

STATE OF TENNESSEE

FFY06

HIGHWAY SAFETY PERFORMANCE PLAN

I. INTRODUCTION

This Highway Safety Performance Plan is the state of Tennessee's action plan for distribution of federal highway safety funds into priority behavioral safety programs during federal fiscal year 2005-2006. The Plan addresses the behavioral aspects of highway safety; that is, activities that affect the knowledge, attitudes, and behaviors of highway users and safety professionals. Several studies have identified the road user as a sole or major contributing factor in between 84 and 94% of all crashes.

MISSION: Develop, execute, and evaluate programs to reduce the number of fatalities, injuries, and related economic losses resulting from traffic crashes on Tennessee's roadways.

VISION: Have all highway users arrive safely at their destination and to look forward to a time when there will be no loss of life on Tennessee's roadways.

GOAL: Reduce the number of highway fatalities, injury and non-injury crashes by 10%, from 1,287 fatalities, 1,143 fatal crashes, 138,493 non-fatal crashes, and 51, 259 injury crashes in 2004 by the year 2010.

Background

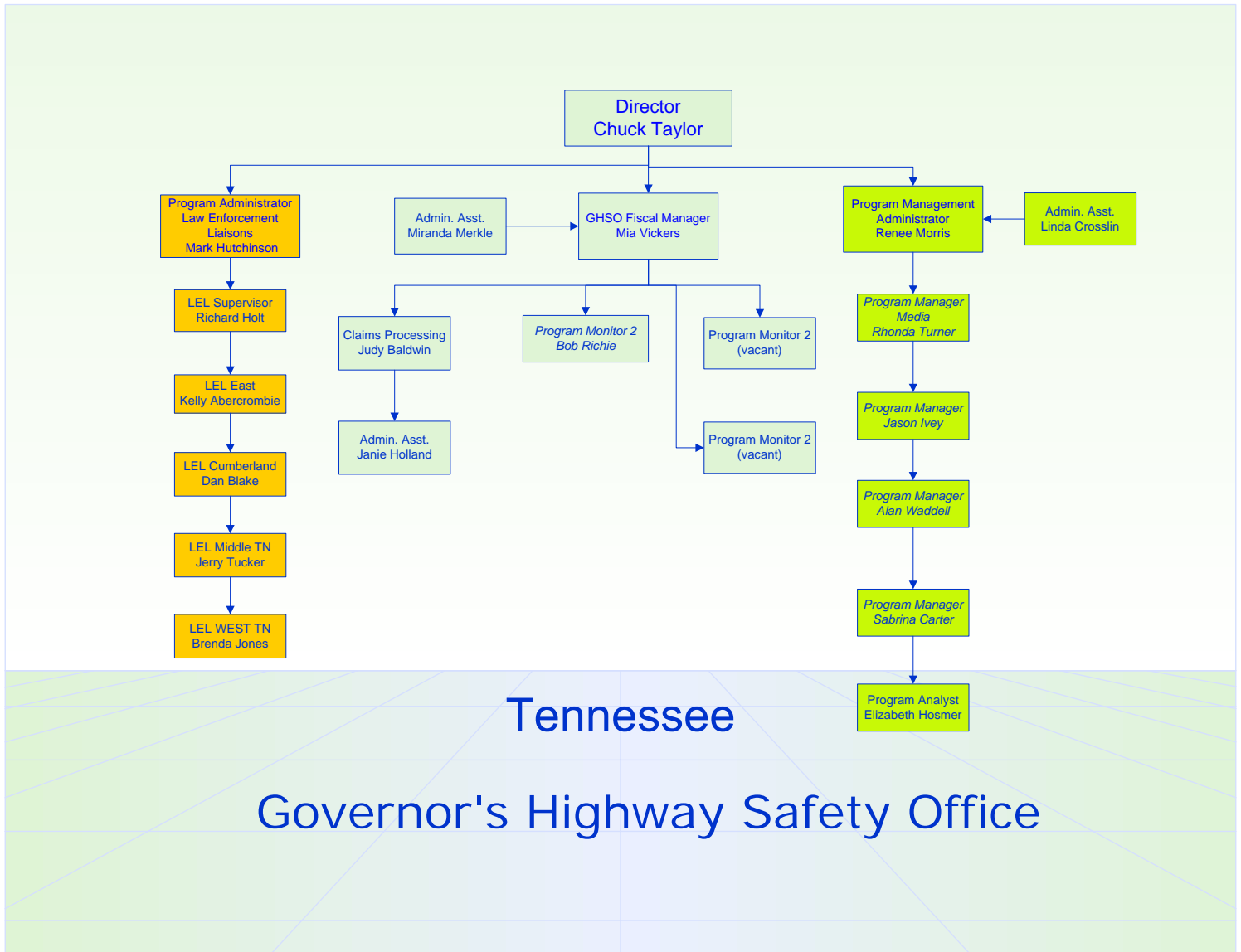
In response to the passage of the National Highway Safety Act of 1966 (Title 23 U.S.C., Chapter 4), the State of Tennessee established the Governor's Highway Safety Program (GHSP). The General Assembly enacted Chapter 193 of the Public Acts of 1967, designating the Governor as the state official responsible for administration, and authorizing county and municipal participation. The Office of Urban and Federal Affairs (OUFA) was established within the Executive Department, with one of its divisions being the Highway Safety Planning Division. The Division was headed by a Coordinator who was designated the Governor's Representative for Highway Safety. The OUFA and GHSP remained in this organizational structure, expanding and contracting as funding dictated, until 1979, when the OUFA was abolished by Executive Order. The Governor's Highway Safety Program remained a part of the Executive Department until 1982, when it was transferred by Executive Order to the Department of Transportation.

Since April 1, 1982, the Commissioner of the Department of Transportation has been designated as the Governor's Highway Safety Representative. The Governor's Highway Safety Program is administered by the Director of Highway Safety and is organizationally attached to the Office of the Chief of Administration. Throughout its history the Governor's Highway Safety Office (GHSO) has been responsible for the development and administration of the state's annual highway safety planning document.

As part of the responsibility to organize and administer a statewide Highway Safety Program, the GHSO recommends approval, monitors, and evaluates individual highway safety projects within the annual planning framework. This responsibility requires the implementation of adequate administrative procedure meeting Federal and State guidelines. Federal funds are available primary to initiate new programs and to expand existing highway safety activities.

The purpose of the funding guide is to designate procedures for the preparation of the highway safety grant proposals and to specify the necessary administrative and fiscal controls that must be maintained for highway safety projects funded by the Highway Safety Act and subsequent amendments.

GHSO Organization



Moving Forward: Strategies for Success

Tennessee has developed a *Comprehensive/Strategic Highway Safety Plan* that was based on The American Association of State Highway and Transportation Officials' (AASHTO) Guidelines that defines a system, organization, and process for managing the attributes of the road, the driver, and the vehicle to achieve the highest level of highway safety by integrating the work of disciplines and agencies involved. These disciplines include the planning, design, construction, operation [incident management], and maintenance of the roadway infrastructure; injury prevention and control (emergency medical services [EMS], health education; those disciplines involved in modifying road user behaviors (education, enforcement, driver license [DMV]; and the design and maintenance of vehicles. In order to manage this complex system and to achieve the level of integration necessary to meet the highest levels of safety. The Tennessee Strategic Highway Safety Committee has taken on the responsibility of developing and implementing this safety plan to reduce fatalities in Tennessee. The team is comprised of the state transportation agencies: Tennessee Department of Transportation (TDOT), Tennessee Department of Safety (TDOS), Governor's Highway Safety Office (GHSO), Federal Highway Administration (FHWA), Federal Motor Carrier Safety Administration (FMCSA), and Nashville Metro Police. The committee reports directly to the Commissioners of Transportation and Safety on their activities and progress.

Emphasis Areas:

- I. Improve Decision Making Process and Information System
- II. Keep Vehicles in the Proper Lane and Minimize the Effects of Leaving the Travel Lane
- III. Improve Intersection Safety
- IV. Improve Work Zone Safety
- V. Improve Motor Carrier Safety
- VI. Improve Driver Behavior
- VII. Safe Communities
- VIII. Legislation
- IX. Training Programs

Providing the most effective and safest highway facilities is of critical importance. Our primary measurement for safety are reductions in the number of fatalities and injuries that occur because of motor vehicle crashes across the state each year. The State of Tennessee strives to enhance its safety program to ensure highway facilities are as safe as possible through education, engineering, enforcement, and emergency response.

We will be participating in the national enforcement waves through our *Booze It & Lose It* and *Click It or Ticket* campaigns. We will continue to encourage our law enforcement partners to participate fully in these initiatives by stepping up enforcement during these designated periods. We also will be implementing a more sustained *Buckle Up in Your Truck* campaign and making it more conducive to the "*Click It or Ticket*" model. We will initiate enforcement along with the media advertising in order to raise the seatbelt usage rate for pick-up truck drivers and their occupants.

This Highway Safety Performance Plan should be seen more as a detailed outline and not as a regulatory blueprint. That is, all parts as described within this plan are necessary, but there is flexibility to customize the structure and process according to external and internal factors.

II. PROGRAM GOALS

01-PA PLANNING AND ADMINISTRATION: To administer the State and Community Highway Safety Grant Program and other state- and federal-funded highway safety programs; to plan for coordinated highway safety activities so as to use strategic resources most effectively to decrease traffic crashes, deaths and injuries in Tennessee.

02-OP INJURY CONTROL - OCCUPANT PROTECTION: (1) To increase statewide average safety belt use to 79% (2) To increase child safety seat usage rates to 85% by 2006. (3) To increase Pick-Up Truck Occupants seatbelt usage rate to 67% in 2006.

03-AL ALCOHOL and OTHER DRUGS (AOD) COUNTERMEASURES: To decrease the number of alcohol- and drug-related motor vehicle crashes to 35 %.

04-AL YOUTHFUL DRIVERS, ALCOHOL and OTHER DRUGS: To decrease the number of 15 to 34-year-old drivers and passengers killed (K) or seriously (A) injured in all traffic crashes by 5% in 2006.

05-PT POLICE TRAFFIC SERVICES: To decrease the number of speed-related crashes 10% by the end of 2006, and to decrease the number of people killed or incapacitated in these crashes by 10% by the end of CY 2006.

06-TR TRAFFIC RECORDS: To coordinate and encourage improvements in the development and use of a complete and comprehensive state highway safety information system, and to support the Traffic Records Assessment Summary recommendations.

07-MC MOTORCYCLE SAFETY: To stop the upward trend of motorcycle riders killed and seriously injured in reportable crashes by 5% the end of CY 2006.

08-PS PEDESTRIAN, BICYCLE & PUPIL TRANSPORTATION SAFETY: To decrease pedestrian fatalities by 5% in CY 2006.

09-SC- SAFE COMMUNITY PROJECTS AND ROADWAY SAFETY : (1) To promote increased multidisciplinary safety activities in 15 populous communities representing at least 40% of the state population and 33 percent of state traffic deaths and serious injuries from the Baseline of 13 communities representing 30% of the population and 27.4% of deaths and serious injuries. (2) To inform the general public and safety advocates of changes in laws, new data, new studies, program opportunities, etc., and to reach high-risk audiences with informational and motivational safety messages from paid, earned media and PSA's. (3) To decrease work zone crashes by 5% in 2006.

10-EM- INJURY CONTROL AND EMERGENCY MEDICAL SERVICES : To improve traffic crash survivability and injury outcome by improving the availability, timeliness and quality of EMS response and by improving State and community coordination of EMS, public safety and mass casualty response.

III. HIGHWAY SAFETY PLAN PROCESS

OVERVIEW:

To maximize safety of the Tennessee Transportation System, a major focus and emphasis on highway safety has been an integral part of the Tennessee Department of Transportation's -Governor's Highway Safety Office strategic planning process. Combined with our mission to become more data driven with "measurable" results-oriented objectives, our initiatives and processes have gained mobility and improved substantially. We continue to strive for higher standards as planners, implementers, and evaluators with an emphasis on accountability. Tennessee continues with its strategy for allocating federal highway funds to state and local agencies.

Process for Identifying Safety Problems:

The specific highway safety problems that grantees wish to address must be data driven. That is, grantees are required to identify an intervention focus that represents a statistically demonstrable category of a heightened traffic safety problem. To assist agencies in this effort, they have the opportunity to request comparative analyses of various crash categories that is available through our computerized "Tennessee CARE" crash analysis system maintained by the University of Memphis and that now is available as a World Wide Web site.

Process for Project Development:

Specific projects must be designed in a way that provides for the assessment of reasonable and valid outcome measures of the projects' impact on highway safety. To assist potential grantees in this area, we offer technical assistance through GHSO staff resources and the University of Memphis with project intervention design and evaluation.

Determining the cause of injury/fatal crashes. The collection of quality data is paramount to the determination through analysis. Grantees will be encouraged to look deep within their community to unmask the root causes for over-representation in the data-defined problem area. Potential grantees for FFY 2006 were informed that the GHSO would consider any data-driven problem that they identified, but that the following areas were of high priority:

- ▶ a low rate of safety belt usage: a low rate of child passenger safety restraint usage
- ▶ a high rate of crashes with alcohol as a contributing factor;
- ▶ a high rate of crashes with speeding as a contributing factor;
- ▶ a high rate of crashes involving drivers 16-20 years old;
- ▶ a high rate of crashes involving drivers over 60 years old;
- ▶ a high rate of crashes involving the aggressive driver;
- ▶ a high rate of crashes resulting in serious injuries or fatalities;
- ▶ a high rate of crashes in work zones.

IV. PROCESS STRATEGY

The Governor's Highway Safety Office, The University of Memphis Injury Analysis And Intervention Group, and The National Highway Traffic Safety Administration Regional Program Manager reviewed the 1997 through 2003 data to determine the high priority areas that would be addressed with 402 funding in FFY 2006.

This was the second year that applications were accepted and scored through an online process as well as manually. An announcement regarding the FFY 2006 Highway Safety Program were mailed and emailed to potential state and local grantees, including all Tennessee Mayors, County Executives, Police Chiefs and Sheriffs. Potential Grantees were informed that the Tennessee GHSO was particularly interested in funding projects that possess the following characteristics:

- Interventions that focus on reducing injury-producing crashes;
- Specific problem-identification procedures that are data-driven and that thoroughly document a local crash injury problem;
- Specific systems for insuring high quality crash reporting by law enforcement (e.g., accuracy and completeness of forms, supervisory oversight, training, etc.);
- Specific plans for following up on crash injuries by linking crash data to medical information concerning such variables as: severity of injury, cost of treatment, degree of incapacitation, etc.;
- With respect to which specific interventions are chosen for funding, documentation of the rationale underlying the belief that the intervention has a reasonable probability of being effective;
- An adequate intervention design that will provide meaningful outcome data on the degree of success in reducing injury-producing crashes. Among other things, this priority requires that the applicant describe how the program's effectiveness will be measured, and the comparison data against which the program's outcome will be evaluated;
- Where local conditions permit, initiatives to coordinate crash-injury reduction efforts with other injury-reduction activities within the community, by participating in cooperative efforts with other professionals and citizens (e.g., educational, civic, judicial, business, medical, etc.) involved in creating a safe community.

Potential grantees were informed that, a full grant proposal for FFY 2006 funding had to be submitted that detailed:

- a) *their process for focusing on traffic safety problems that were data driven*
- b) *the logic behind their proposed intervention strategies*
- c) *the allowance for valid outcome measures in their project design*
- d) *a proposed budget.*

A total of 118 grant proposals were received from state, local agencies and not-for-profit organizations. These grant proposals were evaluated by a team of reviewers consisting of the GHSO leadership, members of Tennessee Department's of Transportation, Finance and Administration, Health, and Safety, the University of Tennessee and the University of Memphis. Based upon this analysis, recommendations for funding were made to the TDOT Commissioner of Transportation.

After completed grant applications and contracts are received, each is reviewed in detail to determine if they meet the GHSO's goals and objectives and project design requirements. (See charts for the online and manually processing which follows.)

The primary source of data for project justification is the University of Memphis crash data base. This data can be sorted and summarized to provide data for any problem areas that are subject to data verification. Other sources of information may include NHTSA, FARS, FHWA, University of Tennessee Department of Research, Tennessee Department of Safety, and the Tennessee Bureau of Investigations.

A project director is assigned for each project. The project director is the person who submitted the project or the TDOT person responsible for the "subject" of the project. A Program Manager is assigned from the Governor's Highway Safety Office to provide

assistance and oversight to each Grantee during the fiscal year based on program area. This person monitors the activity of his/her grantees, reviews billings and makes recommendations to the Director for continuation of the program.

The GHSO staff reviews quarterly reports from the grantees; monitors project activity on-site at least once per year, and provides daily office management. Feedback is provided to each grantee on the strengths and weaknesses of their activities. As needed, suggestions are made as to how the grantee should proceed to achieve the results described in the original grant proposal.

(Note: Some highway safety projects are selected and evaluated with the use of traffic crash data; others are selected because of a safety need that cannot easily be verified by crash data. The selection of other projects is dependent on the knowledge and experience of the persons proposing and approving these projects. Some projects that cannot easily be verified by data are Personnel Training, Tennessee Transportation Assistance Program, and distribution of the Manual on Uniform Traffic Control Devices (MUTCD). The knowledge that trained personnel and updated highway safety reference materials are necessary for an effective state program is used to justify these type projects.

Delivery:

The subsequent pages demonstrate how the GHSO provided access to the process to the various agencies. Pages 8-10, provides the prospective Grantee with directions on how to apply and tentative schedule of events. Page 11 is the grantee fax back form and certification of eligibility statement. Pages 12-13 are the opening dialogue from the actual website, www.TennGrants.org which outlines the Mission Statement, Vision of the Commissioners Strategic Plan, Key Emphasis areas, and listing of the NHTSA generic areas of participation. Following are flow chart presentations of the processes.

- Receiving of grant process for manual acceptance,
- Application Review process
- General Grant Application process.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
Governor's Highway Safety Office
James K. Polk Building, Suite 1800
505 Deaderick Street
NASHVILLE, TENNESSEE 37243

Phone: (615) 741-2589 Fax: (615) 253-5523

February 1, 2005

Dear Highway Safety Advocate:

The Tennessee Department of Transportation Governor's Highway Safety Office (GHSO) will be soliciting project proposals from state agencies, local governments, and not-for-profit organizations seeking funding available through Title 23, USC, Section 402. *The mission of this program is to develop, execute, and evaluate programs to reduce the number of fatalities, injuries, and related economic losses resulting from traffic crashes on Tennessee's roadways.* We strive to accomplish our mission through the use of *effective, efficient, and innovative* approaches designed to target specific highway safety problem areas.

If you have identified specific traffic safety problems and possible solutions in your community, county, or statewide, you are invited to submit a **Highway Safety Grant Application**. If you desire to submit a Highway Safety Grant Application, please return the Fax Back Form located under the www.tntrafficsafety.org web site listed as GHSO Grant Application link to the Governor's Highway Safety Office on or before the close of business February 21st, 2005. Following the receipt of the form, you will be directed to a registration site to enter the information electronically.

After you have confirmed your request via fax or email on the fax back form, we will reply via email a confirmation of your request. We will notify of the time when you can start entering electronically at the upgraded web site. You will assign a name and password at this site and be authorized.

The following program areas eligible for consideration for grant funding are:

- **Alcohol Countermeasures:** issues related to impaired driving
- **Youth Alcohol/Youth Traffic Safety:** issues relevant to persons under age 25
- **Occupant Protection:** issues related to seat belts and child passenger safety seat usage and enforcement

- **Safe Communities:** the creation of traffic safety coalitions and safe community programs
- **Police Traffic Services:** enhanced enforcement of traffic safety laws
- **Traffic Records:** collection and analysis of crash data
- **Emergency Medical Services:** programs related to care of crash victims
- **Pedestrian Safety:** educational issues related to pedestrian/vehicle collisions
- **Pupil Transportation:** safe transportation of school age children
- **Roadway Safety:** work zone safety

As a point of clarification, operational safety improvements, projects that include construction, engineering, or maintenance of highways, traffic signals, flashing lights for school zones, intersection improvements, signs and signals for railroad grade crossings, or engineering studies are not eligible for funding under this grant program and applications will not be accepted. In addition, the grants do not cover media purchasing or development unless directly related to a specific NHTSA approved campaign.

You are also notified that effective July 1, 2001, those counties and municipalities that do not have growth plans approved by the Local Government Planning Advisory Committee are not eligible for grants from the Governor's Highway Safety Office (see TCA 6-58-110). Before making application, make certain that you meet this requirement. Applications from counties or municipalities that do not meet this requirement will not be accepted.

Questions about the grant application process should be directed to Bob Richie, Grants Project Coordinator at (615) 253-5522.

Sincerely,



Chuck Taylor, Director

CT:jb

cc: Commissioner Gerald F. Nicely
Randy Lovett, Chief of Administration
Bob Richie, Grants Project Coordinator

HIGHWAY SAFETY GRANT APPLICATION AND REVIEW SCHEDULE

FY 2005-06

February 10	Notice of Availability of funds mailed to State Agencies and Political Subdivisions
February 21	Return Fax back form if interested.
March 31	Due Date for New Grant Applications. Lockdown of website. In order to be considered for funding, all grant applications <u>must</u> be finished on-line by Midnight and email sent to Governor's Highway Safety Office, 505 Deaderick Street, 18 th Floor, Nashville, TN 37243. Applications not done online must be signed and delivered by close of business April 1 st , 2005.
April 1-May 15th	Review Process of new applications by review committee.
May 15 th - May 30 th	Program Manager Review of Continuation Applications
June 1 – June 15	Apply for departmental grant authority (DGA) <ul style="list-style-type: none">• Meet with legal office to coordinate contract language for FFY 2006• Process Planning & Administration Grant,
June 15	Finish administrative review of Continuation grants. All accepted grants sent copies of RFP Grant proposal and Contracts for signature. Administrative Requirements Two (2) original copies of the grant application (must all be signed in blue ink) temporary filing write grant contract. Contracts returned to GHSO by June 30 th .
July 1	New Grants to Grantees for Signatures,
August 15	All Contracts Returned to GHSO from Grantees
August 16	Submit to Legal, Fiscal and Commissioner
September 2	All Grants Processed
September 2	Originals to Fiscal and Department of Finance and Administration
October 1	Grant Implementation Begins

Grant Application Fax Back Form

Request for
Highway Safety Grant Application
Federal Fiscal Year 2006

TO: _____ Fax Back Number: 615-253-5523

From: (please print) _____ Date: _____
Program Manager

Note: All Information is required.

Email Address of Program Manager: _____

Email Address of Fiscal Administrator: _____

Name of Fiscal Administrator: _____

Go to www.tntrafficsafety.org for your link to the application registration. Key in your requested name and password. This will be verified and authorized. Copies of the application and Application Guide can be copied from the web site so you can prepare required information prior to entering on-line. If you do not have web access, please let us know and we will mail you a Word version of the document on a floppy disk along with the application.

Name: (print/type) _____

Agency: _____

Address: _____










City: _____ State: ____ Zip: _____


Telephone: _____ Fax: _____

New Grant: ____ Continuation: ____ Year of Current Grant: ____

I hereby certify this unit of government (city/county) has an approved growth plan on file with the Local Government Planning Advisory committee per TCA 6-58-110.

Signature Title

 Home |  Help |  Log Out |  Back |  Print |  Add |  Delete |  Edit |  Save

 Instructions

GHSO Instructions

TennGrants.org Introduction

Mission: Develop, execute, and evaluate programs to reduce the number of fatalities, injuries, and related economic losses resulting from traffic crashes on Tennessee's roadways.

Vision of the Commissioners of Health, Safety, and Transportation are: to reduce fatalities on Tennessee roads by 10% by year 2009.

GHSO Key emphasis areas to accomplish are:

1. Traffic Records
2. Seatbelt Usage
3. Alcohol Countermeasure programs

To receive funding from the GHSO, a grant proposal **MUST** be directed at achieving the mission of saving lives and property. Program areas for which applications will be accepted are described below.

Alcohol Countermeasures

The enforcement, adjudication, education, and systemic improvements is necessary to impact drunk and drugged driving.

Youth Alcohol Programs/Youth Traffic Safety Programs

The enforcement, adjudication, education and systemic improvements necessary to impact alcohol impaired and drugged driving among drivers ages 24 and younger. Programs to educate and improve the driving skills, attitudes and behaviors of young drivers ages 15 - 24.

Comprehensive Community Traffic Safety Programs (CCTSPs), Corridor Safety Improvement Programs (CSIPs), and Safe Communities (SCs)

These programs normally combine two or more traffic safety strategies to address local traffic safety problems. Citizen advocacy groups, law enforcement, business, health agencies, education, the courts, the media, and others combine efforts by forming coalitions with elected officials and other community leaders to develop solutions to local traffic safety problems. Corridor Safety Improvement Programs focus education, engineering and enforcement expertise on segments of roadway with high crash rates. Safe Communities builds upon the successes of CCTSPs and can be used to start or expand a successful motor vehicle injury prevention program by using local data, establishing and expanding partnerships, creating an environment for citizen involvement, and integrating prevention, acute care and rehabilitation.

Emergency Medical Services

The development of programs are to improve and enhance the state trauma registry system in Tennessee; improve response time in rural areas; provide for hazardous materials training; and to develop innovative safety campaigns.

Occupant Protection

The development and implementation of programs designed to increase usage of safety belts and proper usage of child safety seats for the reduction of fatalities and severity of injuries from vehicle crashes.

Police Traffic Services

The enforcement necessary to directly impact traffic crashes, fatalities, and injuries. Speeding, aggressive driving, occupant protection, and DUI enforcement programs are priorities.

Pupil Transportation/Pedestrian Safety

The implementation of programs is to enhance the safety of children at school bus stops and while boarding/deboarding buses or the development, implementation and evaluation of educational, engineering, and enforcement programs that will enhance pedestrian safety.

Traffic Records

The continued development and implementation of programs designed to enhance the collection, analysis, and dissemination of collision data, increasing the capability for identifying and alleviating highway safety problems.

Bikes, Blades, and Boards

The development and implementation of programs is to reduce the frequency of involvement of bicycles, roller blades, and skateboards in traffic collisions.

Additional Instructions

If your project plan involves the goal of reducing some category of motor vehicle crash in your jurisdiction, you **MUST** provide the following:

- Three years of baseline statistics from your jurisdiction that are relevant to the category of crash you intend to reduce; for example, alcohol-related crashes.
- Comparative crash statistics from other similar jurisdictions that indicate your particular crash problem is above average.
- In the case of counter-DUI proposals that involve enforcement, baseline statistics on the numbers of proactive (i.e., not crash-related) DUI arrests and their associated (non-reduced) DUI conviction rates.

To obtain, analyze and present these statistics in your application you can:

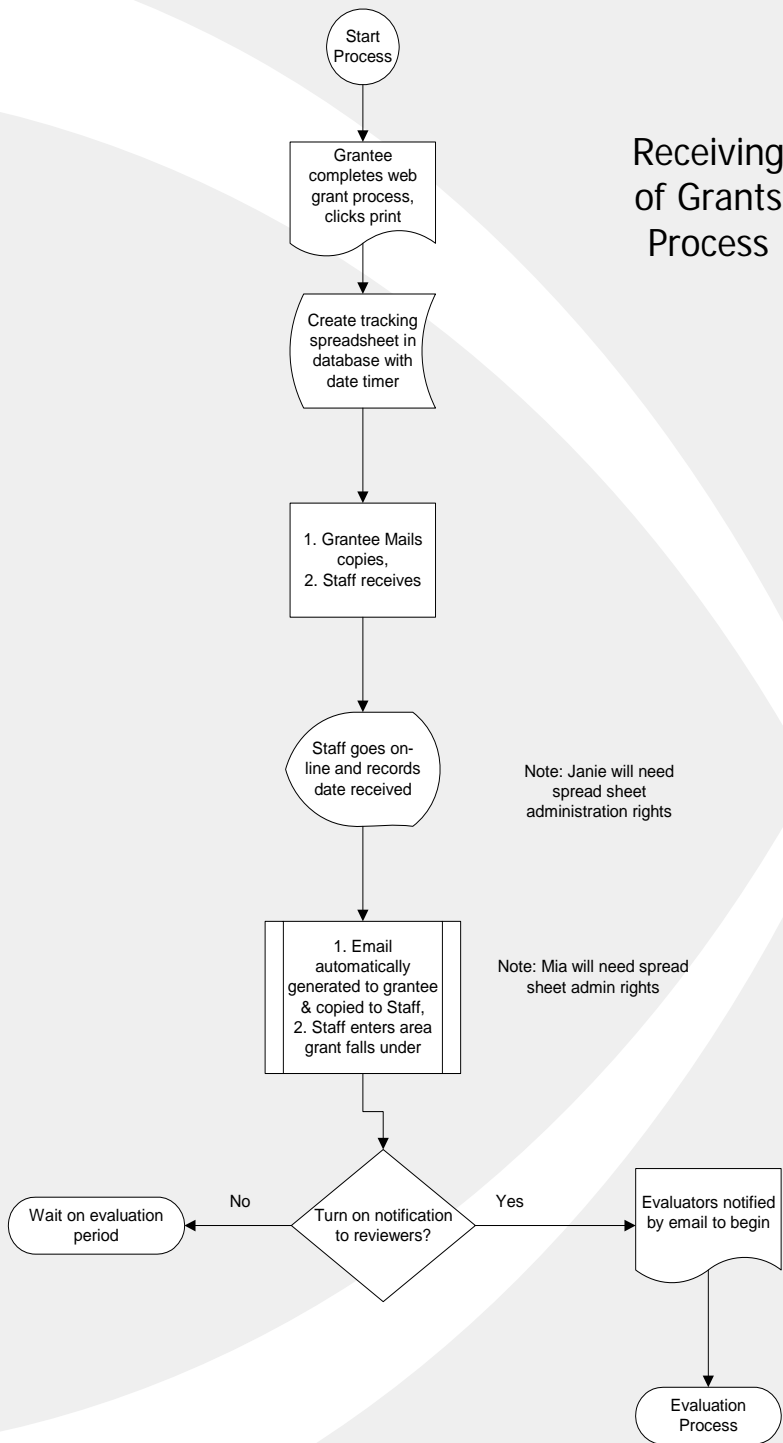
- Consult your own crash records.
- Obtain county and state-wide statistics on fatal crashes occurring in 2002 and before online from the Fatality Analysis Reporting System (FARS) maintained by NHTSA at the following Web address: <http://www.fars.nhtsa.dot.gov>
- Obtain statistics on all crashes in Tennessee and its jurisdictions occurring in 2001 and before online at: <http://care.cs.ua.edu>
- Contact our consultants at The University of Memphis for help in analyzing your crash problems:

Dr. Bill Dwyer	901-678-2149	bill-dwyer@mail.psync.memphis.edu
Gil LeVerne	901-678-5569	gil-leverne@mail.psync.memphis.edu
Patti Simpson	901-678-4694	patti-simpson@mail.psync.memphis.edu

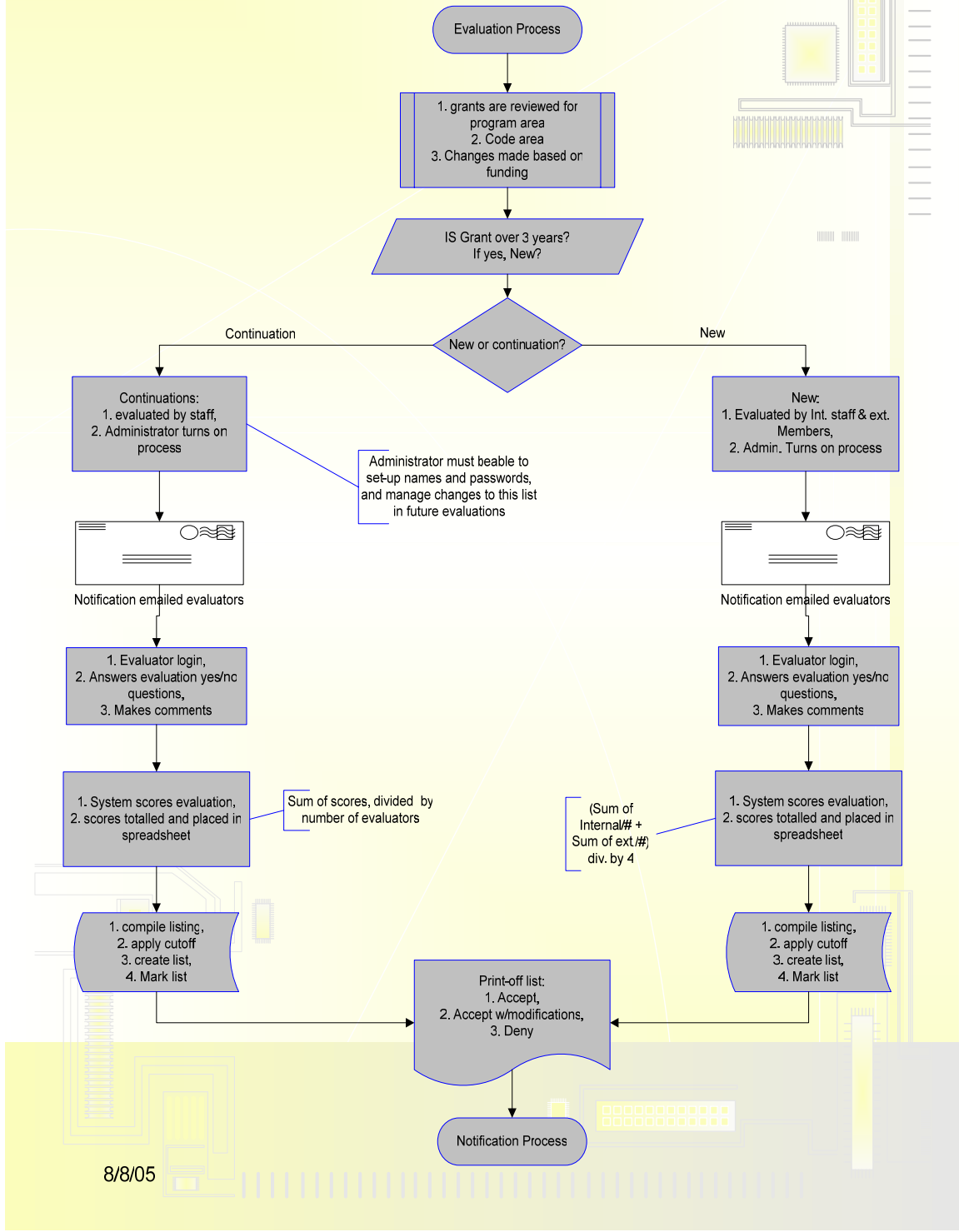
To go to get the Grant Manual for 2004-2005, go to Tennessee Traffic Safety Site on the log-in page, click Grant Information, click GHSO 2005-2006 Grant Application and select 2005-2006 Grant Application Manual.

To view courses for Project Planning and Proposal Evaluation, click on GHSO Program Web Courses on the TennGrants home page. You can email us for course password.

Receiving of Grants Process

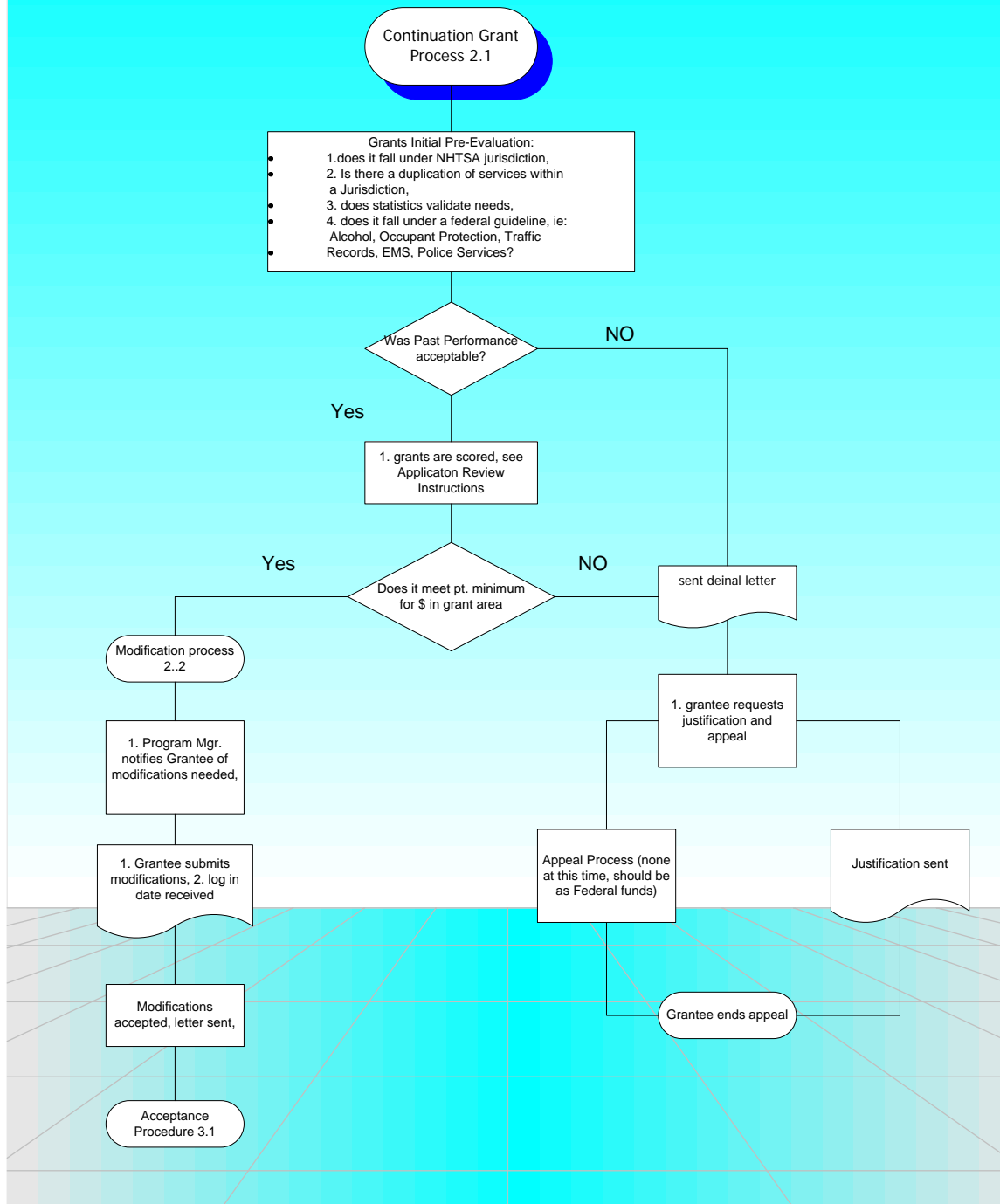


GHSO Evaluation Process



8/8/05

Grant Application Process - Manual



V. Calendar

Events and Activities 2005-2006

MONTH	THEME	MEDIA/PUBLICATIONS/ ACTIVITIES	APPLICATIONS/EVALUATION
October	Halloween – <i>Don't Drink and Drive</i>	Earned Media – News Release	
November	Thanksgiving – <i>CIOT/ BIAL</i>	Earned Media – News Release	
December	Nat Drunk & Drugged Driving Prevention Month	Impaired Driving Media Release Alcohol Mobilization Four statewide news conferences	2005 Annual Report Due Revised HS 217 Due
January			Submit 157 and 411 Applications and Certifications
February			Grant Applications requested
March			
April	Work Zone Safety Awareness Week Prom Season	TDOT News Conference Participation Media Purchase Media Purchase	Grant Application deadline
May	Click It or Ticket Mobilization May 22-June 4	News Release / News Conference Media Purchase	
June	100 Days Summer Heat June - September	Media Purchase Hands Across the Border News Conferences	
July	July 4 <i>Impaired Driving</i> Law Enforcement Challenge Tennessee Lifesavers Conference Date TDA	News Release Earned Media Earned Media	163 Grant Application and Certification
August	"You Drink & Drive. You Lose." National Crackdown	Booze It and Lose It Media Purchase and Enforcement Activities	410 Incentive Grant Application 405 Child Passenger Safety Grant
September	August 18-September 4		Highway Safety Plan CY2007 End of Federal Fiscal Year

VI. OVERVIEW of HIGHWAY SAFETY in TENNESSEE

A. Snapshot of the State

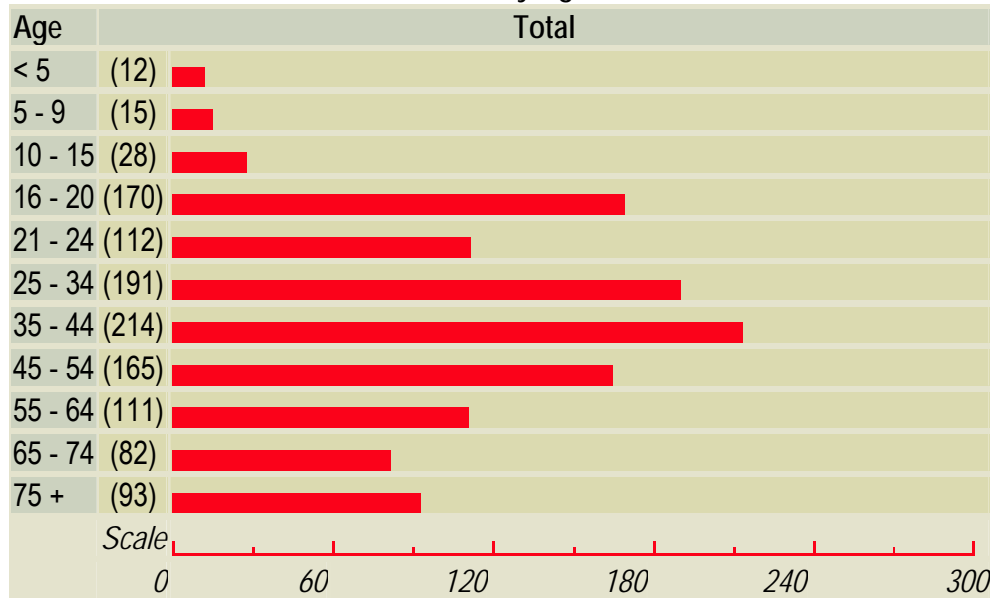
Population: The state of Tennessee is centrally located in the Southeast and is bordered by the states of North Carolina, Virginia, Kentucky, Georgia, Alabama, Mississippi, Missouri and Arkansas. Sharing a border with eight (8) states gives Tennessee the distinction of having more neighboring states than any other state in the nation. Tennessee encompasses 41,219 square miles of mountains, rolling hills and plains. Tennessee is also located on the nation's inland waterway system and enjoys the benefits of more than 1,062 miles of navigable waterways.

The 2004 U.S. Census Bureau population estimate for Tennessee is 5,900,962 distributed over 95 counties and 580 municipalities. The average state population density is less than 138 per square mile. About 65% of the population is urban and most of the urban areas are in the southeastern quadrant of the state. The state has a long, strong tradition of local control; politically, it is organized into townships, municipalities, and counties with overlapping jurisdictions.

Minorities: In the 2000 census, Tennessee's population was 80.2 percent white, 16.4 percent black, and 2.2 percent Hispanic, and the 2000 Census documents a large percentage increase in minority populations over the last decade. Tennessee's minority populations also include Native Americans, Asian persons and Native Hawaiian and other Pacific Islanders.

Age Distribution: According to the 2000 United States Census Bureau, 24.6 percent of the population is under 18 years of age, 63% is between the ages of 18 and 65, and 12.4% is over the age of 65.

2003 Persons Killed, by Age in Tennessee



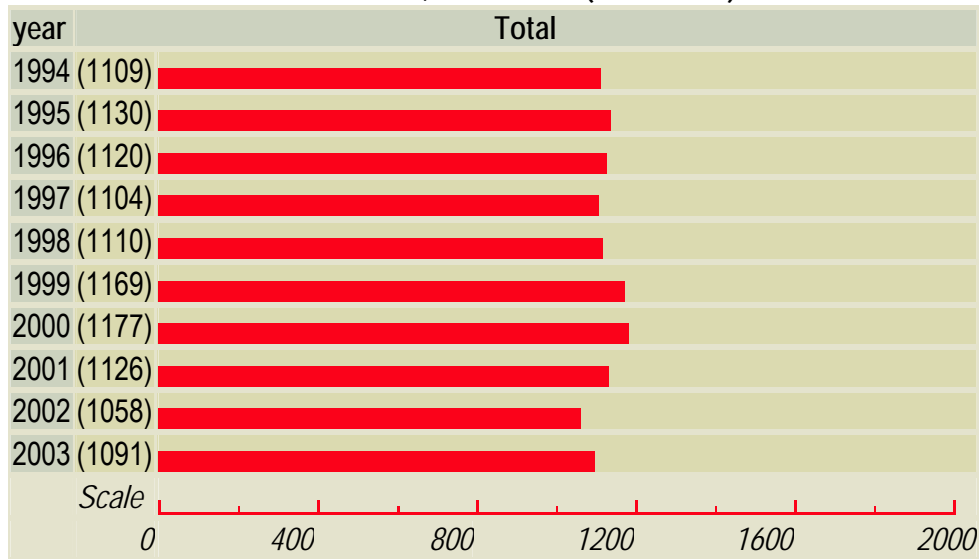
As the above chart from the NHTSA FARS website denotes, the age groups from age 16-54 accounts for more than 71% of our total fatalities in Tennessee. The national average for the 16-54 year olds is 69% of the total fatalities according to the U.S. DOT Traffic Safety Facts 2003. Males are almost 3:1 more likely than females to be involved in fatal crashes nationally. The most over-represented age group in Tennessee, as well as nationally, is the 35-44 year old population.

TENNESSEE
Five-Year Demographic and Statistical Comparison

Square Miles in State 41,219	2000	2001	2002	2003	2004
POPULATION	5,689,283	5,740,021	5,797,289	5,841,748	5,900,962
REGISTERED VEHICLES	5,770,725	5,755,996	5,741,262	5,691,537	6,119,903
LICENSED DRIVERS	4,282,384	4,201,436	4,253,014	4,228,235	4,279,063
MILES OF STATE & FEDERAL ROADS	13,787	12,791	12,797	13,794	13,808
MILES OF INTERSTATE	1,073	1,073	1,074	1,104	1,104
TOTAL ROAD MILES	87,417	87,825	88,287	88,519	88,987
TOTAL CRASHES	176,798	175,630	189,873	193,133	190,895
NUMBER OF NON-INJURY CRASHES	124,861	124,710	137,168	142,966	138,493
NUMBER OF INJURY CRASHES	50,760	49,794	51,647	49,076	51,259
NUMBER OF FATAL CRASHES	1,177	1,126	1,058	1,091	1,143
INJURIES	76,909	74,856	77,472	70,297	73,435
FATALITIES	1,307	1,251	1,177	1,193	1,287
VEHICLE MILES TRAVELED PER 100 MILLION MILES	658.72	676.06	683.16	689.36	708.60
DEATH RATE PER 100 MILLION MILES	1.98	1.85	1.72	1.73	1.82

** In July 2004, the Tennessee Highway Patrol and Commercial Vehicle Enforcement divisions merged into one TN Highway Patrol division.*

Fatal Crashes, 1994 - 2003 (Tennessee)



Fatal crashes also increased from 2002 to 2003 in Tennessee by 3%. The chart below shows an increase in the fatality rate per 100,000 populations, per 100,000 licensed drivers, and per 100,000 registered vehicles. Also noted is an increase in the resident population; however the fatality rate per 100 million has remained the same. Additionally, 37% (which is a 3% decrease from 2002 of 40%) were alcohol related and 61.8% were unrestrained (a .4% decrease from 2002 of 62.2%).

State:

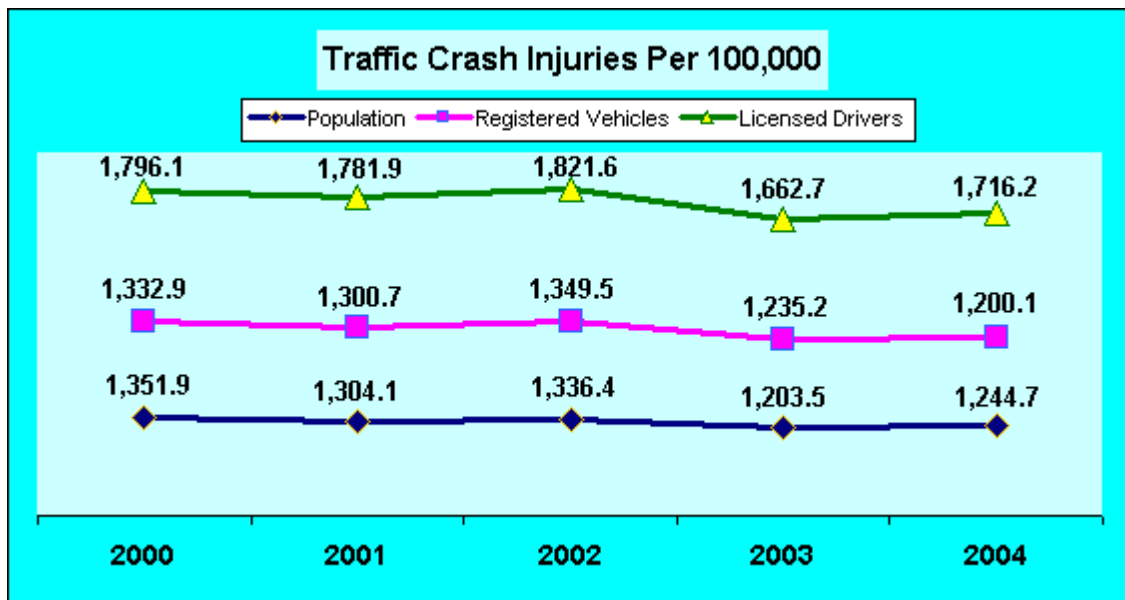
Year:

Fatalities and Fatality Rates, 1994 – 2003

Year	Fatalities	Resident Population (Thousands)	Fatality Rate per 100,000 Population	Licensed Drivers (Thousands)	Fatality Rate per 100,000 Licensed Drivers	Registered Motor Vehicles (Thousands)	Fatality Rate per 100,000 Registered Vehicles	Vehicle Miles Traveled (Billions)	Fatality Rate per 100 Million VMT
1994	1,214	5,163	23.51	3,826	31.73	5,116	23.73	55	2.23
1995	1,259	5,241	24.02	3,739	33.67	5,470	23.01	56	2.24
1996	1,239	5,314	23.32	3,806	32.56	4,909	25.24	58	2.12
1997	1,225	5,378	22.78	3,929	31.18	4,591	26.68	61	2.02
1998	1,216	5,433	22.38	4,073	29.86	4,529	26.85	63	1.94
1999	1,302	5,484	23.74	4,176	31.18	4,490	29.00	65	2.01
2000	1,307	5,703	22.92	4,251	30.74	4,891	26.72	66	1.99
2001	1,251	5,749	21.76	4,188	29.87	5,223	23.95	68	1.85
2002	1,177	5,790	20.33	4,206	27.98	4,861	24.21	68	1.73
2003	1,193	5,842	20.42	4,206	28.36	4,861	24.54	69	1.73

Injuries Per 100,000

	2000	2001	2002	2003	2004
Population	1,351.9	1,304.1	1,336.4	1,203.5	1,244.7
Registered Vehicles	1,332.9	1,300.7	1,349.5	1,235.2	1,200.1
Licensed Drivers	1,796.1	1,781.9	1,821.6	1,662.7	1,716.2



Number of licensed drivers and registered vehicles: While today the number of licensed drivers in Tennessee is 5.8 million, there are 4.8 million registered vehicles in the state.

Tennessee's road system stretches 87,259 miles, enough to circle the world more than three times. Of that figure, 13,752 miles are on the state-maintained highway system, representing 16 percent of the total highway miles within our state and carrying 72 percent of the traffic. Included in the state highway system are 1,074 miles of interstate highways. Although the interstate system makes up just over one percent of the total highway mileage, it carries one quarter of all the traffic in Tennessee.

