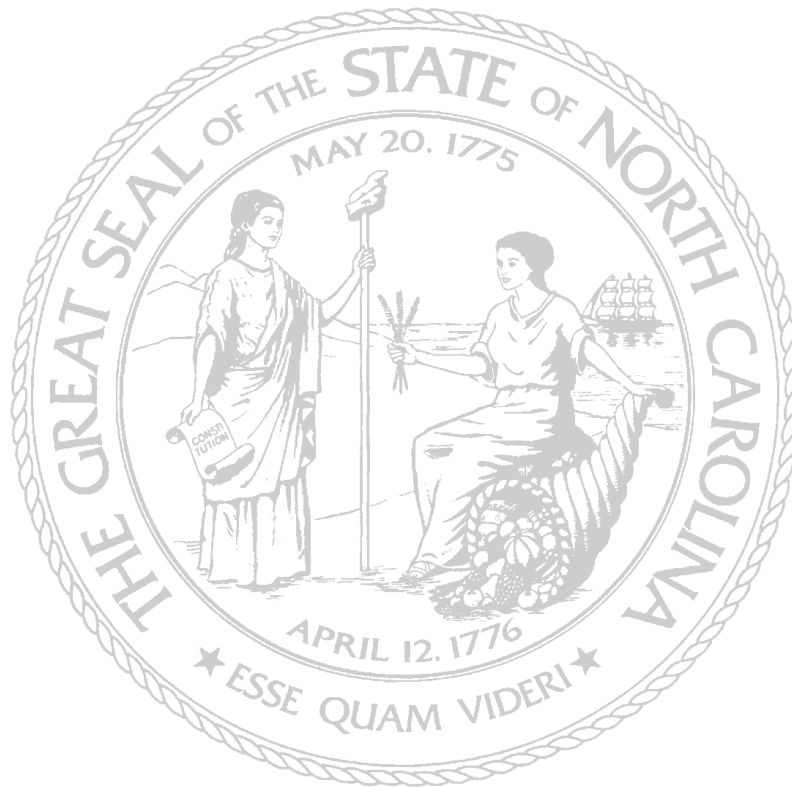


Governor's Highway Safety Program

North Carolina

FY 2011 Highway Safety Plan



GOVERNOR BEVERLY EAVES PERDUE
STATE OF NORTH CAROLINA

SECRETARY EUGENE A. CONTI, JR.
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DIRECTOR DAVID F. WEINSTEIN
GOVERNOR'S HIGHWAY SAFETY PROGRAM

215 East Lane Street
Raleigh, NC 27601
919.733.3083



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

MEMORANDUM

To: Ms. Beth Baker, Regional Administrator, NHTSA Region III

From: David F. Weinstein, Director

Re: North Carolina FY 2011 Highway Safety Plan

Date: September 3, 2010

The Governor's Highway Safety Program is submitting its Fiscal Year 2011 Highway Safety Plan (HSP) for your review and consideration.

The HSP outlines specific expenditures of funds for FY 2011 and includes a brief description of representative contracts. The project contracts included in the plan were selected for funding based on the probability that each would provide a positive impact on the goals outlined in the HSP. Also included for your review are the necessary certifications followed by a listing of all equipment costing \$5,000 or more.

Feel free to contact me for further assistance or if you have any questions or concerns regarding the FY 2011 HSP.

Cc: John Sullivan
Administrator, FHWA

Enclosures: As stated

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
GOVERNOR'S HIGHWAY SAFETY PROGRAM
1508 MAIL SERVICE CENTER
RALEIGH NC 27699-1508

TELEPHONE: 919-733-3083
FAX: 919-733-0604
WWW.NCDOT.GOV/PROGRAMS/GHS

LOCATION:
215 EAST LANE STREET
RALEIGH NC 27601

North Carolina
FY 2011
Highway Safety Plan

Page	
2	Executive Summary
6	Media Plan
7	Mission Statement
11	Organization
12	State Performance Measures
16	Performance Plan
24	Highway Safety Plan
83	Certifications
92	Equipment Requests of \$5,000 or More
94	Program Cost Summary
104	Appendix A - Highlighted Projects
115	Appendix B - Statewide Telephone Survey

Executive Summary

Each year, the N.C. 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 allocated. North Carolina strives to ensure that funding is allocated to those areas that can provide the greatest impact on highway safety.

It should be noted at this time that the data used to put compile the tables, charts and graphs in this application for 2009 are incomplete. Due to a reporting problem, much of the data relating to the Charlotte-Mecklenburg area is not included. This problem is being addressed from several areas and it is our expectation that within the next two or three years, this problem will be resolved. Therefore, the 2009 results are considered to be incomplete.

The purpose of this report is to help the 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 abnormal increase, followed by a significant decrease in 2008.
- During the last five years, with the exception of 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 N.C. Department of Motor Vehicles (DMV).

Alcohol-Involved Crashes

- During the last three years, North Carolina has seen little change in the percentage of crashes involving drivers who had been impaired drivers.
- 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 impairment while being involved in a crash. A contributing factor for this high rate is 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 percent of drinking driver crashes occurred on rural roadways.

Young Driver Crashes

- Crashes involving drivers ages 15-20 have increased in the last several years. There has been a modest change in the severity of crashes during this period.
- Among young drivers, the driver was a contributing factor in 68 percent of all crashes, while only 48 percent of drivers ages 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.
- All alcohol-related crashes by young drivers 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 five years along with the North Carolina population and the 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 roads 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 percent of the total reported motor vehicle crashes in North Carolina, pedestrians are over-represented in fatal and serious injury crashes. Approximately 12 percent of the fatal crashes and 9 percent 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 p.m. to 10 p.m., with over half of pedestrian crashes occurring during these eight hours.
- While most crashes (55 percent) occurred during daylight hours, 18 percent occurred during nighttime on lighted roadways (clear or cloudy) and another 15 percent occurred during nighttime on unlighted roadways (clear or cloudy conditions).
- Citizens over the age of 50 have shown numerical and proportional increases in pedestrian crashes the past five years. On average, adults (30 to 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.
- African Americans are over-represented in pedestrian crashes, and Caucasians 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 Pedestrians failing to yield. It should be noted; 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

- Bicycle crashes represent less than 0.5 percent of the total reported motor vehicle crashes in North Carolina, but represent 1.5 percent of the fatal crashes, and 2 percent of A-type (disabling injury) crashes.
- The number of crashes has fluctuated over the past three years with no obvious trend over this time. The number of crashes in 2006 might indicate a downward trend.
- Bicycle crashes peak on Friday and Saturday.
- While most crashes (74 percent) occurred during daylight conditions, 17 percent occurred during nighttime hours on light or unlighted roadways (clear or cloudy conditions).
- There seems to be an increasing number of bicycle crashes involving adults ages 40 to 69, and a decreasing trend among children under 15. It is not clear if this is due to changes in riding patterns among the different age groups and/or changes in the population of 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 crashes involving older drivers has shown only modest increases over the past 3 years. Drivers age 65 and older were involved in 7.5 percent of all crashes statewide. However, this age group comprises 15 percent of all fatally-injured drivers.
- Nearly one in five drivers killed in crashes in the western Mountain region of the state is 65 and older. 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 and older 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 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 groups are associated with the highest percentage of speed-related crashes.
- A large number of speed-related crashes occur during the morning afternoon, and between 1:00 a.m. 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.
- Almost 80 percent of crashes where a rear-end crash was the first harmful event are speed-related. A significant percentage of crashes (close to 50 percent) 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 percent in the early 1990’s to 90.4 percent in 2010.
- The latest survey of seat-belt usage was conducted June 2010. The usage rate at that time was 90.4 percent of drivers and 86.7 percent for passengers.
- A larger percentage of women use a seat belt (93.5 percent) compared to men (87.8 percent).
- Typically, middle-aged and older drivers have a higher usage rate compared to young drivers.
- Information on restraint usage for individuals involved in a crash is usually self-reported and not reliable, especially for less severe crashes.

Traffic Records and Data Collection

The data for this year’s North Carolina 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. Several issues have occurred this year with reporting from agencies that are not compatible with the state software. This problem is being addressed as well as the problem of having all areas of records being able to “talk” to each other. This is being addressed with a project that will bring the medical element on line with the DOT records.

North Carolina Highway Safety Media Plan

The North Carolina Governor's Highway Safety Program (GHSP) media plan will target two areas of immediate concern: seat belt usage and impaired driving. All media for these areas will include 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 2011. 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 public service announcements on television and radio, the spot will be strategically placed in movie theaters across the state airing prior to the feature presentation. The GHSP will also use gas station advertising in low seat belt usage counties to promote the "Click It or Ticket" message during May 2011.

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. 3- Jan. 2. In addition, the spot will be strategically placed in movie theaters across the state airing prior to the feature presentation. The GHSP will also use gas station advertising in high alcohol-related crash areas to promote the "Booze It & Lose It" message during each impaired driving mobilization.

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

North Carolina will continue to implement the "Click It or Ticket, Securing your Future" (formally known as R U BUCKLED?) initiative, which targets high school age drivers in 2011. This program was launched in the fall of 2005 in 53 high schools across the state and is now in more than 260 schools, impacting more than 85,000 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, all four Atlantic Coast Conference teams in North Carolina as well as East Carolina and Appalachian Universities 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 senior management of selected disciplines involved in highway safety who control the 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

Michael Robertson
Commissioner NCDOT Division of Motor
Vehicles

David Weinstein
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 (Currently Vacant)
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, N.C. The meeting was an opportunity for committee members to meet and 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 North Carolina 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 analyze 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, N.C.'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

The GHSP employees are 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

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 highway safety concerns 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 Manager 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 highway exposition driver for the GHSP expo, which is an impaired driving simulator.

State Performance Measures

These measures are taken from the NHTSA FARS database. FARS has not been updated through 2009, therefore, no updated information is available. These measures will be reviewed later in the fund year when FARS has been updated.

(A) Fatalities (Actual)

To decrease traffic fatalities 15 percent from the 2004 – 2008 average of 1,556 to 1,323 by December 31, 2015.

To decrease traffic fatality deaths to 1,400 by December 31, 2011.

(B) Fatality Rate Per 100M VMT

To decrease fatalities/VMT from the 2004 – 2008 average of 1.55 to 1.20 by December 31, 2015.

To decrease fatalities/VMT to 1.32 by December 31, 2011.

Year	Fatalities	Rate/100 mil 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 35 percent from the 2004 – 2008 average of 3,525 to 2,300 by December 31, 2015.

To decrease serious traffic injuries to 2,500 by December 31, 2011.

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 25 percent from the 2004 – 2008 average of 457 fatalities to 343 by December 31, 2015.

To decrease impaired driving fatalities to 400 by December 31, 2011.

	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 30 percent from the 2004 – 2008 average of 505 to 350 by December 31, 2015.

To decrease unrestrained passenger vehicle occupant fatalities to 380 by December 31, 2011.

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

(F) Speeding Related Fatalities

To decrease speeding-related fatalities 25 percent from the 2004 – 2008 average of 125 to 94 by December 31, 2015.

To decrease speeding-related fatalities to 110 by December 31, 2011.

Speed related					
	2004	2005	2006	2007	2008
	96	138	136	124	133

(G) Motorcyclist Fatalities

To decrease motorcyclist fatalities 25 percent from the 2004 – 2008 average of 162 to 120 by December 31, 2015.

To decrease motorcyclists fatalities to 140 by December 31, 2011.

(H) Unhelmeted Motorcyclist Fatalities

To decrease unhelmeted motorcyclist fatalities 50 percent from the 2004 – 2008 average of 15 to eight by December 31, 2015.

To decrease unhelmeted motorcyclist fatalities to 10 by December 31, 2011.

Year	M/C Fatalis	no 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 25 percent from the 2004 – 2008 average of 279 to 209 by December 31, 2015.

To decrease drivers age 20 or younger involved in fatal crashes to 225 by December 31, 2011.

Drivers 20 and under involved in fatal crash					
	2004	2005	2006	2007	2008
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, 2015.

To decrease pedestrian fatalities to 155 by December 31, 2011.

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 2010 calendar base year usage rate of 89.7 percent to 92 percent by December 31, 2015.

To increase statewide observed seat belt use of front outboard occupants in passenger vehicles to 90 percent by December 31, 2011.

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

Survey Periods	Driver (D)	Passenger (RF)	Combined (D+RF)
1999			
Apr ¹	81.0	77.7	79.9
Jun ¹	83.5	80.8	82.3
Nov ²	79.7	71.0	78.6
2000			
Jun ³	81.6	76.1	80.5
Sep ³	80.3	74.7	79.2
2001			
May ³	80.9	74.8	79.6
Jun ³	83.6	79.1	82.7
Sep ³	83.0	77.3	81.9
2002			
Jun ³	84.9	80.6	84.1
Sep ³	84.5	76.5	82.7
2003			
Apr ³	85.1	79.2	84.1
Jun ³	87.3	81.0	86.1
Sep ³	85.7	80.4	84.7
2004			
Apr ³	85.2	79.1	83.8
Jun ⁴	87.4	74.7	85.4
2005			
Apr ⁵	86.2	82.2	85.4
Jun ⁴	86.9	85.6	86.7
2006			
Apr ⁵	87.6	84.4	86.9
Jun ⁴	88.9	86.3	88.5
2007			
Apr ⁵	87.4	74.7	85.4
Jun ⁴	89.4	84.7	88.8
2008			
Apr ⁵	89.4	82.8	88.4
Jun ⁴	90.4	85.5	89.8
2009			
Apr ⁵	90.4	83.3	89.2
Jun ⁴	89.8	88.8	89.5
2010			
Jun ⁴	90.4	86.7	89.7

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. It is also provides 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 what 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 the Department of Transportation (NCDOT) staff members throughout the state. This data is channeled to the State Traffic Safety Engineer within NCDOT and is readily available to the GHSP and the public. Additionally, GHSP has access to the Fatality Analysis Reporting System (FARS) which is another tool for comparison to the national numbers to identify our state's ongoing concerns. North Carolina has a centralized system of courts administered by the Administrative Office of Courts (AOC) and this enables GHSP to obtain 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 2011 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.

2005 Through 2008 County Rankings

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

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	3	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	1	1	1	1
Davidson	70	44	37	41	Rockingham	47	45	42	25
Davie	91	92	90	78	Rowan	76	67	42	40
Duplin	19	33	31	45	Rutherford	44	28	22	37
Durham	41	50	61	59	Sampson	6	8	12	14
Edgecombe	30	23	25	24	Scotland	16	7	10	10
Forsyth	74	79	79	79	Stanly	64	63	80	70
Franklin	23	18	15	19	Stokes	55	62	63	53
Gaston	49	53	38	39	Surry	43	61	56	65
Gates	7	11	8	42	Swain	67	56	67	86
Graham	2	3	2	5	Transylvania	80	85	91	92
Granville	89	81	74	81	Tyrrell	34	74	47	60
Greene	26	30	56	35	Union	65	68	58	55
Guilford	39	48	50	46	Vance	67	73	76	82
Halifax	20	20	18	13	Wake	81	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	26
Iredell	40	58	69	56	Yadkin	96	95	87	75
Jackson	52	30	31	20	Yancey	98	94	99	93

2008 Ranking of Cities with Populations of 10,000 or More Based on All Reported Crashes from January 1, 2006 through December 31, 2008

City	Total Crashes	% Alcohol Related Crashes	Fatal Crashes	Non-Fatal Injury Crashes		Ranking 2006	Ranking 2007	Ranking 2008	City	Total Crashes	% Alcohol Related Crashes	Fatal Crashes	Non-Fatal Injury Crashes	Ranking			
				2005	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	LENOIR	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	---	---	---	---	MOORESVILLE	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	---	---	59	60
ELIZABETH CITY	1,697	3.48%	5	504	58	55	47	46	NEW BERN	2,570	3.11%	3	665	52	45	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
HUNTER 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 Crash		Non-Fatal Injury Crashes		Ranking		
	200	2008	Crashes	2008	Crash	Crashes	Crashes	200	2008	200	2008
ABERDEEN	1103	2	1.63%	2	247	8	13	10	13	437	453
AHOSKIE	384	2	3.65%	110	19	15	24	36	21	216	233
ALAMANCE	29	0	13.79%	0	11	252	241	226	211	655	43
ALLIANCE	72	0	1.39%	0	25	134	125	165	163	43	93
ANDREWS	79	0	5.06%	0	12	75	283	334	313	4	435
ANGIER	360	1	6.11%	74	153	140	99	105	25	291	285
ANSONVILLE	25	0	4.00%	7	361	1319	280	320	17	316	330
ARAPAHOE	18	1	5.56%	4	368	148	180	171	369	56	102
ARCHDALE	915	3	4.59%	227	21	24	30	23	36	152	156
ARLINGTON	1	0	0.00%	0	0	302	297	292	65	183	175
ASKEWVILLE	5	0	20.00%	0	0	462	456	451	447	235	219
ATKINSON	14	0	0.00%	0	0	402	405	398	432	165	268
ATTANTIC	67	0	5.97%	9	0	0	340	216	10	244	290
ATLANTIC	204	1	9.80%	37	261	237	121	91	24	293	289
AULANDER	12	0	25.00%	4	4	371	358	403	389	4	351
AURORA	12	1	0.00%	3	405	224	214	221	501	69	59
AUTRYVILLE	10	0	10.00%	4	4	129	99	200	250	64	201
AYDEN	49	0	4.08%	0	15	289	298	335	330	394	155
BADIN	3	0	0.00%	0	1	410	442	450	442	33	322
BAILEY	67	0	2.99%	0	11	331	304	264	254	272	66
BAKERSVILLE	32	0	6.25%	6	245	257	324	290	22	279	295
BAIRDHEAD	2	0	0.00%	1	437	463	457	421	8	276	310
BANNER ELK	38	0	2.63%	4	4	292	414	454	371	48	208
BATH	5	0	0.00%	2	369	387	380	400	50	224	252
BAYBORO	71	0	4.23%	0	19	185	202	163	191	6	330
BEAUFORT	551	1	5.44%	113	99	96	62	57	11	249	314
BEECH	35	0	2.86%	6	248	311	343	284	233	87	90
BELHAVEN	39	0	5.13%	9	260	320	346	346	436	172	172
BELMONT	2028	5	3.35%	309	30	31	16	16	7	137	264
BELVILLE	42	0	7.14%	5	192	238	362	371	453	127	81
BELWOOD	44	0	11.36%	20	228	196	230	214	74	146	141
BENSON	338	1	4.73%	71	67	34	78	93	156	170	170
BERMUDA RUN	73	0	8.22%	11	355	318	301	308	63	70	47
BESSEMER CITY	179	0	6.70%	54	212	191	174	201	86	83	59
BETHANIA	20	0	20.00%	5	202	232	259	335	1051	7	2
BETHEL	1	0	0.00%	1	463	449	445	429	12	389	432
BEULAVILLE	142	0	4.23%	22	109	160	173	189	93	329	357
BILTMORE	18	0	11.11%	6	349	375	394	367	11	164	165
BISCOE	100	0	4.00%	13	181	194	250	269	10	333	296
BLACK CREEK	1	0	0.00%	0	427	427	431	458	65	154	136
BLACK	249	2	9.24%	90	123	119	117	103	69	340	369
BLADENBORO	23	1	4.35%	6	319	293	213	237	9	179	184
BLOWING ROCK	269	0	2.97%	40	148	155	170	125	10	343	422
BOARDMAN	18	0	5.56%	5	236	223	430	199	54	211	177
BOGUE	11	0	0.00%	3	186	186	196	401	2036	23	27
BOILING SPRING	140	0	6.43%	39	195	179	211	243	11	396	400
BOILING	222	1	1.80%	33	441	268	221	185	15	367	437
BOLIVIA	32	0	6.25%	8	288	262	254	210	13	295	325
BOLTON	25	0	12.00%	8	232	342	323	282	175	230	192

City	Total Crashes		% Alcohol Related		Fatal		Non-Fatal Injury		Ranking							
	Total Crashes	% Alcohol Related Crashes	Fatal Crash	Non-Fatal Injury Crashes	Fatal Crash	Non-Fatal Injury Crashes	200	200	200	200	200					
CREEDMOOR	268	2.61%	0	54	0	54	186	134	107	155	417	424	315	325		
CRESWELL	3	0.00%	0	1	0	1	257	352	324	435	60	80	87	80		
CROSSNORE	9	8.00%	1	0	0	0	302	334	439	252	209	129	120	124		
CULLOWHEE	34	8.82%	1	11	0	11	458	337	314	246	270	321	307	299		
DALLAS	539	1.11%	0	131	0	131	58	56	64	86	337	340	350	352		
DANBURY	25	8.00%	0	6	0	6	239	229	155	147	13	316	380	312	261	
DAVIDSON	348	2.59%	0	85	0	85	272	284	220	182	217	226	251	218		
DENTON	91	2.20%	0	28	0	28	144	147	144	165	124	238	265	205		
DILLSBORO	2	0.00%	0	0	0	0	464	458	456	17	6	235	297	246	224	
DOBBS	19	15.79%	0	8	0	8	363	349	368	329	16	300	339	407	383	
DOBSON	280	2.14%	0	38	0	38	215	137	139	129	45	262	207	210	206	
DORTCHES	100	3.00%	1	33	0	33	117	65	57	28	14	150	271	241	232	
DOVER	8	12.50%	0	1	0	1	445	446	442	442	10	275	286	232	207	
DREXEL	15	13.33%	0	3	0	3	431	440	438	430	7	386	409	416	369	
DUBLIN	41	4.88%	0	16	0	16	273	133	127	106	67	181	216	215	181	
DUCK	50	6.00%	0	7	0	7	141	215	206	280	23	296	305	290	374	
EART	7	14.29%	0	2	0	2	243	263	327	392	85	144	200	143	112	
EAST ARCADIA	30	3.33%	0	17	0	17	237	267	248	187	29	242	246	317	305	
EAST BEND	36	8.33%	1	5	0	5	323	362	372	185	16	264	261	303	381	
EAST	9	0.00%	0	4	0	4	284	391	294	288	36	233	211	190	213	
EAST SPENCER	78	1.28%	0	28	0	28	220	183	158	180	36	115	112	101	132	
EASTOVER	16	0.00%	0	6	0	6	-----	-----	-----	-----	33	238	227	272	162	
EDENTON	158	5.06%	0	47	0	47	92	135	191	225	11	385	371	385	422	
ELIZABETHITO	257	3.11%	1	76	0	76	59	120	59	92	458	17	51	26	29	
ELK PARK	17	5.88%	0	6	0	6	359	299	285	327	0	0	448	435	460	
ELKIN	434	1.38%	0	95	0	95	46	72	123	117	35	88	98	1338	266	
ELLENBORO	41	7.32%	2	16	0	16	214	75	91	81	38	63	153	203	120	
ELLERBE	84	9.52%	1	31	0	31	162	154	116	54	6	394	394	341	293	
ELM CITY	23	8.70%	0	8	0	8	312	332	354	349	657	118	100	71	34	
ELON COLLEGE	309	6.15%	2	66	0	66	158	162	98	130	205	193	185	66	60	
EMERALD ISLE	451	6.65%	0	65	0	65	81	64	56	122	36	357	300	235	198	
ENEFIELD	146	8.22%	0	53	0	53	120	103	129	137	139	165	124	122	133	
ERWIN	194	3.61%	1	87	0	87	131	89	95	98	10	269	279	409	440	
EUREKA	8	0.00%	0	1	0	1	373	398	449	434	19	384	181	154	159	
EVERETTS	3	0.00%	0	1	0	1	400	390	379	419	0	0	314	399	447	460
FAIR BLUFF	20	10.00%	0	8	0	8	401	426	418	338	153	35	41	113	115	
FAIRMONT	198	4.04%	0	35	0	35	453	322	227	219	257	31	46	119	177	
FAIRVIEW	177	6.78%	3	66	0	66	90	76	82	87	4	408	421	389	399	
FAISON	63	4.76%	0	15	0	15	354	247	239	192	37	169	108	138	138	
FATH	10	10.00%	1	4	0	4	321	335	197	226	3	459	465	453	457	
FALCON	22	9.09%	0	9	0	9	336	361	321	241	89	157	142	146	143	
FALKLAND	8	0.00%	0	3	0	3	172	288	278	314	8	393	388	402	394	
FALLSTON	55	0.00%	0	13	0	13	64	70	107	233	18	311	345	309	302	
FARMVILLE	345	4.35%	0	56	0	56	116	166	176	197	338	34	63	68	74	
EL AT ROCK	17	11.76%	0	6	0	6	452	454	412	384	9	439	455	427	420	
ELETCHER	395	2.53%	0	59	0	59	163	139	145	176	9	278	355	344	377	
EOREST CITY	1,005	7.89%	2	303	0	303	5	7	20	10	0	466	460	460	460	
EOUNTAIN	7	14.29%	0	1	0	1	335	423	408	445	15	432	403	397	411	
FOUR OAKS	20	5.00%	0	4	0	4	241	250	236	410	311	53	69	97	151	

