fiscal Year Funds	Carry Forward Funds	Share to Local
NHTSA 400	6					2 433 633		
	98	Plan	K4-2010-04-01-00	Garner Police Department	\$16,845.00	\$95,450.00	\$.00	\$95,450.00
	99	Plan	K4-2010-04-02-00	Aberdeen Police Department	\$14,893.00	\$84,397.00	\$.00	\$84,397.00
	100	Plan	K4-2010-04-03-00	Alexander County Sheriff's Office	\$16,266.00	\$92,172.00	\$.00	\$92,172.00
	101	Plan	K4-2010-04-04-00	Anson County Sheriff's Office	\$14,299.00	\$81,027.00	\$.00	\$81,027.00
	102	Plan	K4-2010-04-05-00	Conover Police Department	\$.00	\$85,000.00	\$.00	\$85,000.00
	103	Plan	K4-2010-04-06-00	Landis Police Department	\$14,808.00	\$83,915.00	\$.00	\$83,915.00
	104	Plan	K4-2010-04-07-00	Laurinburg Police Department	\$16,996.00	\$96,314.00	\$.00	\$96,314.00
	105	Plan	K4-2010-04-08-00	Lexington Police Department	\$14,412.00	\$81,669.00	\$.00	\$81,669.00
	106	Plan	K4-2010-04-09-00	Locust Police Department	\$.00	\$85,000.00	\$.00	\$85,000.00
	107	Plan	K4-2010-04-10-00	Mint Hill Police Department	\$26,115.00	\$147,985.00	\$.00	\$147,985.00
	108	Plan	K4-2010-04-11-00	Scotland County Sheriff's Office	\$15,204.00	\$86,156.00	\$.00	\$86,156.00
	109	Plan	K4-2010-04-12-00	Statesville Police Department	\$29,881.00	\$169,322.00	\$.00	\$169,322.00
	110	Plan	K4-2010-04-13-00	Transylvania Police Department	\$13,200.00	\$74,800.00	\$.00	\$74,800.00
	111	Plan	K4-2010-04-14-00	Wadesboro Police Department	\$29,078.00	\$164,776.00	\$.00	\$164,776.00
	112	Plan	K4-2010-04-15-00	Wilkesboro Police Department	\$12,662.00	\$71,751.00	\$.00	\$71,751.00
	113	Plan	K4-2010-04-16-00	Wingate Police Department	\$15,515.00	\$87,917.00	\$.00	\$87,917.00
	114	Plan	K4-2010-04-17-00	Bridgeton Police Department	\$.00	\$97,100.00	\$.00	\$97,100.00
	115	Plan	K4-2010-04-18-00	Burgaw Police Department	\$14,375.00	\$81,464.00	\$.00	\$81,464.00
	116	Plan	K4-2010-04-19-00	Jones County Sheriff's Office	\$.00	\$65,800.00	\$.00	\$65,800.00
	117	Plan	K4-2010-04-20-00	Kill Devil Hills Police Department	\$.00	\$21,660.00	\$.00	\$21,660.00
	118	Plan	K4-2010-04-21-00	Morehead City Police Department	\$.00	\$84,200.00	\$.00	\$84,200.00
	119	Plan	K4-2010-04-22-00	Nashville Police Department	\$22,449.00	\$127,207.00	\$.00	\$127,207.00
	120	Plan	K4-2010-04-23-00	Newport Police Department	\$.00	\$83,400.00	\$.00	\$83,400.00

#### U.S. Department of Transportation National Highway Traffic Safety Administration

State: North Carolina Highway Safety Plan Transaction Page: 6
2010-HSP-1 Report Date: 08/31/2009

For Approval

Program Area	Line	Action	Project	Description	State	Current Fiscal Year Funds	Carry Forward Funds	Share to Local
	121	Plan	K4-2010-04-24-00	Pittsboro Police Department	\$16,327.00	\$92,522.00	\$.00	\$92,522.00
	122	Plan	K4-2010-04-25-00	Sharpsburg Police Department	\$12,839.00	\$72,755.00	\$.00	\$72,755.00
	123	Plan	K4-2010-04-26-00	Wendell Police Department	\$33,290.00	\$188,641.00	\$.00	\$188,641.00
	124	Plan	K4-2010-04-27-00	Avery County Sheriff's Office	\$14,766.00	\$83,675.00	\$.00	\$83,675.00
	125	Plan	K4-2010-04-28-00	Cornelius Police Department	\$30,233.00	\$171,322.00	\$.00	\$171,322.00
	126	Plan	K4-2010-04-29-00	Hoke County Sheriff's Office	\$13,807.00	\$78,237.00	\$.00	\$78,237.00

127 Plan	K4-2010-04-30-00 Iredell County Sheriff's Office	\$.00	\$159,300.00	\$.00	\$159,300.00
128 Plan	K4-2010-04-31-00 Cabarrus County Sheriff's Office	\$36,406.00	\$206,298.00	\$.00	\$206,298.00
129 Plan	K4-2010-04-32-00 Richmond County Sheriff's Office	\$.00	\$57,000.00	\$.00	\$57,000.00
NHTSA 406 Total		\$444,666.00	\$3,258,232.00	\$.00	\$3,258,232.00
406 Safety Belts Incentive Total		\$444,666.00	\$3,258,232.00	\$.00	\$3,258,232.00
408 Data Program Incentive					
408 Data Program SAFETEA-LU					
151 Plan	K9-2010-11-01-00 GHSP In-house TR Support	\$.00	\$67,000.00	\$.00	\$.00
152 Plan	K9-2010-11-02-00 AOC-Printers	\$.00	\$328.50	\$.00	\$328.50
153 Plan	K9-2010-11-03-00 NCDOT-TRCC	\$.00	\$16,500.00	\$.00	\$.00
154 Plan	K9-2010-11-04-00 Lenior Police Department	\$44,000.00	\$44,000.00	\$.00	\$44,000.00
155 Plan	K9-2010-11-05-00 Macon County Sheriff's Office	\$16,000.00	\$16,000.00	\$.00	\$16,000.00
156 Plan	K9-2010-11-06-00 Taylorsville Police Department	\$.00	\$12,000.00	\$.00	\$12,000.00
162 Plan	K9-2010-11-07-00 NC State Highway Patrol	\$.00	\$331,240.00	\$.00	\$.00
408 Data Program SAFETEA-LU Total	1	\$60,000.00	\$487,068.50	\$.00	\$72,328.50
408 Data Program Incentive Total		\$60,000.00	\$487,068.50	\$.00	\$72,328.50
410 Alcohol SAFETEA-LU					
410 Alcohol SAFETEA-LU					
3 Plan	K8-2010-02-01-00 GHSP In-house K8 Tech Support	\$.00	\$125,600.00	\$.00	\$.00

## U.S. Department of Transportation National Highway Traffic Safety Administration

# Highway Safety Plan Transaction 2010-HSP-1

State: North Carolina

For Approval

Page: 7 Report Date: 08/31/2009

				Гог Арргочаг		Current		
Program	Line	A -4:	D	D	54-4-	Fiscal	Comm. Formand Family	Share to
Area	Line	Action	Project	Description	State	Year	Carry Forward Funds	Local
						Funds		
		Plan	K8-2010-02-02-00			\$83,930.00		\$37,500.00
		Plan		FTA Research Science		\$374,000.00		\$374,000.00
		Plan	K8-2010-02-04-00	FTA DRE	\$.00	\$208,972.00		\$158,000.00
		Plan	K8-2010-02-05-00	FTA SFST	\$.00	\$47,500.00	\$.00	\$47,500.00
	8	Plan	K8-2010-02-06-00	AOC-Conference of DA's	\$.00	\$271,423.00	\$.00	\$217,634.00
		Plan	K8-2010-02-07-00	AOC-Pitt County	\$.00	\$42,589.00	\$.00	\$42,589.00
	10	Plan	K8-2010-02-08-00	AOC-Wayne County	\$.00	\$166,600.00	\$.00	\$.00
	11	Plan	K8-2010-02-09-00	AOC-Watauga County	\$.00	\$73,150.00	\$.00	\$73,150.00
	12	Plan	K8-2010-02-10-00	SADD	\$.00	\$12,000.00	\$.00	\$.00
	13	Plan	K8-2010-02-11-00	AOC-Buncombe County	\$.00	\$42,809.00	\$.00	\$42,809.00
	14	Plan	K8-2010-02-12-00	AOC-New Hanover County	\$.00	\$51,959.00	\$.00	\$51,959.00
	15	Plan	K8-2010-02-13-00	AOC-Johnston County	\$.00	\$167,809.00	\$.00	\$167,809.00
	16	Plan	K8-2010-02-14-00	AOC-Wake County	\$.00	\$96,716.00	\$.00	\$96,716.00
	17	Plan	K8-2010-02-15-00	GHSP In-house Expo	\$.00	\$76,800.00	\$.00	\$.00
	18	Plan	K8-2010-02-16-00	New Hanover County Sheriff's Office	\$124,027.00	\$124,027.00	\$.00	\$124,027.00
	19	Plan	K8-2010-02-17-00	Henderson County Sheriff's Office	\$.00	\$1,700.00	\$.00	\$1,700.00
	20	Plan	K8-2010-02-18-00	Appalachian State University Police	\$.00	\$15,100.00	\$.00	\$.00
	21	Plan	K8-2010-02-19-00	Cramerton Police Department	\$7,950.00	\$7,950.00	\$.00	\$7,950.00
	22	Plan	K8-2010-02-20-00	Eden Police Department	\$.00	\$17,275.00	\$.00	\$17,275.00
	23	Plan	K8-2010-02-21-00	Forsyth County Sheriff's Office	\$.00	\$6,200.00	\$.00	\$.00
	24	Plan	K8-2010-02-22-00	Laurinburg Police Department	\$.00	\$2,650.00	\$.00	\$2,650.00
	25	Plan	K8-2010-02-23-00	Locust Police Department	\$.00	\$7,900.00	\$.00	\$.00
	26	Plan	K8-2010-02-24-00	Maggie Valley Police Department	\$.00	\$6,000.00	\$.00	\$.00
	27	Plan	K8-2010-02-25-00	Oakboro Police Department	\$.00	\$17,200.00	\$.00	\$17,200.00