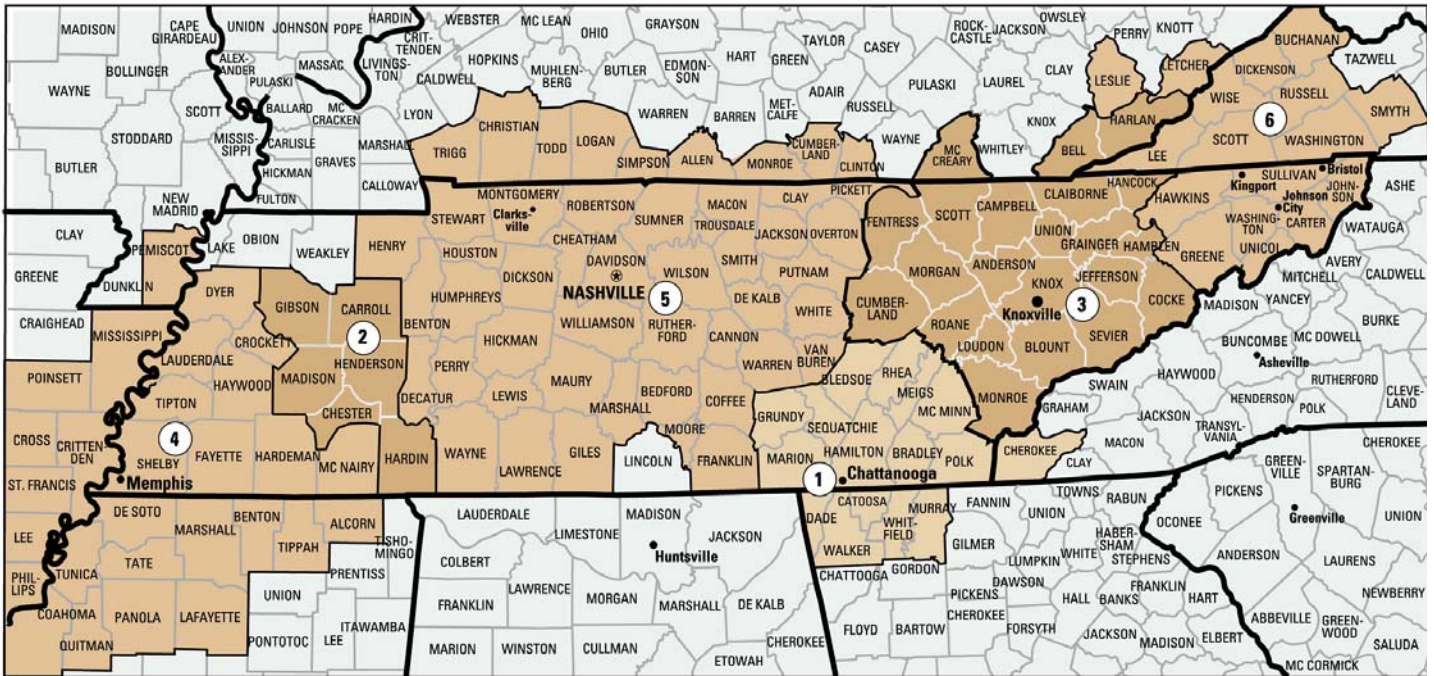
Major Businesses/Manufacturers & Hospitals: Tennessee is home to nationally recognized businesses and manufacturers such as Federal Express, Eastman Chemical, Dollar General, and AutoZone.

There are a total of 165 Hospitals in the State of Tennessee

Climate: Tennessee typically receives 50" of rain each year. Winds from the Gulf of Mexico bring most of the rain and snow to Tennessee. Tennessee averages 40oF in winter and 78oF in summer. West Tennessee averages 5" of snow while north-eastern Tennessee gets 16". Temperature extremes and rough weather challenge both the public and safety professionals. A strong correlation has been noted between crash experience and severity of winter weather.

Economy: Tennessee has a varied and generally healthy economy. Much of the state is rural and agricultural, ranking among the top agricultural states in the nation. Tennessee industry varies from farming, dairy and lumbering, to tourism, music recording and publishing, and to manufacturing and insurance and banking. Much of Tennessee's manufacturing, especially of automobiles, is located in the south central section, but significant manufacturing of tobacco and paper products is more widely distributed throughout the state.

TENNESSEE



- DMAs**
- ① Chattanooga
 - ② Jackson
 - ③ Knoxville
 - ④ Memphis
 - ⑤ Nashville
 - ⑥ Tri-Cities

Media: Tennessee is comprised of 5 designated media areas statewide. Tennessee print and electronic media outlets include 27 commercial and educational television stations, 132 commercial radio stations, 28 daily newspapers and about 101 newspapers published less frequently. The state is divided into three grand divisions, Middle, East and West Tennessee.

Political Status: The Governor of Tennessee is The Honorable Phil Bredesen (D), who is serving his first four-year term after having been elected in 2002.

The Tennessee General Assembly meets in Nashville each year beginning at noon on the second Tuesday of January. Each General Assembly meets 90 session days over a two-year period. Generally, legislative sessions last from mid-January through late April or May of each year. The General Assembly has 33 Senators and 99 representatives. The 104th General Assembly Senate is composed of 17 Republicans and 16 Democrats and elected to four-year terms. The 104th General Assembly House is composed of 53 Democrats and 46 Republicans elected in even-numbered years to two-year terms. In accordance to SJR498, the 104th General Assembly adjourned Saturday, May 28, 2005 from the first regular session. The second regular session will reconvene on January 10, 2006.

Law Enforcement Agencies: 398

Highway Safety Laws Needed In Tennessee:

GDL - Nighttime Restriction Provision

Mandatory BAC Test Law - Drivers Killed

Mandatory BAC Test Law - Drivers Who Survive

Open Container Law

Current Highway Safety Laws:

Primary Enforcement Seat Belt Law

Booster Seat Law

All-Rider Motorcycle Helmet Law

GDL - 6-Month Holding Period Provision

GDL - 30-50 Hours Supervised Driving Provision

GDL - Passenger Restriction Provision

Child Endangerment Law

High BAC Law

Repeat Offender Law

Sobriety Checkpoints Law

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The background of the entire page is a close-up, slightly blurred image of the American flag, showing the red and white stripes and the blue field with white stars. The flag is draped and appears to be in motion, with soft lighting creating highlights and shadows on the fabric.

GOVERNOR'S HIGHWAY SAFETY OFFICE

STATE OF TENNESSEE

PLANNING AND
ADMINISTRATION

SAFETY PROGRAM PLANS

Organization of this Document: Tennessee's Highway Safety Performance Plan is organized into 10 Priority Program Areas, reflecting both federal funding priorities and priorities assigned by analysis of the Tennessee Highway Safety Stakeholders. Each Program Plan contains five sections: 1. One or more program goals that support the statewide primary goal, and a set of one-year objectives; 2. Data describing the problem and justifying applying funds to it; 3. Description of effective strategies for addressing the problem; and 4. A set of projects or activities that support program objectives.

1. Program Goals and Objectives: Each program area has at least one measurable goal supported by multiple ("SMART" or Specific-Measurable-Achievable-Realistic-Time-framed) objectives. Goals are general statements about the overall change desired in the problem based upon problems identified by the process above. Progress toward each goal is measured by process, impact and outcome objectives. Objectives are specific statements of measurable, realistic and time-framed changes that will support the goals identified above. Performance Measures are statements of the specific means by which the state will track its progress toward each objective and goal. Baselines are the points from which progress is measured. When baseline data are not available, they will be gathered during the identified fiscal or calendar year. Base Year Either CY 2000 or the most current year available is used as the baseline. Data from this date forward are more complete and are comparable from year to year. Status is given in terms of the most recent complete calendar year, fiscal year or survey result. The most recent calendar year crash data available is 2003 and the most recent completed fiscal year is 2003.

2. Problem Identification: For each program, problem identification documents the following: · the magnitude and nature of the highway safety issue to be addressed, and the most significant at-risk groups, behaviors and locations. This portion of the plan provides justification for the selection of funded activities and criteria for project selection.

3. Science-based Strategies for Addressing the Identified Problem: Behavior change requires multiple strategies over extended periods of time, cause and effect is difficult to ascertain, and the selection of target sites requires careful analysis of multiple factors, so the Plan documents the following: · justification for selection of strategies to be funded using science-based proofs of effectiveness in addressing the at-risk issues and groups, and · criteria for grant award distributing the program funds to locations and/or organizations most likely to assist in achieving program goals and objectives.

4. Selected Strategies and Activities: Each program plan concludes with a description of the funded activities, organized by those strategies known to be most effective in achieving program goals. Program objectives are listed in the same order as the strategies and activities that support them. Some activities will affect more than one program objective or more than one program area. Each Strategy contains one or more funded Activities. Activity descriptions contain the following items:

- Brief statement of problem addressed
- Objectives
- Plans for self-sufficiency, and
- Type of analyses to be performed to determine whether objectives are met

I. GOALS and OBJECTIVES

A. Goal

To administer the State Highway Safety Grant Program and other state- and federal-funded highway safety programs; to plan for coordinated highway safety activities so as to use strategic resources most effectively to decrease traffic crashes, deaths and injuries in Tennessee.

B. Objectives

Objective 1: To produce required plans and documentation. Performance Measure: Timely delivery of annual programs, plans and evaluation reports. Baseline: Annual Highway Safety Plan and Evaluation Report delivered to NHTSA. Participated in development of TDOT-GHSO Strategic Highway Safety Plan for the Year 2010. Status: FY 2006 HSP delivered at end of August 2005; FY 2005 Annual Report will be delivered the last week of December 2005. FY 2005 project evaluations completed first quarter of 2004. Since FY 2000, the HSP has integrated federal funds and plans, demonstration grants, administered by the Tennessee Department of Transportation Governor's Highway Safety Office – TDOT-GHSO.

Objective 2: To deliver programs that are effective in changing knowledge, attitude and behavior and in reducing crashes, injuries and deaths.

Performance Measure: Analyses of program effectiveness based on moving three-year average state motor vehicle crash, death and injury data; and trend data based upon annual and episodic observational and opinion surveys. Baseline: in 2000, there were 176,798 crashes, 76,909 injuries, and 1,177 deaths. Statewide average safety belt use increased from 58.98% in 2000 to 74.42% in 2004. Status: Crashes, injuries and deaths are increasing. Belt use increased over the past four years. Few analyses of program effectiveness were performed. Although project and program effectiveness was required by the 2002 HSP, most projects did not require data collection or evaluation. This is being changed in this grant period and required of all grantees.

Objective 3: To coordinate transportation safety, public safety and injury control programs for the Department of Transportation and for the state of Tennessee.

Performance Measure: The number of transportation safety and injury control programs that are statewide in scope and multidisciplinary in nature, in which GHSO takes an active role. Baseline: GHSO chairs the Traffic Records Committee and the CODES Board of Directors. Status: In CY 2005, the Traffic Records Committee met irregularly. The Tennessee Governor's Highway Safety Office conducted a Traffic Records Assessment through NHTSA and upon the recommendations in the assessment summary re-convened the TRCC. The GHSO also participates on other Committees.

Objective 4: To incorporate a competitive grant online application process into the development and implementation of a portion of the FFY2006 Highway Safety Plan.

Performance Measure: All distribution of funds to multiple recipients administered through a time-limited RFP process with clear, written selection criteria. Baseline: The GHSO has had a competitive process; however, it has been updated to an online process for more effective management. Recipients expect to get at least 3 years of funding based on one-year grant award. Status: The 2006 development process resulted in a more targeted and defined RFP approach. The process was revised, recentralized and work is underway to begin the 2007 RFP process during February 2006.

II. PROBLEM IDENTIFICATION AND PROGRAM JUSTIFICATION

Leadership/Coordination

The safety mission of the State Highway Safety Office is the coordination of statewide action to decrease deaths and injuries on all roadways. This requires coordination of multidisciplinary programs supported by multiple funding sources, each with its own set of regulations and program goals. Achieving this mission may include leadership in internal TDOT activities such as the Strategic Planning Committee, Work Zone Committee and external activities such as participation within the Governor's Highway Safety Association. The GHSO has played an active role in the development of TDOT's Strategic Plan.

The safety mission also requires the coordination of overlapping activities performed with other state and local agencies, organizations, and advisory groups. The GHSO chairs the Traffic Records Coordinating Committee, participates in the Metropolitan Planning Organization, and chairs the CODES Board of Directors. The GHSO identifies relevant groups, reviews their missions and memberships, and works to assure maximum cooperation and collaboration in order to make the most efficient and effective use of the state's resources.

III. STRATEGIES FOR EFFECTIVE MANAGEMENT

- A. Program Planning- The GHSO conducts biannual planning sessions with staff, Department of Safety Planning and Research, University of Tennessee, and the University of Memphis, in order to analyze data and determine priorities.
- B. Strategic Planning- a Strategic Planning Committee has been developed incorporating individuals from the GHSO, Tennessee Department of Safety, Federal Highways, Tennessee Department of Transportation, Finance and Administration, and the Tennessee Department of Health. The goal is to develop a comprehensive strategic plan encompassing all areas of the state highway safety problem.
- C. Project Selection- the GHSO has instituted an online grant application process and has established a timeline for the selection process from the acceptance of applications, review and evaluation, award, and contract dates.
- D. Project Coordination- Criteria for grant awards have been established and documented in narrative and work flow chart form. Programs are assigned to Program Managers according to area of expertise to provide grantees with professional and effective guidance.
- E. Policies and Procedures- Federal and State guidelines are followed as well as a project director's manual and workshop that is conducted and re-evaluated each year.
- F. Program Evaluation- Funds are set aside for pre-post surveys of mobilizations, ongoing analysis through the University of Memphis, and surveys for the media awareness evaluation to analyze the effective use of our advertising funds.

IV. ACTIVITIES/STRATEGIES

STRATEGY: PROGRAM MANAGEMENT

ACTIVITY: PA PLANNING & ADMINISTRATION

Problem: Behavioral highway safety programs require state coordination of county and local-level programs, including many multidisciplinary programs, employing funds from several sources, and with overlapping regulations, objectives and responsibilities. The Governor's Highway Safety Office employs a planning and administration staff of seven (7) full time state employees and seven (7) full time University of Tennessee grant employees.

Objectives :

- Develop and prepare the Highway Safety Performance Plan (HSP).
- Develop and prepare additional plans as required.
- Establish priorities for highway safety funding.
- Develop and prepare the Annual Benchmark Report.
- Provide information and assistance to prospective aid recipients on program benefits, procedures for participation and development plans.
- Coordinate and facilitate training and public information activities for grant recipients.
- Encourage and assist local political subdivisions in improving their highway safety planning and administrative efforts.
- Review and evaluate the implementation of state and local highway safety funds contained in the approved HSP.
- Coordinate the HSP with other federally and non-federally funded programs relating to highway safety.
- Assess program performance through analysis of data relevant to highway safety planning.
- Utilize all available means for improving and promoting the Governor's Highway Safety Program.
- Complete the monitoring responsibilities of contracts and grants.
- Produce Annual operating budgets and develop biennial budget issues and strategies.
- Deliver programs that are effective in changing knowledge, attitude, and behavior to reduce crashes, injuries, and deaths.

Self-sufficiency: 50% state match

Evaluation: Annual Report

The background of the entire page is a close-up, slightly blurred image of the American flag, showing the red and white stripes and the blue field with white stars. The flag appears to be waving or draped. At the top and bottom of the page, there are solid dark red horizontal bars.

GOVERNOR'S HIGHWAY SAFETY OFFICE

STATE OF TENNESSEE

OCCUPANT
PROTECTION

06-02 INJURY CONTROL - OCCUPANT PROTECTION

I. GOALS and OBJECTIVES

A. Goals

Goal: To increase statewide average safety belt use to 79% from the baseline of 74.42% in 2005.

Goal: To decrease the number of fatalities due to being unrestrained to 59% from 61.8% in 2003

Goal: To reduce child fatalities by 20% with proper use of child passenger safety restraints.

B. Objectives

Objective 1: To increase statewide average safety belt use to 76% by the end of CY 2006.

Performance Measure: Percent of restrained occupants in all front-seat positions in passenger motor vehicles and light trucks.

Baseline: 74.42 in 2005. Status: The May 2005 statewide observational survey found 74.42% average statewide use. Use had increased minimally.

Objective 2: To increase the usage of restraints by Pick-Up Truck Drivers to 67% in CY2006

Performance Measure: Percent restrained by observational survey. Baseline: 57.48% in 2004 Status: 62.60% in 2005

Objective 3: To increase statewide average correct child safety seat use to 20% by the end of CY 2006.

Performance Measure: percent of child safety seats correctly installed. Baseline: No current baseline data for correct use is available. Status: Data will be collected at checkpoints in CY 2006

II. PROBLEM IDENTIFICATION and PROGRAM JUSTIFICATION

Tennessee

Passenger Vehicle Occupant Restraint Use Rates, 2003	
Fatally Injured Occupants (Known Use Only)	Observed Use
33.9%	69%
43.2%	79%
63.2%	95%

Seatbelts do not prevent crashes from occurring; not all crashes are survivable and seatbelts are not 100% effective in preventing fatal injuries in serious crashes. They are, however, generally accepted as the most effective means of reducing fatalities when crashes do occur. National research indicates that seatbelts (i.e., properly used lap/shoulder belts) lower the risk of fatal injuries for front seat auto occupants by 45% and by 60% for light truck occupants.

RESTRAINT USE (Safety Belts & Child Seats)	Passenger Vehicle Occupant Deaths (age 5+)				Current Lives Saved by Safety Belts	Additional Savable at 100%
	Total	Restrained	Unrestrained	Unknown		
Tennessee	955	306	596	53	347	252
(Primary) Front seats for occupants of passenger cars - \$50 to \$100 Fine						

According to the Survey of Safety Belt and Helmet Usage in Tennessee Report for 2005 conducted by the University of Tennessee Center for Transportation Research, 2004 was a very significant year in Tennessee's highway safety community. For the fourth year in a row, the Tennessee Governor's Highway Safety Office (GHSO) participated in NHTSA's Click-It-Or-Ticket safety campaign. Additionally, the Tennessee Highway Patrol conducted a safety and enforcement campaign called "One Hundred Days of Summer Heat." While this effort targeted speeding and impaired drivers, it does compliment the Click-It-Or-Ticket program by providing highly-visible traffic enforcement across the state. Finally, the Tennessee State Legislature enacted a bill which makes failure to wear a seatbelt a primary offense in the State of Tennessee. The 2005 statewide survey of seatbelt and motorcycle helmet usage is the first statistically significant statewide check of seatbelt trends to be completed in its entirety since the primary enforcement law took effect.

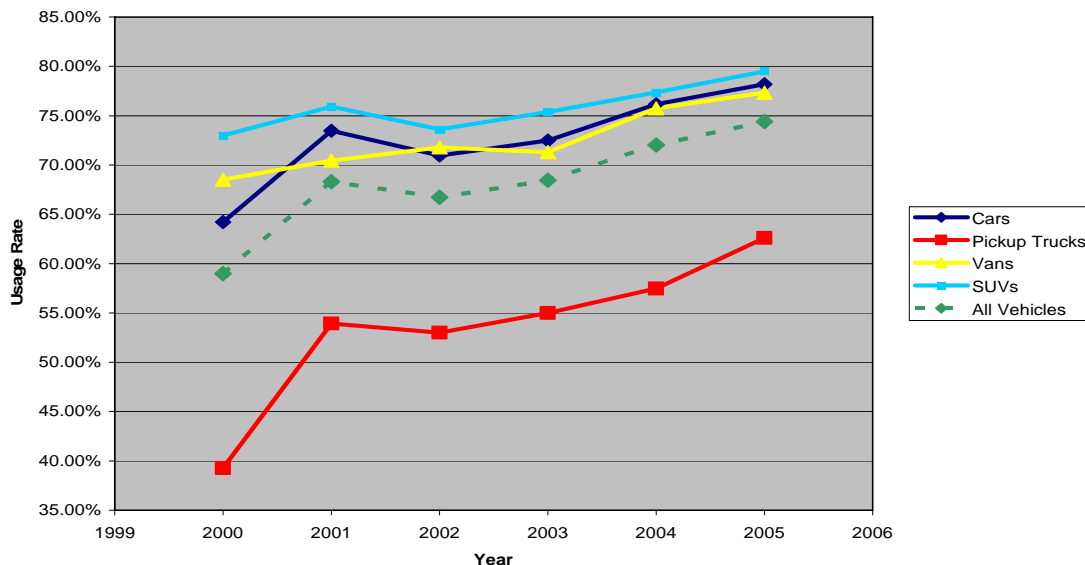
For 2005, the final statistically-adjusted statewide seatbelt usage rate is 74.42%. By comparison, the final usage rate for 2004 was 72.04%. While most experts agree that passage of a primary seatbelt law results in usage rates approximately 10% higher than with a secondary seatbelt law, Tennessee did not experience such a jump from 2004 to 2005. Several factors may contribute to this phenomenon, foremost among them being the previous four years of the Click-It-or-Ticket campaign. Also, despite the fact that most of the 2004 seatbelt survey observations were completed prior to the July 1 effective date of the primary law, there was much discussion of the impending change in all forms of news media at the time these observations were made.

Tennessee Seatbelt Usage, 2000-2005

Survey Year	Passenger Cars	Pickup Trucks	Vans	Sport Utility Vehicles	All Vehicles
2000	64.21%	39.27%	68.51%	72.99%	58.98%
2001	73.47%	53.94%	70.45%	75.90%	68.31%
2002	70.97%	53.00%	71.78%	73.60%	66.71%
2003	72.48%	54.99%	71.30%	75.37%	68.45%
2004	76.14%	57.48%	75.75%	77.35%	72.04%
2005	78.18%	62.60%	77.34%	79.49%	74.42%

Within this year's results, many historical trends continue. Pickup trucks continue to have the lowest usage rate of any vehicle type by a wide margin, although this rate is improving. For 2005, pickup trucks occupants were observed to have a seatbelt usage rate of 62.60%, up from 57.48% in 2004. The next lowest rate by vehicle type was 77.34% for vans. Cars and sport utility vehicles returned usage rates of 78.18% and 79.49%, respectively. To further illustrate the recent progress brought about in increasing seatbelt usage across the state of Tennessee by both the Click-It-Or-Ticket campaign and passage of a primary seatbelt enforcement law, Table 1 shows annual usage rates for all vehicles, passenger cars, pickup trucks, vans, and sport utility vehicles. The figure below shows the trend in graph form.

Figure 1: Tennessee Seatbelt Usage, 2000-2005



Year	Restraint Used		Restraint Not Used		Restraint Use Unknown		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1994	236	23.2	755	74.2	27	2.7	1,018	100.0
1995	256	24.1	770	72.4	38	3.6	1,064	100.0
1996	278	26.5	745	70.9	28	2.7	1,051	100.0
1997	265	26.1	722	71.2	27	2.7	1,014	100.0
1998	269	25.5	741	70.3	44	4.2	1,054	100.0
1999	279	25.3	764	69.3	59	5.4	1,102	100.0
2000	274	25.4	757	70.1	49	4.5	1,080	100.0
2001	297	28.3	702	66.8	52	4.9	1,051	100.0
2002	314	31.9	613	62.2	58	5.9	985	100.0
2003	316	32.7	597	61.8	53	5.5	966	100.0

Tennessee Occupants of Passenger Cars and Light Trucks Killed in Crashes by Restraint Use, 1994 - 2003

Tennessee Drivers of Passenger Cars and Light Trucks in Fatal Crashes by Restraint Use, 1994 - 2003

Year	Restraint Used		Restraint Not Used		Restraint Use Unknown		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1994	564	39.9	814	57.6	36	2.5	1,414	100.0
1995	609	40.5	852	56.6	43	2.9	1,504	100.0
1996	643	44.2	767	52.7	45	3.1	1,455	100.0
1997	666	45.7	743	51.0	49	3.4	1,458	100.0
1998	662	44.3	775	51.8	59	3.9	1,496	100.0
1999	674	44.3	788	51.8	60	3.9	1,522	100.0
2000	648	43.5	775	52.1	65	4.4	1,488	100.0
2001	714	48.7	688	46.9	64	4.4	1,466	100.0
2002	660	50.2	593	45.1	63	4.8	1,316	100.0
2003	709	51.3	601	43.5	73	5.3	1,383	100.0

III. STRATEGIES FOR DECREASING DEATHS & INJURIES

A. Strategies Selected for 2006

Enforcement activity alone is not adequate to force increased belt use and correct use of child safety seats; other partners, including the medical community and businesses need to be belt use proponents. Over more than 30 years, the most effective means of encouraging preferred behaviors such as belt use is the combined employment of multiple strategies --in the case of belts, this would include standard enforcement laws with serious financial or other consequences, waves of enforcement preceded and followed by public information that increases the perception of risk of citation. Education about the benefits of belt use is effective with some sub-populations.

Strategy: Enforcement of Safety Belt and Child Passenger Safety laws. Numerous studies have shown that after belt use laws are passed, there is an initial wave of voluntary compliance. However, highly publicized and visible waves of enforcement of belt laws are necessary for the public perception of risk of citation and which is key to increased safety belt compliance by those risk-takers who are least likely to buckle up.

CHILD RESTRAINTS (Includes Child Seats & Belts)	Passenger Vehicle Occupant Deaths (age <5)				Current Lives Saved	Additional Savable at 100%
	Total	Restrained	Unrestrained	Unknown		
Tennessee	11	10	1	0	15	1
<i>Restraint required < 4 years old - \$50 Fine</i>						

History: Tennessee passed a primary seat belt law in July of 2004. The ten point increase that usually is reflected in the seat belt usage rate when a state passes a primary law, didn't occur in Tennessee. The observational survey conducted by the University of Tennessee showed only a minor increase from 72.04 to 74.42. Police officials often said that the failure to enforce was because Tennessee's primary law was difficult to cite. Enforcement officers' opinion at that time was that the Legislature was not serious about the law when they made it a primary law with a \$10 dollar fine and no points against the driver's license.

However, since 2000, the citation rate for occupant protection violations has risen dramatically as a result of the high level of traffic enforcement activity. Enforcement of the child safety restraint has always been a high priority.

Tennessee Occupant Fatalities by Age Group, 1994 - 2003

Year	Age												Total
	< 5	5 - 9	10 - 15	16 - 20	21 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	> 74	Unknown	
1994	25	21	34	183	119	208	168	103	75	82	87	0	1,105
1995	22	12	28	191	126	228	173	104	89	80	88	0	1,141
1996	23	15	34	180	117	216	195	94	71	89	102	0	1,136
1997	15	11	26	175	111	216	191	114	81	75	93	0	1,108
1998	19	17	26	187	105	216	168	127	84	82	95	1	1,127
1999	12	22	35	183	111	240	204	143	87	74	99	2	1,212
2000	14	17	26	182	129	231	220	133	88	64	93	1	1,198
2001	17	10	25	184	135	211	184	157	99	75	69	0	1,166
2002	14	17	28	193	126	170	177	127	89	56	102	0	1,099
2003	12	10	21	160	107	181	197	142	98	73	88	0	1,089

Enforcement Mobilizations: Mobilizations are high-profile law enforcement programs, combined with paid and earned media, and evaluated in terms of observations of belt use and surveys of public awareness and public changes in behavior. These mobilizations consist of 5 actions: 1) Two Weeks of High-intensity Traffic Law Enforcement; 2) Intense Publicity of paid and earned, using messages that increase the perception of risk; 3) Pre/post Observational Surveys; 4) Pre-post Knowledge/Attitude/Behavior Surveys; and 5) Immediate reporting of enforcement and media activity. During FY06, three such mobilizations are planned: an Alcohol Mobilization in December, 2005, a Safety Belt Mobilization in May, 2006 and a Multiple Message Mobilization in mid-Summer, 2006

Strategy: Education and training Child safety seat use is so complicated that, ideally, every individual should be educated in correct installation and use of their specific equipment in their specific vehicle. This is clearly impossible to do from the state level, so training and certification of child safety seat experts who can be available locally is being made available throughout the state.

Strategy: Evaluation Statewide, local and subgroup observational and opinion surveys will be used to target enforcement and education activities and to identify motivators for non-use in high-risk populations. Surveys will be incorporated into the mobilizations.

Strategy: Empowerment Provision of technical support, community grants, and data or survey methodologies will give communities the tools and incentives to identify the problems they need to address locally and ideas for addressing the problems to change social mores. Expanding partnerships with diverse organizations and high-risk and hard-to-reach populations, as well as expanded outreach to minority audiences, also contribute to community empowerment.

B. Project Selection Criteria

General Criteria:

1. Communities with population in excess of 10,000 and with many highway miles and other exposure factors.
2. A plan to evaluate the effectiveness of coalition-supported activities, and
3. A history of using Highway Safety funds effectively as seed money to develop continuing programs.

Smaller communities may be eligible if they demonstrate problems of unusual scope or unusual buy-in and effectiveness in past Highway Safety projects.

Safe Community Occupant Protection Projects: Priority will be given to communities

1. With the general factors above
2. With an identified and established Safe Community Coalition
3. With low belt use or high improper child safety seat use or low injury-to-death ratio supported by local data and applying for a new project.

Teen Occupant Protection Projects: Priority will be given to communities

1. With the general factors above
2. With low belt use in the teen population, supported by local data.
3. Which demonstrate community involvement through matching funds and/or activities, and
4. Involving and led by local students and law enforcement.

Diversity Challenge Projects: Priority will be given to communities with the general factors above and with low belt use or high improper child safety seat use or low injury-to-death ratio supported by local data and with demonstrated community planning and coordination.

Elementary and Secondary School Projects: Priority will be given to communities with the general criteria above and with low safety belt use or low injury-to-death ratio, supported by local data; and with school system, student and local law enforcement involvement.

Buckle Up in Your Truck: Priority will be given to communities with the general criteria above and with low belt use or low injury-to-death ratio supported by local data, large numbers of crashes and crash-related serious injuries and deaths, and with many highway miles and other exposure factors.

Child Passenger Safety Fitting Station Projects: Priority will be given to communities with the general criteria above and with certified CPS Technicians performing car seat checks, demonstrating need for project start-up materials, and that are willing to make the fitting stations available to the public on an on-going basis rather than just for special events.

IV. ACTIVITIES/STRATEGIES

A: General Occupant Protection

STRATEGY -- PROGRAM MANAGEMENT

Activity: OP SUPPORT 1 FT PROGRAM MANAGEMENT POSITION.

Problem: Tennessee average safety belt use is below the national goal of 90% by 2005 established by the President. Statewide activities require planning, coordination, communication and evaluation.

Objective: Provide oversight of program activities—Program Management position will perform data analysis and develop, monitor program and contract finances and activities for Occupant Protection, and EMS Program areas. Determine statewide average safety belt use to indicate what percentages of motorists are wearing safety belts and if programs are effective.

Evaluation: Compare program objectives and planned activities with accomplishments and comment on reasons for success.

STRATEGY -- EDUCATION Public Information & Education

Activity: OP PUBLIC INFORMATION AND EDUCATION

Problem: Those who respond to safety messages are already buckling up. The nearly 25.6% of Tennessee travelers who do not use seat belts must be reached with different media and messages, and these must be updated regularly to both be perceived by the various audiences and make a difference to them. Child safety seats are not properly used because of confusing instructions. Changes in laws and technologies must be disseminated widely. A variety of messages are required for different ages and cultures.

Objectives:

1. To incorporate PI&E into OP programming in accord with long-range PI&E plan.
2. To reach 25% of the target audiences with appropriate messages and change the behavior of 25% of them.
3. To conduct Click It or Ticket, Buckle Up in Your Truck, and Teen Occupant Protection Campaigns.

Self-sufficiency: State administered.

Evaluation: University of Tennessee Survey PI&E Evaluation Administrative- number of persons receiving messages. Impact: survey change in people's behavior or perceptions.

Activity: SAFE COMMUNITIES – Occupant Protection Activities

Problem: Community members must collaborate to prevent all types of injuries and make their community a safer place to live by forming coalitions of public safety and health professionals, engineers and planners, private citizens and advocacy groups, and business, education and faith leaders to combine resources to implement programs that will be successful in changing public knowledge, attitudes and behaviors.

Objective: Provide funding for 4-6 Safe Communities in FFY 2006. Support occupant protection activities for Safe Communities Coalitions.

Self-sufficiency: Communities will maintain their collaborative efforts in a continued Safe Communities concept.

Evaluation: Administrative evaluation of planned activities. Impact evaluation of programs implemented by the Safe Communities Coalition

Activity: DIVERSE COMMUNITIES - Occupant Protection Activities

Problem: Tennessee's diverse communities and minority population (Hispanic, African American, Laotian, and others) have been shown by local surveys to have lower belt use than the statewide average. While not a large portion of the state's population, they are concentrated in a few areas of the state. Strategies for communicating safety messages and motivating changes in behavior must be culturally sensitive and community-driven. Community leaders and opinion leaders must be involved in program development and implementation. In some minority populations, the faith community is the most important social institution and can have a greater impact on the community than traditional safety advocates and media messages; in others, youth leadership is vital. Strategies may include safety fairs, other safety events associated with various institutions, and development of localized messages.

Objective:

1. Assist up to five minority/ diverse communities to develop local programs to address safety belt use.
2. Assist one consortium of opinion leaders to produce a community-wide competition for belt use during FFY 06.
3. Support occupant protection activities in up to 5 Safe Communities Coalitions that have completed a Traffic Safety Assessment.

Self-sufficiency: This is a one-time incentive grant to encourage safety belt use.

Evaluation: Administrative evaluation of planned activities. Pre and post-observation safety belt survey results of implemented programs.

Activity: Law Enforcement MOBILIZATION ("Click It or Ticket")

Problem: Only 74% of Tennessee motorists wear their safety belts. The President has supported an initiative to increase the national safety belt use rate to 90%. In an attempt to achieve this goal, Tennessee will continue a program of heavy enforcement combined with a hard-hitting media and public information campaign. This combination is known as a mobilization or STEP wave.

Objective: 1. Increase safety belt use to 80% by the end of CY 2006.
2. Maintain STEP Wave concept of enforcement, participating in national mobilization periods
3. 85-100% of TN Law Enforcement (LE) agencies will participate in safety belt mobilizations

Self-sufficiency: Agencies will be required to pay for officer regular time to do the STEP Waves. They will be encouraged to continue the concept after the grant period is completed.

Evaluation: Administrative evaluation. Local surveys to determine if safety belt usage has increased. Enforcement statistics.

Activity: ELEMENTARY and SECONDARY SCHOOLS – Occupant Protection

Problem: Teens and young adults do not buckle up consistently and some never buckle up. Schools can counter this by introducing and reinforcing the habit as an integrated portion of their school educational and social experience. Students may be involved in Safe Communities assessments and coalition building, belt use or other safety behavior surveys, program development and other empowering activities related to highway safety.

Objective: Provide funding for 4-6 School systems and reach 4,000 students with the program during FFY 2006.

Self-sufficiency: Schools will be able to continue using the materials, projects and curricula developed locally.

Evaluation: Administrative evaluation of planned activities. Local evaluation of projects, materials and curricula. Pre- and Post- observation seat belt surveys.

STRATEGY -- EVALUATION Surveys & Studies

Activity: OP OBSERVATIONAL SURVEY – SAFETY BELTS

Problem: Longitudinal data on safety belt and child safety seat use are required by the federal government and for state program design and analysis. The last observational survey took place in 2002. The data were used for program planning and evaluation. Additionally, observational surveys are required prior to and following periods of enforcement known as Buckle Up! mobilizations.

Objectives: 1. Review and revise survey protocol. Support automation if available.
2. Perform statewide survey during 2006, identifying vehicle type, driver/passenger, age, and gender.
3. Analyze and publish survey results by July 2006..

Self-sufficiency: This is a highway safety program management responsibility.

Evaluation: Did the survey provide valid, useful information? Was it cost beneficial? Did BOTS or other program staff use the data in program development/ analysis?

Activity: LE MOBILIZATION and Public Information and Education Campaign ("BUCKLE UP in Your Truck)

Problem: Only 62.60% of Tennessee's Pick-Up Truck Drivers wear their safety belts. In an attempt to achieve the goal of increasing overall seat belt usage to its goal, Wisconsin will continue a program of heavy enforcement combined with a hard-hitting media and public information campaign. This combination is known as a mobilization or sSTEP wave.

Objective: 1. Increase safety belt use to 67% in Pick-Up Trucks by the end of CY 2006.
2. Maintain sSTEP Wave concept of enforcement, participating in national mobilization periods.

Self-sufficiency: Agencies will be required to pay for officer regular time to do the sSTEP Waves. They will be encouraged to continue the concept after the grant period is completed.

Evaluation: Administrative evaluation. Local surveys to determine if safety belt usage has increased.

STRATEGY -- EDUCATION -- Training

Activity CHILD PASSENGER SAFETY TRAINING and COMMUNITY EDUCATION

Problem: Almost 90% of child safety seats are used incorrectly. This is because fitting a seat to a car and a child to a seat is confusing and difficult. Difficulties arise because child restraints are not always compatible with the vehicle, recalls may have been made, parts may be missing from the seat, etc.

Objective: Increase correct child safety seat use to 20% by 2003 by doing the following training:
1. Certify an additional 100 Child Passenger Safety Technicians.
2. Provide mentoring/assistance to newly trained CPS Technicians in a minimum of 30 communities.
3. Evaluate/modify and develop child passenger safety public information and education materials.

Self-sufficiency: Technicians and instructors will be required to maintain their certification by attending inspection events and mentoring less experienced technicians.

Evaluation: Administrative evaluation. Perform 3 month follow up survey of all CPS Technicians trained; conduct a follow-up evaluation statewide of at least 500 families who received assistance from CPS Technicians.

The background of the entire page is a close-up, slightly blurred image of the American flag, showing the red and white stripes and the blue field with white stars. The flag is draped and appears to be in motion.

GOVERNOR'S HIGHWAY SAFETY OFFICE

STATE OF TENNESSEE

**ALCOHOL
COUNTERMEASURES**

I. GOALS and OBJECTIVES

A. Goal

To decrease the number of alcohol- and drug-related fatalities to 35% in 2006 from the baseline of 41% in 2000.

B. Objectives:

Objective 1: To decrease the number of alcohol related fatalities to 35% in CY 2006.

Performance Measure: The annual number of motor vehicle fatal and injury crashes that are alcohol or drug-related. — Alcohol-related“ is defined as —...a crash in which at least one driver, pedestrian or bicyclist involved was listed on the crash report or by the coroner as having drunk alcohol before the crash.“ Baseline: In CY 2000, 41% of fatalities were alcohol related Status: In CY 2003, 447 people were killed in alcohol related crashes representing 37% of total fatalities.

Objective 2: To decrease the number of alcohol- or drug-related crashes by 5%

Performance Measure: The annual number of alcohol-related motor vehicle crashes, incapacitating injuries and deaths reported to the DMV for the calendar year (plus 30 days for deaths). Baseline: The CY 2000 for alcohol-related crashes was 462, deaths were 542 a Status: The CY 2003 crashes are 403, and deaths are 447.

Objective 3: To decrease the number of driver fatalities with BACs of 0.08 or greater by 10% by the end of 2006.

Performance Measure: Number of drivers killed and who were tested for BAC whose test showed BAC of 0.08 or greater. Baseline: In CY 2000 404 drivers killed with BAC's greater than 0.08 Status: In CY 2003, 256 drivers killed and tested had a BAC of 0.08 or greater.

Objective 4: To provide the Booze it and Lose It Message statewide reaching 50% of our target audience in 2006.

Performance Measure: Target Audience Reach from 25% to 50%. Baseline: Total Statewide Awareness in 2002 was less than 10%. Status: In CY 2003 over 40% of the target audience had heard the Booze It and Lose It message.

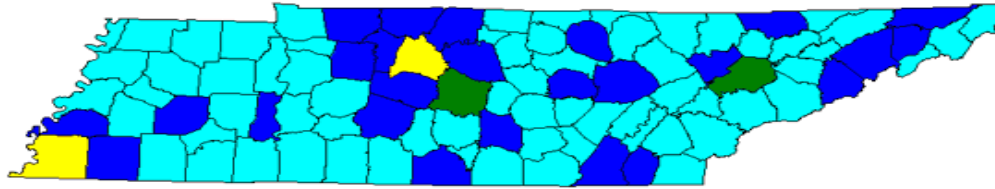
Objective 5: To train 500 traffic enforcement officers in SFST, 50 officers in mobile video camera technology,25 officers as DREs, and to expand Judges and Prosecutor Training to 100 by 30 September 2006 .

Performance Measure: “The number of traffic officers successfully completing the various types of training, the number of communities participating in the training, the number of members of the legal community (prosecutors, judges, defense counsel) having direct contact or participating in GHSO Prosecutor, Judges and Law Enforcement Training. Baseline: None noted. Status: In CY 2004 463 trained in SFST, 17 officers completed DRE training.

C. Related National Goals:

USDOT national impaired driving goals: · to reduce the rate of Alcohol -related highway fatalities per 100 million vehicle miles traveled to 0.53 by 2004; · to reduce alcohol-related fatalities to no more than 11,000 by 2005.

The National Public Health Plan objectives for the Year 2010: to reduce alcohol related deaths in motor vehicle crashes by 33% from 6.1 per 100,000 population to 4 per 100,000 population, to reduce alcohol-related injuries by 47% from 122 per 100,000 population to 65 per 100,000 population.



Source: National Center for Statistics and Analysis, 2003 FARS Annual Report File

	Tennessee Fatalities in Alcohol-Related Crashes, 2003		
	Percentage \geq 0.01 BAC	Percentage \geq 0.08 BAC	Rate per 100 million VMT
Tennessee	37%	34%	0.65
US Total	40%	34%	0.59
Best State	15%	12%	0.19

II. PROBLEM IDENTIFICATION and PROGRAM JUSTIFICATION

A. Magnitude and Severity of the Impaired Driving Problem

Alcohol Impaired Driving

Alcohol intoxication is the principal drug addiction in many countries of the world. It affects all age groups, both sexes and almost all social groups. Mortality associated with acute alcohol poisoning on its own is exceptional, but it can also be an important factor if it coexists with recreational drugs.

Impaired driving is the most frequently committed violent crime in America. Every 33 minutes, someone in this country dies in an alcohol-related crash.

Alcohol is the single greatest driver contributing cause of fatal crashes in Tennessee. Even small amounts of alcohol can affect transportation-related performance.

Alcohol Crashes In 2000, out 1,177 crashes 462 were alcohol-related in Tennessee. This number has decreased by 12% to 403. Alcohol-involved crashes have declined by 52 (11%) from our base year of 1994 to 2003. In 2003, it was a factor in 37% of the fatal crashes.

Nationally in 2002, alcohol-related deaths rose 3% over 2001, the third straight increase after a decade of decline. In Tennessee, fatalities in alcohol-related crashes have decreased by (4%) since 2002. Tennessee passed .08 and it became effective in July of 2005.

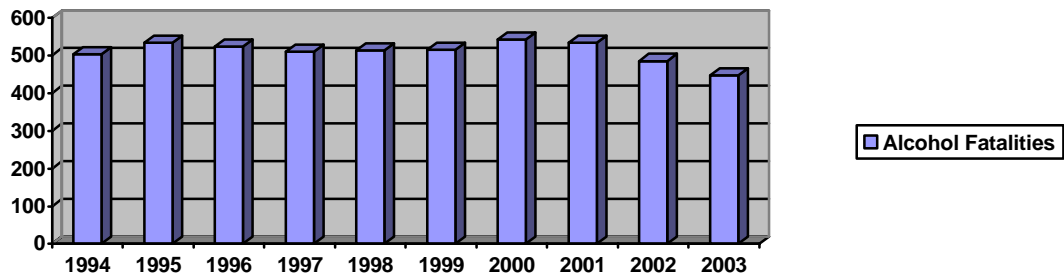
State:

Persons Killed, by Highest Blood Alcohol Concentration (BAC) in the Crashes, 2000 – 2003

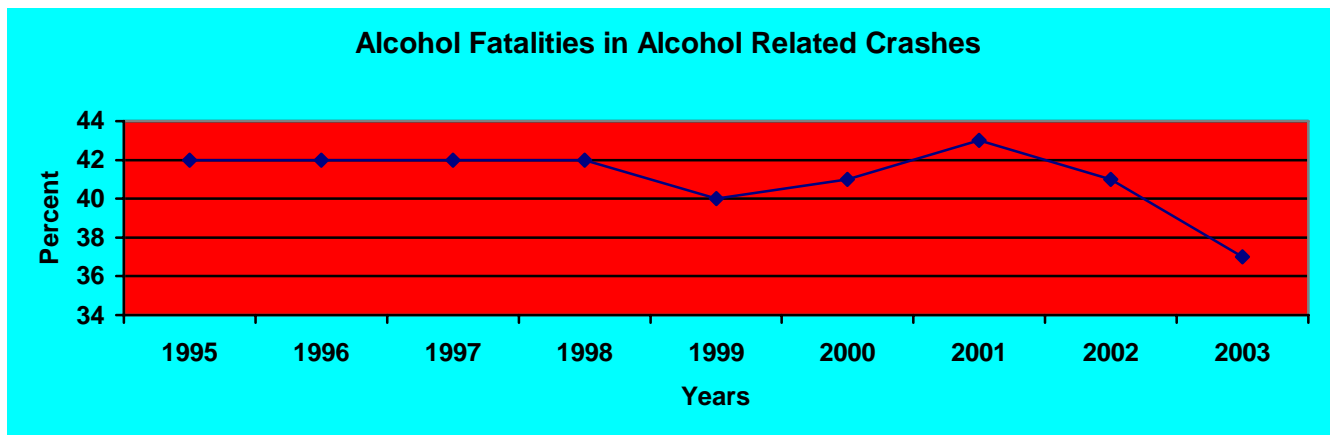
Year:

Year	BAC = 0.00		BAC = 0.01-0.07		BAC = 0.08+		Total Number	Total Fatalities in Alcohol-Related Crashes	
	Number	Percent	Number	Percent	Number	Percent		Number	Percent
2000	765	59	84	6	458	35	1,307	542	41
2001	718	57	70	6	463	37	1,251	533	43
2002	692	59	73	6	412	35	1,177	485	41
2003	746	63	43	4	404	34	1,193	447	37

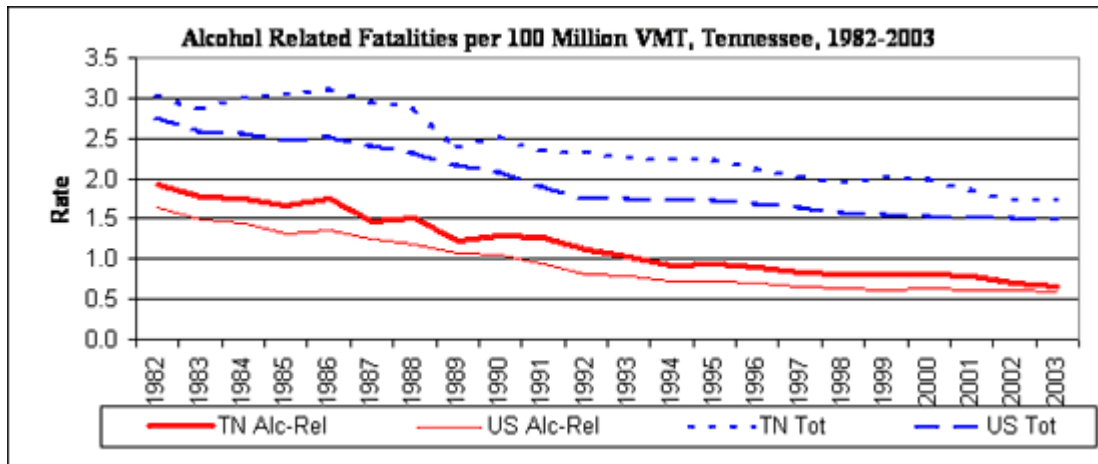
About 37% of Tennessee’s fatal crashes are alcohol-related and while the percent has varied from year to year, there has been a downward trend since 2001. NHTSA National Center for Statistics and Analysis sites a – 66% reduction from 1983 to 2003; the last 10 years a -37% reduction; the last 5 years a - 21% reduction; the last 3 years a – 21% reduction; and the last 1 year an – 8% reduction. Of the past 8 years, where a -21% reduction is noted, the national number was only a -6% reduction.



In Tennessee, while the percentage of alcohol-related fatalities has decreased by 4% from 1994 to 2003, the variation from year to year has averaged a 1% increase, so no clear trend can be identified. Nationally, the percentage of alcohol-related traffic fatalities remained at 40% of the total from 2000 to 2003.



In 2003, Tennessee experienced 0.65 alcohol-related fatalities per 100 million vehicle miles traveled and 7.65 alcohol-related fatalities per 100,000 populations.



The greatest gains in the fatality rate per HMVMT occurred in the early 1980's through early 1990's. Since 1994, the rate has ranged from 0.92 to 0.65 but has averaged .82, with only a slight downward trend.

B. Risk Factors for Crash Involvement and Injury

Alcohol Concentration (AC) Even at ACs as low as 0.04%, alcohol affects driving ability and crash likelihood, according to —Zero Alcohol,“ *Transportation Research Board Special Report #216*. The probability of a crash begins to increase significantly at 0.05 AC and climbs rapidly after about 0.08%. In 2003, of the 811 drivers who died in crashes, all were tested for alcohol and of those tested, 256 (32) were legally intoxicated (i.e., 0.08 AC or higher).

In Tennessee, 11% of surviving drivers in fatal crashes tested at over 0.08 BAC, while the National average was 12% of surviving drivers, NHTSA *Traffic Safety Facts (2003)* Gender In Tennessee crashes involving men are much more likely than those involving women to be alcohol-related. Among fatally injured drivers in 2003 tested for AC, 25% of men and 13 % of women had BAC's of 0.08% more.

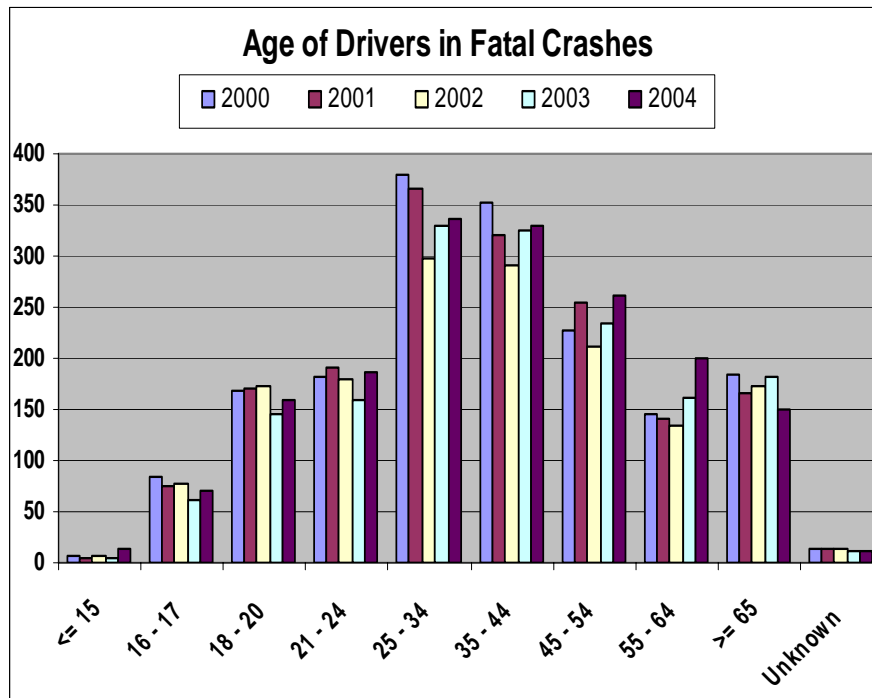
Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Sex, 1994 - 2003

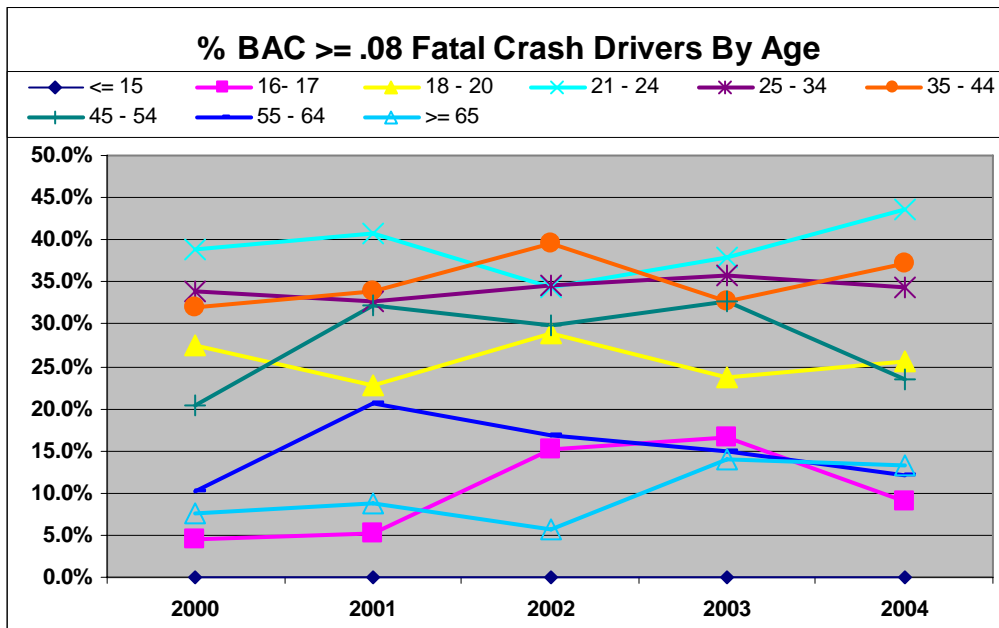
Year	Male			Female		
	Total	Percent		Total	Percent	
		BAC=0.01+	BAC=0.08+		BAC=0.01+	BAC=0.08+
1994	1,163	32	27	455	16	14
1995	1,248	33	29	435	12	10
1996	1,222	32	27	461	13	11
1997	1,172	31	28	480	12	9
1998	1,231	30	26	459	15	13
1999	1,281	31	27	489	12	10
2000	1,258	29	25	474	18	14
2001	1,230	32	27	460	15	13
2002	1,128	31	26	416	17	13
2003	1,126	28	25	479	15	13

Age

Tennessee residents drink and drive at all ages. The highest drinking driver rate continues to be for the 21 to 44 year-old age group; nearly two-thirds of 21 to 34-year-olds involved in crashes are drinking. . The second highest crash rate is for 18-20 year olds.

Tennessee





Tennessee

Prior Impaired Driving Arrest The National Transportation Safety Board (NTSB) defines —hard-core “drunken drivers” as those with prior arrests or convictions who continue to drive drunk or people caught driving with a blood alcohol level nearly double the legal limit. NTSB estimates that such people make up less than one % of all drivers but make up 27% of drivers in fatal crashes.

Over half (59%) of drinking drivers involved in fatal crashes in Tennessee had no prior DWI convictions. In 2003, in Tennessee 24% of the drivers who had been drinking were involved in crashes that resulted in a fatality. Interventions historically have been based on number of prior arrests, but most drivers in fatal alcohol crashes never have a chance to be entered into the system.