City	Total Crashes		% Alcohol Related		Fatal		Non-Fatal Injury		Ranking		City	Total Crashes		% Alcohol Related		Fatal		Non-Fatal Injury		Ranking		
	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes		Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes
JAMESVILLE	29	0	0.00%	0	0	0	8	200	406	356	320	287	200	415	0.00%	0	0	0	0	200	200	200
JEFFERSON	270	1	2.96%	1	38	1	38	230	353	230	162	84	200	341	4.76%	0	6	6	341	343	347	358
IONESVILLE	276	0	3.99%	0	37	0	37	134	114	126	134	169	200	265	2.41%	1	24	24	265	209	86	64
KELEFORD	4	0	0.00%	0	4	0	4	281	222	305	281	342	200	394	0.00%	0	2	2	394	347	388	312
KENANSVILLE	34	0	0.00%	0	8	0	8	281	280	282	281	345	200	420	14.29%	0	3	3	420	444	441	405
KENLY	272	1	3.60%	1	21	1	21	159	324	258	159	153	200	71	2.09%	1	183	71	79	61	76	76
KILL DEVIL	779	2	7.19%	2	167	2	167	19	24	32	19	27	200	392	33.33%	1	2	2	392	373	337	221
KING	590	1	2.88%	1	144	1	144	115	55	83	115	75	200	399	0.00%	0	3	3	399	333	330	316
KINGSTOWN	7	0	14.29%	0	2	0	2	455	448	445	455	430	200	426	0.00%	0	1	1	426	419	417	427
KITTRELL	5	0	0.00%	0	2	0	2	373	196	384	373	362	200	409	0.00%	0	2	2	409	417	464	412
KITTY HAWK	524	3	4.77%	3	119	3	119	7	28	14	7	5	200	50	10.71%	0	73	50	53	77	108	108
KNIGHTDALE	740	3	5.00%	3	145	3	145	105	62	55	105	85	200	166	6.67%	2	104	166	87	50	46	46
KURE BEACH	37	0	13.51%	0	10	0	10	355	332	302	355	344	200	404	0.00%	0	2	404	404	349	348	348
LA GRANGE	54	0	3.70%	0	16	0	16	310	307	328	311	310	200	189	9.57%	0	17	189	198	244	267	267
LAKE LURE	109	1	8.26%	1	32	1	32	69	137	171	69	40	200	460	0.00%	0	0	460	467	462	451	451
LAKE PARK	10	0	10.00%	0	1	0	1	448	425	439	437	448	200	428	50.00%	0	2	428	436	399	406	406
LAKE	3	0	0.00%	0	1	0	1	443	398	402	443	441	200	85	4.52%	1	101	85	62	85	83	83
LANDIS	203	2	2.96%	2	50	2	50	88	121	74	88	94	200	424	0.00%	0	1	424	441	436	439	439
LANSING	14	0	0.00%	0	2	0	2	255	285	275	194	255	200	105	0.00%	0	16	105	90	112	113	113
LATTIMORE	5	0	0.00%	0	0	0	0	449	365	360	366	449	200	424	5.41%	0	0	424	447	446	455	455
LAUREL PARK	5	0	20.00%	0	4	0	4	396	402	407	414	396	200	1672	4.19%	0	413	2	10	13	25	25
LAWNDALE	31	0	3.23%	0	6	0	6	341	366	374	353	341	200	381	3.85%	0	4	381	396	386	363	363
LEGGETT	11	0	0.00%	0	3	0	3	267	259	243	279	267	200	3	5.77%	3	406	3	8	14	8	8
LEWISTON	21	0	9.52%	0	12	0	12	257	136	178	187	257	200	315	7.69%	0	5	315	327	359	387	387
LIBERTY	86	0	4.65%	0	24	0	24	272	298	292	293	272	200	140	2.48%	0	79	140	86	107	65	65
LILESVILLE	34	0	2.94%	0	17	0	17	172	94	210	216	172	200	119	3.16%	0	24	119	152	202	227	227
LILLINGTON	636	0	2.36%	0	126	0	126	72	11	15	39	72	200	240	3.26%	0	26	240	221	247	259	259
LINDEN	11	0	0.00%	0	4	0	4	279	287	258	243	279	200	51	2.42%	1	81	51	67	60	21	21
LITTLETON	1	0	0.00%	0	1	0	1	424	390	408	404	424	200	10	11.48%	2	71	10	25	40	37	37
LOCUST	212	0	1.89%	0	48	0	48	160	229	219	184	160	200	379	4.08%	0	38	379	266	234	214	214
LONG VIEW	277	1	4.69%	1	69	1	69	122	84	78	103	122	200	345	9.76%	0	19	345	350	285	264	264
LOUISBURG	616	1	2.92%	1	120	1	120	41	57	33	43	41	200	47	5.81%	1	23	47	40	37	50	50
LOWELL	320	0	5.63%	0	98	0	98	90	18	37	35	90	200	135	0.00%	0	12	135	163	198	209	209
LUCAMA	22	1	4.55%	1	7	1	7	184	206	159	179	184	200	190	6.97%	2	73	190	132	44	61	61
LUMBER BRIDGE	87	1	4.60%	1	25	1	25	43	77	145	55	43	200	297	5.71%	0	7	297	278	291	318	318
MACCLESFIELD	12	0	8.33%	0	4	0	4	396	407	437	396	357	200	--	0.00%	0	1	--	430	428	426	426
MACON	1	0	0.00%	0	0	0	0	453	387	392	391	453	200	302	10.53%	0	9	302	138	141	127	127
MADISON	468	1	1.92%	1	110	1	110	17	61	23	17	17	200	270	8.82%	0	11	270	201	192	202	202
MAGNOLIA	24	0	8.33%	0	11	0	11	304	193	251	251	304	200	16	3.78%	1	219	16	6	8	15	15
MAGNOLIA	22	0	0.00%	0	7	0	7	350	374	406	371	350	200	358	0.00%	0	4	358	411	411	380	380
MAIDEN	212	0	4.25%	0	52	0	52	141	86	142	104	141	200	247	8.73%	1	22	247	249	193	194	194
MANTHO	175	0	4.00%	0	26	0	26	167	133	175	165	167	200	343	15.38%	0	1	343	377	364	428	428
MARIETTA	3	0	0.00%	0	1	0	1	416	456	416	425	416	200	128	12.43%	2	87	128	113	133	100	100
MARION	15	0	13.33%	0	5	0	5	398	98	167	356	398	200	48	4.24%	1	101	48	54	64	68	68
MARS HILL	88	0	3.41%	0	9	0	9	301	305	312	305	301	200	342	2.44%	0	10	342	351	330	317	317
MARSHALL	3	0	0.00%	0	2	0	2	413	450	434	406	413	200	221	40.00%	1	25	221	281	228	249	249
MARSHVILLE	176	0	7.39%	0	42	0	42	174	68	85	176	174	200	227	2.86%	0	25	227	187	168	177	177
MARVIN	107	0	10.28%	0	29	0	29	251	178	218	302	251	200	423	7.14%	0	2	423	435	423	433	433
MAXTON	104	2	3.85%	2	44	2	44	89	191	131	131	89	200	434	0.00%	0	2	434	450	369	309	309

City	Total Crashes		% Alcohol Related		Fatal		Non-Fatal Injury		Ranking		City		Total Crashes		% Alcohol Related		Fatal		Non-Fatal Injury		Ranking	
	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes
OXFORD	167	8.64%	1	83	79	88	172	164	200	200	200	ROXBORO	1426	3.30%	2	242	200	200	200	200	200	200
PANTEGO	7	0.00%	0	3	327	324	289	340	200	200	200	ROXOBEI	10	20.00%	0	3	313	383	377	361	361	361
PARK	26	7.69%	0	10	421	368	318	270	200	200	200	RURAL HALL	240	5.83%	2	65	26	26	27	35	35	35
PARKMELE	6	0.00%	0	3	430	379	400	364	200	200	200	RUTH	9	0.00%	0	2	218	249	308	409	409	409
PATTERSON	28	3.57%	0	11	204	228	261	262	200	200	200	RUTHERFORD	58	3.45%	0	17	198	169	189	208	208	208
PEACHLAND	31	9.68%	1	11	105	101	83	114	200	200	200	RUTHERFORDTIO	251	3.98%	0	20	78	146	157	158	158	158
PELETIER	10	0.00%	0	8	360	291	268	258	200	200	200	SAINTE JAMES	51	9.80%	0	71	375	323	260	246	246	246
PEMBROKE	481	3.95%	2	136	29	19	27	14	200	200	200	SAINTE PAULS	18	11.11%	0	5	380	372	360	402	402	402
PIKEVILLE	37	6.25%	0	13	283	276	336	253	200	200	200	SALAMBURG	20	5.00%	0	8	346	240	228	242	242	242
PILOT	26	0.00%	0	3	130	168	275	408	200	200	200	SALLIDA	7	0.00%	0	1	417	397	426	444	444	444
PINE KNOLL	61	8.20%	0	7	397	380	374	343	200	200	200	SANDY CREEK	3	0.00%	0	2	--	260	233	382	382	382
PINEBLUFF	89	7.87%	1	28	112	58	81	97	200	200	200	SANDYFIELD	21	9.52%	0	6	356	348	296	303	303	303
PINETOPS	50	6.00%	0	10	429	460	448	319	200	200	200	SARATOGA	10	0.00%	0	2	411	420	440	415	415	415
PINEVILLE	2,002	3.40%	3	417	13	12	9	5	200	200	200	SCOTLAND NECK	83	8.43%	0	27	197	199	211	200	200	200
PINK HILL	17	0.00%	0	3	334	367	382	395	200	200	200	SEABOARD	11	18.18%	0	4	348	331	329	373	373	373
PITTSBORO	445	2.47%	0	50	170	204	177	136	200	200	200	SEAGROVE	20	5.00%	0	4	234	234	266	321	321	321
PLEASANT	187	3.74%	1	62	97	151	151	154	200	200	200	SEDALIA	43	2.33%	0	14	147	149	150	238	238	238
PLYMOUTH	133	7.52%	2	62	122	95	105	102	200	200	200	SELMA	682	4.25%	1	179	25	39	48	52	52	52
POLKTON	154	4.55%	2	38	99	189	132	110	200	200	200	SEVEN DEVILS	19	5.26%	0	4	451	443	366	285	285	285
POLKVILLE	33	3.03%	0	8	188	222	300	295	200	200	200	SEVEN LAKES	6	0.00%	0	0	370	369	352	452	452	452
POLLOCKSVILLE	10	10.00%	0	4	290	301	283	337	200	200	200	SEVEN SPRINGS	8	9.500%	0	2	350	344	284	322	322	322
POWELLSVILLE	11	9.09%	0	5	174	197	270	297	200	200	200	SEVERN	6	16.67%	0	3	433	461	387	352	352	352
PRINCETON	4	0.00%	0	0	422	418	428	454	200	200	200	SHALLOTTE	239	5.44%	2	136	36	11	2	3	3	3
PRINCEVILLE	32	15.63%	0	13	258	277	333	291	200	200	200	SHANNON	28	7.14%	1	10	231	190	77	73	73	73
RAEFORD	297	4.71%	1	73	111	128	90	101	200	200	200	SHARPSBURG	73	13.70%	0	11	200	244	357	306	306	306
RAMSEUR	111	5.41%	0	40	210	163	161	147	200	200	200	SILER CITY	890	4.83%	4	147	43	38	38	39	39	39
RANDLEMAN	636	4.40%	0	101	45	36	84	95	200	200	200	SIMPSON	12	0.00%	0	5	382	401	351	347	347	347
RAYNHAM	1	0.00%	0	1	351	395	393	378	200	200	200	SIMS	11	27.27%	0	4	132	116	126	274	274	274
RED CROSS	89	3.37%	0	36	101	122	124	120	200	200	200	SNOW HILL	75	4.00%	0	22	255	255	240	195	195	195
RED OAK	108	3.70%	0	33	301	313	277	223	200	200	200	SOUTHERN	84	5.95%	1	21	320	206	219	190	190	190
RED SPRINGS	306	2.94%	1	90	110	50	32	45	200	200	200	SOUTHPORT	70	4.29%	0	11	175	173	201	338	338	338
RENNERT	27	18.52%	2	16	206	70	52	57	200	200	200	SPARTA	118	4.24%	0	30	253	205	175	188	188	188
RHODISS	32	6.25%	0	11	143	157	249	236	200	200	200	SPEED	4	0.00%	0	1	274	389	378	370	370	370
RICH SQUARE	33	3.03%	0	5	177	194	345	359	200	200	200	SPENCER	267	4.49%	0	59	281	256	195	168	168	168
RICHEFIELD	67	2.99%	0	22	107	123	137	146	200	200	200	SPENCER	8	12.50%	0	4	377	365	295	216	216	216
RICHLANDS	275	1.45%	0	37	80	92	74	126	200	200	200	SPINDALE	166	7.23%	2	79	159	104	67	55	55	55
RIVER BEND	13	23.08%	0	6	309	316	310	331	200	200	200	SPRING HOPE	59	10.17%	0	20	294	294	223	245	245	245
ROBBINS	17	5.88%	0	3	391	415	460	418	200	200	200	SPRING LAKE	1475	5.08%	2	283	33	28	18	24	24	24
ROBBINSVILLE	100	7.00%	0	31	108	93	92	96	200	200	200	SPRICE PINE	151	7.95%	1	47	96	127	142	88	88	88
ROBERSONVIL	22	0.00%	0	10	383	386	375	333	200	200	200	STALEY	16	0.00%	0	4	263	230	298	354	354	354
ROCKINGHAM	777	4.50%	6	322	15	17	12	4	200	200	200	STANFIELD	33	3.03%	0	5	372	376	405	375	375	375
ROCKWELL	150	6.00%	0	27	91	107	207	231	200	200	200	STANLEY	241	4.56%	0	69	444	315	217	140	140	140
ROLESVILLE	213	4.23%	0	45	249	245	171	150	200	200	200	STANTONSBURG	7	0.00%	1	2	446	253	263	256	256	256
RONDA	38	2.63%	0	15	265	273	224	156	200	200	200	STAR	2	0.00%	0	1	416	428	434	437	437	437
ROPER	14	14.29%	0	9	199	193	257	296	200	200	200	STEDMAN	64	0.00%	0	21	54	130	136	144	144	144
ROSE HILL	103	2.91%	0	32	103	110	182	157	200	200	200	STEM	23	0.00%	0	4	362	358	312	322	322	322
ROSEBORO	29	10.34%	0	7	347	317	384	356	200	200	200	STOKESDALE	295	5.76%	2	106	37	43	27	21	21	21
ROSMAN	13	0.00%	0	2	388	384	424	425	200	200	200	STONEVILLE	9	0.00%	0	1	328	340	348	446	446	446
ROWLAND	58	3.45%	0	18	205	269	231	196	200	200	200	STONEWALL	20	10.00%	0	6	224	271	276	278	278	278

City	Total Crashes		% Alcohol Related Crashes		Fatal Crash		Non-Fatal Injury Crashes		Ranking		Total Crashes		% Alcohol Related Crashes		Fatal Crash		Non-Fatal Injury Crashes		Ranking			
	Crashes	Crashes	Crashes	Crashes	Crash	Crash	Crashes	Crashes	200	200	200	Crashes	Crashes	Crashes	Crashes	Crash	Crashes	Crashes	200	200	200	
STOVALL	23	23	4.35%	4.35%	0	0	6	6	223	179	218	315	3	0.00%	0	0	0	0	457	459	452	450
SUGAR	2	2	0.00%	0.00%	0	0	2	2	304	413	392	390	80	1.25%	0	0	9	9	449	451	376	285
SUMMERFIELD	466	466	4.51%	4.51%	2	2	138	138	42	44	34	53	102	6.86%	1	1	50	50	176	144	109	118
SUNSET BEACH	120	120	4.17%	4.17%	1	1	21	21	306	208	183	203	1 379	2.54%	2	2	453	4	4	4	11	12
SURF CITY	10	10	0.00%	0.00%	1	1	2	2	282	265	274	277	1	0.00%	0	0	1	1	443	364	369	379
SWANSBORO	309	309	3.88%	3.88%	1	1	37	37	267	214	113	104	3	0.00%	0	0	1	1	--	410	419	423
SWEPSONVILLE	34	34	5.88%	5.88%	0	0	3	3	325	336	328	334	350	5.71%	2	2	79	79	93	109	93	33
SYLVA	668	668	5.69%	5.69%	0	0	185	185	14	20	31	31	436	7.11%	5	5	195	195	65	30	23	30
TABOR CITY	167	167	5.39%	5.39%	2	2	53	53	161	161	46	42	235	5.53%	2	2	47	47	160	174	149	78
TAR HEEL	18	18	5.56%	5.56%	0	0	9	9	179	213	188	173	641	4.37%	2	2	172	172	72	52	58	49
TAYLORSVILLE	161	161	4.35%	4.35%	0	0	27	27	74	111	199	220	63	12.70%	0	0	37	37	439	431	395	149
TAYLORTOWN	34	34	0.00%	0.00%	0	0	5	5	375	378	358	360	504	4.37%	2	2	126	126	151	115	53	51
TEACHEY	3	3	0.00%	0.00%	0	0	1	1	308	412	443	438	269	3.35%	2	2	73	73	88	61	49	38
TOBACCOVILL	147	147	8.16%	8.16%	2	2	45	45	112	117	128	82	347	4.03%	4	4	106	106	48	45	25	19
TOPSAIL	3	3	0.00%	0.00%	0	0	1	1	418	366	383	375	295	3.73%	1	1	79	79	139	106	100	76
TRENT WOODS	25	25	12.00%	12.00%	0	0	5	5	414	433	422	406	42	7.14%	0	0	7	7	364	353	381	365
TRENTON	19	19	10.53%	10.53%	0	0	5	5	149	346	291	300	13	7.69%	0	0	2	2	226	248	433	351
TRINITY	679	679	5.89%	5.89%	7	7	226	226	9	5	5	2	33	21.21%	0	0	9	9	184	203	255	289
TROUTMAN	128	128	2.34%	2.34%	0	0	44	44	168	188	178	175	936	2.78%	0	0	345	345	6	1	4	18
TROY	271	271	5.54%	5.54%	5	5	85	85	102	49	41	20	71	8.45%	0	0	23	23	251	224	205	165
TRYON	13	13	7.69%	7.69%	0	0	6	6	316	329	326	366	829	2.90%	2	2	207	207	1	3	6	9
TURKEY	19	19	5.26%	5.26%	0	0	7	7	213	212	304	263	138	4.35%	2	2	54	54	40	77	163	135
UNIONVILLE	326	326	5.52%	5.52%	3	3	103	103	82	73	73	70	82	3.66%	1	1	28	28	73	83	125	107
VALDESE	315	315	4.13%	4.13%	3	3	66	66	124	118	94	77	194	2.06%	2	2	49	49	142	105	96	99
VANCEBORO	37	37	0.00%	0.00%	0	0	13	13	277	307	253	265	28	0.00%	0	0	12	12	253	279	238	239
VANDEMERE	5	5	20.00%	20.00%	0	0	2	2	454	457	459	393	23	8.70%	1	1	5	5	203	216	225	281
VARNAMTOWN	15	15	13.33%	13.33%	0	0	1	1	299	354	330	436	626	3.04%	2	2	140	140	38	35	42	66
VASS	49	49	6.12%	6.12%	0	0	10	10	286	308	257	248	24	4.17%	0	0	8	8	338	270	288	336
WACO	29	29	10.34%	10.34%	0	0	7	7	256	287	306	273	200	9.50%	1	1	55	55	156	82	140	130
WADE	750	750	2.93%	2.93%	4	4	247	247	326	338	341	391	25	8.00%	1	1	9	9	310	309	160	161
WAGRAM	29	29	3.45%	3.45%	0	0	8	8	338	363	339	324	297	8.75%	0	0	39	39	167	182	181	179
WALKERTOWN	533	533	5.07%	5.07%	0	0	163	163	12	18	36	43	451	3.10%	1	1	85	85	95	114	129	62
WALLACE	391	391	2.30%	2.30%	0	0	96	96	104	97	75	79	141	3.55%	0	0	30	30	378	273	245	212
WALNUT COVE	66	66	4.55%	4.55%	1	1	20	20	124	65	111	142	564	1.96%	1	1	19	19	246	254	287	228

Highway Safety Plan

A sampling of the various projects for 2011 and their descriptions can be found in the **Appendix**. These represent a small percentage of the approximately 150 projects currently in process for 2011. They are representative of the categories 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 the GHSP 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 the 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 severity of crashes in North Carolina during the last five years. The large variance in the overall numbers shown in 2009 has led the state to be taking a hard look at our overall reporting and the procedures currently used. These problems will be addressed in future year.

Table 1.2 Crash Frequency and Severity

Severity	2005	2006	2007	2008	2009
PDO	287,261	284,562	241,908	398,397	138,320
Injury	83,135	80,304	120,036	112,384	68,891
Fatal	1,546	1,559	1,705	1,450	1,236
Total	373,947	368,431	365,656	514,239	208,447

Table 1.3 shows the number of crashes, number of injury and fatal crashes for all 100 counties in North Carolina.

