



Asafer Connecticut fordriversand  $^{p}$ assen  $^{g}$ ers alike is  $^{j}$ ustdowntheroad. Tohel  $^{p}$  uson the  $^{j}$ ourne  $^{y}$ , we have created this strate  $^{g}$ ic  $^{p}$ lanfor FY 2006.

#### CONNECTICUTDEPARTMENTOFTRANSPORTATION DIVISIONOFHIGHWAY SAFETY

PO Box 317546
2800 Berlin Turnpike
Newington, Connecticut 06131-7546
Stephen E. Korta, II, Commissioner
Susan C. Maloney, Highway Safety Program Director

#### DIVISIONOFHIGHWAYSAFETYSTAFF: Strategic Plan Coordinators, Raymond Gaulin, Juliet Little, George Bieniaszek, Stephen Livingston, James Peay, Richard Squeglia

### Tableofcontents

#### 1 Certifications and Assurances

#### 8 Executive Summary

- 8 Impaired Driving (AL)
- 9 Police Traffic Services (PT)
- 9 Occupant Protection (OP)
- 9 Roadway Safety (RS)
- 9 Motorcycle Safety (MS)
- 10 Traffic Records (TP)
- 10 Other Areas & Factors (OA)

## 12 Related Highway Safety Legislation

- 14 Process Description
- 15 Highway Safety Data Analysis
- 21 Impaired Driving (AL)
  - 21 Problem Identification
  - 33 Performance Measures
  - 34 Performance Goals
  - 34 Program Objectives
  - 35 Planned Countermeasures

#### 38 Police Traffic Services (PT)

- 38 Problem Identification
- 42 Performance Measures
- 43 Performance Goals
- 43 Performance Objectives
- 43 Planned Countermeasures

#### 46 Occupant Protection (OP)

#### 49 P&ff of makene Measiticestion

Pedestrians

- 50 Performance Goals
- 50 Performance Objectives
- 50 Planned Countermeasures

#### 53 Roadway Safety (RS)

- 53 Problem Identification
- Performance Measures
- 54 Performance Goals
- 54 Performance Objectives
- 54 Planned Countermeasures

#### 57 Motorcycle Safety (MS)

- 57 Problem Identification
- 64 Performance Measures
- 64 Performance Goals
- 64 Performance Objectives
- 64 Planned Countermeasures

#### 66 Traffic Records (TR)

- 66 Problem Identification
- 66 Performance Goals
- 66 Performance Objectives
- 66 Planned Countermeasures

#### 68 Hazard Elimination

- 68 Problem Identification
- 69 Performance Goals
- 69 Planned Countermeasures
- 69 Performance Measures

#### 70 Other Areas & Factors (OA)

70 Driver Groups

74 Vehicle Types: School busses,

75 Vehicleratopoest Buildencele Encergency

81 Vehicle Types: Pickup Trucks

& Utility Vehicles

85 Supplemental Information - H.S. Cost

# Certifications and AssURANCES\_

The Governor is responsible for the administration of

ment and balances, will be imposed upon any sec-

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 % 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 disburse-

ondary 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);

## CertificationsandAssURANCES\_

(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 Actof 1988 (49 CFR Part29 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.
  - 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.
- 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.
  - 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.
  - 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.

#### **BU Y 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%. 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 under-signed, 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 sub-contracts, 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., "grass-roots") lobbying activities, with one exception. This does not preclude a State official whose salary is sup-ported 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 DEPARTMENT AND SUSPENSION:

Instructions for Primary Certification

- 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 prospect i veprimary 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 pro-posed 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 e xceed 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 pro-posed for debarment under 48 CFR Part 9, sub-part 9.4, suspended, debarred, ineligible, or vol-

untarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

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

- 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;
  - a) 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

- 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 that by submitting this proposal it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion --Lower Tier Covered Transaction," with-out 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 pro-posed 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 pro-posed 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:

- 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.
- Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participants shall attach an explanation to this proposal.

#### **ENVIRONMENTAL IMPACT**

The Governor's Representative for Highway Safety has reviewed the State's Fiscal Year 2005 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).

Sun C Maloney

Susan C. Maloney
Governor's Representative for Highway Safety
August 4, 2004

# executivesummar<sup>y</sup>\_

This strategic planning document provides historic, trend and current crash data detailing highway safety in Connecticut. Problem areas are identified, which dictate highway safety goals, objectives and planned countermeasures. This executive summary has been prepared using the latest available data from the Fatality Analysis Reporting System (FARS), as prepared by the Institute for Traffic Safety Management and Research, University at Albany, State University of New York.

Fatal crashes in Connecticut increased 1% between 1999 and 2003 (270 vs. 273), compared to increases of 4% and 3%, respectively, in the New England region and nationwide. The greatest number of fatal crashes occurred on state highways, followed by local roads. More drivers ages 25-34 and 35-44 were involved in fatal crashes than drivers in any other age groups; approximately three-quarters of the drivers invo I ved in fatal crashes were men. Fifteen percent of the drivers involved in fatal crashes did not have a valid driver's license, equal to the national rate (15%), but higher than the regional rate (11%). The most prevalent driver-related factor in fatal crashes was "running off the road" (40%), followed by "driving too fast for conditions or in excess of posted speed limit" (30%).

Fatalities in Connecticut decreased 2% over the five-year period from 1999 to 2003 (301 vs. 294), compared to increases of 4% in the New England region and 2% nationwide. All three measures of the fatality rates in Connecticut Vehicle Miles Travelled (VMT), population, and licensed drivers) were considerably lower than the national rates each year. Driver fatalities in Connecticut rose 11% between 1999 and 2003 (169 vs. 187), compared to an increase of 6% in the region and in the nation.

Fatalities were highest among persons ages 65 and over, followed by persons ages 25-34; 71% of the fatalities were men.

#### **IMPAIRED DRIVING (AL)**

Over the five-year study period, 1999-2003, alcoholrelated fatal crashes in Connecticut fluctuated annually from 120 to 148 fatal crashes. Alcohol-related fatalities decreased 4% over the five years (136 vs. 131), compared to increases of 3% nationwide and 4% in the New England region. The proportion of total alcohol-related fatalities was higher in Connecticut each year than in the region or the nation. Alcohol-related fatal crashes were most likely to occur June-September (40%), on Saturday and Sunday (46%), and between 9 p.m. and 3 a.m. (53%). Between 49%-58% of all drivers involved in fatal crashes in Connecticut were tested for Blood Alcohol Concentration, (BAC) which exceeded the regional rate in three of the five years, and the national rate in four of the five years. The proportion of fatally injured drivers tested for BAC each year was much higher in Connecticut than nationwide (83%-88% vs. 71%-73%, respectively); the Connecticut rate exceeded the regional rate (69%-89%) in four of the five years. It was found that 34% of the fatally injured drivers in Connecticut had a BAC of .08% or higher, compared to 28% in the region and 24% nationwide. Connecticut drivers in the 21-24 age group were the most likely to be intoxicated (45%). Of the fatally injured drivers under the legal drinking age of 21, 32% had a BAC of .08% or higher.

**General Goal:** To reduce significantly the number of alcohol-related crashes.

#### **POLICE TRAFFIC SERVICES (PTS)**

From 1999-2003, the number of speeding-related fatalities in Connecticut ranged from 111 to 154, decreasing by 2%, compared to an 8% increase in the region and 6% nationwide. It was found that 17% of the speed-

ing-related fatalities occurred on Interstate roads, while 52% occurred on non-Interstate roads where the posted speed was 35 mph or less. Twenty-two percent of the drivers involved in speeding-related fatal crashes in Connecticut had a previous speeding conviction on their driving record at the time of the crash, similar to the percentages in the region (23%) and nation (21%). Of the drivers with previous speeding convictions, 30% were 25-34 years of age and 86% were men.

**General Goal:** To reduce the number of speed-related crashes.

#### **OCCUPANT PROTECTION (OP)**

Safety belt use in Connecticut increased from 73% in 1999 to 83% in 2004, exceeding the national rate each year with the exception of 2003. The proportion of fatally injured passenger vehicle occupants who were not restrained occupants was below the national average each year from 1999-2003. Not restrained in Connecticut decreased from 53% in 1999 to 46% in 2003. The average usage rate among occupant survivors was much higher (63%) than the usage rate among occupants killed (36%). Occupants ages 25-34 killed in crashes in Connecticut had the lowest safety belt use of any age group (24%), while occupants age 75 and older had the highest rate (60%). The use rates for those who survived their crashes ranged from a low of 45% for those 21-24 years of age to 88% of those under the age of five.

General Goal: To increase safety belt use rates and

remain at a level that is consistently above the national average.

#### **ROADWAY SAFETY (RS)**

Safety in highway construction or work zones is important both to motorists passing through and personnel working at these sites. Work zone-related fatal and A-injury or serious crashes continue to decline. During the 1999-2003 period, the number of serious crashes fluctuated from a high of 33 in 2000 to a low of 15 in 2003.

**General Goal:** To continue to reduce the number of serious injury crashes occurring in construction/work zone areas.

#### MOTO RC YCLE SAFETY (MS)

From 1999–2003, there were 205 fatal crashes involving motorcycles; 209 operators/passengers were killed in these crashes. Motorcyclist fatalities decreased 26% in Connecticut over the five years, compared to a 23% decrease in the New England region and 47% increase nationwide. Fatal crashes involving motorcycles were most likely to occur June–September (62%), on weekends (43%), and between 3 p.m. and 9 p.m. (53%).

The largest numbers of fatalities were ages 25-34, followed by motorcyclists ages 35-44; 94% of the motorcyclist fatalities were men. Seventy-one percent of the motorcyclists killed were not wearing a helmet, compared to approximately 50% of the fatalities in the

New England region and nationwide. Speed was more likely to be a factor among motorcycle operator fatalities in Connecticut (52%) than regionally (46%) or nationally (40%). A total of 39% of the motorcycle operators killed in Connecticut had a BAC at or equal

to 0.01%, compared to a regional rate of 36% and a national rate of 29%. Sixty-three percent of the motor-cycle operators involved in fatal crashes had a valid license at the time of the crash, compared to 77% in the New England region and 72% nationwide.

**General Goal:** To reduce the number of injuries and deaths among motorcycle operators and passengers.

#### TRAFFIC RECORDS (TR)

Over the past several years, progress has been made in the support area of traffic records. The major focus of Connecticut's traffic records system is to develop and implement an effective method for the capture and delivery of a comprehensive traffic safety data system (motor vehicle crash and injury, citation and adjudication, operator licensing and motor vehicle registration data, and crash-related medical outcome data, etc.) to all users. A self-assessment was completed in 2004 to provide an updated blueprint of program status, for use and reference by all concerned. Oversight of this program area is provided through an active multi-agency/governmental entity, namely, the Connecticut Traffic Records Coordinating Committee.

**General Goal:** To continue to develop a comprehensive traffic records delivery system that can provide users with timely, complete and accurate traffic records data.

#### OTHER AREAS & FAC TORS

Young driver (16-20 years old) fatalities in Connecticut increased 27% over the 1999-2003 five-year period, compared to smaller increases of 22% in the New England region and 3% nationwide. A total of 284 fatal crashes in Connecticut invo I ved young drivers, and 136 young drivers were killed in these crashes. The largest number of fatal crashes involving young drivers occurred in December (13%), October (12%), and August (11%); on weekends (42%); and between 9 p.m. and 3 a.m. (42%). Of all the young drivers involved in fatal crashes, 81% were men. Sixteen percent of the young drivers involved in fatal crashes did not have a valid license, equal to the national rate of 16%, but above the regional rate of 13%. In nearly half (47%) of the cases involving young drivers in fatal crashes speed was reported as a driver-related factor, compared to 51% in the region and 34% nationwide. Nearly one half (49%) of the young drivers involved in fatal crashes used an occupant restraint, higher than the rate in the New England region (39%), but lower than the rate nationwide (52%). Young drivers were somewhat more likely than all other drivers to have had a previous recorded speeding conviction (25% vs. 22%).

There were 221 fatal crashes involving pedestrians in Connecticut over the five-year period of 1999–2003; 216 pedestrians were killed in these crashes. Pedestrian fatalities decreased from 51 in 1999 to 34 in 2003, a decrease of 33%, compared to an 8% increase in the New England region and a 4% decrease nationwide. Over the five years, pedestrians accounted for 10-17% of the total fatalities in Connecticut; in 2003, 12% of the fatalities were pedestrians, similar to the percentage nationwide (11%) and slightly below that in the region. Fatal crashes involving pedestrians we re most likely to occur September–December (47%),

## executivesummar<sup>y</sup>\_

on Friday and Saturday (34%), and between 3 p.m.— midnight (62%). Pedestrian fatalities were most numerous among persons 65 years of age and older; 59% of the fatalities were men. The most frequently reported factor related to pedestrian fatalities was "improper crossing of roadway or intersection." Twenty-three percent of the pedestrian fatalities occurred at intersections; over 60% were killed at non-intersection locations on roadways where cross-walks were not available. Twenty percent of the pedestrian fatalities age 16 and over had a BAC of at least .08%, compared to 18% in the region and 22% nationwide; pedestrians ages 16-20 were the most likely to be intoxicated.

There were 16 fatal crashes involving bicycles which occurred in Connecticut from 1999 to 2003; 15 bicyclists were killed in these crashes.