## $U.S.\ Department\ of\ Transportation\ National\ Highway\ Traffic\ Safety\ Administration$

State: North Carolina

## **Highway Safety Plan Transaction**

### 2010-HSP-1

For Approval

Page: 8 Report Date: 08/31/2009

Program Area	Line	Action	Project	Description	State	Current Fiscal Year Funds	Carry Forward Funds	Share to Local
	28	Plan	K8-2010-02-26-00	Rockingham Police Department	\$.00	\$17,095.00	\$.00	\$17,095.00
	29	Plan	K8-2010-02-27-00	Sanford Police Department	\$.00	\$18,300.00	\$.00	\$.00
	30	Plan	K8-2010-02-28-00	Swain County Sheriff's Office	\$.00	\$9,978.00	\$.00	\$9,978.00
	31	Plan	K8-2010-02-29-00	Western Piedmont Community College	\$.00	\$1,203.00	\$.00	\$1,203.00
	32	Plan	K8-2010-02-30-00	Yancey County Sheriff's Office	\$.00	\$14,100.00	\$.00	\$14,100.00
	33	Plan	K8-2010-02-31-00	Brunswick County Sheriff's Office	\$.00	\$8,700.00	\$.00	\$8,700.00
	34	Plan	K8-2010-02-32-00	Goldsboro Police Department	\$.00	\$8,500.00	\$.00	\$8,500.00
	35	Plan	K8-2010-02-33-00	Jones County Sheriff's Office	\$.00	\$8,525.00	\$.00	\$8,525.00
	36	Plan	K8-2010-02-34-00	Justice in Motion	\$.00	\$1,290.00	\$.00	\$1,290.00
	37	Plan	K8-2010-02-35-00	Kill Devil Hills Police Department	\$47,137.00	\$267,107.00	\$.00	\$267,107.00
	38	Plan	K8-2010-02-36-00	Nash County Sheriff's Office	\$.00	\$17,700.00	\$.00	\$17,700.00
	39	Plan	K8-2010-02-37-00	Roxboro Police Department	\$18,000.00	\$18,000.00	\$.00	\$18,000.00
	40	Plan	K8-2010-02-38-00	UNC W Campus Police	\$.00	\$14,824.00	\$.00	\$14,824.00
	41	Plan	K8-2010-02-39-00	Wake County Sheriff's Office	\$.00	\$19,900.00	\$.00	\$19,900.00
	42	Plan	K8-2010-02-40-00	Wendell Police Department	\$.00	\$23,525.00	\$.00	\$23,525.00
	43	Plan	K8-2010-02-41-00	UNC HSRC	\$14,383.00	\$41,635.00	\$.00	\$41,635.00
	44	Plan	K8-2010-02-42-00	ALE	\$.00	\$50,000.00	\$.00	\$25,000.00
	45	Plan	K8-2010-02-43-00	MADD	\$114,900.00	\$101,500.00	\$.00	\$75,000.00
	46	Plan	K8-2010-02-44-00	El Pueblo	\$.00	\$83,361.00	\$.00	\$41,680.00
410 Alcohol SAFET	EA-LU T	otal			\$326,397.00	\$2,773,102.00	\$.00	\$2,094,230.00
2010 Motorcycle Saf	ety							
	143	Plan	K6-2010-09-01-00	GHSP In-house	\$.00	\$27,000.00	\$.00	\$.00
	144	Plan	K6-2010-09-02-00	NCSHP Bike Safe	\$.00	\$50,000.00	\$.00	\$30,000.00
	145	Plan	K6-2010-09-03-00	NC Motorcycle Safety Education Program	\$.00	\$38,400.00	\$.00	\$38,400.00

## $U.S.\ Department\ of\ Transportation\ National\ Highway\ Traffic\ Safety\ Administration$

State: North Carolina

## Highway Safety Plan Transaction

2010-HSP-1 For Approval Page: 9 Report Date: 08/31/2009

Program Area	Line	Action	Project	Description	State	Current Fiscal Year Funds	Carry Forward Funds	Share to Local
	146	Plan	K6-2010-09-04-00	GHSP In-house PI&E	\$.00	\$75,000.00	\$.00	\$75,000.00
2010 Motorcycle Safety	Incentiv	e Total			\$.00	\$190,400.00	\$.00	\$143,400.00
2010 Motorcycle Safety	Total				\$.00	\$190,400.00	\$.00	\$143,400.00
2011 Child Seats								
	137	Plan	K3-2010-06-01-00	NC Department of Insurance Safe Kids	\$638,000.00	\$536,443.00	\$.00	\$.00
NHTSA Total					\$2,506,046.00	\$12,995,294.50	\$.00	\$9,356,832.50
	Total				\$2,506,046.00	\$12,995,294.50	\$.00	\$9,356,832.50
2011 Child Seat Incent	ive Total				\$638,000.00	\$536,443.00	\$.00	\$.00
2011 Child Se	ats Total				\$638,000.00	\$536,443.00	\$.00	\$.00

# Appendix A

# **Highlighted Projects**

Project Number: PA-10-00-01

Agency: GHSP – Planning and Administration

Goals/Objectives: To implement and oversee local and state traffic safety contracts and grants.

To implement statewide traffic safety programs such as "Click It or Ticket", "Booze it & Lose It" and "No Need 2 Speed". Tasks/Description: Provide organizational structure that will allow for appropriate planning, evaluation, accounting and oversight of federal highway safety funds. Establish procedures to assure that funds are being properly expended and that funds are being liquidated at an appropriate rate.

PROJECT BUD	GET						
<b>Cost Category</b>	Total		Federal	State			Local
	Amount	<b>%</b>	Amount	%	Amount	%	Amount
Personnel	438000	50	219000	50	219000		\$
Contractual	18400	50	9200	50	9200		\$
Commodities	2000	50	1000	50	1000		\$
Direct	24000	50	12000	50	12000		\$
Indirect	140904	50	70452	50	70452		\$
Total	623304		311652		311652		\$

	PERSONNEL BUDGET DETAIL						
Quantity	<u>Personnel</u>		Amount				
	Salaries, seven positions per NCDOT activity rates		438000				
		Total	438000				

	CONTRACTUAL BUDGET DETAIL							
Vendor	<u>Description</u>	Amount						
	State Parking rental	400						
	Telephone service	18000						
	<u>Total</u>	18400						

	COMMODITIES BUDGET DETAIL						
Quantity	<u>Commodities Description</u>	Amount					
	Misc. supplies & support	2000					
	<u>Total</u>	2000					

	OTHER DIRECT COSTS BUDGET DETAIL						
Quantity	<u>Description</u>	Amount					
	Copier service contract	2000					
	In state travel	10000					
	Out of state travel	10000					
	Subscriptions	2000					
	<u>Total</u>	24000					

INDIRECT COSTS BUDGET DETAIL					
Vendor	<u>Description</u>	Amount			
	BSIPS charges	140904			
	<u>Total</u>	140904			

Project Number: AL-10-01-01 Agency: GHSP – Alcohol PI&E

Goals/Objectives: Increase public understanding of North Carolina's traffic safety laws through public service announcement, paid advertising and earned media. Conduct events to promote traffic safety issues and high visibility enforcement activities through use of publications, correspondence and web sites. To promote a creative marketing approach that will include the Carolina Hurricanes, all four ACC college teams and Lowe's ZMax Dragway.

Tasks/Description: Plan and execute "Booze It & Lose It" media events and kickoffs. Hold annual Tree of Life event. Conduct sports marketing. Update materials and brochures and purchase promotional items. Conduct sports marketing throughout the year.

PROJECT BUDGET								
<b>Cost Category</b>	Total		Federal		State		Local	
	Amount	%	Amount	%	Amount	%	Amount	
Contractual	478200	100	478200		\$		\$	
Commodities	40000	100	40000		\$		\$	
Direct	43800	100	43800		\$		\$	
Total	562000		562000		\$		\$	

	CONTRACTUAL BUDGET DETAIL						
Vendor	<u>Description</u>	Amount					
	Materials-Warehouse storage	12000					
	Sports marketing	250000					
	News clipping service	1200					
	Paid media	150000					
	Movie theater advertising	65000					
	<u>Total</u>	478200					

COMMODITIES BUDGET DETAIL							
Quantity	Commodities Description	Amount					
	Booze It & Lose It promotional items	30000					
	Printing	10000					
	<u>Total</u>	40000					

	OTHER DIRECT COSTS BUDGET DETAIL				
Quantity	<u>Description</u>	Amount			
	In state travel	1000			
	Out of state travel	1500			
	Press events	1000			
	Postage & shipping	2000			
	Tree of Life event	2000			
	PSA production 10000	10000			
	Batmobile support	20000			
	Vehicle (Taurus 25346)	6300			
	Total	43800			

Project Number: K8-10-02-02

Agency: Forensic Tests for Alcohol – Bat Mobile Program

Goals/Objectives: the bat program will continue to enhance public awareness by displaying the bat mobile units at highway safety/educational events across the state. This will continue to have an impact in reducing the number of drinking drivers on our highways by reaching more of the public and young adults to explain the dangers of alcohol and drinking and driving. Presently, the bat program is utilized at the state fair, state agency health fairs and city and county community events statewide. Bat units are routinely used at high schools, colleges and universities to emphasize the message of the dangers of drinking and driving. In 2007, more than 65,180 people visited the bat mobile units. Presently, the bat program provides a service to all law enforcement statewide. This service consists of agencies soliciting the bat program by requesting use of a bat unit(s) to be utilized at a DWI checkpoint and/or highway safety educational event. The bat unit is used to process the drinking driver on location at the designated DWI checkpoint. This service eliminates the officer arresting the drinking driver and having to transport the driver to a law enforcement facility away from the checkpoint. The bat units are equipped with all necessary equipment such as DWI checkpoint signs, traffic cones, portable lighting, and alcohol screening test devices, cellular phones, documents and supplies utilized in processing the drinking driver. The bat units are also utilized throughout the state as an educational tool to educate the general public and young adults about the dangers of alcohol and drinking and driving.