Table of COUNTY by REPORT

COUNTY (COUNTY)	REPORT (Crash Report Type)			
Frequency	PDO	Fatal	Injury	Total
-----+	-----+	-----+	-----+	-----+
Alamance	2257	16	1054	3327
-----+	-----+	-----+	-----+	-----+
Alexander	307	8	153	468
-----+	-----+	-----+	-----+	-----+
Alleghany	128	2	73	203
-----+	-----+	-----+	-----+	-----+
Anson	433	6	203	642
-----+	-----+	-----+	-----+	-----+
Ashe	367	4	191	562
-----+	-----+	-----+	-----+	-----+
Avery	207	4	130	341
-----+	-----+	-----+	-----+	-----+
Beaufort	619	11	321	951
-----+	-----+	-----+	-----+	-----+
Bertie	333	5	175	513
-----+	-----+	-----+	-----+	-----+
Bladen	466	11	277	754
-----+	-----+	-----+	-----+	-----+
Brunswick	1257	18	611	1886
-----+	-----+	-----+	-----+	-----+
Buncombe	2725	22	1795	4542
-----+	-----+	-----+	-----+	-----+
Burke	1085	13	668	1766
-----+	-----+	-----+	-----+	-----+
Cabarrus	2685	22	1272	3979
-----+	-----+	-----+	-----+	-----+
Caldwell	991	15	606	1612
-----+	-----+	-----+	-----+	-----+
Camden	112	2	58	172
-----+	-----+	-----+	-----+	-----+
Carteret	755	11	386	1152
-----+	-----+	-----+	-----+	-----+
Caswell	262	6	122	390
-----+	-----+	-----+	-----+	-----+

Catawba	2645	25	1420	4090
Chatham	930	14	301	1245
Cherokee	224	5	150	379
Chowan	173	1	62	236
Clay	69	3	64	136
Cleveland	1457	18	702	2177
Columbus	1048	20	533	1601
Craven	1321	15	536	1872
Cumberland	5375	47	2849	8271
Currituck	235	4	85	324
Dare	423	6	227	656
Davidson	1961	22	1094	3077
Davie	551	9	271	831
Duplin	1202	20	385	1607
Durham	5406	16	2001	7423
Edgecombe	842	9	442	1293
Forsyth	5516	28	2643	8187
Franklin	732	12	327	1071
Gaston	2494	18	1740	4252
Gates	162	5	93	260
Graham	107	4	112	223
Granville	771	11	325	1107
Greene	264	4	129	397
Guilford	7246	40	4465	11751
Halifax	888	6	470	1364
Harnett	1302	20	694	2016
Haywood	638	5	395	1038
Henderson	1338	15	679	2032
Hertford	312	6	167	485
Hoke	429	9	268	706
Hyde	85	2	32	119

Iredell	2356	21	1180	3557
Jackson	527	4	323	854
Johnston	2309	33	1113	3455
Jones	181	3	105	289
Lee	931	4	428	1363
Lenoir	771	5	496	1272
Lincoln	716	8	490	1214
Macon	392	1	227	620
Madison	218	2	99	319
Martin	475	6	162	643
McDowell	693	5	368	1066
Mecklenburg	12986	77	6584	19647
Mitchell	157	1	97	255
Montgomery	368	5	156	529
Moore	1149	9	643	1801
Nash	1607	15	906	2528
New Hanover	2732	20	1685	4437
Northampton	268	7	164	439
Onslow	2736	28	1315	4079
Orange	1900	14	675	2589
Pamlico	135	5	61	201
Pasquotank	542	7	273	822
Pender	883	9	326	1218
Perquimans	172	1	74	247
Person	692	3	222	917
Pitt	2961	19	1375	4355
Polk	232	2	117	351
Randolph	2135	14	1007	3156
Richmond	487	5	366	858
Robeson	1893	46	1399	3338

Rockingham	1392	21	620	2033
Rowan	1904	20	986	2910
Rutherford	690	9	479	1178
Sampson	1000	21	504	1525
Scotland	286	7	266	559
Stanly	811	6	410	1227
Stokes	685	5	259	949
Surry	1124	12	560	1696
Swain	169	7	117	293
Transylvania	324	6	179	509
Tyrrell	114	1	40	155
Union	2536	18	1098	3652
Vance	781	11	337	1129
Wake	15900	69	6013	21982
Warren	277	1	100	378
Washington	224	0	82	306
Watauga	882	4	255	1141
Wayne	1752	19	823	2594
Wilkes	900	9	541	1450
Wilson	1128	10	690	1828
Yadkin	539	4	218	761
Yancey	163	2	122	287
Total	138320	1236	68891	208447

2. Alcohol-Involved Crashes

Driving after drinking continues to be one of the major causes of motor vehicle crashes in North Carolina. 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 past four years with a slight decrease in 2004 and 2005 as compared to 2001. Unfortunately 2006 thru 2008 numbers show a slight increase to the highest level in the past five years. The decrease in 2009 may be attributable to the data collection error previously stated.

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%
Jan. 2009 Dec. 2009	11,008	340,642	3.23%

Demographic Difference in Alcohol Use by Drivers

Driver Age: Alcohol use is strongly related to age and is also true in drinking by crash-involved drivers. The 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 of a crash-involved impaired driver decreases again by age 25 and then declines until reaching a stable, relatively low level among drivers 60 and older.

Driver Alcohol Assessment (2009)

Table 2.B:

Age	No Alcohol		Alcohol		Total
	Number	Percentage	Number	Percentage	
Under 16	724	97.97	15	2.03	739
16-17	15,514	99.04	151	0.96	15,665
18-20	34,556	97.20	996	2.80	35,552
21-24	37,309	94.84	2,028	5.16	39,337
25-29	36,857	95.08	1,908	4.92	38,765
30-39	62,082	96.25	2,422	3.75	64,504
40-49	56,063	96.62	1,960	3.38	58,023
50-59	42,790	97.53	1,082	2.47	43,872
60 and Above	43,455	99.04	421	0.96	43,876
TOTAL	329,350	96.77	10,983	3.23	340,333

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 percentage of crash-involved drivers who had been drinking by race/ethnicity. The most notable finding is the 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 2009

Race	No Alcohol		Alcohol		Total
	Number	Percentage	Number	Percentage	
Caucasian	218,277	96.82	7,174	3.18	225,491
African American	82,079	97.27	2,301	2.73	84,380
Native American	2,853	94.66	161	5.34	3,014
Hispanic	16,382	93.25	1,186	6.75	17,568
Asian	3,737	98.52	56	1.48	3,793
Other	5,110	98.25	91	1.75	1,235
1,196	96.84	39	3.16	1,235	985
Total	329,634	96.77	11,008	3.23	340,642

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 percent of African Americans and 21 percent of Caucasians. Caucasian and African Americans crash-involved drivers include older drivers who are less likely to drink and drive. Hispanic drivers are mostly young males (only 2 percent of Hispanic drinking driver crashes were females whereas 26 percent of African Americans and Caucasian drinking drivers were females).

The following table, Table 2.E, illustrates the presence of alcohol in crashes by county in 2009. The twelve counties with the highest rate of alcohol involvement in crashes account for only 4.36 percent of all drinking driver crashes in North Carolina. Alcohol-related crashes are much more likely in rural areas and these rural counties have less traffic, hence fewer crashes in general. In contrast, the top 10 counties of drinking driver crashes account for close to half (40.64 percent) 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 of COUNTY by DRINTOX

COUNTY (COUNTY)		DRINTOX (Driver Intoxication Assessment)		
Frequency		No -	Yes -	Total
Row Pct		Alc	Alc	
Alamance		5247	182	5429
		96.65	3.35	
Alexander		660	35	695
		94.96	5.04	
Alleghany		260	7	267
		97.38	2.62	
Anson		816	42	858
		95.10	4.90	
Ashe		732	29	761
		96.19	3.81	
Avery		473	17	490
		96.53	3.47	
Beaufort		1369	54	1423
		96.21	3.79	
Bertie		606	13	619
		97.90	2.10	
Bladen		921	32	953
		96.64	3.36	
Brunswick		2702	162	2864
		94.34	5.66	
Buncombe		7563	294	7857
		96.26	3.74	
Burke		2690	107	2797
		96.17	3.83	
Cabarrus		6692	195	6887
		97.17	2.83	
Caldwell		2431	115	2546
		95.48	4.52	
Camden		241	12	253
		95.26	4.74	
Carteret		1890	82	1972
		95.84	4.16	
Caswell		440	35	475
		92.63	7.37	

Catawba	6697	266	6963
	96.18	3.82	
Chatham	1555	63	1618
	96.11	3.89	
Cherokee	518	31	549
	94.35	5.65	
Chowan	299	14	313
	95.53	4.47	
Clay	199	9	208
	95.67	4.33	
Cleveland	3351	112	3463
	96.77	3.23	
Columbus	2019	92	2111
	95.64	4.36	
Craven	2951	87	3038
	97.14	2.86	
Cumberland	14518	367	14885
	97.53	2.47	
Currituck	468	19	487
	96.10	3.90	
Dare	1166	46	1212
	96.20	3.80	
Davidson	4574	149	4723
	96.85	3.15	
Davie	1140	40	1180
	96.61	3.39	
Duplin	1968	96	2064
	95.35	4.65	
Durham	12646	261	12907
	97.98	2.02	
Edgecombe	1697	72	1769
	95.93	4.07	
Forsyth	13503	430	13933
	96.91	3.09	
Franklin	1390	65	1455
	95.53	4.47	
Gaston	7079	259	7338
	96.47	3.53	
Gates	281	17	298
	94.30	5.70	
Graham	263	9	272
	96.69	3.31	
Granville	1426	60	1486
	95.96	4.04	
Greene	469	28	497
	94.37	5.63	

Guilford	19773 96.97	618 3.03	20391
Halifax	1974 96.43	73 3.57	2047
Harnett	2901 95.27	144 4.73	3045
Haywood	1562 95.77	69 4.23	1631
Henderson	3369 96.75	113 3.25	3482
Hertford	674 97.68	16 2.32	690
Hooke	997 94.50	58 5.50	1055
Hyde	128 92.75	10 7.25	138
Iredell	5627 96.67	194 3.33	5821
Jackson	1189 93.84	78 6.16	1267
Johnston	4881 95.80	214 4.20	5095
Jones	347 94.81	19 5.19	366
Lee	2096 97.17	61 2.83	2157
Lenoir	1844 96.65	64 3.35	1908
Lincoln	1919 95.57	89 4.43	2008
Macon	898 96.35	34 3.65	932
Madison	397 94.08	25 5.92	422
Martin	803 95.71	36 4.29	839
McDowell	1478 95.48	70 4.52	1548
Mecklenburg	34651 97.85	763 2.15	35414
Mitchell	377 96.42	14 3.58	391
Montgomery	613 95.78	27 4.22	640
Moore	2800 97.66	67 2.34	2867

Nash	3622	155	3777
	95.90	4.10	
New Hanover	7923	263	8186
	96.79	3.21	
Northampton	530	29	559
	94.81	5.19	
Onslow	6543	311	6854
	95.46	4.54	
Orange	4000	126	4126
	96.95	3.05	
Pamlico	259	10	269
	96.28	3.72	
Pasquotank	1289	49	1338
	96.34	3.66	
Pender	1502	76	1578
	95.18	4.82	
Perquimans	273	16	289
	94.46	5.54	
Person	1281	35	1316
	97.34	2.66	
Pitt	7268	190	7458
	97.45	2.55	
Polk	424	20	444
	95.50	4.50	
Randolph	4587	191	4778
	96.00	4.00	
Richmond	1278	55	1333
	95.87	4.13	
Robeson	4774	251	5025
	95.00	5.00	
Rockingham	2679	120	2799
	95.71	4.29	
Rowan	4515	145	4660
	96.89	3.11	
Rutherford	1637	85	1722
	95.06	4.94	
Sampson	2005	79	2084
	96.21	3.79	
Scotland	768	43	811
	94.70	5.30	
Stanly	1785	60	1845
	96.75	3.25	
Stokes	1166	49	1215
	95.97	4.03	

Surry	2366	123	2489
	95.06	4.94	
Swain	395	21	416
	94.95	5.05	
Transylvania	719	29	748
	96.12	3.88	
Tyrrell	175	9	184
	95.11	4.89	
Union	5919	189	6108
	96.91	3.09	
Vance	1648	64	1712
	96.26	3.74	
Wake	38298	847	39145
	97.84	2.16	
Warren	429	21	450
	95.33	4.67	
Washington	368	13	381
	96.59	3.41	
Watauga	1842	57	1899
	97.00	3.00	
Wayne	4005	150	4155
	96.39	3.61	
Wilkes	2098	100	2198
	95.45	4.55	
Wilson	2662	115	2777
	95.86	4.14	
Yadkin	986	34	1020
	96.67	3.33	
Yancey	408	17	425
	96.00	4.00	
Total	329634	11008	340642

3. Young Drivers

Drivers ages 15 – 20 account for 15.7 percent 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 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 2008. Table 3.A shows, somewhat surprisingly, that injury severity does not differ greatly for young drivers of varying ages.

Table 3.A. Table of AGE by INJ

AGE (Age of Driver)		INJ (Injury Status of Driver)			
Frequency					
Row Pct	K + A In	B + C In	None		Total
	juries	juries			
15	3	102	389		494
	0.61	20.65	78.74		
16	51	1184	5060		6295
	0.81	18.81	80.38		
17	47	1792	7375		9214
	0.51	19.45	80.04		
18	76	2414	9429		11919
	0.64	20.25	79.11		
19	83	2483	9406		11972
	0.69	20.74	78.57		
20	79	2353	8765		11197
	0.71	21.01	78.28		
Total		339	10328	40424	51091

Frequency Missing = 630

Other Demographic Characteristics of Crash-Involved Young Drivers

As is shown in Table 3.B, among the youngest drivers, males and females are equally likely to crash. However, among 18 through 20 year-old drivers, females represent only about 44 percent 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 AGE by SEX

AGE (Age of Driver)	SEX (Sex of Driver)		
Frequency			
Row Pct	Male	Female	Total
15	287	216	503
	57.06	42.94	
16	3214	3149	6363
	50.51	49.49	
17	4925	4370	9295
	52.99	47.01	
18	6705	5351	12056
	55.62	44.38	
19	6734	5396	12130
	55.52	44.48	
20	6112	5219	11331
	53.94	46.06	
Total	27977	23701	51678

Frequency Missing = 43

Table 3.C Table of AGE by REPORT

AGE (Age of Driver)	REPORT (Crash Report Type)			
Frequency				
Row Pct	PDO	Fatal	Injury	Total
15	305	0	199	504
	60.52	0.00	39.48	
16	4147	19	2200	6366
	65.14	0.30	34.56	
17	6003	32	3264	9299
	64.56	0.34	35.10	
18	7720	59	4286	12065
	63.99	0.49	35.52	
19	7805	53	4282	12140
	64.29	0.44	35.27	
20	7284	48	4015	11347
	64.19	0.42	35.38	
Total	33264	211	18246	51721

Summary Points

- Approximately 79 percent of young driver crashes involved no injury to the driver.
- Driver injuries were equally (none) severe at each age among young drivers.
- Although the number of young driver crashes increased, this is completely explained by population growth within 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 percent of crashes.

Roadway Characteristics and Location

Due to the lack of experience and different driving tendencies youngest drivers have, we might expect crashes at certain roadway locations or in conjunction with particular roadway characteristics would be different among young drivers. 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 on those types of roads.

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 these roads.

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 percent of crashes occur at intersections; young drivers have an essentially identical proportion of crashes at intersections (30 percent). Moreover there is little variation in the proportion of intersection crashes by age among young drivers, ranging from 32 percent for 16 year-olds to 30 percent 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.

In contrast, alcohol involvement in crashes of 16 and 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, data suggest that the actual amount of driving after drinking is even lower in comparison to older drivers than the data would indicate. This is consistent with national research. Table 3.D shows the number of yearly crashes by age and the investigating officer's assessment of whether the young driver had been drinking

Table 3.D Table of AGE by DRINTOX

AGE (Age of Driver)		DRINTOX (Driver Intoxication Assessment)		
Frequency				
Row Pct	No - Alc	Yes - Alc	Total	
15	495 98.21	9 1.79	504	
16	6324 99.34	42 0.66	6366	
17	9190 98.83	109 1.17	9299	
18	11803 97.83	262 2.17	12065	
19	11804 97.23	336 2.77	12140	
20	10949 96.49	398 3.51	11347	
Total	50565	1156	51721	

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 through 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 as crash speeds will be lower.

Finally, those counties that attract young drivers from other areas, including other states, will exhibit higher crash rates due to 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 for the period from January 2009 through December 2009. In addition to showing where crash rates are high, this table also indicates where the majority of young driver crashes occur.

Table 3.E Table of COUNTY by REPORT
COUNTY (COUNTY) REPORT (Crash Report Type)

Frequency Row Pct	PDO	Fatal	Injury	Total
Alamance	592 66.97	2 0.23	290 32.81	884
Alexander	93 66.91	0 0.00	46 33.09	139
Alleghany	31 56.36	0 0.00	24 43.64	55
Anson	61 55.45	1 0.91	48 43.64	110
Ashe	80 64.52	0 0.00	44 35.48	124
Avery	48 60.00	1 1.25	31 38.75	80
Beaufort	154 59.69	2 0.78	102 39.53	258
Bertie	52 57.14	1 1.10	38 41.76	91
Bladen	92 57.14	1 0.62	68 42.24	161
Brunswick	224 58.18	3 0.78	158 41.04	385
Buncombe	692 61.02	6 0.53	436 38.45	1134
Burke	272 61.26	2 0.45	170 38.29	444
Cabarrus	752 67.44	2 0.18	361 32.38	1115
Caldwell	283 60.99	4 0.86	177 38.15	464
Camden	36 53.73	2 2.99	29 43.28	67
Carteret	220 62.15	1 0.28	133 37.57	354
Caswell	63 62.38	2 1.98	36 35.64	101
Catawba	753 66.76	3 0.27	372 32.98	1128

Chatham	151	3	68	222
	68.02	1.35	30.63	
Cherokee	57	0	25	82
	69.51	0.00	30.49	
Chowan	36	0	16	52
	69.23	0.00	30.77	
Clay	14	1	20	35
	40.00	2.86	57.14	
Cleveland	354	3	189	546
	64.84	0.55	34.62	
Columbus	145	6	125	276
	52.54	2.17	45.29	
Craven	324	3	144	471
	68.79	0.64	30.57	
Cumberland	1418	8	785	2211
	64.13	0.36	35.50	
Currituck	58	1	30	89
	65.17	1.12	33.71	
Dare	141	1	68	210
	67.14	0.48	32.38	
Davidson	600	1	367	968
	61.98	0.10	37.91	
Davie	148	1	73	222
	66.67	0.45	32.88	
Duplin	244	2	105	351
	69.52	0.57	29.91	
Durham	984	3	421	1408
	69.89	0.21	29.90	
Edgecombe	148	2	121	271
	54.61	0.74	44.65	
Forsyth	1321	4	715	2040
	64.75	0.20	35.05	
Franklin	134	1	87	222
	60.36	0.45	39.19	
Gaston	666	4	443	1113
	59.84	0.36	39.80	
Gates	20	2	14	36
	55.56	5.56	38.89	
Graham	28	0	8	36
	77.78	0.00	22.22	
Granville	136	0	68	204
	66.67	0.00	33.33	

Greene	38	1	40	79
	48.10	1.27	50.63	
Guilford	1829	8	1169	3006
	60.84	0.27	38.89	
Halifax	181	0	112	293
	61.77	0.00	38.23	
Harnett	296	5	214	515
	57.48	0.97	41.55	
Haywood	150	1	88	239
	62.76	0.42	36.82	
Henderson	313	3	172	488
	64.14	0.61	35.25	
Hertford	56	0	38	94
	59.57	0.00	40.43	
Hoke	75	1	72	148
	50.68	0.68	48.65	
Hyde	10	0	5	15
	66.67	0.00	33.33	
Iredell	676	2	311	989
	68.35	0.20	31.45	
Jackson	132	1	74	207
	63.77	0.48	35.75	
Johnston	486	9	306	801
	60.67	1.12	38.20	
Jones	21	1	25	47
	44.68	2.13	53.19	
Lee	219	0	144	363
	60.33	0.00	39.67	
Lenoir	147	1	129	277
	53.07	0.36	46.57	
Lincoln	225	5	135	365
	61.64	1.37	36.99	
Macon	92	0	54	146
	63.01	0.00	36.99	
Madison	50	0	26	76
	65.79	0.00	34.21	
Martin	85	2	39	126
	67.46	1.59	30.95	
McDowell	157	0	95	252
	62.30	0.00	37.70	
Mecklenburg	2677	16	1413	4106
	65.20	0.39	34.41	

Mitchell	36	0	19	55
	65.45	0.00	34.55	
Montgomery	58	2	33	93
	62.37	2.15	35.48	
Moore	268	1	170	439
	61.05	0.23	38.72	
Nash	331	1	221	553
	59.86	0.18	39.96	
New Hanover	807	0	489	1296
	62.27	0.00	37.73	
Northampton	38	1	38	77
	49.35	1.30	49.35	
Onslow	877	3	501	1381
	63.50	0.22	36.28	
Orange	378	5	168	551
	68.60	0.91	30.49	
Pamlico	24	1	17	42
	57.14	2.38	40.48	
Pasquotank	142	2	93	237
	59.92	0.84	39.24	
Pender	152	0	79	231
	65.80	0.00	34.20	
Perquimans	34	0	21	55
	61.82	0.00	38.18	
Person	182	1	55	238
	76.47	0.42	23.11	
Pitt	939	2	455	1396
	67.26	0.14	32.59	
Polk	44	0	32	76
	57.89	0.00	42.11	
Randolph	548	3	326	877
	62.49	0.34	37.17	
Richmond	147	1	109	257
	57.20	0.39	42.41	
Robeson	394	10	344	748
	52.67	1.34	45.99	
Rockingham	281	4	154	439
	64.01	0.91	35.08	
Rowan	503	8	272	783
	64.24	1.02	34.74	
Rutherford	180	0	143	323
	55.73	0.00	44.27	

Sampson	206	0	144	350
	58.86	0.00	41.14	
Scotland	68	1	67	136
	50.00	0.74	49.26	
Stanly	232	0	143	375
	61.87	0.00	38.13	
Stokes	140	1	72	213
	65.73	0.47	33.80	
Surry	308	3	152	463
	66.52	0.65	32.83	
Swain	35	2	26	63
	55.56	3.17	41.27	
Transylvania	94	1	49	144
	65.28	0.69	34.03	
Tyrrell	17	0	10	27
	62.96	0.00	37.04	
Union	770	2	364	1136
	67.78	0.18	32.04	
Vance	169	0	101	270
	62.59	0.00	37.41	
Wake	3838	16	1484	5338
	71.90	0.30	27.80	
Warren	45	0	21	66
	68.18	0.00	31.82	
Washington	27	0	15	42
	64.29	0.00	35.71	
Watauga	311	0	79	390
	79.74	0.00	20.26	
Wayne	441	2	219	662
	66.62	0.30	33.08	
Wilkes	226	1	158	385
	58.70	0.26	41.04	
Wilson	251	0	177	428
	58.64	0.00	41.36	
Yadkin	143	2	67	212
	67.45	0.94	31.60	
Yancey	40	0	43	83
	48.19	0.00	51.81	
Total	33264	211	18246	51721

Summary Points

- Three counties (Mecklenburg, Wake, and Guilford) account for 24 percent 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 2009 which is less than 2 percent of all registered vehicles, however, motorcyclist crashes represent over 1 percent of our overall crashes statewide and 8.47 percent 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 2009.