**General Goal:** To reduce the number of all crashes to levels consistently below the national average.

# relatedhi<sup>g</sup>hwa<sup>y</sup>SAFETYle<sup>g</sup>islation\_

The following is a brief history of the provisions of the

Connecticut General Statutes relating to the safety of motor vehicle travel on Connecticut's roads. The enactment of these statutes has had an effect upon the frequency and severity of traffic crashes. For additional information on the General Statutes of Connecticut, visit <a href="https://www.cga.state.ct.us.">www.cga.state.ct.us.</a>

- Public Act No. 76-326 repealed Section 14-289e of the General Statutes that had required motorcycle drivers and their passengers to wear protective headgear. The statute was repealed on June 1, 1976.
- Public Act No. 76-309 amended Section 14-299 of the General Statutes by allowing a right turn at a red traffic signal, unless a sign prohibits this movement.
   Previously this turn was allowed only where a sign permitted it. This law went into effect July 1, 1979.
- Public Act No. 79-609 amended Section 14-219 of the General Statutes by changing the absolute speed limit to 55 miles per hour upon any highway or road in Connecticut. This law went into effect October 1, 1979.
- Public Act No. 85-264 amended subdivision (20) of Section 30-1 of the General Statutes by redefining the minimum drinking age as 21 years. The new drinking age became efective on September 1, 1985.
   The drinking age had previously been increased from 18 to 19 years on July 1, 1982 and from 19 to 20 years on October 1, 1983.
- Public Act No. 85-429 amended Section 14-100a of the General Statutes by requiring the operator of and any front seat passenger in a private passenger motor vehicle to wear seat safety belts while the

vehicle is operating on the highways and roads of Connecticut. This law went into effect on January 1, 1986. Section 14-100a had been previously amended to require a child, under the age of four years, travelling in a motor vehicle to be restrained by an approved restraint system. This provision was effective as of October 1, 1982.

- Public Act No. 89-314 provides for a mandatory operator licensing suspension for anyone who fails or refuses a chemical test after being arrested for driving while intoxicated or impaired by drugs. This Administrative "Per Se" DWI Law went into effect January 1, 1990.
- Public Act No. 90-143 requires all police authorities to file with the Department of Transportation (instead of the Department of Motor Vehicles) a copy of the police accident report at the conclusion of their investigation of any motor vehicle traffic accident. Operators involved in a motor vehicle traffic accident are no longer required to file an opera-tor accident report with the Department of Motor Vehicles. This law went into effect October 1, 1990.
- Public Act No. 94-5 2: (1) makes the driver of a private passenger motor vehicle responsible for assuring that rear seat passengers between ages 4 and 16 wear seat belts; (2) limits mandatory child restraint usage for children under age 4 to those who weigh less than 40 pounds; (3) requires children between ages 1 and 4 and weighing under 40 pounds to be in a child restraint; and (4) extends child restraint requirements to trucks and truck or van type recreational vehicles. This law went into effect October 1, 1994.

- Public Act No. 98-181 raised the speed limit from 55 mph to 65 mph on designated sections of highways.
   This law went into effect October 1, 1998.
- House Bill No. 6732 redefined the standards for driving under the influence of alcohol. The act redefined "elevated blood alcohol content" to mean a ratio of alcohol in the blood that is .08% or more of alcohol, by weight. This limit was previously defined to be .10%. This law went into effect July 1, 2001.
- Public Act No. 03-91 strengthened Dram Shop Act.
- Public Act No. 03-265 effective October 1, 2003, includes ignition interlock.

There were several highway safety-related legislative actions completed during the 2005 Legislative Session. Two of the bills that were passed: "An Act Concerning Child Restraint Systems" (booster seat) and "An Act Concerning The Use of Hand-Held Mobile Telephones and Hand-Held Mobile Electronic Devices By Operators Of Motor Vehicles." Both Bills will be effective October 1, 2005.

<sup>p</sup>rocessdescri<sup>p</sup>tion\_

## <sup>p</sup>rocessdescri<sup>p</sup>tion\_

Each year, the Connecticut Department of Transportation's Division of Highway Safety (DHS) prepares an annual planning document that addresses a set of identified and defined highway and traffic safety problems. This problem identification process begins early in the calendar year with an examination of a variety of traffic and roadway related data. The analysis of this data identifies both general and specific patterns of concern and, from a review of historical patterns, results in a projection of future data trends. Other problems and deficiencies are identified through programmatic review.

The Division of Highway Safety staff studies both the data and programmatic analysis and develops multiple countermeasures that specifically address the problem areas identified. Countermeasures typically

receive funding based upon their potential to contribute to the achievement of long-range and interim goals and objectives. A major part of this process is to enlist the cooperation of highway safety partners who can and will facilitate the implementation of these countermeasures.

In addition, local political subdivisions and State agencies are routinely and systematically encouraged to identify municipal, regional and State highway safety problems and to propose specific countermeasures that address these problems.

# hi<sup>g</sup>hwa<sup>y</sup>safet<sup>y</sup>dataanal<sup>y</sup>sis\_

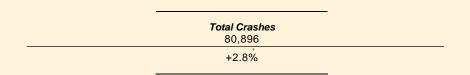
Figure 1 shows Connecticut's motor vehicle crash expe-

In 2003, there were 273 fatal crashes in which 294

rience for the calendar year 2003 and compares it with the prior year. Overall, the number of police reported crashes in the State increased by 2.8% from the year 2002. The increase was due entirely to more reported crashes with property damage only (+6.3%). Fatal crashes declined by 8.4% while injury crashes decreased by 2.2%.

persons were killed. These figures are respectively 8.4% and 8.7% less than in the previous year. Serious (A) injuries decreased by 8.9% in 2003, while B and C injuries decreased by 3.1% and 4.2%, respectively.

Figure 1. — 2003 Connecticut Motor Vehicle Crash Profile



Crashes With Fatalities 273 -8.4%

294
-8.7%
Drivers 187 2.6%
Passengers 69 9.2%
O t h e r 3 8
-29.6%

Crashes With Property

Damage Only
49,671
+6.3%

Crashes With Injuries 30,952

Number of Injuries				
	45,04			
	-4.3%			
A Inj. <sup>⁴</sup>	2,731			
	-8.9%			
B Inj.	10,881			
	-3.1%			
C Inj.	31,434			
	-4.2%			

- 1. Percent change 2003 vs. 2002.
- Data on fatal crashes are from the NHTSA FatalityAnalysis Reporting System (FARS). Data on crashes with injuries and property damage only are from the Connecticut Department of Transportation's Collision Analysis System.
- 3. "Other" includes pedestrians, bicyclists and other non-motorists.
- 4. Injury severity codes: A = severe injury, B = moderate injury, C = minor injury.

### hi<sup>g</sup>h w a <sup>y</sup>s a f e t <sup>y</sup>d a t a a n a l <sup>y</sup>s i s

Table 1. — U.S., New England Region, Connecticut Fatalities Cooperative Overview

	1999	2000	2001	2002	2003	Change 1999-03 %
						_
TOTA L FATA LITIES						
U.S. Total	41,717	41,945	42,196	43,005	42,643	3.1%
Region Total	1,214	1,225	1,302	1,289	1,263	4.0%
Connecticut	301	341	318	325	294	-2.3%
Driver Fatalities						
U.S. Total	25,257	25,567	25,869	26,659	26,640	5.5%
Region Total	759	778	834	844	804	5092%
Connecticut	169	223	213	194	187	10.7%
Passenger Fatalities						
U.S. Total	10,521	10,695	10,469	10,604	10,530	-1.3%
Region Total	280	256	289	290	262	-6.4%
Connecticut		67	67	77	69	-11.5%

urce: FARS Final Files 1999-2003; Annual Report File

Over the five-year period of 1999–2003, the number of fatalities in Connecticut has decreased by 2.3%, compared to increases of 4% in NHTSA's New England region and 3.1% for the U.S.

#### 2003 CRASH RATES

Table 2 compares Connecticut's fatality and injury rates for 2003 based on population, licensed drivers,

registered vehicles and vehicle miles of travel, along with similar rates for the United States. The table indicates that the State's fatality rates are well below national levels. Connecticut's fatality rate was 0.9 per 100 million miles of travel compared with the national figure of 1.5 fatalities per 100 million miles.

Table 2. — Connecticut and U.S. 2003 Fatality and Injury Rates

C T DATA F O R 2 0 0 3	Rate Base	Fatality Rate	Injury Rate
Population	Per 100,000	CT: 8.4	CT: 1,292
3,486,960	Population	US: 14.7	US: 994
Licensed Drivers	Per 100,000	CT: 11.1	CT: 1,694
2,659,918	Licensed Drivers	US: 21.4	US: 1,451
Registered Vehicles 2,963,540	Per 100,000	CT: 9.9	CT: 1,520
	Registered Vehicles	US: 18.4	US: 1,249
Vehicle Miles of Travel	Per 100 Million	CT: 0.9	CT: 143
31,432,000,000	Miles of Travel	US: 1.5	US: 100

Sources: US Census Bureau; NHTSA; Federal Highway Administration (FHWA).

#### **CRASH TRENDS**

Table 3 contains data on the annual number of fatal crashes, the number of persons killed, injury crashes and the number injured for the 20-year period from 1984 to 2003. Also shown are the number of licensed drivers and annual vehicle miles of travel for the State. The table shows that the 294 fatalities recorded in 2003 is the lowest figure over the 20-year period. Total injures (45,046) in 2003 is the lowest figure since 1993. Moreover, the number of severe injuries (A injuries) reported in 2003 is the lowest figure over the 18 years for which data are available.

In the 273 fatal crashes that occurred in 2003, the major factors involved were alcohol (124) and speeding or operating too fast for conditions (99). Major

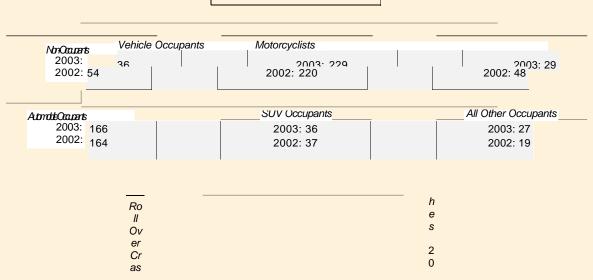
categories other than passenger vehicles, vans and light truck crashes were pedestrians (34 crashes) and motorcycles (25 crashes).

Figure 2 shows a profile of Connecticut's motor vehicle fatalities for the years 2002 and 2003. Of the 294 fatalities that occurred in 2003, 229 (78%) were vehicle occupants, 36 (12%) were non-occupants such as pedestrians and bicyclists and 29 (10%) were motorcyclists.

Among the vehicle occupants, 166 (72%) were riding in automobiles, 36 (16%) were in SUVs and 27 (12%) were occupants of all other types of vehicles. Among the SUV occupants, 18 (50%) were in vehicles that rolled over.

Figure 2. — Connecticut Fatality Profile

Total Fatalities 2003: 294 2002: 322



## hi<sup>g</sup>hwa<sup>y</sup>safet<sup>y</sup>dataanal<sup>y</sup>sis

NorRODer Cestes 2003: 18 2002: 15

Table 3. — Trend Data 1984-2003

YR	Fatal Crashes	Killed	Injury Crashes	Injured	A Injury	B Injury	C Injury	Miles of Travel (Billions)	Licensed Drivers (000)
84	428	464	34,190	44,951	N/A	N/A	N/A	21.08	2,236.7
85	415	441	35,689	48,055	N/A	N/A	N/A	22.15	2,314.6
86	423	450	35,109	49,156	7,617	13,676	27,863	24.05	2,334.8
87	415	447	35,771	50,549	7,357	13,577	29,615	25.00	2,346.7
88	447	485	32,957	46,285	6,454	13,711	28,120	26.06	2,370.0
89	378	405	32,668	46,535	6,965	11,400	28,170	26.18	2,373.8
90	359	386	29,546	41,907	6,406	10,037	25,464	26.31	2,214.1
91	281	310	27,893	40,564	6,221	9,978	24,365	26.63	2,212.7
92	267	297	29,414	43,184	6,490	9,435	27,259	26.46	2,357.6
93	324	342	29,619	43,965	6,276	9,439	28,250	27.01	2,180.3
94	286	312	32,116	47,514	6,263	9,663	31,588	27.14	2,318.5
95	287	317	32,594	48,595	5,602	12,522	30,471	28.04	2,349.1
96	296	310	33,849	49,916	4,898	12,277	32,741	28.14	2,343.8
97	314	338	32,623	48,432	4,671	11,832	31,929	28.55	2,270.2
98	306	329	31,470	47,115	4,187	11,481	31,447	29.32	2,349.3
99	270	301	32,909	49,304	3,927	12,229	33,148	29.93	2,373.7
00	318	342	34,449	51,260	3,976	12,245	35,039	30.76	2,652.6
01	285	312	34,133	50,449	3,598	12,052	34,799	30.84	2,650.4
02	298	322	31,634	47,049	2,997	11,226	32,826	31.21	2,672.8
03	273	294	30,952	45,046	2,731	10,881	31,434	31.43	2,659.9

Figure 3. — Killed and Injured per 100 Million Vehicle

Miles Traveled: 1984-2003

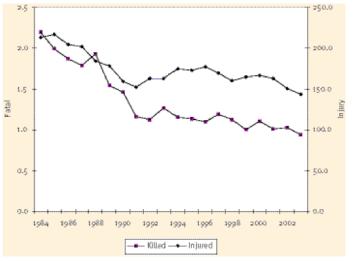


Figure 3 shows the trend in Connecticut's fatality and injury rates per 100 million vehicle miles over the 1984-2003 period. It can be seen that these rates generally declined sharply throughout the 1980s. During the 1990s and into the 2000s, the fatality rate declined gradually, reaching a historic low of 0.9 per 100 million miles in 2003. The injury rate declined in 2002 and 2003 after several years of little change.

## hi<sup>g</sup>h w a <sup>y</sup>s a fet <sup>y</sup>d a ta a n a l <sup>y</sup>s i s

Table 4-A shows rates per 100,000 population in fatal crashes and those with injury and property damage only in Connecticut's eight counties during 1999-2003, while Table 4-B presents total number of fatalities –

by county. Not surprisingly, the greatest number of fatalities occurred in the more populous Fairfield, Hartford and New Haven counties.