### Tasks/Description:

Coordinate with law enforcement agencies across the state for scheduling the bat mobile unit DWI checkpoints to include providing the expertise regarding DWI checkpoints. Coordinate scheduling the bat mobile unit to be utilized at educational events across the state to include high schools, community colleges and universities across the state. Assist the Governor's Highway Safety Program during their DWI campaigns. Provide support to law enforcement and state prosecutors regarding issues related to drinking and driving.

Project Number: K8-10-02-02 Agency: Forensic Tests for Alcohol – Bat Mobile Program

PROJECT BU	UDGET							
Cost Category	y To	otal		Federal		State		Local
	Amount		%	Amount	%	Amount	%	Amount
Personnel			100	\$46,430		\$		\$
Contractua	ıl	\$		\$		\$		\$
Commoditie		\$1,500	100	\$1,500		\$		\$
Other Direct		36,000	100	\$36,000		\$		\$
Indirect Co		\$		\$		\$		\$
Total	\$8	33,930		\$83,930		\$		\$
			P	ERSONNEL BUD	GET DE	TAIL		
Quantity				<u>Personn</u>	<u>el</u>			Amount
1	BAT Coor	dinator						\$36,000
	Fringes						\$10,430	
						<u> </u>	<u> Total</u>	\$46,430
CONTRACTUAL BUDGET DETAIL								
Vendor	<u>Description</u>					Amount		
							\$	
						<u>]</u>	<u> Total</u>	\$
			CC	MMODITIES BUI	DGET D	ETAIL		
Vendor				<u>Descripti</u>	<u>on</u>			Amount
	Promotiona	al Items						\$1,500
						<u>]</u>	<u> Total</u>	\$1,500
			OTHE	R DIRECT COSTS	BUDGE	ET DETAIL		
Quantity				<u>Descripti</u>	<u>on</u>			Amount
	Cell Phone	Comm	unicati	ons				\$5,000
	Printing							\$3,000
	In-State Tr	avel						\$22,000
	Out of State Travel						\$6,000	
							<u> Total</u>	\$36,000
			INI	DIRECT COST BU	DGET D	DETAIL		
Quantity				Description	1			Amount
								\$
<u> </u>						To	tal	\$

Project Number: K8-10-02-03 Agency: FTA-Research Science

#### Goals/Objectives:

The FTA branch trains over 6,000 analysts in the evidential instruments, over 1,000 officers on ASTDS and receives requests and/or subpoenas to provide expert testimony in over 180 court DWI cases statewide. The processing and/or preparing for these trials have put a tremendous additional workload on the administrative staff in doing research. The FTA branch does not have additional funding to employ a part-time administrative assistant to assist with the preparation of these cases. The fta branch will provide ec/ir ii and astd training for all law enforcement officers statewide in the processing of an impaired driver. Purchasing parts for the astd would allow the fta branch to continue providing free service and repairs on astds for law enforcement agencies, eliminating factory costs and keeping the astds in the hands of officers in the enforcement of dwi. Purchasing large quantities of mouthpieces results in a cost savings for mouthpieces. Having an adequate supply of mouthpieces to test the drinking driver is a neccessity. Purchasing astds for law enforcement agencies will result in an increase in dwi arrests. Astds will greatly enhance the officers ability to detect and arrest the impaired driver. In-state travel for all staff personnel, printing necessary manuals, forms and other required material will be implemented and will greatly enchance the state's prosecution and training of law enforcement officers in the detection, apprehension and conviction of the dwi driver. This training will also bring north carolina to the next level in removing impaired drivers from our streets and highways, reducing death and injuries caused by the impaired driver.

#### Tasks/Description:

Provide factory service and repairs on ASTDs used by law enforcement statewide. They will purchase and place mouthpieces at test sites across the state to include distributing ASTD mouthpieces to numerous law enforcement agencies to utilize with their ASTDs. FTA will support law enforcement agencies by supplying all necessary supplies and equipment necessary in removing the impaired driver from our streets and highways, reducing deaths and injuries caused by the impaired driver. This includes purchasing new evidential breath alcohol test instruments. They will continue the statewide support for law enforcement agencies and state prosecutors in detecting, removing and prosecuting the impaired driver.

Project Number: K8-10-02-03 Agency: FTA-Research Science

PROJECT BUDGET								
Cost Category	Total	_	Federal		State	Local		
	Amount	%	Amount	%	Amount	%	Amount	
Personnel					\$		\$	
Contractual	\$28,000		\$28,000		\$		\$	
Commodities	\$90,000		\$90,000		\$		\$	
Other Direct	\$256,000		\$256,000		\$		\$	
Indirect Cost	\$	·	\$		\$		\$	
Total	\$374,000		\$374,000		\$		\$	

0 11	PERSONNEL BUDGET DETAIL		
Quantity	<u>Personnel</u>	A	mount
		_	
	<u>To</u>	<u>tal</u>	
	CONTRACTUAL BUDGET DETAIL	1 .	
Vendor	<u>Description</u>	A	mount
	Instructors		\$8,000
	Administrative Support		\$20,000
	<u>To</u>	tal	\$28,000
	COMMODITIES BUDGET DETAIL		
Vendor	<u>Description</u>		mount
	ASTD Mouthpieces and Parts		\$55,000
	Evidential Mouthpieces, Parts and Printers		\$35,000
	<del></del>	<u>tal</u>	\$90,000
	OTHER DIRECT COSTS BUDGET DETAIL		
Quantity	<u>Description</u>	A	mount
400	Alco-Sensors	\$	3125,000
500	Ethanol Gas Canisters		\$50,000
	Ethanol Gas Canister Valves		\$8,000
2	Chemical Analyst Card Makers		\$8,000
	Printing		\$20,000
	In-State Travel		\$35,000
	Out-of State Travel		\$10,000
	<u>To</u>	stal \$	256,000
	INDIRECT COST BUDGET DETAIL		
Quantity	<u>Description</u>	Am	ount
			\$
	Tota	ıl	\$

Project Number: K8-10-02-06 Agency: NC Conference of DA's

### Goals/Objectives:

The Conference of District Attorneys is a state agency comprised of the 43 elected district attorneys. The office is responsible for all training needs for district attorneys, legal staff and support staff. The conference receives no funding for prosecutor/law enforcement education and development programs other than through federal grant funds. It remains the only agency that provides prosecutor training and prosecutor/law enforcement cross-training. North carolina laws and procedures continue to exhibit statutory flaws and loopholes that hinder obtaining the conviction and proper punishment. Innovative and scientifically accepted tools, such as horizontal gaze nystagmus (hgn), drug recognition (dre) and crash reconstruction exist but extensive training is needed for both prosecutors and law enforcement statewide on the requirements for admissibility. Problematic case law defining checkpoints and sfsts still exists and are abused daily in the court system. The conference will increase the level of readiness and proficiency for the effective prosecution of traffic-related cases and continue the employment of a traffic safety resource prosecutor (tsrp) who will be supervised by the chief resource prosecutor and 4 regional tsrps. The purpose of the tsrp is to serve along with the chief resource prosecutor as a liaison while providing technical assistance, training, counsel to law enforcement, and information to communities. The regional tsrps purpose is to facilitate the exchange of information throughout the state and to assist the tsrp and crt with training and technical assistance. The conference will improve communication and cooperation between victims, law enforcement and prosecution.

#### Tasks/Description:

The Conference of Da's will provide education on traffic-related issues through publications, training and trial advocacy courses, technical assistance, and community outreach. Increase the level of understanding and awareness between prosecutors, law enforcement and the community and encourage District Attorneys' continued involvement in traffic-related projects. The TSRP will act as a liaison with NHTSA, NAPC, GHSP, NCSHP, local law enforcement, other agencies, community organizations and prosecutors to inform them of the needs, concerns, and activities of the District Attorneys with regards to traffic safety issues. Provide both general and specific technical assistance to prosecutors and law enforcement via training, phone, email and publications and develop and publish "For the Record" traffic safety newsletter. The Conference will provide training for special topic programs for prosecutor and/or law enforcement to ready them for the most effective prosecution of DWI-related cases. Develop and implement DWI tracks for training at the NC District Attorneys' Association meeting, as well as state and national conferences and training. Attend checkpoints to assist in legally sound DWI and other traffic arrests. Upon request, serve as lead or second chair or assist in the prosecution of DWI, vehicular homicide and/or other traffic-related cases. Educate citizens, community groups and organizations regarding the role of the prosecutor in highway safety issues.