Table 4.A Table of ACCSEV by VEHTYPE

ACCSEV (ACCSEV)	VEH TYPE (Vehicle Type)		
Frequency			
Row Pct	Other	MC	Total
Fatal	1653	153	1806
	91.53	8.47	
A Injury	2543	372	2915
	87.24	12.76	
B Injury	26381	1851	28232
	93.44	6.56	
C Injury	88130	868	88998
	99.02	0.98	
PDO	215647	407	216054
	99.81	0.19	
Unknown	2475	16	2491
	99.36	0.64	
Total	336829	3667	340496

Findings

- Approximately 85 percent of motorcyclist crashes involves death or injury for the driver as compared to only 22 percent 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 had been increasing for the past five years along with the North Carolina population and number of registered motorcycles. The crash rate for 2009, however shows a slight decline 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 percent during 2008 and as expected are 21 percent below last year's year-to-date numbers. N.C. tightened the helmet law in 2008 and increased enforcement of the law causing a decrease in the novelty type helmets being worn by riders. In addition, increased rider education to include the new Bike Safe 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 2009 is shown in Table 4.B as a function of crash injury severity.

Table 4.B Table of AGE by INJ

AGE (Age of MC Driver)	INJ (Injury Status of MC Driver)					Total
Frequency	Fatal	A	B	C	No	
Row Pct	Injury	Injury	Injury	Injury	Injury	
< 16	1 7.14	0 0.00	10 71.43	2 14.29	1 7.14	14
16 to 17	1 4.00	3 12.00	11 44.00	5 20.00	5 20.00	25
18 to 20	4 1.72	17 7.30	108 46.35	68 29.18	36 15.45	233
21 to 24	16 3.68	40 9.20	224 51.49	95 21.84	60 13.79	435
25 to 29	14 3.30	30 7.08	225 53.07	94 22.17	61 14.39	424
30 to 39	30 3.88	67 8.66	381 49.22	193 24.94	103 13.31	774
40 to 49	28 3.47	99 12.28	379 47.02	200 24.81	100 12.41	806
50 to 59	34 5.38	64 10.13	301 47.63	137 21.68	96 15.19	632
60+	10 3.30	30 9.90	161 53.14	60 19.80	42 13.86	303
Total	138	350	1800	854	504	3646

Frequency Missing = 21

Findings

- Motorcycle drivers between the ages of 30 and 49 accounted for 43.3 percent 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 percent 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 riders 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

Findings

- 3,404 motorcycle passengers were involved in crashes in 2008, in which 9.9 percent received fatal/severe injuries, 73 percent received moderate/minor injuries, and 16.6 percent were not injured. These percentages are very similar to those for motorcycle riders. There appears to be no significant difference between the injury and fatal frequencies of passengers vs. drivers.
- The overwhelming majority of crash-involved passengers (83 percent) are women, who appear to be somewhat less likely to escape injury in the crash (15 percent) than are men passengers (23 percent).

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 percent of all motorcycle crashes each year, and over 50 percent of all moderate/minor and fatal/severe injury crashes. However, recent trends seem to be changing with only about 43 percent of 2008 fatal crashes involving another vehicle. Weather, environment, road conditions, in addition to 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 percent) and less likely to have no injuries (9 percent) than are motorcycle drivers involved in multiple vehicle crashes (66 percent and 19 percent, respectively). Drivers involved in single and multiple vehicle crashes were equally as likely to be fatally or severely injured.

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 Table of RDCLASS by INJ

RDCLASS (Road Class)	INJ (Injury Status of MC Driver)					Total
Frequency Row Pct	Fatal Injury	A Injury	B Injury	C Injury	No Injury	
Interstate	5 2.89	17 9.83	86 49.71	39 22.54	26 15.03	173
US Route	24 4.20	56 9.79	288 50.35	118 20.63	86 15.03	572
NC Route	26 3.83	73 10.75	338 49.78	145 21.35	97 14.29	679
State Secondary Route	58 4.80	144 11.91	595 49.21	273 22.58	139 11.50	1209
Local Street	24 2.45	58 5.92	481 49.08	275 28.06	142 14.49	980
PVA	0 0.00	1 10.00	5 50.00	3 30.00	1 10.00	10
Private Road, Dr Way	0 0.00	0 0.00	1 50.00	0 0.00	1 50.00	2
Other	0 0.00	0 0.00	2 66.67	1 33.33	0 0.00	3
Total	137	349	1796	854	492	3628

Frequency Missing = 39

Findings

- The majority of all motorcycle crashes, and 80 percent of all fatal/severe injury crashes, occur 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 and 4-lane roadways and more likely to occur on those with 2-lanes.
- About 59.8 percent of all fatal crashes occur on state secondary roads and on local streets.

Speed Limits and Travel Speed in Motorcycle Crashes

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.

Findings

- Not surprisingly, the risk of fatal/severe injury increases linearly as a function of increasing speed limit. In fact, more than 80 percent 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 percent of all motorcyclist crashes occurred at speeds above 60 MPH, 21 percent 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).

Findings

- 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 percent) and lower risk for fatal/severe injury crashes (11 percent) 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 percent).
- About 34 percent of all motorcycle crashes occur on curved roadway segments, though 46 percent of fatal/severe injury crashes occur on curved segments. Curved segment crashes are more likely to result in fatal/severe injury (23 percent) than are crashes on straight segments (14 percent).
- Intersection was the special roadway feature most often associated with motorcycle crashes of all types (24 percent), but was not related to crash severity. Although crashes at driveway intersections represented only a small percentage of motorcycle crashes (8 percent), they were somewhat overrepresented in fatal/severe injury crashes (10 percent).
- Although railroad crossings and bridges are considered to be more treacherous for motorcycles than for automobiles, only small percentages of crashes (0-1 percent) were found to coincide with these special road features, and neither was related to crash severity.
- Similarly, work zones are considered to be more dangerous for motorcyclists because of road debris and changes in the road grade associated with such areas. Only a small percentages of motorcycle crashes were found to occur in work zones across 3 years (1-2 percent), 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.

Findings

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

Findings

- The percentages of crash-involved motorcyclists wearing helmets was uniformly high (91 percent) 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.
- There was little evidence of a relationship between helmet usage and crash injury severity, which may be due to the high helmet usage rate.
- The most common motorcycle defect associated with the crashes coded by law enforcement officers were tire defects, which were noted for about 2 percent of the crashes and were somewhat overrepresented (3.5 percent) in fatal/severe injury crashes.

Summary of Motorcycle Crash Findings

- The overwhelming majority of motorcycle crashes involve death or injury for the driver. Most crash-involved motorcycle riders 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 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 percent) 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 were compliant or were the novelty type.
- Over 400 motorcycle passengers were involved in crashes in 2008, many of which were 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 2009, there were 1,754 pedestrian-motor vehicle crashes that were reported to the NC Division of Motor Vehicles.

Although crashes involving pedestrians represent less than 1 percent of the total reported motor vehicle crashes in North Carolina, pedestrians are highly over-represented in fatal and serious injury crashes. Approximately 17 percent of the fatal crashes in North Carolina involved pedestrians.

Although the number of pedestrian crashes has remained somewhat steady over the past few years, an apparent declining trend in the proportion of disabling (A-type) injuries reported has continued. These changes, which began in 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, which N.C. began using in 2000. The proportion of reported A-type injuries has dropped from 15 percent in 2000. 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 highlight the characteristics of pedestrian crashes and some of the pedestrian safety issues across North Carolina. Some discussion of potential countermeasures is included. 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 fluctuations from year to year, but pedestrian crashes in North Carolina are fairly evenly distributed throughout the year. The highest proportions occurred during the months of October followed by September and May from 2005 to 2008. The lowest total occurred in February, followed by July for the six years. Other months account for about 8 to 9 percent. Pedestrian crashes peak on Friday (17.9 percent) and Saturday (16.5 percent), with the lowest proportion occurring on Sunday (10.1 percent) for the three-year. Thursday also accounts for a slightly higher proportion than other weekdays at 14.7 percent.

Pedestrian crashes are most likely to occur in the afternoon and early evening between the hours of 2 p.m. to 6 p.m. and 6 p.m. to 10 p.m., with over half of pedestrian crashes occurring during these eight hours. The mid-day period of 10 a.m. to 2 p.m. 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), 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 would be appropriate.

Environmental Factors

About 40 percent of pedestrian crashes over the past few 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 percent 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 percent) of pedestrian crashes occur under clear or cloudy weather conditions, 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 percent) occurred during clear or cloudy weather and under daylight conditions, 18 percent occurred during night-time on lighted roadways (clear or cloudy) and another 15 percent 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 for 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 from differences in crash location and types of crashes that different age groups tend to be involved in. 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 two-thirds (63 percent) of the pedestrians reported involved in crashes in each of the 3 years while females were involved in a little over one-third or 37 percent of pedestrian crashes.

Although pedestrian crashes in North Carolina are most likely to involve Caucasian pedestrians (approximately 48 percent), African Americans are almost as likely to be victims (approximately 41.5 percent - Table 5.A). Considering they comprise about 22 percent of the population living in the state (2000 census data), African Americans are clearly over-represented in pedestrian crashes, while Caucasians are under-represented based on the population (about 72 percent). There appears to be a decreasing trend in the proportion of crashes involving African American pedestrians, from around 45 percent in 1998 to about 41.5 percent in 2009, 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 percent 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 percent of the pedestrian crashes each year, and a comparable proportion of the population, 4.7 percent in 2000.

Table of AGE by RACE
Table 5.A

AGE (Age of Pedestrian)	RACE (Ethnic Origin of Pedestrian)							Total
Frequency	White	Black	Nat Amer	Hispanic	Asian	Other	Unknown	
Row Pct								
< 16	95 36.26	129 49.24	3 1.15	27 10.31	4 1.53	2 0.76	2 0.76	262
16 to 17	38 45.24	40 47.62	1 1.19	4 4.76	0 0.00	0 0.00	1 1.19	84
18 to 20	62 42.47	72 49.32	2 1.37	6 4.11	0 0.00	2 1.37	2 1.37	146
21 to 24	86 46.74	83 45.11	0 0.00	13 7.07	0 0.00	0 0.00	2 1.09	184
25 to 29	76 50.00	55 36.18	0 0.00	16 10.53	3 1.97	1 0.66	1 0.66	152
30 to 39	138 50.18	98 35.64	9 3.27	17 6.18	7 2.55	4 1.45	2 0.73	275
40 to 49	151 52.07	116 40.00	6 2.07	14 4.83	0 0.00	2 0.69	1 0.34	290
50 to 59	101 51.79	83 42.56	1 0.51	5 2.56	0 0.00	1 0.51	4 2.05	195
60+	106 63.86	53 31.93	1 0.60	3 1.81	0 0.00	2 1.20	1 0.60	166
Total	853	729	23	105	14		16	1754

Frequency Missing = 8

The investigating officer indicated alcohol use by about 16 percent of the pedestrians struck by motor vehicles over this period with the proportion apparently declining from around 13 percent in 2000 to 7 percent in 2005 but rising to 16 percent again in 2008 and 2009. (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 of AGE by DRINTOX
Table 5.B

AGE (Age of Pedestrian)		DRINTOX (Pedestrian Intoxication Assessment)		
Frequency		No -	Yes -	Total
Row Pct		Alc	Alc	
< 16		261	1	262
		99.62	0.38	
16 to 17		82	2	84
		97.62	2.38	
18 to 20		131	15	146
		89.73	10.27	
21 to 24		144	40	184
		78.26	21.74	
25 to 29		121	31	152
		79.61	20.39	
30 to 39		204	71	275
		74.18	25.82	
40 to 49		216	74	290
		74.48	25.52	
50 to 59		154	41	195
		78.97	21.03	
60+		154	12	166
		92.77	7.23	
Total		1467	287	1754

Frequency Missing = 8

Driver use of alcohol was detected in an average of 4 percent 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 percent).

Roadway and Location Characteristics of Pedestrian Crashes

Crash severity also tends to vary by roadway classification (Table 5.C).

Table of RDCLASS by INJ
Table 5.C

RDCLASS (Road Class)	INJ (Injury Status of Pedestrian)					Total
Frequency Row Pct	Fatal Injury	A Injury	B Injury	C Injury	No Injury	
Interstate	13 22.41	8 13.79	16 27.59	19 32.76	2 3.45	58
US Route	36 18.56	22 11.34	66 34.02	61 31.44	9 4.64	194
NC Route	13 8.97	19 13.10	55 37.93	51 35.17	7 4.83	145
State Secondary Route	34 12.45	30 10.99	105 38.46	95 34.80	9 3.30	273
Local Street	50 4.92	63 6.19	431 42.38	449 44.15	24 2.36	1017
PVA	1 2.63	1 2.63	13 34.21	22 57.89	1 2.63	38
Private Road, Dr Way	0 0.00	0 0.00	9 50.00	9 50.00	0 0.00	18
Other	0 0.00	1 100.00	0 0.00	0 0.00	0 0.00	1
Total	147	144	695	706	52	1744

Frequency Missing = 18

The majority of reported pedestrian roadway crashes occurred on two-lane roads, while approximately 22 percent occurred on roadways with four or more through travel lanes. There are year-to-year fluctuations in most categories. 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 3 years as having occurred at intersections, slightly less than one half occurred at non-intersection roadway locations, with the remainder occurring at non-roadway locations. These proportions vary considerably by rural and urban location.

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 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 counties ranked by percentage of pedestrian-motor vehicle crashes for the year 2009 are:

COUNTY
Table 5.D

COUNTY	Frequency	Percent	Cumulative Frequency	Percent
Mecklenburg	263	14.93	263	14.93
Wake	164	9.31	427	24.23
Guilford	156	8.85	583	33.09
Cumberland	86	4.88	669	37.97
Durham	75	4.26	744	42.22
New Hanover	66	3.75	810	45.97
Buncombe	53	3.01	863	48.98
Forsyth	44	2.50	907	51.48
Catawba	41	2.33	948	53.80
Gaston	41	2.33	989	56.13
Wayne	35	1.99	1024	58.12
Onslow	33	1.87	1057	59.99
Cabarrus	28	1.59	1085	61.58
Nash	27	1.53	1112	63.11
Johnston	26	1.48	1138	64.59
Pitt	26	1.48	1164	66.06
Robeson	26	1.48	1190	67.54
Davidson	24	1.36	1214	68.90
Randolph	21	1.19	1235	70.09
Union	21	1.19	1256	71.28
Edgecombe	20	1.14	1276	72.42
Iredell	20	1.14	1296	73.55
Orange	18	1.02	1314	74.57
Columbus	16	0.91	1330	75.48
Dare	16	0.91	1346	76.39
Harnett	16	0.91	1362	77.30
Rowan	16	0.91	1378	78.21
Cleveland	15	0.85	1393	79.06
Lenoir	15	0.85	1408	79.91
Duplin	14	0.79	1422	80.70
Rockingham	14	0.79	1436	81.50
Wilson	14	0.79	1450	82.29
Alamance	13	0.74	1463	83.03
Brunswick	13	0.74	1476	83.77
Henderson	13	0.74	1489	84.51
Burke	12	0.68	1501	85.19
Halifax	12	0.68	1513	85.87
Stanly	12	0.68	1525	86.55
Caldwell	11	0.62	1536	87.17
Richmond	11	0.62	1547	87.80
Scotland	11	0.62	1558	88.42
Pasquotank	9	0.51	1567	88.93

COUNTY	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Vance	9	0.51	1576	89.44
Watauga	9	0.51	1585	89.95
Chatham	8	0.45	1593	90.41
Lee	8	0.45	1601	90.86
Moore	8	0.45	1609	91.32
Sampson	8	0.45	1617	91.77
Carteret	7	0.40	1624	92.17
Haywood	7	0.40	1631	92.57
Lincoln	7	0.40	1638	92.96
McDowell	7	0.40	1645	93.36
Craven	6	0.34	1651	93.70
Rutherford	6	0.34	1657	94.04
Anson	5	0.28	1662	94.32
Davie	5	0.28	1667	94.61
Granville	5	0.28	1672	94.89
Hoke	5	0.28	1677	95.18
Jackson	5	0.28	1682	95.46
Stokes	5	0.28	1687	95.74
Wilkes	5	0.28	1692	96.03
Alexander	4	0.23	1696	96.25
Ashe	4	0.23	1700	96.48
Bertie	4	0.23	1704	96.71
Franklin	4	0.23	1708	96.94
Gates	4	0.23	1712	97.16
Greene	4	0.23	1716	97.39
Northampton	4	0.23	1720	97.62
Chowan	3	0.17	1723	97.79
Macon	3	0.17	1726	97.96
Madison	3	0.17	1729	98.13
Pender	3	0.17	1732	98.30
Polk	3	0.17	1735	98.47
Surry	3	0.17	1738	98.64
Alleghany	2	0.11	1740	98.75
Beaufort	2	0.11	1742	98.86
Martin	2	0.11	1744	98.98
Transylvania	2	0.11	1746	99.09
Warren	2	0.11	1748	99.21
Avery	1	0.06	1749	99.26
Camden	1	0.06	1750	99.32
Caswell	1	0.06	1751	99.38
Cherokee	1	0.06	1752	99.43
Graham	1	0.06	1753	99.49
Hertford	1	0.06	1754	99.55
Hyde	1	0.06	1755	99.60
Mitchell	1	0.06	1756	99.66
Montgomery	1	0.06	1757	99.72
Pamlico	1	0.06	1758	99.77
Perquimans	1	0.06	1759	99.83
Person	1	0.06	1760	99.89
Swain	1	0.06	1761	99.94
Yadkin	1	0.06	1762	100.00

Summary of Findings

Pedestrian crash rates may seem low compared with overall crash rates. The high proportions of fatalities and serious injuries along with the need to provide a safe and encouraging environment for pedestrians on roadways warrants a serious effort to address pedestrian safety in our state. While more crashes occurred in urbanized areas, rural crashes tend to be particularly serious, with over 25 percent of those hit in rural areas killed or seriously injured.

Crashes typically occur during daylight hours but night-time crashes are probably over-represented. However, we have no exposure data to test this hypothesis. The majority of crashes also occur during clear or cloudy weather, also 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 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 crashes of all types, nationally. 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 percent at 20 MPH, increasing to a 45 percent chance at 30 MPH and an 85 percent chance of death, if the vehicle is traveling at 40 MPH.

The N.C. 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, N.C., and U.S. highways, where speeds are significantly higher than in urban areas and on local streets, suggests that speed has a serious effect on pedestrian crash outcomes, given that a crash occurs. Therefore, 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 unlighted 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 safe place to walk.

6. Bicyclist Safety

More than 700 bicyclist-motor vehicle crashes have been reported to the N.C. Division of Motor Vehicles during 2003 and 2004 (773 and 818 crashes, respectively). This number jumped to 757 in 2007 and increased slightly to 774 in 2008, with a dramatic increase in 2009 to 835.

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

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 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 percent 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 highlight the characteristics of bicyclist crashes and some of the bicycle safety issues across North Carolina.

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, with 10 percent on lighted roadway segments and 8 percent on unlighted. There was a drop from 15 crashes (about 2 percent) to 2 crashes (0.2 percent) that occurred during early morning (dawn) hours from 2000 to 2002 and slight year-to-year increases in crashes at night-time (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, reflecting exposure. Only 3 percent occurred during rain and less than 1 percent 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 percent occurred during night-time on lighted or unlighted roadways (clear or cloudy conditions). Most bicyclists apparently try to avoid riding during rain or other precipitation with only about 1 and a half percent of crashes occurring during rain in daylight hours and slightly more than 1 percent 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. There seems to be an increasing trend across the board within all age groups. Whether these trends will be sustained or are due to random variation is unknown. We do not have information on the amount of riding or exposure within the state or among different age groups. However, there are some suggestions that child bicycling may be decreasing while it may be increasing among adults.

It is also difficult to draw firm conclusions about the 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 25 and up seem 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 contributing factors. The apparent results of increasing crash seriousness with increasing age may also reflect to some extent, increasing vulnerability with age, particularly of the oldest age group.

Males consistently accounted for the vast majority (85 percent) 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 Caucasian racial background (48 percent on average), African Americans are involved in almost as many crashes (approximately 43 percent - Table 6.C). Considering they comprise about 22 percent of persons living in the State (2000 census data), African Americans are clearly over-represented in bicycle crashes, and Caucasian are under-represented based on the population (about 72 percent). There has been a slight decrease in the proportion of crashes involving African Americans bicyclists, from around 44 percent in 2003 to about 42 percent in 2006. Asians and Native Americans account for less than half percent and about 1 half percent, 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 percent of the bicyclist crashes each year and a comparable proportion of the population, 4.7 percent (in 2000).

Table 6.C Pedicyclists by Race by Year

Race	2003	2004	2005	2006	2007	2008	2009
White	364	400	371	331	403	432	486
Black	345	364	337	280	287	274	298
Hispanic	11	17	45	30	43	43	30
Native	31	28	13	12	8	12	10
Asian	9	1	5	7	9	8	5
Other	7	1	3	2	4	2	7
Unknown	9	7	14	5	3	3	7
Total	776	818	788	667	757	774	843

Reported helmet use for bicyclists involved in crashes is extremely low, less than 2 percent on average. This data is 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 percent among those riding on streets. Observed use for those 15 and under was only 16 percent.

Helmet use was lowest in the coastal plain region, followed by the piedmont region and highest in the mountain region.

The investigating officer indicated alcohol use by only about 1 percent 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 percent 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 percent).

Roadway and Location Characteristics of Bicyclist Crashes

Approximately 39 percent of bicycle crashes occurred at rural locations last year. These crashes are more serious and occur more often than urban crashes.

In 2003 and 2004, over 55 percent, 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 2009 with 59 percent of the crashes occurring on local streets. (Table 6.D) There were year-to-year fluctuations, but no obvious trends over time. Nearly 20 percent 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 percent occurred on U.S. Routes and N.C. routes between 2003 and 2005 but increase to 20 percent 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 percent 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 of RDCLASS by INJ
Table 6.D

RDCLASS (Road Class)	INJ (Injury Status of Bicyclist)					Total
Frequency Row Pct	B Injury	C Injury	A Injury	No Injury	Fatal Injury	
Local Street	226 45.66	226 45.66	23 4.65	15 3.03	5 1.01	495
State Secondary Route	69 48.25	54 37.76	11 7.69	4 2.80	5 3.50	143
NC Route	46 44.23	40 38.46	12 11.54	3 2.88	3 2.88	104
US Route	35 42.68	30 36.59	8 9.76	3 3.66	6 7.32	82
PVA	1 20.00	4 80.00	0 0.00	0 0.00	0 0.00	5
Interstate	0 0.00	2 66.67	1 33.33	0 0.00	0 0.00	3
Private Road, Dr way	2 66.67	1 33.33	0 0.00	0 0.00	0 0.00	3
Other	0 .	0 .	0 .	0 .	0 .	0
Total	379	357	55	25	19	835

Frequency Missing = 8

Crash Types

As with pedestrian crashes, the development of effective countermeasures to help prevent bicycle 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.). However, 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.
- Eight percent were riding on the sidewalk.
- When bicyclists involved in crashes were reported to be riding on the sidewalk, in more than three-fourth 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 percent and 31 percent of the time, respectively.
- Adults were equally as likely as children to be riding facing traffic.

Counties

From 2003 through 2005 the ten highest crash rate counties accounted for only 19 percent of the state’s bicycle crashes. In 2009, the 8 highest crash rate counties accounted for 54.5 percent of the state’s bicycle crashes. This would indicate that bicycling is becoming more popular in urban areas. This is something that will need to be observed in future data collections.