Table 4-A. — Crash Rates by County 1999-2003

County	Crash Type		RATESPER 100,	000 Po p u LAT I O	n b y <b>Y</b> e a r	
		1999	2000	2001	2002	2003
Fairfield	Fatal	6.18	7.59	7.45	7.49	5.99
	Injury	1,046	950	906	1,002	870
	Prop. Damage	1,428	1,300	1,256	1,544	1,337
Hartford	Fatal	6.63	8.63	8.24	9.12	7.08
	Injury	1,105	1,135	1,191	700	909
	Prop. Damage	1,366	1,276	1,343	972	1,191
Litchfield	Fatal	9.87	18.7	9.76	9.66	10.84
	Injury	645	1,051	1,106	980	1,016
	Prop. Damage	1,125	1,799	1,999	1,202	2,045
Middlesex	Fatal	9.24	9.67	9.52	8.78	12.69
	Injury	764	896	852	980	793
	Prop. Damage	1,109	1,764	1,738	1,365	1,604
New Haven	Fatal	9.71	7.28	7.00	9.21	6.40
	Injury	1,130	744	708	1,219	707
	Prop. Damage	1,407	1,040	1,035	1,484	1,139
lew London	Fatal	10.97	15.05	8.49	13.35	15.05
	Injury	848	1,604	1,561	826	1,498
	Prop. Damage	1,671	2,698	2,753	1,726	2,958
Tolland	Fatal	10.55	13.93	12.96	11.91	12.96
	Injury	657	1,085	977	661	959
	Prop. Damage	1,217	1,593	1,592	1,259	1,621
Windham	Fatal	13.30	10.08	15.43	13.50	11.80
	Injury	655	1,161	1,097	764	1,108
	Prop. Damage	1,128	1,711	1,645	1,225	1,752
Statewide	Fatal	8.23	9.37	8.32	8.62	8.09
	Injury	1,011	1,012	996	915	904
	Prop. Damage	1,368	1,410	1,426	1,351	1,450

## hi<sup>g</sup>h w a <sup>y</sup>s a fe t <sup>y</sup>d a ta a n a l <sup>y</sup>s i s

Table 4-B — Connecticut Fatalities by County

County	1999	2000	2001	2002	2003
Fairfield	59	72	71	67	48
Hartford	59	83	79	79	63
Litchfield	22	20	20	18	13
Middlesex	16	12	16	14	9
New Haven	87	66	67	77	74
New London	28	44	26	35	35
Tolland	14	24	18	17	15
Windham	16	20	21	15	16
Total	301	341	318	322	273

#### **COST OF CRASHES**

Based on methods developed by NHTSA, the economic cost of motor vehicle crashes in Connecticut in 2000 is estimated to have been \$3.596 billion. This trans-

lates to a cost per capita of \$1,056 and per capita personal income of 2.6%. The major cost components included lost productivity, property damage and medical costs.

#### STATEWIDE PERFORMANCE MEASURES

	Ye a r					
Performance Measure	1999	2000	2001	2002	2003	
Fatal Crashes	270	318	285	298	273	
Fatalities	301	342	312	322	294	
Fatalities/100 million vehicle miles	1.0	1.1	1.0	1.0	0.9	
Injury Crashes	32,909	34,449	34,133	31,634	30,952	
Injuries	49,304	51,260	50,449	47,049	45,046	
Injuries per 100,000 population	1,502	1,505	1,469	1,360	1,292	

# im<sup>p</sup>aireddrivin<sup>g</sup>(al)\_

## im <sup>p</sup> aireddrivin <sup>g</sup> (al)

The trends in Connecticut's total motor vehicle fatalities, alcohol-related fatalities, and non-alcoholrelated fatalities are shown in Figure 4. During the 1980s, Connecticut's fatalities remained around 460 per year, with little upward or downward movement. Then, between 1989 and 1992, total fatalities dropped dramatically, reaching a low of 297 in 1992. Fatalities then remained in the lower 300 range, until dropping below 300 again (to 294) in 2003. Using NHTSA's estimates of alcoholrelated fatalities, Figure 4 shows there was a downward trend through about 1992. That year, for the first time, less than 50% of the State's fatalities were alcohol-related. In more recent years, the number of alcohol-related fatalities has essentially remained constant. However, the 131 alcohol-related fatalities in 2003 we re the lowest over the past 20 years. Between 1982 and 1989, alcohol-related fatalities declined while non-alcohol fatalities increased producing, an essentially constant total. From 1989 to 1992, both alcohol and non-alcohol

fatalities shown in Figure 4. From 1993 to 1999, alcohol and non-alcohol-related fatalities did not show any major changes, but there had been greater year-to-year fluctuation in non-alcohol fatalities. In 2003, 45% of all fatalities were alcohol-related (NHTSA statistical model estimate).

In 2003, Connecticut recorded BAC test results for 86% of fatally injured drivers and 30% of surviving drivers involved in fatal crashes, with both rates higher than the national figures of 66% and 24%, respectively. In 2003, Connecticut statistics show 78% of fatally injured pedestrians and bicyclists over the age of 15 had known BACs compared to 61% nationally. State data on alcohol-related fatalities are based on known BAC test results, while FARS data use statistical methods to estimate BACs when no test data are available. Connecticut's figures parallel NHTSA's estimates, but are somewhat more conservative.

Table AL-1. — Alcohol-Related Crashes/Fatalities (Connecticut)

	1999	2000	YE AR 2001	2002	2003
# Alcohol-Related Fatal Crashes	117	136	124	123	124
% Alcohol-Related Fatal Crashes	43.3%	42.8%	42.8%	41.3%	44.8%

## im paireddrivin g(al)

# Alcohol-Related	134	146	144	135	131
Fatalities					
% Alcohol-Related Fatalities	44.5%	42.7%	45.3%	41.9%	45.3%

Source: Connecticut Department of Transportation.

## im <sup>p</sup>aireddrivin <sup>g</sup>(al)

Tables AL-2 and AL-3 show the raw numbers of fatal crashes, fatalities and total crashes in which the impaired/intoxicated driver was deemed responsible.

Table AL-2. — Crashes Involving At-Fault Drivers Who Had Been Drinking

(Blood Alcohol > 0.00 < .10%)

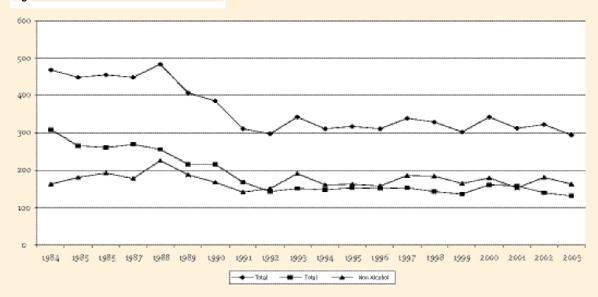
YEAR	FATA L C R A S H E S	FATALITIES	TOTA L C R A S H E S				
1989	37	39	722				
1990	26	27	617				
1991	24	29	526				
1992	22	32	534				
1993	24	25	571				
1994	21	23	488				
1995	15	19	265				
1996	25	26	240				
1997	30	31	288				
1998	19	213	93				
1999	22	24	415				
2000	22	25	512				
2001	27	33	599				
2002	19	19	398				
2003	16	16	366				
Soul	Source: Connecticut Department of Transportation.						

Table AL-3. — Crashes Involving At-Fault Drivers Who Were Intoxicated

(Blood Alcohol > .10%)

YEAR	FATA L	FATA LITIES	TOTA L
	CRASHES		CRASHES
1989	119	131	3,704
1990	128	141	2,580
1991	90	108	2,105
1992	76	82	2,088
1993	94	97	1,780
1994	76	88	1,572
1995	95	106	1,625
1996	85	86	1,588
1997	80	87	1,562
1998	91	97	1,454
1999	75	85	1,388
2000	90	95	1,407
2001	94	108	1,292
2002	86	96	1,329
2003	91	99	1,413

Figur e 4. Connecticut Fatalities 1984-2003



Connecticut Department of Transportation data for 2003 indicate that 54% of the drinking drivers who were at fault in the crash were between the ages of 20-39. For non-drinking drivers, 39% of those at fault were in this age range; 78% of the drivers who had used alcohol and were at fault were males, compared to 61% of males who were at fault but had not been drinking.

Table AL-4 shows that the percentage of alcoholrelated fatalities in Connecticut during 2003 (44.6%) was higher than the national percentage of 39.9%

and slightly above the 43.2% in the other New England states. Of the Connecticut fatal crashes, 39.2% were estimated to have been "high" BAC crash-es (BAC0.08). The national estimate for "high" BAC crashes was 34.3%, and was 35.9% in the other New England states.

Table AL-4. — Alcohol-Related/High BAC Crashes-2003

	Connecticut	U.S.	New England
Percentage of Alcohol- related Fatalities	44.6%	39.9%	43.2%
Percentage of High BAC (0.08%+) Crashes	39.2%	34.3%	35.9%

As previously noted, when BAC test results are either not available or unknown, the National Highway Traffic Safety Administration employs a statistical model to estimate alcohol involvement. The recently adopted multiple imputation data have been used in this plan. See Table AL-5 for the estimated results. Using this method can produce slight differences in totals due to rounding.

The number of alcohol-related fatal crashes in Connecticut has been on a downward trend since reaching a high of 148 crashes in 2000. Alcohol-related fatalities have also been on a downward trend since 2000; between 1999 and 2003 there was a 4% decrease in fatalities.

Table AL-5. — Estimated Alcohol-Related Crashes/Fatalities (NHTSA)

State of Connecticut	1999	2000	2001	2002	2003
Number of Alcohol-Related Fatal Crashes	120	148	138	129	124
Percent Alcohol-Related Fatal Crashes	44%	47%	48%	43%	45%
Number of Alcohol-Related Fatalities	136	161	158	140	131
Percent Alcohol-Related Fatalities	45%	47%	51%	43%	45%

Source: Fatal Analysis Reporting System (NHTSA).

In 2003, 86% of the fatally injured drivers in Connecticut were tested for alcohol compared to 66%

nationally. Table AL-6 shows Connecticut BAC test results for the years 1999-2003

Table AL-6. — BACs of Fatally Injured Drivers Who Had Been Drinking

ВАС	1999	2000	2001	2002	2003
.00	75	102	90	92	87
.0107	10	9	10	12	11
.08 –up	55	78	73	63	62
No/Unknown	29	34	40	27	27
Result					
Source: Fatal Analysis Report	ting System (NHTSA).				I .

Table AL-7 indicates, by county, the percentage of fatally injured drivers found to have been drinking. Also included is the comparative percent of fatally

injured drivers throughout the State, in the other New England states and in the U.S.

Table AL-7. — Percentage of Fatally Injured Drivers Who Had Been Drinking

PERCENT ALCOHOL	1999	2000	2001	2002	2003
Fairfield County	40.0%	41.2%	42.9%	33.3%	30.8%
Hartford County	43.5%	40.0%	48.8%	39.5%	32.4%
Litchfield County	75.0%	63.6%	66.7%	50.0%	22.2%
Middlesex County	50.0%	50.0%	0.0%	66.7%	50.0%
New Haven County	39.0%	39.0%	55.9%	45.5%	56.8%
New London County	47.1%	58.3%	61.1%	52.4%	63.6%
Tolland County	50.0%	58.3%	50.0%	16.7%	70.0%
Windham County	80.0%	46.2%	28.6%	90.1%	33.3%
Percent Statewide	46.4%	45.7%	44.3%	45.6%	45.6%
Percent Other	42.4%	41.7%	42.4%	36.4%	41.8%
New England					
Percent Other U.S.	41.7%	41.9%	41.2%	41.8%	40.4%

Source: Fatal Analysis Reporting System (NHTSA).

Table AL-8 shows the number of fatalities, by county and statewide, for the years 1999-2003; the percentage of these that were known or estimated to have been alcohol-related; and the rate of alcohol-related fatalities per 100,000 population. The statewide data at the bottom of the table indicates that for the

five-year period shown, the percentage of alcohol-related fatalities ranged from 43.5%, (2002) to 50.6% (2001). The fatality rate per 100,000 population shows a steady decline from 4.64 in 2000 to 3.76 in 2003, the lowest rate in this study period.

Table AL-8. — Fatalities by County

Соинту		1999	2000	2001	2002	2003
Fairfield	Total	59	72	69	67	54
	Pct. Alcohol	45.8%	48.6%	52.2%	32.8%	37.0%
	Alcohol Rate/100,000	3.21	3.97	4.07	2.46	2.22
Hartford	Total	59	83	77	79	70
	Pct. Alcohol	47.5%	42.2%	46.8%	40.5%	37.1%
	Alcohol Rate/100,000	3.37	4.08	4.18	3.69	2.98
Litchfield	Total	22	20	20	18	13
	Pct. Alcohol	54.5%	45.0%	60.0%	50.5%	30.8%
	Alcohol Rate/100,000	6.58	4.94	6.51	4.83	2.13
Middlesex	Total	16	12	16	14	10
	Pct. Alcohol	31.3%	41.7%	18.8%	42.9%	50.0%
	Alcohol Rate/100,000	3.30	3.22	1.90	3.76	3.10
New Haven	Total	87	67	66	77	78
	Pct. Alcohol	39.1%	43.3%	59.1%	45.5%	51.3%
	Alcohol Rate/100,000	4.29	3.52	4.71	4.19	4.75
New London	Total	28	44	26	35	37
	Pct. Alcohol	46.4%	54.5%	57.7%	48.6%	59.5%
	Alcohol Rate/100,000	5.28	9.26	5.79	6.49	8.33
Tolland	Total	14	24	18	17	15
	Pct. Alcohol	42.9%	45.8%	50.0%	41.2%	60.0%
	Alcohol Rate/100,000	4.52	8.07	6.48	4.90	6.21
Windham	Total	16	20	20	15	17
	Pct. Alcohol	56.3%	45.0%	30.0%	86.7%	35.3%
	Alcohol Rate/100,000	8.55	8.25	5.45	11.70	5.33
Statewide	Total	301	342	312	322	294
	Pct. Alcohol	44.5%	46.2%	50.6%	43.5%	44.6%
	Alcohol Rate/100,000	4.08	4.64	4.61	4.05	3.76
0 5.14	lucis Panartina System (NHTSA)					

Source: Fatal Analysis Reporting System (NHTSA).