Project Number: K8-10-02-06 Agency: NC Conference of DA's

PROJECT BUDGET									
Cost Category	Total		Federal	State		Local			
	Amount	%	Amount	%	Amount	%	Amount		
Personnel	\$53,789		\$53,789		\$		\$		
Contractual	\$31,400		\$31,400		\$		\$		
Commodities	\$5,000		\$5,000		\$		\$		
Other Direct	\$181,234		\$181,234		\$		\$		
Indirect Cost	\$		\$		\$		\$		
Total	\$271,423		\$271,423		\$		\$		

	PERSONNEL BUDGET DETAIL	
Quantity	<u>Personnel</u>	Amount
	Traffic Safety Legal Assistant	\$40,500
	Fringes	\$13,289
	<u>Total</u>	\$53,789
	CONTRACTUAL BUDGET DETAIL	
Vendor	<u>Description</u>	Amount
	Speaker Services	\$5,000
	Traffic Safety Resource Prosecutor	26,400
	<u>Total</u>	\$31,400
	COMMODITIES BUDGET DETAIL	
Vendor	<u>Description</u>	Amount
	Promotional Items	\$5,000
	<u>Total</u>	\$5,000
	OTHER DIRECT COSTS BUDGET DETAIL	
Quantity	<u>Description</u>	Amount
	DWI Primer, Newsletter and Shipping	\$6,500
	Training Brochures and Supplies	\$14,500
	TSRP Equipment	\$12,000
	In-State Travel	\$120,700
	Out-of-State Travel	\$27,534
	Out-of-State Travel Total	
Quantity	<u>Total</u>	
Quantity	Total INDIRECT COST BUDGET DETAIL	\$27,534 \$181,234 Amount

Project Number: K8-10-02-13

Agency: Johnston County District Attorney's Office

## Goals/Objectives:

Johnston county is a high-growth area with three major roadways running through the county (interstates 95, 40 and highway 70). The population growth has been accompanied by an increasing number of motor vehicle and DWI cases. Johnston continues to have the greatest number of DWI cases among the three counties in district 11. Due to the high volume of traffic cases, the assistant district attorneys do not have adequate time or resources to prepare for cases on the next day's docket by (1) interviewing driving witnesses, (2) locating and subpoenaing those persons involved in taking and testing the defendant's blood, (3) identifying and debriefing medical care providers at EMS and hospitals who may have treated the defendant and victims, (4) obtaining photographs, and (5) out-of-state driving records, and other documents needed for effective prosecution and sentencing of offenders. Additionally, the most complex cases raise issues that require advance preparation in order to present the evidence necessary to convict and hold accountable the most dangerous offenders. As a result, there are delays in disposing cases because parties often fail to appear in court as schedule and vital case information is not collected in a timely manner. Johnston county DA's office will continue to reduce both the pending age and the number of pending DWI by 25% within a year's time and continue to reduce the number of DWI dismissals due to parties' failure to appear in court and lack of sufficient evidence to prosecute.

## Tasks/Description:

Johnston County DA's Office will continue to operate a DWI Court three days a week to expedite the disposition of DWI Cases and continue to reduce the DWI case back log in Johnston County. They will provide a legal assistant who is solely dedicated to DWI Court who will ensure that all interested parties are subpoenaed i.e. law enforcement, chemical analysts, civilian witnesses, and medical personnel. In addition, they will continue to employ an Assistant District Attorney who is solely dedicated to DWI Court who will be responsible for interviewing driving witnesses, locating persons involved in taking and testing the defendant's blood, identifying and debriefing medical care providers at EMS and hospitals who may have treated the defendant and victims, and obtaining photographs, out-of state driving records, and other documents needed for effective prosecution and sentencing of offenders.

Project Number: K8-10-02-13 Agency: Johnston County District Attorney's Office

PROJECT BUDGET								
Cost Category	Total		Federal		State		Local	
	Amount	%	Amount	%	Amount	%	Amount	
Personnel	\$167,309	100	\$167,309		\$		\$	
Contractual					\$		\$	
Commodities					\$		\$	
Other Direct	\$500	100	\$500		\$		\$	
Indirect Cost	\$		\$		\$		\$	
Total	\$167,809		\$167,809		\$		\$	

	PERSONNEL BUDGET DETAIL		
Quantity	<u>Personnel</u>		Amount
	Legal Assistant		\$37,422
	Assistant District Attorney		\$41,513
	Part-time Deputy Clerk		\$16,733
	Part-time Retired Judge		\$42,000
	Fringes		\$29,641
	<u>To</u>	tal	\$167,309
	CONTRACTUAL BUDGET DETAIL		
Vendor	<u>Description</u>		Amount
	<u>To</u>	tal	
	COMMODITIES BUDGET DETAIL		
Vendor	<u>Description</u>		Amount
	<u>To</u>	tal	
	OTHER DIRECT COSTS BUDGET DETAIL		
Quantity	<b>Description</b>		Amount
	In-State Travel		\$500
	To	tal	\$500
	INDIRECT COST BUDGET DETAIL		
Quantity	<u>Description</u>		Amount
			\$
	Tota	ıl	\$

Project Number: K8-10-02-15 / OP-10-05-05 Agency: GHSP – Highway Safety Exhibit (Expo)

Goals/Objectives: To continue the EXPO schedule and to publicize the new EXPO while promoting Safety City at the NC

State and Mountain State Fairs.

Tasks/Description: Participate in the Mountain State Fair and the NC State Fair. Continue throughout the year with the EXPO

schedule of events.

PROJECT BUDGET								
<b>Cost Category</b>	Total		Federal		State		Local	
	Amount	%	Amount	%	Amount	%	Amount	
Personnel	\$53600	100	53600		\$		\$	
Contractual	10000	100	10000		\$		\$	
Commodities	5000	100	5000		\$		\$	
Direct	85000	100	85000		\$		\$	
Total	\$153600		153600		\$		\$	

	PERSONNEL BUDGET DETAIL	
Quantity	<u>Personnel</u>	Amount
	Part time driver	40000
	Fringes	13600
	Total	53600

	CONTRACTUAL BUDGET DETAIL				
Vendor	<u>Description</u>	Amount			
	NC Mountain State Fair	3000			
	NC State Fair	7000			
	Total	10000			

	COMMODITIES BUDGET DETAIL	
Quantity	<u>Commodities Description</u>	Amount
	Printing & supplies	5000
_	<u>Total</u>	5000

	OTHER DIRECT COSTS BUDGET DETAIL				
Quantity	<u>Description</u>	Amount			
	Expo support	50000			
	Insurance	3000			
	In state travel	30000			
	Out of state travel	2000			
	Total	85000			

Project Number: K8-10-02-41 Agency: HSRC - UNC

Goals/Objectives: To update the North Carolina Alcohol Facts web site with 2008 data.

Tasks/Description: Obtain the 2008 data from NCDOT, NCDMV and the Administrative Office of the Courts and place into the web site. Modify web site interface to provide user friendly data. Provide any needed support to web site users by

responding to inquiries.

PROJECT BUDGET							
<b>Cost Category</b>	Total		Federal State		e Local		
	Amount	%	Amount	%	Amount	%	Amount
Personnel	\$37709	100	37709		\$		\$
Commodities	141	100	141		\$		\$
Indirect	3785	100	3785		\$		\$
Total	\$41635		\$41635		\$		\$

	PERSONNEL BUDGET DETAIL				
Quantity	<u>Personnel</u>	Amount			
	Principal Investigator	9565			
	Research Associate	2248			
	Application & Data Specialist	13612			
	Systems Admin. – support	3814			
	Undergrad/grad support	1271			
	Fringes	7199			
	<u>Total</u>	37709			

	COMMODITIES BUDGET DETAIL	
Quantity	Commodities Description	Amount
	Project supplies/photocopies	141
		\$
	<u>Total</u>	141

INDIRECT COSTS BUDGET DETAIL				
Vendor	<u>Description</u>	Amount		
	UNC Facilities & Admin costs	3785		
	Total	3785		

Project Number: K8-10-02-42

PROJECT BUDGET

Total

Agency: Alcohol Law Enforcement (ALE)

Tasks/Description: through mobile enforcement, keys to life and cops in shops ale has increased the awareness of dangers associated with underage drinking and driving as well as maintaining the all-important enforcement aspect associated with effective deterrents. Although these programs have been extremely successful, ale continues to seek new opportunities to change the lives of our youth in a positive manner. Statistics show that education supported by strict enforcement can make a difference in the availability of alcohol to our youth. Ale believes that if alcohol were not easily obtainable, that the number of incidents involving alcohol use by underage persons would decline. Statistics show that underage persons acquire their alcohol approximately 65% of the time from adult providers. While the cops in shops and mobile enforcement projects allow them to identify some offenders, the opportunity to educate the public on this is missing in their efforts. The laws recently changed stiffen the penalty for those who aid and abet underage persons in the possession of alcoholic beverages. By continuing the addition of this component to ale's strategy it allows the opportunity to educate the adult audience in the dangerous consequences that can evolve when young people consume alcohol. Keys to Life has become a popular and effective tool in preventing underage possession and consumption of alcoholic beverages which can lead to automobile crashes. Ale believes that as a result of this initiative targeting high school juniors and seniors and college freshman and sophomores, they have prevented countless bad decisions that would have resulted in serious injuries and/or death.

Goals/Objectives: ale plans to build partnerships with retail community and local law enforcement by conducting cops in shops programs and public information programs. Purchasing promotional materials for distribution with strong drunk driving message to help in all programs will enforce the message. Educate at-risk youth on the dangers of underage alcohol consumption and driving while impaired and adults about the consequences of providing alcohol to and/or allowing the consumption of alcohol by underage persons by conducting keys to life programs for underage youth. Ale will conduct mobile enforcement team operations in targeted areas all year.

State

Local

Amount % Amount % Amount %	A 4					
Timount /0	Amount					
Personnel \$ 100 \$ \$	\$					
Contractual	\$					
Commodities \$25,000 100 \$25,000 \$	\$					
Other Direct \$25,000   100   \$25,000   \$	\$					
Indirect Cost \$ \$ \$	\$					
Total \$50,000 \$50,000 \$	\$					
<u>Total</u> \$						
COMMODITIES BUDGET DETAIL						
Vendor <u>Description</u>	Amount					
Promotional Items	\$25,000					
<u>Total</u>	\$25,000					
OTHER DIRECT COSTS BUDGET DETAIL						
Quantity <u>Description</u>	Amount					
In State Travel	\$25,000					
<u>Total</u>	\$25,000					

**Federal** 

Project Number: K8-10-02-43

Agency: Mothers Against Drunk Driving (MADD)

Tasks/Description: Mothers Against Drunk Driving (MADD) is proposing various awareness campaigns to help prevent drunk driving and underage drinking across the state. Alcohol is the #1 youth drug problem and kills 6.5 times more youth than all other illicit drugs combined. Alcohol also plays an important role in the other leading causes of death for youth: homicides, suicides and unintentional injuries such as vehicle crashes and drowning. Overall traffic crashes are the leading cause of death for ages 4-33 and 1/3 of all crashes are alcohol related, North Carolina ranks 7th in the nation for alcohol related traffic deaths. On avarage 80,000 North Carolina citizens are arrested for DWI each year. Nearly 1/3 of DWI arrests are by repeat offenders.