COUNTY
Table 6.F

COUNTY	Frequency	Cumulative Frequency
Wake	100	100
Guilford	95	195
Mecklenburg	84	279
New Hanover	68	347
Durham	36	383
Buncombe	33	416
Cumberland	23	439
Orange	21	460
Catawba	20	480
Forsyth	20	500
Cabarrus	17	517
Robeson	16	533
Dare	15	548
Gaston	15	563
Nash	14	577
Rowan	14	591
Onslow	12	603
Cleveland	11	614
Wayne	11	625
Wilson	11	636
Carteret	10	646
Iredell	10	656
Pasquotank	9	665
Brunswick	8	673
Edgecombe	8	681
Pitt	8	689
Union	8	697
Lenoir	7	704
Moore	7	711
Stanly	7	718
Alamance	6	724
Burke	6	730

Halifax	6	736
Harnett	6	742
Johnston	6	748
Randolph	5	753
Rockingham	5	758
Beaufort	4	762
Chatham	4	766
Currituck	4	770
Davidson	4	774
Hyde	4	778
Pender	4	782
Richmond	4	786
Columbus	3	789
Granville	3	792
Henderson	3	795
Hertford	3	798
Lee	3	801
Pamlico	3	804
Sampson	3	807
Cherokee	2	809
Chowan	2	811
Craven	2	813
Franklin	2	815
Greene	2	817
Haywood	2	819
Martin	2	821
Northampton	2	823
Rutherford	2	825
Stokes	2	827
Watauga	2	829
Anson	1	830
Ashe	1	831
Bladen	1	832
Caswell	1	833
Duplin	1	834
Lincoln	1	835
McDowell	1	836
Person	1	837
Scotland	1	838
Swain	1	839
Washington	1	840
Wilkes	1	841
Yadkin	1	842
Yancey	1	843

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 percent of those struck being killed and another 94.8 percent 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 that involve 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 mini-traffic 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, 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 areas include motorist overtaking crashes, and bicyclist turn/merge crashes (about 61 percent each). Adults were over-represented in the former and youth, 11 – 15 were over-represented in the latter. Many of the bicyclist turn/merge crashes involving young riders 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 paved shoulders and in urban areas, through bike lanes or widening outside lanes would address these issues. Educating motorists and bicyclists about traffic laws, 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.

Ideally, most bicycle crashes would be prevented through implementation of appropriate countermeasures and when a crash does occur, a properly worn safety helmet can provide the best protection from a serious or fatal injury. Helmet use is very low in N.C., only 24 percent over all, and even lower among children. The 11 to 15 age group is most represented 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 state's roadways should be a key priority over the next period of road-building and improvements.

7. Older Driver Safety

Introduction

More than 43,000 drivers age 60 or older were reported to have been involved in crashes in North Carolina in 2009. This number includes a large number of drivers age 75 or older. Older adults are of particular interest because of several reasons:

- 1) Citizens in this age group are increasing and can be expected to continue to increase over the next 30 years or more. Whereas, the overall North Carolina population is projected to increase 46 percent by 2030, the age 60 and older population will more than double, from just over 1 million to 2.2 million persons within that age range.
- 2) Declining functional abilities and health in older adults contributes to increased crash rates per mile driven. Only 16 to 19-year-old drivers have higher overall crash rates than drivers ages 80 and up.
- 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, 12.9 percent of crash-involved drivers in North Carolina were age 60 or older (Table 7.A). This is in line with their 12 percent representation in the overall population. Information on the injury status of drivers involved in crashes is shown below (Table 7.A.). In 2009, we found that the 60 and over age group accounts for only 12.8 percent of the injuries and PDO crashes, but is overrepresented in the fatal category at 20.6 percent. 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 of AGE by INJ
Table 7.A

AGE (Age of Driver)	INJ (Injury Status of Driver)					Total
Frequency	Fatal	A	B	C	No	Total
Col Pct	Injury	Injury	Injury	Injury	Injury	
15 to 24	220 24.50	410 24.58	4780 28.63	13679 25.46	70797 26.91	89886
25 to 39	207 23.05	509 30.52	4981 29.83	16544 30.80	79770 30.32	102011
40 to 59	286 31.85	536 32.13	4771 28.58	16739 31.16	78456 29.82	100788
60+	185 20.60	213 12.77	2164 12.96	6761 12.58	34057 12.95	43380
Total	898	1668	16696	53723	263080	336065

Frequency Missing = 4033

Summary of Findings

- The number of crash-involved older drivers has shown only modest increases over the past 3 years, with “baby boomers” having not yet entered into the ranks of older drivers.
- Once involved in a crash, older drivers are more likely than their younger drivers to be severely injured or killed.
- Although drivers ages 60 and up make up only 7.5 percent of the crash-involved driver population, they comprise 20.6 percent 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 over represented in crashes between 10:00 a.m. and 2:00 p.m. Approximately 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. As drivers age, this pattern of midday crashes becomes even more pronounced. Older driver crashes are also more likely to occur on weekdays, although the differences are relatively small. Overall in North Carolina, 78 percent of crashes occurred on weekdays (Monday – Friday) and 22 percent on weekends (Saturday or Sunday). For drivers ages 65 and older, 81 percent occurred on weekdays and 19 percent on weekends.

Summary of Findings

- 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 percent of North Carolina crashes occur in the state’s more highly populated piedmont counties, 26 percent in its eastern coastal counties, and only 12 percent 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 the crash data. With increasing age, the percentage of crashes occurring in the mountain region increases, while the percentage occurring in the piedmont counties declines. For drivers ages 85 and up, nearly one in five crashes (19 percent) 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 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 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 more likely to occur on private roadways, such as parking lots, 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 65 or older. As the North Carolina population ages, this proportion will rise, not only in western North Carolina but in all parts of the state.
- Older driver crashes tend to mimic the locations and situations where older adults drive, (i.e., on shorter trips, lower speed roadways, around 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 a greater risk to their safety.

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

The majority of all drivers (57 percent) 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 percent of drivers overall, it is cited for 31 percent of drivers ages 65-74, increasing to 41 percent for drivers ages 85 and above. 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

- Driver’s ages 65 and older 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 hit 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.

The data analysis showed that while older adults represent 7.5 percent of all crash-involved drivers, they represent 15 percent of drivers killed in crashes. They also represent about 15 percent 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.

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 likely 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 35 percent and 40 percent of fatal and injury crashes are speed related, whereas, 33 percent of PDO crashes are speed related (Table 8.A).

Table of REPORT by SPDA
Table 8.A

REPORT (Crash Report Type)		SPDA (Speeding Involved Crash)		
Frequency				
Row Pct	No - Spding	Yes - Spding	Total	
PDO	92845 67.12	45475 32.88	138320	
Fatal	803 64.97	433 35.03	1236	
Injury	42211 61.27	26680 38.73	68891	
Total	135859	72588	208447	

Area Type

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

Table of URBRUR by REPORT
Table 8.B

URBRUR (URBRUR)	REPORT (Crash Report Type)			
Frequency				
Row Pct	PDO	Fatal	Injury	Total
Rural	62024 65.66	878 0.93	31554 33.41	94456
Urban	76296 66.93	358 0.31	37337 32.75	113991
Total	138320	1236	68891	208447

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 of AGE by spd
Table 8.C

AGE (Age of Driver)		spd (Driver Indicated as Speeding)		
Frequency				
Row Pct	N	Y		Total
15	395	109		504
	78.37	21.63		
16	4178	2169		6347
	65.83	34.17		
17	6111	3207		9318
	65.58	34.42		
18	8155	3910		12065
	67.59	32.41		
19	8358	3782		12140
	68.85	31.15		
20	7916	3414		11330
	69.87	30.13		
21 to 24	28748	10589		39337
	73.08	26.92		
25 to 29	30076	8706		38782
	77.55	22.45		
30 to 39	51888	12616		64504
	80.44	19.56		
41 to 49	48220	9803		58023
	83.10	16.90		
51 to 59	37238	6634		43872
	84.88	15.12		
60+	37913	5963		43876
	86.41	13.59		
Total	269196	70902		340098

Time of Day

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

Month of Year

In the last few 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 Local streets. SSR's have the next highest number of speed related crashes.

Table of RDCLASS by REPORT
Table 8.D

RDCLASS (Road Class)	REPORT (Crash Report Type)			
Frequency Row Pct	PDO	Fatal	Injury	Total
Interstate	6118 68.97	28 0.32	2725 30.72	8871
US Route	7474 61.49	54 0.44	4626 38.06	12154
NC Route	6408 59.49	70 0.65	4294 39.86	10772
State Secondary Route	9137 58.69	205 1.32	6226 39.99	15568
Local Street	15976 64.67	76 0.31	8653 35.03	24705
PVA	150 73.17	0 0.00	55 26.83	205
Private Road, Dr Way	37 74.00	0 0.00	13 26.00	50
Other	53 66.25	0 0.00	27 33.75	80
Total	45353	433	26619	72405

Frequency Missing = 183

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.

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 a.m. and 3:00 a.m.
- Interstates have the lowest number of speed-related crashes, but the highest percentage of speed-related crashes. Local streets have the highest number of speed-related crashes, but N. C. routes and state secondary roads have a lower percentage of speed-related crashes.
- Close to 80 percent of crashes where a rear-end crash was the first harmful event, are speed-related. A significant percentage of crashes (close to 50 percent) where the first harmful event is a jackknife/overtake/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 percent in the early 1990's to 89.7 percent in 2010.

Each year, GHSP conducts a statewide survey to determine the seat belt usage rates for the state. This survey is conducted in accordance with NHTSA guidelines and policies. The latest survey was conducted following the Memorial Day 2010 campaign. The usage rate for drivers at that time was determined to be 90.4 percent. The corresponding usage rate for passengers was 86.7 percent.

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. The usage rate in the piedmont region was 91.1 percent and the mountain region was 89.5 percent while the coastal region was 88.8 percent. Cars, SUVs and Mini-vans have the highest usage rates – all over 90 percent during the Memorial Day survey. The usage rates also increase with an 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 93.5 percent of women used a seat belt while 87.8 percent 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 percent of drivers involved in a crash in 2003 had used a seat 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 percent 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 percent (self reported). For B and C injuries, and the No-Injury cases, the usage rate was between 89 percent and 99 percent (self reported).

Table 1. North Carolina Seat Belt Usage Rates, Unweighted and Weighted: 121-Site June 2010 Survey Category		Unweighted	Weighted	Sample Size
	Use %	Use %	SE %	
Overall				
Driver	90.5	90.4	0.7	23,538
Passenger	87.3	86.7	1.4	5,614
Combined	89.8	89.7	0.7	29,183
Urban/Rural				
Urban	90.8	90.4	0.7	15,755
Rural	89.9	89.8	1.9	7,783
Region				
Mountain	91.2	89.5	0.8	4,464
Piedmont	90.8	91.1	0.9	11,521
Coast	89.7	88.8	1.2	7,553
Vehicle Type				
Car	91.6	91.4	0.5	11,434
Van	81.9	79.9	5.7	592
Minivan	94.8	94.5	1.5	1,605
Pickup Truck	85.4	84.1	1.6	4,465
Sport-Utility Vehicle	92.2	91.6	0.7	5,262
Sex of Driver				
Male	88.0	87.8	0.8	5,110
Female	93.7	93.5	1.0	3,971
Race/Ethnicity of Driver				
White	90.5	90.3	0.8	6,771
Black	89.6	89.6	1.6	1,680
Hispanic	92.9	95.4	1.2	394
Native American	a	a	a	31
Asian	a	a	a	101
Age of Driver				
16–24	87.6	86.6	2.2	994
25–64	90.7	90.1	0.8	7,362
65+	92.0	96.8	0.9	696

Table 2. North Carolina Seat Belt Usage Rates by County, Weighted: 121-Site June 2010 Survey County Name	Driver (D)	Passenger (RF)	Combined (D+RF)	Sample Size
Overall	90.4	86.7	89.7	29,183
Alamance	87.5	86.9	87.3	1,622
Buncombe	88.3	85.8	88.0	1,832
Burke	93.0	88.6	92.1	1,604
Craven	93.6	91.3	93.1	1,316
Cumberland	88.3	80.5	86.8	1,434
Gaston	92.1	86.7	91.1	2,063
Granville	86.7	85.6	86.5	1,730
Mecklenburg	91.1	87.5	90.6	2,514
New Hanover	90.3	79.9	88.3	1,561
Pitt	92.2	93.3	90.8	1,289
Robeson	79.2	69.3	76.7	718
Stanly	92.5	83.4	91.0	1,430
Wake	92.1	87.4	91.3	2,162
Wayne	91.3	88.5	90.6	1,235
Wilkes	92.0	91.9	92.0	1,028

Table 3. Observed Seat Belt Use in North Carolina (%), Weighted Survey Periods	Driver (D)	Passenger (RF)	Combined (D+RF)
1999			
Apr1	81.0	77.7	79.9
Jun1	83.5	80.8	82.3
Nov2	79.7	71.0	78.6
2000			
Jun3	81.6	76.1	80.5
Sep3	80.3	74.7	79.2
2001			
May3	80.9	74.8	79.6
Jun3	83.6	79.1	82.7
Sep3	83.0	77.3	81.9
2002			
Jun3	84.9	80.6	84.1
Sep3	84.5	76.5	82.7
2003			
Apr3	85.1	79.2	84.1
Jun3	87.3	81.0	86.1
Sep3	85.7	80.4	84.7
2004			
Apr3	85.2	79.1	83.8
Jun4	87.4	74.7	85.4
2005			
Apr5	86.2	82.2	85.4
Jun4	86.9	85.6	86.7
2006			
Apr5	87.6	84.4	86.9
Jun4	88.9	86.3	88.5
2007			
Apr5	87.4	74.7	85.4
Jun4	89.4	84.7	88.8
2008			
Apr5	89.4	82.8	88.4
Jun4	90.4	85.5	89.8
2009			
Apr5	90.4	83.3	89.2
Jun4	89.8	88.8	89.5
2010			
Jun4	90.4	86.7	89.7

10. Commercial Motor Vehicles (CMV)

Table of REPORT by CMVA
Table 10.A

REPORT (Crash Report Type)		CMVA (CMV Vehicle Involved Crash)		
Frequency	Percent	Row Pct	Col Pct	Total
		N	Y	
PDO	122324	15996	138320	
	58.68	7.67	66.36	
	88.44	11.56		
	65.41	74.65		
Fatal	1087	149	1236	
	0.52	0.07	0.59	
	87.94	12.06		
	0.58	0.70		
Injury	63609	5282	68891	
	30.52	2.53	33.05	
	92.33	7.67		
	34.01	24.65		
Total	187020	21427	208447	
	89.72	10.28	100.00	

Summary of Findings

- It is apparent that due to their size and weight, CMV involved crashes are more violent as they represent 8.34 percent of all crashes in N.C., but account for 16.39 percent of all fatalities in N.C.
- It is also apparent that 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 percent of the fatalities were in the other vehicle.

Table of RDCLASS by REPORT
Table 10.B

RDCLASS (Road Class)	REPORT (Crash Report Type)			
Frequency	PDO	Fatal	Injury	Total
Interstate	2046	30	735	2811
US Route	1740	35	846	2621
NC Route	1670	35	719	2424
State Secondary Route	2909	28	842	3779
Local Street	6941	21	2095	9057
PVA	421	0	24	445
Private Road, Dr Way	87	0	4	91
Other	42	0	5	47
Total	15856	149	5270	21275

Summary of Findings

- Even though the highest percentage (42.5 percent) of CMV involved crashes occur on local routes, a higher number of fatalities and “A” injuries occur on U.S., N.C., and state secondary routes, which are typically two lane and higher speed limits, yet still have high incidence of intersections/access areas.

CMV Vehicle Type
Table 10.C

VEHTYPE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
2 ax, 6 tire trk	2151	27.68	2151	27.68
3 axle trk	973	12.52	3124	40.20
Truck/trailer	1141	14.68	4265	54.88
Truck/Tractor	150	1.93	4415	56.81
Tractor/semi-trlr	3051	39.26	7466	96.08
Tractor/doubles	84	1.08	7550	97.16
Unk heavy trk	221	2.84	7771	100.00

Summary of Findings

- Tractor/Semi-trailer and 2 axles, 6 tires CMV’s seem to be over represented in crashes with 39.26 percent and 27.68 percent 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
- 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

Section 402 Requirements

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;

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));

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 seat belt use survey in accordance with criteria established by the Secretary for the measurement of State seat 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. (23 USC 402 (b) (1) (E).

Other Federal Requirements

Cash drawdowns will be initiated only when actually needed for disbursement. 49 CFR 18.20

Cash disbursements and balances will be reported in a timely manner as required by NHTSA. 49 CFR 18.21.

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 18.41.

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;

Federal Funding Accountability and Transparency Act

The State will report for each sub-grant awarded:

- Name of the entity receiving the award;
- Amount of the award;
- Information on the award including transaction type, funding agency, the North American Industry Classification System code or Catalog of Federal Domestic Assistance number (where applicable), program source;
- Location of the entity receiving the award and the primary location of performance under the award, including the city, State, congressional district, and country and an award title descriptive of the purpose of each funding action;
- A unique identifier (DUNS);
- The names and total compensation of the five most highly compensated officers of the entity if-- of the entity receiving the award and of the parent entity of the recipient, should the entity be owned by another entity;

(i) The entity in the preceding fiscal year received—

(I) 80 percent or more of its annual gross revenues in Federal awards; and(II) \$25,000,000 or more in annual gross revenues from Federal awards; and(ii) the public does not have access to

information about the compensation of the senior executives of the entity through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986;

- Other relevant information specified by the Office of Management and Budget in subsequent guidance or regulation.

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) and the Americans with Disabilities Act of 1990 (42 USC § 12101, *et seq.*; PL 101-336), which prohibits discrimination on the basis of disabilities (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; The Civil Rights Restoration Act of 1987, which provides that any portion of a state or local entity receiving federal funds will obligate all programs or activities of that entity to comply with these civil rights laws; and, (k) the requirements of any other nondiscrimination statute(s) which may apply to the application.

The Drug-free Workplace Act of 1988(41 U.S.C. 702 ;):

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 (49 U.S.C. 5323(j)) 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, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

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.

Certification Regarding Debarment, Suspension, and Other Responsibility 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.
- (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.

3. 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 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.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -- Lower Tier 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.

POLICY TO BAN TEXT MESSAGING WHILE DRIVING

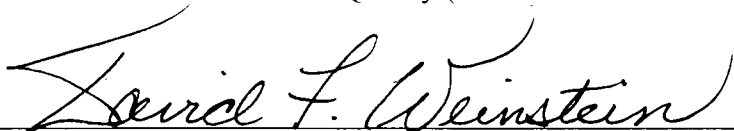
In accordance with Executive Order 13513, Federal Leadership on Reducing Text Messaging While Driving, and DOT Order 3902.10, Text Messaging While Driving, states are encouraged to: Adopt and enforce workplace safety policies to decrease crashed caused by distracted driving including policies to ban text messaging while driving—

Company-owned or –rented vehicles, or Government-owned, leased or rented vehicles; or Privately-owned when on official Government business or when performing any work on or behalf of the Government.

Conduct workplace safety initiatives in a manner commensurate with the size of the business, such as – Establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving; and Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

ENVIRONMENTAL IMPACT

The Governor's Representative for Highway Safety has reviewed the State's Fiscal Year 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 Safety

State of North Carolina
Fiscal Year 2011

9/8/2010
Date

FY 2011 Equipment Requests 5,000 and Over

Project	Agency	Equipment	Cost
K4-11-04-01	Newton Police Department	Vehicle	\$30,000.00
K4-11-04-01	Newton Police Department	MDT	\$8,000.00
K4-11-04-01	Newton Police Department	In-car camera	\$6,000.00
K4-11-04-02	Reidsville Police Department	Vehicle	\$30,000.00
K4-11-04-02	Reidsville Police Department	In-car camera	\$6,000.00
K4-11-04-02	Reidsville Police Department	MDT	\$8,000.00
K4-11-04-03	Knightdale Police Department	Vehicles 2 @ \$30,000	\$60,000.00
K4-11-04-03	Knightdale Police Department	MDTs 2 @ \$7,000	\$14,000.00
K4-11-04-03	Knightdale Police Department	In-car cameras 2 @ \$6,000	\$12,000.00
K4-11-04-04	Lumberton Police Department	Vehicles 2 @ \$30,000	\$60,000.00
K4-11-04-04	Lumberton Police Department	MDTs 2 @ \$6,800	\$13,600.00
K4-11-04-04	Lumberton Police Department	In-car cameras 2 @ \$5,200	\$10,400.00
K4-11-04-05	Pembroke Police Department	Vehicles 2 @ \$30,000	\$60,000.00
K4-11-04-05	Pembroke Police Department	MDTs 2 @ \$7,650	\$15,300.00
K4-11-04-05	Pembroke Police Department	In-car cameras 2 @ \$5,150	\$10,300.00
K4-11-04-06	Street Safe	Trailer	\$5,000.00
K4-11-04-07	Tyrrell County Sheriff's Office	Vehicle	\$30,000.00
K4-11-04-07	Tyrrell County Sheriff's Office	In-car camera	\$6,000.00
K4-11-04-07	Tyrrell County Sheriff's Office	MDT	\$8,000.00
K4-11-04-08	UNC Public Safety	Motorcycles 2 @ \$25,000	\$50,000.00
K4-11-04-08	UNC Public Safety	MDTs 2 @ \$6,000	\$12,000.00
K4-11-04-08	UNC Public Safety	Trailer	\$5,000.00
K4-11-04-10	Wilson Police Department	Vehicles 3 @ \$30,000	\$90,000.00
K4-11-04-10	Wilson Police Department	In-car cameras 3 @ \$6,000	\$18,000.00
K4-11-04-10	Wilson Police Department	MDTs 3 @ \$7,300	\$21,900.00
K4-11-04-11	Franklinton Police Department	Vehicle	\$30,000.00
K4-11-04-11	Franklinton Police Department	In-car camera	\$6,000.00
K4-11-04-11	Franklinton Police Department	MDT	\$8,000.00
K4-11-04-12	Holly Springs Police Department	Vehicles 2 @ \$30,000	\$60,000.00
K4-11-04-12	Holly Springs Police Department	In-car cameras 2 @ \$6,000	\$12,000.00
K4-11-04-13	Robeson County Sheriff's Office	Vehicles 2 @ \$30,000	\$60,000.00
K4-11-04-13	Robeson County Sheriff's Office	MDTs 2 @ \$8,000	\$16,000.00
K4-11-04-13	Robeson County Sheriff's Office	In-Car camras @ \$6,000	\$12,000.00
K4-11-04-16	Henderson County Sheriff's Office	Vehicles 2 @ \$30,000	\$60,000.00
K4-11-04-16	Henderson County Sheriff's Office	In-car cameras 2 @ \$5,200	\$10,400.00
K4-11-04-17	Spring Lake Police Department	Vehicle	\$30,000.00
K4-11-04-17	Spring Lake Police Department	In-car camera	\$6,000.00
K4-11-04-17	Spring Lake Police Department	MDT	\$8,000.00
K4-11-04-19	Buncombe County Sheriff's Office	Vehicles 2 @ \$30,000	\$60,000.00
K4-11-04-19	Buncombe County Sheriff's Office	MDTs 2 @ \$8,000	\$16,000.00
K4-11-04-19	Buncombe County Sheriff's Office	In-car cameras 2 @ \$6,000	\$12,000.00
K4-11-04-19	Buncombe County Sheriff's Office	Radar trailer	\$12,000.00
K8-11-02-05	Forensic Tests for Alcohol	HGN camera	\$10,000.00
K8-11-02-16	Robeson County Sheriff's Office	Vehicles 2 @ \$30,000	\$60,000.00
K8-11-02-16	Robeson County Sheriff's Office	MDTs 2 @ \$8,000	\$16,000.00
K8-11-02-16	Robeson County Sheriff's Office	In-car cameras 2 @ \$6,000	\$12,000.00
K8-11-02-17	Columbus County Sheriff's Office	Vehicles 2 @ \$30,000	\$60,000.00
K8-11-02-17	Columbus County Sheriff's Office	MDTs 2 @ \$8,000	\$16,000.00
K8-11-02-17	Columbus County Sheriff's Office	In-car cameras 2 @ \$6,000	\$12,000.00