Table AL-9 shows the age groups of drinking drivers killed during the five-year period (1999-2003), along with the numbers of licensed drivers in these same age groups and rate of drinking drivers killed. The Chart indicates that persons under the age of 35

made up the majority of the fatalities (55%). The table also shows that 12.5% of the fatally injured drinking drivers were under the legal drinking age of 21.

Table AL-9. Fatally Injured Drinking Drivers by Age Group

	DRINKING DRIVERS KILLED		LICENSED		
Age	(1 9 9 9 - 2 0 0 3 )  Number <sup>1</sup> Percent of		( 2 0 0 3 ) Number <sup>2</sup> Percent of		Rate <sup>3</sup>
		Total		Total	
<21	53	12.5%	136,537	5.1%	38.8
21-34	181	42.8%	579,984	21.8%	31.2
35-49	127	30.0%	865,379	32.5%	14.7
50+	62	14.7%	1,078,018	40.5%	5.89
Total	423		2,659,918		15.9

<sup>1.</sup> Source: Fatal Analysis Reporting System (NHTSA), Imputed Drinking.

Table AL-10 shows additional characteristics of these drivers and their crashes. The table shows that the fatally injured drinking drivers were predominately males (84.5%) and were most often killed in single vehicle crashes (71.2%). Overall, 82.9% of the victims had valid licenses; 9.7% had a previous DUI conviction and 93.1 were Connecticut residents. Approximately 67.7% of the fatalities took place on arterial type roadways, 15.9% we re on local roads and 16.6% were on collector roadways.

The second part of Table AL-10 shows that drinking driver fatalities were most likely to have occurred on Saturdays and Sundays (the overnight periods of Friday into Saturday and Saturday into Sunday). The

table shows that 39.4% of the fatalities occurred during the late night hours from midnight to 5:59 a.m., 29.6% took place between 8:00 p.m. and midnight and 30.8% occurred during the daytime hours from 6:00 a.m. to 7:59 p.m. The summer and fall months (June–October) are when most of the fatalities occurred.

<sup>2.</sup> Source: FHWA.

<sup>3.</sup> Fatality rate per 100,000 Licensed Drivers.

Table AL-10. — Characteristics of Fatality Injured Drinking Drivers 1999-2003

	1999	2000	2001	2002	2003	Total
Age	(N=71)	(N=96)	(N=93)	(N=82)	(N=80)	(N=422)
<21	21.4%	9.4%	13.0%	9.8%	10.0%	12.5%
21-34	40.0%	39.6%	45.7%	41.5%	47.5%	42.8%
35-49	28.6%	36.5%	30.4%	28.0%	26.3%	30.0%
50+	10.0%	14.6%	10.9%	20.7%	16.3%	14.7%
Sex						
Male	88.6%	85.4%	81.7%	85.4%	83.8%	84.5%
Female	11.4%	14.6%	18.3%	14.6%	16.3%	15.2%
Number of						
Vehicles						
Single Vehicle	76.1%	70.8%	69.9%	67.5%	72.5%	71.2%
Multi Vehicle	23.9%	29.2%	30.1%	32.5%	27.5%	28.9%
License Valid	76.1%	82.3%	83.9%	82.9%	87.5%	82.9%
Previous DWI	11.3%	8.3%	12.9%	11.0%	5.0%	9.7%
Connecticut						
Resident	87.3%	87.5%	90.3%	93.9%	95.0%	93.1%
Road Type						
Arterial	73.2%	64.9%	79.6%	62.7%	57.5%	67.7%
Collector	9.9%	15.5%	14.0%	18.1%	21.3%	21.3%
Local	16.9%	19.6%	6.5%	19.3%	21.3%	16.6%

Source: Fatal Analysis Reporting System (NHTSA)s.

Table AL-11. — Characteristics of Fatality Injured Drinking Drivers 1999-2003 (Continued)

	1999 (N=71)	2000 (N=96)	2001 (N=93)	2002 (N=82)	2003 (N=80)	Total (N=422)
Day	( /	(13.55)	(	( 5=/	(13.33)	(
Sunday	22.5%	15.5%	21.5%	22.9%	23.8%	21.0%
Monday	8.5%	9.3%	9.7%	8.4%	8.8%	9.0%
Tuesday	5.6%	8.2%	9.7%	6.0%	7.5%	7.6%
Wednesday	12.7%	8.2%	11.8%	6.0%	10.0%	9.0%
Thursday	11.3%	13.4%	9.7%	12.0%	11.3%	11.6%
Friday	15.5%	15.5%	9.7%	21.7%	20.0%	16.4%
Saturday	15.5%	33.0%	28.0%	22.9%	18.8%	25.8%
Time						
Mid-0559	38.6%	32.3%	45.2%	36.6%	45.0%	39.4%
0600-1959	32.9%	31,3%	37.6%	26.8%	25.0%	30.8%
2000-2359	28.6%	36.5%	17.2%	36.6%	30.0%	29.6%
Month						
January	10.1%	5.2%	7.4%	8.5%	7.5%	7.6%
February	8.7%	4.1%	4.3%	13.4%	1.3%	6.2%
March	4.3%	6.2%	5.2%	8.5%	8.8%	6.6%
April	1.4%	6.2%	9.6%	3.7%	10.0%	6.4%
May	7.2%	10.3%	9.6%	7.3%	8.8%	8.8%
June	7.2%	11.3%	7.4%	6.1%	13.8%	9.2%
July	15.9%	9.3%	8.5%	12.2%	11.3%	11.1%
August	11.6%	14.4%	12.8%	9.8%	10.0%	11.8%
September	8.7%	7.2%	10.6%	9.8%	7.5%	8.8%
October	13.0%	7.2%	8.5%	9.8%	7.5%	9.0%
November	8.7%	7.2%	4.3%	6.1%	8.8%	6.9%
December	2.9%	11.3%	11.7%	4.9%	5.0%	7.6%

Source: Fatal Analysis Reporting System (NHTSA).

Using ConnDOT data, AL-11 highlights alcohol-related crashes of all types (fatal, injury and property damage) and also shows they were most likely to have occurred on Fridays, Saturdays and Sundays. This table also shows that about one-third of the crashes occurred during the late night hours between midnight and 5:59 a.m., one-third took place between

8:00 p.m. and midnight and one-third occurred during the morning to early evening period of 6:00 a.m. to 7:59 p.m. This time pattern differs from that of drinking driver fatalities detailed in Table AL-10. Also, alcohol-related crashes of all types are far more evenly distributed across the months than are the crashes that killed drinking drivers.

Table AL-12. — Characteristics of Alcohol Involved Crashes: 2003

	2003					
	Number = 1,864	Percentage = 100%_				
Day of Week						
Sunday	340	18.2%				
Monday	163	8.7%				
Tuesday	186	10.0%				
Wednesday	201	10.8%				
Thursday	228	12.2%				
Friday	326	17.5%				
Saturday	420	22.5%				
Time <sup>1</sup>						
Mid-0559	615	33.0%				
0600-1959	642	34.5%				
2000-2359	605	34.5%				
Month						
January	164	8.8%				
February	125	6.7%				
March	179	9.6%				
April	154	8.3%				
May	145	7.8%				
June	149	8.0%				
July	152	8.2%				
August	175	9.4%				
September	155	8.3%				
October	163	8.7%				
November	148	7.9%				
December	155	8.3%				

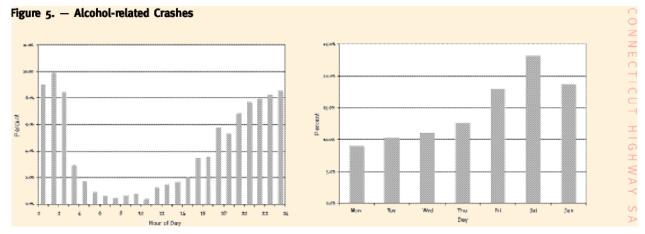
Source: Connecticut Department of

Transportation. Time of day was unknown in two

crashes.

The distributions of alcohol-related crashes by time of day and day of week are shown in Figure 5. The frequency of crashes increases in the afternoon and evening hours, peaking during the 1 a.m. hour.

Around 10% of crashes take place on Monday through Wednesday with frequency increasing through the weekend days.



Source: Connecticut Department of Transportation.

NHTSA defines a nonfatal crash as being alcoholrelated if police indicate on the police crash report that there was evidence that alcohol was present. Table AL-12 shows the percentage of Connecticut nonfatal crashes in the years 1999 to 2003 in which police reported that alcohol was involved. The figure shows that

alcohol is a greater factor in severe crashes than less severe crashes. For instance, 2003 results show that 5.5% of A-injury crashes and 5.0% of Binjury crashes involved alcohol compared to 2.1% of C-injury and

1.6% of property damage only crashes.

Table AL-13 — Percent of Crashes Police Reported Alcohol Involved

Maximum Severity Level	1999	2000	2001	2002	2003
A Injury	5.3%	5.5%	5.4%	5.4%	5.5%
B Injury	5.4%	5.7%	4.9%	5.2%	5.0%
C Injury	2.0%	2.0%	2.1%	1.9%	2.1%
No Injury	1.7%	1.6%	1.6%	1.5%	1.6%
Injury Crashes	3.2%	3.3%	3.1%	3.1%	3.1%
Total Crashes	2.5%	2.3%	2.2%	2.2%	2.2%

Table AL-13 summarizes DUI enforcement levels during the 1999-2003 period. DUI arrest totals in 2003 were 34% higher than in 1999. The average BAC and the percentage of arrests following motor vehicle crashes have remained essentially unchanged over the years, while chemical test refusals have been increasing slightly.

Table AL-13 — DUI Enforcement Levels

	1999	2000	2001	2002	2003
DUI Arrests	8,799	9,849	10,729	12,365	12,951
Average BAC	0.167	0.168	0.169	0.165	0.163
DUI Arrest Per					
10,000 Licensed					
Drivers	37	44	40	46	44
Percent Test					
Refusal	17.4%	18.2%	18.7%	19.8%	21.8%
DUI Arrests	23.3%	23.7%	23.9%	23.3%	24.1%
from Crashes					
Percent					
Adjudications					
Other Than Guilty	59%	57%	54%	59%	58%

Source: Connecticut Department of Transportation; 2004 arrests totaled.

#### PERFORMANCE MEASURES

The following is a list of tracking information utilized to chart the State's progress.

#### T R ACKING DATA

Performance Measure	1999	2000	2001	2002	2003
Alcohol-Related Fatal	117	136	124	123	124
Crashes (ConnDOT)					
Alcohol-Related Fatal	43.3%	42.8%	42.8%	41.3%	44.8%
Crashes (ConnDOT)					
Alcohol-Related Fatalities	134	146	144	135	135
(Conn DOT)					
Alcohol-Related Fatalities	44.5%	42.7%	45.3%	41.9%	45.3%
(Conn DOT)					
	118	145	138	129	124
Alcohol-Related Fatal		1.10	100	120	
Crashes (N HTSA-FARS)	43.7%	45.00/	40.40/	40.00/	45.40/
Alcohol-Related Fatal	43.7%	45.6%	48.4%	43.3%	45.4%
Crashes (N HTSA-FARS)					
Alcohol-Related Fatalities	134	158	158	140	131
(N HTSA-FARS)					
Alcohol-Related Fatalities	44.5%	46.2%	50.6%	43.5%	44.6%
(N HTSA-FARS)					
Alcohol-Related Fatalities	0.45	0.52	0.52	0.46	0.42
per 100 million VMT					
Alcohol-Related Injury	1,057	11,14	1,058	971	963
Crashes					
	2.20/	2.20/	3.1%	3.1%	2.40/
Alcohol-Related Injury	3.2%	3.3%			3.1%
DUI Arrests (ConnDOT)	8,799	9,849	10,729	12,365	11,825
DUI Arrests per 10,000	37	44	40	46	44
Licensed Drivers					

#### PERFORMANCE GOALS

- To reduce the number of alcohol-related fatal crashes by 5%, from the five-year average of 124 to 118 by the end of calendar year 2005, with a further 2% reduction by the end of calendar year 2006.
- To reduce the mean BAC at the time of arrest to .160% by the end of calendar year 2006.
- To reduce alcohol-related fatalities in the 21-34 age group (the most over-represented in drinking drivers killed compared to the number of licensed drivers for those ages), by five percent, from 43% to 38% by the end of calendar year 2006.
- To reduce the percentage of alcohol-related fatalities in the under 21 old age group, in which there is more than twice the percentage of young drinking drivers killed than that of licensed drivers in that age group.
- •To diminish teen access to alcohol through education and enforcement, programming and collaborative efforts with prevention partners.

#### PROGRAM OBJECTIVES

- To provide planning, coordination, monitoring, and evaluation of the Connecticut Impaired Driving Program.
- To increase Statewide DUI enforcement (number of arrests/police visibility).
- To encourage and fund high-visibility regional DUI enforcement efforts among police agencies, including greater frequency of checkpoints.
- To utilize media to draw public attention to Statewide DUI enforcement operations, and emphasize the risk of being caught and punished for driving under the influence.
- To provide statewide coordination of Standard Field Sobriety Testing (SFST) training and related training to police officers.
- To develop and distribute educational information to the general public and specific target groups identified as high-risk.
- To collaborate with State and local police agencies in carrying out enforcement and public information/ education efforts directed at the prevention of underage alcohol purchase and youth impaired-driving.
- To assist in the acquisition of DUI-related enforcement equipment to support statewide DUI enforcement operations.

#### PLANNED COUNTERMEASURES

Recent positive results in Connecticut's Impaired Driving Program indicate that the key deterrent to driving under the influence of alcohol and/or drugs is the fear of being caught. Enforcement objectives will be accomplished through coordinated sobriety checkpoints and roving and saturation patrols in conjunction with a comprehensive DUI education/media campaign. All Connecticut police agencies will be offered yearround DUI overtime enforcement grants, and will be encouraged to train their traffic personnel in the latest methods of DUI enforcement.