Goals/Objectives: MADD, Inc will continue educating the state on the dangers of drunk driving and underage drinking by enhancing and enlarging their existing programs and introducing new concepts to bring awareness of the dangers of driving while impaired. Provide presentations to schools, civic organizations, conferences and churches throughout the state. Provide trainings for programs along with attending the MADD national conference and the lifesavers conference. MADD will add Spanish translators for our victim impact panels across the state. Distribute materials and promotional items at fairs, events and conferences. Increase participation in school programs, corporate fairs, victim impact panels and the tie one on for safety events. Hold press conferences, special events, ribbon orders, distribution box orders and tools/red ribbon kits. Partner with the local police, sheriff and highway patrol, participate in statewide checkpoints. Hold annual events such as the law enforcement awards ceremonies and holiday candle light vigils. Expand programs with military, PTA and the Hispanic population.

Project Number: K8-10-02-43 Agency: Mothers Against Drunk Driving (MADD)

PROJECT						G	1	
Cost Categ	ory	Total		Federal		State		Local
		Amount	<b>%</b>	Amount	%	Amount	<b>%</b>	Amount
Personn		\$		\$		\$		
Contracti		\$1,500	100	\$1,500		\$		
Commodi		\$25,000	100	\$25,000		\$		
Other Dir	ect	\$75,000	100	\$75,000		\$		
Indirect C	Cost	\$		\$		\$		
Total		\$101,500		\$101,500		\$		
			PI	ERSONNEL BUD	GET DE	ΓAIL	1	•
Quantity				Personne	<u>el</u>			Amount
							Гotal	
			COI	NTRACTUAL BU	DGET D	ETAIL		•
Vendor				Description	on			Amount
	Tran	slation Servic	e for V	ictim Impact Panel				\$1,50
	1			<u>.</u>		,	Γotal	\$1,50
			CO	MMODITIES BUI	DGET DI			+ ,
Vendor				Description				Amount
	Educ	ation and Pro	motion	al Materials				\$20,00
						r	Гotal	\$20,000
		C	THER	DIRECT COSTS	BUDGE		<u>rotar</u>	<b>\$20,00</b>
Quantity				Description		1 221112		Amount
Quinitity	Chec	kpoint Suppl	ies					\$5,00
		ne and Interne		ees				\$8,00
		ial Events						\$15,00
		Enforcement	Award	S				\$5,000
		ol Outreach	11// 01/ 04	<u> </u>				\$20,000
		ate Travel						\$14,00
		of State Trave	:1					\$8,00
	0 (		-			r	Total	\$75,00
			IND	IRECT COST BU	DGET D		<u> </u>	ψ75,00
Quantity			11 (1)	Description				Amount
~				20011711011				THIOUIT
						To	tal	
						10	iai	

Project Number: K8-10-02-44/OP-10-05-03

Agency: El Pueblo

## Goals/Objectives:

Motor vehicle injuries are by far the leading cause of death for North Carolina Hispanics. Data from the UNC Highway Safety Research Center suggests that the causes of crashes for Hispanic drivers are more often related to alcohol and excessive speed. El Pueblo's goals are to work with statewide coalition of organizations targeting the Latino community with safety messages reduce the DWI fatalities by 10% and to increase awareness of traffic safety issues, including, but not limited to: seat belt use, child safety seat use, and the prevention of drinking and driving.

#### Tasks/Description:

El Pueblo will utilize the 11 Regional Coordinators to distribute material and will serve as the overall organizer and support for regional groups. They will provide technical assistance and training to Regional Coordinators, to include on-site training regarding the campaign materials, Latino community issues, and bilingual capacity. Organize quarterly meetings for the purpose of reporting out and monitor campaign activities as well as to build a strong network of communication among all agencies serving the Latino community. Distribute Spanish-language materials to Latino nonprofits, churches, health departments, law enforcement, and other government agencies that serve Latinos. Conduct presentations, interviews in Spanish-language media, conduct child safety seat checks to the community regarding highway safety issues. Participate in GHSP events and campaigns as requested. Utilize DWI Golf cart at Latino events and re-print and distribute *Fotonovelas*, posters and bumper sticker throughout the state. Organize the annual Public Safety Fair at La Fiesta del Pueblo 2010.

Project Number: K8-10-02-44/OP-10-05-03 Agency: El Pueblo

PROJECT BUDGET								
Cost Category	Total	Federal			State	Local		
	Amount	%	Amount	%	Amount	%	Amount	
Personnel	\$83,692	100	\$83,692		\$		\$	
Contractual	\$33,000	100	\$33,000		\$		\$	
Commodities	\$19,500	100	\$19,500		\$		\$	
Other Direct	\$30,530	100	\$30,530		\$		\$	
Indirect Cost	\$		\$		\$		\$	
Total	\$166,722		\$166,722		\$		\$	

Total	\$100,722		•
	PERSONNEL BUDGET DETAIL		
Quantity	Personnel		Amount
100%	Project Director		\$44,600
75%	Project Specialist		\$24,000
	Fringes		\$15,092
	<u> </u>	<u> Fotal</u>	\$83,692
	CONTRACTUAL BUDGET DETAIL		
Vendor	<u>Description</u>		Amount
11	Regional Coordinators		\$27,500
	Graphic Design and Copier Rental		\$4,000
	Auditor		\$1,500
	]	<u> Fotal</u>	
	COMMODITIES BUDGET DETAIL		
Vendor	<u>Description</u>		Amount
	Supplies, Postage and Printing		\$11,500
	Promotional Items		\$8,000
	<u> </u>	<u> Fotal</u>	\$19,500
	OTHER DIRECT COSTS BUDGET DETAIL		
Quantity	<u>Description</u>		Amount
	Training and Outreach		\$8,500
	Occupancy		\$12,530
	Phone, Internet and Misc.		\$2,500
	In-State Travel		\$3,000
	Out-of-State Travel		\$4,000
		<u> Fotal</u>	\$30,530
0 11	INDIRECT COST BUDGET DETAIL		
Quantity	<u>Description</u>		Amount
			\$
	<u>To</u>	tal	\$

Project Number: OP-10-05-02 Agency: GHSP – OP PI&E

Goals/Objectives: To continue and expand the "RU Buckled" program. To plan and run events to promote traffic safety issues and high visibility law enforcement activities. To continue, improve and update the GHSP web site, correspondence and publications. To continue the publicizing of the traffic safety message through various sports marketing and theater venues. Tasks/Description: Plan and execute media events. Plan and carry our PSA production, sports marketing and theater marketing. Continue to operate and enlarge the "RU Buckled" program.

PROJECT BUDGET							
<b>Cost Category</b>	Total	Federal			State		Local
	Amount	%	Amount	%	Amount	%	Amount
Contractual	263200	100	263200		\$		\$
Commodities	80000	100	80000		\$		\$
Direct	22500	100	22500		\$		\$
Total	365700		365700		\$		\$

	CONTRACTUAL BUDGET DETAIL						
Vendor	<u>Description</u>	Amount					
	Materials-Warehouse storage	12000					
	Sports Marketing	225000					
	Movie Theater advertising	25000					
	News clipping service	1200					
	Total	263200					

	COMMODITIES BUDGET DETAIL	
Quantity	Commodities Description	Amount
	Click It or Ticket promotional items	40000
	RU Buckled promotional items	30000
	Printing	10000
	<u>Total</u>	80000

	OTHER DIRECT COSTS BUDGET DETAIL					
Quantity	<u>Description</u>	Amount				
	In state travel	1500				
	Out of state travel	2000				
	Press events	1000				
	PSA production	10000				
	Postage & shipping	2000				
	Vehicle (Van 55370)	6000				
	Total	22500				

Project Number: OP-10-05-06

Agency: Western North Carolina Safe Kids (WNCSK)

### Goals/Objectives:

Transporting children with special needs is on the rise in NC with 333,895 estimated children with needs. The access to care is limited for these children and the awareness regarding safe transportation of this population is just as limited. Many require costly medical seats and inadequate funding for these seats make it difficult for the families to acquire help. As the unemployment rate increases in the western part of the state, WNCSK has seen an influx of referrals for car seats and installation education at our office and permanent fitting stations. To combat the problem, WNCSK will increase safe transportation of children with special needs, work with referrals from social workers, caseworkers, family support networks, and inquiries from the general community for car seats and installation education and keep retention of CPS Technicians and Permanent Checking Stations.

### Tasks/Description:

WNCSK will provide training materials with updated CPS information and training opportunities for CEU's (continuing education units) for technician certification. Maintain well-informed technicians and instructors through continuing education and provide instructors for NHTSA CPS Certification Classes. Help low income families by providing car seats along with proper car seat installation education. Provide printed educational materials to community agencies and individuals for distribution to their families and caregivers regarding best practice for safe transportation of children and join community partners in classes and events regarding injury prevention education and stress the importance of the proper use of seat belts and child restraints for all those traveling in vehicles. WNCSK will recognition of community partners and their contribution to highway safety. And continue to act as resource for the Western Counties and the state on safe ambulance transportation of children. They will partner and consult with local law enforcement in their injury prevention programs and events and continue to be active with Smoky Mountain Law Enforcement Executive Association and the NC State Highway Patrol.