K8-11-02-19	Conover Police Department	Trailer	\$5,000.00
K8-11-02-20	Glen Alpine Police Department	Light tower	\$8,000.00
K8-11-02-20	Glen Alpine Police Department	Trailer	\$5,000.00
K8-11-02-21	Hickory Police Department	In-car cameras 5 @ \$6,000	\$30,000.00
K8-11-02-22	Maggie Valley Police Department	Light tower	\$8,000.00
K8-11-02-23	Mecklenburg County ABC Board	Trailer	\$5,000.00
K8-11-02-23	Mecklenburg County ABC Board	Golf carts 2 @ \$7,000	\$14,000.00
K8-11-02-25	Thomasville Police Department	In-car cameras 4 @ \$5,000	\$20,000.00
K8-11-02-26	Troutman Police Department	Light tower	\$8,000.00
K8-11-02-27	Coats Police Department	Trailer	\$5,000.00
K8-11-02-27	Coats Police Department	Light tower	\$8,000.00
K8-11-02-28	Creedmoor Police Department	In-car cameras 4 @ \$5,000	\$20,000.00
K8-11-02-29	Havelock Public Safety	Light unit	\$8,000.00
K8-11-02-29	Havelock Public Safety	Trailer	\$5,000.00
K8-11-02-30	Pittsboro Police Department	Trailer	\$5,000.00
K8-11-02-30	Pittsboro Police Department	Light tower	\$8,000.00
K8-11-02-31	Rocky Mount Police Department	Light tower	\$8,000.00
K8-11-02-32	Anson County Sheriff's Office	Light tower	\$8,000.00
K8-11-02-32	Anson County Sheriff's Office	Trailer	\$5,000.00
K8-11-02-33	Ayden Police Department	Light tower	\$8,000.00
K8-11-02-42	Cabarrus County Sheriff's Office	Light tower	\$8,000.00
K8-11-02-42	Cabarrus County Sheriff's Office	Trailer	\$5,000.00
K8-11-02-43	VIP for a VIP	Trailer	\$5,000.00
K8-11-02-43	VIP for a VIP	Generator	\$5,000.00
K8-11-02-46	Fletcher Police Department	In-car cameras 8 @ \$5,000	\$40,000.00
K8-11-02-47	Iredell County Sheriff's Office	Light tower	\$8,000.00
K8-11-02-47	Iredell County Sheriff's Office	Trailer	\$5,000.00
K8-11-02-49	Winston-Salem Police Department	Vehicles 6 @ \$30,000	\$181,000.00
K8-11-02-49	Winston-Salem Police Department	MDT 6 @ \$8,000	\$48,000.00
K8-11-02-49	Winston-Salem Police Department	In-car camera's 6 @ \$6,000	\$36,000.00
K9-11-11-04	Weldon Police Department	MDT's 2 @ \$8,000	\$16,000.00
K9-11-11-06	Morganton Dept. of Public Safety	MDT's 2 @ \$8,000	\$16,000.00
PT-11-03-03-03	Guilford County Sheriff's Office	In-car camera	\$6,000.00
PT-11-03-03-11	Tarboro Police Department	In-car camera	\$6,000.00
PT-11-03-03-15	Shelby Police Department	Total station crash unit	\$17,000.00
PT-11-03-03-23	Henderson Police Department	Radar trailer	\$9,960.00
PT-11-03-03-24	Henderson County Sheriff's Office	In-car cameras 5 @ \$5,200	\$26,000.00
PT-11-03-03-25	Rockingham Police Department	Portable message board	\$16,000.00
PT-11-03-03-26	NC State Highway Patrol	Golf carts 5 @ \$7,000	\$35,000.00
PT-11-03-04-20	Wadesboro Police Department	MDT's 2 @ \$8,000	\$16,000.00
SB-11-13-01	NC Dept. of Public Instruction	Buster Bus	\$8,500.00
SB-11-13-01	NC Dept. of Public Instruction	Stoparm cameras 6 @ \$5,333	\$32,000.00
Total			\$1,930,360.00

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 reports by NHTSA.

Highway Safety Plan Cost Summary

U.S. Department of Transportation National Highway Traffic Safety Administration
Highway Safety Plan Cost Summary

State: North Carolina

2011-HSP-2
 For Approval

Program Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incre/ (Decre)	Current Balance	Share to Local
NHTSA								
NHTSA 402								
Planning and Administration								
	PA-2011-00-01-00	GHSP In-house P&A	\$324,828.00	\$324,828.00	\$324,828.00	\$0.00	\$324,828.00	\$0.00
	Planning and Administration Total		\$324,828.00	\$324,828.00	\$324,828.00	\$0.00	\$324,828.00	\$0.00
Alcohol								
	AL-2011-01-00-00	GHSP 402 Hold Account	\$4,500,000.00	\$0.00	\$4,500,000.00	\$0.00	\$4,500,000.00	\$0.00
	AL-2011-01-01-00	GHSP In-house Alcohol PI&E	\$427,200.00	\$0.00	\$427,200.00	\$0.00	\$427,200.00	\$0.00
	Alcohol Total		\$4,927,200.00	\$0.00	\$4,927,200.00	\$0.00	\$4,927,200.00	\$0.00
Motorcycle Safety								
	MC-2011-08-04-00	Maggie Valley Police Department	\$3,750.00	\$1,250.00	\$3,750.00	\$0.00	\$3,750.00	\$3,750.00
	Motorcycle Safety Total		\$3,750.00	\$1,250.00	\$3,750.00	\$0.00	\$3,750.00	\$3,750.00
Occupant Protection								
	OP-2011-05-02-00	GHSP In-house OP PI&E	\$362,400.00	\$0.00	\$362,400.00	\$0.00	\$362,400.00	\$0.00
	OP-2011-05-03-00	El Pueblo, Inc.	\$54,984.00	\$0.00	\$54,984.00	\$0.00	\$54,984.00	\$0.00
	OP-2011-05-06-00	WNC Safe Kids	\$103,745.00	\$0.00	\$103,745.00	\$0.00	\$103,745.00	\$0.00
	OP-2011-05-07-00	UNC-HSRC NC CPS Resource Center	\$134,250.00	\$0.00	\$134,250.00	\$0.00	\$134,250.00	\$0.00
	Occupant Protection Total		\$655,379.00	\$0.00	\$655,379.00	\$0.00	\$655,379.00	\$0.00
Police Traffic Services								
	PT-2011-03-02-00	NC Justic Academy	\$75,620.00	\$0.00	\$75,620.00	\$0.00	\$75,620.00	\$0.00
	PT-2011-03-03-01	Ayden Police Department	\$10,000.00	\$0.00	\$10,000.00	\$0.00	\$10,000.00	\$10,000.00
	PT-2011-03-03-02	Garner Police Department	\$10,000.00	\$0.00	\$10,000.00	\$0.00	\$10,000.00	\$10,000.00
	PT-2011-03-03-03	Guilford County Sheriff's Office	\$10,000.00	\$0.00	\$10,000.00	\$0.00	\$10,000.00	\$10,000.00
	PT-2011-03-03-04	Henderson County Sheriff's Office	\$10,000.00	\$0.00	\$10,000.00	\$0.00	\$10,000.00	\$10,000.00

U.S. Department of Transportation National Highway Traffic Safety Administration
Highway Safety Plan Cost Summary

State: North Carolina

2011-HSP-2

For Approval

Program Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incre/ (Decre)	Current Balance	Share to Local
	PT-2011-03-03-05	Jackson County Sheriff's Office	\$10,000.00	\$0.00	\$10,000.00	\$0.00	\$10,000.00	\$10,000.00
	PT-2011-03-03-06	Kitty Hawk Police Department	\$10,000.00	\$0.00	\$10,000.00	\$0.00	\$10,000.00	\$10,000.00
	PT-2011-03-03-07	Lenoir Police Department	\$10,000.00	\$0.00	\$10,000.00	\$0.00	\$10,000.00	\$10,000.00
	PT-2011-03-03-08	Mooreville Police Department	\$10,000.00	\$0.00	\$10,000.00	\$0.00	\$10,000.00	\$10,000.00
	PT-2011-03-03-09	New Hanover County Sheriff's Office	\$10,000.00	\$0.00	\$10,000.00	\$0.00	\$10,000.00	\$10,000.00
	PT-2011-03-03-10	Rockingham Police Department	\$10,000.00	\$0.00	\$10,000.00	\$0.00	\$10,000.00	\$10,000.00
	PT-2011-03-03-11	Tarboro Police Department	\$3,375.00	\$1,125.00	\$3,375.00	\$0.00	\$3,375.00	\$3,375.00
	PT-2011-03-03-12	Bolling Springs Police Department	\$9,375.00	\$3,125.00	\$9,375.00	\$0.00	\$9,375.00	\$9,375.00
	PT-2011-03-03-13	Hickory Police Department	\$3,300.00	\$1,100.00	\$3,300.00	\$0.00	\$3,300.00	\$3,300.00
	PT-2011-03-03-14	Kemersville Police Department	\$9,500.00	\$9,500.00	\$9,500.00	\$0.00	\$9,500.00	\$9,500.00
	PT-2011-03-03-15	Shelby Police Department	\$0.00	\$0.00	\$0.00	\$697,500.00	\$697,500.00	\$0.00
	PT-2011-03-03-16	GHSP In-house Points Program	\$33,486.00	\$11,162.00	\$33,486.00	\$0.00	\$33,486.00	\$33,486.00
	PT-2011-03-03-19	Raleigh Police Department	\$3,375.00	\$1,125.00	\$3,375.00	\$0.00	\$3,375.00	\$3,375.00
	PT-2011-03-03-20	Sampson County Sheriff's Office	\$3,375.00	\$1,125.00	\$3,375.00	\$0.00	\$3,375.00	\$3,375.00
	PT-2011-03-03-21	Southern Pines Police Department	\$2,478.00	\$827.00	\$2,478.00	\$0.00	\$2,478.00	\$2,478.00
	PT-2011-03-03-22	Carolina Beach Police Department	\$7,470.00	\$2,490.00	\$7,470.00	\$0.00	\$7,470.00	\$7,470.00
	PT-2011-03-03-23	Henderson Police Department	\$12,900.00	\$12,900.00	\$12,900.00	\$0.00	\$12,900.00	\$12,900.00
	PT-2011-03-03-24	Henderson County Sheriff's Office	\$16,000.00	\$0.00	\$16,000.00	\$0.00	\$16,000.00	\$16,000.00
	PT-2011-03-03-25	Rockingham Police Department	\$258,525.00	\$0.00	\$258,525.00	\$0.00	\$258,525.00	\$0.00
	PT-2011-03-03-26	NCSHP	\$127,700.00	\$127,700.00	\$127,700.00	\$0.00	\$127,700.00	\$127,700.00
	PT-2011-03-04-01	Brunswick County Sheriff's Office	\$30,578.00	\$13,104.00	\$30,578.00	\$0.00	\$30,578.00	\$30,578.00
	PT-2011-03-04-02	Marshville Police Department	\$40,421.00	\$17,323.00	\$40,421.00	\$0.00	\$40,421.00	\$40,421.00
	PT-2011-03-04-03	Troutman Police Department	\$68,135.00	\$29,201.00	\$68,135.00	\$0.00	\$68,135.00	\$68,135.00
	PT-2011-03-04-04	Waxhaw Police Department						

**U.S. Department of Transportation National Highway Traffic Safety Administration
Highway Safety Plan Cost Summary**

State: North Carolina

Page: 3
Report Date: 09/28/2010

2011-HSP-2
For Approval

Program Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incr/(Decr)	Current Balance	Share to Local
	PT-2011-03-04-05	China Grove Police Department	\$28,073.00	\$12,032.00	\$28,073.00	\$0.00	\$28,073.00	\$28,073.00
	PT-2011-03-04-06	Guilford County Sheriff's Office	\$79,240.00	\$33,960.00	\$79,240.00	\$0.00	\$79,240.00	\$79,240.00
	PT-2011-03-04-07	Coats Police Department	\$33,770.00	\$14,473.00	\$33,770.00	\$0.00	\$33,770.00	\$33,770.00
	PT-2011-03-04-08	Garner Police Department	\$109,513.00	\$46,935.00	\$109,513.00	\$0.00	\$109,513.00	\$109,513.00
	PT-2011-03-04-09	Aberdeen Police Department	\$36,988.00	\$15,852.00	\$36,988.00	\$0.00	\$36,988.00	\$36,988.00
	PT-2011-03-04-10	Alexander County Sheriff's Office	\$39,157.00	\$16,781.00	\$39,157.00	\$0.00	\$39,157.00	\$39,157.00
	PT-2011-03-04-11	Anson County Sheriff's Office	\$32,078.00	\$13,748.00	\$32,078.00	\$0.00	\$32,078.00	\$32,078.00
	PT-2011-03-04-12	Conover Police Department	\$37,464.00	\$16,956.00	\$37,464.00	\$0.00	\$37,464.00	\$37,464.00
	PT-2011-03-04-13	Landis Police Department	\$34,658.00	\$14,854.00	\$34,658.00	\$0.00	\$34,658.00	\$34,658.00
	PT-2011-03-04-14	Laurinburg Police Department	\$42,420.00	\$18,180.00	\$42,420.00	\$0.00	\$42,420.00	\$42,420.00
	PT-2011-03-04-15	Lexington Police Department	\$41,137.00	\$17,630.00	\$41,137.00	\$0.00	\$41,137.00	\$41,137.00
	PT-2011-03-04-16	Locust Police Department	\$29,393.00	\$12,597.00	\$29,393.00	\$0.00	\$29,393.00	\$29,393.00
	PT-2011-03-04-17	Mint Hill Police Department	\$57,227.00	\$24,526.00	\$57,227.00	\$0.00	\$57,227.00	\$57,227.00
	PT-2011-03-04-18	Scotland County Sheriff's Office	\$29,990.00	\$12,853.00	\$29,990.00	\$0.00	\$29,990.00	\$29,990.00
	PT-2011-03-04-19	Statesville Police Department	\$78,168.00	\$33,591.00	\$78,168.00	\$0.00	\$78,168.00	\$78,168.00
	PT-2011-03-04-20	Wadesboro Police Department	\$76,066.00	\$32,600.00	\$76,066.00	\$0.00	\$76,066.00	\$76,066.00
	PT-2011-03-04-21	Wilkesboro Police Department	\$31,439.00	\$13,474.00	\$31,439.00	\$0.00	\$31,439.00	\$31,439.00
	PT-2011-03-04-22	Wingate Police Department	\$29,301.00	\$12,558.00	\$29,301.00	\$0.00	\$29,301.00	\$29,301.00
	PT-2011-03-04-23	Bridgeton Police Department	\$16,633.00	\$7,129.00	\$16,633.00	\$0.00	\$16,633.00	\$16,633.00
	PT-2011-03-04-24	Burgaw Police Department	\$35,884.00	\$15,378.00	\$35,884.00	\$0.00	\$35,884.00	\$35,884.00
	PT-2011-03-04-25	Jones County Sheriff's Office	\$26,735.00	\$11,459.00	\$26,735.00	\$0.00	\$26,735.00	\$26,735.00
	PT-2011-03-04-27	Morehead City Police Department	\$32,168.00	\$13,786.00	\$32,168.00	\$0.00	\$32,168.00	\$32,168.00
	PT-2011-03-04-28	Nashville Police Department	\$62,091.00	\$26,610.00	\$62,091.00	\$0.00	\$62,091.00	\$62,091.00
	PT-2011-03-04-29	Pittsboro Police Department	\$40,355.00	\$17,299.00	\$40,355.00	\$0.00	\$40,355.00	\$40,355.00

Page: 4
Report Date: 09/28/2010

**U.S. Department of Transportation National Highway Traffic Safety Administration
Highway Safety Plan Cost Summary**

State: North Carolina

2011-HSP-2
For Approval

Program Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incre/ (Decr)	Current Balance	Share to Local
	PT-2011-03-04-30	Sharpsburg Police Department	\$30,435.00	\$13,044.00	\$30,435.00	\$0.00	\$30,435.00	\$30,435.00
	PT-2011-03-04-31	Wendell Police Department	\$86,995.00	\$37,285.00	\$86,995.00	\$0.00	\$86,995.00	\$86,995.00
	PT-2011-03-04-32	Avery County Sheriff's Office	\$38,395.00	\$16,455.00	\$38,395.00	\$0.00	\$38,395.00	\$38,395.00
	PT-2011-03-04-33	Cornellus Police Department	\$68,320.00	\$29,280.00	\$68,320.00	\$0.00	\$68,320.00	\$68,320.00
	PT-2011-03-04-34	Hoke County Sheriff's Office	\$32,831.00	\$14,071.00	\$32,831.00	\$0.00	\$32,831.00	\$32,831.00
	PT-2011-03-04-35	Iredell County Sheriff's Office	\$74,216.00	\$31,807.00	\$74,216.00	\$0.00	\$74,216.00	\$74,216.00
	PT-2011-03-04-36	Cabarrus County Sheriff's Office	\$96,651.00	\$39,708.00	\$96,651.00	\$0.00	\$96,651.00	\$96,651.00
	PT-2011-03-04-37	New Bern Police Department	\$10,650.00	\$3,550.00	\$10,650.00	\$0.00	\$10,650.00	\$10,650.00
	PT-2011-03-05-00	NC Sheriff's Association	\$34,500.00	\$0.00	\$34,500.00	\$0.00	\$34,500.00	\$0.00
	Police Traffic Services Total		\$2,348,564.00	\$871,278.00	\$2,348,564.00	\$697,500.00	\$3,046,064.00	\$1,979,919.00
	Traffic Records							
	TR-2011-10-01-00	UNC-HSRC Quick Response	\$40,100.00	\$0.00	\$40,100.00	\$0.00	\$40,100.00	\$0.00
	TR-2011-10-02-00	UNC-HSRC NC Crash Data	\$48,959.00	\$0.00	\$48,959.00	\$0.00	\$48,959.00	\$0.00
	Traffic Records Total		\$89,059.00	\$0.00	\$89,059.00	\$0.00	\$89,059.00	\$0.00
	Railroad/Highway Crossings							
	RH-2011-12-01-00	NC Operation Lifesaver	\$80,000.00	\$0.00	\$80,000.00	\$0.00	\$80,000.00	\$80,000.00
	Railroad/Highway Crossings Total		\$80,000.00	\$0.00	\$80,000.00	\$0.00	\$80,000.00	\$80,000.00
	Safe Communities							
	SA-2011-16-01-00	GHSP In-house	\$653,000.00	\$0.00	\$653,000.00	\$0.00	\$653,000.00	\$0.00
	Safe Communities Total		\$653,000.00	\$0.00	\$653,000.00	\$0.00	\$653,000.00	\$0.00
	School Bus							
	SB-2011-13-01-00	NC Department of Public Instruction	\$71,200.00	\$0.00	\$71,200.00	\$0.00	\$71,200.00	\$0.00
	School Bus Total		\$71,200.00	\$0.00	\$71,200.00	\$0.00	\$71,200.00	\$0.00
	NHTSA 402 Total		\$9,152,980.00	\$1,197,356.00	\$9,152,980.00	\$697,500.00	\$9,850,480.00	\$2,063,669.00

U.S. Department of Transportation National Highway Traffic Safety Administration
Highway Safety Plan Cost Summary

State: North Carolina

Page: 5

Report Date: 09/28/2010

2011-HSP-2

For Approval

Highway Safety Plan Cost Summary

Program Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incre/ (Decre)	Current Balance	Share to Local
405 OP SAFETEA-LU								
	K2-2011-07-00-00	GHSP 405 Hold Accounts	\$1,500,000.00	\$0.00	\$1,500,000.00	\$0.00	\$1,500,000.00	\$0.00
	K2-2011-07-01-00	GHSP In-house Click It Media Buys	\$835,000.00	\$0.00	\$835,000.00	-\$500,000.00	\$335,000.00	\$0.00
405 Occupant Protection Total			\$2,335,000.00	\$0.00	\$2,335,000.00	-\$500,000.00	\$1,835,000.00	\$0.00
405 OP SAFETEA-LU Total			\$2,335,000.00	\$0.00	\$2,335,000.00	-\$500,000.00	\$1,835,000.00	\$0.00
NHTSA 406								
	K4-2011-04-00-00	GHSP 405 Hold Accounts	\$3,500,000.00	\$0.00	\$3,500,000.00	\$0.00	\$3,500,000.00	\$0.00
	K4-2011-04-01-00	Newton Police Department	\$86,028.00	\$15,182.00	\$86,028.00	\$0.00	\$86,028.00	\$86,028.00
	K4-2011-04-02-00	Reidsville Police Department	\$80,141.00	\$14,143.00	\$80,141.00	\$0.00	\$80,141.00	\$80,141.00
	K4-2011-04-03-00	Knightdale Public Safety Department	\$223,890.00	\$39,510.00	\$223,890.00	\$0.00	\$223,890.00	\$223,890.00
	K4-2011-04-04-00	Lumberton Police Department	\$175,855.00	\$31,033.00	\$175,855.00	\$0.00	\$175,855.00	\$175,855.00
	K4-2011-04-05-00	Pembroke Police Department	\$157,714.00	\$27,832.00	\$157,714.00	\$0.00	\$157,714.00	\$157,714.00
	K4-2011-04-06-00	StreetSafe	\$6,500.00	\$0.00	\$6,500.00	\$0.00	\$6,500.00	\$6,500.00
	K4-2011-04-07-00	Tyrrell County Sheriff's Office	\$81,317.00	\$14,350.00	\$81,317.00	\$0.00	\$81,317.00	\$81,317.00
	K4-2011-04-08-00	UNC-CH Department of Public Safety	\$63,000.00	\$21,000.00	\$63,000.00	\$0.00	\$63,000.00	\$63,000.00
	K4-2011-04-10-00	Wilson Police Department	\$302,014.00	\$53,296.00	\$302,014.00	\$0.00	\$302,014.00	\$302,014.00
	K4-2011-04-11-00	Franklin Police Department	\$84,674.00	\$14,943.00	\$84,674.00	\$0.00	\$84,674.00	\$84,674.00
	K4-2011-04-12-00	Holly Springs Police Department	\$167,169.00	\$29,501.00	\$167,169.00	\$0.00	\$167,169.00	\$167,169.00
	K4-2011-04-13-00	Robeson County Sheriff's Office	\$181,200.00	\$32,000.00	\$181,200.00	\$0.00	\$181,200.00	\$181,200.00
	K4-2011-04-14-00	Haywood County Sheriff's Office	\$219,801.00	\$38,789.00	\$219,801.00	\$0.00	\$219,801.00	\$219,801.00
	K4-2011-04-15-00	Harnett County Sheriff's Office	\$194,525.00	\$34,328.00	\$194,525.00	\$0.00	\$194,525.00	\$194,525.00
	K4-2011-04-16-00	Henderson County Sheriff's Office	\$182,458.00	\$32,198.00	\$182,458.00	\$0.00	\$182,458.00	\$182,458.00
	K4-2011-04-17-00	Spring Lake Police Department	\$99,462.00	\$17,551.00	\$99,462.00	\$0.00	\$99,462.00	\$99,462.00
	K4-2011-04-18-00	Buncombe County Sheriff's Office	\$133,904.00	\$0.00	\$133,904.00	\$0.00	\$133,904.00	\$133,904.00