En f o rcement will be aimed at high DUI activity periods (Friday into Saturday, and Saturday into Sunday, during evening and late evening hours). Additional grants will be available to police for holiday/high-travel periods in which a higher incidence of DUI occurs. Public education will be aimed at specific target groups: 21-34 year olds who are over-represented in alcohol-related crashes in relation to the number of licensed drivers in that age group; under-21 year old drivers who are also over-represented (although not as severely); and males in their twenties and thirties who make up the largest segment of fatally injured drinking drivers.

The number of SFST instructors will be increased

by 15-20 trainers to offer two-for Basic SFST training courses for police officers during the fiscal year, and to ensure that field officers making DUI arrests are properly trained in the detection and apprehension of drunk drivers, including writing proper narratives for state prosecutors and following standardized arrest procedures that will hold up in court.

Legislatively, passage of laws that would qualify the State for discretionary alcohol funding will be examined and pursued where feasible.

#### Alcohol

#### Task 1 — Alcohol Program Administration

Administrative Oversight: Department of Transportation, Division of Highway Safety Staff Person: Richard Squeglia

Program administration will include the coordination of activities and projects outlined in the Impaired Driving Program area, coordination of program activities (statewide), development and facilitation of public information and education projects, and providing status reports and updates on project activity to the Highway Safety Program Director and the NHTSA New England Regional office. Additionally, program administration will include monitoring project activity, preparing and maintaining project documentation, and evaluating task accomplishments. Funding will be provided for personnel services, employee-related expenses, professional and outside services, travel, materials, supplies and other necessary related operating expenses.

#### im paireddrivin g(al)\_

#### Task 2 — DUI Overtime Enforcement

Administrative Oversight: Department of Transportation, Division of Highway Safety

Staff Person: Richard Squeglia

High-visibility enforcement objectives will be accomplished through coordinated sobriety checkpoints and roving patrols in conjunction with a comprehensive DU I education/media campaign. Police departments will be offered year-round DUI overtime enforcement grants, and will be encouraged to train their traffic personnel in the latest methods of DUI enforcement. Enforcement will be aimed at high DUI activity periods (Friday into Saturday, and Saturday into Sunday, during evening and late evening hours). Additional grants will be available to police for holiday/high-travel periods in which a higher incidence of DUI occurs. Public education will be aimed at specific target groups: 21-34 year olds who are over-represented in alcohol-related crashes in relation to the number of licensed drivers in that age group; under-21 year old drivers who are also over-represented (although not as severely); and males in their twenties and thirties which make up the largest segment of fatally injured drinking drivers. Th rough this task, it is expected that approximately 250 DUI checkpoints and over 2,000 roving/saturation patrols will be conducted statewide during FY 2006.

Task 3 — Division of Highway Safety; DUI Enforcement Equipment

Using funds received through the Section 154 transfer, grants will be made available to all interested police agencies for the purchase of equipment necessary to conduct effective DUI enforcement, i.e.: DUI mobile command vehicles for Regional Traffic Units (RTU's),

in-car video cameras, breath-testing equipment, passive alcohol sensing flashlights, alcohol breath-testing devices, checkpoint signage/lighting eq uipment, and other eligible DUI-related enforcement equipment. Approval for capital equipment acquisition(s) (as defined in 23 CFR 1200.21) will be addressed when specific needs analysis is complete and program structure is determined.

#### Task 3 — Division of Highway Safety; DUI Media Campaign

A comprehensive DUI multi-media campaign, "Drink-Drive-Lose," will focus primarily on law enforcement's resolve to identify and apprehend DUI offenders, and emphasize the severe penalties associated with being convicted of DUI. Contingent on the availability of funds, primetime television spots will be aired, targeting the problem group of 21-34 year old males, placing the focus on being caught and severely punished. A major component of the media campaign includes Drink-Drive-Lose.com, an inter-active web site that utilizes a variety of tools to engage visitors in scenarios that illustrate the dangers of drinking and driving. A new section of the web site has been added that targets the 16-20 age group. Other elements of the campaign may include radio, print, and outdoor advertising. Earned media will be sought by inviting TV reporters to live checkpoints and ride-alongs on DUI patrols for broadcasts.

# Task 4 — Division of Highway Safety; Alcohol Public Information and Education

Under this task, funding will be provided for the development and purchase of public information and education materials addressing all age groups in Connecticut. Distribution will be accomplished through community-based safety programs, State and local police departments, area health departments, and civic/social groups. Brochures, pamphlets and other materials produced or purchased will be geared toward Connecticut's entire motoring public with emphasis placed on cultural or ethnic diversity, 21-34 year old males, and those in the 16-20 age bracket.

#### Task 5 — SFST Instructor Training

Administrative Oversight: Department of Transportation, Division of Highway Safety Staff Person: Richard Squeglia

An SFST instructor development ("train-the-trainers") course will be conducted to increase the number of existing instructors. Due to re-assignments, retirements, etc., the SFST instructor cadre has been reduced to a level that has made it difficult to enlist the instructors needed to conduct Basic SFST officer training. Candidates for this course have previously been identified through recent Basic SFST classes. The training is expected to produce 15-20 new SFST instructors that will be available to present Basic SFST courses statewide.

#### Task 6 — Statewide DUI Prosecutor/Coordinator

Administrative Oversight: Department of Transportation, Division of Highway Safety Staff Person: Richard Squeglia

A statewide DUI Prosecutor/Coordinator position will be funded within the Office of the Chief State's Attorney. The Prosecutor/Coordinator will help the Office to successfully prosecute DUI and drug-related traffic cases through training/education programs for professionals from all related fields (including prosecutors, law enforcement, judges, and hearing officers).

Among all types of crashes in Connecticut during 2003 (fatal, injury and property damage only), there were four predominant contributing factors: following too closely (32.1%), failure to yield right-of-way (15.6%), speeding (12.2%) and violating traffic

driver errors contributed to crash causalities with operating under the influence of alcohol and speeding (37.7% and 18.1%) predominate among them.

Table PT-1. — Contributing Factors in 2003 Crashes

	All Crashes	%	Injury Crashes	%	Fatal Crashes	%
Driver following too closely	25,950	32.1%	9,329	30.0%	6	2.2%
Driver failed to grant right-of-way	12,603	15.6%	5,897	19.0%	15	5.4%
Speed too fast for conditions	9,860	12.2%	3,808	12.3%	50	18.1%
Driver violated traffic controls	3,860	4.8%	2,179	7.0%	7	2.5%
Under the Influence	1,425	1.8%	692	2.2%	104	37.7%

Source: Connecticut Department of Transportation.

During 1998-2002, the most prevalent driver-related factor in fatal crashes was "failure to keep in proper lane or running off road," reported for 59.3% of all drivers (in 2003). "Speeding/racing" was the second

most commonly cited factor, reported for approximately 24.7%–34.5% of all drivers involved in fatal crashes each year.

Table PT-2. — Drivers Involved in Fatal Crashes: Related Factors

_	1999	2000	2001	2002	2003
Factors	(N=398)	(N=466)	(N=431)	(N=411)	(N=393)
Failure to keep in proper lane or running off road	36.2%	39.9%	43.4%	50.4%	59.3%
Speeding, racing	26.1%	24.7%	30.9%	34.5%	25.7%
Drugs other than alcohol	n/a	n/a	n/a	n/a	13.7%
Failure to yield right of way	5.3%	7.5%	6.0%	6.8%	4.1%
Inattention (talking, eating, etc)	2.5%	1.5%	2.3%	2.4%	2.3%
Failure to obey traffic signs, signals, or officer	4.8%	3.2%	3.2%	3.2%	2.3%
Operating vehicle in erratic, reckless manner	1.8%	3.2%	6.3%	2.7%	3.3%
Swerving or avoiding due to weather/ road conditions	2.5%	2.1%	2.6%	3.4%	4.6%
Drowsy, asleep, fatigued, ill, blackout	5.0%	4.9%	3.7%	2.9%	4.3%
Driving wrong way on one-way traffic or wrong side of road	1.3%	1.9%	0.7%	1.5%	0.8%
Overcorrecting/ oversteering	1.0%	1.5%	2.8%	3.9%	3.1%
Vision obscured	3.3%	3.0%	2.6%	3.6%	0.8%
Making improper turn	0.3%	0.2%	0.2%	0.7%	1.0%
Other factors	23.1%	23.2%	25.8%	24.3%	22.4%

Over the five-year period from 1999-2003, the greatest proportion of fatalities (35%) occurred on roads with a posted speed limit of 30 mph or less, followed by

roads with limits of 35 or 40 mph (22.6%), and 45 or 50 mph (18.3%). Details are included in Table PT-3.

Table PT-3. — Fatalities by Posted Speed Limit

Po sted Speed Limit	1999 (N=301)	2000 (N=341)	2001 (N=318)	2002 (N=322)	2003 (N=294)	Total (N=1,575)
30 mph or less	114	122	106	122	91	35.2%
35 or 40 mph	57	93	62	85	59	22.6%
45 or 50 mph	69	52	71	50	47	18.3%
55 mph	36	46	43	39	45	13.2%
60+ mph	24	23	34	21	42	9.1%
No statutory limit	1	2	1	3	5	0.8%
Unknown	0	3	1	2	5	0.7%

Among drivers involved in fatal crashes in Connecticut, the proportion traveling in excess of 75 mph was greater for drivers ages 16-20 and 21-34 than for any other age group. Conversely, drivers ages 65+ were the most likely to be travelling at 30 mph or slower at the time of the crash. However, in the majority of cases (73.5%) travel speed was unknown, as outlined in Table PT-4.

SA

Table PT-4. — Drivers involved in Fatal Crashes: Travel Speed by Age Group, Five-Year Total (1999–2003)

-						-
	^		_			
	AG	Ε	GRO	U	Ρ	

	7.6 2 3.6 5.							
TR AV E L Spe e d	16-20 (N=294)	21-34 (N=702)	35-44 (N=421)	45-54 (N=269)	55-64 (N=159)	65+ (N=237)		
< 31 mph	3.1%	5.6%	8.1%	10.0%	8.2%	13.9%		
31-45 mph	8.5%	7.0%	10.0%	6.7%	8.8%	6.8%		
46-55 mph	3.4%	3.1%	2.9%	2.6%	6.3%	2.5%		
56-65 mph	4.1%	5.0%	3.1%	4.5%	1.3%	0.4%		
66-75 mph	3.7%	2.7%	1.9%	0.0%	0.6%	0.4%		
> 75 mph	5.4%	4.8%	1.9%	0.7%	0.6%	0.0%		
Unknown	71.8%	71.8%	72.2%	75.5%	74.2%	75.9%		

Table PT-5 shows the number of speeding charges made during the 1999-2003 time period. The 2003 figures represent approximately 384 speeding charges per 10,000 drivers. Table PT-5 also shows the percentages of speeding charges which had adjudication

outcomes involving other than guilty findings (were nollied, diverted, dismissed, found not guilty) during the years 1999-2003 period. These data indicated that in speeding charges, about 1 in every 5 resulted in nollied or not guilty findings.

Table PT-5. — Speeding Charges

YE A R	1999	2000	2001	2002	2003
Total Number	115,224	114,563	120,425	123,090	102,180
Per 10,000 drivers	485	432	454	461	384
Percent Other	21.0%	19.3%	17.9%	18.6%	21.5%
Than guilty					

In 2003, NHTSA's FARS data described speeding as a "contributing factor" in 36.6 percent of the State's fatal motor vehicle crashes.\* Nationally, in 2003,

speed was a contributing factor in 30.5 percent of fatal crashes indicating that Connecticut's experience was higher than that of the nation as a whole.

#### PERFORMANCE MEASURES

v		Λ.	-
- 1	_	А	

PERFORMANCE MEASURE	1999	2000	2001	2002	2003
% CT Speed-Related	36.3%	34.6%	43.9%	46.3%	36.6%
Fatal Crashes					
% U.S. Speed-Related	29.2%	28.5%	29.0%	31.2%	30.5%
Fatal Crashes					
% CT Speed-Related	10.9%	11.8%	11.0%	11.1%	12.3%
Injury Crashes					

Source: FARS; with speed defined as driving too fast for conditions or exceeding posted speed.

ation, as noted in Table PT-1, categorizes "speed too fast for conditions" separately, resulting in a lower percentage of crashes with speed as a factor.

<sup>\*</sup> Please note that NHTSA identifies speed as a factor in addition to other causes, resulting in a higher percentage of crashes in which speed is a contributing factor. The Connecticut Department of Transport-

#### PERFORMANCE GOALS

- To reduce the percentage of speed-related fatal crashes, from the five-year average of 39.5% to 34% by the end of calendar year 2005, and 32% by the end of 2006.
- To reduce the percentage of speed-related crashes by 5% by the end of calendar year 2005 and by 5% by the end of 2006.
- To reduce the high level of crashes due to Connecticut's four predominant contributing factors (as referenced in Table PT-1) from 65% to 55% by the end of 2006, with an emphasis on speeding.

#### PERFORMANCE OBJECTIVES

- To provide planning, coordination, and evaluation for projects funded under the Police Traffic Services Program.
- To increase the level of traffic enforcement through regional traffic enforcement units and individual agencies.
- To increase enforcement of violations that result in the majority of the State's crashes: following too closely, failure to grant right-of-way, speeding, and violation of traffic controls. To assist police agencies with traffic enforcement resources, i.e.: equipment, training, pilot programs.
- To encourage and assist police agencies with traffic safety public awareness efforts.
- To provide the resources necessary to support statewide police traffic enforcement training.

#### **PLANNED COUNTERMEASURES**

Regional Traffic Enforcement Units (RTUs) have been successful in projecting a broad police presence to the public by their high visibility and mobility. Program objectives will be met by supporting existing regional units and fostering the formation of new ones. Police agencies will be offered traffic enforcement equipment incentives conditional upon formation of the units.