State:

Driver Involved in Fatal Crashes, by Previous Driving Record and Year:

License Status

Previous Convictions	License						Total (58,156)	
	Valid License (49,311)		Invalid License (6,973)		Unknown (1,872)			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Previous Recorded Crashes	6,737	13.7	885	12.7	8	0.4	7,630	13.1
Previous Recorded Suspensions or Revocations	3,721	7.5	3,007	43.1	13	0.7	6,741	11.6
Previous DWI Convictions	848	1.7	821	11.8	1	0.1	1,670	2.9
Previous Speeding Convictions	10,345	21.0	1,287	18.5	14	0.7	11,646	20.0
Previous Other Harmful Moving Convictions	8,033	16.3	1,610	23.1	19	1.0	9,662	16.6
Drivers with No Previous Convictions	29,616	60.1	3,215	46.1	1,838	98.2	34,669	59.6

Notes: FARS records prior driving records (convictions only, not violations) for events occurring within 3 years of the date of the crash. The same driver can have one or more of these convictions.

Fatal Crashes and Percent Alcohol Related, by Time of Day and Crash Type

Time of Day	Crash Type						Total		
	Single Vehicle			Multiple Vehicles			Number	Alcohol Related	Percent Alcohol Related
	Number	Alcohol Related	Percent Alcohol Related	Number	Alcohol Related	Percent Alcohol Related			
Midnight to 2:59 am	90	58	64	22	13	61	112	71	63
3:00 am to 5:59 am	61	36	60	19	10	53	80	47	58
6:00 am to 8:59 am	64	13	21	49	4	9	113	18	16
9:00 am to 11:59 am	57	11	19	67	7	10	124	17	14
Noon to 2:59 pm	64	12	18	81	10	12	145	21	15
3:00 pm to 5:59 pm	103	34	33	101	19	19	204	53	26
6:00 pm to 8:59 pm	88	53	60	72	27	37	160	80	50
9:00 pm to 11:59 pm	86	59	69	39	21	54	125	80	64
Unknown	28	16	57	0	0	0	28	0	0
Total	641	292	46	450	111	25	1,091	403	37

Day of Week Alcohol involvement in crashes peaks at night and is higher on weekends than on weekdays. In 2003, among Tennessee drivers of all types of motor vehicles 57% were killed between 6 pm and 3am. Nationally 40% of fatally injured drivers on weekends (6 pm Friday to 6 am Monday) and 53% of those killed in weekend nighttime crashes had ACs of 0.10% or more in 2000. During weekdays (6 am Monday to 6 pm Friday), the proportion drops to 21% but rises to 41% for weekday nighttime crashes.

Drugs Other Than Alcohol

Frequency: According to Wisconsin's Highway Safety Plan, only limited data are available on the frequency of drugged driving. In part, this is because many drug-impaired drivers are never detected. Secondly, many drug users also drink. So when they are detected, they may be arrested and statistically reported as being only alcohol impaired. In addition, due to economic and other factors, crash-involved drivers are seldom chemically tested for drugs other than alcohol. However, some research suggests that impairment by drugs other than alcohol may be a considerable problem.

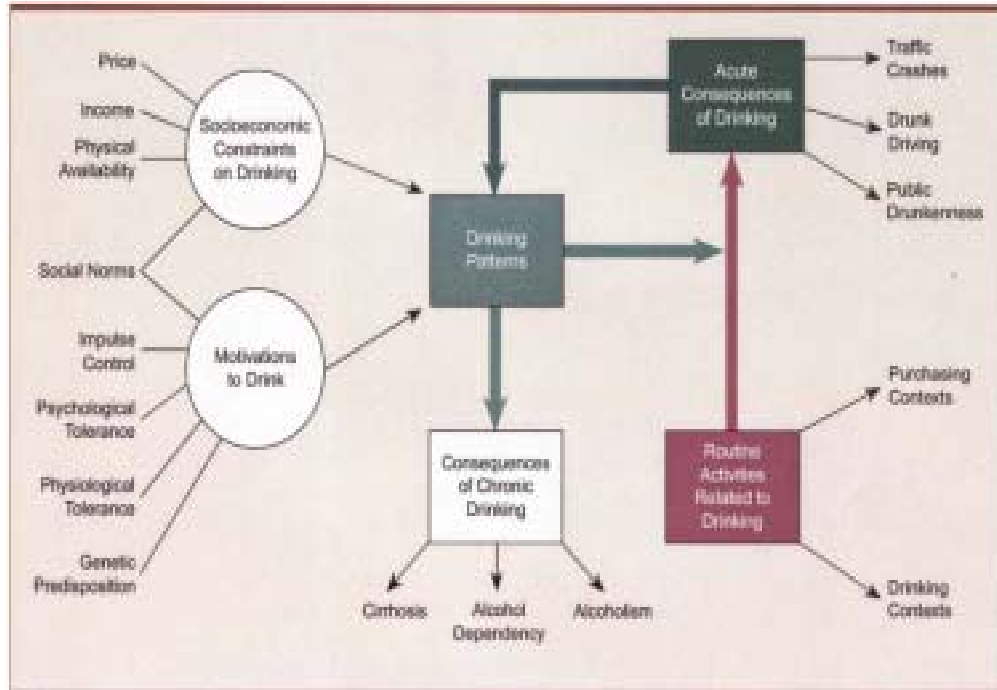
Drug abusers routinely take combinations of drugs simultaneously. This behavior, called polydrug use, is so common in some areas the practice may be more prevalent than single drug use. One of the most frequent combinations involves alcohol with virtually any other drug. In a 1985 study, the Los Angeles Police Department tested 173 drivers arrested for being under the influence of drugs. Of these 81, or 47%, had consumed alcohol and some other drug in combination. Anecdotally, Manitowoc DREs see illegal drug in combination with alcohol use, especially high alcohol use. In many instances, toxicological tests are not being conducted for drugs. A 1990s UMTRI study suggested that about 5% of drivers arrested for alcohol impaired driving had ingested other drugs.

Other studies have indicated that drivers previously arrested for drug offenses pose a greater traffic safety risk than others. A report from the California Department of Motor Vehicles, *The Relationship Between Drug Arrests and Driving Risk*, concluded that drug arrestees are involved in nearly one and a half times as many serious traffic crashes as the general population, they commit a high number of traffic violations, and crash investigations have found them to have a significantly greater culpability than the general driving population.

III. STRATEGIES FOR DECREASING DEATHS & INJURIES

A. Strategies Selected for 2006

The safety professional who wants to develop effective strategies for countering impaired driving must first recognize that drinking is a social behavior and a public health problem, and then must be able to identify the relationships between motivations to drink and socioeconomic constraints on drinking, drinking patterns and routine activities related to drinking and associated consequences. These may vary between states and between communities and even within communities where there are marked differences in social groupings.



Alcohol Health & Research World Vol.17, No. 1, 1993

The 37% drop in alcohol-related deaths from 1982 to 1999 is generally attributed to stronger laws, tougher enforcement and adjudication, more effective public information and education, and changed attitudes about drinking and driving.

The GHSO plan provided the following priority recommendations (organized by strategy):

Program Management: Enhance the identity of GHSO as the voice for change · Increase state and local input into the HSP development process · Coordinate and consolidate impaired driving task forces and efforts.

Enforcement/prosecution/adjudication: · Establish a Law Enforcement Task Force on Impaired Driving · Encourage enforcement agencies to make DWI a priority · Form a judicial workgroup to improve DWI adjudication

Evaluation: · Assign priority to completion of the DUI Tracker and mandate all grantees enter data into it in order to evaluate effective prosecution and adjudication. Communicate progress on Model Data System with all partners and stakeholders · Assign priority to completion of Model Data System to permit electronic records transfer between courts and DMV · Redesign driver records inquiry system and redesign driver records abstracts to improve accessibility and usefulness

Education: · Develop statewide PI&E campaign to reduce DWI injuries and fatalities

Strategy: Enforcement

—Saturation Patrols are law enforcement efforts that combine a high level of sustained enforcement with intense enforcement mobilizations around the July 4, Labor Day (September), and December holiday periods. Mobilizations are high-profile law enforcement programs combined with paid and earned media, and evaluated in terms of public awareness and public changes in behavior. These Saturation Patrols will consist of 5 actions: 1) Sustained Enforcement of monthly DWI operations by agencies serving at least 65 % of the state's population; 3) Intense Publicity of paid and earned; 4) Pre/post Knowledge/Attitude/Behavior Surveys; and 5) Monthly Reporting of enforcement and media activity.

Tennessee will organize a December holiday alcohol enforcement mobilization and a mid-summer traffic law enforcement mobilization concentrating on alcohol on 16 consecutive nights spanning three consecutive weekends by agencies serving at least 85% of the population. The agencies participating in the mobilizations will be required to maintain a high level of sustained enforcement by deploying monthly patrols combined with speed and other high-risk behavior enforcement efforts funded through the Police Traffic Services program.

A hard-hitting media campaign developed during 2004 will be integrated into the mobilization and sustained enforcement efforts. Pre- and Post-enforcement period surveys of public awareness of the mobilizations will take place in DMV stations. Participating agencies will be required to provide monthly activity reports.

Data Entry

The DUI Offender Tracking System (Tracker) is a model; Web-based DUI tracking system that collects information on variables based on NHTSA standards and data requirements. The system, developed by The University of Memphis, has been in operation since 2003 and is currently populated with arrest and prosecution information resulting from the activities of GHSO-funded special DUI prosecutors in 16 Judicial Districts throughout the State. To date, the DUI tracking system contains over 13,000 arrest records, 9,524 of which include disposition data.

Beginning in FFY 2005/2006, all law enforcement agencies with GHSO funds for alcohol countermeasures or traffic services money will be required to populate the DUI Tracker with their DUI arrest data. The Tennessee GHSO is committed to maintaining a high level of accountability from its grantees, and analyses of the DUI arrest data they enter into the Tracking System will afford a unique opportunity to oversee the agencies' activities in real time and ensure that they remain committed to their grant goals.

One of the major advantages of the DUI Tracking System is that it provides for detailed analyses of the potential causes of low DUI conviction rates, where they exist. To that end, the data in the Tracking System have been subjected to analyses, which indicate the following:

Out of the nearly 600 variables per DUI case collected with over 10,000 adjudicated cases in the Tracker only eight variables significantly predicted prosecution outcome. Table 1 represents these eight variables, their odds of leading to a given outcome, and the outcome itself. For example if balance problems were observed post-stop (i.e., once the officer stopped the violator), that violator would be 1.29 times more likely to have his or her case end in a conviction. Put another way, 56 out of 100 people who demonstrate balance problems to a police officer in a DUI-related stop will be convicted. Conversely, if a person refuses to submit to a blood-alcohol test, he or she is 1.33 times more likely to have the DUI charge reduced or acquitted (i.e., 57 out of 100). Other factors that predict are: being Caucasian vs. not being Caucasian (1.23 times more likely to be reduced or acquitted), and the absence of police scene video (1.25 times more likely to be reduced or acquitted). The remaining variables that successfully predict conviction of a DUI charge is all part of the standard field sobriety tasks used by police officers. However, of the 7 tasks, only four predicted conviction. Unlike the other variables, these four tasks predicted a two to three times higher likelihood of conviction if the police noted that the outcome of the task demonstrates impairment (i.e., suspect failed the task). The greatest odds of conviction was for the finger dexterity tasks with an odds of 3.34 or 77 out of 100 people that fail this task get convicted.

Variables that significantly predict prosecution outcome in DUI related cases.

Variable	Odds	Outcome
Balance problems observed after traffic stop	1.29	Conviction
Caucasian ethnicity vs. all others	1.23	Reduction/acquittal
Absence of scene video	1.25	Reduction/acquittal
Refused BAC test	1.33	Reduction/acquittal
Failed walk and turn SFST	3.08	Conviction
Failed one-leg-stand SFST	2.22	Conviction
Failed finger to nose SFST	3	Conviction
Failed finger dexterity SFST	3.34	Conviction

University of Memphis

Variables that were examined that did not successfully predict DUI case outcome were:

1. All of the 24 NHTSA standardized pre-stop driving behaviors
2. Whether or not the DUI arrest involved a crash
3. Time of day
4. Day of the week
5. Age group of the violator
6. Arresting agency type
7. Reason for stop

Some of the above-listed variables were not surprising in that they did not predict conviction. The time of the day, day of the week, and the arresting agency type should not predict whether or not a person would be convicted of a DUI. However, the presence of a crash as a result of the DUI and the presence of any alcohol-impaired driving behaviors should predict a prosecution considering those two situations directly reflects the spirit of the DUI statutes.

Through the use of this technology (large scale behavioral tracking systems), it is now possible to study both the major and minor aspects of DUI cases from the time of the stop to the treatment and/or punishment of the offender. By taking a behavioral approach, and studying the patterns on local, regional, and state levels, reasons for judiciary system anomalies can be identified and dealt with in a systematic and accurate fashion. However, if a system such as the DUI Tracker is to be maximally effective, wide scale implementation/participation is mandatory.

Strategy of Education - Training of Law Enforcement Officers

Standard Field Sobriety Test (SFST) Training is a NHTSA-approved curriculum that has been demonstrated to provide highly accurate assessments of driver alcohol impairment, and that has gained court acceptance. All agencies receiving highway safety grants for traffic law enforcement require SFST training of their traffic officers. A grant-funded position in GHSO schedules and administers SFST training statewide.

NHTSA developed a national Drug Evaluation and Classification (DEC) Program curriculum in partnership with the International Association of Chiefs of Police (IACP). By fall 1995, more than half the states and the District of Columbia had adopted the DEC program, and the program has gained court acceptance. Drug Recognition Expert (DRE) training produces certified officers who can reliably detect drug impaired drivers approximately 90% of the time. The DRE program is a valid method for identifying and classifying drug-impaired drivers. The DRE program requires scientifically sound support by the laboratory. A full-time DRE-trained former officer serves as the state's DRE training coordinator.

Strategy: Education - Training of the Prosecutorial and Judicial Community The dissemination and sharing of information is a formidable task, especially with statute changes, new case law and ever changing technology. Getting correct information to judges, prosecutors, law enforcement, defense attorneys, legislators and educators is an ongoing challenge as is changing behavior. Highway-safety funded positions in the Administrative Office of the Courts and the District Attorney Generals Conference perform legal research and write articles, provide information and consultation about impaired driving issues and policies to judges, prosecutors, defense attorneys, legislators and educators and organize the annual state impaired driving conference.

Strategy: Education - Public Information and Media Campaigns

Mass media can provide information to those ready, willing and able to receive that information. Education of the public and advocacy groups has helped enact legislation and transmitted knowledge about the provisions and penalties of laws in ways that increase their deterrent effect, and has generated public support for law enforcement programs. Mass media can provide motivation for behavior change only in those drivers predisposed to change or when associated with another safety strategy such as traffic law enforcement. Intense publicity will be associated with periodic law enforcement mobilizations, relying on paid media and earned media, using a strong DWI enforcement message and media campaign developed during 2003.

B. Criteria for Project Selection

Alcohol Saturation Patrol (Mobilizations and Sustained Enforcement) Projects: Priority for funding will be given to the counties and communities:

- (1) with populations in excess of 10,000, and with many highway miles and other exposure factors;
- (2) with the most impaired driving crashes or impaired driving crashes with serious injuries and deaths and/or a high injury to death ratio;
- (3) demonstrating use of multiple sources of local data (crash, citation, conviction, CODES, e-codes, surveys) to identify local high-risk populations and locations, and to deploy patrols;
- (4) demonstrating willingness to coordinate enforcement with other community safety strategies, especially through a local Safe Community Coalition;
- (5) demonstrating willingness to coordinate activities with other jurisdictions;
- (6) demonstrating willingness and ability to commit local funding and other match; and to sustain traffic enforcement without Highway Safety funds;
- (7) with a plan for local evaluation of the effectiveness of targeted enforcement; and
- (8) with a history of using Highway Safety funds effectively as seed money to develop continuing programs.

Smaller communities may be eligible if they demonstrate problems of unusual scope or unusual buy-in and effectiveness in past Highway Safety projects.

Alcohol Community Projects: Priority for funding will be given to counties and communities with

- (1) populations in excess of 10,000 with many highway miles and other exposure factors -- or a smaller community with a problem of unusual scope or unusual buy in and effectiveness in past highway safety efforts;
- (2) with the most impaired driving crashes or impaired driving crashes with serious injuries and deaths and/or a high injury to death ratio;
- (3) demonstrating willingness to coordinate a range of safety strategies, programs and funds;
- (4) demonstrating willingness and ability to commit local funding and other match; and to sustain the effort without Highway Safety funds;
- (5) with a plan to evaluate the effectiveness of the innovation; and
- (6) with a history of using Highway Safety funds effectively as seed money to develop continuing programs.

IV. ACTIVITIES/STRATEGIES

Strategy -- ADMINISTRATION

Activity: AL PROGRAM MANAGEMENT

Problem: Short and long-term planning, coordination and management of the Alcohol and Drugged Driving Countermeasure Program and activities in Tennessee.

Objectives: To achieve alcohol and youth alcohol program goals, employing the most effective and cost-effective strategies and activities.

Activities: Manage and administer alcohol and other drug safety program activities including analysis, grant applications, contract management and fiscal management of federal and state funded programs and projects. Manage and administer the Youth Alcohol Program coordinating all highway safety activities for Tennessee youth, including the OJJDP Enforcing Underage Drinking Program and emphasizing prevention activities. Serve as a liaison to other DOT units, other state agencies, associations and organizations on alcohol highway safety issues.

Self-sufficiency: None.

Evaluation: Compare program objectives and planned activities with accomplishments and comment on reasons for success of lack thereof. Quarterly and final reviews and Annual report.

Strategy - Enforcement

Activity: Full-Time Tennessee Judicial Districts DUI Prosecuting Attorney's

Problem: Lack of manpower for the overwhelming caseload of DUI's in Tennessee make for ineffective prosecution and plea bargains and low conviction rates for offenders. Additionally, Attorney's get very little DUI prosecution training in law school.

Objectives: To fund DUI Prosecutors around the state in order to achieve higher conviction rates of DUI offenders. Additionally, these prosecutors will be provided ongoing training through our District Attorney Generals Conference Grant making them more specialized and abreast of effective DUI prosecution.

Activities: Prosecute DUI cases within their specific judicial district handling only impaired driving cases. Enter data into the DUI Tracker in order to track DUI Offenses statewide.

Self-sufficiency: State administered through grant funds.

Evaluation: Evaluate data entered into the DUI Tracker log to determine conviction rates and track districts trends of

Activity: W.A.S.P. (Wide Area Saturation Patrols)

Problem: TN counties and municipalities don't have enough manpower to provide effective impaired driving enforcement. Thus, more and more impaired drivers go undetected.

Objective

To organize multi-jurisdictional units in the top 16 impaired driving counties to initiate these W.A.S.P.(Wide Area Saturation Patrols) within their counties to work together in a collaborative effort to implement saturation patrols and sting operations concurrently at least once a month.

Activities: Organize and schedule W.A.S.P. patrols in at least 16 communities effected by a high level of impaired drivers in CY06.

Self-sufficiency: Voluntary participation will be recruited.

Evaluation: Pre/post surveys, monthly activity reports, final enforcement activity reports, a final administrative evaluation report. University of Memphis data analysis unit will perform overall program evaluation.

Activity: ALCOHOL SATURATION PATROLS/Roadside Sobriety Checkpoints – Booze It or Lose It – Alcohol Countermeasures

Problem: TN counties and municipalities that are over-represented in alcohol related crashes and that have at least 60% of the state's alcohol-related crashes and 85% of the State's population must participate in at least one alcohol mobilization as well as sustained enforcement efforts over the year to make TN eligible for Section 410 funding. These enforcement efforts must be tied to both strong enforcement and a strong message that creates an awareness of increased risk of arrest to the traveling public.

- Objectives**
1. Organize "sustained" (at least once monthly) alcohol enforcement deployments —Saturation Patrol or Sobriety Checkpoint coverage in areas representing more than 85% of the population of Tennessee and in which at least 60% of the alcohol-related crash fatalities have occurred and/or a disproportionate fatality to crash ratio was observed.
 2. Organize state participation in the national Alcohol Mobilization scheduled for December 2005 to reach 100% of the State's population.

Activities: Organize and schedule Alcohol Selective Traffic Enforcement-in at least 30 community saturation patrols or roadside sobriety checkpoints during FFY06.

Self-sufficiency: Voluntary participation in statewide effort is invited. Reports of effectiveness of Saturation Patrol countermeasure activity will be distributed statewide to encourage participation.

Evaluation: Pre/post surveys, monthly activity reports, final enforcement activity reports, a final administrative evaluation report. University of Memphis data analysis unit will perform overall program evaluation.

Strategy -- Empowerment

Activity: SAFE RIDE PROGRAM – Alcohol Countermeasures

Problem: Individuals who drive after having too much to drink.

Objectives: Support community Safe Ride programs coordinated through the local law enforcement agencies.

Activities: Provide rides home for intoxicated individuals who should not be driving.

Self-sufficiency: This effort is self-sufficient.

Evaluation: data supported.

Strategy -- Education – Training

Activity: LAW ENFORCEMENT SFST TRAINING

Problem: Law enforcement in Tennessee currently are not all NHTSA certified in SFST. Some of the training doesn't provide the quality of curriculum needed to prepare officers properly for detecting and apprehending impaired drivers.

Objectives: Train 1,000 officers in SFST and 50 officers in mobile video camera technology.

Activities: State-funded staff will organize, schedule and arrange for instructors and materials to implement training of traffic officers in SFST and Mobile Video Camera use.

Self-sufficiency: Establish the NHTSA 24 hour SFST curriculum as part of the basic law enforcement recruit curriculum. Encourage vendors of MVC equipment to provide comprehensive training.

Evaluation: Count the number of officers trained in SFST and in MVC use, and survey law enforcement agencies to determine impact of training.

Activity: PUBLIC INFORMATION/MEDIA CAMPAIGNS

Problem: Both the dissemination of information about statute changes, improvements, new technology and improved program concepts and practices and the motivation of the various target groups to act on that information is required for the effectiveness of other safety strategies. Effective campaigns requires planning and packaging of information, motivational messages, selection of appropriate media and audience segments and organizing these in a timely manner. An umbrella campaign with a strong enforcement message is needed to support all enforcement efforts.

Objectives: 1. Increase the knowledge level and subsequently change the behavior of Tennesseans regarding impaired driving. To incorporate PI&E into AOD programming in accord with long-range PI&E plan.

2. To reach 25% of the target audiences with appropriate messages and change the behavior of 25% of the target audience.

Activities: Alcohol PI&E, Paid Media: Purchase time in appropriate locations and on appropriate media to increase awareness of enforcement activity. Alcohol PI&E, Reproduction: Production of the various campaign components created during 2005 and reproducing as needed current PI&E materials as our stock is depleted, if material is still timely and appropriate. Educate TN about 0.08 and Impairment.

Self Sufficiency: If materials and messages are incorporated into multiple-strategy campaigns, they are more likely to be incorporated into behaviors, programs and organizations.

Evaluation: University of Tennessee PI&E evaluation Administrative- number of persons receiving messages. Impact: Pre/post survey

Activity: District Attorney Generals Conference Training on IMPAIRED DRIVING: OUTREACH TO LEGAL COMMUNITY

Problem: The dissemination and sharing of information is a formidable task, especially with statute changes, new case law and ever changing technology. Getting correct information to judges, prosecutors, law enforcement, defense attorneys, legislators and educators is an ongoing challenge as is changing behavior.

Objectives: 1. Provide information about impaired driving issues and policies to 10,000 judges, prosecutors, law enforcement, defense attorneys, legislators, and educators by the end of 2004.
2. Coordinate an annual state alcohol conference by April 2004.

Activities: Legal Resource Center on Impaired Driving: Continue funding support for 1 FTE positions plus administrative support for the District Attorney Generals Conference for information sharing and dissemination to the legal community by means of telephone consultations, organization of annual conference, research and writing of articles for legal publications, and statewide training sessions.

Self-sufficiency: State Administered through grant support.

Evaluation: Monitor reports to identify the use of the Resource Center and efforts made to disseminate the information to interested parties; tracks efforts to increase the sharing of information and the number of people trained.

The background of the page is a close-up, slightly blurred image of the American flag, showing the red and white stripes and the blue field with white stars. The flag is draped and appears to be in motion.

GOVERNOR'S HIGHWAY SAFETY OFFICE

STATE OF TENNESSEE

YOUTH ALCOHOL

I. GOALS and OBJECTIVES

A. Goal

To decrease the number of 15 to 34-year-old drivers and passengers killed (K) or seriously (A) injured in all traffic crashes by 5% in 2006.

B. Objectives

Objective 1: To decrease the number of Youth ages 15-20 killed or seriously injured in motor vehicle crashes 5 % by the end of CY 2006.

Performance Measure: Number of 15-20 year olds killed or seriously (A) injured in motor vehicle crashes.

Baseline: In CY, 2003, 211 15-20 year old drivers were killed. Status: In CY 2004, 242 15-20 year olds were killed.

Objective 2: To decrease the number and percent of 21 o 24-year-old drinking drivers involved in fatal crashes by 5% by the end of CY 2006.

Performance Measure: Number of 20-24 year old drinking drivers in crashes as a percentage of the total of all drinking drivers involved in crashes. Baseline: In 2003, 38% tested had a BAC > = .08 Status: In CY2004, 43.5% 21-24 had a BAC > = .08

Objective 3: To decrease the number and percent of 25 o 34-year-old drinking drivers involved in fatal crashes by 5% by the end of CY 2006.

Performance Measure: Number of 25-34 year old drinking drivers in crashes as a percentage of the total of all drinking drivers involved in crashes. Baseline: In 2003, 35.8% 25-34 year olds tested had a BAC > = .08 Status: In CY2004, 34.3% 25-34 had a BAC > = .08.

C. Related National Goals

The National Highway Traffic Safety Administration's major impaired driving and youth objective for 2004 is to decrease drug-impaired driving, supporting the recommendations identified in the Initiative on Drugs, Driving and Youth.

Healthy People 2010 National Public Health Plan goals include decreasing to 30% the proportion of adolescents who report that they rode, during the previous 30 days, with a driver who had been drinking alcohol.

II. PROBLEM IDENTIFICATION and PROGRAM JUSTIFICATION

A. Magnitude and Severity of the Youthful Driver Crash Problem

Introduction: Motor vehicle crashes are the leading cause of death for young people 15 to 20 years of age. The Center for Disease Control and the National Institute on Alcohol Abuse report that alcohol is a factor in the four leading causes of death among persons ages 20 to 24. These four causes are motor-vehicle crashes, unintentional injuries, homicide and suicide.

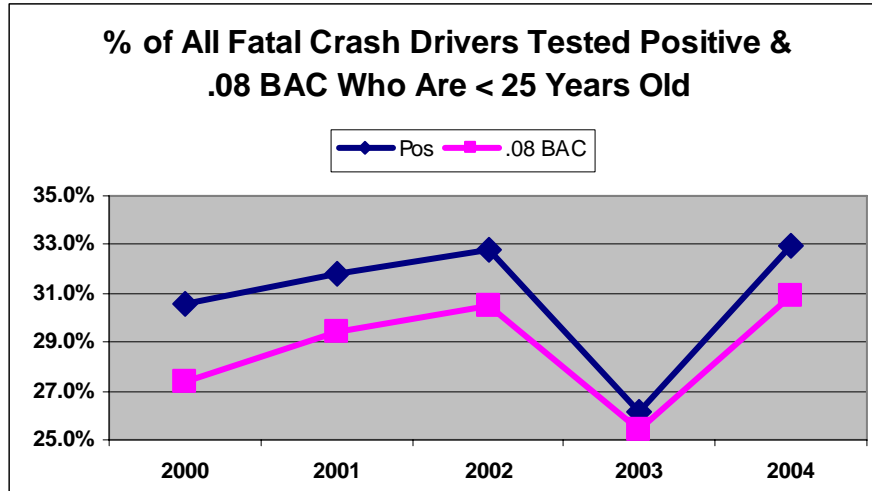
Teen Drivers (15 to 19 Years Old):

The Century Council revealed that more than one-third of youth under the age of 21 killed in alcohol-related fatalities in 2001 died during the months of April, May and June - prom and graduation season. Summer time marked by Memorial Day, Fourth of July and Labor Day holidays, is more deadly for youth under 21 than the Christmas and New Year's Eve holidays. The number of alcohol related traffic fatalities during the summer-time holidays is nearly double the number of alcohol-related traffic fatalities among youth under 21 during the winter time holidays (132 compared to 74 nationwide). According to the National Highway Traffic Safety Administration (NHTSA) in 2001 alone, 2,950 children under 21 died in alcohol-related traffic fatalities, and 1,012 of them died during the months of April, May and June.

A smaller (5.7%) proportion of 15-19 year olds are licensed than would be expected by their representation in the population (7.6%), but they are involved in a disproportionately large proportion (14.2%) of all crashes and are also disproportionately represented in drinking Tennessee

drivers in crashes (10.2%).

On the basis of miles driven, teenagers are involved in three times as many fatal crashes as driver in general. During 2001, one in every 518 driver's ages 16-19 involved in a crash was killed. Since 1989, for two thirds of all teens that died in a crash, it was their first crash. This group contains inexperienced drivers, and all are under the legal drinking age. The rate that young people died in alcohol-related crashes across the U.S. reached a low in 1998, when nine out of every 100,000 youth ages 15 to 20 died in a crash where a driver or non-occupant had been drinking. This reduction occurred primarily because the youth population increased by over a half million while the number of fatalities remained relatively stable.

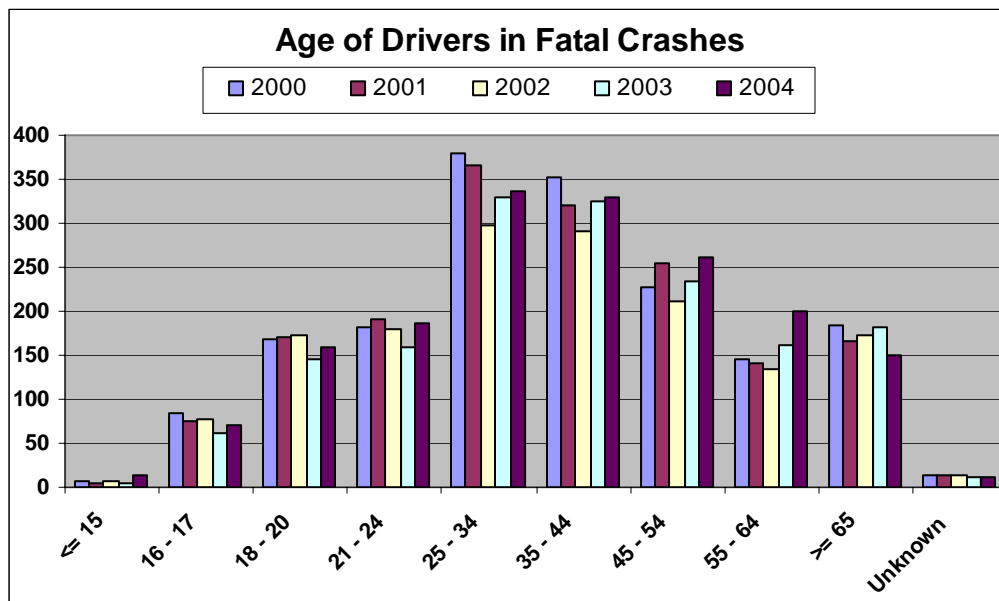


Youthful Drivers (20 to 24 Years Old):

This group contains legal but inexperienced drinkers who get behind the wheel. More 21 year olds died in alcohol-related crashes than any other age. Twenty-one to twenty-four year olds are a challenging group to address for behavior change, especially for drinking and driving behaviors. The binge drinking begun in high school is often consolidated during college years, whether or not they have access to motor vehicles during this period of their lives.

Young Adult Drivers (21 to 34 Years Old):

Most research and statistics combine this cohort with the 27-34 year old cohort. The entire population of 21-34 year olds represents 30% of the nation's licensed drivers and 60% of the nation's college population. Very little impact has been made with these young adults over the legal drinking age despite many national programs targeting them.



D. Risk Factors for Crash Involvement and Injury

Age and Inexperience Technical experience, good judgment and experience are all needed to make the many continuous decisions that constitute safe driving behavior. As age and driving experience increase, crash involvement decreases.

Onset Age Both the percentage of high school students who drink and the frequency of drinking increases as the grade level increases.

Gender In Tennessee, crashes involving men are much more likely than those involving women to be alcohol-related. Among all fatally-injured male drivers, 25% of those tested had BAC's of 0.08% or more in 2003. The percentage for women was 13. Alcohol involvement above the 0.08 BAC legal limit is highest for fatally injured male drivers ages 35-44. Male high school students were more frequent alcohol drinkers and more likely to report binge drinking than female students.

Risk Taking Adolescent impulsiveness results in poor driving judgment and participation in behaviors such as speeding, inattention, drinking and driving and not using a seat belt, and it is encouraged by peer pressure, against which the adolescent is poorly equipped. Compared to other age groups, teen drivers have more crashes involving higher risk factors.

- Drivers under the age of 20 (ages 15-19) continue to be over-represented involved in fatal and injury crashes.
- The number of licensed drivers under the age of 20 **decreased 1.5% in 2003**, reducing exposure rates for youth fatalities.
- The "Tennessee Council of Juvenile and Family Court Judges" reported that there were 14,358 traffic related referrals to the courts, in the 1999 calendar year.
- In 2002 the five major Contributing Factors for all youthful driver crashes were
 - Failure to Yield
 - Following Too Close
 - Speeding
 - Weather
 - Disregarding Sign or Signal
 *The most "reported" contributing factor for youthful drivers were "none" and "other"
 *The other five contributing factors accounted for 46.8% of all youthful driver crashes.
- In 2002 the five major Contributing Factors for youthful drivers' fatal crashes were*
 1. Speeding
 2. Wrong Side of Road
 3. Failure to Yield
 4. Reckless Driving
 5. Drinking

*The most "reported" contributing factor for youthful drivers were "none" and "other"

*The other five Contributing Factors accounted for 38.8% of the youthful fatal crashes.

Young Drivers on Tennessee Highways 1997-2002

	1997	1998	1999	2000	2001	2002	%Change 1997-2002
Number of Drivers Age 19 & Under in Fatal and Injury Crashes	12,597	12,288	12,285	12,136	11,633	11,342	-6.9%
% of Total Drivers in Fatal & Injury Crashes	14.4%	15.2%	14.7%	14.2%	22.8%	26.5%	+10.2%
Number of Licensed Drivers Age 19 & Under	249,156	252,687	252,112	250,927	249,318	245,234	-1.5%
Percentage of Total Licensed Drivers	6.7%	6.2%	5.9%	5.9%	5.9%	5.8%	-4.9%
*Over-representation of Drivers Age 19 & Under Fatal & Injury Crashes	3.5	4.0	3.5	2.6	3.9	4.6	+31.4%

Note: *Representation is percent of fatal and injury crashes divided by percent of licensed drivers

YOUNG DRIVERS ON TENNESSEE HIGHWAYS 1997-2002

	1997	1998	1999	2000	2001	2002	% of Change 1997-2002
Total: Age 15-19 Drivers in Fatal Crashes	201	204	214	183	186	164	-17.2%
Alcohol Involved Crashes: Age 15-19 Drivers	1,286	1,229	1,117	1,198	1,086	1,059	-10.5%
All Drivers-Alcohol Involved	10,436	9,845	9,135	9,629	9,379	9,145	-5.6%
% Alcohol Involved Age 19 & Under	12.3%	12.5%	12.2%	12.4%	11.6%	11.6%	-0.6%
Fatalities Where Alcohol Was Involved for All Drivers	251	229	213	240	201	148	-34.8%
Fatalities Where Alcohol Was Involved for 19 & Under Drivers	30	42	39	21	30	15	-53.8%
%Fatalities Alcohol Involved 19 & Under	12.0%	18.3%	18.3%	8.8%	15%	10%	-4.5%

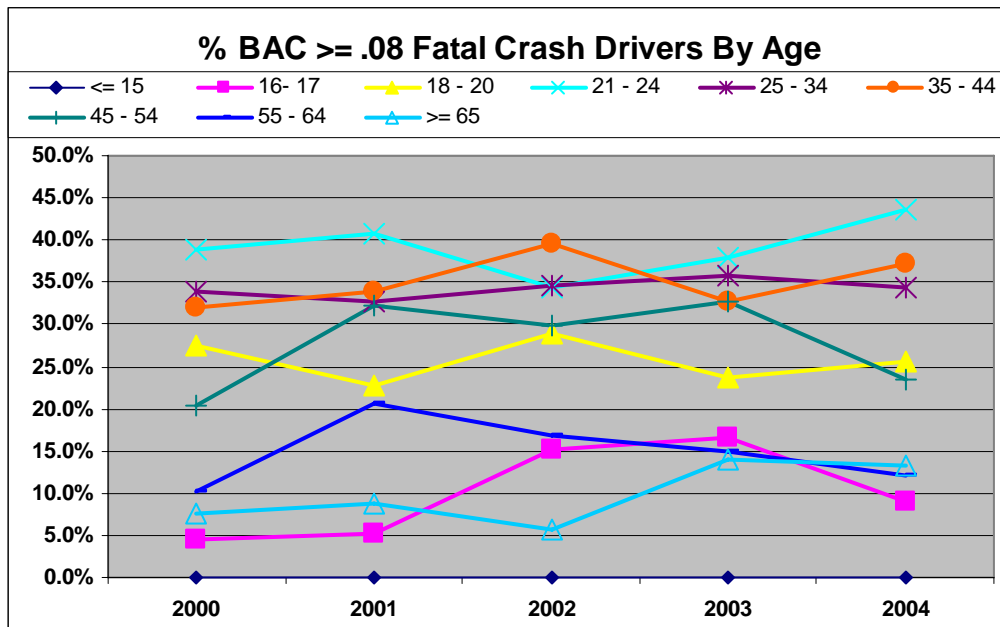
* Representation is percent of fatal and injury crashes divided by percent of licensed drivers.

III. STRATEGIES FOR DECREASING DEATHS & INJURIES

A. Strategies Selected for 2006 (all targeted age groups)

Strategy: Education and Information The general public, youth and community prevention organizations/collaborations that work with youth on young driver issues such as impaired driving, alcohol laws, safety belts, safe choices, etc. need access to up-to-date educational and motivational materials and current data to help them employ successful prevention strategies.

Safety messages must be formatted and worded appropriately by age and other grouping if they are to be effective. Peer education is a powerful and proven method in which youth impact other youth in changing attitudes and behavior. High schools offer opportunities to address groups of youth with safety messages, through auditorium shows, special events or integrated with the curriculum. Post-secondary institutions offer social settings and some curricula in which targeted messages or appropriate behavior can be modeled. Individual schools or post-secondary institutions do not have the resources to produce effective multi-media shows or educational events or materials to demonstrate the impact of risky decision-making by young people. Working young people are the hardest to reach and are not motivated by information alone.



Strategy of Enforcement Enforcement and Enactment combine in this program area. Because the data clearly demonstrate a relationship between age, other risk factors and crash involvement, the Tennessee Legislature passed a Graduated Driver License law. With knowledge that their community supports strict law enforcement intervention of youth underage alcohol laws, officers can be consistent and fair in their citation writing. This also sends a strict message to the community, and youth especially, that underage alcohol violations will NOT be tolerated. The consequence of a citation and the involvement of the courts and the parents is often the first step towards a change in attitude about high risk drinking and driving. Tennessee has implemented Compliance Investigation (checks) statewide as a part of its Youth Enforcement Strategy. The level of enforcement has increased in the past few years, mirroring the level of interest and activity underlying the passage of the Graduated Driver License law

Both motor vehicle-related convictions and underage alcohol and drug possession convictions have increased since 1994. However, drug convictions constitute only a small and apparently declining portion of youth enforcement activity.

Strategy- Empowerment-Community Programs Prevention professionals understand the important role of families, schools and communities in helping young people to develop into healthy, caring and responsible adults. This shared responsibility is about helping young people to develop healthy choices and reduce risky choices while behind the wheel, in the passenger seat, and on the street. Research findings and successful programs suggest a comprehensive and multifaceted approach that includes all community members. Coordinated community efforts strengthen communities and empower youth to make a positive change in their community and in their decision-making and social responsibility. Comprehensive strategies expand partnerships with diverse organizations, minority populations

and other high-risk and hard to reach populations. Communities must involve many partners in order to develop effective alternative transportation options for young adult drivers, especially the 21 to 34-year-old males. In addition to law enforcement intervention, young people need the benefit of prevention efforts and diversion efforts such as alternative transportation programs and other reward programs.

Strategy -Protective Factor Development Three models have been shown to be effective in establishing protective factors which enable young people to develop the life skills which favor good decision-making, including decision-making in their choices regarding safe behavior on Tennessee's roadways. These are: (1) Risk Factor Mitigation: The research of Hawkins and Catalano of over 30 years and more than 300 longitudinal studies establishes a clear link between certain risk factors and the expression of those risks in behaviors. In their study, they discovered certain Protective Factors could mitigate all known risk factors in the lives of young persons. To reduce risk factors in lives of young people we can increase pro-social bonding, teach social skills, and establish clear, consistent boundaries; (2) Resiliency: The research of Bonnie Bernard established resiliency factors. Resilient children exhibit social competence, have developed problem solving skills, autonomy, and have a sense of meaning and purpose to their lives, and (3) Asset-Building: The research of Peter Benson and the Search Institute of more than 250,000 6-12 graders in over 450 communities combined with drawing from extensive literature on child and adolescent development, resiliency, youth development, and prevention established Asset Building. This research shows that assets are powerful in shaping behavior, both by reducing negative behaviors and increasing positive ones.

All three of these models have common ground in the protective factor research. Risk reduction factors include pro-social bonding, clear expectations, and learning life-skills. Resiliency factors include care and support, high expectations, and opportunities to participate. Asset building factors include care and support, clear boundaries, and structured time use. Using these models when developing youth programs and focusing on prevention may provide our youth and communities across Tennessee the best opportunity of reducing motor vehicle crashes involving young people.

To reduce risk taking behavior and increase developmental assets, youth must be involved in program implementation, and adults must understand the powerful contribution youth can make. Youth also need to have a clear understanding of their choices and the impact upon themselves and others of the decisions they make.

Risk behaviors among youth are highly correlated. Many young people are involved in various risky behaviors, and thus require prevention approaches addressing the —whole person—and all issues. Strategies that are coordinated to address multiple issues reinforced over time are more likely to be effective than single-issue approaches. Multiple strategies are needed to promote healthy choices and reduce risk behavior. Young people have different needs and strengths that constantly change. Strategies must be coordinated within the school and community. Young people must experience a consistent message that promotes their development of values, skills, attitudes and assets.

A strong focus on life skill development is vital to provide youth the ability to take action in making their own choices and influence the choices of others. Five skills form the basis for teaching health promotion, risk prevention and youth development across all areas. Critical thinking skills enable young people to make wise choices and actively solve problems which arise in social and other settings. Communication skills are vital for social competency and effective interpersonal relationships. Assertiveness helps young people say what they think and stand up for what they believe in without bringing others down. Stress management skills assist young people in avoiding making risky choices due to stressful situations. Learning positive coping strategies, building a support network, physical activity, relaxation techniques and other alternative activities enable them to more effectively manage all stress. Goal setting skills can assist young people who often make health related decisions based on the immediate rather than long term consequences of the decision. Advocacy skills, address risk behaviors and healthy behaviors of young people who are influenced by the social context in which decisions are made. Young people can learn skills and behaviors to change the social context or physical environment.

Certain key concepts affect many health and safety behavior choices and can help young people reinforce and build on prior knowledge. A few of these concepts are: Influences: young people need to be able to critically reflect on how they construct their beliefs about risky choices and healthy choices and reflect on the variety of influences that impact those beliefs. Consequences: young people can reach a deeper understanding of the role consequences have in the decision-making process. Safety: provide young people an opportunity to evaluate their use of personal skills and abilities and identify new skills. Responsibility: information about boundaries to assist young people in understanding limits which have been set in relation to behaviors and the degree to which rules promote personal and social well-being.

Strategy - Social Norms Marketing Social norms marketing is one promising innovation to encourage in high-risk populations the healthy behaviors practiced by a majority of the public. The social norms approach to prevention is based upon promoting actual normative information to a specific group as a way of dispelling commonly held beliefs about exaggerated substance abuse

norms. This approach is scientific and gathers data to show a significant disparity between perceived and actual substance use and then develops media and other strategies to promote the true norms. This approach has been proven to reduce the reported harmful behavior (Montana Social Norms project).

Social norms marketing employs two processes to create an effective behavior change strategy. This process is based upon the social norms theory, which assumes that much of our behavior is influenced by how other members of our social groups behave, and that our beliefs about what others do are often times incorrect. (Perkins & Berkowitz, 1986) Because young adults are generally more susceptible to peer pressure and social acceptance everyday, this approach is applicable to this group.

The second process involves using social marketing techniques in designing programs for delivery through promotional campaigns that meet the specific needs of a target population. Campaigns that utilize social normative themes can have far-reaching effects on a variety of health outcomes. Northern Illinois University, Hobart and William Smith Colleges, Western Washington University and the University of Arizona saw reductions of 18 to 21% in binge drinking rates among college students over a two-year period. (Perkins 1998)

B. Criteria for Project Selection

Priority for Traffic Law Enforcement funding will be given to counties and communities with:

- (1) populations in excess of 10,000 and with many highway miles and other exposure factors;
- (2) the most total crashes or crashes involving youthful drivers or with youth alcohol, with serious injuries and deaths and/or a high injury to death ratio;
- (3) demonstrating willingness to coordinate community-wide safety strategies, programs and funds;
- (4) demonstrating willingness and ability to commit local funding and other match; and to sustain the effort without Highway Safety funds;
- (5) a plan to evaluate the effectiveness of their enforcement activities; and
- (6) a history of using Highway Safety funds effectively as seed money to develop continuing programs.

Priority for Community Projects will be given to counties and communities with:

- (1) populations in excess of 10,000 and with many highway miles and other exposure factors;
- (2) the most total crashes or crashes of involving youthful drivers or youth alcohol , and with serious injuries and deaths and/or a high injury to death ratio;
- (3) demonstrating willingness to coordinate community-wide safety strategies, programs and funds;
- (4) demonstrating willingness and ability to commit local funding and other match; and to sustain the effort without Highway Safety funds;
- (5) a plan to evaluate the effectiveness of their enforcement activities; and
- (6) a history of using Highway Safety funds effectively as seed money to develop continuing programs.

Priority for College Projects will be given to the colleges in counties and communities with:

- (1) the most total crashes or crashes of a particular type with serious injuries and deaths and/or a high injury to death ratio;
- (2) demonstrating willingness to coordinate community-wide safety strategies, programs and funds;
- (3) demonstrating willingness and ability to commit local funding and other match; and to sustain the effort without Highway Safety funds;
- (4) a plan to evaluate the effectiveness of their enforcement activities; and
- (5) a history of using Highway Safety funds effectively as seed money to develop continuing programs.

Priority for Enforcement Projects within a Safe Community Coalition funding will be given to the law enforcement agency in counties and communities with functioning Safe Communities Coalitions that have used data to select and identify youth safety issues as a priority area for community activity. The Safe Community Coalition must demonstrate intent to participate in the National Mobilizations for Safety Belt and Impaired Driving.

All Safe Community Coordinators will know about every GHSA grant their community has qualified for and received. This information should be shared with other members of the coalition. Working with youth organizations, schools and law enforcement is expected and strongly recommended. Youth Alcohol project dollars will only be awarded to agencies for youth program activities as outlined in the grant agreement. All program specific activities must be done in accordance with the guidelines established by the State Program Manager (SPM) for that project. Consultations with SPM or Regional Program Manager (RPM) are encouraged.

Smaller communities may be eligible to apply for funding for all project types if the community can demonstrate problems of unusual scope or unusual buy-in, and if funding is available.

IV. ACTIVITIES/STRATEGIES

STRATEGY EMPOWERMENT Community Programs

Activity: YOUTH COMMUNITY EMPOWERMENT ACTIVITIES – Alcohol Countermeasures

Problem: Young drivers make many judgment errors; they take risks due to inexperience and peer pressure and they fail to wear seat belts on a regular basis. With the increasing proportion of 15-20 year old drivers with their high crash rate, increased safety belt use has great potential for decreasing fatalities and serious injuries, especially by changing parameters of what is considered acceptable risk-taking behavior.

Tennessee youth have few opportunities to be involved in youth leadership positions, advocating for themselves and developing and pursuing policies for youth. Young people are making risky decisions of many types, including driving behaviors that put them into the judicial system. The system is not equipping them with skills to help change their behavior and make healthy decisions.

Communities lack adequate resources to initiate youth development models and need assistance in expanding their efforts in reducing youth involvement in motor vehicle crashes. Many Tennessee Communities try to initiate safe driving programs around high-risk events such as graduation and prom or in response to local crashes but often need funding to support these programs.

Objectives: 1. To assist up to 2 communities to adopt youth development models.

2. To assist 1 community to implement community safe driving awareness program.

3. To increase the number of youth involved in community service by 25% to 30% in FFY 06.

Activities: Provide resources and necessary funding to replicate program aimed at increasing safety belt use by teenagers. Assist communities initiating a youth development movement and fund increased community efforts in developing/implementing programs to reduce youth Involvement in motor vehicle crashes and reduce underage drinking.

Self-sufficiency: If communities repeat the Community Youth Innovative Development Grants programs, all funds come from the community.

Evaluation: Each community will compare alcohol related fatalities and injuries in this age group prior to and after program implementation. Community youth grants will describe activities and survey youth attitudes.

Activity: YOUTH COMMUNITY EMPOWERMENT ACTIVITIES – Occupant Protection/Safe Communities

Problem: Young drivers make many judgment errors; they take risks due to inexperience and peer pressure and they fail to wear seat belts on a regular basis. With the increasing proportion of 15-20 year old drivers with their high crash rate, increased safety belt use has great potential for decreasing fatalities and serious injuries, especially by changing parameters of what is considered acceptable risk-taking behavior.

Tennessee youth have few opportunities to be involved in youth leadership positions, advocating for themselves and developing and pursuing policies for youth. Young people are making risky decisions of many types, including driving behaviors that put them into the judicial system. The system is not equipping them with skills to help change their behavior and make healthy decisions.

Communities lack adequate resources to initiate youth development models and need assistance in expanding their efforts in reducing youth involvement in motor vehicle crashes. Many Tennessee Communities try to initiate safe driving programs around high-risk events such as graduation and prom or in response to local crashes but often need funding to support these programs.

Objectives:

1. To assist up to 2 communities to adopt youth development models.
2. To assist 1 community to implement community safe driving awareness program.
3. To increase the number of youth involved in community service by 25% to 30% in FFY 06.

Activities: Provide resources and necessary funding to replicate program aimed at increasing safety belt use by teenagers. Assist communities in Youth development movement and fund increased community efforts in developing/implementing programs to reduce youth involvement in motor vehicle crashes and reduce underage drinking.

Self-sufficiency: If communities repeat the Community Youth Innovative Development Grants programs, all funds come from the community.

Evaluation: Each community will compare safety belt use prior to and after program implementation. Community youth grants will describe activities and survey youth attitudes.

Activity: Youth Alcohol Enforcement Programs – Alcohol Countermeasures

Problem: Year after year alcohol remains the number one drug of choice for our state's young people. More than any other age group, those 15 to 20 years of age are over-represented in motor vehicle crashes. The easy availability of alcohol and the perception that they will not be caught procuring or consuming contributes greatly to the problem. High-risk behavior choices and the addition of alcohol increase the probability of crashes, injuries, and fatalities.

Objectives:

1. Support efforts to enforce underage drinking laws in up to 10 communities.
2. Decrease the drinking driver crash rate for drivers age 15 to 20 identified by the reporting officer as "had been drinking" to 10%.
3. Decrease the 15 to 20 year old drivers and passengers killed and injured in motor vehicle crashes by 15%.
4. Reduce availability of alcohol to underage individuals in 10 communities.

Activities: Encourage local adoption of Comprehensive Alcohol Risk Reduction (CARD) enforcement projects. These are a combination of the Cops in Shops and the Party Patrol programs that allows for a greater number of patrols in a community and will increase the perception of risk

Self-sufficiency: Departments will provide a 25% hard match which will include program mileage, administration time, PI&E, additional enforcement hours, and training.

Evaluation: Administrative: Project activity and success in meeting objectives. University of Memphis analysis of crash data and severity index with the three previous years average and specific head and spinal cord injury data.

Activity: YOUNG ADULT Impaired Driving Prevention PROJECTS – Alcohol Countermeasures

Problem: Few effective programs/activities exist at the post secondary level aimed specifically at reducing impaired driving. A great deal of high-risk drinking and often drinking/driving behaviors occur on college campuses, and campus organizations are seeking methods of reducing these risks. The university/college organizations can provide a network for distributing a toolbox of strategies, materials and program ideas for addressing high-risk youth behaviors.

Objectives: To assist 6 post secondary institutions and their communities to implement new and effective impaired driving prevention programs and activities during FFY 06.

Activities: Encourage and assist university/college communities to develop, implement and evaluate alcohol/ impaired driving prevention programs/ activities.

Self-sufficiency: Communities will provide manpower requirements and will continue efforts once GHSO funding has expired.

Evaluation: Administrative number of communities funded, and each community will evaluate their developed objectives

Activity: MAKING THE TRANSITION from HIGH SCHOOL to COLLEGE - Alcohol Countermeasures

Problem: Some high-risk drinking behavior begins in high school. In addition, college-bound high school students have mistaken perceptions of the amount and extent of drinking on campus, and they acquire positive college role models only by luck. The misperceptions become self-fulfilling prophecies. Social norms prevention strategies can change these perceptions.