**U.S. Department of Transportation National Highway Traffic Safety Administration
Highway Safety Plan Cost Summary**

State: North Carolina

Page: 6

Report Date: 09/28/2010

2011-HSP-2

For Approval

Program Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incr/ (Decre)	Current Balance	Share to Local
406 Safety Belts Incentive Total	K4-2011-04-19-00	Buncombe County Sheriff's Office	\$62,500.00	\$62,500.00	\$62,500.00	\$.00	\$62,500.00	\$62,500.00
	Total		\$6,002,152.00	\$478,156.00	\$6,002,152.00	\$.00	\$6,002,152.00	\$2,502,152.00
NHTSA 406 Total								
408 Data Program SAFETEA-LU	K9-2011-11-00-00	GHSP 408 Hold Account	\$100,000.00	\$.00	\$100,000.00	\$.00	\$100,000.00	\$.00
	K9-2011-11-04-00	Weldon Police Department	\$8,000.00	\$8,000.00	\$8,000.00	\$.00	\$8,000.00	\$8,000.00
	K9-2011-11-06-00	Morganton Department of Public Safety	\$8,000.00	\$8,000.00	\$8,000.00	\$.00	\$8,000.00	\$8,000.00
	K9-2011-11-07-00	Sylva Police Department	\$4,132.00	\$4,132.00	\$4,132.00	\$.00	\$4,132.00	\$4,132.00
	K9-2011-11-11-00	Rocky Mount Police Department	\$4,000.00	\$4,000.00	\$4,000.00	\$.00	\$4,000.00	\$4,000.00
408 Data Program Incentive Total			\$129,557.00	\$1,809.00	\$5,425.00	\$.00	\$5,425.00	\$5,425.00
408 Data Program SAFETEA-LU Total			\$129,557.00	\$25,941.00	\$129,557.00	\$.00	\$129,557.00	\$29,557.00
410 Alcohol SAFETEA-LU	K8-2011-02-00-00	GHSP 410 Hold Account	\$4,000,000.00	\$.00	\$4,000,000.00	\$.00	\$4,000,000.00	\$.00
	K8-2011-02-01-00	GHSP In-house Alcohol Media & Education	\$410,000.00	\$.00	\$410,000.00	\$.00	\$410,000.00	\$.00
	K8-2011-02-02-00	Forensic Tests for Alcohol Batmobile	\$109,340.00	\$.00	\$109,340.00	\$.00	\$109,340.00	\$.00
	K8-2011-02-03-00	Forensic Tests for Alcohol Research Scie	\$434,000.00	\$.00	\$434,000.00	\$.00	\$434,000.00	\$.00
	K8-2011-02-04-00	Forensic Tests for Alcohol DRE	\$212,431.00	\$.00	\$212,431.00	\$.00	\$212,431.00	\$.00
	K8-2011-02-05-00	Forensic Tests for Alcohol SFST	\$118,500.00	\$.00	\$118,500.00	\$.00	\$118,500.00	\$.00
	K8-2011-02-06-00	NC Conference of DA's	\$440,942.00	\$.00	\$440,942.00	\$.00	\$440,942.00	\$.00
	K8-2011-02-07-00	AOC-Pitt County	\$46,799.00	\$.00	\$46,799.00	\$.00	\$46,799.00	\$.00
	K8-2011-02-08-00	AOC-Wayne County	\$117,348.00	\$.00	\$117,348.00	\$.00	\$117,348.00	\$.00
	K8-2011-02-09-00	AOC-Buncombe County	\$44,789.00	\$.00	\$44,789.00	\$.00	\$44,789.00	\$.00
	K8-2011-02-10-00	AOC-New Hanover County	\$54,296.00	\$.00	\$54,296.00	\$.00	\$54,296.00	\$.00

https://gts.nhisa.gov/gts/reports/new_report1.asp?report=2&transid=41811

9/28/2010

**U.S. Department of Transportation National Highway Traffic Safety Administration
Highway Safety Plan Cost Summary**

State: North Carolina

Report Date: 09/28/2010

Page: 7

2011-HSP-2
For Approval

Program Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incre/ (Decre)	Current Balance	Share to Local
	K8-2011-02-11-00	AOC-Johnston County	\$176,407.00	\$0.00	\$176,407.00	\$0.00	\$176,407.00	\$0.00
	K8-2011-02-12-00	AOC-Wake County	\$136,685.00	\$0.00	\$136,685.00	\$0.00	\$136,685.00	\$0.00
	K8-2011-02-13-00	AOC-Columbus County	\$205,131.00	\$0.00	\$205,131.00	\$0.00	\$205,131.00	\$0.00
	K8-2011-02-15-00	SADD	\$12,000.00	\$0.00	\$12,000.00	\$0.00	\$12,000.00	\$12,000.00
	K8-2011-02-16-00	Robeson County Sheriff's Office	\$213,200.00	\$0.00	\$213,200.00	\$0.00	\$213,200.00	\$213,200.00
	K8-2011-02-17-00	Columbus County Sheriff's Office	\$202,423.00	\$0.00	\$202,423.00	\$0.00	\$202,423.00	\$202,423.00
	K8-2011-02-18-00	Boone Police Department	\$13,848.00	\$0.00	\$13,848.00	\$0.00	\$13,848.00	\$13,848.00
	K8-2011-02-19-00	Conover Police Department	\$9,900.00	\$0.00	\$9,900.00	\$0.00	\$9,900.00	\$9,900.00
	K8-2011-02-20-00	Glen Alpine Police Department	\$17,150.00	\$0.00	\$17,150.00	\$0.00	\$17,150.00	\$17,150.00
	K8-2011-02-21-00	Hickory Police Department	\$15,000.00	\$15,000.00	\$0.00	\$0.00	\$15,000.00	\$15,000.00
	K8-2011-02-22-00	Maggie Valley Police Department	\$8,000.00	\$0.00	\$8,000.00	\$0.00	\$8,000.00	\$8,000.00
	K8-2011-02-23-00	Mecklenburg County ABC Board Law Enforce	\$14,250.00	\$4,750.00	\$14,250.00	\$0.00	\$14,250.00	\$14,250.00
	K8-2011-02-24-00	Sylva Police Department	\$4,923.00	\$4,923.00	\$0.00	\$0.00	\$4,923.00	\$4,923.00
	K8-2011-02-25-00	Thomasville Police Department	\$16,000.00	\$10,000.00	\$10,000.00	\$0.00	\$10,000.00	\$10,000.00
	K8-2011-02-26-00	Troutman Police Department	\$18,550.00	\$0.00	\$18,550.00	\$0.00	\$18,550.00	\$18,550.00
	K8-2011-02-27-00	Coats Police Department	\$17,250.00	\$0.00	\$17,250.00	\$0.00	\$17,250.00	\$17,250.00
	K8-2011-02-28-00	Creedmoor Police Department	\$10,000.00	\$10,000.00	\$0.00	\$0.00	\$10,000.00	\$10,000.00
	K8-2011-02-29-00	Havelock Police Department	\$18,900.00	\$0.00	\$18,900.00	\$0.00	\$18,900.00	\$18,900.00
	K8-2011-02-30-00	Pittsboro Police Department	\$20,902.00	\$0.00	\$20,902.00	\$0.00	\$20,902.00	\$20,902.00
	K8-2011-02-31-00	Rocky Mount Police Department	\$8,000.00	\$0.00	\$8,000.00	\$0.00	\$8,000.00	\$8,000.00
	K8-2011-02-32-00	Anson County Sheriff's Office	\$19,550.00	\$0.00	\$19,550.00	\$0.00	\$19,550.00	\$19,550.00
	K8-2011-02-33-00	Ayden Police Department	\$8,000.00	\$0.00	\$8,000.00	\$0.00	\$8,000.00	\$8,000.00
	K8-2011-02-34-00	Justice In Motion	\$2,097.00	\$0.00	\$2,097.00	\$0.00	\$2,097.00	\$2,097.00
	K8-2011-02-35-00	Kill Devil Hills Police Department	\$159,125.00	\$68,197.00	\$159,125.00	\$0.00	\$159,125.00	\$159,125.00

State: North Carolina

Report Date: 09/28/2010

Page: 8

**U.S. Department of Transportation National Highway Traffic Safety Administration
Highway Safety Plan Cost Summary**

2011-HSP-2
For Approval

Program Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incre/ (Decre)	Current Balance	Share to Local
	K8-2011-02-36-00	Biscoe Police Department	\$2,400.00	\$800.00	\$2,400.00	\$0.00	\$2,400.00	\$2,400.00
	K8-2011-02-37-00	Mount Gilead Police Department	\$12,350.00	\$0.00	\$12,350.00	\$0.00	\$12,350.00	\$12,350.00
	K8-2011-02-38-00	NCSHP-In Car Video Camera	\$179,820.00	\$0.00	\$179,820.00	\$0.00	\$179,820.00	\$0.00
	K8-2011-02-39-00	Whispering Pines Police Department	\$1,500.00	\$0.00	\$1,500.00	\$0.00	\$1,500.00	\$1,500.00
	K8-2011-02-40-00	Alcohol Law Enforcement	\$50,000.00	\$0.00	\$50,000.00	\$0.00	\$50,000.00	\$0.00
	K8-2011-02-41-00	MADD	\$111,700.00	\$0.00	\$111,700.00	\$0.00	\$111,700.00	\$0.00
	K8-2011-02-42-00	Cabarrus County Sheriff's Office	\$20,425.00	\$0.00	\$20,425.00	\$0.00	\$20,425.00	\$20,425.00
	K8-2011-02-43-00	VIP for VIP	\$10,000.00	\$0.00	\$10,000.00	\$0.00	\$10,000.00	\$0.00
	K8-2011-02-44-00	AOC- Forsyth County	\$51,891.00	\$0.00	\$51,891.00	\$0.00	\$51,891.00	\$0.00
	K8-2011-02-45-00	El Pueblo, Inc,	\$54,984.00	\$0.00	\$54,984.00	\$0.00	\$54,984.00	\$0.00
	K8-2011-02-46-00	Fletcher Police Department	\$36,450.00	\$12,150.00	\$36,450.00	\$0.00	\$36,450.00	\$36,450.00
	K8-2011-02-47-00	Iredell County Sheriff's Office	\$19,050.00	\$0.00	\$19,050.00	\$0.00	\$19,050.00	\$19,050.00
	K8-2011-02-49-00	Winston Salem Police Department	\$769,420.00	\$0.00	\$769,420.00	-\$30,000.00	\$739,420.00	\$739,420.00
	410 Alcohol SAFETEA-LU Total		\$8,629,726.00	\$125,820.00	\$8,629,726.00	-\$30,000.00	\$8,599,726.00	\$1,634,663.00
	2010 Motorcycle Safety							
	K6-2011-09-00-00	GHSP 2010 Hold Account	\$200,000.00	\$0.00	\$200,000.00	\$0.00	\$200,000.00	\$0.00
	K6-2011-09-01-00	GHSP In-house Motorcycle Safety	\$107,500.00	\$0.00	\$107,500.00	\$0.00	\$107,500.00	\$0.00
	K6-2011-09-02-00	NC Motorcycle Safety Education Program	\$35,500.00	\$35,500.00	\$35,500.00	\$0.00	\$35,500.00	\$0.00
	K6-2011-09-03-00	NC Motorcycle Safety Education Program	\$44,430.00	\$0.00	\$44,430.00	\$0.00	\$44,430.00	\$0.00
	K6-2011-09-04-00	NCSHP-Bike Safe	\$15,500.00	\$0.00	\$15,500.00	\$0.00	\$15,500.00	\$0.00
	2010 Motorcycle Safety Incentive Total		\$402,930.00	\$35,500.00	\$402,930.00	\$0.00	\$402,930.00	\$0.00
	2010 Motorcycle Safety Total		\$402,930.00	\$35,500.00	\$402,930.00	\$0.00	\$402,930.00	\$0.00
	2011 Child Seats							
	K3-2011-06-00-00	GHSP 2011 Hold Account	\$600,000.00	\$0.00	\$600,000.00	\$0.00	\$600,000.00	\$0.00

**U.S. Department of Transportation National Highway Traffic Safety Administration
Highway Safety Plan Cost Summary
2011-HSP-2**

State: North Carolina Page: 9
 Report Date: 09/28/2010 For Approval

Program Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incre/ (Decre)	Current Balance	Share to Local
	K3-2011-06-01-00	NC SafeKids/Dept. of Insurance	\$542,629.00	\$.00	\$542,629.00	\$.00	\$542,629.00	\$.00
	2011 Child Seat Incentive Total		\$1,142,629.00	\$.00	\$1,142,629.00	\$.00	\$1,142,629.00	\$.00
	2011 Child Seats Total		\$1,142,629.00	\$.00	\$1,142,629.00	\$.00	\$1,142,629.00	\$.00
	NHTSA Total		\$27,794,974.00	\$1,862,773.00	\$27,794,974.00	\$167,500.00	\$27,962,474.00	\$6,230,041.00
	Total		\$27,794,974.00	\$1,862,773.00	\$27,794,974.00	\$167,500.00	\$27,962,474.00	\$6,230,041.00

Appendix A
Highlighted Projects

FY 2011 Project Description

Project Number: K4-11-04-18

Agency: Buncombe County Sheriff's Office

Goals/Objectives: The goal of local law enforcement is to reduce the number of traffic related accidents, injuries, and deaths in Buncombe County by creating a Traffic Safety Team. To work with the Henderson County Sheriffs Office as part of a multi-county task force to address the alcohol problem in this part of the state.

Tasks/Description: Incorporate two personnel into a unified traffic safety team to enforce traffic laws, by addressing specifically traffic safety initiatives; ensuring safer roads in the Buncombe County area.

PROJECT BUDGET							
Cost Category	Total Amount	Federal		State		Local	
		%	Amount	%	Amount	%	Amount
Personnel	\$133,904	100	\$133,904		\$		\$
Contractual	\$		\$		\$		\$
Commodities	\$		\$		\$		\$
Direct	\$		\$		\$		\$
Checkpt Eqpt	\$		\$		\$		\$
Indirect	\$		\$		\$		\$
Total	\$133,904		\$133,904		\$		\$

PERSONNEL BUDGET DETAIL		
Quantity	Personnel	Amount
1	Patrol Deputy	\$38567
	Fringe Benefits for Patrol Deputy	\$28385
1	Patrol Deputy	\$38567
	Fringe Benefits for Patrol Deputy	\$28385
	<u>Total</u>	\$133,904

FY 2011 Project Description

Project Number: K4-11-04-19

Agency: Buncombe County Sheriff's Office

Goals/Objectives: The goal of local law enforcement is to reduce the number of traffic related accidents, injuries, and deaths in Buncombe County by creating a Traffic Safety Team. This is the equipment portion of the grant for the multi-county task force with Henderson County Sheriffs Office.

Tasks/Description: Incorporate two personnel into a unified traffic safety team to enforce traffic laws, by addressing specifically traffic safety initiatives; ensuring safer roads in the Buncombe County area.

PROJECT BUDGET							
Cost Category	Total Amount	Federal		State		Local	
		%	Amount	%	Amount	%	Amount
Personnel	\$		\$		\$		\$
Contractual	\$		\$		\$		\$
Commodities	\$		\$		\$		\$
Direct	\$125,000	50	\$62,500		\$	50	\$62,500
Checkpt Eqpt	\$		\$		\$		\$
Indirect	\$		\$		\$		\$
Total	\$125,000		\$62,500		\$		\$62,500

OTHER DIRECT COSTS BUDGET DETAIL		
Quantity	Description	Amount
2	Vehicles	\$60,000
2	Mobile Data Terminal	\$16,000
2	Lidar Units	\$7,000
2	Dual Antenna Radar	\$5,000
2	In-car Camera	\$12,000
2	Uniforms	\$10,000
1	Speed Enforcement Trailer	\$12,000
2	Travel @\$1,500 ea	\$3,000
Total		\$125,000

FY 2011 Project Description

Project Number: K4-11-04-16

Agency: Henderson County Sheriffs office

Goals/Objectives: Reduce the number of traffic crashes in the county by 20% by July 1, 2012. To work with Buncombe County Sheriffs office to reduce crashes, reduce speeders and reduce DWI's in the two county area through coordinated task force efforts of enforcement.

Tasks/Description: Set up an additional deputy to enforce all traffic laws and to assist in the task force efforts of a multi-county effort to make the roads safer.

PROJECT BUDGET							
Cost Category	Total Amount	Federal		State		Local	
		%	Amount	%	Amount	%	Amount
Personnel	\$128,582	85	\$109,295		\$	15	\$19,287
Contractual	\$		\$		\$		\$
Commodities	\$		\$		\$		\$
Direct	\$86,074	85	\$73,163		\$	15	\$12,911
Checkpt Eqpt	\$		\$		\$		\$
Indirect	\$		\$		\$		\$
Total	\$214,656		\$182,458		\$		\$32,198

PERSONNEL BUDGET DETAIL		
Quantity	Personnel	Amount
2	Deputies plus fringes	128,582
	<u>Total</u>	128,582

OTHER DIRECT COSTS BUDGET DETAIL		
Quantity	Description	Amount
2	Vehicles	60,000
2	MDT's	6,200
2	Radars	5,000
2	In-car cameras	10,400
2	Uniforms	4,474
	<u>Total</u>	86,074

FY 2011 Project Description

Project Number: OP-11-05-07

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 Amount	Federal		State		Local	
		%	Amount	%	Amount	%	Amount
Personnel	81,898	100	81,898		\$		\$
Commodities	11,942	100	11,942		\$		\$
Direct	28,205	100	28,205		\$		\$
Indirect	12,205	100	12,205		\$		\$
Total	134,250		134,250		\$		\$

PERSONNEL BUDGET DETAIL		
Quantity	Personnel	Amount
	All personnel and fringes	81,898
	<u>Total</u>	81,898

COMMODITIES BUDGET DETAIL		
Quantity	Commodities Description	Amount
	Supplies, photocopies and training supplies	11,942
	<u>Total</u>	11,942

OTHER DIRECT COSTS BUDGET DETAIL		
Quantity	Description	Amount
	Travel, printing, subscriptions, WATTS, storage, etc	28,205
	<u>Total</u>	28,205

INDIRECT COSTS BUDGET DETAIL		
Vendor	Description	Amount
	UNC facility fee 10%	12,205
	<u>Total</u>	12,205

FY 2011 Project Description

Project Number: K8-11-02-06

Agency: NC Conference of DA's

Goals/Objectives: The Conference of DA's will increase the level of understanding and awareness between prosecutors, law enforcement and the community. The Conference will provide education on traffic-related issues through publications, training and trial advocacy courses, technical assistance, and community outreach. They will continue the employment of a Traffic Safety Consult and hire a Traffic Safety Resource Prosecutor (TSRP) who will be supervised by the Chief Resource Prosecutor. The purpose of the TSRP is to 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. In addition, the TSRP will develop and publish a Magistrate Impaired Driving PRIMER, a Law Enforcement Impaired Driving Manual, four issues of the "For the Record" traffic safety newsletter, as well as other traffic-related publications, including legal updates. Provide training for special topic programs for prosecutor and/or law enforcement to ready them for the most effective prosecution of DWI-related cases. Hold Multi-Disciplinary DWI Traffic Safety Symposium -This year there is a greater need than ever to combine prosecutors, law enforcement and other allied professional to train together on highway safety issues. Therefore, host an Impaired Driving/Highway Safety Symposium which will be comprised of multiple training tracks for ADA, Law Enforcement, victim advocates, Magistrates and other allied professionals along with the Chief Resource Prosecutor as a liaison while providing technical assistance, training, counsel to law enforcement, and information to communities. 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 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. To accomplish the objectives, the Conference will continue to employ a legal assistant to administer the general administrative support, logistics for meetings and trainings, ordering of supplies and manual orders, prepare course registration and follow-ups, develop handout packets, CLE and NCJA course approval and reporting, preparation and processing of reimbursements, follow-up letters to supervisors, follow-up surveys, and assistance in implementing publication requirements.

Tasks/Description: In addition to the above goals and objectives, The Conference of DA's will plan, hold attend and evaluate the following meetings, conferences and materials; Fall Association Meeting, National NHTSA TSRP/LEL Conference, 4 quarterly newsletters, NAPC Meeting, NHTSA Working Group, Charlotte Highway Safety Symposium, Wilmington Highway Safety Symposium, 2 Legal Update, Eastern DWI Regional Training, Lifesavers Conference, New Prosecutor's School, Central DWI Regional, IPTM Alcohol and Drug Driving Symposium, Summer Association Meeting, DRE Conference, Western DWI Regional, NAPC/NHTSA Working Group, Transition from District to Superior Court. They will purchase materials and design promotional items.