Project Number: OP-10-05-06 Agency: Western North Carolina Safe Kids (WNCSK)

Namount	<b>PROJECT</b>				,				
Personnel	<b>Cost Categ</b>	ory	Total		Federal				
Contractual   \$3,500   100   \$3,500   \$   \$   \$   \$   \$   \$   \$   \$   \$			Amount		Amount	<b>%</b>			Amount
Commodities	Personn	el			,				
Other Direct			\$3,500	100	\$3,500				
Total   \$83,943   \$83,944   \$83,943   \$83,944   \$83,943   \$83,944   \$83,94			\$						
Total   \$83,943   \$83,943   \$   \$   \$   PERSONNEL BUDGET DETAIL				100					
Personnel   Amount	Indirect C	Cost	\$		\$				
Quantity         Personnel         Amount           Educator         \$41,00           Fringes         \$9,00           Total         \$50,00           CONTRACTUAL BUDGET DETAIL           Vendor         Description         Amount           Rental Space for Mt. State Fair         \$3,50           COMMODITIES BUDGET DETAIL           Vendor         Description         Amount           OTHER DIRECT COSTS BUDGET DETAIL           Quantity         Description         Amount           Special Needs Child Restraints for Instruction         \$3,00           Special Needs Seats for Distribution         \$10,00           Car Topper Tents and Signs for Clinics         \$9,20           Annual Law Enforcement Appreciation Banquet         \$2,00           Printing Cost         \$1,60           In-State Travel         \$1,60           Out of State Travel         \$3,15           Total         \$30,4	Total		\$83,943		\$83,943			\$	
Educator				Pl	ERSONNEL BUDG	GET DE	TAIL		
Fringes	Quantity				Personne	<u>el</u>			Amount
Total   \$50,00		Educ	eator						\$41,00
CONTRACTUAL BUDGET DETAIL           Vendor         Description         Amount           Rental Space for Mt. State Fair         \$3,50           COMMODITIES BUDGET DETAIL           Vendor         Description         Amount           Total           OTHER DIRECT COSTS BUDGET DETAIL           Quantity         Description         Amount           Special Needs Child Restraints for Instruction         \$3,00           Special Needs Seats for Distribution         \$10,00           Car Topper Tents and Signs for Clinics         \$9,20           Annual Law Enforcement Appreciation Banquet         \$2,00           Printing Cost         \$1,60           In-State Travel         \$3,14           Out of State Travel         \$3,14           Out of State Travel         \$3,14           INDIRECT COST BUDGET DETAIL         Amount		Fring	ges						\$9,00
Vendor         Description         Amount           Rental Space for Mt. State Fair         \$3,50           Total         \$3,50           COMMODITIES BUDGET DETAIL           Vendor         Description         Amount           OTHER DIRECT COSTS BUDGET DETAIL           Quantity         Description         Amount           Special Needs Child Restraints for Instruction         \$3,00           Special Needs Seats for Distribution         \$10,00           Car Topper Tents and Signs for Clinics         \$9,20           Annual Law Enforcement Appreciation Banquet         \$2,00           Printing Cost         \$1,60           In-State Travel         \$1,40           Out of State Travel         \$3,14           Out of State Travel         \$3,14           INDIRECT COST BUDGET DETAIL         Amount		•					·	Total	\$50,00
Rental Space for Mt. State Fair   \$3,50				COI	NTRACTUAL BU	DGET D	ETAIL		•
COMMODITIES BUDGET DETAIL   S3,50	Vendor				<u>Description</u>	<u>on</u>			Amount
COMMODITIES BUDGET DETAIL           Vendor         Description         Amount           Total           OTHER DIRECT COSTS BUDGET DETAIL           Quantity         Description         Amount           Special Needs Child Restraints for Instruction         \$3,00           Special Needs Seats for Distribution         \$10,00           Car Topper Tents and Signs for Clinics         \$9,20           Annual Law Enforcement Appreciation Banquet         \$2,00           Printing Cost         \$1,60           In-State Travel         \$1,44           Out of State Travel         \$3,14           Out of State Travel         \$3,14           INDIRECT COST BUDGET DETAIL         Amount		Rent	al Space for N	At. Stat	e Fair				\$3,50
Vendor         Description         Amount           Total           OTHER DIRECT COSTS BUDGET DETAIL           Quantity         Description         Amount           Special Needs Child Restraints for Instruction         \$3,00           Special Needs Seats for Distribution         \$10,00           Car Topper Tents and Signs for Clinics         \$9,20           Annual Law Enforcement Appreciation Banquet         \$2,00           Printing Cost         \$1,60           In-State Travel         \$1,44           Out of State Travel         \$3,14           Out of State Travel         \$3,14           Quantity         Description         Amount		•	-					Total	\$3,50
Total				CO	MMODITIES BUI	DGET D	ETAIL		
OTHER DIRECT COSTS BUDGET DETAIL           Quantity         Description         Amount           Special Needs Child Restraints for Instruction         \$3,00           Special Needs Seats for Distribution         \$10,00           Car Topper Tents and Signs for Clinics         \$9,20           Annual Law Enforcement Appreciation Banquet         \$2,00           Printing Cost         \$1,60           In-State Travel         \$1,40           Out of State Travel         \$3,14           Total         \$30,44           INDIRECT COST BUDGET DETAIL           Quantity         Description         Amount	Vendor				Description	<u>on</u>			Amount
OTHER DIRECT COSTS BUDGET DETAIL           Quantity         Description         Amount           Special Needs Child Restraints for Instruction         \$3,00           Special Needs Seats for Distribution         \$10,00           Car Topper Tents and Signs for Clinics         \$9,20           Annual Law Enforcement Appreciation Banquet         \$2,00           Printing Cost         \$1,60           In-State Travel         \$1,40           Out of State Travel         \$3,14           Total         \$30,44           INDIRECT COST BUDGET DETAIL           Quantity         Description         Amount					•				
Quantity         Description         Amount           Special Needs Child Restraints for Instruction         \$3,00           Special Needs Seats for Distribution         \$10,00           Car Topper Tents and Signs for Clinics         \$9,20           Annual Law Enforcement Appreciation Banquet         \$2,00           Printing Cost         \$1,60           In-State Travel         \$1,40           Out of State Travel         \$3,12           Total         \$30,44           Undity           Description         Amount		•						Total	
Special Needs Child Restraints for Instruction   \$3,000     Special Needs Seats for Distribution   \$10,000     Car Topper Tents and Signs for Clinics   \$9,200     Annual Law Enforcement Appreciation Banquet   \$2,000     Printing Cost   \$1,600     In-State Travel   \$1,400     Out of State Travel   \$3,100     Total   \$30,400     Under the Cost Budget Details   \$30,400     Out of State Travel   \$30,400     Out of State Travel   \$30,400     Amount   \$1,400     Car Topper Tents and Signs for Clinics   \$30,400     Car Topper Tents and Signs for Clinics   \$3,000     Car Topper Tents and Signs for Clinics   \$9,200     Special Needs Seats for Distribution   \$10,000     Car Topper Tents and Signs for Clinics   \$9,200     Special Needs Seats for Distribution   \$10,000     Special Needs Seats for Distribution   \$10,000     Car Topper Tents and Signs for Clinics   \$9,200     Special Needs Seats for Distribution   \$10,000     Car Topper Tents and Signs for Clinics   \$9,200     Special Needs Seats for Distribution   \$10,000     Car Topper Tents and Signs for Clinics   \$9,200     Car Topper Tents and Signs for Clinics   \$9,200     Special Needs Seats for Distribution   \$10,000     Car Topper Tents and Signs for Clinics   \$9,200     Special Needs Seats for Distribution   \$10,000     Car Topper Tents and Signs for Clinics   \$9,200     Car Topper Tents and Signs for Clinics   \$9,200     Special Needs Seats for Distribution   \$10,000     Car Topper Tents and Signs for Clinics   \$9,200     Car Topper Tents and Signs for Clinics   \$9,200     Car Topper Tents and Signs for Clinics   \$9,200     Car Topper Tents and Signs for Clinics   \$1,000     Car Topper Tents and Signs			C	THER	DIRECT COSTS	BUDGE	T DETAIL		
Special Needs Seats for Distribution   \$10,00	Quantity				Description	on			Amount
Car Topper Tents and Signs for Clinics   \$9,20		Spec	ial Needs Chi	ld Rest	raints for Instruction	n			\$3,00
Annual Law Enforcement Appreciation Banquet   \$2,000		Spec	ial Needs Sea	ts for I	Distribution				\$10,00
Printing Cost   \$1,60     In-State Travel   \$1,43     Out of State Travel   \$3,13     Total   \$30,44     INDIRECT COST BUDGET DETAIL     Quantity   Description   Amount		Car	Topper Tents	and Sig	ns for Clinics				\$9,20
Printing Cost   \$1,60     In-State Travel   \$1,43     Out of State Travel   \$3,13     Total   \$30,44     INDIRECT COST BUDGET DETAIL     Quantity   Description   Amount		Annı	ual Law Enfor	rcemen	t Appreciation Band	quet			\$2,00
In-State Travel					• •	_			\$1,60
Out of State Travel									\$1,48
INDIRECT COST BUDGET DETAIL		Out	of State Trave	el					\$3,15
Quantity <u>Description</u> Amount								Total	\$30,44
				IND	IRECT COST BU	DGET D	ETAIL		,
	Quantity								Amount
<u>Total</u>									
		•					<u>T</u>	<u>'otal</u>	

Project Number: OP-10-05-07

Agency: HSRC- Child Passenger Safety Resource Center

Goals/Objectives: Coordinate state and local CPS education, training, distribution and "hands on" technical assistance

programs and activities. Conduct and analyze child restraint observational surveys.

Tasks/Description: Provide consumer information to the public through toll free number, website and brochures and flyers. Provide program and technical assistance to CPS advocates and administrators by keeping curriculum current. Coordinate all CPS training activities and programs in N. C. Support N. C. CPS Training Committee. Register and pay for participants in the national certification course. Maintain and keep current the website: www.buckleupnc.org.