Objectives: To form an innovative partnership between a University, including faculty, student peer educators and area high schools to broaden high school prevention efforts and promote a positive —“freshman experience“ with regard to alcohol.

Activities: Train public school staff about transition issues and social norms; train peer educators to present awareness programs to local high school students; prepare and distribute accurate information to local and college media and printed material to high school students and staff. Develop and present activities, presentations, and materials for incoming freshmen by means of trained academic and support staff and student peer educators. Provide alcohol-free social activities. Conduct focus groups and surveys.

Self-sufficiency: Project will be documented and shared with other campuses, private schools and the technical college system.

Evaluation: Administrative evaluation including number of college students and high school students involved in the program; pre/post surveys of perceptions and drinking behavior of program/non-program students.



GOVERNOR'S HIGHWAY SAFETY OFFICE

STATE OF TENNESSEE

**POLICE TRAFFIC
SERVICES**

06-05 POLICE TRAFFIC SERVICES

I. GOALS and OBJECTIVES

A. Goals

Goal: To decrease the number of motor vehicle fatal crashes related to speed and aggressive driving by 10% by CY 2006.

Goal: To reduce the number of fatal motor vehicle crashes in rural areas by 10% in CY 2006.

B. Objectives

Objective 1: To decrease the number of speed-related crashes to 10% by end of 2006 and decrease fatalities and incapacitating injuries resulting from these crashes 10% by the end of CY 2006.

Performance Measure: The number of speed-related crashes in which at least one driver received a citation for speeding, or for which Primary Contributing Circumstance had one or more speed-related causes recorded ; the number of fatalities and incapacitating injuries sustained in such crashes. Baseline: In 2003, of 49,076 injury crashes, 246 fatalities and 3,894 injuries were speed-related. Status: In 2004, of 51,259 injury crashes that occurred, 232 people were killed and 4,693 people sustained incapacitating injuries for which speed was a contributing circumstance.

Objective 2: To decrease the number of rural fatal crashes 10% by the end of CY2006.

Performance Measure: The number of reportable crashes in which the responding law enforcement officer recorded the crash as occurring in a rural location; the number of fatalities and injuries sustained in such crashes. Baseline: In CY2003, out of 1,091 fatal crashes, 641 were rural crashes. Status: In CY 2004, out of 1,143 fatal crashes, 701 were rural crashes.

II. PROBLEM IDENTIFICATION and PROGRAM JUSTIFICATION

Police Traffic Services include the enforcement of traffic laws, training in traffic enforcement skills, and crash and injury prevention activities such as leadership and outreach in communities to encourage safety belt and child safety seat use, use of helmets and protective gear, and support for community-based efforts to discourage speeding, aggressive driving and other unsafe driving behaviors.

All grants for law enforcement activity require that participating officers be trained in SFST by CY2007, and that participating agencies coordinate their traffic patrols with other local safety activities and with state and national mobilizations or waves of enforcement.

A. Magnitude and Severity of Driver Behavior-Caused Crashes

Vented anger displayed through , excessive speeding, changing lanes frequently without signaling, following too closely, driving on shoulders to pass, driving across marked barriers, shouting or gesturing at other drivers, and stress created by traffic congestion are manifestations of aggressive driving. "Speeding and Recklessness"

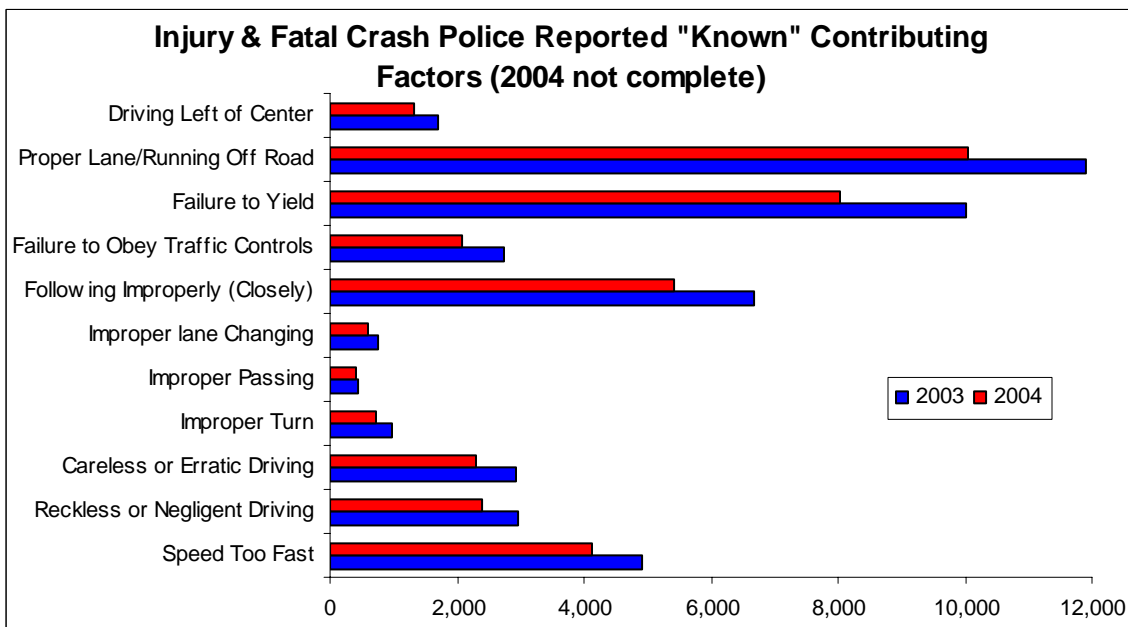
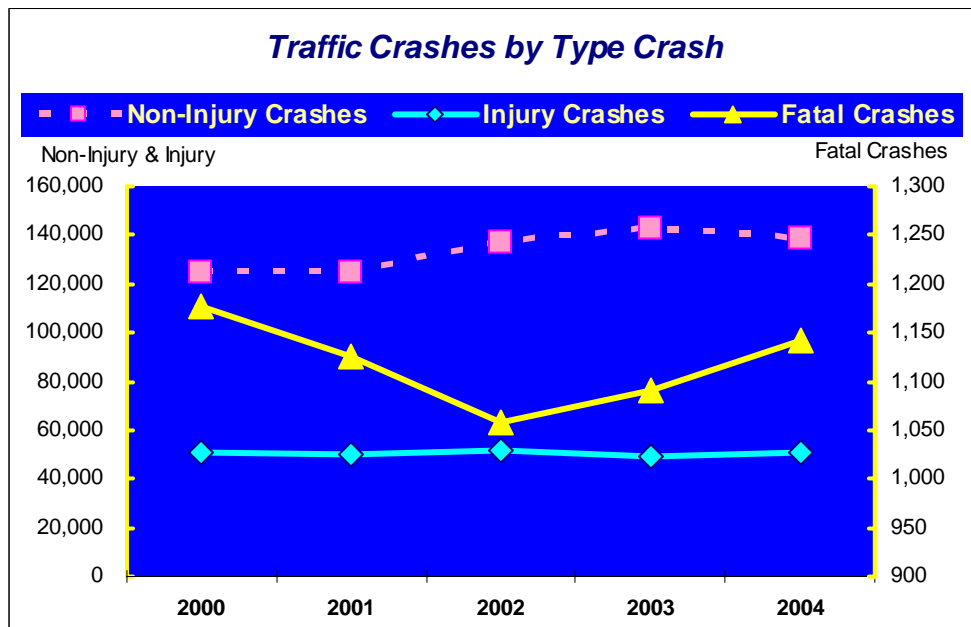
Fatal & Injury Crashes Due to Speed Only

	Fatal	Injury	Property Damage	Total
2003 Speed Too Fast	232	4,693	6,949	11,874
2004 Speed Too Fast	246	3,894	2,700	6,840

B. Risk Factors for Crash Involvement and Injury

The reporting officer indicates on Tennessee's crash report form one or more —possible contributing circumstances (PCC's) that in his opinion contributed to crash causation. These PCC's may include roadway, vehicle or driver factors. Driver factors may include driver behaviors or driver condition (generally alcohol or drug impairment). An officer may report a driver PCC, but not issue a citation for a crash.

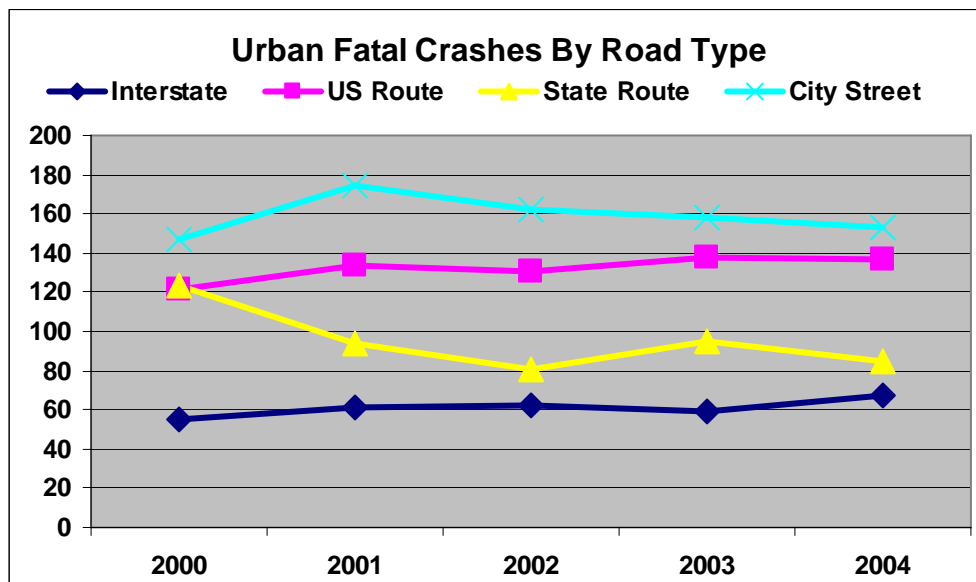
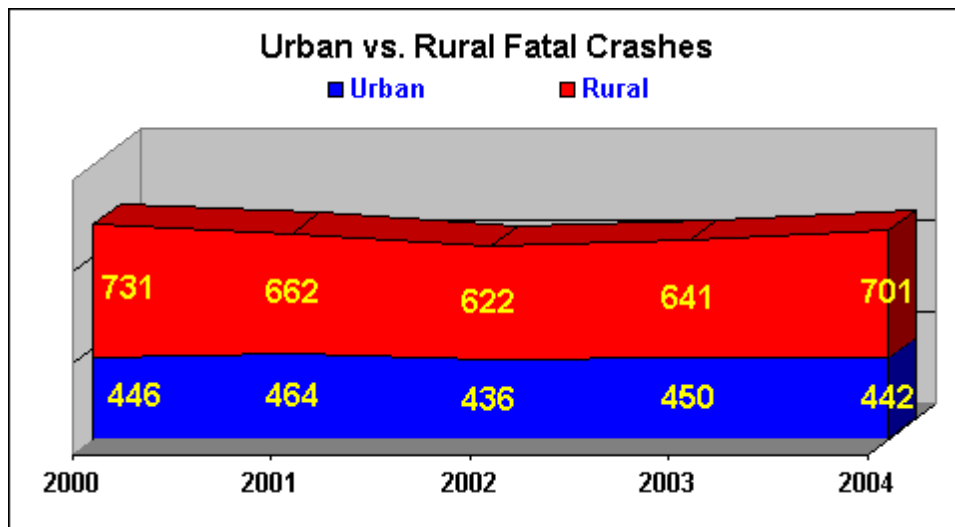
SPEED	Number of Fatalities Involved in Speed Related Crashes, 2003	Percent of Fatal Crashes That Are Speed Related, 2003	Estimated Cost of All Speed Related Crashes, 2000
Tennessee	272	23%	\$861 Million
US Total	13,380	31%	\$40,390 Million
Best State		6%	\$44 Million



Aggressive Driving In a 1999 NHTSA survey on aggressive driving attitudes and behaviors, more than 60% of drivers perceived unsafe driving by others as a major personal threat to themselves and more than half admitted to driving aggressively on occasion. Although there is no single accepted definition of aggressive driving, NHTSA defines it as —operating a motor vehicle in a manner that endangers or is likely to endanger people or property.“

Aggressive drivers are high-risk drivers. They are more likely to drink and drive, speed, or drive unbelted even when not being aggressive. They act as though their vehicle provides anonymity, allowing them to take out driving (and non-driving related) frustrations on others. Their frustration levels are high and concern for other motorists low; they consider vehicles as objects and fail to consider the human element involved. Roadway congestion is a big contributing factor to driver frustration and a trigger to aggressive driving behaviors.

Aggressive driving is generally considered to consist of combinations of several high-risk behaviors which, taken singly, do not represent aggression. These behaviors include exceeding the posted speed limit, following too closely or tailgating, erratic or unsafe lane changes or weaving in and out of traffic, improperly signaling lane changes; running stop signs, disobeying red lights, passing on the right, flashing lights, blowing horns, or making hand and facial gestures.



Rural and Urban Crashes saw an increase in 2003, .03% .031% respectively. In 2004, urban fatal crashes resulted in 442 fatalities and 701 rural crashes resulted in fatalities, an 8.5% increase. U.S. Routes and City Streets are the most common areas for fatality crashes.

III. STRATEGIES FOR DECREASING DEATHS & INJURIES

A. Strategies Selected for 2006

Strategy of Targeted Traffic Law Enforcement Specialized enforcement projects such as speed waves, aggressive driving patrols, red-light running campaigns and the like may contribute to the public's awareness of specific types of unsafe driver behaviors at the same time that the presence of traffic patrols serves as a general deterrent to the wide variety of undesirable behaviors that are not being targeted.

Crashes caused by speeding, aggression and other risky driver behavior must be addressed by multiple strategies, of which traffic law enforcement is a major component. However, enforcement is only briefly effective if performed as a stand-alone strategy. A 2003 University of Toronto/University of California study showed that receiving a traffic ticket reduces a driver's chance of being involved in a fatal crash by 35%, but that the effect only lasts for several weeks and within 3-4 months, the risk of being involved in a fatal crash returns to the pre-ticket level. It may safely be assumed that the mere presence of traffic officers will have even less effect on an individual's long-term behavior.

Many studies have demonstrated that combinations of strategies that increase the public's perception of risk of immediate negative consequences (i.e., a citation and fine), and maintain this perception over time, are the most effective use of traffic law enforcement time. In the long run, community attitude shifts changing the definition of "acceptable" behavior have the greatest potential for decreasing negative driver behaviors". The public needs to accept that officers are contributing to public health and safety by enforcing traffic laws; this attitude shift is best accomplished through Safe Community and other community-based coalitions. Law enforcement cannot be expected to make these changes alone.

The Federal Highway Administration and its partners have finalized a comprehensive national intersection safety agenda. It proposes multiple strategies, beginning with better data, emphasizing individual responsibility, applying engineering improvements and using technologies such as red-light-running cameras.

Strategy: Education and Public Information Enforcement Campaigns: Effective mass media techniques have been shown to increase the motoring public's perception of the risk of becoming involved in a serious crash or of receiving a citation for unlawful behavior and to improve the immediate and long-term effectiveness of enforcement campaigns. The "Elmira", models waves of publicity and enforcement which has shown success for more than 20 years. Thus, all Tennessee enforcement activities will include a publicity campaign that precedes the activity and has a message relating to the presence of enforcement patrols and their immediate, high-probability consequences, whether the patrols occur in waves or as a general deterrence activity.

Public education cannot by itself change the motoring public's attitude regarding the social benefit of obeying posted speed limits or other socially desirable driving behaviors. These attitude changes occur most successfully within communities as outgrowths of community-wide integrated safety programs such as Safe Community coalitions, in which traffic law enforcement is one strategy employed in concert with public education, community forums and others which in total can change social norms.

B. Criteria for Project Selection

Priority for Speed/Aggressive Driving Law Enforcement funding will be given to the counties and communities with:

- (1) populations in excess of 10,000 and with many highway miles and other exposure factors;
- (2) the most total crashes or crashes of a particular type with serious injuries and deaths and/or a high injury to death ratio;
- (3) demonstration of willingness to coordinate safety strategies, programs and funds (extra consideration will be given to Safe Communities that include Speed and Aggressive Driving countermeasures into their community-wide planning);
- (4) demonstration of willingness and ability to commit local funding and other match, and to sustain the effort without Highway Safety funds;
- (5) a plan to evaluate the effectiveness of their enforcement activities; and
- (6) a history of using Highway Safety funds effectively and providing timely and complete documentation of project activity.

Priority for Sustained Alcohol Deployments ("Saturation Patrol") funding will be given to counties and communities:

- (1) populations in excess of 10,000 and with many highway miles and other exposure factors;
- (2) the highest number or greatest frequency of crashes or of crashes of a particular type with serious injuries and deaths and/or a high injury to death ratio;
- (3) participating in National Mobilizations for Impaired Driving and Safety Belt;
- (4) producing a plan and schedule for sustained alcohol deployments targeting highest risk times and locations, and coordinated with

neighboring communities;

(5) demonstrating willingness to coordinate this enforcement with other safety strategies, programs and funds (extra consideration will be given to Safe Communities that include Saturation Patrols into their community-wide planning);

(6) demonstrating willingness and ability to commit local funding and other match, and to sustain the effort without Highway Safety funds;
and

(7) providing a plan to evaluate the effectiveness of these enforcement activities.

Smaller communities may be eligible if they demonstrate problems of unusual scope or unusual buy-in and effectiveness in implementing past Highway Safety projects.

IV. ACTIVITIES/STRATEGIES

Activity: PT POLICE TRAFFIC SERVICES PROGRAM MANAGEMENT

Problem: Short and long-term planning and management of the Police Traffic Services Program and activities in Tennessee. Coordination with traffic law enforcement activities funded elsewhere in this Plan. Coordination with traffic law enforcement activities funded from other federal, state and local resources.

Objectives: Administer the Police Traffic Services Program, including project development and implementation, training development and implementation, coordination of special projects. Promotion of law enforcement (LE) information on technology and tools, participation in conferences, training, and on appropriate committees.

Self - Sufficiency: None.

Evaluation: Compare program objectives and planned activities with accomplishments and prepare written report on reasons for success or lack thereof. Quarterly and final reviews and Annual report.

STRATEGY -- ADMINISTRATION

Activity: TRAFFIC LAW ENFORCEMENT – Police Traffic Services

Problem: Federal guidelines for —Alcohol Saturation Patrols“require a high level of sustained enforcement” as well as participation in national mobilizations. Sustained traffic enforcement consists of at least monthly patrols covering areas in which more than 80% of the population resides and in which more than 60% of the fatal alcohol crashes occur and/or a disproportionate fatality to crash ratio was observed. In 2003, speed was a contributing cause in 23% of all fatal crashes. While more people were injured in urban crashes, more people were killed in rural crashes in 2003.

Objectives:

1. To support sustained Impaired Driving enforcement
2. To reduce the incidence of speed - related crashes by 10%, associated fatalities and incapacitating injuries, and 15% reduction in speed-related crashes in project communities by end of FFY 2006.
3. To reduce statewide incidence of driver-aggression caused crashes, fatalities and injuries by the end of CY 2006.

Activities:

1. Speed/Aggressive Driving Enforcement Projects consisting of overtime enforcement, purchase of enforcement related tools or a combination of both.
2. Impaired Driving Enforcement Projects consisting of overtime enforcement, purchase of enforcement-related tools or a combination of both.

Self - Sufficiency: Grant recipients must provide a plan for self-sufficiency in project application.

Evaluation: Enforcement Activity Report Forms, monthly reports. Administrative evaluation based on officer reporting, Citation Forms, and other reporting forms.

Activity: Local LAW ENFORCEMENT Assistance Program (LLEAP) – Police Traffic Services

Problem: Only 72% of Tennessee motorists wear their safety belts. The President has supported an initiative to increase the national safety belt use rate to 90%. In an attempt to achieve this goal, Tennessee will continue a program of heavy enforcement. In 2003, speed was a contributing cause in 23% of all fatal crashes.

Objective: 1. Increase safety belt use to 79% by the end of CY 2006.
2. Maintain STEP Wave concept of enforcement, participating in national mobilization periods
3. TN Law Enforcement (LE) agencies participate in safety belt mobilizations

Self-sufficiency: They will be encouraged to continue the activity after the grant period is completed and must include a plan for self-sufficiency in the application.

Evaluation: Administrative evaluation. Local surveys to determine if safety belt usage has increased. Enforcement statistics.

STRATEGY -- EDUCATION Public Information & Education

Activity: PT PUBLIC INFORMATION AND EDUCATION CAMPAIGNS

Problem: Perception of risk through effective mass media has been shown to improve the immediate and long-term effectiveness of enforcement campaigns. The —Elmira“ model of waves of publicity and enforcement has been successful for more than 20 years. All enforcement activity will include a publicity campaign that precedes the activity and has a message relating to the presence of enforcement patrols and their immediate-high probability consequences, whether the patrols occur in waves or as general deterrence activity. No materials have been developed that are directed to highest risk groups (young male drivers) for speed-related crashes. Driver aggression and driver distraction materials are also lacking.

Objectives: 1. To coordinate PI&E with national mobilizations and state sustained enforcement deployments.
2. To develop materials/ campaigns directed at highest risk drivers for speed and aggression.
3. To reach 25% of the target audiences with appropriate messages and change the behavior of 10% of the target Audience.
4. To reproduce and distribute existing materials.

Self- Sufficiency: If special local identifiers are needed the community or organization will cover that portion of the printing unless it is incorporated into a specifically approved project.

Evaluation: PI&E Evaluation Administrative- number of persons receiving messages. Impact: survey changes in killed or injuredB

STRATEGY -- EDUCATION --Training

Activity: PT LAW ENFORCEMENT TRAINING

Problem: Specialized traffic law enforcement training is needed on a continuous basis because of turnover of new traffic officers, changes in laws, social attitudes and behaviors and of availability of new enforcement tools, technologies and techniques.

Objectives:

1. To inform 100 law enforcement management and traffic patrol officers about speed and other aggressive driving enforcement —best practices.“
2. To support 12 officers representing large associations to attend specialized traffic safety conferences and to disseminate the information they bring back to Tennessee.
3. To support meetings of the Traffic Law Enforcement Task Force.
4. To support the Traffic Officer's Association and conference.
5. To provide law enforcement traffic management with improved briefing tools.

Self - Sufficiency: On going activity. Match (hard and/or soft may be required).

Evaluation: Administrative. Trainees complete evaluations. Pre/ Post Killed or Injured tests. Curriculum may also be evaluated

The background of the entire page is a close-up, slightly blurred image of the American flag, showing the stars and stripes in shades of red, white, and blue. The flag appears to be waving or draped.

GOVERNOR'S HIGHWAY SAFETY OFFICE

STATE OF TENNESSEE

TRAFFIC RECORDS

I. GOALS and OBJECTIVES

A. Goals

To improve the timeliness of the gathering of the State Crash Records for state, local and federal highway stakeholder use; to plan for coordinated highway safety activities with the Records information so as to use the strategic resources most effectively to decrease traffic crashes, deaths and injuries in Tennessee. The Vision of the GHSO is to aid the local reporting and using agencies in the reduction of paper through electronic data collection, to enhance the decision making to Law enforcement and engineering with timely accurate data, and to improve the safety of the on scene law enforcement officer.

B. Objectives

Objective 1 promote the use of electronic crash record collection through a coordinated multi-agency program to promote data-driven highway safety decision-making in Tennessee by state and local organizations and data users during FFY 2007.

Performance Measure: Have 3 of Big 8 Metropolitan areas reporting electronically by June 2006, have Dept. of Safety THP major metro districts reporting electronically by March of 2006, have 100% of all THP offices reporting by June 2006, have 100 agencies with over 50 crash reports uploading to DOS, and development of a Pursuit Team to determine high impact collection agencies.

Baseline: 2003-2005, over 100 agencies have been contacted and demonstrated the use of Electronic Collection through NHTSA funded TraCS. Currently, there are 28 agencies currently uploading electronic crash reports.

Status: Pursuit members identified and discussion began on Strategic Plan. Website established at University of Memphis to aid in marketing and distribution (www.TennTraCS.org). A project manager was selected at Tennessee Department of Safety for deployment of TraCS and training.

Objective 2: To develop a formalized process with detailed documentation for Electronic Crash collection to develop a state wide support process for both RMS and TraCS users.

Performance Measure: Develop and update multi-agency Deployment Plan, End User Training/Technical/Administrative manuals, Process Plan, Knowledge, Base tool, Change Control Process, Communication Plan, XML schema, and User Group Steering Committee. Update existing users and provide to new users. Implement Customer Relational Database for multiple agency usage to gather user acceptance and problem data. Development of a statewide help desk by end of 2006 through Safety and University of Memphis.

Baseline: Currently, University of Memphis and TDOS have developed a User Manual, Training Process, Memorandum of Understanding, Web based down load Training tool, and TraCS web Site. Currently use University Memphis spreadsheets and logs and DOS TraCS status reports.

Status: TDOS has already started designing a new Oracle database with XML schema for non-TraCS systems, available in 2006. University of Memphis has web site up with FAQ's tools for current users. Investigating various CRM tools to allow for status tracking of users from 3 agencies.

Objective 3: Update Crash collection electronic workflows and forms to make increase user acceptance.

Performance Measure: The current paper and workflow for submission of the standard paper or bubble form. Current backlog of data not entered into the system. To receive 50% of electronic submissions providing correct data to TDOS on a monthly basis by end of 2006.

Baseline: Inability to obtain 98% good 2004 Crash data by August 2005.

Status: Completing 2003 Crash data. Completing update of DOS new law enforcement agency electronic crash data prototype for deployment to THP.

Objective 4: To coordinate transportation safety and behavioral control in reducing crashes, injuries and deaths.

Performance Measure: Ability to report to the Strategic Highway Safety Committee in a timely manner with information that allows committee to develop multidisciplinary changes with demonstration projects to validate benefits of electronic crash data delivery.

Baseline: Last useful data was from 2001. As such, GHSO, TDOT and TDOS have not had adequate information to develop some

strategic recommendations to both managements on developing intervention programs that can provide some immediate impact to reduce crashes, injuries and deaths.

Status: The Strategic Highway Safety Committee meets monthly to develop and recommend specific plans with FHWA and FMCSA representatives. Goal is to be able to recommend some projects and provide a timely mechanism of feedback to top management.

Objective 5: To improve crash and outcome reporting by increasing use of linked reports and by increasing the linkages to coroner, ambulance run and emergency department databases during FFY 2004.

Performance Measure: Number of communities and agencies using linked reports for highway safety purposes. Note: This objective is changed as of 2003: Local road information improvements will be tied to Objective 4 – Automation and has been deleted here.

Baseline: In 2004, TDOH provided 200 communities with linked hospital discharge/ crash reports. Only crash, hospital discharge and death certificate databases are currently linkable.

Status: Linked files are available to all counties on the CODES Internet site. Approximately 200 communities receive hard copy linked data reports. Death certificate data are being linked, and the 2002 emergency department data will be available for linkage later in 2003 at the earliest. No ambulance run data are being collected by the state.

Objective 6: To ensure vigorous participation of all interests in the State Traffic Records Coordinating Committee and to use the TRCC's Traffic Records Strategic Plan recommendations as the basis for decision-making about highway safety information systems, during FY2006.

Performance Measure: Level of participation by interested parties in meetings of Traffic Records Coordinating Committee. Number of Strategic Plan recommendations for which action has begun.

Baseline: In 2004, a State Traffic Records Assessment was performed, and a TR Coordinating Committee was re-established. Status: The TRCC meets quarterly. This 2006 HSP incorporates recommendations from the 2004 Traffic Records Assessment. 2005-2006 Strategic Plan under development with updated and operational objectives.

II. PROBLEM IDENTIFICATION and PROGRAM JUSTIFICATION

A. Nature of the Traffic Records System

Information as Government Function: One important government function is the provision of timely, accurate, complete and replicable data to be used for policy development and for the allocation of public funds to effective and cost-effective projects and programs. Traffic Records are core components of public safety, public health and public security decision support.

A "performance plan" such as the Highway Safety Plan requires good information for program and project selection and for measuring the effectiveness and cost-effectiveness of programs and projects into which public funds have been distributed. This planning function is highly dependent upon the availability and use of quality records from the Tennessee Traffic Safety Information System.

Tennessee's Traffic Safety Information System (TCrash System)

A complete Traffic Safety Information System (TSIS) consists of crash, driver, vehicle, roadway, commercial motor vehicle, citation/conviction records (maintained by TN Dept. of Safety), and emergency medical services, emergency department, inpatient, and rehabilitation records (maintained by the Tennessee's Department of Health, Codes Project, and individual health care providers). As the Crash data becomes more geo-coded there will be an opportunity to link the Trauma Brain Injury Registry project. The TRA Committee recommendation was for the development of a statewide Injury Surveillance System. This will be considered in the upcoming TRCC meetings and Strategic Plan.

Tennessee's crash file system has had its share of issues and concerns. The TRA report noted that the Crash File contains an unacceptably high rate of errors. Tennessee was presented with a choice of trying to fix the old bubble form scanning solution or move on to electronic submission. Once the crash report has been entered into the system, TDOT geo-codes the location from its TRIMS database. A key area that will need to be worked on is the reporting of first time DUI offenders to the driver record. Courts can assign a "first time offender" to an alcohol driving school that shields the adjudication from the driving record. TN has two approaches to resolving this. One is through expanding the Tracker web based platform and the other is through the leadership of the AOC (Administrative Office of the Courts).

Health care records maintained by the Department of Health and are improving through the new EMS data collection and analysis system. Phase I of the new system has already been implemented. Tennessee does not have an Injury Surveillance System but does have a Trauma Brain Injury Registry. Work is to be done through the TRCC to develop a linkage to aid in decision making.

Uses of Traffic Records A complete and comprehensive state traffic records system is essential for effective traffic-related injury control efforts. Traffic records provide the necessary information for tracking of trends, planning, problem identification, operational management and control, and implementation and evaluation of highway safety activities. In today's environment these records must be integrated with records supporting other public safety and security initiatives.

Behavior Change/Social Survey Data Since a majority of crash causation (85% to 95%) results from human behavior, Traffic Records Systems should also contain some longitudinal data about knowledge, attitudes and behaviors as well as about behavioral motivators, especially of people at greatest risk of traffic injury or those most able to effect changes in social mores and institutions. These surveys or observations are only proxies over real world observations. Tennessee conducts yearly seatbelt surveys to understand the impact of various law enforcement campaigns and advertising. With the passage of the Primary Seatbelt law, Tennessee observed appropriate increases in Car and SUV usage but the average pickup driver has not made significant change. Therefore, the HSP plan includes concentration on this segment of the population. Other perceptions measured by a GHSO grant include perceptions on law enforcement, punishment costs, container law, DWI and DUI, and cell phone usage while driving.

Behavior is difficult to characterize, and behavioral change is difficult to quantify and analyze. Collection of longitudinal information about knowledge, attitudes and behaviors of target populations is vital for planning for behavioral change strategies. Planning and evaluating behavior change requires sophisticated analyses of data from a variety of sources. These analyses are applied to long-term processes with multiple intervening factors. The GHSO funded Tracker project has developed 18 months of data that has allowed for a sampling to determine various arrest factors. These factors can then be added to the law enforcement training curriculum to effect change and behavior modification. (See Appendix for Report)

III. STRATEGIES FOR DECREASING DEATHS & INJURIES

A. Strategies Selected for 2006

State Traffic Records Assessment: In November 2004, a NHTSA/NAGHSR Traffic Records Assessment was performed in Tennessee. Major recommendations of the assessment were:

(A) Reestablish a new Traffic Records Coordinating Committee with state and local representation;

DONE and CONTINUING The State Traffic Records Coordinating Committee (TRCC) was re-established in 2005. It had met quarterly until 2003. The Commissioners of Health, Safety and Transportation have developed The Strategic Highway Plan which incorporates many of the Assessment team's recommendations, adds areas not considered or emerging since the federal Assessment, and identifies priorities based on the TRCC's understanding of TN resources and challenges. As part of the TRCC, the sub-committee called the Strategic Highway Safety Committee has met monthly. The 2005 priorities were:

- (1) Automate the state crash form and process (and relate that automation to other law enforcement automation initiatives);
- (2) Improve and automate the collection GIS location information;
- (3) Improve the records of post-crash treatment, outcomes and costs.

(B) Initiate an on-going traffic records planning process:

DONE and CONTINUING

(C) Provide training and promote a user-friendly electronic data access system:

UNDERWAY: Training Development is underway through the joint efforts of the Department of Safety and University of Memphis Crash Record Training Staff. Due to the past issues with the old manual 'Bubble Form' that the State created, Community activists and safety professionals in all except the largest venues have limited access to automated traffic record and other injury-related information to assist them in their community safety planning. As electronic data collection improves across the state, Community professionals at the local level will require increased numbers of trained data miners using SAS, easy access to standard reports, knowledge of sources for ad hoc reports and Internet access to all types of data. The revised TRCC will begin looking into opportunities, means and methods to deploy the information content in a user friendly format.

(D) Support the planned use of GPS by Law Enforcement in collecting crash location data.

UNDERWAY: The first deployment of this will be with the Tennessee Highway Patrol in their use of TraCS. GPS systems had to be studied to develop a configuration that would meet the interfacing to the THP CADD system. A common reference system of hardware requirements and software requirements has been developed using standardized Geographical Information System (GIS) base maps from the DOT TRIMS System. This will allow agencies the means of coordinating and analyzing the relationships among the many sources of data necessary for investigating the multiple, intersecting factors which underlie human behaviors. Planners and crime analysts already use these powerful tools. They have not yet been used for highway safety planning in Tennessee.

Location data needs for transportation safety improvements must be integrated with the needs of the law enforcement agencies that collect roadway safety data and with the needs of other partners in state and federal public health, public safety and emergency management systems. Once resources have been freed up using a manual method of obtaining Latitudinal and Longitudinal for DOS planning, TDOT will be able to provide resources to review complimentary technology to provide DOS and smaller communities' access to SAS information.

(E) Ensure currency of conviction data:

UNDERWAY: The GHSO has been funding a grant that has created a DUI Tracking system called the Tracker. Currently there is one full DA district utilizing the Tracker and several other state agencies. As part of the new grant cycle, the GHSO plans to make it a requirement of the larger funded agencies in 2006. We have already seen some interested results which have been provided in an attached White Paper.

(F) Crash Data:

Automated Data Collection Tennessee has adopted the National Model TraCS Enforcement Data Collection System. The Traffic Accident Section of the Department of Safety (DOS) is the lead for Tennessee's TraCS project and is organizing a State TraCS Steering Committee to assure coordinated development of all collection and management systems. The DOS has begun revising the current TraCS Crash Form to make it more compliant with the new MMUCC forms. In addition, it has begun development of new XML standards for the new Oracle Database to allow large Metro Traffic systems to use their existing Records Management Systems (RMS) A Pursuit Team has been assembled consisting of GHSO, TDOT and TDOS members to assist the larger cities to review whether or not they can effectively use their RMS systems or use TraCS for front end data collection. As result of Team, 2 large metro governments may be able to come on line in 2005. The GHSO has provided the funding for any agency to utilize TraCS and the state has 100 agencies evaluating and 30 now electronically downloading.

(G) EMS & Trauma Data linkage for ISS:

UNDERWAY: The TRA 2004 recommended the continued development of a statewide injury surveillance system or ISS and linkage with the Crash data base. With the development of the new XML data dictionary at TDOS and the Traumatic Brain Injury Registry going into production, this can be realized. All Tennessee Hospitals are mandated to submit inpatient, emergency room, and selected outpatient information to the Department of Health (DOH). As TN continues to deploy the new electronic EMS data collection and analysis system, it will be easier to provide linkage in databases. This will be one of the areas tasked to the new TRCC team. A means to provide linkage to decreasing TennCare costs will be analyzed to provide the political incentive to developing the ISS.

We will then look at means so that communities participating in the automated collection of crash data using TraCS and TBIR will be able to access their own automated files at the same time they forward the data to the state. We will then be able to develop relationships and interventions to reduce highway fatalities and injuries.

(H) Driver & Vehicle Data linkage: The TRA committee recommended processing of adverse driver histories of all drivers coming to Tennessee from other states as the CDLIS requires. There is a serious problem with existing legislation and old computer infrastructure that is the cause of linkage issues. The new XML dictionary underway will assist in overcoming some of the issues. This will allow DOS to make arrangements to accept electronic input from courts.

ON HOLD: review of this has been put on hold pending changes being considered in the legislature due to some of the changes being considered as a result of federal legislative mandates in relation to homeland security and changes in the license issuance. The TRCC will begin considering this when it convenes in September.

IV. ACTIVITIES/STRATEGIES

STRATEGY-ADMINISTRATION

Activity: DATA IMPROVEMENTS - AUTOMATED CRASH REPORT – Traffic Records

Problem: Tennessee's State Traffic Records Coordinating Committee gave top priority to automating the crash data system and improving location data collection and use of new technology for efficient and accurate data collection. Tennessee is one of 19 states and Canadian provinces participating in the Iowa National Model Program for Automation of Law Enforcement Reporting. Tennessee's 3-phase crash module project is well into its third phase. Automated crash and citation data collection, including automated location information will improve the usefulness of these reports to many end users.

Objectives:

1. To automate the Tennessee crash and citation reporting systems and support automation of related law enforcement officer reports.
2. To automate crash location by incorporating GIS mapping and GPS location into the crash data and other data systems.
3. To maintain a coordinated statewide TraCS project by convening quarterly meetings of the TraCS Steering Committee and its location and coordination subcommittees.

Self-sufficiency: Institutionalization of traffic records/public safety information systems coordination is a top priority of the strategic plan. Depends upon perception of value by state and local collectors and users of location data

Evaluation: Administrative evaluation consisting of Quarterly Program Reports, Meeting Notes including decisions, document Experience in setting up system; impact: document information indicating improvements in speed and accuracy of data Collection.

Activity: TR PROGRAM MANAGEMENT and SAFETY ANALYSES

Problem: Problem identification, program and project development and analysis, and database development requires skilled analysts who are knowledgeable about the data. Project data must be received, entered, analyzed and returned in a timely fashion for local as well as state project and program analysis.

Objectives:

1. To assist in the development of Highway Safety Plans and Reports
2. To develop and perform analyses of programs and projects.
3. To develop more accessible and user-friendly reports and media.
4. 2 full-time TRAC positions within the Tennessee Department of Safety.

Evaluation: Administrative

Activity: STRATEGIC PLAN REVIEW and REVISION: Complete Implementation of Year 2007

Problem: Tennessee's TRCC Committee meets quarterly to communicate about safety data improvement, oversee the implementation of the Strategic Plan for Traffic Records Improvements and recommend distribution of Sec. 402 and 411 funds to high priority initiatives and review and revise the Plan as necessary.

Objectives:

1. To review, revise and implement the year 2007 Strategic Plan by March 2006.
2. To continue studying the most effective strategies for records improvements.
3. To provide training for state traffic records leaders and TRCC members.

Self-sufficiency: Institutionalization of coordinated traffic records/public safety information systems improvements is a top priority of the strategic plan.

Evaluation: Process the Notes of meetings, including decisions, distribution of Strategic Plan, determine use made of Strategic Plan. Reported in Annual HSP and Annual Report.

STRATEGY -- EVALUATION of Data System Improvements – LINKAGE

Activity: TR DATA IMPROVEMENTS-DATA LINKAGE

Problem: Much problem identification and program evaluation has used only fatality information and estimates of cost. Linkage of crash files with medical and vital records files can provide population-based data on medical outcomes and costs of treatment for injuries as well as fatalities. These linked data improve the quality of problem identification at the state and local level, permit identification and quantification of intervening factors and provide quality assurance for other data sources.

Objectives:

1. To 2006 crash extract files with 2006 hospital discharge files, death records and emergency department records by the end of the second quarter of the FY or as soon after the medical files are available as is practical.
2. To produce and distribute standard, user-friendly Annual Summary Reports and 2006 standard community reports by the end of the third quarter of the FY.
3. To produce Safety Program reports, ad hoc reports, presentations or journal articles, as requested
4. To develop, update & maintain the Tennessee CODES Internet site as the primary means of distributing these data and reports..
5. To link additional EMS, ED and physician office visit data to linked crash, hospital and death records as soon as automated files are available.
6. To provide 1 full time CODES Analyst to the Tennessee Department of Health

Self-sufficiency: May occur as funding permits state support of DH&FS Bureau of Health Information positions

Evaluation: Administrative. Describe uses made of CODES data.

Activity: CODES DATA NETWORK COOPERATIVE AGREEMENT

Problem: NHTSA is creating a network of CODES projects from among the 25 states that have initiated data linkage projects. Ten of the more advanced states, such as Tennessee, will take the lead in developing this system of state databases that can provide summable data for questions of national interest.

Objectives:

1. To assist in development of a national system of linked databases and provide quality data upon demand of questions of national interest posed by Washington.
2. To upgrade CODES software and if necessary, hardware
3. To conduct twice-monthly meetings of the State CODES Board of Directors
4. To provide quarterly activity reports to NHTSA and to BOTS
5. To produce CODES Management Reports
6. To provide aggregated data to state and local traffic safety groups and projects

Self-sufficiency: This is a multi-year Cooperative Agreement.

Evaluation: Administrative - process of development, implementation and use.

The background of the entire page is a close-up, slightly blurred image of the American flag, showing the red and white stripes and the blue field with white stars. The flag is draped and appears to be in motion.

GOVERNOR'S HIGHWAY SAFETY OFFICE

STATE OF TENNESSEE

MOTORCYCLE SAFETY

06-07 MOTORCYCLE SAFETY

I. GOALS and OBJECTIVES

A. Goal:

Goal: To reduce the number of Motorcycle crash fatalities by 5% from baseline of 71 in 2003 and the number of crashes from 1556 in CY 2000 to 1478.

Motorcycle Safety Data
1997 – 2002

	Crashes	Fatalities	Injuries
1999	1435	60	1338
2000	1556	71	1421
2001	1813	79	1605
2002	2197	95	1867 *

*(2002 injury data based on rolling means method of projection)

Objective 1: To decrease the three-year (2000-2002) average number of motorcycle crashes to 1762, and three-year average number of fatalities to 77 in 2006

Performance Measure: Annual number of motorcycle crashes and motorcyclists killed as reported on police crash report form, averaged over three years. Baseline: In CY 2000, 71 motorcycle riders died in 1,556 crashes. Status: In CY 2003, 90 motorcycle riders died.

C. Related National/State Goals:

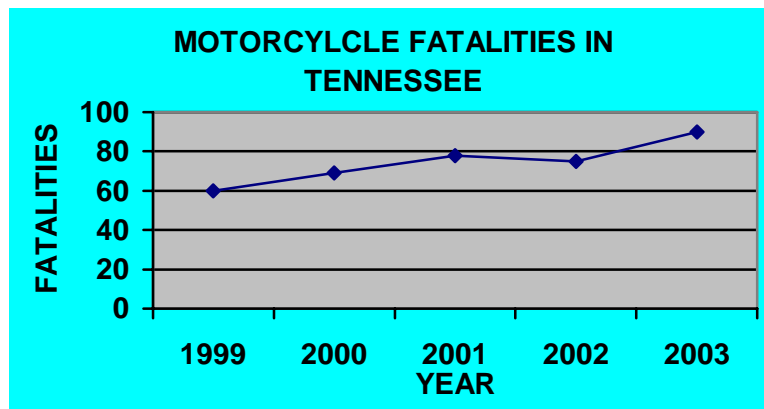
Motorcycle Safety Foundation/NHTSA National Agenda for Motorcycle Safety (2002) includes 4 categories of —Urgent recommendations, 19 categories of —Essential recommendations, and 13 categories of —Necessary recommendations. The four —Urgent categories are: Research in Motorcycle Crashes, Motorcyclist Alcohol & Other Impairment, Personal Protective equipment and Motorist Awareness.

II. PROBLEM IDENTIFICATION and PROGRAM JUSTIFICATION

A. Magnitude and Severity of the Motorcycle Crash Problem

In the United States, motor vehicle injuries are the leading cause of death for person's age 4 to 33 years. Of the 41,821 persons killed in motor vehicle crashes nationally in 2000, 2,862 (7%) were motorcyclists. Of the 3,189,000 persons injured nationally, 58,000 (1.8%) were motorcyclists. Per vehicle mile traveled, a motorcyclist is 18 times more likely to die in a motor vehicle crash and three times more likely to be injured in a crash than a passenger car occupant. In Tennessee from 2002 to 2003 there was a 20% increase in motorcycle fatalities.

MOTORCYCLES	Motorcycle Rider Deaths 2003				Current Lives Saved by Helmets	Additional Savable at 100%
	Total	Helmeted	Unhelmeted	Unknown		
Tennessee	90	75	15	0	44	6
	Motorcycle Rider Deaths 2002					
Tennessee	75	60	13	2	37	5



Nationally, motorcycle injury crashes had been on a fairly steady decline since 1985, the trend reversed in 1997, and the corresponding decline in fatalities began an upward trend in 1995 and the number has nearly doubled in fewer than 10 years. Tennessee has been on an upward trend since 1999 with the exception of a minor decrease in 2002. However, 2003 marked a significant increase.

Initial Point of Impact	Motorcycles Involved in Fatal Crashes by Initial Point of Impact and Crash Type				Total	
	Crash Type					
	Single-Vehicle Crashes		Multiple-Vehicle Crashes		Number	Percent
Number	Percent	Number	Percent			
Front	26	66.7	41	77.4	67	72.8
Left Side	4	10.3	4	7.5	8	8.7
Right Side	4	10.3	2	3.8	6	6.5
Rear	1	2.6	3	5.7	4	4.3
Other/Unknown	4	10.3	3	5.7	7	7.6
Total	39	100.0	53	100.0	92	100.0

III. STRATEGIES FOR DECREASING DEATHS & INJURIES

Public Information Federal funds support the development, duplication and distribution of public information and education materials that support training and that address the primary safety issues for motorcyclists. 2001 Motorcycle Safety Foundation award-winning materials address training, licensing, protective gear, alcohol-impaired riding, work zone hazards and moped safety.

IV. ACTIVITIES/STRATEGIES

STRATEGY -- EDUCATION OF Public Information & Education

Activity: MC MOTORCYCLE SAFETY PUBLIC INFORMATION

Problem: PSA developed to be communicated to the appropriate target audiences

Objective: Market research, design campaign messages and materials to disseminate all five messages, ascertain baseline KAB for each message and develop plan for analysis of effectiveness. The purpose of which is to:

1. Increase interest in training and therefore increase class size by 10% by 2004.
2. Reduce impaired riding and alcohol-related crashes by 10% by 2004.
3. Stop upward trend and reduce annual motorcyclist deaths and injuries by 8% by 2004.
4. Reach 60% of the targeted audiences with these materials.

Self-sufficiency: All materials will be available for free duplication.

Evaluation: PI&E Evaluation ascertain baseline KAB for each message and develop plan for analysis of effectiveness in reaching target audiences and in affecting KAB.

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GOVERNOR'S HIGHWAY SAFETY OFFICE

STATE OF TENNESSEE

**PEDESTRIAN,
BICYCLE
AND PEOPLE
TRANSPORTATION
SAFETY**

06-08 PEDESTRIAN, BICYCLE & PUPIL TRANSPORTATION SAFETY

I. GOALS and OBJECTIVES

A. Goals

Goal: To decrease pedestrian fatalities by 5% in 2006.

B. Objectives

Objective 1: To decrease pedestrian fatalities 90 in CY 2006.

Performance Measure: The numerical average of three calendar years of pedestrians involved in crashes reported on the state police crash report. Baseline: In 2002, 72 pedestrians were killed Status: In 2003, 96 pedestrians were killed.

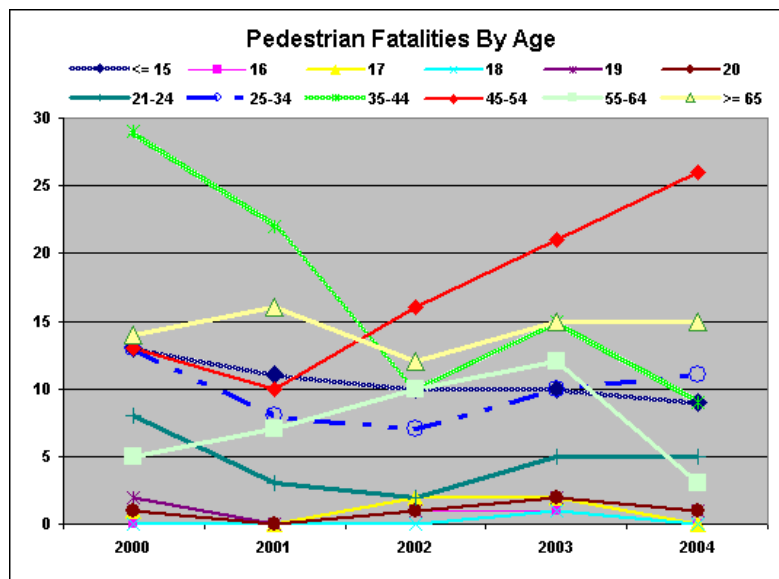
C. Related National/ State Goals

The Center for Disease Control's Healthy People 2010 national public health goals include reducing pedestrian deaths on public roads to 1.0 pedestrian death per 100,000 population and reducing nonfatal pedestrian injuries on public roads to 19 per 100,000 population, and to increase the number of states with law requiring bicycle helmets for bicycle riders.

Federal Highway Administration (FHWA) goals for the year 2008 include doubling bicycle and walking trips from 7.9 to 15.8 and at the same time to decrease bicyclists or pedestrians killed or injured in motor vehicle crashes by 10%. (National Bicycling and Walking Study-1994).

Pedestrian Fatalities

Age	2000	2001	2002	2003	2004
<= 15	13	11	10	10	9
16	0	0	1	1	0
17	1	0	2	2	0
18	0	0	0	1	0
19	2	0	1	2	1
20	1	0	1	2	1
21-24	8	3	2	5	5
25-34	13	8	7	10	11
35-44	29	22	10	15	9
45-54	13	10	16	21	26
55-64	5	7	10	12	3
>= 65	14	16	12	15	15
Total	99	77	72	96	80



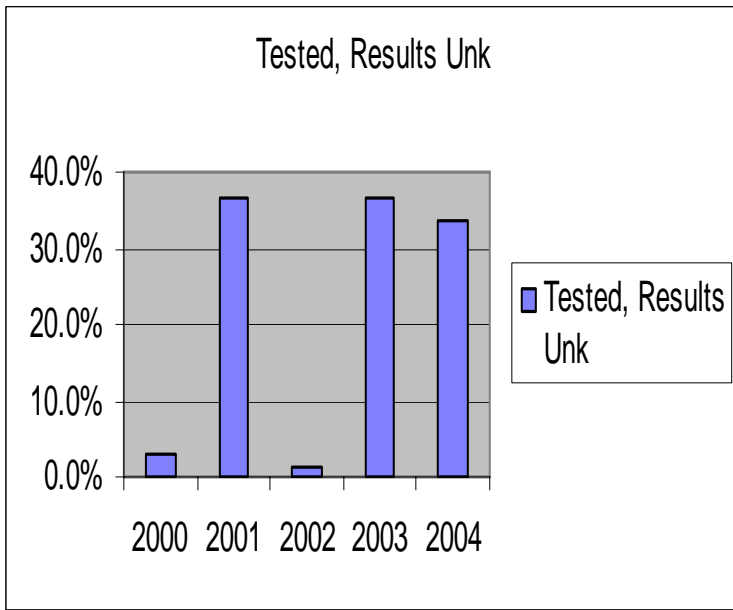
II. PROBLEM IDENTIFICATION and PROGRAM JUSTIFICATION

Although pedestrian and bicycle crashes have decreased dramatically over the past fifteen years, when they do occur most of them result in injury. The difference between a pedestrian or bicyclist death and an injury is minor differences in speed of the motor vehicle, and in the skill, knowledge and attentiveness of drivers, bicycle riders and pedestrians. Only 1.7% of motor vehicle occupants will be seriously injured or killed in a crash, in comparison with 24.4% of pedestrians and 13% of bicyclists, when involved in crashes with motor vehicles.

Although pedestrians and bicycle riders are similar in that they are —low profile“ (difficult to see), travel at relatively slow speeds and are relatively unprotected when compared with motor vehicles and their occupants, and although both tend to be injured even in slow-speed crashes with motor vehicles, they pose different problems for the safety professions. They have different risk factors and at-risk groups,

and respond to different strategies and motivators.

However, for groups, engineering a friendlier environment for them, and motivating the motoring public to recognize them as valid forms of transportation with legal rights to travel on the pavement are effective safety strategies. The Federal Highway Administration's goals above highlight the added benefit that, with more pedestrian and bicycle-friendly communities, more exercise will occur and the general well-being and health of the public will improve.