A range of enforcement equipment includes: dedicated traffic enforcement vehicles, communication equipment, mobile data terminals, speed monitoring radar trailers, in-car video cameras, speed detection equipment (radar, laser, vascar), tire puncturing devices, message light bars for police vehicles, enforcement checkpoint equipment, and other equipment directly related to traffic enforcement. All enforcement agencies will be asked to focus on the predominant factors that presently account for the majority of the State's crashes. DHS will consider grant submissions from police agencies identifying specific traffic problems within their jurisdictions as substantiated by data. When available, grant funds will be offered to support traffic enforcement equipment/training needs. To support the enforcement efforts, related media will be used. The Connecticut State Police will conduct comprehensive traffic enforcement on the Interstates and rural roadways. DUI, seat belts, red light running, and aggressive and distracted driving will be addressed using marked cruisers and undercover vehicles, motorcycles and aircraft. Resources will be directed toward police traffic enforcement training, such as PIO.

#### POLICE TRAFFIC SERVICES

# Task 1 — Police Traffic Services Program Administration

Administrative Oversight: Department of Transportation, Division of Highway Safety Staff Person: Richard Squeglia

Program administration will include the coordination of activities and projects outlined in the Police Traffic Services Program area, coordination of program activities (statewide), development and facilitation of public information and education projects, and providing status reports and updates on project activity to the Highway Safety Program Director and the NHTSA New England Regional office. Additionally, program administration will include monitoring project activity, preparing and maintaining project documentation and evaluating task accomplishments. Funding will be provided for personnel services, employee-related expenses, professional and outside services, travel, materials, supplies and other necessary related operating expenses.

#### Task 2 — Traffic Enforcement Grants

Administrative Oversight: Department of Transportation, Division of Highway Safety Staff Person: Richard Squeglia

Here traffic enforcement will focus on the predominant contributing factors in State crashes, as verified through crash information analysis. DHS will consider grant submissions from police agencies identifying specific traffic problems within their jurisdictions, substantiated by data. Specialized enforcement projects

initiated in FY 2005 in Hartford, New Britain, Newington, Berlin, Andover, Stafford, Marlborough, Rocky Hill, New London and Branford will be reviewed for continued funding during FY 2006.

#### Task 3 — Regional Traffic Unit (RTU) Equipment

Administrative Oversight: Department of Transportation, Division of Highway Safety Staff Person: Richard Squeglia

Funds will be made available exclusively to established RTUs in the State for the purchase of equipment to support their comprehensive traffic enforcement operations. As members of established RTUs, the following cities and towns are eligible for RTU equipment grants: Orange, Bethany, Woodbridge, Wethersfield, Rocky Hill, Cromwell, Berlin, Newington, Waterford, Groton City, Groton Town, New London, Ledyard, Stonington, Montville, Norwich, Torrington, Winchester, Thomaston, Naugatuck, Watertown, Wolcott, Middlebury, Lisbon, Preston, Jewett City, Sprague, Voluntown, Manchester, East Hartford, Coventry, Glastonbury, Windsor, Vernon, Windsor Locks, South Windsor, East Windsor, Avon, Bloomfield, Canton, Granby, Simsbury, Norwalk, Wilton, Weston, Westport, Kent, Warren, Washington, Hamden, North Haven, East Haven, Branford, North Branford, Bridgeport, Trumbull, Fairfield, Stratford, Shelton, Derby and Ansonia. As a condition of the grants, all cities and towns receiving equipment agree to share it with the agencies within their respective RTUs when conducting regional enforcement.

#### Task 4 — State Police Comprehensive

#### **Traffic Enforcement**

Administrative Oversight: Department of Transportation, Division of Highway Safety Staff Person: Richard Squeglia

In this task the Connecticut State Police will conduct comprehensive traffic enforcement on the Interstates and rural roadways. On the Interstates, speed limits will be aggressively enforced. Special enforcement campaigns will target DUI, seat belts, and aggressive, distracted, and fatigued driving. Undercover specialty vehicles, such as Camaros, Impalas and Intrepids will be used, in addition to motorcycles and aircraft.

#### Task 5 — Red Light Running Enforcement

Administrative Oversight: Department of Transportation, Division of Highway Safety

Staff Person: Richard Squeglia

Red Light Running Enforcement Grants will be offered to police agencies with documented crash problems at identified intersections within their jurisdictions. The program will integrate aggressive enforcement with community outreach (interaction between officer and motorist), public education (educational brochures/posters), and media (TV, radio and print). The program will focus on intervention, prevention, and educational initiatives for both adult and teenage drivers, with the goal of establishing respect for traffic signals, enhancing the safety of drivers and pedestrians, and reducing fatalities and injuries as a result of red light running.



occu<sup>p</sup>ant<sup>p</sup>rotection(o<sup>p</sup>) & child<sup>p</sup>assen<sup>g</sup>ersafet<sup>y</sup>(CPS)\_

# occuranterotection (or) &

#### PROBLEM IDENTIFICATION

Programs designed to increase safety belt use remain a high priority in Connecticut. Between 1999 and 2004, the safety belt usage rate in Connecticut increased from 73% in 1999 to 83% in 2004. In the same time period, the nationwide rate increased from 67% to 80%. With the exception of 2003, Connecticut's use rate exceeded the national use rate each year.

Table OP-1, below, details the trends in injury severity due to motor vehicle crashes. In 1989, there were 46,940 people killed or injured in crashes in

Connecticut. In 2003, total injuries were about 3% below this level, while the number of licensed drivers increased by 12% and miles of travel rose by 20%. There has also been a dramatic shift in the distributions of injury severity. In 2003, there we re 3,025 fatal and serious (A) injuries reported, 59% fewer than the 7,370 reported in 1989. The rate of fatal and A injuries per 10,000 licensed drivers dropped from 31.0 in 1989 to 11.4 in 2003. The rate per 100 million miles of travel dropped from 28.2 in 1989 to 9.6 in 2003. Conversely, in 2003 there were 12% more minor (C) injuries reported than in 1989 (31,434 to 28,170).

Table OP-1. — Injury Severity Trends (1989-2003): Connecticut

Year	Total Injuries	# Fatals + A Injuries	% Fatals + A Injuries	# B Injuries	% B Injuries	# C Injuries	% C Injuries
1989	46,940	7,370	15.7%	11,400	24.3%	28,170	60.0%
1990	42,293	6,792	16.1%	10,037	23.7%	25,464	60.2%
1991	40,874	6,531	16.0%	9,978	24.4%	24,365	59.6%
1992	43,481	6,787	15.6%	9,435	21.7%	27,259	62.7%
1993	44,307	6,618	14.9%	9,439	21.3%	28,250	63.8%
1994	47,826	6,575	13.8%	9,663	20.2%	31,588	66.0%
1995	48,912	5,919	12.1%	12,522	25.6%	30,471	62.3%
1996	50,226	5,208	10.4%	12,277	24.4%	32,741	65.2%
1997	48,770	5,009	10.3%	11,832	24.3%	31,929	65.5%
1998	47,444	4,516	9.5%	11,481	24.2%	31,447	66.3%
1999	49,605	4,228	8.6%	12,229	24.8%	33,148	67.2%
2000	51,602	4,318	8.4%	12,245	23.9%	35,039	68.4%
2001	50,449	3,910	7.8%	12,052	23.9%	34,799	69.0%
2002	47,371	3,319	7.0%	11,226	23.7%	32,826	69.3%
2003	45,340	3,025	6.7%	10,881	24.0%	31,434	69.3%

# occupanterotection(op)&

Table OP-2 shows the percentage of safety belt use by drivers of passenger-type vehicles (by injury severity) over the five-year period 1999-2003. The absolute numbers should be interpreted with caution as the "minor" or "no injury" data are based largely on afterthe-fact reports to the investigating police. The figures generally show increasing safety belt use over time within each injury category.

Tables OP-2. — Percent Belt Use by Injury Severity of Drivers of Passenger Vehicles: 1998-2003

IN JURY SEVERITY	1999	2000	2001	2002	2003
Killed	40.5%	37.8%	45.3%	38.8%	48.3%
A-Injury	74.9%	76.9%	78.1%	80.2%	81.7%
B-Injury	80.5%	81.6%	83.1%	85.4%	87.5%
C-Injury	93.9%	94.6%	94.9%	95.8%	96.6%
No Injury	97.6%	97.9%	98.1%	98.5%	98.9%

Source: Connecticut Department of Transportation. Vehicles included: automobiles, single-unit, single-tire trucks, passenger vans, motor homes, campers and car trailer combos.

#### PROBLEM IDENTIFICATION: CHILD RESTRAINTS

Table OP-3 shows observed restraint use for children aged 0-3 years from the State's bellwether observations. The table indicates that in 2004, 93% of all children under the age of 4 were being restrained and over 95% were in the rear seat of their vehicles. The

table also shows that the drivers of young children are more likely to be buckled up themselves (89%) than are drivers in general (83%). Young children are less likely to be restrained when their driver is not buckled up (95% vs. 86%).

Table OP-3. — Child Restraint Use (Age 0 to 3 Years) 1997-2004

	1997 (N=247)	1998 (N=138)	1999 (N=183)	2000 (N=146)	2001 (N=185)	2002 (N=196)	2003 (N=214)	2004 (N=214)
Child Restraint Use	70.4	94.9	86.9	92.5	94.1	94.9	98.6	93.3
Driver Belt Use	63.6	73.0	76.0	87.0	84.3	88.3	88.3	89.4
When Driver Belted	80.3	98.0	92.1	97.6	98.1	96.5	99.5	94.9
When Driver Not Belted	56.3	89.2	69.8	57.9	75.0	81.0	92.0	85.7
Children in:								
Front Seat	23.9	7.2	10.4	1.4	3.8	1.0	4.2	4.5
Rear Seat	76.1	92.8	89.6	98.6	96.2	99.0	95.8	95.5

The latest scientific survey was conducted in June 2004. It provides an accurate and reliable statewide estimate of safety belt use in Connecticut that is comparable to the 1995 baseline estimate accredited

by NHTSA in September 1998 and the statewide survey conducted in 1998. The results are detailed in Table OP-4.

Table OP-4. — Statewide Scientific Observations

YEAR	1995	1998	1999	2000	2001	2002	2003	2004
Statewide								
Usage Rate	59%	70%	73%	76%	78%	78%	78%	83%

Table OP-5 shows driver and front-seat passenger safety belt use rates in 2004 as a function of vehicle, location and personal characteristics. Observed safety belt use was highest in passenger cars and SUVs, and lowest in pick-up trucks. Use was similar in rural and urban areas, higher among females than males and

higher for whites than non-whites. Statewide safety belt use increased by 13% from 1998 to 2004 (70% to 83%). Comparing 2004 results with those from 1998 in Table OP-5 shows that safety belt use increased in all categories.

Table OP-5 — Observed Driver and Front Seat Passenger Belt Use: 1998 & 2004

	Dri	/ E R S	Passengers			
	1998	2004	1998	2004		
Vehicle Type						
Passenger Car	69.4%	82.4%	66.5%	80.6%		
Pick Up Truck	45.9%	63.1%	41.0%	58.0%		
SUV	70.1%	84.5%	70.0%	85.9%		
Van	60.9%	79.3%	64.4%	80.5%		
Urban/Rural						
Urban	68.4%	82.3%	63.5%	83.5%		
Rural	74.1%	87.3%	76.2%	87.5%		
Gender						
Male	61.5%	76.7%	52.3%	71.4%		
Female	75.7%	87.1%	71.5%	85.7%		
Race						
White	67.6%	81.4%	66.6%	80.9%		
Non-White	53.4%	74.7%	43.6%	72.4%		

Source: Connecticut Department of Transportation Statewide Scientific Observations.

# occu<sup>p</sup>ant<sup>p</sup>rotection(o<sup>p</sup>) & child <sup>p</sup>assen <sup>g</sup>ersafet <sup>y</sup>(CPS)\_

Table OP-6 shows driver belt use by injury severity on a county-by-county basis in 2003. The data indicates that belt use in serious crashes varies around the State. For example, the safety belt use of fatally

injured drivers in 2003 ranged from a low of 20.0% in Windham County to a high of 63.6% in Litchfield County.

Table OP-6 — Driver Belt Use by Injury and County, 2003

	Faintiald	Hauttand	Litabilia	Middlesex	Nam Hanan	New Leader	Talland	Min alla ann
DRIVER INJURY	Fairfield	Hartford	Litchfield	Middlesex	New Haven	New London	Tolland	Windham
KILLED	31.6%	50.0%	63.6%	40.0%	54.2%	58.8%	60.0%	20.0%
A Injury:	78.4%	81.8%	75.3%	71.7%	79.8%	89.7%	80.9%	87.2%
B Injury:	88.2%	87.2%	88.1%	83.4%	86.4%	88.7%	88.0%	89.5%
C Injury:	96.8%	96.1%	96.4%	96.3%	96.2%	97.1%	96.9%	97.9%
Uninjured Source: Connec	99.0%	98.5%	98.9%	98.6%	98.7%	99.1%	99.2%	99.4%
Source: Connec	ticut Departmen	t of Transportati	on.	,	,			

#### PERFORMANCE MEASURES

	YEAR						
Performance Measure	1999	2000	2001	2002	2003		
Percent Motor Vehicle Occupants Restrained [Observations]:	72.9%	76.3%	78.0%	78.0%	78.0%		
Percent Motor Vehicle Occupant Fatalities Restrained:	32.0%	36.0%	36.0%	35.0%	38.0%		
Safety Belt Citations Issued*	70,229	53,686	52,986	63,453	69,533		
Safety Belt Adjudications Other Than Guilty	17.0%	22.0%	15.0%	14.0%	12.0%		
*Source: Connecticut DMV, Commercial Vehicle Safety Division.							

The first comparable belt use survey in Connecticut was done in 1995 and recorded a 59.2% belt use rate. Statewide safety belt use has increased since then; it reached 78% in 2001 and remained at 78% in both 2002 and 2003,\* an 18.8% increase since the first comparable statewide survey. In 2004, a further increase to 83% was reported. Nighttime belt use was found to be 76.7%.

\*Source: Preusser Research Group, Inc. 2003 Seat Belt Use in Connecticut, August2003.