PROJECT BUDGET								
Cost Category	Total	Federal			State		Local	
	Amount	%	Amount	%	Amount	%	Amount	
Personnel	\$90,000	100	90,000		\$		\$	
Commodities	\$7011	100	7011		\$		\$	
Direct	18205	100	18205		\$		\$	
Indirect	\$11522	100	11522		\$		\$	
Total	\$126739		126739		\$		\$	

PERSONNEL BUDGET DETAIL						
Quantity	<u>Personnel</u>		Amount			
	All personnel and fringes		90000			
-		<u>Total</u>	90000			

COMMODITIES BUDGET DETAIL						
Quantity	Commodities Description	Amount				
	Supplies, photocopies and training supplies	7011				
_	Total	7011				

OTHER DIRECT COSTS BUDGET DETAIL						
Quantity	<u>Description</u>	Amount				
	Travel, printing, subscriptions, WATTS, storage, etc	18205				
	Total	18205				

INDIRECT COSTS BUDGET DETAIL					
Vendor	<u>Description</u>	Amount			
	UNC facility fee	11522			
_	<u>Total</u>	11522			

Project Number: K3-10-06-01

Agency: NC Department of Insurance - NC Safe Kids

### Goals/Objectives:

the increase in population and number of children in motor vehicles has heightened the number of injuries and deaths of children 14 and under in nc over the past few years. in 1982 when the first child passenger safety law was passed it covered children age 1 and under. at that time 30 % of children under age 6 were observed to be buckled up in any type of restraint, many were in a seat belt only. before the NC CPS law went into effect, the percentage of children under age 6 who were either killed or seriously injured in a crash was 1.7 percent. the current cps law covers all children under age 16 and requires children 8 years old or 80 pounds to be in a child restraint, the four steps of properly restraining children from infant seat to convertible to booster seat and then to seat belt is still not followed due to lack of education on the dangers associated with these actions, booster seat awareness campaigns are useful in provided this needed education, in addition, research has shown that latino populations and residents in rural areas do not understand the hazards associated with not restraining children, themselves, and other passengers, there is a need to educate people in all counties in nc about the importance of child passenger safety through training programs such as buckle up kids, nc safe kids will continue to increase the usage of child restraints, booster seats, and seat belts in order to reduce the number of injuries and deaths to motor vehicle occupants by collaborating with local and state child passenger safety programs.

#### Tasks/Description:

NC Safe kids will offer national accredited cps technician classes to cps courses to fire/rescue, law enforcement, hospital, health care, and other child safety advocates and fund instructors for cps courses. They will hold update/ refresher or renewal classes to assist technicians in maintaining certification by acquiring continuing education units. Safe kids will help permanent checking stations revitalization grants to restock supplies, materials and update equipment and distribute child restraints to local buckle up kids counties with detailed data to compile for quarterly reports. They will offer scholarships to local agencies to receive child passenger safety certification and host cps conference in conjunction with the cps training committee. This will provide continuing education for technicians throughout NC.

Project Number: K3-10-06-01 Agency: NC Department of Insurance – NC Safe Kids

PROJECT BUDGET							
Cost Category	Total		Federal State		Federal State Loca		Local
	Amount	%	Amount	%	Amount	%	Amount
Personnel	\$22,000	100	\$22,000		\$		\$
Contractual	\$84,600	100	\$84,600		\$		\$
Commodities	\$310,000	100	\$310,000		\$		\$
Other Direct	\$125,000	100	\$125,000		\$		\$
Indirect Cost	\$		\$		\$		\$
Total	\$541,600		\$541,600		\$		\$

	PERSONNEL BUDGET DETAIL		
Quantity	<u>Personnel</u>		Amount
	CPS Assistance Clerical		\$22,000
		<u>Total</u>	\$22,000
	CONTRACTUAL BUDGET DETAIL		
Vendor	<u>Description</u>	Amount	
	CPS & Special Needs Instructors		\$70,000
	CPS Conference		\$10,000
	Accounting Contract		\$4,600
		<u>Total</u>	\$84,600
	COMMODITIES BUDGET DETAIL		·
Vendor	<u>Description</u>		Amount
	Office Supplies, Promotional Items and LATCH for Instructors		\$30,000
	Printing		\$30,000
	Child Restraints		\$250,000
		<u>Total</u>	\$310,000
	OTHER DIRECT COSTS BUDGET DETAIL	1	
Quantity	<u>Description</u>		Amount
	CPS Committee, Outreach and Instructor Meetings		\$15,000
	Vehicle Cost		\$50,000
	Scholarships for classes/snacks		\$10,000
	Permanent Checking Stations Mini Grants		\$20,000
	In-State Travel		\$25,000
	Out of State Travel		\$5,000
		<u>Total</u>	\$125,000
	INDIRECT COST BUDGET DETAIL		
Quantity	<u>Description</u>		Amount
			\$
		Total	\$

Project Number: K2-10-07-01

Agency: GHSP – Law Enforcement Support

Goals/Objectives: Provide administrative support of the statewide law enforcement network that supports GHSP enforcement campaigns through assisting with law enforcement activities, points system and material distribution. Educate the law enforcement community by providing two (2) Regional law Enforcement Summits.

Tasks/Description: Review law enforcement database for accuracy and update as necessary. Distribute promotional material and brochures. Update online points system. Conduct two Law Enforcement Summits, one in Eastern NC and one in Western NC.

PROJECT BUDGET							
Cost Category	Total		Federal State			State Local	
	Amount	%	Amount	%	Amount	%	Amount
Personnel	30000	100	30000		\$		\$
Contractual	60000	100	60000		\$		\$
Total	90000		90000		\$		\$

PERSONNEL BUDGET DETAIL					
Quantity	<u>Personnel</u>	Amount			
	Part time administrative assistant	30000			
	<u>Total</u>	30000			

CONTRACTUAL BUDGET DETAIL					
Vendor	<u>Description</u>	Amount			
	Law enforcement summits	60000			
	<u>Total</u>	60000			

Project Number: K2-10-07-02 Agency: GHSP – Points System

Goals/Objectives: To increase law enforcement agency participation during campaigns and throughout all weeks of the year through awarding points for checkpoints, online reporting and for overall dedication to traffic enforcement and safety. Tasks/Description: Keep a running total of points earned by all agencies through their self reporting. Award county coordinator points to those eligible. Award extra points to agencies that reported 100% for campaign periods. Collect redemption forms and order equipment for agencies wishing to redeem their points to receive equipment. Distribute equipment to agencies who are eligible to redeem points.

PROJECT BUDGET								
<b>Cost Category</b>	Total		Federal		State		Local	
	Amount	%	Amount	%	Amount	%	Amount	
Direct	647500	100	647500		\$		\$	
Total	647500		647500		\$		\$	

OTHER DIRECT COSTS BUDGET DETAIL				
Quantity	<u>Description</u>			
250	Speed measuring instruments	515000		
15	In-car Video systems	90000		
300	Traffic vests	15000		
20	PBT's	10000		
	Tint meters	17500		
	<u>Total</u>	647500		

Project Number: K6-10-09-04

Agency: GHSP- Motorcycle Safety Education

Goals/Objectives: To create a North Carolina specific public service announcement. Create supporting educational materials for the public and law enforcement agencies regarding the helmet law. Place advertising in movie theaters that target high motorcycle crash areas and high rider population in North Carolina.

Tasks/Description: Research possible educational outreach opportunities. Plan and create law enforcement PSA. Research possible advertising outlets to reach target audience. Disseminate PSA in major media markets and create supporting educational materials.

PROJECT BUDGET								
Cost Category	Total		Federal State			Local		
	Amount	%	Amount	%	Amount	%	Amount	
Contractual	70000	100	70000		\$		\$	
Commodities	5000	100	5000		\$		\$	
Total	\$75000		75000		\$		\$	

	CONTRACTUAL BUDGET DETAIL					
Vendor	<u>Description</u>	Amount				
	PSA production	5000				
	Paid media	50000				
	Cinema advertising	15000				
	Total	70000				

	COMMODITIES BUDGET DETAIL	
Quantity	<u>Commodities Description</u>	Amount
	Printing & supplies	5000
		\$
	<u>Total</u>	5000

Project Number: K9-10-11-02

Agency: Administrative Office of the Courts

Goals/Objectives: NC as of April 2009 has 188 agencies and 7812 officers reporting citations electronically. WE have a prorated avg. citation reporting time between electronic and paper citations of 5.43 days. The goal is to increase the agencies to 300 and officers reporting electronically to over 8500 by March of 2010 and reduce the weighted avg. reporting time to 4 days. Tasks/Description: AOC will purchase at least 750 printers and supporting hardware (cables, mounts, paper, etc. and distribute these to requesting agencies based on requested need, evaluation of past citation data, and available units. AOC maintains a dynamic list of agencies requesting to be trained and use eCitation® and also those requesting printers for same.

PROJECT BUDGET								
Cost Category	Total		Federal		State		Local	
	Amount	%	Amount	%	Amount	%	Amount	
Personnel	\$		\$		\$		\$	
Contractual	\$		\$		\$		\$	
Commodities	\$		\$		\$		\$	
Direct	\$350,000	100	\$350,000	0	\$0	0	\$0	
Indirect	\$		\$		\$		\$	
Total	\$350,000		\$350,000		\$0		\$0	

OTHER DIRECT COSTS BUDGET DETAIL				
Quantity	<u>Description</u>	Amount		
750	Mobile printers with necessary accessories (Car adapters, cables, paper)	\$350,000		
		\$		
		\$		
		\$		
		\$		
		\$		
		\$		
		\$		
		\$		
		\$		
	<u>Total</u>	\$350,000		

Project Number: RH-10-12-01

Agency: North Carolina Operation Lifesaver

Goals/Objectives: To train law enforcement in the investigation of motor vehicle and train collision. To build bridges of information with all ethnic groups to inform our population regarding rail safety. Increase partnership for rail safety in North

Carolina

Tasks/Description: Conduct seven presenter classes. Conduct four RSER classes. Conduct six GCCI classes. Attend

Lifesavers and National OL.