Pedestrian Fatalities By Age Positive Alcohol

	2000	2001	2002	2003	2004
<=					
15	0.0%	0.0%	0.0%	0.0%	0.0%
16	0.0%	0.0%	0.0%	0.0%	0.0%
17	0.0%	0.0%	50.0%	0.0%	0.0%
18	0.0%	0.0%	0.0%	0.0%	0.0%
19	50.0%	0.0%	100.0%	0.0%	100.0%
20	100.0%	0.0%	0.0%	0.0%	100.0%
21-					
24	62.5%	0.0%	0.0%	0.0%	20.0%
25-					
34	53.8%	0.0%	71.4%	0.0%	9.1%
35-					
44	37.9%	13.6%	60.0%	0.0%	0.0%
45-					
54	46.2%	10.0%	50.0%	9.5%	11.5%
55-					
64	20.0%	0.0%	30.0%	8.3%	66.7%
>=					
65	7.1%	6.3%	0.0%	6.7%	0.0%
Total	33.3%	6.5%	33.3%	4.2%	11.3%

	2000	2001	2002	2003	2004
Tested, Results					
Unk	3.0%	36.4%	1.4%	36.5%	33.8%

A. Magnitude and Severity of the Pedestrian Crash Problem

Tennessee is ranked 18 out of the 50 states and Puerto Rico for our Pedestrian fatality rate. We average 1.64 per \$100,000 population. In 2002, we ranked 29th in the nation. The Tennessee CODES Project linked 1998 and 1999 drivers from crash reports and hospital records having respectively, 1127 and 1081 drivers involved in 1056 and 1014 crashes involving pedestrians. EMS data was and still is unavailable at this time. Though pedestrians were not considered in the linkage project for 1998 and 1999, there were 38 pedestrian deaths in 1998 and 37 pedestrian deaths in 1999, recorded in hospital discharge data (noted by patient status of Died and e-code for pedestrian involved in a crash). In 1998 and 1999, hospital e-code information for pedestrian injuries showed respectively, 2,025 and 2,302 persons injured. Those hospitalized had an average hospital stay of 8.0 days and total in-patient charges of \$31,344,803.

B. Risk Factors for Pedestrian Crash Involvement and Injury:

Location

Location can be urban or rural, can vary by speed limit and the density and type of traffic, and especially by the roadway design. Age and location are correlating factors. Pedestrian-friendly intersections, traffic calming features, and the availability of paved shoulders and sidewalks make walking safe and more enjoyable for all ages. Some examples are:

--Neighborhoods: Child pedestrian crashes generally occur on neighborhood streets and often at mid-block. Children are often struck by a vehicle belonging to their own or another parent or teacher's car at or near school or home.

--Intersections: For older youth and adults, being a pedestrian is often a form of exercise as well as transportation and fun. Crashes are

often on larger city streets or country roads and are caused by a left turning motorist who does not look for/see the smaller road user or does not judge the pedestrian's movements and speed accurately. Sometimes crashes are caused by a right turning motorist who does not look to the right for pedestrians before turning at a right-turn-on-red intersection. Looking only for cars and trucks at intersections, not smaller vehicles and pedestrians or animals, is a common motorist mistake.

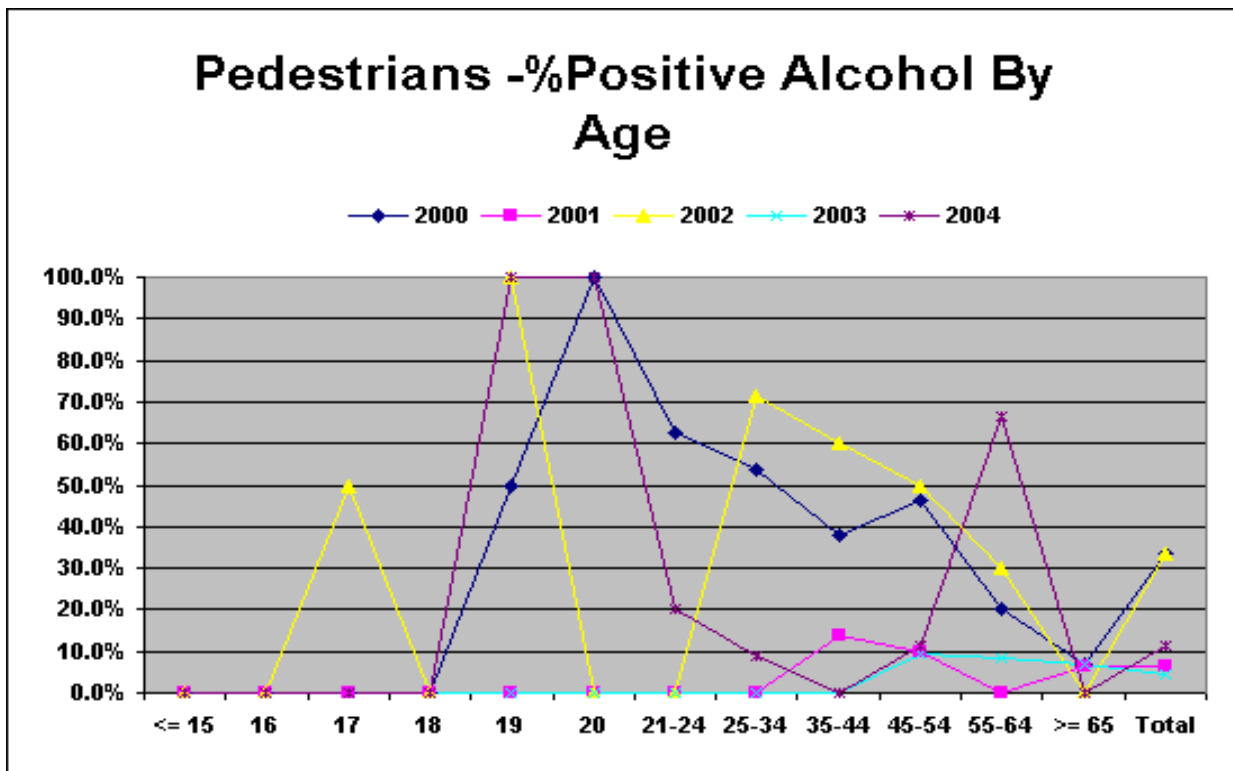
--High-speed Roadways: A few of the fatalities and serious injuries each year happen to motorists who become pedestrians in areas where pedestrians are not expected. Examples are: running out of gas, changing a tire or inspecting/repairing a vehicle problem, or leaving a car with an abusive driver or passenger. The only defense is making oneself as visible as possible with flares, flashlight, another vehicle's lights, vehicle hazard lights, strap-on lighting or retro-reflective outer clothing, and walking facing traffic or even off the roadway altogether when traffic speed is high. Other high-risk locations are on RR ROW, in highway work zones, in stalled cars on roadways and on college campuses.

Age historically, children, elderly and alcohol-impaired pedestrians constituted about 30% each of pedestrian fatalities. In most recent years, child and elderly pedestrian fatalities are decreasing. Anecdotal information indicates that this may be due to decreased walking because of fear of traffic by these two groups rather than any real improvements in safety. The following table shows that both in incidence of death and injury and in the injury-to-death ratios, it is the adult and elderly population that merits more attention and intervention.

Gender Nationally, more than two-thirds of pedestrian fatalities are males, and males sustain more than twice the number of injuries in pedestrian crashes.

Time of Day Age and time of day are correlating factors. The large majority of childhood crashes happen in the 3-4 hours right after school in daylight. Three of the five fatalities of those 65 or older occurred during daylight. On the other hand, 28 of the 33 fatalities of adults 15 to 65 years old occurred at night. Dark clothing, especially red and black, make night-time pedestrians almost invisible to motorists.

Almost all of adult pedestrian fatalities occurred at night. National studies use night-time as a surrogate for drinking, which in the case of pedestrians is a combination of the drinking behaviors and risk-taking of both drivers and pedestrians.



**2004 -
PEDESTRIAN
FATALITIES
BY AGE BY
ALCOHOL**

	Negative	Positive	Tested, Results Ink	Not Tested	Total
AGE <= 15	0	0	2	7	9
AGE 16	0	0	0	0	0
AGE 17	0	0	0	0	0
AGE 18	0	0	0	0	0
AGE 19	0	1	0	0	1
AGE 20	0	1	0	0	1
AGE 21-24	0	1	3	1	5
AGE 25-34	0	1	2	8	11
AGE 35-44	2	0	3	4	9
AGE 45-54	3	3	8	12	26
AGE 55-64	0	2	0	1	3
AGE >= 65	0	0	9	6	15
Unknown	0	0	0	0	0
Total	5	9	27	39	80

August 25, 2005

Tennessee Department of Safety, Fatality Analysis Reporting System (FARS)

Impaired judgment Adult pedestrians often cross against lights, cross outside crossing zones at intersections, or cross at the most convenient place for them. These can be dangerous situations but if the teen or adult accurately judges traffic and other environmental conditions a crash rarely occurs.

Introduce alcohol or drug use, and the most athletic pedestrian may have trouble coordinating the walk along or crossing of a street/road. The impaired judgment and reflexes that make a person a dangerous motorist are hazardous to others when on foot.

Vehicle type Few pedestrian crashes result in damage only to clothing or other property; almost all result in some injury to the pedestrian. Speed and the size and construction of vehicle hitting pedestrian affect degree of injury. Bumper height, for example, can mean the difference between injury and death.

Driver Aggression Driver aggression toward the relatively slower-moving pedestrian is getting worse. Crossing guards are sworn at, given hand signals, and being intentionally driven at, and their directions to traffic disregarded. Crossing guards, like school bus drivers, can take a vehicle license and report it to local law enforcement to initiate a contact and possible citation. However, most are in shock when they or the children are in jeopardy and cannot record this information.

III. STRATEGIES FOR DECREASING PEDESTRIAN DEATHS & INJURIES

Everyone is a pedestrian at some time, and thus we think of walking as a simple activity. We fail to recognize the complexity of many of the issues facing planners who want to integrate safe pedestrian travel into their transportation and land use plans. Also, pedestrian travel is not as engaging in terms of political motivation as bicycling. The federal government developed the Pedestrian Road Show as a community-focused interactive means of providing a fresh view of the problems and possible solutions for such planning.

A. Strategies Selected for 2006

Pedestrian Safety

Research/data compiled over the last 30 years demonstrates the effectiveness of the following strategies to prevent serious injuries and deaths involving a pedestrian:

Community leaders concerned about safety for pedestrians are encouraged to remain open to creative innovative approaches. They may develop new strategies or test best practices from other communities, and through state organizations share what they have learned about making walking both fun and safe. Good community design, such as the Smart Growth Initiative, is one of the most effective strategies to both encourage walking and make it safer. Incorporating city planners into community pedestrian safety groups is a powerful means of improving safety.

Schools should discourage parent drop-offs and should designate student drop-off points and direct and inform all users of the school area why this should be observed - to protect all children by reducing the most dangerous maneuvers of turning, backing, and walking between vehicles especially in multi-directional traffic.

Strategy of Education Public information and education must be a component of each pedestrian safety strategy. Up-to-date, targeted, free or free-loan educational materials must be made available to communities, interest groups and advocacy groups who do not have the resources to research or produce such materials.

Pedestrian safety is an extremely complex issue. Multiple types of education or training are necessary because so many target groups need to learn about safe pedestrian environments and behaviors; these groups include trainers, the various at-risk groups, planners, designers, engineers, community leaders, school systems, and law enforcement officers. Adult peer groups such as AARP and 55-Alive can incorporate more pedestrian-motorist material to explain the changes in abilities and perceptions that occur with age and ways to compensate while maintaining mobility as long as possible. Even for child pedestrian safety, multiple groups need to be made aware of their contribution to the danger to child pedestrians and what they can do to address it in their multiple roles of citizen, parent, safety professional, safety advocate or educator. Public information is an essential part of pedestrian law enforcement;

Strategy of Enforcement Law enforcement for pedestrian safety includes enforcing motorist speeds, aggression toward pedestrians, red-light violations, failure to yield in crosswalks and for blind pedestrians at all locations. It also includes limited enforcement of pedestrian behaviors coupled with on-the-spot education of the pedestrians about crossing locations and strategies. These enforcement strategies can reduce up to 90% of crashes.

Strategy -Engineering and Conspicuity Enhancement:

Crash prevention through changing the environment can take the form of re-engineering the roadway to adapt to the needs of pedestrians and to minimize conflicts with motor vehicles. Smart Growth and residential design standards argue against the target 85th percentile speed of 25-30 mph. The potential for pedestrian fatalities is ten times greater at 31 mph than at 15 mph and the short trips on these residential streets do not justify the minimal travel time savings that the higher speed limits yield. Wide, curvilinear streets now in favor should be replaced with a more connected street network of narrowed streets permitting parallel routes serving all travelers safely at moderate speeds. In addition, curvilinear streets and cul-de-sacs discourage walking because walking distance is increased and they diminish sight distance, making them even more dangerous for pedestrians to cross.

Changing the environment can also take the form of increasing the visibility of walkers, joggers and early morning or late evening delivery people. A simple intervention is to educate them about the value of retro-reflective material on their outerwear, especially on their shoes.

B. Criteria for Project Selection

Priority for pedestrian safety funding will be given to communities with:

- (1) populations in excess of 10,000;
- (2) unusual exposure factors for pedestrian crashes;
- (3) at least three years of data demonstrating a pedestrian crash problem;
- (4) a high-level of community buy-in demonstrated by project match;
- (5) a plan for coordinated activity employing multiple actors, strategies, and/or fund sources, especially if part of integrated Safe Community/Smart Growth planning;
- (6) an evaluation plan;
- (7) demonstration of good self-sufficiency within 1-3 years, and
- (8) a history of using Highway Safety funds effectively.

Communities with functioning Safe Community Coalitions or Smart Growth or Safety Planning initiatives that have used data to select pedestrian safety as a priority area for community activity will be given preference.

Smaller communities may be eligible for start-up grants if they demonstrate problems of unusual scope or unusual community buy-in, plus unusual effectiveness in past Highway Safety Projects.

Project funding is for one year; communities may extend funding for an activity for no more than 2 additional years, including both planning and implementation phases, and these must be documented in the initial project. Each year's activity will be evaluated, and communities that have not performed the prior year's contract will not be eligible for additional years of funding.

School Bus Safety

A. MAGNITUDE and SEVERITY of the SCHOOL BUS INJURY PROBLEM

This issue has received more attention than the extremely few crashes, injuries and deaths warrant. Few school bus crashes result in serious injury, except those that involve pedestrians or motorists in other vehicles. School bus passengers are four times more likely to be killed as pedestrians near the bus than as passengers while on the bus.

Motorists who pass a school bus while stopped with red alternating lights flashing can be cited by LEA if seen by officer or if bus driver gets license number. Often bus driver has no time to see and record this number while main job is getting child on/off bus safely.

Most often injured in school-bus-related crashes are the drivers and occupants of the other vehicle. Children boarding/deboarding the bus are injured in lower numbers.

Occupant protection is a hotly contested issue, even though so few injuries occur on the school bus. The physical dissimilarities of the children within one age group create extreme difficulty in fitting protection individually. Occupants on the bus have little risk of serious injury, even in a crash, except in rare instances, such as when a semi is the other vehicle.

III. STRATEGIES FOR DECREASING DEATHS & INJURIES in SCHOOL BUS CRASHES

Education Of Public Information Materials These materials are targeted at motorists, educating them about the provisions of school bus safety laws, emphasizing the stop requirement for all lanes on undivided highways when a school bus is stopped with red lights flashing.

IV. ACTIVITIES/STRATEGIES

STRATEGY --ADMINISTRATION

Activity: PEDESTRIAN AND BICYCLE SAFETY – Pedestrian Safety

Problem: Pedestrian and Bicycle Safety audiences and need for information vary by age and role. Materials must be targeted for a wide variety of audiences and must be revised frequently to address changing social and environmental factors.

Objective: 1. Maintain current materials to meet demand, evaluate validity and effectiveness, need for new or updated materials, develop new materials as required
2. Address target audiences - children under 15, elderly adults, alcohol-impaired travelers, and motorists sharing the road with them with the appropriate messages in appropriate formats.
3. Increase motorist and parental awareness of special problems of school zones and school buses.
4. Develop new youth-oriented materials.

Self-sufficiency: Internet offers possibility of decreased cost of development/ handling of paper.

Evaluation: Administrative. Baseline survey required, then post-use survey of change in attitudes and behaviors.

Activity: PUPIL TRANSPORTATION SAFETY

Problem: Local efforts have been shown to be most effective in changing behavior. Most of the school bus collisions reported occurred in urban areas in the early morning or afternoon as one would since students are generally being transported to and from school. Students must be taught how to wait, enter, and exit the school bus safely. Bus drivers must be taught the safe operation of transport vehicles.

Objective: 1. To provide materials, training, grants, support for the development of local training, and other technical assistance as requested.
2. To assist in promotion of safe driving practices.
3. To study the effectiveness of Safe Community Coalitions in changing community knowledge, attitudes, behaviors.

Self-sufficiency: Community must include self-sufficiency plan in application.

Evaluation: Administrative description of activities. Impact local surveys of pre/post activities.

The background of the entire page is a close-up, slightly blurred image of the American flag, showing the red and white stripes and the blue field with white stars. The flag is draped and appears to be in motion.

GOVERNOR'S HIGHWAY SAFETY OFFICE

STATE OF TENNESSEE

**SAFE COMMUNITY
PROGRAMS**

I. GOALS and OBJECTIVES

A. Goals

Goal: To promote increased multidisciplinary safety activities in statewide at least 40% of the state population and 33% of state traffic deaths and serious injuries.

Goal: To inform the general public and safety advocates of changes in laws, new data, new studies, program opportunities, etc., and to reach high-risk audiences with informational and motivational safety messages.

B. Objectives

Community Outreach and Activities

Objective 1: To provide outreach, technical assistance and guidance on no less than a quarterly basis to community representatives in Tennessee's 95 counties.

Performance Measure: Attendance at all Traffic Safety Commission meetings. Number of meetings with representatives of multiple disciplines in county and sub-county political jurisdictions. Baseline: In CY 2002, GHSO staff attended most quarterly Traffic Safety Commission meetings. GHSO staff meets almost entirely with law enforcement officials. Status: During CY 2003, GHSO staff attended most TSC meetings. GHSO staff met regularly with coalitions in all organized Safe Communities.

Objective 2: To encourage locally directed multi-disciplinary safety activities in the top 10 most populated counties or communities by the end of 2006 and the top 25 most populated counties or communities by the end of 2010.

Performance Measure: Population and KA in counties and sub-county communities in which continuing multi-disciplinary safety activities are occurring.

Baseline: In FY 2000, GHSO did Safe Community Meetings around. Development of Action Guides began. State-level committee organized to coordinate community grant activity. No grant program had yet been developed.

Status: In FY 2004, funded Safe Community Coalitions included Washington - Johnson City, Vanderbilt Children's Hospital, Cumberland, Warren and Smith.

General Outreach and Communications

Objective 4: To provide training, technology transfer and technical assistance to at least 300 safety professionals and to assist with the coordination of at least two volunteer organizations during 2006-7.

Performance Measure: Attendance at subsidized conferences. Number of programs initiated by targeted groups. Baseline: In 2002, 200 attended the Tennessee's Lifesaver's Conference and Status: In 2004, 550 attended the Tennessee Lifesaver's Conference and Governor's Law Enforcement Challenge.

Objective 5: To evaluate the effectiveness of existing GHSO radio, television and print medium public information and education materials in changing knowledge, attitudes and behaviors, and to apply results to the development of the year 2007 HSP.

Performance Measure: The percent of all program-level and project level public information campaigns for which the distribution to target audiences is mapped and effectiveness of changing knowledge, attitude and/or behavior is evaluated. Baseline: In 2003, A UT Survey was conducted showing minimal reach. Status: 2004 A University of Tennessee survey conducted to measure the effectiveness of our campaigns showed that approximately 85% of the state had heard one or more of our messages.

II. PROBLEM IDENTIFICATION and PROGRAM JUSTIFICATION

A. Magnitude and Severity of the Problem æ Community Safety Activities

In an era of devolution and diminishing federal resources, local units of government and non-government organizations will need to address their traffic injury problems locally to an ever greater extent.

Long-term individual and community-based measures are crucial for addressing complex behavioral problems like drinking and driving that are determined by a myriad of cultural, lifestyle and psychosocial factors. Single-strategy activities focused on the individual have been shown to be ineffective over the long run, especially when compared with grass-roots community-based activities reflecting community mores & social attitudes about what behaviors are acceptable to other members of the community.

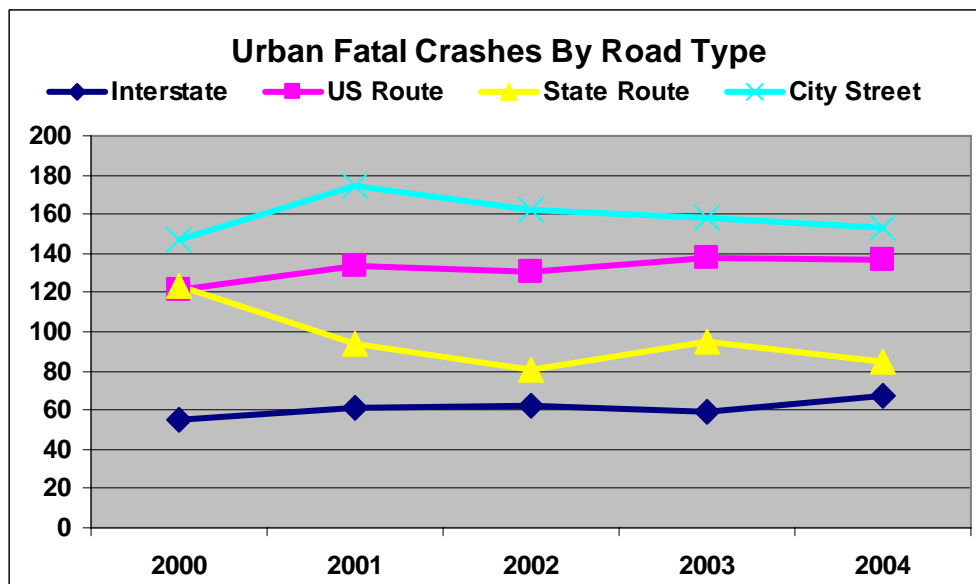
Government assistance in the form of facilitation of community development skills, strategic planning skills and assistance in accessing information and other strategic resources have been shown to be an effective strategy for program development and implementation. It is these community skills that prepare the community to develop perform and analyze highway safety activities that lead to the desired behavior changes that occur only in the long-term and in the context of the community.

Community-level planning and activities permit a higher level of coordination and earned media than the traditional single-strategy approaches once favored in Highway Safety. When community's teams begin to consider who needs to be involved in their highway safety activities, they are often surprised by the interest and skills non-traditional partners bring to the table. Historically, planning and engineering have not been included in the development of collaborative highway safety projects at the local level. Their work has not been well understood by other safety and health professionals and they in turn, do not always understand what the "soft side" of safety does accomplish. Thus they have not been integrated into multi-strategy community development efforts such as Safe Communities, where their expertise can best be deployed.

Single-strategy approaches such as mass media or law enforcement campaigns have been shown to be ineffective in attaining long-term behavior change. Old-style mass media campaigns are known to be expensive and relatively ineffective. Traffic law enforcement is expensive and has only a short-term effect. To reach the new driver or the recalcitrant driver, market-savvy information or motivational materials should be integrated into multiple-strategy social marketing campaigns, generally developed at the community level, that not only get their attention, but motivate them to change their behavior. Mass media have significant value in providing information to a broad public, but the advent of the Internet has also changed how this information is packaged and distributed.

B. Risk Factors for Crash Involvement and Injury

Roadway Location While more crashes occur on urban streets and roads, they tend to have less severe consequences than rural crashes. This is due to many factors, including speed, roadway design and availability, and emergency response.



Communities with Diverse Populations The 2004 U.S. Census Bureau population estimate for Tennessee is 5,900,962 distributed over 95 counties and 580 municipalities. The average state population density is less than 138 per square mile. About 65% of the population is urban and most of the urban areas are in the southeastern quadrant of the state. The state has a long, strong tradition of local control; politically, it is organized into townships, municipalities, and counties with overlapping jurisdictions.

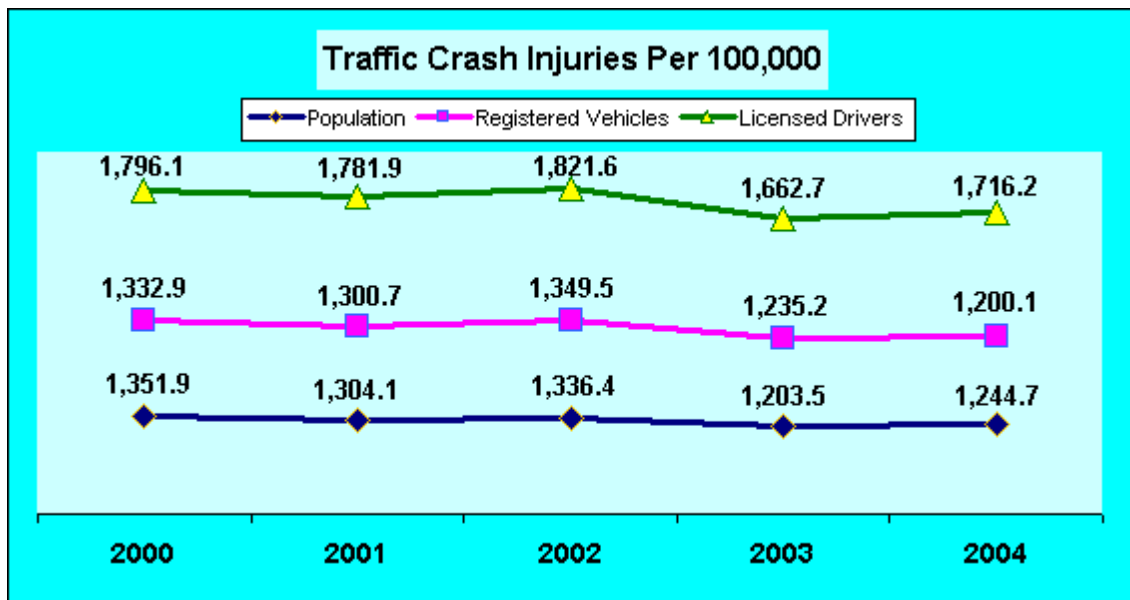
Minority: In the 2000 census, Tennessee's population was 80.2 percent white, 16.4 percent black, and 2.2 percent Hispanic, and the 2000 Census documents a large percentage increase in minority populations over the last decade. Tennessee's minority populations also include Native Americans, Asian persons and Native Hawaiian and other Pacific Islanders.

Age Distribution: According to the 2000 United States Census Bureau, 24.6 percent of the population is under 18 years of age, 63% is between the ages of 18 and 65, and 12.4% is over the age of 65.

While the Tennessee population is nearly 80.2% white, the 2000 U.S. Census documents that our population is becoming increasingly diverse, and "one size fits all" strategies, messages, and approaches are no longer effective. We must learn from our partners in the human services how to achieve our safety goals while being culturally appropriate and sensitive to the differences between diverse populations in order to achieve the desired behavior changes.

Injuries Per 100,000

	2000	2001	2002	2003	2004
Population	1,351.9	1,304.1	1,336.4	1,203.5	1,244.7
Registered Vehicles	1,332.9	1,300.7	1,349.5	1,235.2	1,200.1
Licensed Drivers	1,796.1	1,781.9	1,821.6	1,662.7	1,716.2



III. STRATEGIES FOR DECREASING DEATHS & INJURIES

A. Strategies Selected for 2006

Community Traffic Safety Outreach and Activities

Multidisciplinary Activities The 1999 Iowa State University study of traffic safety communications identified community programs using an integrated set of approaches involving mass communication, face-to-face program elements, community action and small-scale educational activities as being shown to effect lasting attitudinal and behavioral change. Thus, highway safety advocates are following their public health partners toward production of multi-component programs addressing multiple levels of social, psychological and structural influences on driver behavior.

Safety Conscious Planning TEA-21 required metropolitan planning organizations to include safety and security in their transportation planning. The USDOT recognized that safety planning is a non-traditional role for city planners, that dialog, coordination and communication did not exist between planners and other safety professionals, and that their plan processes had differing criteria and timelines. However, their goals, functions and data need overlap with those of safety planners. Thus, improved communication and coordination, sharing of information, designing of complementary programs and focus on multi-modal functions should result in superior plans for both groups.

Safe Communities Highway Safety funds support community coalitions that adopt the Safe Community "local empowerment" concept first developed by the World Health Organization as embraced by the National Highway Traffic Safety Administration and the US Department of Health and Human Services to address local injury problems.

The NHTSA Safe Communities model has four essential characteristics:

1. Use of multiple data sources to identify community injury problems;
2. Citizen involvement;
3. Expanded partnerships; and
4. A comprehensive and integrated injury control system.

The Safe Communities model is used locally to identify and address local injury problems. Injury patterns vary by age group, gender and cultural group. They are also subject to seasonal and geographic factors. Safe Communities allow citizens to predict when and where injuries are most likely to occur and to determine the best course of action to prevent them or to treat them effectively.

Safe Communities are data-driven; they use data from multiple sources to identify their local priority problems and to evaluate the effectiveness of their programs. They examine the type and severity of injuries, the cost of treatment and the impact on the community; they discover local behaviors and attitudes that either help or hinder them in decreasing the problem. They identify strategies proven to work in communities such as theirs, and adapt them to make them their own. They evaluate the effectiveness of their activities to determine whether they are making the best use of their own limited resources.

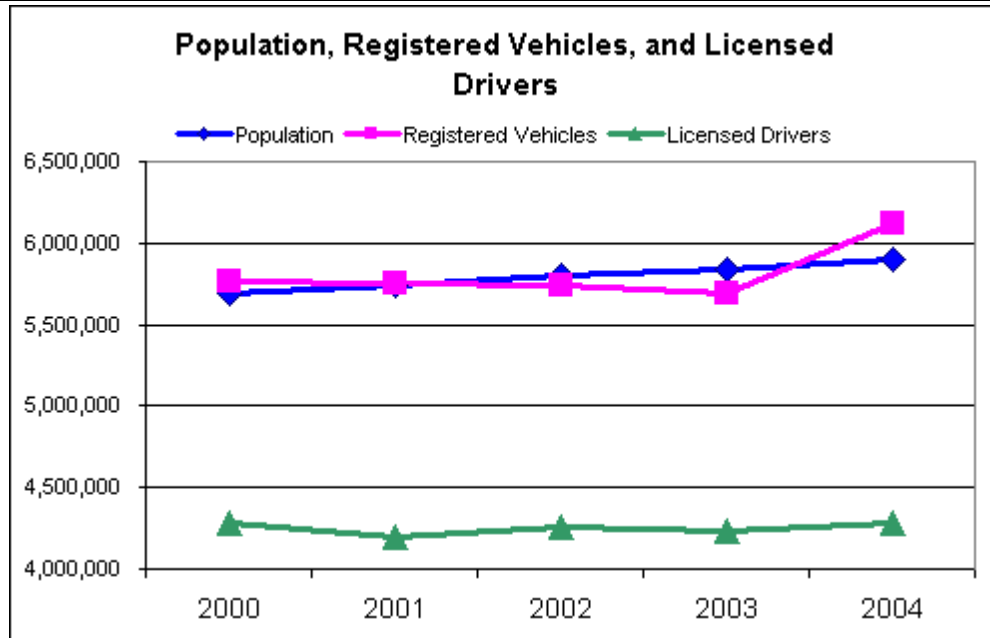
A Safe Community is one in which there is broad-based, multi-disciplinary leadership for injury control and significant amount of citizen involvement. Engineers, Planners, Law Enforcement, Public Health Professionals, EMT's, Teachers, Doctors, Nurses, Business owners, Volunteers, Citizens, Parents and others work cooperatively to plan and implement community injury prevention efforts. Collaboration and communication is the key to successful Safe Community efforts.

Expanded partnerships ensure that members working to address a local injury problem identify and collaborate with others in the community with a stake in reducing that problem. It also allows communities to gain access to the energy and resources of existing single-focus groups, such as teen coalitions, to use their knowledge and energy on areas of overlap.

Citizen involvement allows community organizations and individuals a say in determining which local problems will be addressed, and how. Not only is theirs the responsibility to identify the problem and determine the strategies to employ locally, but they must also gather the resources to address the problem. A coalition of concerned citizens and community groups produces a means for gaining significant local support and resources.

Highway Safety funds are used to support local coalition development and leadership. Thirteen communities have developed "Safe Communities" coalitions with the assistance of Highway Safety funding and technical support.

	2000	2001	2002	2003	2004
Population	5,689,283	5,740,021	5,797,289	5,841,748	5,900,962
Registered Vehicles	5,770,725	5,755,996	5,741,262	5,691,537	6,119,903
Licensed Drivers	4,282,384	4,201,436	4,253,014	4,228,235	4,279,063



General Safety Outreach and Communications

Targeting programs, activities and messages requires the highway safety professional to achieve the cultural competence of his social science and public health counterparts. Messages that are based purely on demographic factors are not as successful as those that incorporate the message into the entire psychosocial context in which the target group operates. This requires grounding in cultural norms other than those of the public safety professional or of the predominant culture.

Management The Communications Program Manager will assist each program specialist in the development of communications strategies, educational materials and marketing or social marketing techniques. In addition, the Communications Manager will arrange for the dissemination of information about traffic safety issues, programs and techniques by means of media releases, print newsletters and Internet publications, and by coordination of state safety conferences and advocacy group meetings.

Communications/Education/ Marketing Effective information dissemination and marketing creates an awareness of the issues and furthers the principles of traffic safety in all arenas. PI&E is intended to be an integral part of each program activity and will be evaluated as a contributing factor to the program's success. Our —toolbox" of strategies include, but are not limited to, advertising, media programming, media relations, information programming, training and development, advocacy leadership, response feedback, special events, promotional items, product marketing and testimonials.

Mass Media Education alone is ineffective at best; it can even increase the risk, according to a May 2001 article in the Insurance Institute's Status Report. A recent literature review of the assumptions, premises and results of 25 years of traffic safety communications campaigns provided little evidence to support implementation of "mass media only" programs to modify negative traffic safety behaviors (Iowa State U, 1999). Mass media alone can introduce broad health promotion concepts and accurate information on safe traffic measures, but they do not produce significant changes in attitudes and values on social issues or adoption of preventive behaviors such as seat belt use.

Integrated Campaigns Information campaigns will use multiple media wherever appropriate and will combine mass media with community, small group and individual activities. PSA's will be de-emphasized in favor of use of earned media, target group newsletters, etc. to direct messages to the target, secondary targets or opinion leaders.

Enforcement Mobilizations Perception of risk through effective mass media techniques has been shown to improve the immediate and long-term effectiveness of enforcement campaigns. Improved traffic safety laws, with publicity and education, can change behavior. The "Elmira" model, waves of publicity and enforcement has shown success for more than 20 years. Thus, all Tennessee's enforcement activities will include a publicity campaign that precedes the activity and has a message relating to the presence of enforcement patrols and their immediate, high-probability consequences, whether the patrols occur in waves or as a general deterrence activity.

B. Criteria for Project Selection

Safe Community Coordination Projects Priority for Safe Communities funding will be given to the counties and communities:

- (1) With populations in excess of 10,000 and with many highway miles and other exposure factors;
- (2) with the most total crashes or crashes of a particular type with serious injuries and deaths and/or a high injury to death ratio as demonstrated by at least 3 years of data;
- (3) with an existing and functioning coalition that has processes for preventing injuries, particularly traffic crash injuries, that is broad-based and representative of the community's demographic make-up, and that includes representatives from law enforcement, health care providers including fire/EMS, schools, business, service organizations, citizen groups or neighborhood associations;
- (4) with an on-going process for examining multiple sources of appropriate local data (crash, citation, CODES, e-codes, surveys) to identify local problems and to select projects;
- (5) with completed baseline (pre-activity) surveys ce i.e., surveys of community needs and resources (Community Traffic Safety Assessment); knowledge, attitudes and behaviors; observational survey of safety belt use;
- (6) with a process for developing local injury prevention strategies and projects with specific measurable objectives, and emphasizing alcohol-related crashes and failure to wear safety belts;
- (7) agreeing to participate in all three state law enforcement mobilizations;
- (8) demonstrating willingness to coordinate safety strategies, programs and funds;
- (9) demonstrating willingness and ability to commit local funding and other match; and to sustain the effort without Highway Safety funds;
- (10) with a plan to evaluate the effectiveness of coalition-supported activities; and
- (11) with a history of using Highway Safety funds effectively as seed money to develop continuing programs.

Smaller communities may be eligible if they demonstrate problems of unusual scope or unusual buy-in and effectiveness in past Highway Safety projects.

IV. ACTIVITIES/STRATEGIES

STRATEGY Community Outreach Activities

Activity: COMMUNITY PROGRAMS -SAFE COMMUNITIES

Problem: Local efforts have been shown to be most effective in changing behavior. Improved local access to and use of information and improved community development skills will produce the empowerment necessary for the sustained efforts required. Coordination of local injury data and resources is a first step in a strategic process of producing safer communities.

Objective: 1. To Form 5 additional Safe Communities (Injury Control) Coalitions in Tennessee in FFY06. To provide materials, training, grants, support for the development of local coalitions, and other technical assistance as requested.
2. To assist in promotion of self-sufficiency of existing coalitions.
3. To study the effectiveness of Safe Community Coalitions in changing community knowledge, attitudes, behaviors at the individual level
and at the political/institutional level.

Self-sufficiency: Empowered communities will know how to plan and to use data, and will thus request GHSO resources only for those priority needs that cannot be supported from local or other funds.

Evaluation: Administrative description of coalition and its activities. Impact local surveys of pre/post activities; outcome of 3-year average change in crashes, injuries and deaths.

Activity: SAFE COMMUNITY SAFETY-CONSCIOUS PLANNING PROJECTS

Problem: Safety needs to be incorporated into the Transportation Planning process. Communities often recognize roadway safety improvements that can be implemented locally. Working with local engineers/planners, community efforts should include or be associated with local traffic calming efforts. Communities receiving these Safe Community funds will be strongly encouraged to attend traffic calming training and will be required to share their experience with other similarly situated communities. Safety in school zones is a perceived problem by parents and school officials. Schools and school districts need to review the safety of school zones thoroughly before investing time and energy in proposing expensive solutions to imagined problems.

Objectives: At least five (5) communities will undertake safety planning/engineering for at-risk populations or at-risk locations such as older pedestrians or children in school zones by implementing such activities as a study of travel zones, a safe route to school effort, or other study, or to plan a traffic calming or other roadway safety improvement project based upon these community-led scanning and planning activities.

Activities: Communities may undertake community-wide safe transportation planning, school zone safety studies, safe route to school projects or some other approach to traffic safety designed by a collaborating group including school staff, advocates for the elderly, planners and other interested community members as appropriate for the community and project.

Self-sufficiency: The 50/50 match will allow self-sufficiency. Communities are allowed only one school zone study in a ten-year period (2006-2016).

Activity: PI&E - GENERAL (Community-Focused and Non-program-related Campaigns and Media Outreach)

Problem: Informal surveys indicate general public is unaware of nature and extent of traffic safety problem, unaware of existence of GHSO and believe traffic —accidents“ are normal part of living. Some traffic safety public relations efforts do not fit squarely within a Priority Program area. The GHSO function as coordinator of state highway safety programs requires means of communicating changes in laws and programs, the latest information about a wide variety of topics. This requires timely multi-media offerings.

Objective:

1. Develop general outreach materials.
2. Develop, duplicate and distribute non activity-specific print and AV materials.
3. Support GHSO displays at state and local fairs, professional, commercial and advocacy meetings.
4. Develop speakers' bureaus of volunteers and GHSO staff to perform outreach function.

Self-sufficiency: GHSO web site and in-house maintenance, and development of volunteer speakers bureaus should decrease cost of outreach activities.

Evaluation: Baseline surveys of KAB, on-site surveys regarding nature and content of materials, post-surveys of KAB.

STRATEGY- TRAINING

Activity: GOVERNOR'S HIGHWAY SAFETY CONFERENCE

Problem: Outreach to safety professionals and advocacy groups necessary to keep them informed and motivated to work locally and in state-level organizations on traffic safety issues.

Objective: To conduct one 2-day Governor's Conference on Highway Safety for 300 volunteers and safety professionals.

Self-sufficiency: Attendees pay own registration fee and lodging costs

Evaluation: Conference evaluations only.

STRATEGY- ENFORCEMENT

Activity: WORK ZONE ENFORCEMENT – Roadway Safety

Problem: As roadway construction activities continue in Tennessee the public and highway construction workers are exposed to potential crashes. Enforcement activities are needed to enhance the safety of both the motorist and the highway construction worker in both maintenance and construction work zones.

Objective: 1. To provide overtime to law enforcement agencies to enforce the work zone requirements related to traffic control.

Self-sufficiency: These are one year awards.

Evaluation: Administrative description of activities. Enforcement data/activities. Monthly reports.

The background of the page is a close-up, slightly blurred image of the American flag, showing the red and white stripes and the blue field with white stars. The flag is draped and appears to be moving, creating a sense of depth and texture. The colors are vibrant, with the red being a deep, rich red and the white being a bright, clean white. The blue field is partially visible at the top left.

GOVERNOR'S HIGHWAY SAFETY OFFICE

STATE OF TENNESSEE

**INJURY CONTROL AND
EMERGENCY MEDICAL
RESPONSE**

I. GOALS and OBJECTIVES

A. Goal

To improve traffic crash survivability and injury outcome by improving the availability, timeliness and quality of EMS response and by improving State and community coordination of EMS, public safety and mass casualty response.

B. Objectives

Objective 1: To improve ambulance run data capture and develop analyses useful for highway safety improvements.

Performance Measure: The completeness and accuracy of EMS reporting of MV Crash responses to the state. The usefulness of reports derived from these data. Baseline: In CY 2000, ambulance run reporting was not automated statewide, no state requirement existed for providing reports to the state agency responsible for EMS, and no summary reports were generated.

Status: In CY 2004, the TEMSIS automated ambulance run system is being developed for online submission of run reports

C. Related State and National Goals

National priorities for EMS will stress integration of routine EMS response capacity with terrorism readiness resources, increased collaboration and cooperation with the State Highway Safety Office and other interested parties.

National priorities for funding include improvements in surveillance and data collection, emergency communications, trauma system development, and rural EMS.

II. PROBLEM IDENTIFICATION and PROGRAM JUSTIFICATION

EMS is a vital public service, a system of care for victims of sudden and serious illness or injury. This system depends on the availability and coordination of many elements, ranging from an informed public capable of recognizing medical emergencies to a network of trauma centers capable of providing highly specialized care to the most seriously ill or injured. The 9-1-1 emergency number, search and rescue teams, and well-trained and equipped pre-hospital and emergency department personnel are some critical elements of an EMS system.

A. Need for Quality Emergency Medical Response to Crashes

In 2001, the General Accounting Office cited in its report, —Emergency Medical Response: Reported Needs are Wide-Ranging, With Lack of Data a Growing Concern,“ the lack of coordination of EMS activities that has resulted in unmet needs for personnel, training, and equipment in local and state EMS Systems.

In the aftermath of September 11, improvements in funding, coordination and collaboration of —first responders,“ including police, fire and EMS as well as local communications systems and medical facilities, became a top national priority. Nationally, coordination has been slow in coming and at the state level, multiple committees, task forces and agency groups have been convened, but state policies and plans are not yet available. Preparation for response to bioterrorism, terrorism and mass casualty events as well as normal ambulance run business is likely to increase the responsibility of local ambulance and health care providers. Funding for them has been piecemeal.

B. Risk Factors for Poor Outcomes from Crash-Related Injury

Non-qualified dispatch Not all Emergency Medical Communicators (EMC) in Tennessee have received appropriate EMS dispatch training

Access to appropriate level of care Rural areas do not have the same level of care available as do the large metropolitan areas. Paramedic units tend to be in the metropolitan areas.

Timeliness of Response Response time to scene and transport times to hospitals are longer in rural areas. The great variety of Injury-to-death ratios in Tennessee may reflect long response times, distance to appropriate trauma centers, as well as the nature of crashes on rural two-lane roads.

Overlapping responsibilities The public health, Injury Prevention and Highway Safety communities have areas of overlapping responsibility, but so far no institutionalized means of coordinating resources and eliminating duplication of effort has been possible. Motor vehicle injury has been recognized as one of three top injury issues to be addressed in the *Turning Point Public Health Plan for the Year 2010*. Whether the public health community will reach out to the public safety and highway safety professionals under this plan remains to be seen.

III. STRATEGIES FOR DECREASING DEATHS & INJURIES

A. 2004 Tennessee Traffic Records Assessment Recommendations

Tennessee's NHTSA Traffic Records Assessment made the following recommendations for EMS improvement.

- A. Develop a statewide injury surveillance system.
- B. Incorporate edit checks to identify incomplete and or inaccurate E-codes (mechanism of injury codes) in the Traumatic Brain Injury and hospital in-patient data collection system.
- C. Invite EMS, Trauma, TBI, Tennessee Hospital Association and CODES representatives to participate in the TRCC.
- D. Incorporate data quality trends and identified patterns of errors for inclusion in training sessions and manuals.

In order to decrease fatalities related to traffic crashes it is paramount that we increase the training to persons who are first on the scene by providing the following:

- Train and equip First Responder groups in high motor vehicle crash risk locations.
- Provide skills development for dealing with crash scenes and crash-related injuries, and skills development for crash injury prevention activities.
- Train Emergency Medical Communicators via distance learning to reach more people who do not have the time or resources for long-distance travel.

B. Project Selection Criteria

First Responder Training & Equipment Projects: Priority will be given to communities with:

- (1) disproportionate number of crashes, injuries and fatalities
- (2) low injury-to-death ratios
- (3) long response time for ambulance service; and
- (4) documented relationship with an ambulance provider and town or village.

IV. ACTIVITIES/STRATEGIES

STRATEGY -- TRAINING

Activity: EM FIRST RESPONDER EQUIPMENT & TRAINING – Emergency Medical Services

Problem: EMS response times for an ambulance in rural Tennessee can be anywhere from 10-30 minutes. Transport times to a hospital can even be longer, depending upon the location of the call for service. The longer a patient has to wait for medical personnel to arrive the worse the medical outcome.

Objectives: 1. Provide initial training for at least 20-30 individuals per community belonging to qualified First Responder organizations.
2. Provide startup equipment kits for at least 15 communities.

Self-sufficiency: One-time funding. First Responder organizations will be required to provide continuing education and to replace equipment. EMS organizations will seek state funding.

Evaluation: Administrative evaluation. Activity Reports by First Responder

STRATEGY -- EMPOWERMENT

Activity: EM COMMUNITY PROGRAMS - SAFE COMMUNITY EMS ACTIVITIES – Emergency Medical Services

Problem: Community members must collaborate to prevent injuries effectively. Community coalitions of public safety and health professionals, engineers and planners, private citizens and advocacy groups, and business, education and faith leaders can combine resources to implement programs that will be successful in changing public knowledge, attitudes and behaviors. Communities must complete a local Traffic Safety Assessment. EMS Providers must be involved in the Coalition and must lead the EMS project.

Objective: Provide funding for innovative EMS-related activities to decrease traffic-related deaths and injuries integrated with other Safe Community activities.

Self-sufficiency: Communities will maintain their collaborative efforts in a continued Safe Communities concept.

Evaluation: Administrative evaluation of planned activities. Effectiveness evaluation of programs implemented by Coalition through surveys or other collection measures.