#### PERFORMANCE GOALS

- To reduce the percentage of serious (fatal and "A") injuries resulting from motor vehicle crashes from 8.4% in 2000 to 4.9% in 2008.
- To reduce the percentage of moderate ("B") injuries resulting from motor vehicle crashes from 23.9% in 2000 and 22% in 2003 to 15% in 2008.
- To reduce the percentage of injuries to children from 2.8% in 2001 and 2.4% in 2003 to 2% in 2006.

#### **PERFORMANCE OBJECTIVES**

- To increase the safety belt usage rate (observations) from 76.3% in 2000, 81% in 2003 and 83% in 2004 to 88% in 2008.
- To increase correct child safety seat usage.

#### **PLANNED COUNTERMEASURES**

The Division of Highway Safety (DHS) serves as the lead agency for the coordination of occupant protection programs in Connecticut. Current efforts include programs designed to increase awareness of the

importance of safety belt and correct child/booster seat use and adherence to the occupant protection

laws. A high visibility safety belt and child safety seat enforcement effort ("Click It or Ticket") will continue to be the core component of the program. Proposed activities include cooperative networking among governmental and municipal agencies and private/corporate concerns unified to further increase the proper use of child safety seats statewide.

Programmed resources will continue to be made available to support multi-approach efforts such as: public information and education, enforcement, law enforcement training, dissemination of public service announcements and support materials, safety week planning (i.g., Buckle Up America! Week, Child Passenger Safety Awareness Week), "Convincer/Rollover" public demonstration programs and the "Click it or Ticket" mobilizations.

Plans call for supporting components that add new dimensions to the efforts to increase seat belt and child safety seat use.

The objective is to establish a statewide expanded partnership of organizations dedicated to increase safety belt usage rates, reaching and then maintaining a usage rate greater than 85%. This will involve further expanding existing partnerships by looking for new collaborative projects.

# occu<sup>p</sup>ant<sup>p</sup>rotection(o<sup>p</sup>) & child <sup>p</sup>assen <sup>g</sup>ersafet <sup>y</sup>(CPS)\_

#### **OCCUPANT PROTECTION**

#### Task 1 — Occupant Protection Program Administration

Administrative Oversight: Department of Transportation, Division of Highway Safety Staff Person: Juliet Little

Occupant Protection Program Administration will include the coordination of activities and projects outlined in the Occupant Protection Program area, coordination of program activities (statewide), development and facilitation of public information and education projects, and providing status reports and updates on project activity to the Highway Safety Program Director and the NHTSA New England Regional Office. Additionally, program administration will include monitoring project activity, preparing and maintaining project documentation, and evaluating task accomplishments. Funding will be provided for personnel services, employee-related expenses, overtime, professional and outside services, travel, materials, supplies and other related operating expenses.

## Task 2 — Occupant Protection Public Information and Education

Administrative Oversight: Department of Transportation, Division of Highway Safety Staff Person: Juliet Little

This task provides funding for professional and outside services, materials and supplies, as well as other related expenses to assure a comprehensive statewide public information and education "Click It or Ticket" program for adult occupant protection.

#### **CHILD RESTRAINT**

#### Task 1 — Child Restraint Administration

Administrative Oversight: Department of Transportation, Division of Highway Safety Staff Person: Stephen Livingston

This initiative will include the coordination of activities and projects as outlined in the Occupant Protection/
Child Restraint Program area, development, promotion and distribution of public information materials and provide reports to the Highway Safety Program
Director and the NHTSA New England Region office.

#### Task 2 — Program Administration

Administrative Oversight: Department of Transportation, Division of Highway Safety

Staff Person: Stephen Livingston

Included will be support for approximately six Child Passenger Safety Technician training classes. These sessions will provide approximately 75 new certified technicians who support the 89 currently operating child safety seat fitting stations statewide and will replace technicians lost by attrition.

#### Task 3 — Child Passenger Safety Workshop

Administrative Oversight: Department of Transportation, Division of Highway Safety

Staff Person: Stephen Livingston

Predicated on available funding, program administration will plan, coordinate and implement a one-day Child Passenger Safety Informational Workshop for all certified technicians statewide for the purpose of providing the latest available information on changes and updates in the certification process. This includes curriculum, approved practices, child safety seat and booster seat engineering and hardware.

#### PERFORMANCE GOAL

To reduce the percentage of motor vehicle injuries to children under 16 from 25% in 2003 to 20% in 2006.

#### PERFORMANCE OBJECTIVES

To maintain or increase the percentage of child restraint use rate currently reported at 93.3% through the end of 2006.

#### **PLANNED COUNTERMEASURES**

A high visibility safety belt and child safety seat enforcement effort will continue to be the core component of the program. The Division of Highway Safety (DHS) serves as the lead agency for the coord ination of occupant protection for children's programs in Connecticut. Current efforts include programs designed to increase awareness of the importance of correct child/booster seat use and adherence to all occupant protection laws.

The proposed activities include cooperative networking among governmental and municipal agencies and private/corporate concerns to increase the proper use of child safety seats and booster seats state-wide. Plans call for components that complement the enforcement campaign and add new dimensions to the efforts to increase child safety seat use, including the use of booster seats.

# Roadwa<sup>y</sup> Safet<sup>y</sup>(RS)\_

#### RoadwaySafety(RS)

#### PROBLEM IDENTIFICATION

Table RS-1 shows the number of fatal and A-injury as well as "other" (minor) crashes that occurred at work zones, rail crossings and on bridges during the 1998-

2002 period. Fatal and A-injury crashes at these special locations have been fluctuating year to year with no significant trends.

Table RS-1. — Crashes at Special Locations: 1999-2003

	Total Crashesby Year							
Lo c at 10 N	1999	2000	2001	2002	2003			
Construction Activity or Device:								
Fatal & A Injury	25	33	27	20	15			
Other	1287	1290	1003	1,102	1,180			
Percent of All Crashes	1.7%	1.6%	1.4%	1.4%	1.5%			
Railroad Crossing:								
Fatal & A Injury	3	1	2	5	0			
Other	38	37	28	39	36			
Percent of All Crashes	0.055%	0.05%	0.04%	0.06%	0.04%			
On a Bridge:								
Fatal & A Injury	16	17	11	16	15			
Other	667	741	660	683	737			
Percent of All Crashes	0.9%	0.9%	0.9%	0.9%	0.9%			

Table RS-2 shows the number of fatal and A-injury crashes that occurred (by county) during 2002 and 2003 by type of roadway on which the crashes occurred. The data show that statewide crashes classified as "Fatal" and "A-Injury" increased on Interstate highways and declined on the other roadway types in 2003 as compared to 2002.

Changes from 2002 to 2003 in serious crashes by road type generally showed a mixed pattern county by county.

### Roadwa<sup>y</sup>Safet<sup>y</sup>(RS)

Table RS-2. — Serious (Fatal+A) Injury Crashes by County and Road Type: 2002/2003

	ROAD TY PE							
	Inter	state	U.S. Route Sta		Stat	e Route	Local Road	
County	2002	2003	2002	2003	2002	2003	2002	2003
Fairfield	16	20	92	86	175	180	287	243
Hartford	21	23	54	62	251	222	368	320
Litchfield	-	-	14	12	81	80	52	37
Middlesex	6	6	11	10	50	44	37	27
New Haven	19	27	58	48	167	199	195	171
New London	11	17	62	70	191	180	133	130
Tolland	4	9	23	13	37	37	49	33
Windham	1	2	8	9	57	54	35	42
Statewide	78	110	322	310	1,109	996	1,156	1003

#### PERFORMANCE MEASURES

Under an ongoing statewide work zone safety program, municipalities have acquired various work zone signs and safety items. To date, nearly all of Connecticut's 169 local political subdivisions have participated.

#### PERFORMANCE GOALS

To reduce the number of construction/work zone related crashes by 15% from 1,348 in 1995 to 1,146 by the year 2006. (Performance status: In 2003, work zone crashes totaled 1,176.)

#### PERFORMANCE OBJECTIVES

To finalize statewide work zone safety grant program (work zone safety signs, barricades, cones, and vests, etc.) in an effort to increase work zone safety at construction/work zone sites in all municipalities by the close of FY 2006.

#### **PLANNED COUNTERMEASURES**

The completion of the local work zone safety program is anticipated by the close of fiscal year 2006. By the end of FY 2005, 163 municipalities will have participated in the program. Promotion of work zone safety will continue with a variety of messages to the public via print and electronic media. Emphasis is on enforcement at work zone/construction sites. There currently exists a Work Zone Safety Committee.

Other ConnDOT units and representatives from other agencies (including the State Police) are coordinating this public information and education activity.

## ROADWAY SAFETY Task 1 — Roadway Safety Administration

Administrative Oversight: Department of Transportation, Division of Highway Safety Staff Person: Stephen Livingston

The first task will include the coordination of activities as outlined in the Roadway Safety Program area. Promotion of the program to the municipalities that have not yet participated will be the main task. Required reports will be provided to the Highway Safety Program Director and the NHTSA New England region office.

#### Task 2 — Local Work Zone Safety

Administrative Oversight: Department of Transportation, Division of Highway Safety Staff Person: Stephen Livingston

The signing/materials program will be promoted to the municipalities, that have not yet participated.

## Task 3 — Work Zone Safety Education and Enforcement

Administrative Oversight: Department of Transportation, Division of Highway Safety Staff Person: Stephen Livingston

Should Section 163 incentive funds be available, support of the Work Zone Safety Week will be offered to assure a comprehensive media campaign is undertaken.

motorc<sup>y</sup>clesafet<sup>y</sup>(MS)\_

## motorc<sup>y</sup>cle safet<sup>y</sup>(MS)\_

#### PROBLEM IDENTIFICATION

In 2003, a total of 26 motorcycle operators and passengers were killed on Connecticut roadways, representing 8.8% of the State's total traffic fatalities.

Based on 69,528 registered motorcycles, the fatality rate was 3.7 per 10,000 registered vehicles.

In the other New England states in 2003, 7.9 % of fatalities were motorcyclists and the fatality rate per 10,000 motorcycles registered was 2.8. Nationally, motorcycle fatalities in 2003 accounted for 8.3% of motor vehicle crash victims with a fatality rate of 6.6 per 10,000 registered motorcycles. Please refer to Table MS-1 below.

Table MS-1. — Motorcyclists Killed/Fatality Rate: 2002 and 2003

	Conne	Connecticut New England		New En g land		. S
YE A R	2002	2003	2002	2003	2002	2003
Motorcyclists Killed (FARS)						
% of all fatalities	13.7%	8.8%	10.1%	7.9%	7.6%	8.3%
Fatality Rate Per 10,000						
Motorcyclists	6.7%	3.7%	3.6%	2.8%	6.5%	6.6%
Motorcycles Registered	65,785	69,528	267,609	275,891	5,004,156	5,370,035

Source: FatalityAnalysis Reporting System (NHTSA), FHWA, Connecticut DMV.

Tables MS-2 and MS-3 show the numbers of motorcyclists killed and injured during the 1999-2003 period. In 2003, the number of motorcyclists killed (26) was the lowest for the five-year period. The number of operator and passenger injuries in 2003 (931) was lower than the preceding two years. The injury rate (injuries per 10,000 registered motorcycles) has been declining during recent years.

Table MS-2. — Motorcyclists Killed

	1999	2000	2001	2002	2003
Operators Killed	30	49	44	44	26
Passengers Killed	8	1	2	0	0
Total Killed	38	50	46	44	26

Source: Connecticut Department of Transportation.

## motorc<sup>y</sup>cle safet<sup>y</sup>(MS)\_

Table MS-3. — Motorcyclists Injured

	1999	2000	2001	2002	2003
Operators Injured	813	828	942	885	838
Passengers Injured	103	88	110	98	93
Total Injured	916	916	1052	983	931
Injuries per 10,000 Registrations	171	155	167	149	134
Total Number of Crashes	995	1031	1154	1112	1069
(includes property damage only)					

Source: Connecticut Department of Transportation and Department of Motor Vehicles.