PROJECT BUDGET							
Cost Category	Total Amount	Federal		State		Local	
		%	Amount	%	Amount	%	Amount
Personnel	\$170,655	100	\$170,655		\$		\$
Contractual	\$35,400	100	\$35,400		\$		\$
Commodities	\$5,000	100	\$5,000		\$		\$
Direct	\$229,887	100	\$229,887		\$		\$
Indirect	\$		\$		\$		\$
Total	\$440,942		\$440,942		\$		\$

PERSONNEL BUDGET DETAIL		
Quantity	Personnel	Amount
	Legal Assistant	\$40,500
	Traffic Safety Prosecutor	\$82,000
	Benefits	\$48,155
	Total	\$170,655

CONTRACTUAL BUDGET DETAIL		
Vendor	Description	Amount
	Speaker Honorariums	\$5,000
	Traffic Safety Consultant	\$30,400
	Total	\$35,400

COMMODITIES BUDGET DETAIL		
Quantity	Commodities Description	Amount
	Promotional Items	\$5,000
	Total	\$5,000

OTHER DIRECT COSTS BUDGET DETAIL		
Quantity	Description	Amount
	Magistrate Primer	\$5,000
	Newsletter and Shipping	\$5,000
	Training Brochures	\$4,500
	Training Supplies	\$10,000
	Update DWI Manual & Reprint	\$10,000
	LE Resource Manual	\$10,000
	In State Travel	\$157,601
	Out of State Travel	\$27,786
	Total	\$229,887

FY 2011 Project Description

Project Number: K8-11-02-44

Agency: AOC-Forsyth County District Attorney's Office

Goals/Objectives: Recent court rulings and legislation have complicated the process in which DWI are prosecuted in North Carolina. Chemical analyst and their results must be present during DWI trials, making continuation of cases occur more often. As a result, more time is needed to properly gather information thus creating a backlog of DWI cases. The goals of this grant are to facilitate the consistent and effective prosecution of DWI cases in NC by reducing the number of dismissals due to lack of sufficient evidence and ensure that DWI habitual offenders receive the maximum punishment. By reduce the number of DWI cases by 10%, that have been pending for a year or more will help eliminate the backlog that is currently taking place. SB
 Tasks/Description: In order to achieve the goals and objectives of this grant, the Forsyth County DA's office will hire a DWI Prosecutor, review and calendar new and old DWI cases, identify cases that are more than one year old and those that are habitual offenders. They will create a database of the disposed DWI cases to evaluate the success of the program, create systems for collecting and organizing discovery materials and reports from law enforcement that is a must to successfully try DWI cases. SB

PROJECT BUDGET							
Cost Category	Total Amount	Federal		State		Local	
		%	Amount	%	Amount	%	Amount
Personnel	\$50,960	100	\$50,960		\$		\$
Contractual	\$		\$		\$		\$
Commodities	\$		\$		\$		\$
Direct	\$931	100	\$931		\$		\$
Checkpt Eqpt	\$		\$		\$		\$
Indirect	\$		\$		\$		\$
Total	\$51,891		\$51,891		\$		\$

PERSONNEL BUDGET DETAIL		
Quantity	Personnel	Amount
	DWI Prosecutor with Benefits	\$50,960
	<u>Total</u>	\$50,960

CONTRACTUAL BUDGET DETAIL		
Vendor	Description	Amount
		\$
	<u>Total</u>	\$

COMMODITIES BUDGET DETAIL		
Quantity	Commodities Description	Amount
		\$
	<u>Total</u>	\$

OTHER DIRECT COSTS BUDGET DETAIL		
Quantity	Description	Amount
	Yearly rental of laptop, phone and data line for DWI Prosecutor	\$931
	<u>Total</u>	\$931

CHECKPOINT EQUIPMENT BUDGET DETAIL		
Quantity	Description	Amount
		\$
	<u>Total</u>	\$

INDIRECT COSTS BUDGET DETAIL		
Vendor	Description	Amount
		\$
	<u>Total</u>	\$

FY 2011 Project Description

Project Number: K8-11-02-01

Agency: GHSP In-House Alcohol Public Information and Education

Goals/Objectives: The GHSP plans to increase its outreach effort regarding impaired driving with an enhanced media placement campaign in during each enforcement period which will include TV, radio and gas station advertising. As part of the plan, GHSP will contract an agency to supply media buys, placement and statewide distribution of our message during each campaign. Each year GHSP gathers more than 500 law enforcement officers to educate them on traffic safety laws, GHSP updates and other topics relating to highway safety. With the assistance of Forensic Test for Alcohol and the Conference of District Attorneys, GHSP will host a Traffic Safety DWI Symposium in the spring which will include topics for law enforcement, magistrates, judges and prosecutors. SB

Tasks/Description: GHSP will plan and execute the first DWI symposium in two regional locations. The symposium will have numerous breakout sessions and national and state expert speakers. Plan and contract PSA's with an ad agency. Provide media research and placement of PSA's for December and August campaigns. Evaluate outcome via reporting numbers and surveys. SB

PROJECT BUDGET							
Cost Category	Total Amount	Federal		State		Local	
		%	Amount	%	Amount	%	Amount
Personnel	\$		\$		\$		\$
Contractual	\$410,000	100	\$410,000		\$		\$
Commodities	\$		\$		\$		\$
Direct	\$		\$		\$		\$
Indirect	\$		\$		\$		\$
Total	\$410,000		\$410,000		\$		\$

PERSONNEL BUDGET DETAIL		
Quantity	Personnel	Amount
		\$
	<u>Total</u>	\$

CONTRACTUAL BUDGET DETAIL		
Vendor	Description	Amount
		\$
	<u>Total</u>	\$

COMMODITIES BUDGET DETAIL		
Quantity	Commodities Description	Amount
		\$
	<u>Total</u>	\$

OTHER DIRECT COSTS BUDGET DETAIL		
Quantity	Description	Amount
	PSA Production	\$10,000
	Paid Media	\$250,000
	Gas Station Advertising	\$70,000
	Traffic Safety DWI Symposium	\$80,000
	<u>Total</u>	\$410,000

FY 2011 Project Description

Project Number: PT-11-03-05

Agency: NC Sheriff's Association

Goals/Objectives: During the 2010 session of the North Carolina General Assembly, a number of laws have been passed, changed, or amended that have a direct impact on the way North Carolina law enforcement officers to perform their duties. The North Carolina Sheriffs' Association will increase the knowledge of law enforcement officers of changes made to the Driving While Impaired (DWI) Statute and other traffic related statute changes to the North Carolina Motor Vehicle Laws. This will be accomplished by providing education on the changes through publications and training programs. The Sherriff's Association will conduct 6 one-day seminars across North Carolina on the legislative bills containing changes in the statutes that impact sheriffs' deputies and other law enforcement officers. Through the trainings they will increase the knowledge of North Carolina law enforcement officers in the additions or changes in the North Carolina General Statutes in areas such as Motor Vehicle Law, Identity Theft, and other traffic safety issues.

Tasks/Description: Conduct 6 one-day seminars on the legislative bills containing changes in the statutes of North Carolina that impact sheriffs' deputies and other law enforcement officers.

PROJECT BUDGET							
Cost Category	Total Amount	Federal		State		Local	
		%	Amount	%	Amount	%	Amount
Personnel	\$		\$		\$		\$
Contractual	\$10,500	100	\$10,500		\$		\$
Commodities	\$2,500	100	\$2,500		\$		\$
Direct	\$21,500	100	\$21,500		\$		\$
Indirect	\$		\$		\$		\$
Total	\$34,500		\$34,500		\$		\$

PERSONNEL BUDGET DETAIL		
Quantity	Personnel	Amount
		\$
	<u>Total</u>	\$

CONTRACTUAL BUDGET DETAIL		
Vendor	Description	Amount
	Research and preparation of training materials	\$7,500
	Instructor Fees	\$3,000
	<u>Total</u>	\$10,500

COMMODITIES BUDGET DETAIL		
Quantity	Commodities Description	Amount
	Promotional Items	\$2,500
	<u>Total</u>	\$2,500

OTHER DIRECT COSTS BUDGET DETAIL		
Quantity	Description	Amount
	Printing	\$3,500
	Administrative and Scheduling Fees	\$5,500
	In-State Travel	\$12,500
	<u>Total</u>	\$21,500

FY 2011 Project Description

Project Number: K8-11-02-49

Agency: Winston-Salem Police Department

Goals/Objectives: The goal of local law enforcement is to reduce the number of DWI-related accidents, injuries, and deaths in Forsyth County by creating a DWI Task Force with personnel from the Winston-Salem Police Department, Forsyth County Sheriff's Office, and the Kernersville Police Department.

Tasks/Description: Hire six Law Enforcement Officers to create a unified DWI task force to enforce traffic laws, by addressing specifically DWI initiatives; ensuring safer roads in the Forsyth County area.

PROJECT BUDGET							
Cost Category	Total Amount	Federal		State		Local	
		%	Amount	%	Amount	%	Amount
Personnel	\$441,820	100	\$441,820		\$		\$
Contractual	\$		\$		\$		\$
Commodities	\$		\$		\$		\$
Direct	\$297,600	100	\$327,600		\$		\$
Checkpt Eqpt	\$		\$		\$		\$
Indirect	\$		\$		\$		\$
Total	\$739,420		\$739,420		\$		\$

PERSONNEL BUDGET DETAIL		
Quantity	Personnel	Amount
4	Officers Winston-Salem PD @ \$75,455 ea.	\$301,820
1	Officers Forsyth COSO @ \$70,000 ea	\$70,000
1	Officers Kernersville PD @ \$70,000 ea	\$70,000
	<u>Total</u>	\$441,820

OTHER DIRECT COSTS BUDGET DETAIL		
Quantity	Description	Amount
6	Uniform (x 6 @ \$5,000 ea) \$ 30,000	\$30,000
6	Vehicle (x 6 @ \$30,000 ea) \$180,000	\$180,000
6	Laptop Computer (x 6 @ \$8,000 ea) \$ 48,000	\$48,000
6	In-Car Camera & Installation (x 6 @ \$6,000 ea) \$ 36,000	\$36,000
	In-State Travel \$ 600	\$600
2	Software packages \$ 3,000	\$3,000
	<u>Total</u>	\$297,600

Appendix B

Statewide Telephone Survey July 2010

NHTSA-GHSA Statewide Telephone Survey

FINAL REPORT

**NHTSA-GHSA
STATEWIDE TELEPHONE SURVEY**

(July 12 – 21, 2010)

August 16, 2010

NHTSA-GHSA Statewide Telephone Survey

Survey Methodology

The NHTSA-GHSA statewide telephone survey, conducted by the Governor's Highway Safety Program of the North Carolina Department of Transportation, was administered by telephone to a randomly selected sample of North Carolina households with a working landline telephone. The survey was conducted between July 12 and July 21, 2010 using a random digit dialing call procedure. The use of random digit dialing provides each household possessing a working landline telephone an approximately equal chance of being selected. Non-household entities that were called during the survey were eliminated as non-eligible members of the sample.

To maintain the randomness of the respondent selection process, a *within household random selection procedure* was further used to choose a person within the selected household to participate in the survey. This individual needed to meet the screening requirements of age (15 ½ +), residency (full-time resident of North Carolina) and driving habits (drives a motor vehicle as either a licensed driver, a driver with a learner's permit, or a driver not currently licensed to drive in North Carolina).

The survey was conducted in 10 field sessions over the 10-day period of July 12 to July 21, 2010. Calls were placed during various day-parts throughout the week and on weekends to maximize a cross-section of respondent attributes. Multiple calls were placed to households until an interview was completed or a final disposition code was assigned. The average length of the telephone interview was 15 minutes.

The survey resulted in 600 interviews, yielding a response rate of 52.9% using the American Association for Public Opinion Research's COOP1 equation for calculating cooperation rates. For a sample of this size, the margin of error attributable to sampling is plus or minus four percentage points at the 95% level of confidence. This means in 95 out of 100 samples among the same target population, the results should differ by no more than four percentage points. The margin of error for survey sub-groups is higher due to the fact that the results for these sub-groups are derived from a smaller number of respondents.

NHTSA-GHSA Statewide Telephone Survey

Survey Summary

The results of this survey reveal that North Carolinians profess to being law abiding citizens when it comes to seat belt usage, not mixing alcohol with driving, and obeying a safe driving speed. More than nine out of ten respondents indicate that they wear their safety belt "all of the time." While nearly one half of the survey panel says it has had at least one alcoholic drink during the previous 30 days, more than three out of four in this group say they have not driven a motor vehicle within two hours after having a drink. And in spite of the fact that respondents acknowledge that they sometimes drive faster than they should, a clear majority says that only "occasionally" or "never" do they drive more than five miles per hour over the posted speed limit.

Campaigns and other publicly disseminated information to encourage seat belt usage and warn of the dangers of driving too fast and drinking and driving are reaching some members of the general public. More than four in ten respondents have read, seen or heard information over the past 30 days that promotes the use of seat belts and cautions drivers of the consequences of driving too fast. More than six in ten recall messages relating to driving while impaired.

Respondents believe there is a good likelihood that drivers will be caught if they do not wear their safety belt, if they drink and drive, and if they speed. However, the general sentiment is that the chances of being caught not buckling up are lower, while there is a greater probability of being stopped by law enforcement officers for speeding and driving while impaired.

To promote wider seat belt use and reduce the number of drunk drivers and speeders using the state's roadways, respondents support some measures that will impose greater penalties over what is currently in place. Respondents tend to favor increasing the fine for drivers and passengers who fail to buckle up, but are generally opposed to placing points on a person's driver's license or insurance coverage. Stronger support is evident for increasing the fine and suspending a driver's license for a longer period of time for drivers caught drinking and driving. Respondents also favor extending the revocation period of a driver's license following conviction for drinking while impaired. Moderate support exists for placing a mark or symbol on the license tag of a convicted drunk driver. Moderate support is present as well for the use of automated traffic enforcement efforts, such as red light cameras and speed cameras, to reduce the number of speeders.

Several driver safety programs and campaigns were presented to survey respondents to test their level of familiarity. *Friends Don't Let Friends Drive Drunk* and *Booze It & Lose It* were the two most familiar impaired driving campaigns according to the survey panel. Surprisingly, *Over the Limit, Under Arrest* did not perform as well. *Click It or Ticket* was clearly the most recognized seat belt campaign, followed by *Buckle Up for Safety*.

NHTSA-GHSA Statewide Telephone Survey

Some respondents have direct experience with checkpoints used by law enforcement officials to catch drivers who drive while impaired or do not use their safety belt. One-quarter of the respondents have driven through a daytime checkpoint during the past 12 months, while one-third have driven through a nighttime checkpoint during the same period.

The 600 members of the survey panel reflect a diverse and representative mix of North Carolinians. They represent 90 of the state's 100 counties and are spread among large, medium, small, and rural communities alike. Gender and age, which were closely tracked during the study's data collection phase, match the U.S. Census Bureau's 2009 estimate of North Carolina's population. While some over-sampling of white respondents occurred, respondents exhibit wide characteristics among educational attainment, household income, and driving habits.

Survey Findings

Safety Belts

A strong majority of respondents (93%) wears their seat belt "all of the time." Five percent wear their seat belt "most of the time."

More than one-half of those participating in the survey (57%) do not recall having read, seen or heard information or messages about seat belt law enforcement programs or campaigns in North Carolina.

Three out of four respondents believe that drivers who do not wear their seat belt will ultimately be stopped and issued a ticket. Thirty-six percent believe it is "very likely" while 40% think it is "somewhat likely" a driver will receive a ticket for a seat belt violation.

Chance of Receiving a Ticket for Not Buckling Up	
Very likely	36%
Somewhat likely	40%
Not very likely	20%
Don't know/Not sure	4%

NHTSA-GHSA Statewide Telephone Survey

Survey respondents were asked to indicate how familiar they are with four safety belt campaign programs. The results reveal that *Click It or Ticket* is the most widely known program in North Carolina, with 90% of respondents being "very familiar" with it. Fifty-five percent of respondents are "very familiar" with *Buckle Up for Safety*, while 28% are "somewhat familiar" with the program. *Buckle Up America* and *RU Buckled* are not as widely known among the North Carolina survey panel.

	<u>Buckle Up America</u>	<u>RU Buckled</u>	<u>Click It or Ticket</u>	<u>Buckle Up for Safety</u>
Very familiar	19%	15%	90%	55%
Somewhat familiar	24%	12%	8%	28%
Not very familiar	14%	13%	1%	6%
Not at all familiar	41%	58%	2%	12%
Don't know/Not sure	2%	3%	0%	0%

Three penalties to encourage greater safety belt usage were tested to determine the level of support by citizens of North Carolina. Increasing the fine for not buckling up beyond the current \$25 penalty is favored by 64% of respondents. Forty-four percent of those participating in the survey favor points on a driver's record, while 42% favor points applied to a driver's insurance policy.

	<u>Increase Fine</u>	<u>Points on License</u>	<u>Points on Insurance</u>
Favor	64%	44%	42%
Oppose	34%	54%	54%
Don't know/Not sure	2%	3%	3%

One in three respondents (33%) have not driven past or driven through a daytime checkpoint in North Carolina during the past 12 months. These are checkpoints set up by law enforcement personnel to catch drivers for such things as not wearing their seat belt or driving under the influence.

NHTSA-GHSA Statewide Telephone Survey

Driving While Impaired

During the previous 30 days, 45% of survey respondents report having consumed at least one alcoholic drink. Among this group, 77% report that they have not driven a vehicle within two hours after drinking an alcoholic beverage. However, 14% reveal that they have had a drink and driven a vehicle within two hours on one or two days during this 30-day period. An additional 4% indicate that they have driven on three to five days out of the past 30 days within two hours of drinking alcohol.

Number of Days Driving Within Two Hours after Drinking Alcohol <i>(among those reporting having a drink in the past 30 days)</i>	
None	77%
1 to 2 days	14%
3 to 5 days	4%
6 to 10 days	1%
11 to 20 days	0%
21 to 30 days	1%
Don't know/Not sure	1%

Slightly more than six in ten respondents (62%) have read, seen or heard messages or other information regarding the dangers of drinking and driving.

Most respondents taking part in the survey believe the chances are good that a person who chooses to drink and drive in North Carolina will be arrested. Forty-two percent of the sample believes the chances are "very likely" while 48% say the chances are "somewhat likely." Eight percent of the survey panel suggests that it is "not very likely" a person who drinks and drives will be arrested.

Chance of Being Arrested for Drinking & Driving	
Very likely	42%
Somewhat likely	48%
Not very likely	8%
Don't know/Not sure	2%

NHTSA-GHSA Statewide Telephone Survey

Six impaired driving messages and campaigns were presented to survey respondents. They were asked to indicate how familiar they are with each one. *Friends Don't Let Friends Drive Drunk* was the most familiar of the six, with 86% of respondents saying they are "very familiar" with this impaired driving campaign. *Booze It & Lose It* was cited as "very familiar" by 76% of survey respondents. Respondents were considerably less familiar with the four remaining campaigns, including *Over the Limit, Under Arrest* which has aired regularly in North Carolina.

	<u>Friends Don't Let Friends Drive Drunk</u>	<u>Operation Eagle</u>	<u>Checkpoint Strikeforce</u>	<u>Booze It or Lose It</u>	<u>Over the Limit, Under Arrest</u>	<u>Highways or Dieways</u>
Very familiar	86%	6%	10%	76%	21%	21%
Somewhat familiar	11%	12%	18%	55%	20%	19%
Not very familiar	1%	11%	11%	3%	12%	10%
Not at all familiar	2%	70%	60%	6%	46%	48%
Don't know/Not sure	0%	2%	1%	0%	1%	1%

Respondents indicate strong support for three potential penalties for drivers who elect to drink and drive. Eighty-five percent believe fines should be increased for impaired driving, while 79% support a longer suspension period of the driver's license and 78% favor a longer revocation period following a drunk driving conviction. Mild support exists for placing a symbol on the license tag of a convicted drunk driver (53%), while fewer respondents favor lowering the blood alcohol level to be considered driving under the influence (39%).

	<u>Increase Fines</u>	<u>Longer Suspension of License</u>	<u>Longer Revocation of License</u>	<u>Lower Blood Alcohol Level</u>	<u>Symbol on License Tag</u>
Favor	85%	79%	78%	39%	53%
Oppose	12%	17%	18%	55%	43%
Don't know/Not sure	3%	4%	4%	6%	3%

NHTSA-GHSA Statewide Telephone Survey

Three-quarters of the survey respondents (74%) have not driven through a nighttime checkpoint in North Carolina during the previous 12 months set up by law enforcement officials to catch drivers who have been drinking.

Speeding

Eighty-five percent of survey respondents admit that at least on occasion they drive more than five miles per hour over the limit in a 30 MPH zone. Twenty-two percent say they do so "most of the time," 17% say they speed "about half the time," and 46% indicate they drive more than five miles per hour over the limit "occasionally." The remaining 15% of respondents say they "never" drive more than 5 MPH over the speed limit.

Frequency of Driving More than 5 MPH Over the Limit in a 30 MPH Zone	
Most of the time	22%
About half the time	17%
Occasionally	46%
Never	15%
Don't know/Not sure	1%

When asked about their driving behavior in a 65 MPH speed zone, fewer drivers admit to driving 70 MPH or faster. Fourteen percent say they drive 70 MPH or faster "most of the time," while 17% indicate they drive this fast "about half the time." Thirty-eight percent say that on occasion they drive 70 MPH or faster in a 65 MPH speed zone. On these faster highways, more respondents (31%) indicate that they never drive more than 5 MPH over the speed limit.

Frequency of Driving More than 5 MPH Over the Limit in a 65 MPH Zone	
Most of the time	14%
About half the time	17%
Occasionally	38%
Never	31%
Don't know/Not sure	<1%

NHTSA-GHSA Statewide Telephone Survey

The majority of respondents taking part in the survey (55%) do not recall having read, seen or heard specific messages or information related to speed enforcement programs by police or other law enforcement agencies.

Most respondents believe there is some likelihood that driving over the speed limit in North Carolina will result in a speeding ticket. Thirty-seven percent say it is "very likely" that speeding drivers will receive a ticket, and 52% say it is "somewhat likely." Still, 10% believe that driving over the speed limit is not very likely to result in a speeding ticket for a driver.

Chance of Receiving a Ticket for Speeding	
Very likely	37%
Somewhat likely	52%
Not very likely	10%
Don't know/Not sure	1%

As a way to curb speeding, 25% of the participants in the survey "strongly favor" the use of automated traffic enforcement efforts, such as red light cameras and speed cameras. Twenty-eight percent "somewhat favor" these measures. Eighteen percent of respondents are "somewhat opposed to these types of actions to curtail speeders, while 26% are "strongly opposed."

Support for Automated Traffic Enforcement Efforts	
Strongly favor	25%
Somewhat favor	28%
Somewhat oppose	18%
Strongly oppose	26%
Don't know/Not sure	3%

Demographics

Interviews for this survey were conducted in 90 of North Carolina's 100 counties. Respondents represent a good mix of community sizes as shown in the table on the following page.

NHTSA-GHSA Statewide Telephone Survey

Community Size of survey Respondents	
A large city	21%
A medium sized city	18%
A small city	16%
A small town	22%
A rural area	23%

Gender and age were tracked during the survey to monitor the representativeness of the sample. Females account for 51% of the survey sample, which matches the proportion of females in North Carolina according to the U.S. Census bureau's 2009 state estimate.

The survey resulted in a good distribution of age groups that closely reflect the U.S. Census Bureau's 2009 estimate for North Carolina, though a slight under-sampling of 22 to 29 year olds did occur.

Respondent Age Distribution	
15 to 17	3%
18 to 21	6%
22 to 29	10%
30 to 39	18%
40 to 49	20%
50 to 59	19%
60 to 69	14%
70 or over	10%

Respondents' race yielded 86% White, 9% Black, and 1% Hispanic. This proportion results in an over-sampling of White respondents and under-sampling of Blacks and Hispanics.

The distribution of education, household income and weekly miles driven represent good diversity among respondents, as shown in the tables on the following page.

NHTSA-GHSA Statewide Telephone Survey

Respondent Education Distribution

Less than high school	7%
High school diploma	18%
Some school beyond high school	24%
Associate degree or equivalent	11%
Bachelor's degree	26%
Master's degree	12%
Doctorate or professional degree	3%

Household Income Distribution

Less than \$24,000	11%
\$24,001 to \$36,000	10%
\$36,001 to \$50,000	16%
\$50,001 to \$75,000	19%
\$75,001 to \$100,000	18%
\$100,001 to \$150,000	14%
\$150,001 or above	11%

Weekly Miles Driven

10 miles or less	4%
11 to 25 miles	7%
26 to 50 miles	18%
51 to 100 miles	24%
101 to 250 miles	27%
251 to 500 miles	12%
More than 500 miles	6%
Don't know/Not sure	2%