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GOVERNOR'S HIGHWAY SAFETY OFFICE

STATE OF TENNESSEE

**FISCAL YEAR
2006 BUDGET**

Appendix A

H HIGHWAY SAFETY PROGRAM COST SUMMARY


State: Tennessee

Number: FFY 2006

Date: 09/12/2005(Revised for FY 2006)

Program Area	Approved Program Cost	Basis for % of Change	State/Local Funds	Federally Funded Programs				Federal Share to Local
				Previous Balance	Increase/(Decrease)	% Change	Current Balance	
P &A	320,000.00		320,000.00					0.00
AL	575,628.00		133,631.00					575,628.00
OP	303,322.00		33,723.00					203,322.00
PM	160,712.00		0.00					0.00
PT	1,060,720.00		138,562.00					599,366.00
RS	350,863.00		70,173.00					50,000.00
SA	622,326.00		17,240.00					10,000.00
SB	54,780.00		10,956.00					54,780.00
TR	245,824.00		14,550.00					43,650.00
(402 Est. Carryforward \$694,711.00) (402 '06 award \$2,999,464.00)								
Total This Page	3,694,175.00		738,835.00					1,536,746.00
Grand Total	27,596,921.00							

State Official Authorized Signature:

NAME: 
 NAME: _____

TITLE: Director, Governor's Highway Safety Office
 DATE: September 12, 2005
 Effective Date Oct. 1, 2005
 HS FORM 217 (REV. 7-93)

Federal Official(s) Authorized Signature:

NHTSA

TITLE: _____ DATE: _____
 FHWA NAME: _____
 TITLE: _____ DATE: _____
 Effective Date October 1, 2005

HIGHWAY SAFETY PROGRAM COST SUMMARY

State: Tennessee

Number: FFY 2006

Date: 09/12/2005(Revised for FY 2006)

Program Area	Approved Program Cost	Basis for % of Change	State/Local Funds	Federally Funded Programs				Federal Share to Local
				Previous Balance	Increase/(Decrease)	% Change	Current Balance	
Sect. 410 (J8) (est carryfrwd \$836,860.00 3 rd /4 th \$820,280 5 th /6 th)	1,657,140.00		418,430.00 615,210.00					0.00
Section 163 (est carryfrwd \$1,492,011.00)	1,492,011.00		0.00					608,733.00
Section 164HE (est carryfrwd \$3,000,400.00)	3,000,400.00		0.00					0.00
Section 154HE (est carryfrwd \$4,411,710.00)	4,411,710.00		0.00					0.00
Total This Page	10,561,261.00		1,033,640.00					608,733.00
Grand Total	27,596,921.00							

State Official Authorized Signature:

NAME: 

TITLE: Director, Governor's Highway Safety Office
 DATE: September 12, 2005
 Effective Date Oct. 1, 2005
 DATE: _____
 HS FORM 217 (REV. 7-93)

Federal Official(s) Authorized Signature:

NHTSA NAME: _____

TITLE: _____ DATE: _____
 FHWA NAME: _____
 TITLE: _____
 Effective Date October 1, 2005

HIGHWAY SAFETY PROGRAM COST SUMMARY

State : Tennessee

Number: FFY 2006

Date: 09/12/2005(Revised for FY 2006)

Program Area	Approved Program Cost	Basis for % of Change	State/Local Funds	Federally Funded Programs				Federal Share to Local
				Previous Balance	Increase/(Decrease)	% Change	Current Balance	
Sect. 154AL (est carryfrwd \$8,337,864.00)	8,337,864.00		0.00					4,151,299.00
Sect. 154PM (est carryfrwd \$4,474,705.00)	4,474,705.00		0.00					0.00
157OP	128,916.00		57,783.00					128,916.00
157PM (est carryfrwd \$288,916.00)	160,000.00		0.00					0.00
157Innov 5 th Yr (est carryfrwd \$240,000.00)	240,000.00		0.00					110,000.00
Total This Page	13,341,485.00		57,783.00					4,390,215.00
Grand Total	27,596,921.00							

State Official Authorized Signature:

Federal Official(s) Authorized Signature:

NAME: 

NHTSA NAME: _____

TITLE: Director, Governor's Highway Safety Office

TITLE: _____ DATE: _____

DATE: September 12, 2005

FHWA NAME: _____

Effective Date Oct. 1, 2005

TITLE: _____ DATE: _____

HS FORM 217 (REV. 7-93)

Effective Date October 1, 2005

Appendix B

2006 Grant/Contract Projects

Agency	Project Name	Revised	Grant #
Administrative Office of the Courts	General Sessions Court	\$87,813.20	154AL-06-24
Amerisports	Alcohol Countermeasures	\$150,000.00	154PM-06-01
Athens Police Department	Small Community Grant	\$10,000.00	IN5-06-01
Blount County Sheriffs Dept	DUI & Aggressive Driving	\$169,834.00	AL-06-01
Bradley County Sheriff's Department	Operation Safe Streets	\$109,147.50	AL-06-02
Bristol Police Department	High Risk Crash Intervention Program	\$43,649.92	TR-06-02
Brownsville Police Department	CERT	\$92,970.00	PT-06-01
Chandler Ehrlich	Paid Media & Advertising	\$1,075,000.00	154PM-06-02
Chandler Ehrlich	Paid Media & Advertising \$1,500,000	\$425,000.00	HN10-06-01
Chattanooga Police Department	Arresting Impaired Driving	\$25,000.00	AL-06-06
Children's Emergency Care Alliance	CECA	\$2,000.00	OP-06-03
Citadel Broadcasting	Alcohol Countermeasures	\$140,000.00	154PM-06-03
Clarksville Police Department	Alcohol Countermeasures	\$25,000.00	AL-06-07
Collegedale Police Department	Area Traffic Safety	\$52,225.50	PT-06-02
Columbia State Community College	TN Criminal Justice Language Academy	\$194,135.00	PT-06-03
Davidson County Sheriff's Department	Sober Ride	\$5,000.00	AL-06-03
Dresden Police Department	Traffic Safety Enforcement	\$5,000.00	PT-06-06
Dyersburg Police Department	Small Community Grant	\$10,000.00	IN5-06-03
East Tennessee State University	TN Child Occupant Protec	\$203,113.00	HN10-06-03
East Tennessee State University	Small Community Grant	\$10,000.00	IN5-06-04
Franklin County Communications	First Responder Training	\$9,000.00	HN10-06-05
Gatlinburg Police Department	Traffic Enforcement Project	\$5,000.00	PT-06-11
Governor's Highway Safety	Planning & Administration	\$320,000.00	PA-06-01
Governor's Highway Safety	Paid Media	\$160,712.00	PM-06-01
Hardin County Sheriff's Department	Highway Safety Program	\$63,666.75	PT-06-04
Hendersonville Police Department	Speed Management	\$10,134.96	HN10-06-04
Hoops, LP	Alcohol Countermeasures	\$100,000.00	154PM-06-04
Host Communications	Alcohol Countermeasures	\$95,000.00	154PM-06-05
Infinity Broadcasting	Alcohol Countermeasures	\$75,000.00	154PM-06-06
Jackson County Sheriff's Department	Small Community Grant	\$10,000.00	IN5-06-05
Johnson City Police Department	Safe Cart Program	\$5,000.00	J8-06-06
Kingsport Police Department	Everyone Counts	\$44,650.74	PT-06-12
Knoxville Police Department	Aggressive Driving Enforcement	\$140,000.00	HN10-06-16
Learfield Communications	Alcohol Countermeasures	\$193,000.00	154PM-06-07
LeMoyne-Owen Collge	Children are Restrained	\$86,282.26	HN10-06-11
Liberty Bowl	Occupant Protection	\$80,000.00	157PM-06-01
Loretto Police Department	Small Community Grant	\$10,000.00	IN5-06-13
Loudon Police Department	Traffic Safety Saturation	\$77,198.50	154AL-06-01
Madison County Sheriff's Department	Small Community Grant	\$10,000.00	IN5-06-06
Madison County Sheriff's Department	Work Zone Enforcement	\$49,999.88	RS-06-02
Martin Police Department	Youth Alcohol/Youth Traffic	\$20,000.00	J8-06-01
Martin Police Department	Small Community Grant	\$10,000.00	IN5-06-07
Maryville Police Department	Traffic Enforcement Project	\$67,499.91	AL-06-05

Mason Police Department	Alcohol Countermeasures	\$10,000.00	AL-06-08
McNairy County Sheriff's Department	Selective Enforcement	\$64,146.25	AL-06-04
Meharry Medical College	Child Passenger Safety	\$134,205.00	OP-06-04
Memphis Police Department	Traffic Enfrmnt Pro	\$1,105,974.70	154AL-06-26
Memphis Police Department	Traffic Enforcement Project	\$100,000.00	OP-06-05
Metro Nashville Police Department	Highway Safety Initiative	\$800,076.36	154AL-06-03
Montgomery County Sheriff's Department	Small Community Grant	\$10,000.00	IN5-06-09
Montgomery County Sheriff's Department	Traffic Enforcement Project	\$105,000.00	PT-06-13
Morristown Police Department	Hispanic Driver Safety Coalition	\$10,000.00	HN10-06-12
Mother's Against Drunk Driving	Protecting You, Protecting Me	\$65,335.00	J8-06-02
Mt. Carmel Police Department	Operation Speed	\$15,000.00	PT-06-07
Mt. Carmel Police Department	CPS Demonstration	\$15,000.00	HN10-06-13
Mt. Juliet Police Department	Young & Alive Safe Community	\$10,000.00	SA-06-04
Nashville Hockey Club	Alcohol Countermeasures	\$200,000.00	154PM-06-08
Rhea County Sheriff's Department	Comprehensive Comm Traffic Safety	\$63,735.21	HN10-06-17
Shelby County School District	Cross Over To Safety	\$54,779.92	SB-06-01
Shelby County Sheriff's Department	Youth DUI Unit	\$75,114.00	J8-06-03
Shelby County Sheriff's Department	Police Traffic Services	\$116,851.84	PT-06-08
Smithville Police Department	Small Community Grant	\$10,000.00	IN5-06-08
Southern Heritage Classic	Occupant Protection	\$80,000.00	157PM-06-02
Special Delegated Purchase Authority	Alcohol Countermeasures/Occupant	\$1,701,849.75	154PM-06-09
Special Delegated Purchase Authority	Alcohol Countermeasures/Occupant	\$224,728.25	HN10-06-06
Special Delegated Purchase Authority	Alcohol Countermeasures/Occupant	\$73,422.00	INPM-06-01
Sullivan County Sheriff's Department	Operation Declaration	\$99,000.00	PT-06-09
Tennessee Football	Alcohol Countermeasures	\$200,000.00	154PM-06-10
TN Association of Chief's of Police	Hwy. Safety Training for CLEO's	\$6,750.00	HN10-06-07
TN Department of Safety	Law Enforcement Management	\$35,400.00	HN10-06-08
TN Department of Safety	Traffic Records Improvement	\$514,084.00	154AL-06-27
TN Department of Safety	Statewide Traffic Officer Cert	\$68,125.00	PT-06-05
TN Department of Safety	Strike Three	\$396,999.81	154AL-06-18
TN Department of Safety	STEP	\$199,094.49	PT-06-10
TN Department of Safety	Project Car	\$300,862.80	RS-06-01
TN District Attorney 10th District	DUI Special Team Prosecution	\$110,604.82	154AL-06-07
TN District Attorney 11th District	DUI Prosecution	\$124,956.92	154AL-06-08
TN District Attorney 11th District	Trauma Day	\$500.00	154AL-06-28
TN District Attorney 13th District	B.E.S.T.	\$126,757.12	154AL-06-09
TN District Attorney 15th District	Protecting Lives	\$120,000.00	154AL-06-29
TN District Attorney 17th District	DUI Special Prosecutor	\$107,778.64	154AL-06-10
TN District Attorney 19th District	DUI Special Prosecutor	\$134,047.96	154AL-06-11
TN District Attorney 1st District	Special DUI Prosecutor	\$111,574.99	154AL-06-02
TN District Attorney 20th District	Specialized Traffic Offender	\$195,650.00	154AL-06-12
TN District Attorney 21st District	DUI Special Prosecutor	\$139,768.40	154AL-06-13
TN District Attorney 22nd District	Special DUI Prosecutor	\$139,939.31	154AL-06-14
TN District Attorney 23rd District	DUI Special Prosecutor	\$120,325.16	154AL-06-15
TN District Attorney 26th District	DUI Abatement	\$126,179.08	154AL-06-16
TN District Attorney 2nd District	DUI Special Prosecutor	\$116,436.96	154AL-06-29
TN District Attorney 30th District	DUI Abatement	\$188,435.64	154AL-06-17
TN District Attorney 4th District	Special Prosecutor for Local Areas	\$127,868.88	154AL-06-04

TN District Attorney 5th District	DUI Special Prosecutor	\$120,000.00	154AL-06-30
TN District Attorney 6th District	DUI Prosecution Enhancement	\$103,044.08	154AL-06-05
TN District Attorney 8th District	Special DUI Prosecutor	\$121,162.52	154AL-06-06
TN District Attorneys General Conference	DUI Specialized Training Unit	\$286,451.64	J8-06-04
TN Law Enforcement Training Officers Asso.	Training Annual Event	\$101,829.00	HN10-06-10
TN State University	Occupant Protection	\$75,000.00	HN10-06-14
University of Memphis	ITTRS	\$402,346.67	154AL-06-19
University of Memphis	DUI Tracking System	\$711,057.39	J8-06-05
University of Memphis	Crash Analysis	\$202,173.79	TR-06-02
University of Tennessee	UT LE P&A 1 796,258	\$100,000.00	OP-06-01
University of Tennessee	UT LE P&A 1	\$696,257.70	154AL-06-20
University of Tennessee	Program Admin 430,270	\$350,270.02	154AL-06-21
University of Tennessee	Program Admin	\$80,000.00	HN10-06-15
University of Tennessee	Alcohol Perceptions & Attitudes	\$126,800.44	154AL-06-22
University of Tennessee	Safe Comm P&A 522,743	\$261,371.65	SA-06-01
University of Tennessee	Safe Comm P&A	\$261,371.65	154AL-06-31
University of Tennessee	Seat Belt Survey	\$56,578.00	IN5-06-11
University of Tennessee	Public Inf & Ed 380,270.50	\$190,135.25	SA-06-02
University of Tennessee	Public Inf & Ed	\$190,135.25	154AL-06-32
University of Tennessee	Traffic Safety Resource	\$160,818.76	SA-06-03
University of Tennessee Department of Athletics	Alcohol Countermeasures	\$140,000.00	154PM-06-11
Vanderbilt School of Medicine	Child Booster Seat Use in TN	\$68,616.95	OP-06-02
Williamson County Sheriff's Department	Small Community Grant	\$10,000.00	IN5-06-10
Winchester Police Department	RID Project	\$38,994.00	154AL-06-23
Winchester Police Department	Small Community Grant	\$10,000.00	IN5-06-12

Appendix C



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
Governor's Highway Safety Office
James K. Polk Building, Suite 1800
505 Deaderick Street
NASHVILLE, TENNESSEE 37243

Phone: (615) 741-2589 Fax: (615) 253-5523

September 13, 2005

Mr. Terrance Schiavonne
Regional Administrator
National Highway Traffic
Safety Administration
Atlanta Federal Center
61 Forsyth Street, S.W.
Suite 17-T-30
Atlanta, Georgia 30303

Re.: 2006 Purchase Request for equipment \$5,000.00 and over

Dear Mr. Schiavone:

We respectfully request approval to purchase equipment exceeding \$5,000.00 for the items listed below:

1. 11 in-car video cameras at the cost of \$5,000.00 each (total \$55,000) – Sullivan County Sheriff's Dept.
2. 1 laser measuring system at the cost of \$13,000.00 each – Knoxville Police Dept.
3. 1 SIDNE DUI Simulator at the cost of \$9,999.00 – Martin Police Dept.

Total Equipment purchase \$77,999.00

Thank you for your attention to the above. If you have any questions, please feel free to call me at (615) 741-2589.

Sincerely,

Chuck Taylor
Director
Governor's Highway Safety Office

/mv

The background of the entire page is a close-up, slightly blurred image of the American flag, showing the red and white stripes and the blue field with white stars. The flag is draped and appears to be in motion.

GOVERNOR'S HIGHWAY SAFETY OFFICE

STATE OF TENNESSEE

STATE CERTIFICATIONS

Appendix D

STATE CERTIFICATIONS AND ASSURANCES

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

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

- 23 U.S.C. Chapter 4 - Highway Safety Act of 1966, as amended;

- 49 CFR Part 18 - Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments

- 49 CFR Part 19 - Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals and Other Nonprofit Organizations

- 23 CFR Chapter II - (§§1200, 1205, 1206, 1250, 1251, & 1252) Regulations governing highway safety programs

- NHTSA Order 462-6C - Matching Rates for State and Community Highway Safety Programs

- Highway Safety Grant Funding Policy for Field-Administered Grants

Certifications and Assurances

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

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

At least 40 per cent of all Federal funds apportioned to this State under 23 USC 402 for this fiscal year will be expended by or for the benefit of the political subdivision of the State in carrying out

local highway safety programs (23 USC 402(b) (1) (C)), unless this requirement is waived in writing;

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

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

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

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

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

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

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

The State will provide a drug-free workplace by:

- a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;

- b) Establishing a drug-free awareness program to inform employees about:
 - 1) The dangers of drug abuse in the workplace.
 - 2) The grantee's policy of maintaining a drug-free workplace.
 - 3) Any available drug counseling, rehabilitation, and employee assistance programs.
 - 4) The penalties that may be imposed upon employees for drug violations occurring in the workplace.
- c) Making it a requirement that each employee engaged in the performance of the grant be given a copy of the statement required by paragraph (a).
- d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will --
 - 1) Abide by the terms of the statement.
 - 2) Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction.
- e) Notifying the agency within ten days after receiving notice under subparagraph (d) (2) from an employee or otherwise receiving actual notice of such conviction.
- f) Taking one of the following actions, within 30 days of receiving notice under subparagraph (d) (2), with respect to any employee who is so convicted -
 - 1) Taking appropriate personnel action against such an employee, up to and including termination.
 - 2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency.
- g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e), and (f) above.

BUY AMERICA ACT

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

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

POLITICAL ACTIVITY (HATCH ACT).

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

CERTIFICATION REGARDING FEDERAL LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

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

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

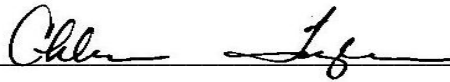
Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -- Lower Tier Covered Transactions:

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.

ENVIRONMENTAL IMPACT

The Governor's Representative for Highway Safety has reviewed the State's Fiscal Year 2006 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

8-26-05

Date

Appendix E

**Public Information and Education
Media Work Plan
2005-2006**

STRATEGIC PLAN FOR PUBLIC INFORMATION ACTIVITIES

Vision: A limited number of highly effective program-related messages and activities recognized by the target audience and integrated into their social environment.

Goal: Information - Create general public awareness of the size and nature of the problem of traffic-related injuries Goal: Information - Improve public knowledge about unsafe driving behaviors and their consequences Goal: Information - Create awareness of and access to –GHSO Sponsored programs and activities. Goal: Information - Create awareness of risk of negative consequences. Goal: Motivation to Change and Motivate audiences to minimize risk of negative consequences.

Tactic: All public information activities must be integrated with other strategies supporting programs and must be demonstrated to add to the effectiveness of the program. · No stand-alone messages or campaigns. · Integration of strategies at the community level will be required of all grantees.

Tactic: Distribute traffic safety messages broadly. Adopt a new, comprehensive publicity model for all large-scale public information programs, making greater use of state agencies, partners and the private sector to ensure multiple exposures to safety messages. Involve all state and local program coordinators and law enforcement liaisons in development and implementation of the model in order to disseminate traffic safety messages as widely and in as many venues as possible. Plan for the multiple message exposures required for information acquisition.

Tactic: In some cases, through our Public Relations contract, we will request focus group analysis to segment population and identify priority target audiences for safety messages. · Baseline and periodic Knowledge/Attitude/Behavior Surveys · Baseline and periodic Observational Surveys · Develop PR audience segmentation information · Organize Focus Groups of target market individuals and of those who interact with them.

Tactic: Identify target market motivators for behavior change · Organize Focus Groups of target market individuals and of those who interact with them · Work with Safe Communities and other local coalitions on understanding of social norms and Social norm change strategies

Tactic: Selection of media and messengers appropriate to target audience · News consumption, periodicals, other sources of information · Identification with individuals, professions, etc.

Tactic: Selection of Earned Media vs. Paid Media depends upon value added to program. · Follow NHTSA Guidance for Using Federal Safety Funds for Purchasing Advertising for Highway Safety Messages.“ February 2002. · Try to identify types of earned media before placement of messages.

INFORMATION/PROGRAM ACTIVITIES

Management: The Communications Program Manager will assist in the development of communications strategies, educational materials and marketing or social marketing techniques. In addition, the Communications Manager will arrange for the dissemination of information about traffic safety issues, programs and techniques by means of media releases, print newsletters and Internet publications, and by coordination of state safety conferences and advocacy group meetings.

Communications/Education/ Marketing: Effective information dissemination and marketing creates an awareness of the issues and furthers the principles of traffic safety in all arenas. PI&E is intended to be an integral part of each program activity and will be evaluated as a contributing factor to the program's success. Our strategies include, but are not limited to, advertising, media programming, media relations, information programming, training and development, advocacy leadership, response feedback, special events, promotional items, product marketing and testimonials.

Mass Media: Education alone is ineffective at best; it can even increase the risk, according to a May 2001 article in the Insurance Institute's Status Report. A recent literature review of the assumptions, premises and results of 25 years of traffic safety communications campaigns provided little evidence to support implementation of "mass media only" programs to modify negative traffic safety behaviors. (Iowa State U, 1999). Mass media alone can introduce broad health promotion concepts and accurate information on safe traffic measures, but they do not produce significant changes in attitudes and values on social issues or adoption of preventive behaviors such as seat belt use.

Enforcement Mobilizations: Perception of risk through effective mass media techniques has been shown to improve the immediate and long-term effectiveness of enforcement campaigns. Improved traffic safety laws, with publicity and education, can change behavior. The —Elmira" model of waves of publicity and enforcement has shown success for more than 20 years. Thus, all of Tennessee's enforcement activities will include a publicity campaign that precedes the activity and has a message relating to the presence of enforcement patrols and their immediate, high-probability consequences, whether the patrols occur in waves or as a general deterrence activity.

Communications/Education/ Marketing:

Effective information dissemination and marketing creates an awareness of the issues and furthers the principles of traffic safety in all arenas. PI&E is intended to be an integral part of each program activity and will be evaluated as a contributing factor to the program's success. Our strategies include, but are not limited to, advertising, media programming, media relations, information programming, training and development, advocacy leadership, response feedback, special events, promotional items, product marketing and testimonials.

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Mass media can introduce broad health promotion concepts and accurate information on traffic measures;

i.e., mass media can provide information to those ready, willing and able to receive that information. In conjunction with other program elements, mass media may be able to achieve lasting attitudinal and behavior change. Some behavior changes have been demonstrated when media are combined with other community components. Ideally, the community program will consist of an integrated set of approaches involving mass communication, face-to-face program element, community action and small-scale education activities.

Education of the public and advocacy groups has helped enact legislation and transmitted knowledge about the provisions and penalties of laws in ways that increase their deterrent effect, and has generated public support for law enforcement programs.

Integrated Campaigns: Information campaigns will use multiple media wherever appropriate and will combine mass media with community, small group and individual activities. PSA's will be placed through intelligent, well-thought out media buys in an effort to get the most reasonable price. Additionally, use of earned media, target group newsletters, etc. will be utilized to reach the target and secondary targets.

Marketing: PI&E programs are more effective if marketing techniques are adopted: these include research, positioning, message design, testing and evaluation. The sophistication of today's highway safety consumer demands the use of social marketing principles to effectively reach our audiences.

Effective social marketing techniques to develop information and education programs will be used in tandem with enforcement, engineering, education and emergency medical services. "Branding" or repetition of a single message, permits consumers to readily recognize the source, creating awareness of the issue/problem.

Targeting/ Segmentation: The programs which reach the population "segments" identified with a message they will receive are not what we "think" they want to hear. GHSO will incorporate targeting into its overall activities by creating primary target profiles for each activity undertaken, selecting the easiest to reach or most at risk markets, with clear segment specific objectives.

Targeting programs, activities and messages requires the highway safety professional to achieve the cultural competence of his social science and public health counterparts. Messages that are based purely on demographic factors are not as successful as those that incorporate the message into the entire psychosocial context in which the target group operates. This requires grounding in cultural norms other than those of the public safety professional or of the predominant culture.

To achieve the "right message", the GHSO will incorporate the following in developing PI&E strategies for each of the highway safety program areas:

1. Identify the problem or problems using statistical information available, as well as the perception of our driving public.
2. Target messages by segmenting the market. There is no such thing as "general audience" today.
3. Establish partnerships or "secondary targets" of those entities that can assist in achieving our goals.
4. Develop the program through use of focus groups and market testing. Make change not noise.
5. Put the strategy into action, positioning the issue, or branding it, using messages the public becomes familiar with, will heighten awareness and are immediately relatable to a specific program.
6. Because social marketing is more than delivering messages via mass media, we will continue to develop innovative methods using the marketplace of ideas and be prepared to change ourselves in the process. Since communication goes both ways, we must answer the question, "What's in it for them?" when developing campaigns.

7. Evaluate the program through administrative methods, evaluate impact on knowledge, attitude and behavior using opinion/perception surveys and marketing surveys, and ultimately perform outcome evaluation of reduction of deaths and injuries resulting from motor vehicle crashes caused by the targeted behaviors.

SUMMARY of 2005-2006 PUBLIC INFORMATION PROJECTS

TOTAL BUDGET

OCCUPANT PROTECTION

OP Total Budget Message \$350,000: Click It or Ticket Selected media: TV and Radio PSA's
Target Audience(s): General Public Year Introduced: 2006
Paid Media \$350,000
Earned Media \$ 100,000

OP Total Budget \$650,000 Message: Teen Occupant Protection Demonstration Grant Selected
media: TV and Radio PSA's Target Audience(s): General public Year Introduced: 2006
Paid Media \$350,000
Earned Media \$ 100,000

OP Total Budget \$500,000 Message: Buckle Up in Your Truck Selected media: TV and Radio
PSA's Target Audience(s): 18-34 white males Year Introduced: 2006
Paid Media \$500,000
Earned Media \$ 100,000

ALCOHOL COUNTERMEASURES

AL Total Budget \$500,000 Message: Booze It and Lose It: TV and Radio PSA's Target
Audience(s): General Public; , 18-34 y/o males/ those who influence them Year
Introduced: 2002
Paid Media \$ 500,000
Estimated Earned Media \$ 500,000

06-03--154AL Total Budget \$275,000 Message: Safe Ride Message Selected media: To be
selected by ad agency Target Audience(s): Bar Patrons, 21-34 y/o males/ those who
influence them Year Introduced: 2003
Paid Media \$ 275,000
Estimated Earned Media \$ Source(s): local Tavern leagues

YOUTH ALCOHOL/OP/HIGHWAY SAFETY

163 Governor's Prom Message Total Budget \$300,000 Message: Booze It and Lose it and Click it or Ticket (may be more narrowly targeted) Selected media: To be determined Target Audience(s): 15-24 year olds Year Introduced: 2005
Paid Media \$ 300,000
Earned Media \$ 300,000

AL Total Budget \$500,000 Message: Various messages, new community message to be developed Selected media: Video PSA, Print posters, brochures, purchased resources Target Audience(s): 15-24 year olds Year Introduced: 1998
Paid Media \$500,000
Estimated Earned Media \$ 500,000

POLICE TRAFFIC SERVICES

163 PM PT Total Budget \$300,000 Message: Summer Heat Target Audience(s): 18- 35 white males. General public Year Introduced: 2004
Paid Media \$ \$300,000
Estimated Earned Media \$ 300,000

MOTORCYCLE SAFETY

06-03-AL Total Budget \$30,000 Message: Ride Smart, Ride Sober, Get Trained Selected media: Print brochures, posters Target Audience(s): Riders, Students, General Public Year Introduced: 2002
Paid Media \$ 30,000
Estimated Earned Media \$ 30,000

PEDESTRIAN, BICYCLE, PUPIL TRANSPORTATION SAFETY

06-09--PS Total Budget \$30,000 Message: Safe behaviors for targeted age bicyclists and pedestrians, parents, educators, school bus drivers; responsibilities and strategies for motorists Selected media: Video, Print brochures, booklets, curriculum packages, trinkets Target Audience(s): Children, parents, educators, motorists, Spanish,
Paid Media \$ 20,000
New materials \$ 0
Duplication \$ 10,000
Estimated Earned Media \$ 20,000

CORRIDOR/COMMUNITY TRAFFIC SAFETY

06-10--CP Total Budget \$60,000 Message: Various, general highway safety issues, not program-related Selected media: Radio PSA's, Print brochures Target Audience(s): General public
Year Introduced: Various
Paid Media \$ 40,000
New Materials \$ 10,000
Duplication \$10,000
Estimated Earned Media \$ 40,000

Appendix F

Traffic Records Assessment
Executive Summary

In mid-2004 the Tennessee Governor's Highway Safety Office (GHSO) requested that NHTSA facilitate a traffic records assessment. NHTSA assembled a team of traffic records professionals representing the various disciplines involved in a state traffic records system. Concurrently the GHSO carried out the necessary logistical and administrative steps in preparation for the onsite assessment.

A team of professionals with backgrounds and expertise in the several component areas of traffic records data systems (crash, driver/vehicle, traffic engineering, enforcement and adjudication, and EMS and trauma data systems) conducted the assessment November 1 to 5, 2004.

The scope of this traffic records assessment included all of the data systems comprising a traffic records system. The purpose of this assessment is to determine whether Tennessee's traffic records system is capable of supporting management's needs to identify the state's safety problems, to manage the countermeasures applied to reduce or eliminate those problems and to evaluate those programs for their effectiveness. The following discusses the various traffic records system components and their current ability to support Tennessee's management of its highway safety programs.

The state is facing serious challenges in its attempts to provide crash data to users throughout the highway safety community. The current condition of the crash file at the Tennessee Department of Safety (TDOS) renders it practically unacceptable as a source of crash data to drive decisions in program planning and policy-setting by the State's highway safety managers. No usable data exists in the crash file beyond 2001. *Crash Facts* has not been published since 2002, and that used data from 2000. This delay in the availability of annual traffic crash data causes a critical problem for the Tennessee traffic safety community.

The crash file contains an unacceptably high rate of errors. The transition to the bubble form has created overwhelming backlogs in data entry, due partly to a decreased staff but also due to the large volume of reporting errors (some estimates show that as many as 80% of the crash reports have errors, and roughly 30% have fatal errors). This high rate of inaccuracy in reporting has been attributed largely to the lack of proper testing before going operational. It was also attributed to lack of involvement of local enforcement agencies in the original development of the form.

Although promising to improve the accuracy and timeliness of crash data in the future, the planned implementation of an electronic crash data collection and reporting system has further compounded the current situation within the TDOS. The system is being pilot tested at this critical time when TDOS is dealing with the crisis at hand. Nevertheless the State is to be commended for its recognition of the value of electronic data collection and its benefits not only in the increased quality of data, but the time and cost savings to the law enforcement agencies.

The driver records system at TDOS supports the department's basic responsibilities to issue driver licenses and perform its driver control and improvement functions but is seriously deficient in presenting an accurate and complete history of driver performance. This is due to a number of practices that prevent certain convictions from being reported to the TDOS. Courts can assign a "first time offender" to an alcohol driving school that shields the adjudication from being entered in the driver's record. This results in such offenders being treated as "first time offenders" over and over again. Speeding charges are also commonly dismissed or significantly reduced. This diminishes the value of the driving record in identifying and exercising control over problem drivers. It also obscures the role of two major violations, alcohol and speeding, contributing to an unsafe driving environment and making it impossible to measure the effectiveness of highway safety countermeasures.

Further, there are reportedly a significant percentage of court convictions that are not being sent to the TDOS, and many convictions that are reported are on a lesser charge than was written on the citation.

However, there is no systematic means, such as a citation tracking system, to identify those courts failing to submit convictions or to compare the original charge with that of which convicted.

Presently there is no citation tracking system in Tennessee to provide data on traffic citations and their subsequent dispositions to analyze the effectiveness of the state's enforcement of its traffic laws and to ensure the integrity of citation processing from issuance to the capture of conviction information in the driver history record. Each court processes citations using its own case management software and no data are reported to a central database. The Administrative Office of the Courts (AOC) has designed a standardized case management system for the clerks of the state courts but is available on a voluntary basis. Many courts use an independently procured system. The AOC has no plans to collect the data for placement in a central repository. Further complicating the development of a system for tracking citations on a statewide basis is the lack of a uniform traffic citation or even a standard data set, and the fact that municipal courts are not under AOC's oversight. To its credit, the AOC has promoted the transfer of records to the TDOS via *ftp*.

Tennessee does not have a comprehensive statewide Injury Surveillance System. There are several key components in place or in the process of being developed; however, these are not mature data collection and analysis systems yet. The most significant component is the new electronic EMS data collection and analysis system that is in the process of deployment and beta testing. Complete statewide deployment of the new system will be achieved in a multiple phase process.

Tennessee has no active Traffic Records Coordinating Committee (TRCC). Obstacles to solving the many problems noted in this report cannot be overcome without cooperation from all stakeholders. A TRCC provides the oversight, support and guidance necessary to move the state towards a usable and effective traffic records system for better management of its highway safety programs.

Following are the major recommendations to address the deficiencies noted here and to improve Tennessee's traffic records system. The references indicate the sections of the report from which the recommendations are drawn.

MAJOR RECOMMENDATIONS

Roadway Data

Support the planned use of GPS by law enforcement in collecting crash location data. Help fund and encourage its use by all law enforcement agencies. (1-B)

Crash Data

Task the Traffic Records Coordinating Committee (TRCC) with developing a comprehensive plan for traffic records to include detailed consideration of the future of the crash component. See Section 4-A for a more detailed discussion on the TRCC. (1-A)

Implement a two-tiered data entry system for all paper reports. In the first tier, enter the data exactly as on the form and without edit checks. In the second tier, run edit checks and correct at least all fatal errors. (2-A)

Correct at least the fatal errors in the 2003 and 2004 crash data. (1-A)

Fund projects that get the most crashes into the system per dollar spent, regardless of the software solution preferred by the law enforcement agency. Greater flexibility is called for in supporting solutions to achieve electronic data transfer. (2-A)

Make the 2003 data accessible and publish *Crash Facts* and other reports as soon as possible. If the data are deemed unreliable for some analyses, annotate the affected results tables or do not produce them. (2-A)

Citation Data

Seek authority to capture DUI arrests information on the driver history file. (2-E)

Create a statewide citation tracking system once the infrastructure is laid, which includes information about a citation from its distribution to a law enforcement agency to its final disposition and reporting convictions to the driver file. (1-E)

Driver & Vehicle Data

Participate in efforts to establish legislation that is needed to correct the systemic problems that enable alcohol offenders to escape prosecution on alcohol charges and to have "first offense" alcohol convictions shielded from the driver file. (1-D)

Record adverse driver histories of all drivers coming to Tennessee from other states in the same manner as the CDLIS processes require. (1-D)

Record original charges on convictions in addition to adjudicated charges and provide that information to courts, enforcement and driver control and improvement personnel but not to public, private or insurance requests for driver records. Driver files in other states with open (public) records have been structured to achieve this objective. (1-D)

Coordinate plans for upgrading the driver file with those for the vehicle file and for the other components of a comprehensive statewide traffic records system particularly with improvements in court reporting of convictions. (1-D)

EMS & Trauma Data

Develop a statewide injury surveillance system. (2-F)

Incorporate edit checks to identify incomplete and/or inaccurate E-Codes (mechanism of injury codes) in the Traumatic Brain Injury (TBI) and hospital in-patient data collection system. (2-F)

Invite EMS, Trauma, TBI, Tennessee Hospital Association and CODES representatives to participate in the TRCC (described in more detail in Section 4-A). (2-F)

Incorporate data quality trends and identified patterns of errors for inclusion in training sessions and manuals. (4-C)

TRCC

Establish a new state TRCC immediately, with a two-tiered membership that includes top-level management and program level staff. Formalize the commitment of time and support of the head of each agency involved by requesting a letter of appointment of a designated individual. Assure that the membership is sufficiently broad-based to represent all the various stakeholders in the traffic safety community. (4-A)

Assign a traffic records champion as the TRCC chairperson. Provide the resources and support necessary to assist this person with scheduling meetings and other administrative functions. (4-A)

Strategic Planning

Task the TRCC with oversight and coordination of the development of a Traffic Records Strategic Plan. The Strategic Plan should:

- Specify the requirements for and from each component of the traffic records system.
- Identify the goals for improvements for each of the traffic records system components.
- Set priorities for each goal with a timeline for implementation.
- Secure commitment to the goal implementation and the timeline.
- Develop a monitoring process to track progress for each goal and a mechanism to modify or replace goals as required. (4-B)

Appendix G

A System for Identifying Contributions to Low Conviction Rates of Alcohol-Impaired Drivers*

Richard G. McCowen Patricia W. Simpson and William O. Dwyer
The University of Memphis

*This study was funded, in part, by a grant from the Tennessee Department of Transportation, Governor's Highway Safety Office and the National Highway Traffic Safety Administration. The opinions, findings, and conclusions expressed in this article are those of the authors and not necessarily those of the Tennessee Department of Transportation, Governor's Highway Safety Office, or the National Highway Traffic Safety Administration.

Abstract

One of the important issues involving attempts to reduce the number of alcohol-impaired drivers is the nation-wide problem of relatively low conviction rates for the offense. The purpose of this study was to determine the major demographic, temporal, and arrest-related factors involved in predicting case outcome (guilty vs. not-guilty) for those arrested for *Driving Under the Influence* (DUI). Over 10,000 DUI arrests were analyzed (7,622 non-crash related) using a statewide Web-based DUI Behavioral Tracking System. Interestingly, neither officer-reported impaired-driving behaviors nor the presence or absence of a crash predicted case outcome. Variables that did predict case outcome included: one observed post-stop behavior, driver ethnicity, absence of a scene video, refusing to submit to a blood alcohol test, and poor performance on several field sobriety tests. Results are discussed in terms of their implications for increasing DUI conviction rates. Keywords: Alcohol-impaired driving, Conviction rates, DUI enforcement, DUI prosecution, DWI, driving under the influence, behavioral tracking system.

In 2002, the National Highway Traffic Safety Administration (NHTSA) reported that in the United States one person died every 30.2 minutes in an alcohol-related traffic crash. The 17,419 individuals who lost their lives in this manner constitute approximately 41% of the total traffic fatalities. In addition to the fatalities, approximately 348,000 people were injured in police reported alcohol-related crashes, representing an average of one person injured every 1.5 minutes. The direct fiscal impact of alcohol-related crashes is estimated at \$45 billion yearly with an additional \$70.5 billion in quality of life (Cotton & Spencer, 2003).

From a behavioral perspective, the naturally-occurring negative (i.e., crash) consequences of alcohol-impaired driving are insufficient to control the behavior in tens of thousands of impaired-drivers; it is estimated that the likelihood of becoming involved in a crash during any one impaired-driving event is 1 in 772 (NHTSA, 2000). For this reason society has added contrived consequences (i.e., legal sanctions) for impaired-driving to increase the perceived likelihood among would-be impaired drivers that “something bad” will happen to them if they drive while impaired. Indeed, millions of dollars are spent each year by law enforcement in targeted driving under the influence (DUI) enforcement initiatives.

In spite of this effort, however, the probability of an arrest during any one impaired-driving episode is only about 1 in 2000 (Greene, 2003). Because a very large proportion of DUI arrests occur at crashes scenes, the actual probability of a non-crash DUI arrest occurring as a result of any given driving episode is, indeed, extremely small—much less than 1 in 772. Furthermore, the deterrent effect of these minimal probabilities is being “estimated” typically by people in various stages of inebriation, thus rendering the deterrent value of DUI penalties even less salient. Dr. Jeffrey Runge, Director of the National Highway Traffic Safety Administration (NHTSA) stated that, to make progress in this area, “*The public must perceive that if you drive impaired you will be caught. No exceptions. No excuses*” (American Public Health Association, 2003). This goal will be a real challenge to achieve.

Classical deterrence theory suggests that the enforcement/judicial system’s ability to control illegal behavior is predicated on four variables: (1) probability of detection, (2) probability of punishment (e.g., fine, jail, license suspension), (3) magnitude of the punishment, and (4) the speed of punishment. To the extent that alcohol-impaired drivers arrested for DUI are not convicted on a timely basis, the impact of three of the above variables (2, 3 and 4) is jeopardized. High conviction rates are important because they provide *specific deterrence* (i.e., allow for the punishment/treatment of those who have already offended) and, when sanctions are adequately publicized, *general deterrence* (i.e., create disincentives for impaired driving among would-be offenders). In addition to the estimated 1 arrest in 772 impaired driving events, it is likely that conviction rates and sanctions are not being adequately publicized and, therefore, thousands of drivers under the influence are not being deterred.

In addition to being inadequately publicized, DUI conviction rates across the country are also low. Unfortunately, accurate information in this important arena is difficult to come by because it is not generally systematically maintained. What data are available seem to indicate that DUI conviction rates vary from around 30% to 80%, depending upon the jurisdiction (Jones, Wiliszowski, & Lacey, 1999). To complicate matters, some jurisdictions reporting high conviction rates may be counting DUI charges that were actually reduced or replaced with a less severe charge (e.g., to reckless driving) as “convictions,” thus artificially inflating the numbers. Finally, the procedures used for determining conviction rates may call for caution when interpreting the data, as when the rate is calculated in terms of the number of DUI convictions for a time period divided by the number of total DUI arrests for the *previous* period (Jones, et al., 1999). NHTSA would like to see the conviction rate of prosecutable cases increased to a standard of at least 80% (DWI

Standards Assessment Tool, 2003). (Note: DWI—driving while intoxicated and DUI— driving under the influence, though sometimes statutorily different, are synonymous terms in the literature.)

The causal factors underlying low DUI conviction rates can occur anywhere along the enforcement/prosecution/adjudication chain. Prosecutors complain that police often make “bad” arrests that do not contain the necessary documentation to prove the elements of the DUI offense. Police, on the other hand, complain about prosecutors who dismiss cases and reduce DUI charges just to clear their desks for “more important” crimes. In addition, both parties complain about lenient judges and juries. Any of the above factors can result in low conviction rates for DUI related charges.

To address this problem in a meaningful way, a comprehensive DUI tracking system is needed that captures numerous variables associated with the DUI arrest situation, the arrestee, the charges levied, the efforts of the prosecutors, charges dropped and reduced, and the judicial process. Furthermore, for meaningful analysis to occur, this system must be populated with thousands of records. Detailed statistical analyses of such information would allow traffic safety professionals to identify where, and in what ways, various enforcement/prosecutorial/judicial systems are inadequately applying the statutory sanctions designed to mitigate the annual loss in the U.S. of over 17,000 people and the maiming of 350,000 more. The purpose of this study was to design such a system and, once it was populated with thousands of DUI arrests, identify for our particular dataset the variables that are predictive of low conviction rates.

Method

DUI Tracking System Design

In designing the tracking system (“Tracker”) for the study, five important requirements were considered. First, the system must hold data reliably and produce the information, when needed, in a timely fashion. Second, the variables collected should exhaustively cover all the information needed to analyze the DUI cases at an atomic level. Third, the interface through which the users input data into and request information from the system should be uniform, intuitive and ubiquitous. Fourth, the analyses generated by the system should be relevant to a broad range of users while at the same time customizable for the individual user. Lastly, the system must be protected at adequate levels of security.

Given the requirements of the solution, a Web user-interface was chosen to maximize accessibility and expedite software updates. Additionally, a Web interface guarantees that any platform with any wide-use, W3C standards compliant browser would be able to access the system. The Web interface was written to XHTML 1.1 standards for maximum compatibility and accessibility. The application was written using PHP5 as the logic and MySQL 4.1 as the database server. This allowed for minimal cost development while at the same time maximizing future portability.

Tracking Variables. The variables collected for each record broke down into the following categories:

1. Offender demographic data (age, ethnicity, gender, etc.)
2. Arrest information
3. Vehicle Information
4. Offender DUI behavior and impairment level
 - a. Pre-stop (driving) behaviors
 - b. Post-stop behaviors
 - c. Field sobriety tests
 - d. Blood alcohol concentration

5. Court Information
6. Charge information
7. Charge reduction and elimination information
8. Sanction and treatment information

These eight variable categories break down into many different variables (for a complete list of variables used in the Tracker, see Appendix A). These variables were assembled both from factors deemed important by NHTSA and from data used in the DUI arrest-prosecution chain that were accessible by the data entry personnel. Furthermore, standardized sheets were developed mapping these variables to the information used by the prosecutors' offices in order to both expedite data entry and aid in case organization.

In addition to the presence of tracking variables, the system maintained administrative and system-level variables, such as name-password combinations, usage logs, agency-county-judicial district data, to name a few. This information was preloaded (in the case of the geographical and user data) or fed in automatically based on user input (usage logs). Though these variables were not included in the end user-reports, these variables can be used to track the activities of the personnel using the system if future research demands it.

Lastly, the Tracker uses regularly timed maintenance algorithms that check for data integrity and alignment. To accomplish this, early in development, common mistakes made by data entry personnel were identified. Though awareness of these mistakes were incorporated into the future training of the data entry personnel, data entry is still a human endeavor and thus prone to errors. Ultimately, these programs were written to minimize the errors and, in turn, increase power.

Reports.

The initial set of reports generated by the Tracker was based on the requirements of the DWI Standards Assessment Tool (Cotton & Spencer, 2003) set by NHTSA and analysis of the offender behaviors. These include 1) prosecution rates, 2) pre-stop (impaired-driving) behaviors, 3) post-stop behaviors, 4) blood-alcohol tests, 5) reason for stop, and 6) demographic reports. All reports are "real-time" reports, i.e., the report is not compiled until the user requests the report. Statistics and graphing are generated on the fly. This strategy ensures the reports are always timely and decreases the workload on the administrators of the tracking system. Another advantage of the real-time reporting is that field personnel (e.g., the police, prosecutors, politicians, etc.) have hands-on experience with their own data. This creates a greater sense of interaction with and ownership of the data as well as instant feedback. Ultimately, it brings the relevancy of the Tracker directly to the field instead of putting the antiseptic layer of the researchers in the middle.

Also built into the Tracker are reports that analyze the impact on conviction of the presence or absence of the pre-and post-stop driving behaviors associated with impaired driving. To assist law enforcement officers with visually detecting alcohol-impaired drivers, NHTSA published a set of behavioral driving cues that possess a documented association with DUI (Harris, 1980). In 1997, NHTSA published an updated and revalidated list of these 20 driving behaviors that are predictive of blood alcohol concentrations (BAC) of 0.08 or higher (Stuster, 1997). These impaired-driving cues are classified into four categories: 1) Problems in maintaining proper lane position, 2) Speed and braking problems, 3) Vigilance problems, and, 4) Judgment problems (NHTSA, 1997).

In addition to pre-stop driving cues, NHTSA (1997) also published a set of 10 post-stop cues that have documented association with BAC levels of 0.08 or higher. These post-stop cues involve the behaviors

an officer might encounter at the driver's side window and as the driver steps out of the vehicle. Both the driving behaviors and the post-stop behaviors are available from NHTSA in the form of *The Visual Detection of DWI Motorists*, a laminated list of the behaviors and a brochure defining each of them. Included for each of the behaviors is the probability that a driver exhibiting them has a BAC of at least 0.08. A report was built into the Tracker to analyze the impact on conviction rate of an officer's observation of one or more of these post-stop behaviors.

Procedure

Implementation and training. Personnel in the DUI Special Prosecutors' offices of 16 judicial districts (out of a total of 31) across Tennessee were trained to populate the Tracker with DUI case data. These 16 districts were also participating in a counter-DUI grant program funded by the Tennessee Governor's Highway Safety Office (GHSO). The counter-DUI grant program provided special DUI prosecutors and coordinators in the respective offices of the district attorneys. The funded prosecutors handled DUI cases only. Their coordinators functioned as assistants and were the main data entry personnel for the Tracker.

Tracker data-entry training was conducted during a one-day session for the DUI coordinators. Additional training was provided as needed for those who could not attend the original session. The research team also provided technical support via telephone and email.

Data mining. Within 18 months of implementation, the DUI Tracker contained 10,111 complete records that include the information from arrest to disposition. This dataset was queried to answer questions about the variables that predict conviction vs. non-conviction for a DUI charge. All reports presented here were developed as push button reports (available to all users) that presented all necessary statistical tests.

Results

71 data entry users representing the 16 Judicial Districts entered 10,111 complete records. Over this period, these users logged into the system a total of 6,642 times for an average of nine logins a day. For these data, the average statewide conviction rate for non-reduced DUI over the 2002-2005 period was 72.61%, 7.39% under the NHTSA-established Assessment Tool standard. However it is notable that, although these conviction rates are below the target of 80%, the per-year conviction rates rose steadily over the past three years from 64.97% to 82.11%.

Descriptive Statistics and Demographics

The demographics of the population comprising the sample were studied using the dataset of 10,111 cases. Tables 1 and 2 represent the ethnic and age group composition of the offenders in the dataset, respectively. The gender distribution was 79% to 18%, male to female, with 3% not reporting a gender. The mean ages for men and women were 35.58 (SD=11.8) and

Table 1.

Ethnic Distribution of DUI Offenders.

<i>Ethnicity</i>	<i>Proportion of dataset</i>
Asian	1%
African-American	10%
Caucasian	74%
Hispanic Multiracial	6% 1%
Native-American	1%
Pacific-Islander	1%
Other	1%
No ethnicity reported	11%

36.64 (SD=10.29), respectively.

Table 2. Age Group Distribution of DUI Offenders.

Age Group Proportion of dataset

18-21 7% 21-30 27% 30-40 25% 40-50 22% 50-60 9% 60-70 3% 70-80 1% 80-90 1% No age reported 10%

Note. The age group variable for an offender was taken as the difference between the offender's date of birth and the arrest date. As a result, the age of the offender was treated as a continuous variable as opposed to a categorical variable. Therefore, the upper and lower numbers of the age groups are boundaries as opposed to inclusive ages rounded off to the nearest year.

Variables Predicting Conviction

Out of the over 600 variables collected for each case, 19 variables were analyzed, in addition to the 24 pre-and 10 post-stop driving behaviors, for their predictive ability of case outcome. Using simple logistic regression, each category of the variable was treated as a binomial independent variable (the state of being vs. not being that variable). The dependent measure was also binomial with a success or failure of the outcome of the case (convicted vs. reduced/acquitted). Odds ratios were computed for each variable category and a Chi-Squared test was used to test significance. Analysis was run at two levels. For the first or "strict" level, the criterion for a "successful" prosecution was set at the NHTSA standard that only a non-reduced conviction is a "success". Secondly, the analysis was rerun using a "relaxed" conviction criterion, to wit: a "success" included reductions to a first DUI offense or higher. All analyses were built into the DUI Tracker application and could be computed in real time using the Web-based interface.

Driving behaviors. The first analysis was conducted on the 7,622 cases that did not involve a crash. Crash cases were excluded in this analysis because those arrests were the result of a crash as opposed to the officer observing the driver's behavior or vehicle condition that led to a stop. This analysis

evaluated the prediction strength of the 24 NHSTA standardized DUI pre-stop driving behaviors. That is, to what extent does the arresting officer's observation of any impaired driving behaviors impact case outcome? The first analysis was run at the "strict" level. None of the driving behaviors successfully predicted a prosecution; no Chi-squared values exceeded 1 (criterion value with $p < 0.05 = 3.84$). Some of the log-odds ratios for the behaviors were positive and some were negative indicating that, though not significant, current data reflect that the presence of some driving behaviors actually predict acquittal or reduction instead of prosecution. Rerunning the analysis at the "relaxed" (i.e., any DUI conviction) level did not change the results.

Post-stop behaviors. The 10 post-stop behaviors yielded stronger results at the both the strict and relaxed levels (which, again, were not significantly different from each other) as compared to the pre-stop behaviors. Also in contrast with the pre-stop behaviors, two analyses were conducted for the post-stop behaviors (all arrests (crash and non-crash) and non-crash arrests) because both types of arrests allow the officer to observe post-stop behaviors. All of the log-odds ratios were positive for the first analysis (all arrests). However, the only post-stop behavior that significantly predicted prosecution was "Balance Problems," $\chi^2(1, N = 10,111) = 4.58, p < 0.05$. Some of the behaviors had Chi-squared values over 1 with the highest being unsteady gait (a type of balance problem) and admission to drinking. However, neither of these behaviors significantly predicted prosecution. No variables changed sign for their log-odds values for the second analysis (non-crash arrests). However, the one behavior that was significant for all arrests (i.e., Balance Problems) was no longer significant for non-crash arrests. The Chi-squared value slipped just under the criterion value of 3.84 to 3.67. With a greater sample size, this behavior may become significant.

Presence or absence of a crash. A simple logistic regression was run on the presence and absence of a crash. Because of the potential impact the presence of a crash may have on case outcome, it was important to test whether the crash and non-crash cases differed in conviction rates. The odds ratio for presence of a crash leading to conviction was 1.01, $\chi^2(1, N = 10,111) = 0.03, p > 0.80$, at the strict level and 1.0, $\chi^2(1, N = 10,111) = 0.21, p > 0.50$ at the relaxed level, indicating that presence or absence of a crash did not predict conviction. Therefore, the remaining analyses were run combining crash and no crash DUI arrests.

Miscellaneous. Of the remaining 18 variables analyzed for a potential relationship with conviction, 11 of them were not significant. These variables were: agency type; gender; age group; time of day; the field sobriety tests of: horizontal gaze, counting test, alphabet test; fatality involved; reason for the DUI stop other than crash; the day of the week of the arrest; and the time of the arrest. Two of these variables (i.e., alphabet test, presence of a fatality) occurred at low frequencies, potentially accounting for their lack of significance. These analyses were also run under the "strict" and the "relaxed" criteria, and the results did not differ between them.

The seven variables that were predictive of conviction were: ethnicity (Caucasians were convicted at a lower rate than non-Caucasians), submitting to a blood-alcohol concentration test, the presence of a scene video, and failing the field sobriety tests of walk and turn, one leg stand, finger-to-nose SFST, and finger dexterity SFST. Tables 3 and 4 display the variables with their log odds ratios and Chi-squared values for the "strict" and "relaxed" conviction criteria, respectively. Ethnicity, refusing BAC test, walk and turn, one leg stand, and finger dexterity sobriety tests were no longer significant predictors of conviction with the "relaxed" criteria, whereas the counting test became significant.

Table 3.

Variables that significantly predicted conviction using "strict"(i.e., guilty of original charge) criteria.

Variable	Outcome	Odds ratio	Chi-squared
Ethnicity (Caucasian)	Acquittal/Reduction	1.23	5.7*
No scene video	Acquittal/Reduction	1.32	5.96*
Refused test and turn	Acquittal/Reduction	3.06	15.54*
Walk SFST	Conviction	1.25	13.28*
One leg stand SFST	Conviction Conviction	2.37 3.09	8.22* 13.58*
Finger to nose SFST	Conviction	3.32	4.91*
Finger dexterity SFST			

* $p < 0.05$, $df = 1$, $N = 10,111$

Table 4.

Variables that significantly predicted conviction using "relaxed"(i.e., any DUI conviction)criteria.

Variable Outcome Odds ratio Chi-squared

No scene video Acquittal/Reduction 1.36 7.8* Finger to nose SFST Conviction 2.85 11.06* Counting test SFST Conviction 4.46 3.95*

* $p < 0.05$, $df = 1$, $N = 10,111$

With regard to the finding that Caucasians were convicted at lower rates than non-Caucasians, further analysis indicated that the difference was due to the higher rate with which Hispanics were convicted, i.e., 70.94% and 81.92%, respectively. Further analysis revealed that, for the 10,111 cases in the "strict" analysis, 66.73% of the Caucasians refused to take the BAC test, whereas only 54.50% of the Hispanics refused. This 12% difference may be attributing to the Hispanics' higher conviction rate.

Discussion

The challenge of reducing the number of alcohol-impaired drivers on the road is complex, indeed. Each stage of detection, arrest, prosecution, sanctioning and monitoring, brings its own difficulties. To be effective, a comprehensive counter DUI system must contain sanctions and programs that protect the public and change the offenders' behavior (Robertson & Simpson, 2003). The sanctions cannot produce that protection or changes in behavior if they are not implemented, and no implementation takes place without convictions. Of course, it is also possible that the experience of being arrested, alone, may serve some disincentive function.

This study focused on convictions and what, if any, variables (behavioral, demographic, offender-processing, etc.) are associated with successful conviction of a DUI charge. Some variables successfully

predicted conviction but most did not. Among this latter group, of particular interest were two of these variables: pre-stop, impaired-driving behaviors and presence or absence of a crash. Interestingly, neither of these predicted a conviction, although both are the central component of the offense for which DUI laws are in place to prevent. This suggests that the court system is not looking at the offense itself, as much as proxies to that offense. These proxies come in the form of technology and pseudo-analogues to driving behavior (e.g., finger-to-nose, one-leg stand, etc.). Presence of the scene video (which records some post-stop behaviors), the BAC test, and several of the field sobriety tests were all significant predictors of DUI conviction.

Failing field sobriety tests predicted a 2 to 3 times increase in conviction if they demonstrated impairment. However, regardless of the tests applied to and post-stop behaviors observed of the driver, it is evident that whether or not the officer reports observing the actual impaired-driving behaviors (that are the direct causes of crashes) is not relevant to case outcome. This finding may have serious implications for both officer training and the strategies used in the court system for weighing evidence in DUI cases.

Absence of an arrest scene video and refusing the BAC test were also important predictors of non-conviction. As a group, drivers who refused the BAC test were 1.32 times more likely to have their DUI charge reduced or dismissed. Additionally, if the scene video was missing or flawed (e.g., the officer is standing between the camera and the driver) then the driver was 1.25 more likely of having his or her DUI charge reduced or dismissed. Though these odds ratios were not huge, they are significant.

It should also be noted that conviction rates did not depend upon which type of law enforcement agency (e.g., county sheriff vs. city police) made the DUI arrest. This has implications for evaluating the various types of training and techniques used by the different agencies. Also, the reason for the stop is not a significant predictor of conviction; it does not matter whether the stop was the result of a checkpoint, a moving violation, or a non-moving violation. Lastly, temporal values are irrelevant. It does not matter what day or time an arrest happens, there is a similar likelihood for all dates and times.

In summary, direct indicators (e.g., driving behaviors) of a DUI or the presence of a crash do not affect the outcome of a DUI case. Instead the judicial system is relying heavily on technology (scene video and BAC) along with pseudo-analogous behaviors to indicate that a DUI offense has taken place. The problem of low conviction rates may stem in part from this trend. If the courts were to refocus prosecution based on observations of the driving behaviors, themselves, in addition to secondary, tertiary and quaternary indicators to the offense, the conviction rate may improve.

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The background of the entire page is a close-up, slightly blurred image of the American flag, showing the red and white stripes and the blue field with white stars. The flag is draped and appears to be in motion, with soft lighting creating highlights and shadows on the fabric.