PROJECT BUDGET							
<b>Cost Category</b>	Total	Federal		State			Local
	Amount	%	Amount	%	Amount	%	Amount
Personnel	\$9000	100	9000		\$		\$
Commodities	60000	100	60000		\$		\$
Direct	11000	100	11000		\$		\$
Total	80000		80000		\$		\$

PERSONNEL BUDGET DETAIL				
Quantity	<u>Personnel</u>	Amount		
	Clerical assistant	8000		
	Engineer	1000		
	Total	9000		

	COMMODITIES BUDGET DETAIL	
Quantity	Commodities Description	Amount
	Support to conduct GCCI classes, RSER and presenter classes	60000
		\$
	<u>Total</u>	60000

OTHER DIRECT COSTS BUDGET DETAIL				
Quantity	<u>Description</u>	Amount		
	In state travel	3500		
	Out of state travel (NAWHSL, Lifesavers, National OL)	7500		
	<u>Total</u>	11000		

#### STATE CERTIFICATIONS AND ASSURANCES

rilure to comply with applicable Federal statutes, regulations and directives may subject State officials to civil or minal penalties and/or place the State in a high risk grantee status in accordance with 49 CFR §18.12.

Each fiscal year the State will sign these Certifications and Assurances that the State complies with all applicable Federal statutes, regulations, and directives in effect with respect to the periods for which it receives grant funding. Applicable provisions include, but not limited to, the following:

- 23 U.S.C. Chapter 4 Highway Safety Act of 1966, as amended;
  - 49 CFR Part 18 Uniform Administrative Requirements for Grants and Cooperative
- Agreements to State and Local Governments
- 49 CFR Part 19 Uniform Administrative Requirements for Grants and Agreements with
- Institutions of Higher Education, Hospitals and Other Nonprofit Organizations
  - 23 CFR Chapter II (§§1200, 1205, 1206, 1250, 1251, & 1252) Regulations governing
- highway safety programs
  - NHTSA Order 462-6C Matching Rates for State and Community Highway Safety Programs
  - Highway Safety Grant Funding Policy for Field-Administered Grants

## Certifications and Assurances

The Governor is responsible for the administration of the State highway safety program through a State highway safety agency which has adequate powers and is suitably equipped and organized (as evidenced by appropriate oversight procedures governing such areas as procurement, financial administration, and the use, management, and disposition of equipment) to carry out the program (23 USC 402(b) (1) (A)):

The political subdivisions of this State are authorized, as part of the State highway safety program, to carry out within their jurisdictions local highway safety programs which have been approved by the Governor and are in accordance with the uniform guidelines promulgated by the Secretary of Transportation (23 USC 402(b) (1) (B));

At least 40 per cent of all Federal funds apportioned to this State under 23 USC 402 for this fiscal year will be expended by or for the benefit of the political subdivision of the State in carrying out local highway safety programs (23 USC 402(b) (1) (C)), unless this requirement is waived in writing:

The State will implement activities in support of national highway safety goals to reduce motor vehicle related fatalities that also reflect the primary data-related crash factors within the State as identified by the State highway safety planning process, including:

- National law enforcement mobilizations.
- Sustained enforcement of statutes addressing impaired driving, occupant protection, and driving in excess of posted speed limits,
- An annual statewide safety belt use survey in accordance with criteria established by the Secretary for the measurement of state safety belt—use rates to ensure that the measurements are accurate and representative,
- Development of statewide data systems to provide timely and effective data analysis to support allocation of highway safety resources.

The state shall actively encourage all relevant law enforcement agencies in the state to follow the guidelines established for vehicular pursuits issued by the International Association of Chiefs of Police that are currently in effect.

This State's highway safety program provides adequate and reasonable access for the safe and convenient movement of physically handicapped persons, including those in wheelchairs, across curbs constructed or replaced on or after July 1, 1976, at all pedestrian crosswalks (23 USC 402(b) (1) (D));

Cash draw downs will be initiated only when actually needed for disbursement, cash disbursements and blances will be reported in a timely manner as required by NHTSA, and the same standards of timing and jount, including the reporting of cash disbursement and balances, will be imposed upon any secondary recipient organizations (49 CFR 18.20, 18.21, and 18.41). Failure to adhere to these provisions may result in the termination of drawdown privileges);

The State has submitted appropriate documentation for review to the single point of contact designated by the Governor to review Federal programs, as required by Executive Order 12372 (Intergovernmental Review of Federal Programs);

Equipment acquired under this agreement for use in highway safety program areas shall be used and kept in operation for highway safety purposes by the State; or the State, by formal agreement with appropriate officials of a political subdivision or State agency, shall cause such equipment to be used and kept in operation for highway safety purposes (23 CFR 1200.21):

The State will comply with all applicable State procurement procedures and will maintain a financial management system that complies with the minimum requirements of 49 CFR 18.20.

The State highway safety agency will comply with all Federal statutes and implementing regulations relating to nondiscrimination.

These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin (and 49 CFR Part 21); (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§ 1681-1683, and 1685-1686), which prohibits discrimination the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps (and 49 CFR Part 27); (d) the Age Discrimination Act of 1975, as amended (42U.S.C. §§ 6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970(P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse of alcoholism; (g) §§ 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§ 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§ 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and. (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

# The Drug-free Workplace Act of 1988 (49 CFR Part 29 Sub-part F):

The State will provide a drug-free workplace by:

- a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- b) Establishing a drug-free awareness program to inform employees about:
  - 1. The dangers of drug abuse in the workplace.
  - 2. The grantee's policy of maintaining a drug-free workplace.
  - 3. Any available drug counseling, rehabilitation, and employee assistance programs.
  - 4. The penalties that may be imposed upon employees for drug violations occurring in the workplace.
- c) Making it a requirement that each employee engaged in the performance of the grant be given a copy of the statement required by paragraph (a).
- d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will
  - 1. Abide by the terms of the statement.
  - 2. Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction.
- e) Notifying the agency within ten days after receiving notice under subparagraph (d) (2) from an employee or otherwise receiving actual notice of such conviction.

- f) Taking one of the following actions, within 30 days of receiving notice under subparagraph (d) (2), with respect to any employee who is so convicted
  - 1. Taking appropriate personnel action against such an employee, up to and including termination.
  - 2. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by Federal, State, or local health, law enforcement, or other appropriate agency.
- g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e), and (f) above.

#### **BUY AMERICA ACT**

The State will comply with the provisions of the Buy America Act (23 USC 101 Note) which contains the following requirements:

Only steel, iron and manufactured products produced in the United States may be purchased with Federal funds unless the Secretary of Transportation determines that such domestic purchases would be inconsistent with the public interest; that such materials are not reasonably available and of a satisfactory quality; or that inclusion of domestic materials will increase the cost of the overall project contract by more than 25 percent. Clear justification for the purchase of non-domestic items must be in the form of a waiver request submitted to and approved by the Secretary of Transportation.

# POLITICAL ACTIVITY (HATCH ACT)

ie State will comply with the provisions of 5 U.S.C. §§ 1501-1508 and implementing regulations of 5 CFR Part 151, concerning "Political Activity of State or Local Offices. or Employees".

## CERTIFICATION REGARDING FEDERAL LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief. that:

- 1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- 2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 3. The undersigned shall require that the language of this certification be included in the award documents for all sub-award at all tiers (including subcontracts, sub-grants, and contracts under grant, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this nsaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification snall be subject to a civil penalty of not less than \$10.000 and not more than \$100,000 for each such failure.

## RESTRICTION ON STATE LOBBYING

None of the funds under this program will be used for any activity specifically designed to urge or influence a State or local legislator to favor or oppose the adoption of any specific legislative proposal pending before any State or local legislative body. Such activities include both direct and indirect (e.g., "grassroots") lobbying activities, with one exception. This does not preclude a State official whose salary is supported with NHTSA funds from engaging in direct communications with State or local legislative officials, in accordance with customary State practice, even if such communications urge legislative officials to favor or oppose the adoption of a specific pending legislative proposal.

#### CERTIFICATION REGARDING DEBARMENT AND SUSPENSION

## **Instructions for Primary Certification**

- 1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
- 2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
- 3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.
- 4. The prospective primary participant shall provide immediate written notice to the department or agency to which this proposal is submitted if at any time the prospective primary participant learns its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 5. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this clause, have the meaning set out in the Definitions and coverage sections of 49 CFR Part 29. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
- 6. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

- 7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension. Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the list of Parties Excluded from Federal Procurement and Non-procurement Programs.
- 9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 10. Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

# Certification Regarding Debarment, Suspension, and Other Esponsibility Matters-Primary Covered Transactions

- 1. The prospective primary participant certifies to the best of its knowledge and belief, that its principals:
  - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency;
  - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of record, making false statements, or receiving stolen property;
  - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
  - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

Where the prospective primary participant is unable to certify to any of the Statements in this certification, such prospective participant shall attach an explanation to this proposal.

#### Instructions for Lower Tier Certification

- 1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
- 2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- 2. The prospective lower tier participant shall provide immediate written notice to the person to whom this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 4. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this clause, have the meanings set out in the Definition and Coverage sections of 49 CFR Part 29. You may contact the person to whom this proposal is submitted for assistance in obtaining a copy of those regulations.
- 5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

The prospective lower tier participant further agrees by submitting this proposal that is it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -- Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions. (See below)

- 7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the List of Parties Excluded from Federal Procurement and Non-procurement Programs.
- 8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

# <u>Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -- Lower Tier</u> Covered Transactions:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

## **ENVIRONMENTAL IMPACT**

The Governor's Representative for Highway Safety has reviewed the State's Fiscal Year 2008 highway safety planning document and hereby declares that no significant environmental impact will result from implementing this Highway Safety Plan. If, under a future revision, this Plan will be modified in such a manner that a project would be instituted that could affect environmental quality to the extent that a review and statement would be necessary, this office is prepared to take the action necessary to comply with the National Environmental Policy Act of 1969 (42 USC 4321 et seq.) and the implementing regulations of the Council on Environmental Quality (40 CFR Parts 1500-1517).

Sovernor's Representative for Highway Safety

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