GOVERNOR'S HIGHWAY SAFETY OFFICE

STATE OF TENNESSEE

TABLES, CHARTS
AND GRAPHS

Table 1
Tennessee Five-Year Demographic and Statistical Comparison

Square Miles in State 41,219	2000	2001	2002	2003	2004
Population	5,689,283	5,740,021	5,797,289	5,841,748	5,900,962
Registered Drivers	5,770,725	5,755,996	5,741,262	5,691,537	6,119,903
Licensed Drivers	4,282,384	4,201,436	4,253,014	4,228,235	4,279,063
Miles of State & Federal Roadways	13,787	12,791	12,797	13,794	13,808
Miles of Interstate	1,073	1,073	1,074	1,104	1,104
Total Road Miles	87,417	87,825	88,287	88,519	88,987
Total Crashes	176,798	175,630	189,873	193,133	190,895
Number of Non-Injury Crashes	124,861	124,710	137,168	142,966	138,493
Number of Injury Crashes	50,760	49,794	51,647	49,076	51,259
Number of Fatal Crashes	1,177	1,126	1,058	1,091	1,143
Injuries	76,909	74,856	77,472	70,297	73,435
Fatalities	1,307	1,251	1,177	1,193	1,287
Vehicle Miles Traveled Per 100 Million Miles	658.72	676.06	683.16	689.36	708.60
Death Rate Per 100 Million Miles	1.98	1.85	1.72	1.73	1.82

* In July 2004, the Tennessee Highway Patrol and Commercial Vehicle Enforcement Divisions merged into one TN Highway Patrol Division

Table 2
Injuries and Fatalities in Traffic Crashes

	2000	2001	2002	2003	2004
Injuries	76,909	74,856	77,472	70,297	73,435
Fatalities	1,307	1,251	1,177	1,193	1,287

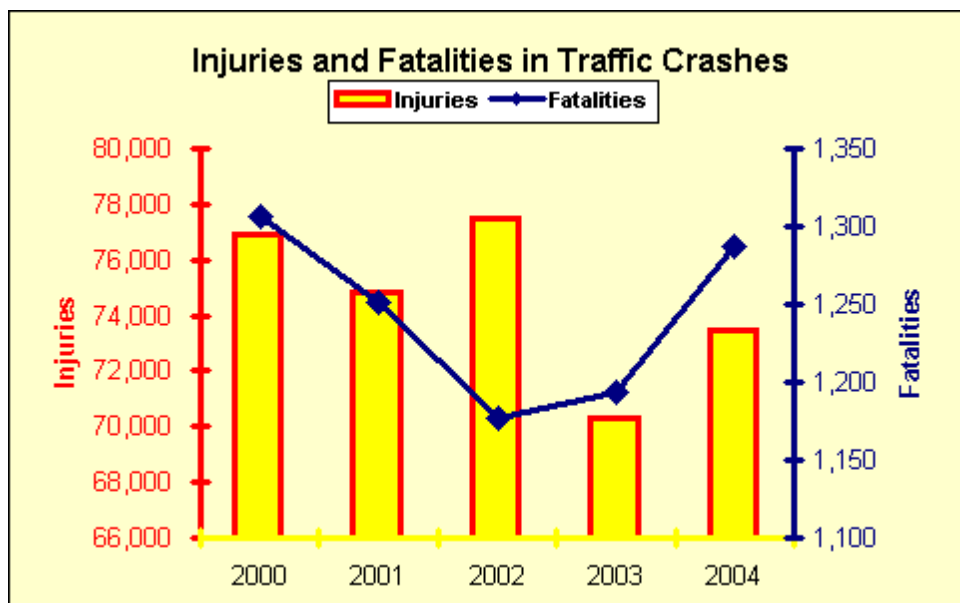


Table 3
Traffic Crash Injuries Per 100,000

	2000	2001	2002	2003	2004
Population	1,351.9	1,304.1	1,336.4	1,203.5	1,244.7
Registered Vehicles	1,332.9	1,300.7	1,349.5	1,235.2	1,200.1
Licensed Drivers	1,796.1	1,781.9	1,821.6	1,662.7	1,716.2

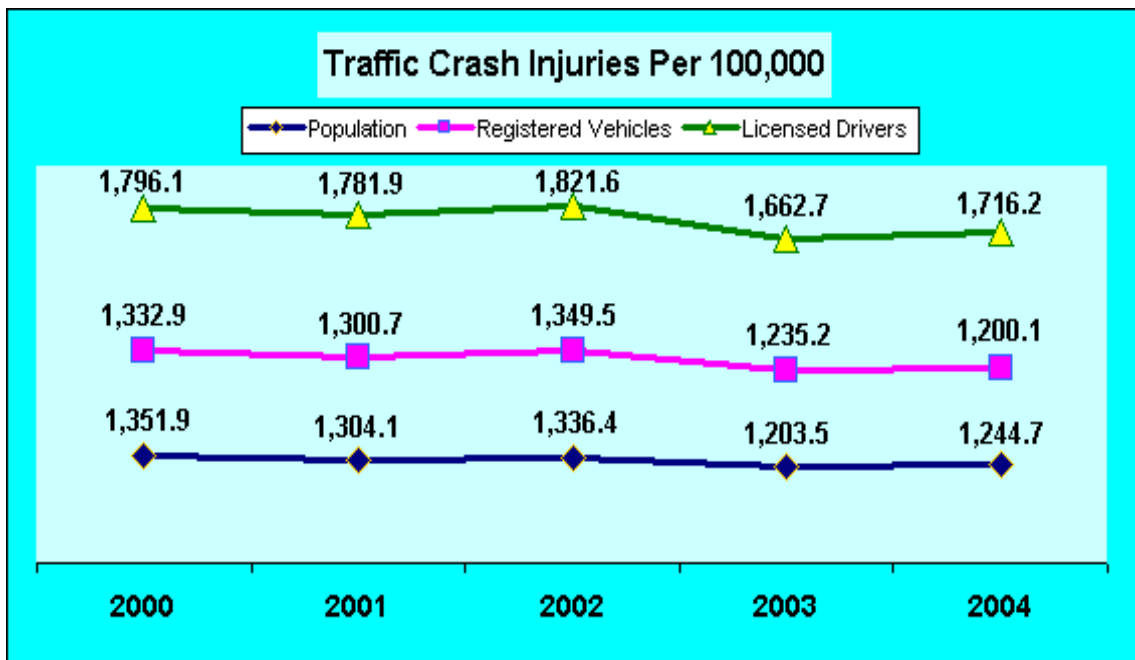


Table 4
Tennessee Population, Registered Vehicles and Licensed Drivers

	2000	2001	2002	2003	2004
Population	5,689,283	5,740,021	5,797,289	5,841,748	5,900,962
Registered Vehicles	5,770,725	5,755,996	5,741,262	5,691,537	6,119,903
Licensed Drivers	4,282,384	4,201,436	4,253,014	4,228,235	4,279,063

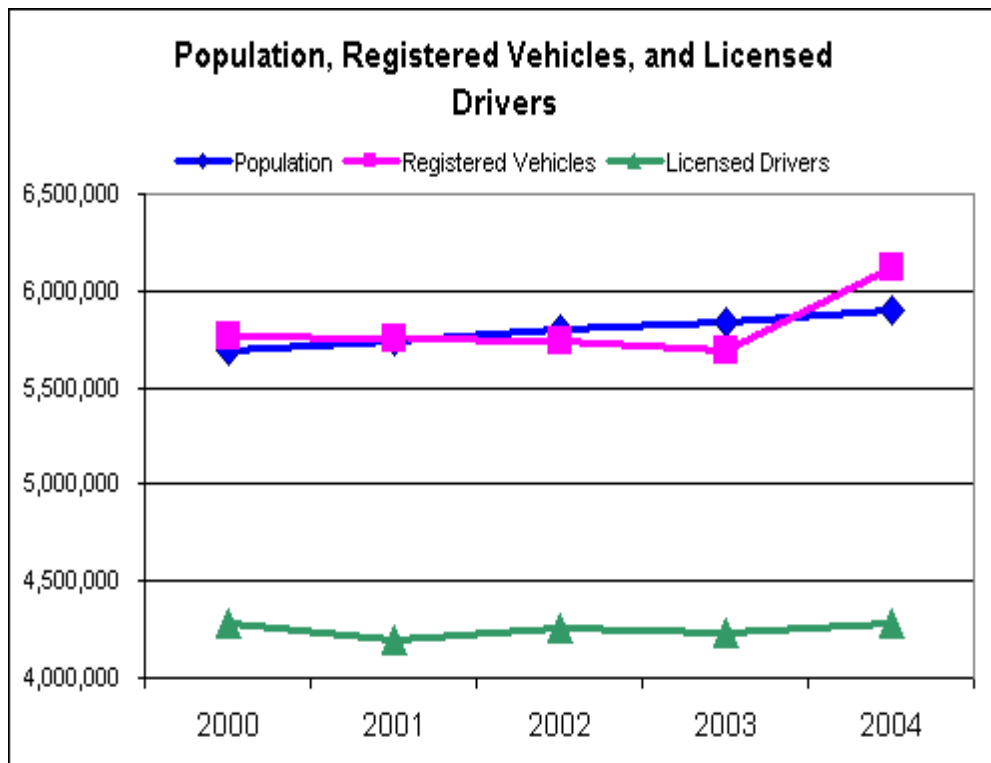


Table 5
Tennessee Crashes By Type

	2000	2001	2002	2003	2004
Non-Injury Crashes	124,861	124,710	137,168	142,966	138,493
Injury Crashes	50,760	49,794	51,647	49,076	51,259
Fatal Crashes	1,177	1,126	1,058	1,091	1,143

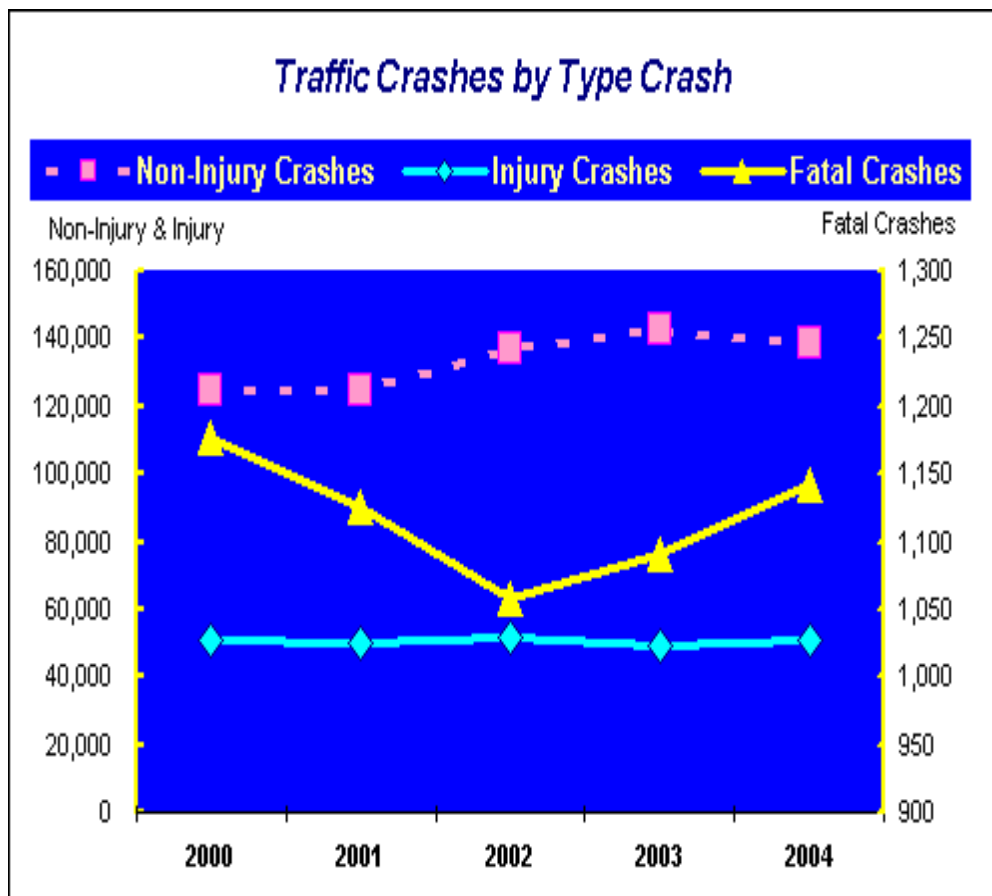


Table 6
Tennessee Occupant Fatalities by Age Group, 1994 – 2003

Year	Age											Total	
	< 5	5 - 9	10 - 15	16 - 20	21 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	> 74		Unknown
1994	25	21	34	183	119	208	168	103	75	82	87	0	1,105
1995	22	12	28	191	126	228	173	104	89	80	88	0	1,141
1996	23	15	34	180	117	216	195	94	71	89	102	0	1,136
1997	15	11	26	175	111	216	191	114	81	75	93	0	1,108
1998	19	17	26	187	105	216	168	127	84	82	95	1	1,127
1999	12	22	35	183	111	240	204	143	87	74	99	2	1,212
2000	14	17	26	182	129	231	220	133	88	64	93	1	1,198
2001	17	10	25	184	135	211	184	157	99	75	69	0	1,166
2002	14	17	28	193	126	170	177	127	89	56	102	0	1,099
2003	12	10	21	160	107	181	197	142	98	73	88	0	1,089

Table 7
Tennessee Drivers of Passenger Cars and Light Trucks in Fatal Crashes by Restraint Use, 1994 – 2003

Year	Restraint Used		Restraint Not Used		Restraint Use Unknown		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1994	564	39.9	814	57.6	36	2.5	1,414	100.0
1995	609	40.5	852	56.6	43	2.9	1,504	100.0
1996	643	44.2	767	52.7	45	3.1	1,455	100.0
1997	666	45.7	743	51.0	49	3.4	1,458	100.0
1998	662	44.3	775	51.8	59	3.9	1,496	100.0
1999	674	44.3	788	51.8	60	3.9	1,522	100.0
2000	648	43.5	775	52.1	65	4.4	1,488	100.0
2001	714	48.7	688	46.9	64	4.4	1,466	100.0
2002	660	50.2	593	45.1	63	4.8	1,316	100.0
2003	709	51.3	601	43.5	73	5.3	1,383	100.0

Table 8
Tennessee Occupants of Passenger Cars & Light Trucks
Killed in Crashes by Restraint Use, 1994 - 2003

	Restraint Used		Restraint Not Used		Restraint Use Unknown		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1994	236	23.2	755	74.2	27	2.7	1,018	100.0
1995	256	24.1	770	72.4	38	3.6	1,064	100.0
1996	278	26.5	745	70.9	28	2.7	1,051	100.0
1997	265	26.1	722	71.2	27	2.7	1,014	100.0
1998	269	25.5	741	70.3	44	4.2	1,054	100.0
1999	279	25.3	764	69.3	59	5.4	1,102	100.0
2000	274	25.4	757	70.1	49	4.5	1,080	100.0
2001	297	28.3	702	66.8	52	4.9	1,051	100.0
2002	314	31.9	613	62.2	58	5.9	985	100.0
2003	316	32.7	597	61.8	53	5.5	966	100.0

Table 9
Tennessee Child Occupants (Ages 0-9) Injured and Percent Unrestrained

	1999	2000	2001	2002	2003
Injuries	3,745	3,822	3,509	3,229	2,625
% Unrestrained	26.6%	25.1%	20.0%	18.6%	15.7%

Note: "Injuries" include children shown as "Possible Injury" by investigating Officers

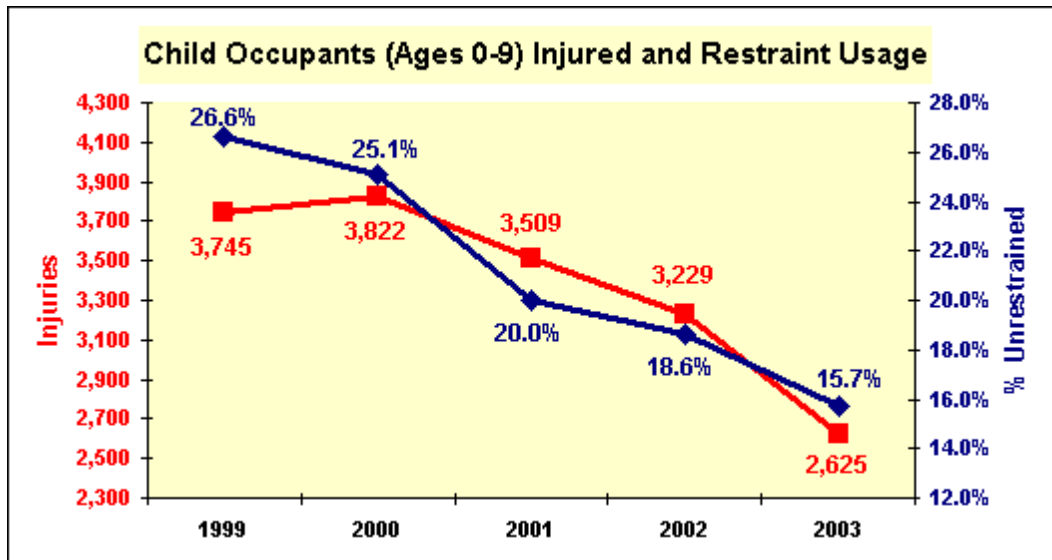


Table 10
Tennessee Child Occupant (Ages 0-9) Injuries by Injury Severity

	1999	2000	2001	2002	2003
Possible Injury	2,464	2,571	2,419	2,237	1,715
Non-Incapacitating Injury	1,056	1,045	910	838	758
Incapacitating Injury	197	175	155	128	130
Fatal Injury	28	31	25	26	22

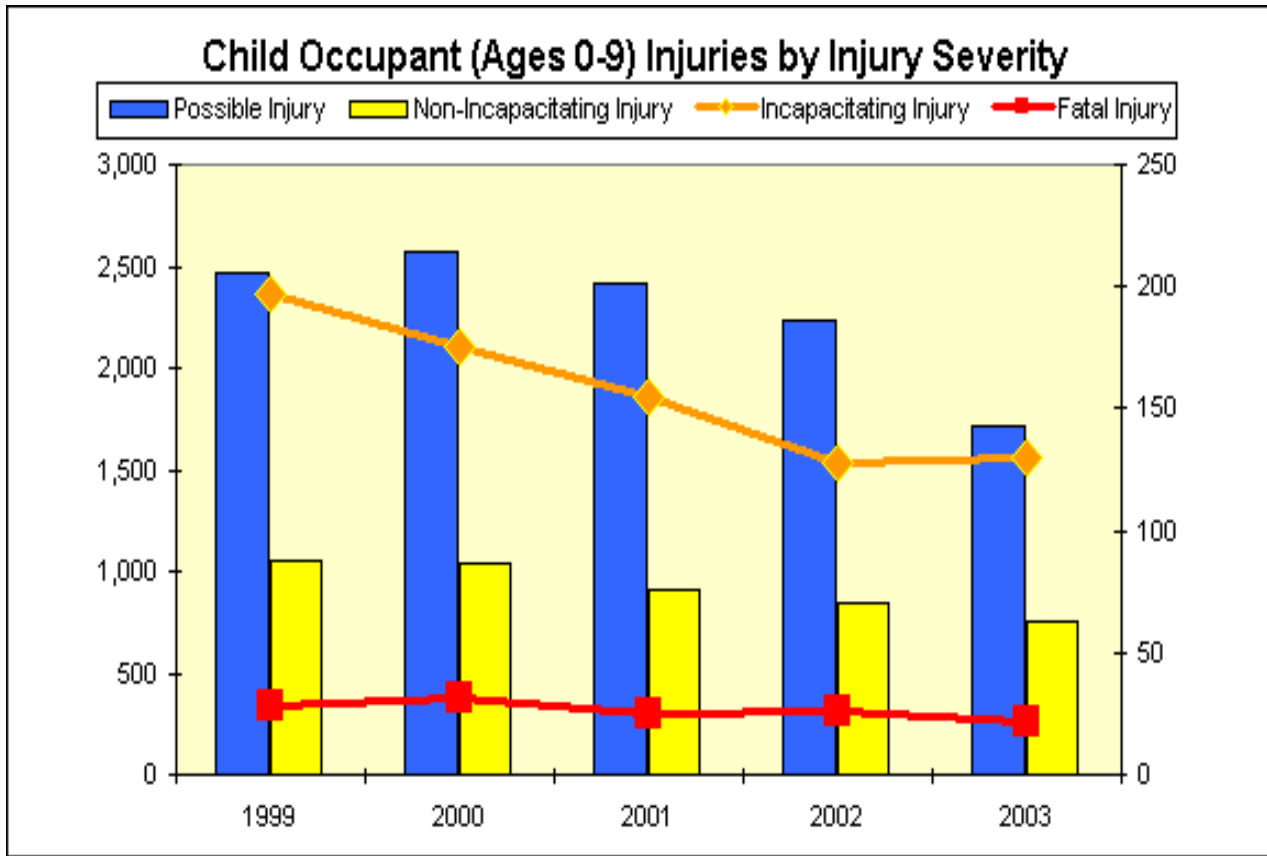


Table 11
BAC > .08 Fatal Crash Drivers By Age

% BAC >= .08 Fatal Crash Drivers By Age

	2000	2001	2002	2003	2004
<= 15	0.0%	0.0%	0.0%	0.0%	0.0%
16- 17	4.5%	5.3%	15.2%	16.7%	9.1%
18 - 20	27.6%	22.8%	29.0%	23.6%	25.5%
21 - 24	38.9%	40.8%	34.4%	38.0%	43.5%
25 - 34	33.8%	32.8%	34.5%	35.8%	34.3%
35 - 44	32.0%	34.0%	39.6%	32.7%	37.2%
45 - 54	20.3%	32.3%	29.8%	32.8%	23.5%
55 - 64	10.3%	20.7%	16.9%	15.0%	12.2%
>= 65	7.5%	8.8%	5.8%	13.9%	13.3%

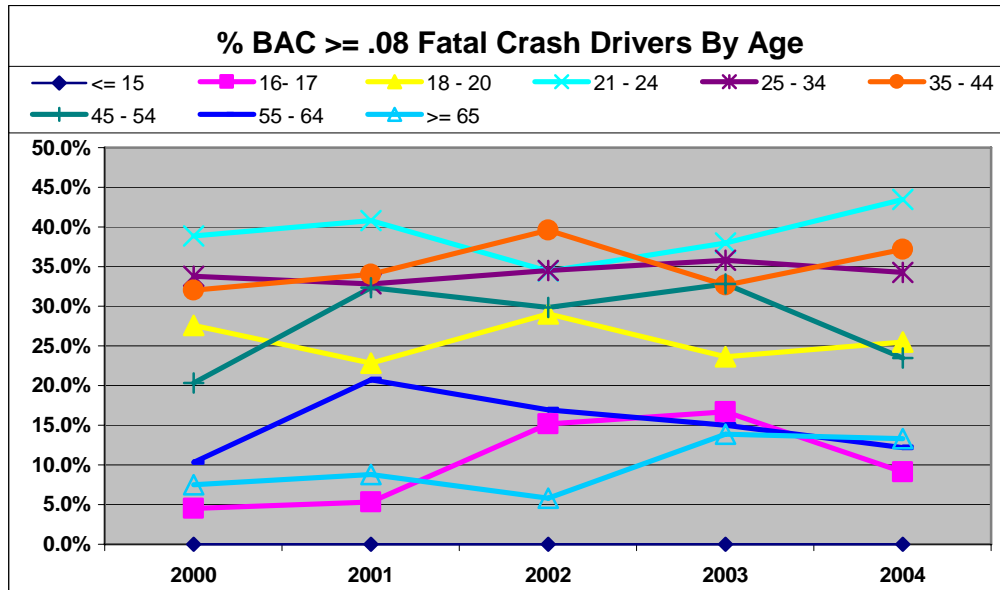


Table 12
Drivers in Fatal Crashes by Age

Age	2000	2001	2002	2003	2004
<= 15	7	4	7	5	14
16 - 17	83	75	77	61	70
18 - 20	169	171	173	145	158
21 - 24	181	192	180	158	186
25 - 34	379	365	297	329	337
35 - 44	353	320	290	326	329
45 - 54	227	254	212	235	262
55 - 64	146	142	135	162	201
>= 65	183	166	172	182	149
Unknown	13	13	14	12	12

Table 13
Percentage of BAC Fatal Crash Drivers By Age

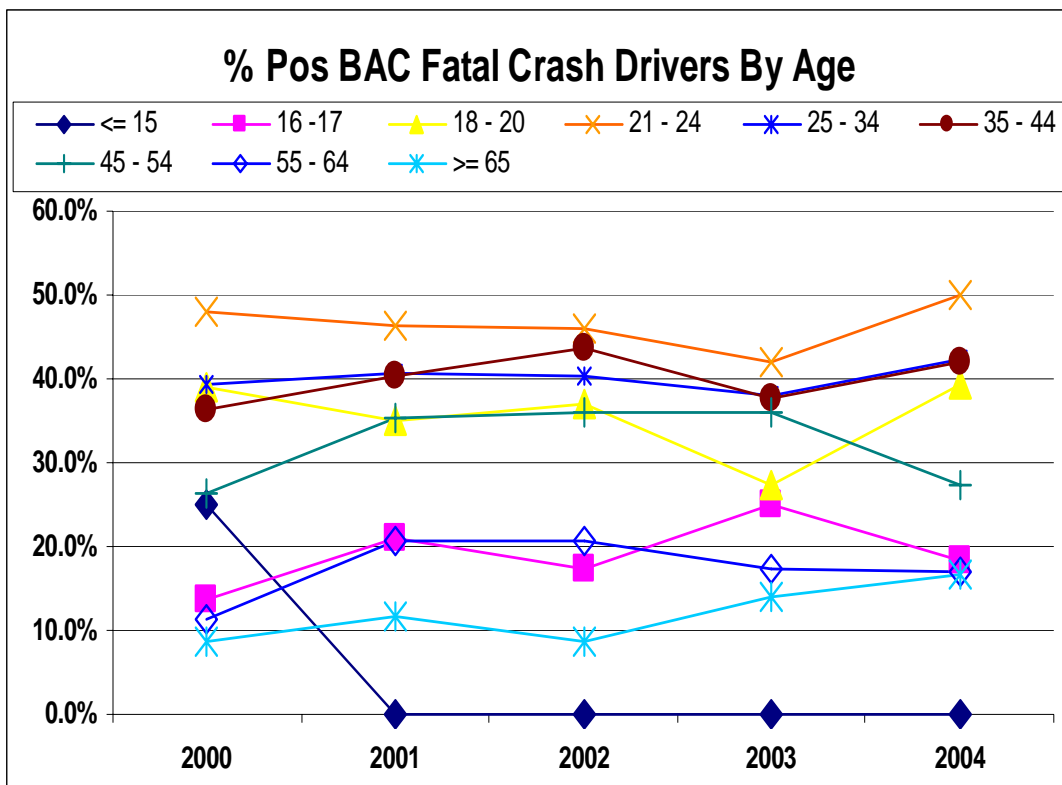
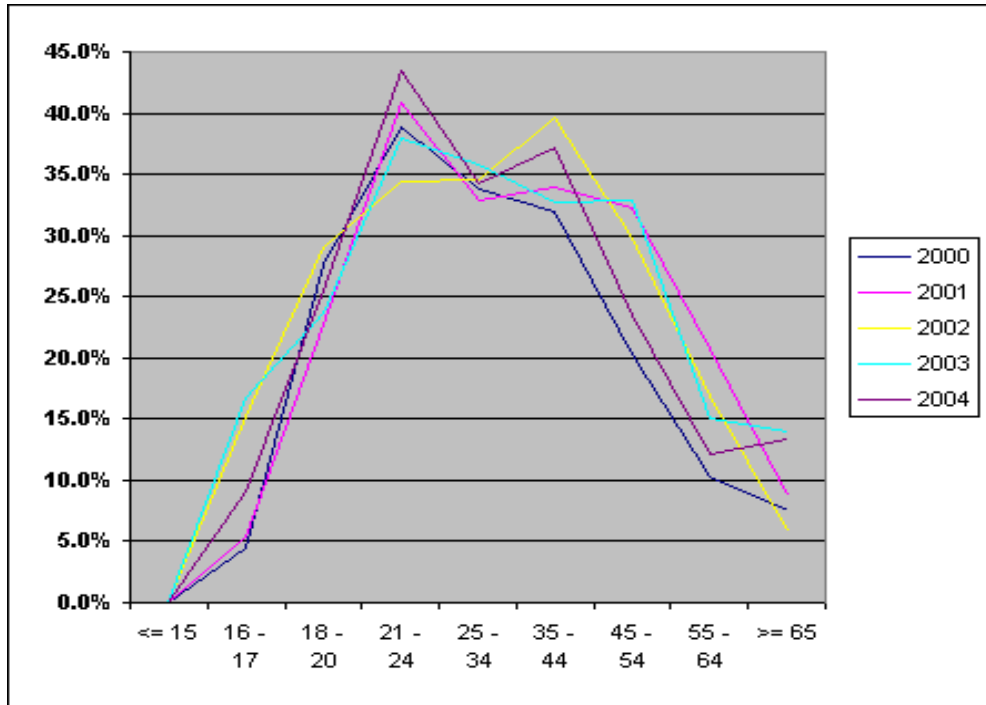


Table 14
 Percent of Drivers in Fatal Crashes Tested with BAC \geq .08 BAC



Age	2000	2001	2002	2003	2004
<= 15	25.0%	0.0%	0.0%	0.0%	0.0%
16 - 17	13.6%	21.1%	17.4%	25.0%	18.2%
18 - 20	39.0%	35.1%	37.0%	27.3%	39.2%
21 - 24	48.1%	46.5%	45.9%	42.0%	50.0%
25 - 34	39.4%	40.8%	40.2%	37.9%	42.4%
35 - 44	36.4%	40.4%	43.8%	37.6%	41.9%
45 - 54	26.3%	35.4%	36.0%	35.9%	27.2%
55 - 64	11.5%	20.7%	20.8%	17.5%	17.1%
>= 65	8.8%	11.8%	8.7%	13.9%	16.7%

Table 15
Age of Drivers in Fatal Crashes

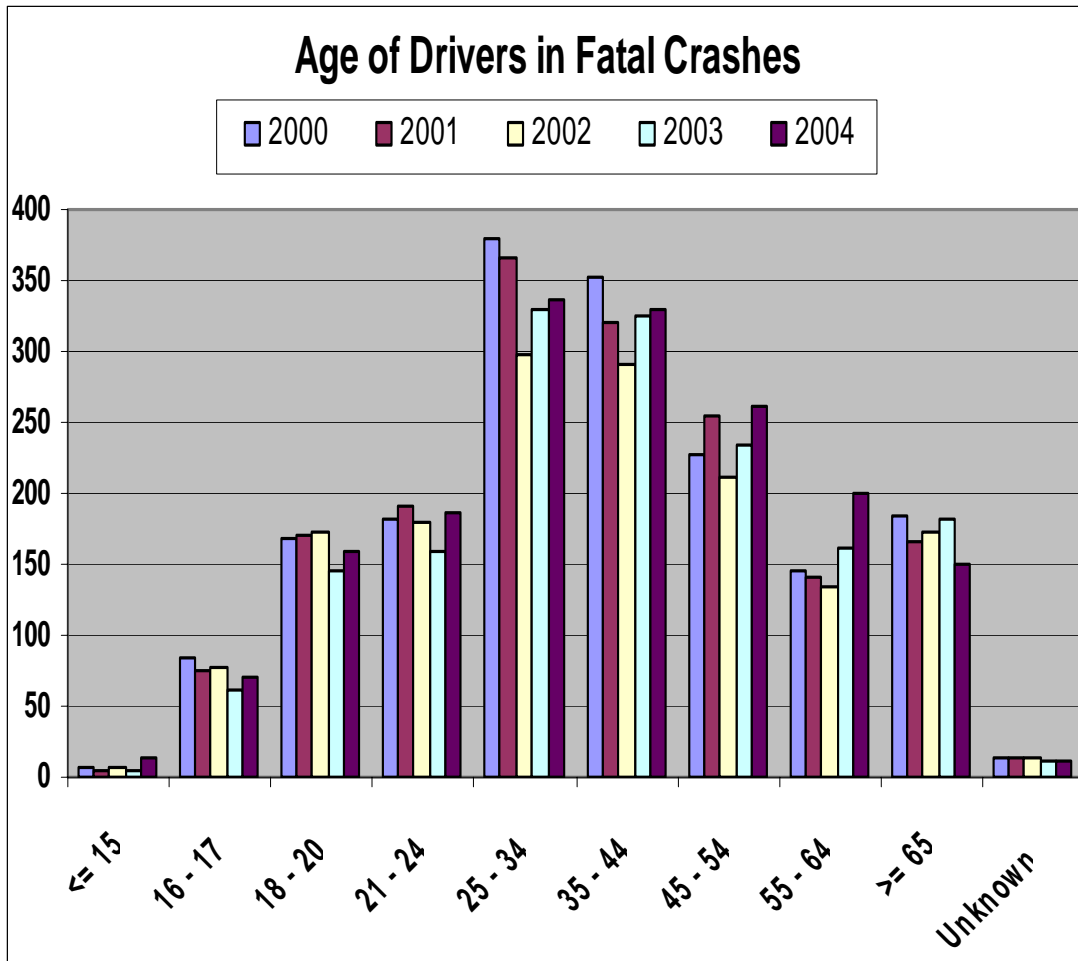


Table 16
TENNESSEE DRIVERS IN FATAL CRASHES BY AGE BY KNOWN ALCOHOL

YEAR	TOTAL DRIVERS	TOTAL TESTED	% OF TOTAL	ALCOHOL TEST RESULTS					
				NEG BAC	% OF TESTED	POS BAC	% OF TESTED	BAC >=.08	% OF TESTED
AGE 15 & UNDER									
2000	7	4	57.1%	3	75.0%	1	25.0%	0	0.0%
2001	4	0	0.0%	0	0.0%	0	0.0%	0	0.0%
2002	7	4	57.1%	4	100.0%	0	0.0%	0	0.0%
2003	5	1	20.0%	1	100.0%	0	0.0%	0	0.0%
2004	14	3	21.4%	3	100.0%	0	0.0%	0	0.0%
AGE 16 - 17									
2000	83	44	53.0%	38	86.4%	6	13.6%	2	4.5%
2001	75	19	25.3%	15	78.9%	4	21.1%	1	5.3%
2002	77	46	59.7%	38	82.6%	8	17.4%	7	15.2%
2003	61	12	19.7%	9	75.0%	3	25.0%	2	16.7%
2004	70	22	31.4%	18	81.8%	4	18.2%	2	9.1%
AGE 18 - 20									
2000	169	105	62.1%	64	61.0%	41	39.0%	29	27.6%
2001	171	57	33.3%	37	64.9%	20	35.1%	13	22.8%
2002	173	100	57.8%	63	63.0%	37	37.0%	29	29.0%
2003	145	55	37.9%	40	72.7%	15	27.3%	13	23.6%
2004	158	51	32.3%	31	60.8%	20	39.2%	13	25.5%
AGE 21 - 24									
2000	181	108	59.7%	56	51.9%	52	48.1%	42	38.9%
2001	192	71	37.0%	38	53.5%	33	46.5%	29	40.8%
2002	180	122	67.8%	66	54.1%	56	45.9%	42	34.4%
2003	158	50	31.6%	29	58.0%	21	42.0%	19	38.0%
2004	186	62	33.3%	31	50.0%	31	50.0%	27	43.5%
AGE 25 - 34									
2000	379	231	60.9%	140	60.6%	91	39.4%	78	33.8%
2001	365	125	34.2%	74	59.2%	51	40.8%	41	32.8%
2002	297	174	58.6%	104	59.8%	70	40.2%	60	34.5%
2003	329	95	28.9%	59	62.1%	36	37.9%	34	35.8%
2004	337	99	29.4%	57	57.6%	42	42.4%	34	34.3%
AGE 35 - 44									
2000	353	231	65.4%	147	63.6%	84	36.4%	74	32.0%
2001	320	94	29.4%	56	59.6%	38	40.4%	32	34.0%
2002	290	169	58.3%	95	56.2%	74	43.8%	67	39.6%
2003	326	101	31.0%	63	62.4%	38	37.6%	33	32.7%
2004	329	86	26.1%	50	58.1%	36	41.9%	32	37.2%

AGE 45 - 54									
2000	227	133	58.6%	98	73.7%	35	26.3%	27	20.3%
2001	254	65	25.6%	42	64.6%	23	35.4%	21	32.3%
2002	212	114	53.8%	73	64.0%	41	36.0%	34	29.8%
2003	235	64	27.2%	41	64.1%	23	35.9%	21	32.8%
2004	262	81	30.9%	59	72.8%	22	27.2%	19	23.5%
AGE 55 - 64									
2000	146	87	59.6%	77	88.5%	10	11.5%	9	10.3%
2001	142	29	20.4%	23	79.3%	6	20.7%	6	20.7%
2002	135	77	57.0%	61	79.2%	16	20.8%	13	16.9%
2003	162	40	24.7%	33	82.5%	7	17.5%	6	15.0%
2004	201	41	20.4%	34	82.9%	7	17.1%	5	12.2%
AGE 65 & OLDER									
2000	183	80	43.7%	73	91.3%	7	8.8%	6	7.5%
2001	166	34	20.5%	30	88.2%	4	11.8%	3	8.8%
2002	172	69	40.1%	63	91.3%	6	8.7%	4	5.8%
2003	182	36	19.8%	31	86.1%	5	13.9%	5	13.9%
2004	149	30	20.1%	25	83.3%	5	16.7%	4	13.3%
AGE UNKNOWN									
2000	13	0	0.0%	0	0.0%	0	0.0%	0	0.0%
2001	13	0	0.0%	0	0.0%	0	0.0%	0	0.0%
2002	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%
2003	12	1	8.3%	0	0.0%	1	100.0%	1	100.0%
2004	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%
TOTAL									
2000	1,741	1,023	58.8%	696	68.0%	327	32.0%	267	26.1%
2001	1,702	494	29.0%	315	63.8%	179	36.2%	146	29.6%
2002	1,557	875	56.2%	567	64.8%	308	35.2%	256	29.3%
2003	1,615	455	28.2%	306	67.3%	149	32.7%	134	29.5%
2004	1,718	475	27.6%	308	64.8%	167	35.2%	136	28.6%

**Source: Tennessee Department of Safety, Fatality Analysis Reporting System (FARS)
August 19, 2005
2000-2003 Data reflected in this report are final. 2004 Data are preliminary.**

Table 17
2004 TENNESSEE TRAFFIC FATALITIES AND CRASHES
(INCLUDING KNOWN ALCOHOL INVOLVED) BY COUNTY

COUNTY	2004 TRAFFIC FATALITIES	ALCOHOL INVOLVED FATALITIES	2004 FATAL CRASHES	ALCOHOL INVOLVED CRASHES	COUNTY	2004 TRAFFIC FATALITIES	ALCOHOL INVOLVED FATALITIES	2004 FATAL CRASHES	ALCOHOL INVOLVED CRASHES
ANDERSON	17	3	15	3	LAUDERDALE	7	2	7	2
BEDFORD	7	3	7	3	LAWRENCE	15	7	14	7
BENTON	8	4	7	3	LEWIS	4	0	3	0
BLEDSON	2	1	2	1	LINCOLN	15	4	12	4
BLOUNT	36	6	31	5	LOUDON	17	7	12	2
BRADLEY	15	5	14	4	MCMINN	18	3	16	3
CAMPBELL	18	4	15	4	MCNAIRY	9	6	9	6
CANNON	5	2	5	2	MACON	4	3	4	3
CARROLL	8	1	7	1	MADISON	29	6	26	5
CARTER	12	5	11	5	MARION	23	6	17	5
CHEATHAM	14	4	11	3	MARSHALL	10	2	7	2
CHESTER	6	0	5	0	MAURY	18	8	15	6
CLAIBORNE	16	3	13	3	MEIGS	6	4	6	4
CLAY	1	0	1	0	MONROE	9	3	9	3
COCKE	6	4	5	3	MONTGOMERY	43	18	33	13
COFFEE	4	1	4	1	MOORE	0	0	0	0
CROCKETT	4	0	4	0	MORGAN	3	1	3	1
CUMBERLAND	18	4	14	4	OBION	8	2	8	2
DAVIDSON	97	24	88	22	OVERTON	2	0	2	0
DECATUR	3	2	3	2	PERRY	4	0	4	0
DEKALB	10	6	9	5	PICKETT	2	2	2	2
DICKSON	7	5	7	5	POLK	8	1	8	1
DYER	10	2	9	2	PUTNAM	16	1	15	1
FAYETTE	10	5	10	5	RHEA	6	2	6	2
FENTRESS	6	2	6	2	ROANE	12	2	10	2
FRANKLIN	3	1	3	1	ROBERTSON	11	4	10	4
GIBSON	8	4	8	4	RUTHERFORD	32	7	29	5
GILES	7	3	7	3	SCOTT	6	2	6	2
GRAINGER	7	0	6	0	SEQUATCHIE	12	4	9	2
GREENE	16	3	12	3	SEVIER	21	8	20	7
GRUNDY	7	3	7	3	SHELBY	109	14	94	14
HAMBLLEN	13	1	11	1	SMITH	10	5	8	4
HAMILTON	39	11	36	9	STEWART	7	2	7	2
HANCOCK	3	1	3	1	SULLIVAN	39	2	33	2
HARDEMAN	16	2	14	2	SUMNER	26	6	20	5
HARDIN	8	5	7	4	TIPTON	8	5	7	5
HAWKINS	9	5	8	4	TROUSDALE	4	1	4	1
HAYWOOD	6	1	6	1	UNICOI	7	5	6	4
HENDERSON	19	11	16	8	UNION	4	3	4	3
HENRY	9	2	9	2	VAN BUREN	1	0	1	0
HICKMAN	6	1	6	1	WARREN	11	3	10	3
HOUSTON	3	0	3	0	WASHINGTON	19	4	18	4
HUMPHREYS	6	3	6	3	WAYNE	9	4	9	4
JACKSON	0	0	0	0	WEAKLEY	4	2	4	2
JEFFERSON	13	1	11	1	WHITE	7	2	7	2
JOHNSON	4	0	4	0	WILLIAMSON	13	3	11	3
KNOX	72	12	68	12	WILSON	25	7	24	6
LAKE	0	0	0	0	STATE TOTALS	1,287	349	1,143	311

Table 18
Fatal Crashes BY County

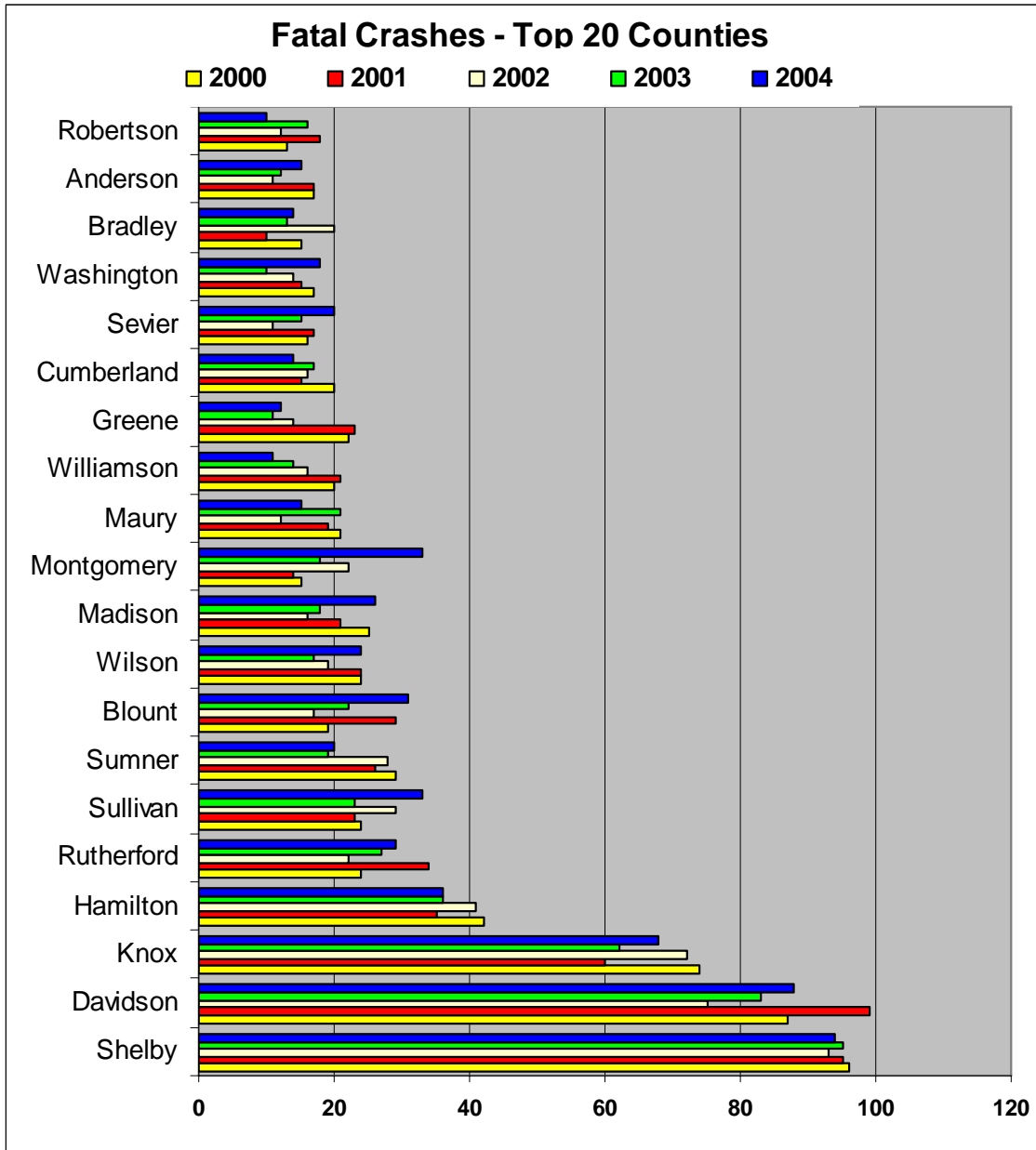
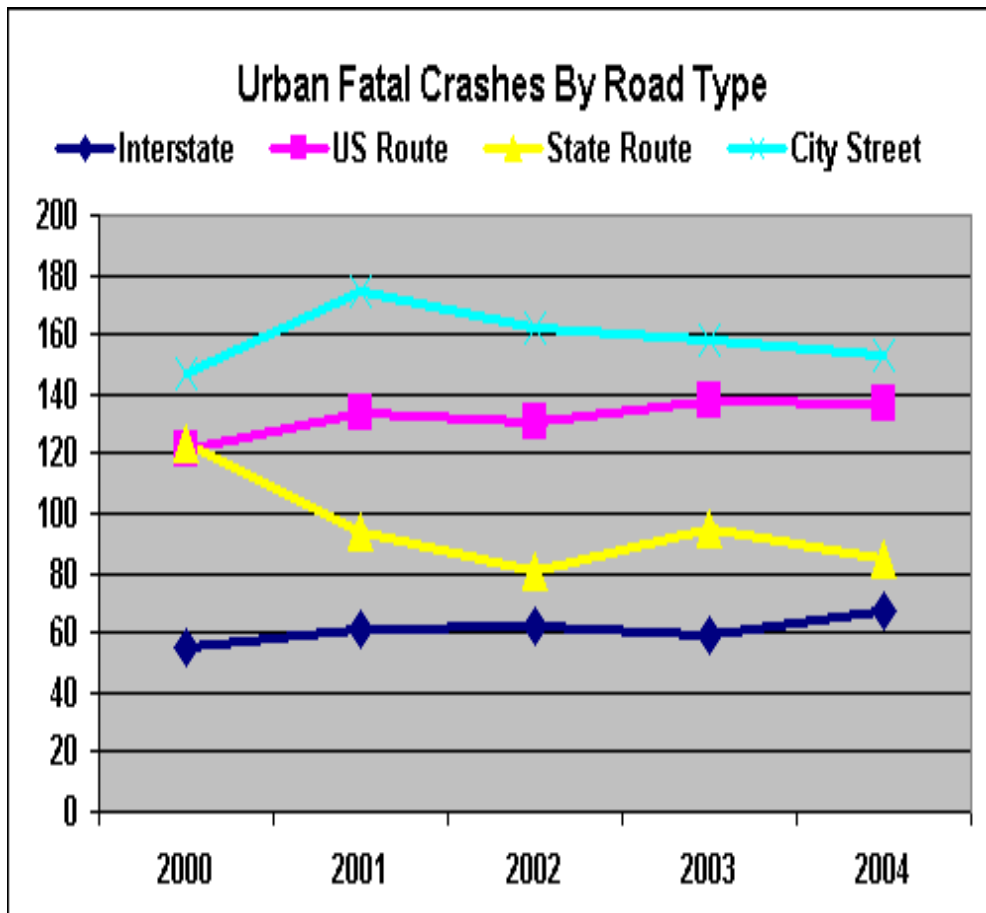


Table 19
Urban Fatal Crashes By Road Type

	2000	2001	2002	2003	2004
Interstate	55	61	62	59	67
US Route	121	134	131	138	137
State Route	123	94	81	95	85
City Street	147	175	162	158	153



COUNTY	YEAR					DISTRICT	COUNTY	YEAR					
	2000	2001	2002	2003	Prelim 2004			2000	2001	2002	2003	Prelim 2004	
Anderson	17	17	11	12	15	6	Bledsoe	3	3	4	2	2	
Blount	19	29	17	22	31		Cannon	6	0	4	2	5	
Campbell	14	6	15	7	15		Clay	1	2	0	4	1	
Knox	74	60	72	62	68		Cumberland	20	15	16	17	14	
Loudon	5	9	7	9	12		Dekalb	7	5	2	1	9	
Monroe	12	13	12	9	9		Fentress	1	10	6	7	6	
Morgan	6	6	4	3	3		Jackson	2	5	5	2	0	
Roane	14	7	11	10	10		Macon	1	8	5	6	4	
Scott	5	6	3	4	6		Overton	10	6	6	7	2	
Sevier	16	17	11	15	20		Pickett	3	1	2	3	2	
Union	6	6	4	4	4		Putnam	18	11	2	11	15	
TOTAL	188	176	167	157	193		Smith	6	5	9	12	8	
Bradley	15	10	20	13	14		Trousdale	0	4	2	3	4	
Coffee	17	12	14	20	4		Van Buren	1	2	0	2	1	
Franklin	9	3	9	6	3	Warren	14	9	8	6	10		
Grundy	7	5	7	5	7	White	12	6	10	12	7		
Hamilton	42	35	41	36	36	TOTAL	105	92	81	97	90		
McMinn	15	11	12	13	16	7	Bedford	12	6	11	8	7	
Marion	15	10	16	7	17		Giles	14	8	11	9	7	
Meigs	0	1	4	2	6		Hickman	6	11	7	6	6	
Polk	8	6	10	5	8		Lawrence	5	8	9	14	14	
Rhea	6	5	4	4	6		Lewis	0	2	4	2	3	
Sequatchie	5	4	5	4	9		Lincoln	10	4	3	13	12	
TOTAL	139	102	142	115	126		Marshall	6	10	9	7	7	
Cheatham	11	6	9	12	11		Maury	21	19	12	21	15	
Davidson	87	99	75	83	88		Moore	0	3	0	1	0	
Dickson	13	19	8	16	7		Perry	3	3	3	4	4	
Houston	3	2	4	4	3		Wayne	4	4	7	6	9	
Humphreys	4	11	6	9	6	TOTAL	81	78	76	91	84		
Montgomery	15	14	22	18	33	8	Benton	10	6	5	9	7	
Robertson	13	18	12	16	10		Carroll	6	11	6	6	7	
Rutherford	24	34	22	27	29		Chester	6	2	3	2	5	
Stewart	6	10	2	3	7		Decatur	1	6	1	9	3	
Sumner	29	26	28	19	20		Gibson	8	12	15	11	8	
Williamson	20	21	16	14	11		Hardin	7	8	9	9	7	
Wilson	24	24	19	17	24		Henderson	6	13	16	12	16	
TOTAL	249	284	223	238	249		Henry	8	11	7	9	9	
Crockett	6	6	6	6	4		McNairy	9	8	8	11	9	
Dyer	10	13	6	10	9		Madison	25	21	16	18	26	
Fayette	15	6	5	8	10	Weakley	6	4	9	2	4		
Hardeman	12	14	4	12	14	TOTAL	92	102	95	98	101		
Haywood	12	8	17	8	6	DISTRICT 8	Benton	10	6	5	9	7	
Lake	3	1	0	0	0		Carroll	6	11	6	6	7	
Lauderdale	9	3	5	7	7		Chester	6	2	3	2	5	
Obion	10	7	5	6	8		Decatur	1	6	1	9	3	
Shelby	96	95	93	95	94		Gibson	8	12	15	11	8	
Tipton	13	8	8	8	7		Hardin	7	8	9	9	7	
TOTAL	186	161	149	160	159		Henderson	6	13	16	12	16	
Carter	10	6	8	17	11		Henry	8	11	7	9	9	
Claiborne	6	6	6	9	13		McNairy	9	8	8	11	9	
Cocke	17	12	6	17	5		Madison	25	21	16	18	26	
Grainger	9	5	6	7	6		Weakley	6	4	9	2	4	
Greene	22	23	14	11	12		TOTAL	92	102	95	98	101	
Hamblen	10	3	7	13	11		DISTRICT 8	Benton	10	6	5	9	7
Hancock	1	2	4	3	3			Carroll	6	11	6	6	7
Hawkins	7	17	10	9	8	Chester		6	2	3	2	5	
Jefferson	9	12	11	11	11	Decatur		1	6	1	9	3	
Johnson	11	10	10	10	10	Gibson		8	12	15	11	8	
Kanawha	10	10	10	10	10	Hardin		7	8	9	9	7	
Meigs	10	10	10	10	10	Henderson		6	13	16	12	16	
Monroe	10	10	10	10	10	Henry		8	11	7	9	9	
Morgan	10	10	10	10	10	McNairy		9	8	8	11	9	
Putnam	10	10	10	10	10	Madison		25	21	16	18	26	
Randolph	10	10	10	10	10	Weakley		6	4	9	2	4	
Sevier	10	10	10	10	10	TOTAL		92	102	95	98	101	
Union	10	10	10	10	10								
Van Buren	10	10	10	10	10								
Warren	10	10	10	10	10								
White	10	10	10	10	10								

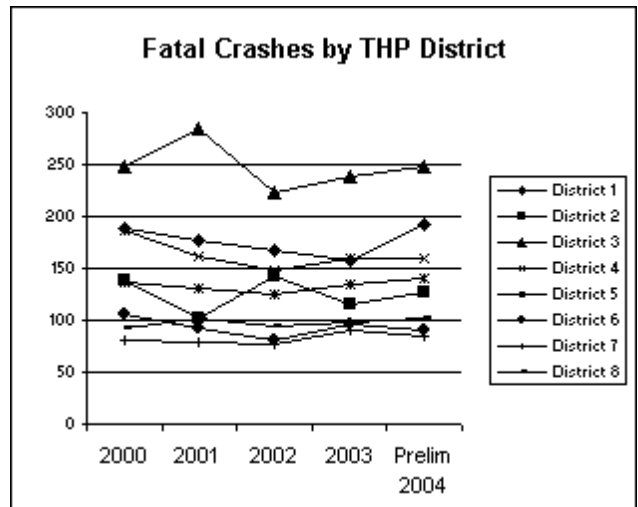


Table 21

Rankings of FY 2004 Crash Target Problems								
*Based on Tennessee Department of Safety Data from 2002 - 2000								
<i>Shaded Counties Have Greater than Average Rate of Problems</i>								
County	Overall Crash Rate	Fatal Crash Rate	Injury Crash Rate	Senior Driver Crash Rate	Young Driver Crash Rate	Alcohol Crash Rate	Fatal Alcohol Crash Rate	% Children Unrestrained
Anderson	28	69	32	22	30	72	57	72
Bedford	15	41	7	16	13	2	48	49
Benton	46	16	38	46	39	51	16	48
Bledsoe	93	36	89	94	94	92	50	2
Blount	29	71	51	15	14	53	65	89
Bradley	13	79	28	12	7	39	79	76
Campbell	22	34	8	14	32	45	90	61
Cannon	7	4	3	38	46	32	26	40
Carroll	77	49	60	63	68	77	29	51
Carter	34	88	54	35	21	54	12	77
Cheatham	39	56	67	49	48	7	64	46
Chester	32	47	19	34	54	38	55	30
Claiborne	81	63	88	53	79	93	78	59
Clay	94	94	94	93	93	69	6	9
Cocke	26	25	22	28	25	9	5	73
Coffee	18	42	30	13	20	50	49	65
Crockett	88	7	90	89	84	81	7	13
Cumberland	17	28	14	27	10	42	18	41
Davidson	1	83	1	2	1	20	63	93
Decatur	50	60	46	74	31	5	2	20
DeKalb	38	46	20	42	35	30	92	36
Dickson	16	38	16	20	18	4	20	64
Dyer	44	45	27	29	50	13	23	68
Fayette	57	33	48	55	60	79	21	44
Fentress	84	14	77	79	81	88	24	25
Franklin	64	76	83	59	61	52	39	69
Gibson	74	51	74	52	74	71	27	55
Giles	69	17	61	78	78	46	46	4
Grainger	82	37	85	73	71	56	40	70
Greene	37	35	36	47	70	90	54	67
Grundy	85	6	52	69	89	84	17	5
Hamblen	23	95	40	23	12	41	88	95
Hamilton	9	91	24	8	5	26	75	88
Hancock	53	23	53	83	57	60	93	19
Hardeman	48	10	35	51	45	49	1	50
Hardin	31	29	31	40	17	14	15	37
Hawkins	65	61	84	58	52	66	47	87
Haywood	12	1	5	18	34	8	32	22
Henderson	4	3	6	6	15	18	31	15
Henry	78	43	68	54	55	68	51	52
Hickman	30	11	12	45	40	15	9	10
Houston	60	21	79	76	69	21	89	23
Humphreys	59	19	45	71	64	23	41	7
Jackson	61	13	78	80	83	17	22	3
Jefferson	58	52	63	68	63	58	73	56
Johnson	43	48	58	41	38	31	19	33
Knox	3	73	4	4	3	19	69	85

County	Overall Crash Rate	Fatal Crash Rate	Injury Crash Rate	Senior Driver Crash Rate	Young Driver Crash Rate	Alcohol Crash Rate	Fatal Alcohol Crash Rate	% Children Unrestrained
Lake	95	59	95	95	95	95	8	12
Lauderdale	90	53	86	90	91	64	34	6
Lawrence	41	72	57	26	44	36	72	42
Lewis	68	78	82	81	77	34	91	26
Lincoln	33	75	34	19	24	37	25	32
Loudon	67	85	56	67	42	73	62	60
Macon	51	58	47	56	33	40	94	28
Madison	2	57	15	1	4	22	30	86
Marion	55	2	39	70	82	63	4	11
Marshall	40	31	64	37	49	33	38	43
Maury	19	55	9	21	26	25	71	62
McMinn	21	50	23	17	19	61	35	47
McNairy	52	27	29	77	58	28	13	27
Meigs	86	87	71	87	80	43	80	35
Monroe	71	24	65	44	73	80	42	75
Montgomery	20	92	13	10	22	35	85	81
Moore	27	77	2	75	51	1	95	21
Morgan	73	39	69	72	75	70	56	34
Obion	42	64	37	36	36	76	43	79
Overton	56	20	59	39	66	75	11	74
Perry	75	18	25	91	62	3	70	1
Pickett	92	22	91	92	85	83	10	8
Polk	91	8	80	86	92	85	83	38
Putnam	8	82	18	9	6	27	60	71
Rhea	76	80	76	32	72	91	77	39
Roane	66	68	62	61	67	78	82	45
Robertson	35	44	41	33	41	16	28	53
Rutherford	14	86	11	11	11	24	67	82
Scott	83	62	75	57	88	82	33	63
Sequatchie	62	9	66	65	47	65	81	84
Sevier	11	74	10	7	8	47	45	94
Shelby	6	93	17	3	9	74	84	91
Smith	24	12	26	48	27	6	14	17
Stewart	72	5	42	82	65	29	3	14
Sullivan	36	84	44	24	28	59	58	92
Sumner	54	65	49	43	53	62	53	54
Tipton	89	66	93	85	90	89	52	16
Trousdale	10	32	21	31	16	12	87	29
Unicoi	47	81	73	62	29	44	86	80
Union	87	30	92	84	87	67	37	24
Van Buren	80	67	72	88	86	94	68	18
Warren	25	40	55	30	23	48	44	66
Washington	5	89	33	5	2	10	59	90
Wayne	49	26	43	66	59	11	61	31
Weakley	79	70	87	64	43	57	66	57
White	63	15	70	60	56	86	74	83
Williamson	70	90	81	50	76	87	76	78
Wilson	45	54	50	25	37	55	36	58

Table 22
Pedestrian Fatalities

Age	2000	2001	2002	2003	2004
<= 15	13	11	10	10	9
16	0	0	1	1	0
17	1	0	2	2	0
18	0	0	0	1	0
19	2	0	1	2	1
20	1	0	1	2	1
21-24	8	3	2	5	5
25-34	13	8	7	10	11
35-44	29	22	10	15	9
45-54	13	10	16	21	26
55-64	5	7	10	12	3
>= 65	14	16	12	15	15
Total	99	77	72	96	80

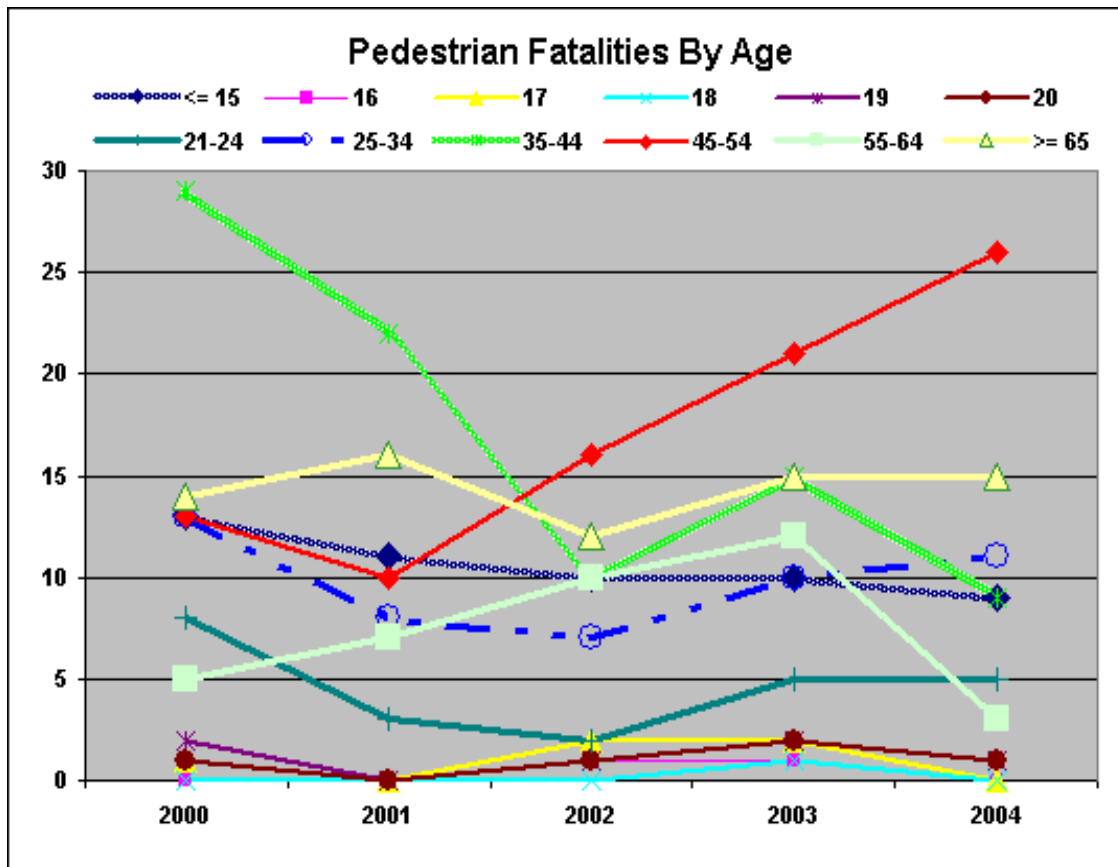


Table 23
Pedestrian Tested Unknown Results

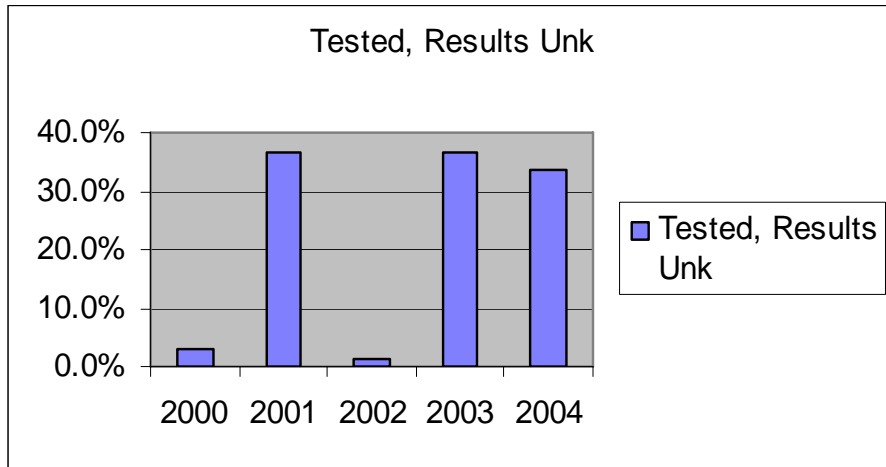


Table 24
Pedestrian By Age Tested Positive

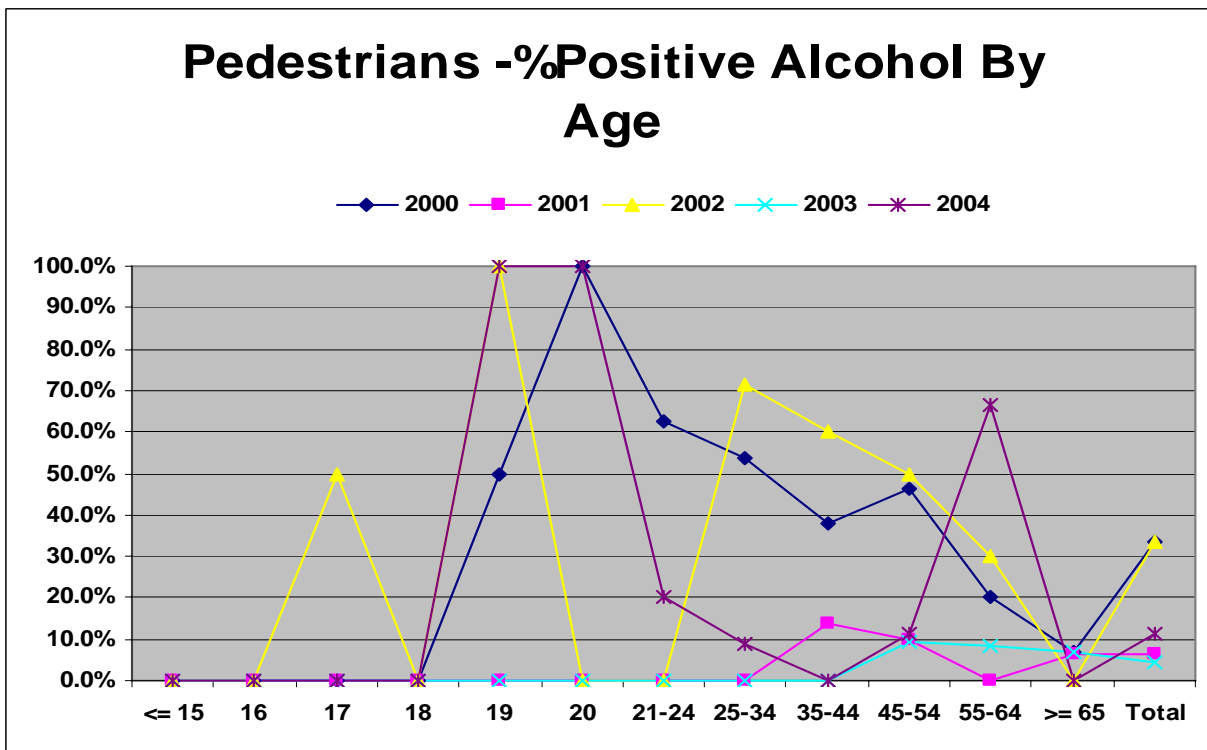


Table 25

Pedestrian Fatalities By Age Positive Alcohol

	2000	2001	2002	2003	2004
<=					
15	0.0%	0.0%	0.0%	0.0%	0.0%
16	0.0%	0.0%	0.0%	0.0%	0.0%
17	0.0%	0.0%	50.0%	0.0%	0.0%
18	0.0%	0.0%	0.0%	0.0%	0.0%
19	50.0%	0.0%	100.0%	0.0%	100.0%
20	100.0%	0.0%	0.0%	0.0%	100.0%
21-					
24	62.5%	0.0%	0.0%	0.0%	20.0%
25-					
34	53.8%	0.0%	71.4%	0.0%	9.1%
35-					
44	37.9%	13.6%	60.0%	0.0%	0.0%
45-					
54	46.2%	10.0%	50.0%	9.5%	11.5%
55-					
64	20.0%	0.0%	30.0%	8.3%	66.7%
>=					
65	7.1%	6.3%	0.0%	6.7%	0.0%
Total	33.3%	6.5%	33.3%	4.2%	11.3%
	2000	2001	2002	2003	2004
Tested, Results Unk	3.0%	36.4%	1.4%	36.5%	33.8%

Table 26: Tennessee Seatbelt Usage, 2000-2005

Survey Year	Passenger Cars	Pickup Trucks	Vans	Sport Utility Vehicles	All Vehicles
2000	64.21%	39.27%	68.51%	72.99%	58.98%
2001	73.47%	53.94%	70.45%	75.90%	68.31%
2002	70.97%	53.00%	71.78%	73.60%	66.71%
2003	72.48%	54.99%	71.30%	75.37%	68.45%
2004	76.14%	57.48%	75.75%	77.35%	72.04%
2005	78.18%	62.60%	77.34%	79.49%	74.42%

Figure 1: Tennessee Seatbelt Usage, 2000-2005

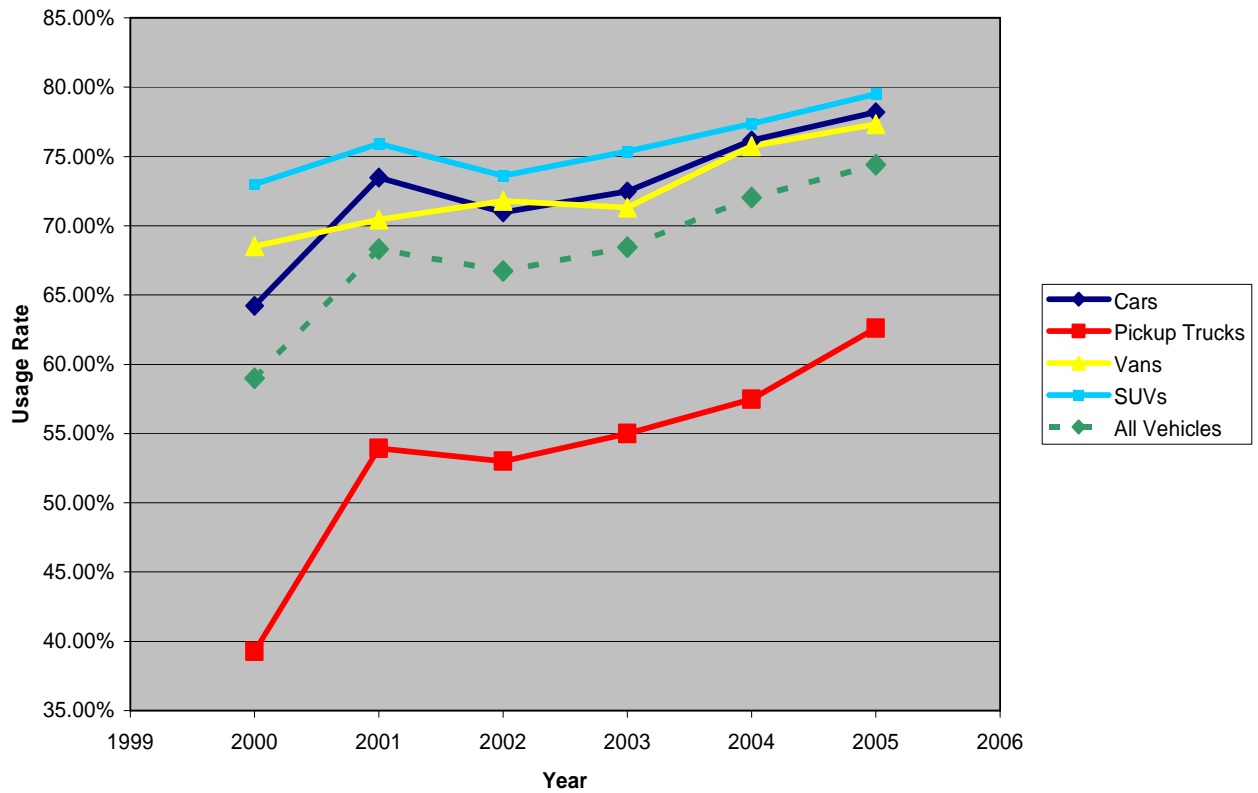


Table 27
 2003 Persons Killed, by Age in Tennessee

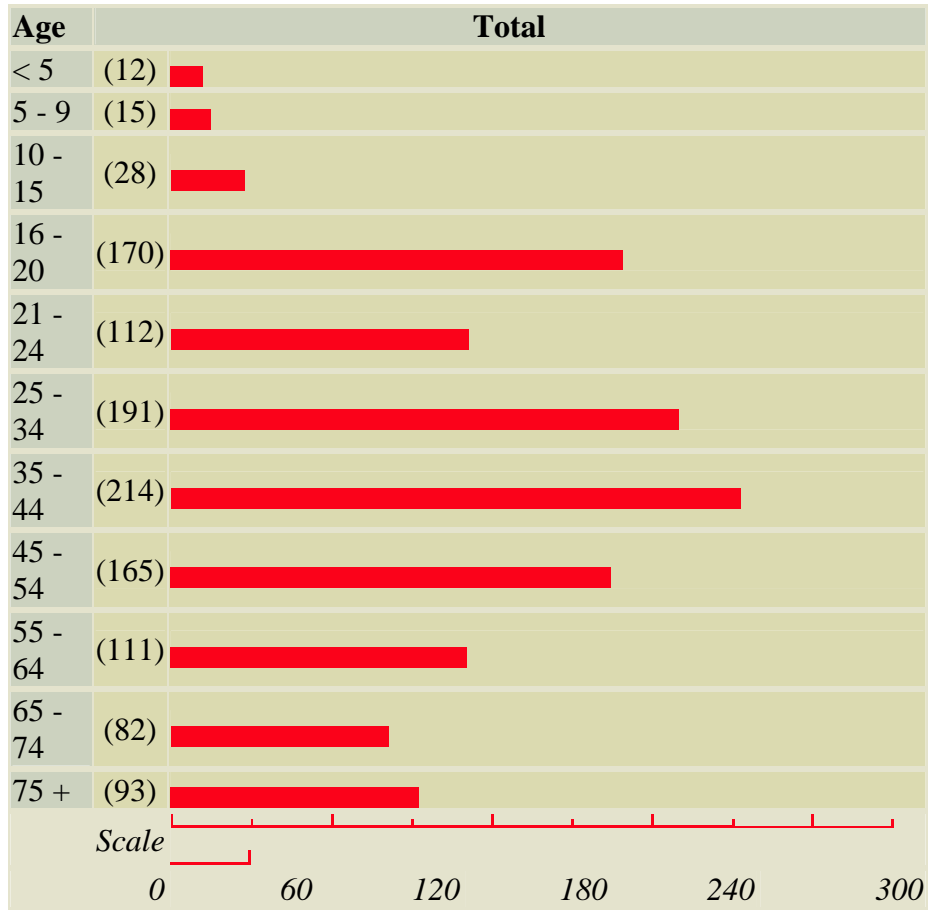


Table 28

State:

Fatalities and Fatality Rates, 1994 – 2003

Year:

Year	Fatalities	Resident Population (Thousands)	Fatality Rate per 100,000 Population	Licensed Drivers (Thousands)	Fatality Rate per 100,000 Licensed Drivers	Registered Motor Vehicles (Thousands)	Fatality Rate per 100,000 Registered Vehicles	Vehicle Miles Traveled (Billions)	Fatality Rate per 100 Million VMT
1994	1,214	5,163	23.51	3,826	31.73	5,116	23.73	55	2.23
1995	1,259	5,241	24.02	3,739	33.67	5,470	23.01	56	2.24
1996	1,239	5,314	23.32	3,806	32.56	4,909	25.24	58	2.12
1997	1,225	5,378	22.78	3,929	31.18	4,591	26.68	61	2.02
1998	1,216	5,433	22.38	4,073	29.86	4,529	26.85	63	1.94
1999	1,302	5,484	23.74	4,176	31.18	4,490	29.00	65	2.01
2000	1,307	5,703	22.92	4,251	30.74	4,891	26.72	66	1.99
2001	1,251	5,749	21.76	4,188	29.87	5,223	23.95	68	1.85
2002	1,177	5,790	20.33	4,206	27.98	4,861	24.21	68	1.73
2003	1,193	5,842	20.42	4,206	28.36	4,861	24.54	69	1.73

Table 29
Fatal Crashes, 1994 - 2003 (Tennessee)

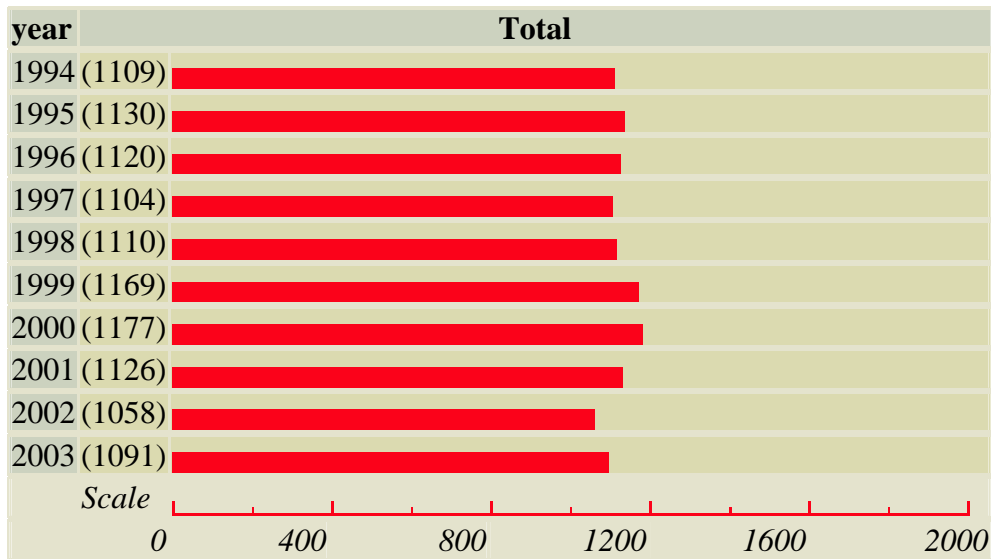
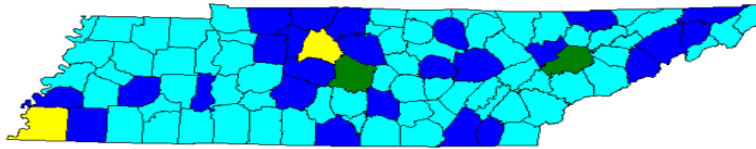


Table 30
Alcohol Concentration By Population



Source: National Center for Statistics and Analysis, 2003 FARS Annual Report File

Table 31

State:

Persons Killed, by Highest Blood Alcohol Concentration (BAC) in the Crashes, 2000 – 2003

Year:

Year	BAC = 0.00		BAC = 0.01-0.07		BAC = 0.08+		Total Number	Total Fatalities in Alcohol-Related Crashes	
	Number	Percent	Number	Percent	Number	Percent		Number	Percent
2000	765	59	84	6	458	35	1,307	542	41
2001	718	57	70	6	463	37	1,251	533	43
2002	692	59	73	6	412	35	1,177	485	41
2003	746	63	43	4	404	34	1,193	447	37

Table 32
Alcohol Fatalities By Year

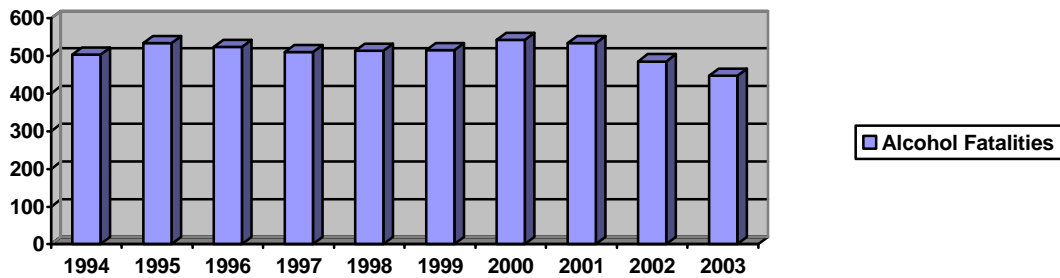


Table 33
Alcohol Fatalities In Alcohol Related Crashes

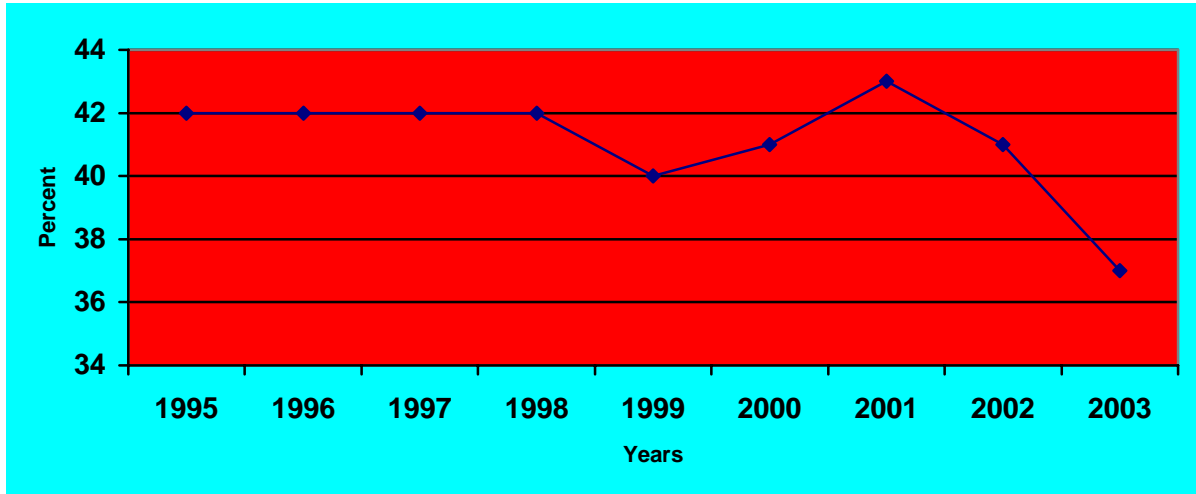


Table 34
Alcohol Related Fatalities Per 100 Million VMT

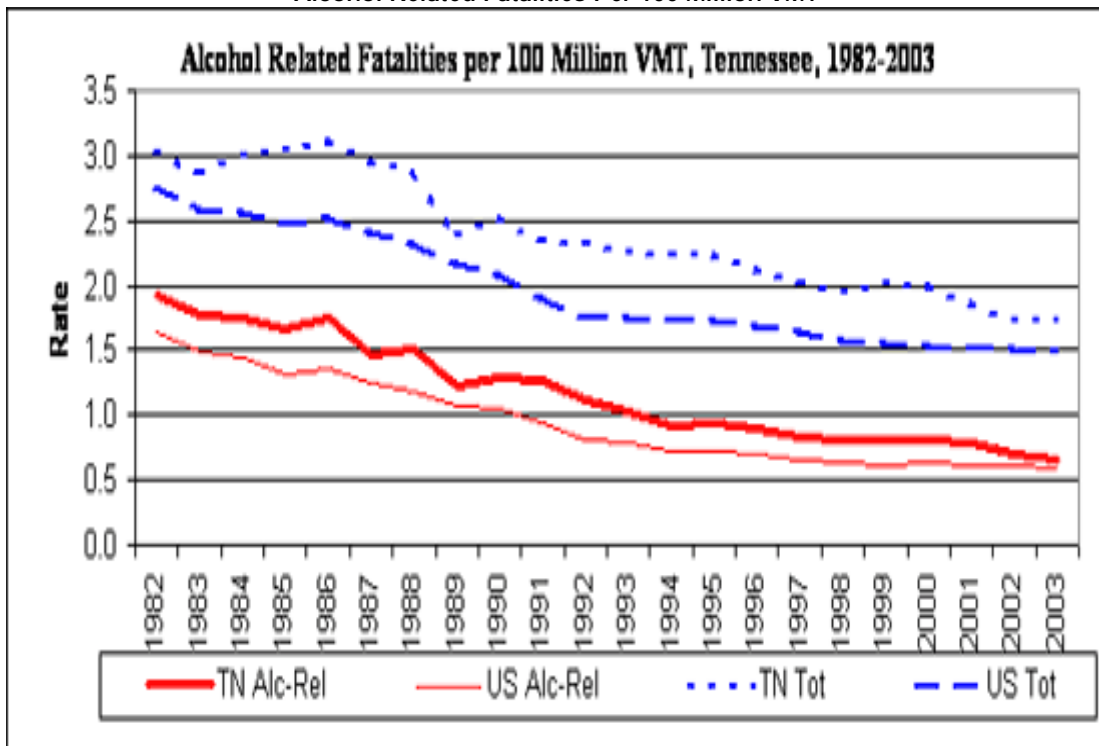


Table 35
Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Sex, 1994 - 2003

Year	Male			Female		
	Total	Percent		Total	Percent	
		BAC=0.01+	BAC=0.08+		BAC=0.01+	BAC=0.08+
1994	1,163	32	27	455	16	14
1995	1,248	33	29	435	12	10
1996	1,222	32	27	461	13	11
1997	1,172	31	28	480	12	9
1998	1,231	30	26	459	15	13
1999	1,281	31	27	489	12	10
2000	1,258	29	25	474	18	14
2001	1,230	32	27	460	15	13
2002	1,128	31	26	416	17	13
2003	1,126	28	25	479	15	13

Table 36
Drivers in Fatal Crashes License Status

Previous Convictions	License						Total (58,156)	
	Valid License (49,311)		Invalid License (6,973)		Unknown (1,872)			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Previous Recorded Crashes	6,737	13.7	885	12.7	8	0.4	7,630	13.1
Previous Recorded Suspensions or Revocations	3,721	7.5	3,007	43.1	13	0.7	6,741	11.6
Previous DWI Convictions	848	1.7	821	11.8	1	0.1	1,670	2.9
Previous Speeding Convictions	10,345	21.0	1,287	18.5	14	0.7	11,646	20.0
Previous Other Harmful Moving Convictions	8,033	16.3	1,610	23.1	19	1.0	9,662	16.6
Drivers with No Previous Convictions	29,616	60.1	3,215	46.1	1,838	98.2	34,669	59.6

Table 37

University of Memphis Variables that significantly predict prosecution outcome in DUI related cases

Variable	Odds	Outcome
Balance problems observed after traffic stop	1.29	Conviction
Caucasian ethnicity vs. all others	1.23	Reduction/acquittal
Absence of scene video	1.25	Reduction/acquittal
Refused BAC test	1.33	Reduction/acquittal
Failed walk and turn SFST	3.08	Conviction
Failed one-leg-stand SFST	2.22	Conviction
Failed finger to nose SFST	3	Conviction
Failed finger dexterity SFST	3.34	Conviction

Table 38
Fatal Alcohol Crashes: Time of Day

	Crash Type						Total		
	Single Vehicle			Multiple Vehicles			Number	Alcohol Related	Percent Alcohol Related
	Number	Alcohol Related	Percent Alcohol Related	Number	Alcohol Related	Percent Alcohol Related			
Midnight to 2:59 am	90	58	64	22	13	61	112	71	63
3:00 am to 5:59 am	61	36	60	19	10	53	80	47	58
6:00 am to 8:59 am	64	13	21	49	4	9	113	18	16
9:00 am to 11:59 am	57	11	19	67	7	10	124	17	14
Noon to 2:59 pm	64	12	18	81	10	12	145	21	15
3:00 pm to 5:59 pm	103	34	33	101	19	19	204	53	26
6:00 pm to 8:59 pm	88	53	60	72	27	37	160	80	50
9:00 pm to 11:59 pm	86	59	69	39	21	54	125	80	64
Unknown	28	16	57	0	0	0	28	0	0
Total	641	292	46	450	111	25	1,091	403	37

Table 39
Alcohol Behavior to Outcome

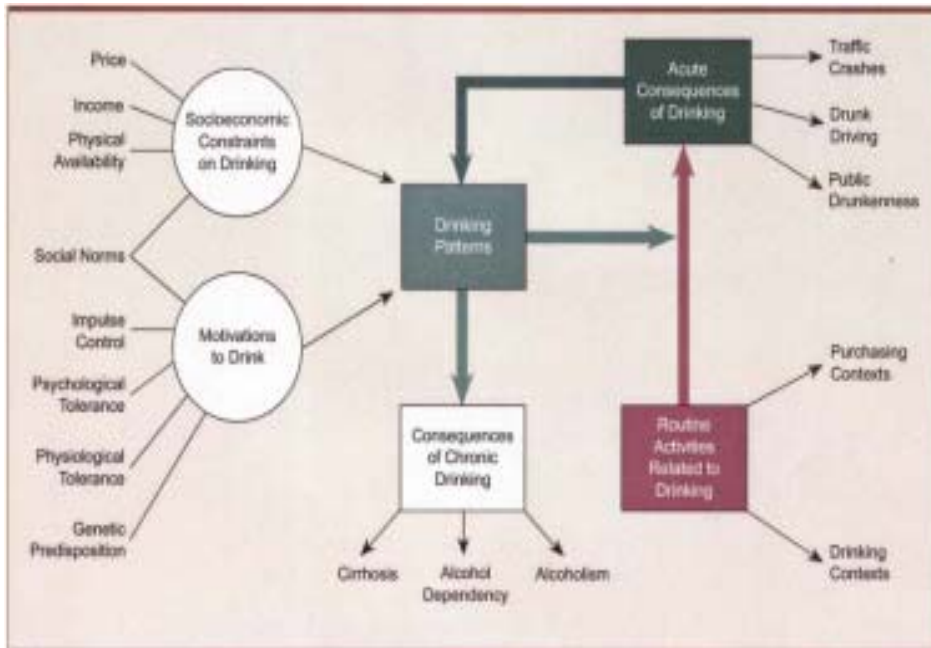


Table 40
Cost of Fatal Crashes Speed Related

SPEED	Number of Fatalities Involved in Speed Related Crashes, 2003	Percent of Fatal Crashes That Are Speed Related, 2003	Estimated Cost of All Speed Related Crashes, 2000
Tennessee	272	23%	\$861 Million
US Total	13,380	31%	\$40,390 Million
Best State		6%	\$44 Million

Table 41
Injury & Fatal Crash Factors

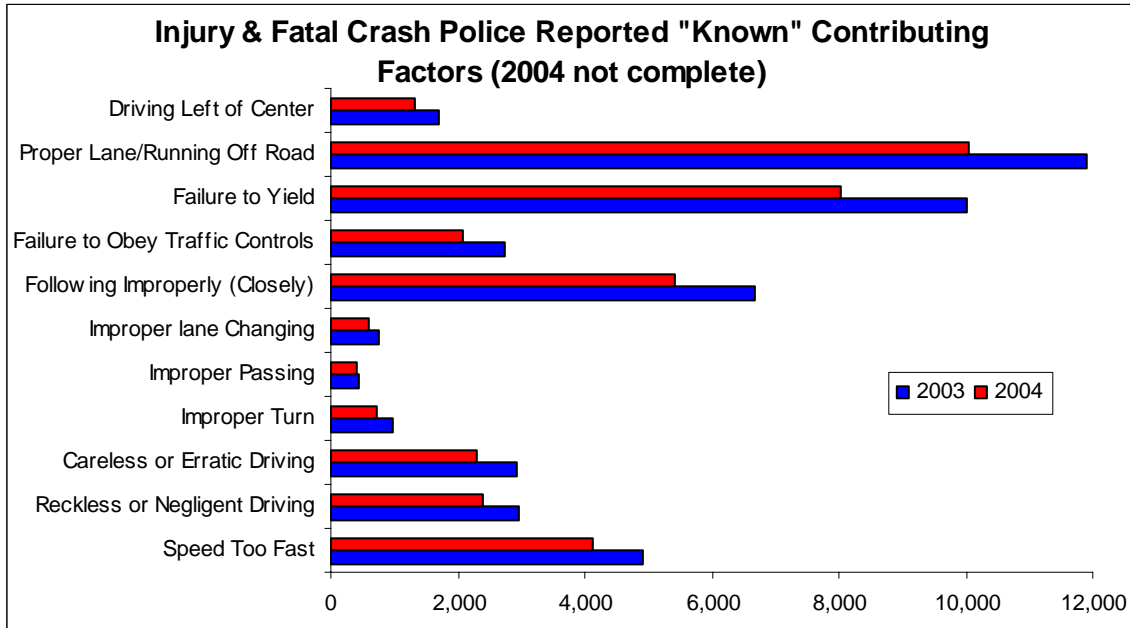


Table 42
Fatal & Injury Crashes Due to Aggressive Driving

	1997	1998	1999	2000	2001	2002	%of Change 1997-2002
Fatal Crashes	238	232	217	218	203	212	-4.5%
Injury Crashes	22,252	21,593	20,084	19,981	20,015	21,327	+2.6%
Total	75,351	74,959	71,116	51,937	72,531	74,116	+7.1%
% of Total Crashes	29.8%	29.1%	28.5%	38.9%	27.9%	29.1%	-1.7%

Percent of change is calculated by using the five-year average (1997-2001) of crash type subtracted from the 2002 percent of Total Crashes and divided by the five year average. Aggressive driving is defined as speeding plus two other offenses: reckless driving, disregarding of a signal, failure to yield, following too closely and/or improper passing. The Percent of Change (1997-2002) for the Percent of Total Crashes is calculated by subtracting the five-year average (1997-2001) of percent of total crashes from the 2002 data.

Table 43
Fatal Crashes With Positive .08 BAC

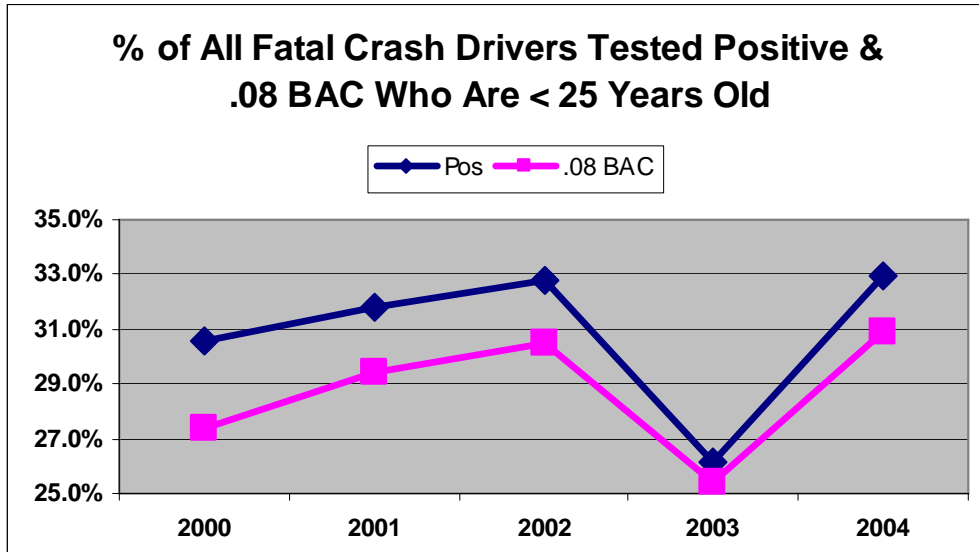


Table 44
Urban Vs. Rural Crashes

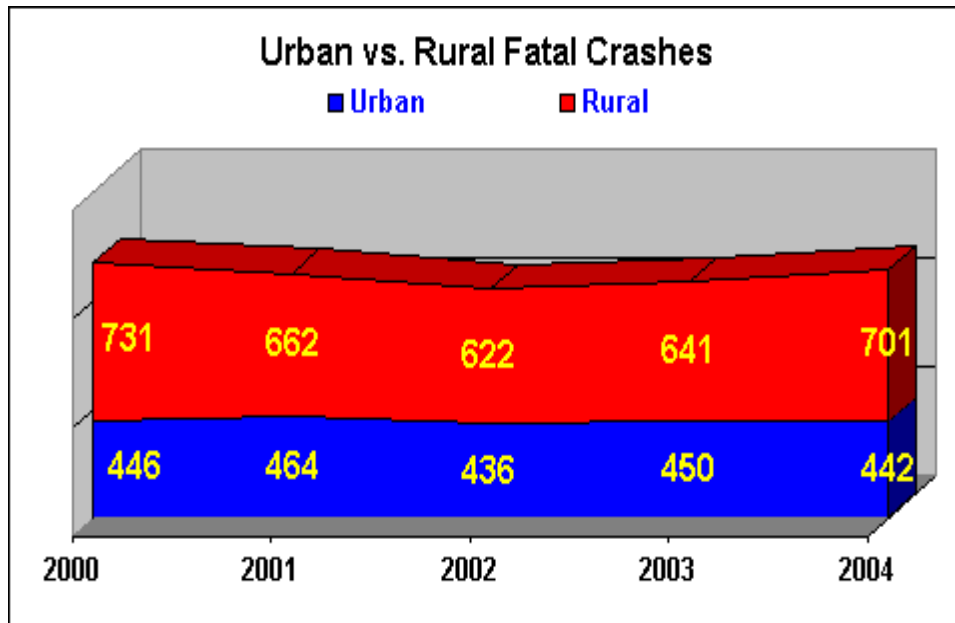


Table 45
Urban Fatal Crashes By Road Type

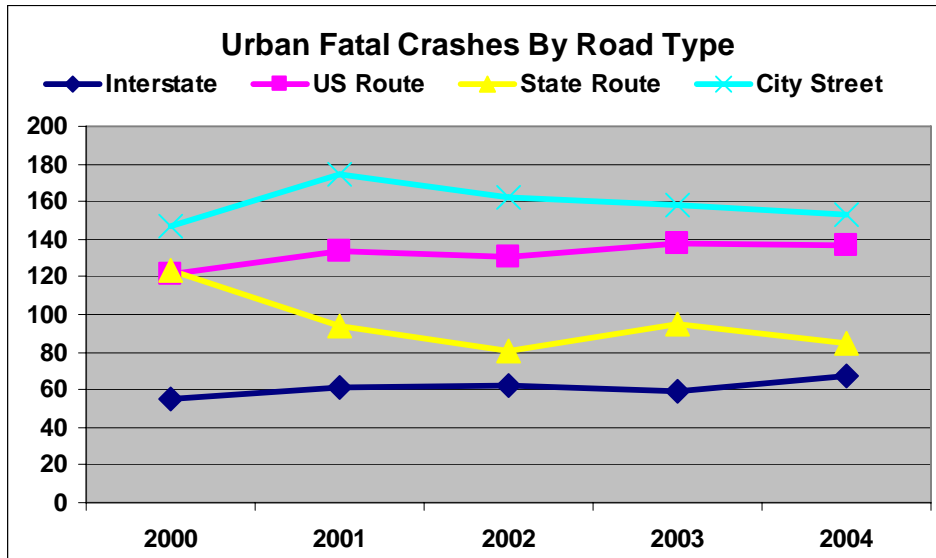


Table 46
Fatal Motorcycle Crashes By Helmet Use

MOTORCYCLES	Motorcycle Rider Deaths 2003				Current Lives Saved by Helmets	Additional Savable at 100%
	Total	Helmeted	Unhelmeted	Unknown		
Tennessee	90	75	15	0	44	6
	Motorcycle Rider Deaths 2002					
Tennessee	75	60	13	2	37	5

Table 47
Motorcycle Fatalities

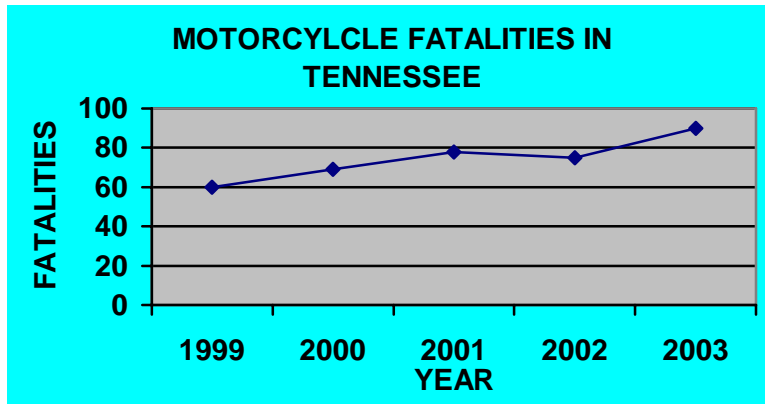


Table 48
Fatal Motorcycle Crashes By Type

<u>Initial Point of Impact</u>	Motorcycles Involved in Fatal Crashes by Initial Point of Impact and Crash Type				Total	
	Single-Vehicle Crashes		Multiple-Vehicle Crashes			
	Number	Percent	Number	Percent	Number	Percent
Front	26	66.7	41	77.4	67	72.8
Left Side	4	10.3	4	7.5	8	8.7
Right Side	4	10.3	2	3.8	6	6.5
Rear	1	2.6	3	5.7	4	4.3
Other/Unknown	4	10.3	3	5.7	7	7.6
Total	39	100.0	53	100.0	92	100.0

Table 49
2004 – Pedestrian Fatalities By Age By Alcohol

	Negative	Positive	Tested, Results Unk	Not Tested	Total
AGE <= 15	0	0	2	7	9
AGE 16	0	0	0	0	0
AGE 17	0	0	0	0	0
AGE 18	0	0	0	0	0
AGE 19	0	1	0	0	1
AGE 20	0	1	0	0	1
AGE 21-24	0	1	3	1	5
AGE 25-34	0	1	2	8	11
AGE 35-44	2	0	3	4	9
AGE 45-54	3	3	8	12	26
AGE 55-64	0	2	0	1	3
AGE >= 65	0	0	9	6	15
Unknown	0	0	0	0	0
Total	5	9	27	39	80

August 25, 2005 Tennessee Department of Safety, Fatality Analysis Reporting System (FARS)

Table 50
Tennessee CODES

	1998	1999
Total Drivers	28,833	27,578
Total Hospital Charges/Drivers	\$59,602,365	\$66,677,834
Average Hospital Charges/Drivers	\$2,067	\$2,418
Total Drivers Belted	22,523	20,845
Total Charges	\$33,288,897	\$37,763,608
Average Charges	\$1,477	\$1,750
Total Drivers Unbelted	6,310	6,000
Total Charges	\$26,313,469	\$28,954,226
Average Charges	\$4,170	\$4,826

Table 51
1998 and 1999 TN CODES Aggregate Data involves only known drivers

Distribution of Drivers	1998	1999
15-24	30%	32%
25-59	59%	58%
60+	11%	10%

Table 52
Minority Population:

Black drivers wear safety belt as much as 10% more than white drivers. The biggest range is between black and white males.

Known Minority Wearing Belts		
	1998	1999
Black Male	79%	80%
Black Female	89%	86%
Other Male	72%	81%
Other Female	88%	89%

Table 53
Driver Races involved in crashes

	1998	1999
White	68%	74%
Black	23%	17%
Other	2%	1%
Unknown	8%	9%

Table 54
Gender

In both 1998 and 1999, 84% of female drivers wore belts, while only 71% of male drivers did.

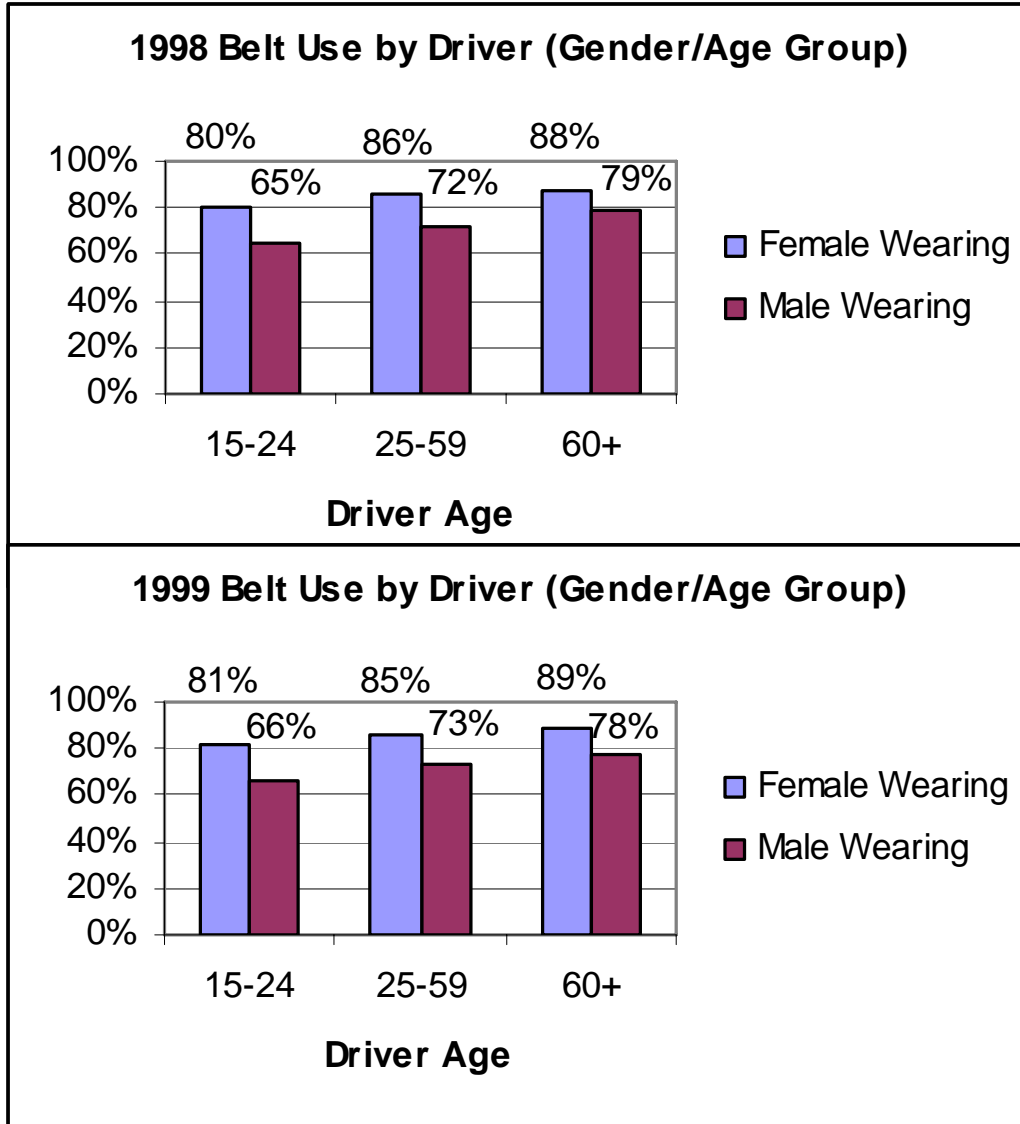


Table 55
Death Rate Per 100 Million VMT