Table MS-4 — Motorcycle Crash Data (Injury & Fatal)

YE A R	Registra-	No.	Riders	Riders	Passng	Passng	ST	UDENTS T <sub>R</sub>	AINED
	tions	Cras.	Injured	Killed	Injured	Killed	Total	Novice	Experience
December									
1985	61,242	2864	2156	74	315	13	856	568	288
1986	60,964	2593	1977	55	323	7	594	487	107
1987	63,613	2249	1724	61	260	4	726	581	145
1988	59,331	1823	1352	57	172	4	988	794	194
1989	55,925	1506	1118	45	174	6	977	768	209
1990	55,876	1354	1050	48	151	2	1147	937	210
1991	54,035	1340	1121	27	158	1	1269	1042	227
1992	53,445	1123	921	36	140	1	1538	1279	259
1993	52,169	1089	889	42	135	2	2077	1818	259
1994	51,375	1021	861	24	115	8	2107	1747	360
1995	51,122	951	786	31	92	2	1879	1655	224
1996	51,433	882	746	28	87	2	1998	1758	240
1997	50,734	867	691	33	83	5	2137	1850	137
1998	51,026	959	793	37	98	4	2236	2040	196
1999	53,521	992	813	30	103	8	2699	2503	196
2000	59,077	1029	828	47	88	2	2344	2066	278
2001	63,023	1153	942	44	110	2	3252	3029	223
2002	65,785	1110	885	46	98	1	4150	3919	222
2003	69,528	1065	837	27	93	0	4304	4072	205
2004	77,225			48		2	4932	4700	232

Table MS-5 — Motorcycle Crash Data (Injury & Fatal)

						Pe rc	E N TAG E O	FREGIST	RATIONS
YE A R	Registra-	No.	Riders	Riders	Passng	Passng	ST	UDENTS T <sub>R</sub>	AINED
	tions	Cras.	Injured	Killed	Injured	Killed	Total	Novice	Experience
January									
1985	61,242	4.68%	3.52%	0.12%	0.51%	0.02%	856	568	288
1986	60,964	4.25%	3.24%	0.09%	0.53%	0.01%	594	487	107
1987	63,613	3.54%	2.71%	0.10%	0.41%	0.01%	726	581	145
1988	59,331	3.07%	2.28%	0.10%	0.29%	0.01%	988	794	194
1989	55,925	2.69%	2.00%	0.08%	0.31%	0.01%	977	768	209
1990	55,876	2.42%	1.88%	0.09%	0.27%	0.00%	1147	937	210
1991	54,035	2.48%	2.07%	0.05%	0.29%	0.00%	1269	1042	227
1992	53,445	2.10%	1.72%	0.07%	0.26%	0.00%	1538	1279	259
1993	52,169	2.09%	1.70%	0.08%	0.26%	0.00%	2077	1818	259
1994	51,375	1.99%	1.68%	0.05%	0.22%	0.02%	2107	1747	360
1995	51,122	1.86%	1.54%	0.06%	0.18%	0.00%	1879	1655	224
1996	51,433	1.71%	1.45%	0.05%	0.17%	0.00%	1998	1758	240
1997	50,734	1.71%	1.36%	0.07%	0.16%	0.01%	2137	1850	137
1998	51,026	1.88%	1.55%	0.07%	0.19%	0.01%	2236	2040	196
1999	53,521	1.85%	1.52%	0.06%	0.19%	0.02%	2699	2503	196
2000	59,077	1.74%	1.40%	0.08%	0.15%	0.00%	2344	2066	278
2001	63,023	1.83%	1.49%	0.07%	0.17%	0.00%	3252	3029	223
2002	65,785	1.69%	1.35%	0.07%	0.15%	0.00%	4142	3919	223
2003	69,528	1.53%	1.20%	0.04%	0.13%	0.00%	4304	4072	205
2004	77,225	0.00%	0.00%	0.06%	0.00%	0.00%	4932	4700	232

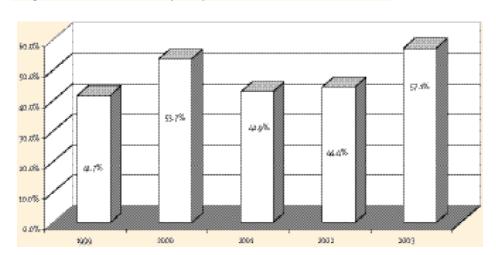


Figure 7. — Percent of Motorcycle Operators Killed with a B.A.C. > 0.00%

Table MS-7. — BACs of Fatally Injured Motorcycle Operators

B AC	1999	2000	2001	2002	2003
.00	14	19	20	20	9
.0107	4	3	5	8	4
.08-Up	6	19	10	8	8
No/Unknown Result	5	8	9	7	4

During the 1999 to 2003 period, 83% of fatally injured motorcycle operators in Connecticut were tested for alcohol. As shown in Table MS-7, during these years 41.7% to 57.1% of those tested were found to have been drinking (any trace of alcohol), with 32% of those tested having a blood alcohol concentration (BAC) of 0.08% or higher. Nationally, in 2003, 33% of the fatally injured motorcycle operators tested for alcohol had BACs of 0.08 or higher.

Table MS-8 shows the distribution of the age and gender of motorcycle operators involved in fatal and injurious crashes during 1999-2000 and 2002-2003.

The table indicates that the majority of the riders are under the age of 40. However, in the 2002-2003 crashes, 39.0% were age 40 or more compared to 31.3% in the 1999-2000 period. This tendency toward an older ridership follows national trends. Table MS-4 also shows that males are predominate among the riders involved in fatal and injury crashes (96.4% in 2002–2003).

Table MS-8. — Motorcycle Operators Involved by Age and Sex, Fatal/Injury Crashes: 1999-2002

		Percent 1999-2000 (N=1,812)	Percent 2002-2003 (N=1,888)
Age	Under 20	6.4%	5.0%
	20-24	18.0%	16.4%
	25-29	16.6%	13.3%
	30-34	14.3%	14.4%
	35-39	13.5%	12.1%
	40-49	18.8%	24.1%
	50-59	10.0%	12.1%
	60-Up	2.5%	2.8%
Gender	Male	96.5%	96.4%
	Female	3.5%	3.6%

Source: Connecticut Department of Transportation. (Unknown values are excluded in body of table.)

Table MS-9 shows the distributions by month, day of week, and time of day of motorcycle crashes involving fatalities and injuries comparing 1999-2000 crashes with those that occurred in 2002-2003.

Motorcycle crashes in Connecticut are rare during the colder months with less than 10% having taken place from November through March. Crashes are more frequent on Saturdays and Sundays. Approximately 60% of the crashes occurred between noon and 8:00 p.m. There are only minor differences between 2002-2003 and 1999-2000 results.

## motorc<sup>y</sup>cle safet<sup>y</sup>(MS)\_

Table MS-9. — Motorcycle Operators

Month, Day of Week, and Time of Fatal and Other Injury Crashes: 1999-2002

		Percent	Percent
		1999-2000 (N=1,812)	2002-2003 (N=1,888)
Month	January	0.6%	0.6%
	February	0.7%	0.7%
	March	3.3%	3.1%
	April	6.8%	7.1%
	May	15.0%	10.9%
	June	16.1%	16.8%
	July	15.4%	19.8%
	August	15.6%	16.2%
	September	12.4%	13.1%
	October	10.1%	6.5%
	November	2.9%	4.5%
	December	1.0%	0.6%
Day of Week	Sunday	21.4%	21.0%
	Monday	8.7%	10.0%
	Tuesday	8.9%	12.3%
	Wednesday	11.1%	11.1%
	Thursday	11.4%	11.4%
	Friday	15.1%	14.3%
	Saturday	23.4%	19.9%
Time of Day	Mid-0359	6.4%	5.5%
	0400-0759	3.2%	3.3%
	0800-1159	11.7%	10.5%
	1200-1559	27.1%	26.9%
	1600-1959	33.9%	35.0%
	2000-2359	17.8%	18.9%

Source: Connecticut Department of Transportation.

Table MS-10 shows the total of fatal and injurious motorcycle crashes in each Connecticut county, the percentage change in these crashes from 1999 to

2003, and the number of crashes in 2003 per 100,000 population.

Table MS-10. — Motorcycle Fatal/Injury Crashes 1999-2003 by Location

Co u n ty	Total	Pct. Change	2003 Crashes Per
	1999-2003	1999-2003	100,000 Pop.
Fairfield	1,029	+5.8%	22.5
Hartford	972	-8.3%	20.2
Litchfield	295	-2.0%	26.6
Middlesex	249	-6.7%	26.0
New Haven	1281	+7.2%	31.7
New London	343	+6.8%	23.9
Tolland	237	+37.1%	33.1
Windham	203	+15.8%	39.1

Source: Connecticut Department of Transportation; population data estimate for 2003.

Table MS-11. — Motorcycle Fatality/Injury Crashes-Contributing Factors 1999-2003

	% of Single Vehicle Crashes (N=1,872)	% of Multiple Vehicle Crashes; MC Oper. Fault (N=1,457)	% of Multiple Vehicle Crashes; Other Oper. Fault (N=1,763)
Driver Lost Control	49.7%	12.2%	1.6%
Driving Too Fast for Conditions	22.0%	8.7%	1.5%
Road Condition/Object In Road	2.5%	0.1%	0.4%
Driver Under the Influence	8.3%	1.9%	1.4%
Failed to Grant Right of Way	0.1%	20.7%	58.7%
Driver Following Too Closely	1.3%	24.2%	10.0%
Driver Violated Traffic Control	0.3%	4.9%	6.2%
Other	15.8%	27.3%	20.1%

Source: Connecticut Department of Transportation (unknowns are not included).

### $motorc^{y}cle safet^{y}(MS)_{-}$

The most frequent contributing factors in Connecticut fatal and injurious motorcycle crashes during 1999-2003 are listed in Table MS-11. The first data column contains the contributing factors for single vehicle crashes (N=1,872). The operator losing control and driving too fast for conditions were the most common factors in these crashes.

Contributing factors in multiple vehicle crashes are tabulated separately depending on whether the motorcyclist (N=1,457) or the other driver (N=1,763) was most likely at fault in the crash. When the motorcyclist was deemed most at fault, and a specific cause was noted, following too close, failing to grant the right of way and losing control were most often the contributing factors. When the other driver was deemed most at fault, failure to grant the right-of-way was the predominant contributing factor (58.7%).

In summary, CT Department of Transportation motorcycle crash data show:

- A substantial decline in motorcyclist fatalities in 2003 compared to earlier years
- The majority of motorcycle fatal and injurious crashes occurred between the hours of noon and 8 p.m.
- Saturdays and Sundays were the most common days for fatal and injury crashes
- Most fatal and injurious crashes occurred in the summer months
- Almost all motorcycle operators involved in crashes were male.
- In multiple vehicle crashes, the other driver was at fault in 53% of the cases. The major contributing factor in these crashes was failure to grant the right of way.

#### PERFORMANCE MEASURES

Performance Measure			YE AR		
	1999	2000	2001	2002	2003
Motorcyclists Killed and Injured	954	966	1098	1027	957
Injuries per 10,000 Registered Motorcycles	171	155	167	149	142
Percent Motorcycle	28.6%	37.8%	26.1%	35.0%	35.0%
Fatalities Helmeted	(10 of 35)	(17 of 45)	(12 of 46)	(14 of 40)	(7 of 25)
Percent Motorcycle	34.8%	27.6%	44.0%	43.9%	44.5%
Injuries Helmeted	(299 of 858)	(319 of 1155)	(427 of 971)	(391 of 890)	(377 of 847)
Percent Operators	41.7%	53.7%	42.9%	44.4%	57.1%
Killed with BAC >0.00	(10 of 24)	(22 of 41)	(15 of 35)	(16 of 36)	(12 of 21)
Number of	2,371	2,918	3,271	4,150	4,304
Motorcyclists Trained					

#### PERFORMANCE GOALS

- To decrease the number of injuries per 10,000 registrations by 10%, from 171 in 1999 to 154 by the year 2005, and by 20% to 137 in the year 2008.
- To decrease the percentage of fatally injured motor-cycle operators with blood alcohol concentration (BACs) greater than 0.00 from 65.5% in 1997 to 43% in 2003, and 40% in 2005.

#### PERFORMANCE OBJECTIVES

 To train 5,500 beginning, intermediate and experienced motorcycle operators during 2005, up from 2,918 motorcyclists in 2000.

#### **PLANNED COUNTERMEASURES**

These goals will be achieved by: continuing rider education sites and expanding motorcycle education programs; promoting helmet use by all riders (not just those young riders currently covered under existing law); and including motorcyclists in the emphasis on reducing impaired driving.

Results of the 2002 focus group studies will continue to be incorporated into a public information and education impaired riding campaign. This campaign, "Open the Throttle Not the Bottle," will utilize recently developed materials, and may include developing new materials. The distribution process will incorporate a

### $motorc^{y}cle safet^{y}(MS)_{-}$

network of informational resources including: a web site, rider education courses, various motorcycle dealerships, and local motorcycle rider organizations. and maintaining project documentation; and evaluating task accomplishments. Funding will be provided for personnel, employee-related expenses, professional and outside services, travel, materials, supplies and other related operating expenses.

#### MOTO RC YCLE SAFETY

#### Task 1 — Motorcycle Safety Program Administration

Administrative Oversight: Department of Transportation, Division of Highway Safety Staff Person: Raymond Gaulin

The task will include coordination of activities and projects outlined in the motorcycle safety program area, statewide coordination of program activities, development and facilitation of public information and education projects, and providing status reports and updates on project activity to the Highway Safety Program Director and the NHTSA New England Regional office.

#### Task 2 — Program Administration

Administrative Oversight: Department of Transportation, Division of Highway Safety Staff Person: Raymond Gaulin

The task will include the training and monitoring of 130 motorcycle safety instructors; providing support services to the eleven Connecticut Rider Education Program training sites; providing ride sober information at grass roots motorcycle safety events; maintaining the Division's "Ride Sober" web site; preparing

#### Task 3 — Community Outreach To Motorcycle Riders

Administrative Oversight: Department of Transportation, Division of Highway Safety

Staff Person: Raymond Gaulin

The expected impact of this task will be the registration of over 5,500 riders in motorcycle safety training courses, conducting ten or more safety events, maintaining the "Ride Sober" web site so that the message reaches over 20,000 motorcycle riders.

## trafficrecordS(TR)\_

#### PROBLEM IDENTIFICATION

The highway safety performance-based program planning processes are dependent upon timely, accurate and complete traffic records data. Significant action has taken place to improve traffic records systems in Connecticut, although much remains to be accomplished. To provide an up-to-date program analysis, a "mini" Traffic Records Assessment was completed in March 2004. This report served to provide a pro-gram status summary and outline updated recommendations.

Data improvements are being made in areas related to motor vehicles, base mapping, toxicology, electronic data capture, citation tracking, fatality analysis and emergency medical services.

Connecticut's Tr a ffic Records Coordinating Committee, (TRCC) is comprised of representatives from key agencies, including the Departments of Transportation, Motor Vehicles, Public Safety/State Police, Public Health, and Information Technology. Additional representatives are from the Office of Policy and Management, Judicial Branch, Connecticut Police Chief's Association, Regional Planning Organizations, Capitol Region Council of Governments, and Federal liaisons from NHTSA, FHWA and FMCSA.

#### PERFORMANCE GOALS

- To develop and implement a crash data subsystem which can deliver timely, complete and accurate motor vehicle crash data to all users.
- To design, develop and implement a traffic citation/ adjudication data subsystem which can deliver traffic citation and adjudication data in a timely fashion to all users by the year 2006.

 To develop a central relational database environment holding driver licensing, motor vehicle registration, driver history data and administrative "per se" systems and, to improve data access to these files for all users by the year 2007.

#### PERFORMANCE OBJECTIVES

- To reduce the backlog of police crash reports to three months by the end of 2006.
- To implement a new statewide motor vehicle crash file (data warehouse) by the end of 2006.
- To complete the redesign of the driver licensing, motor vehicle registration and driver history files and transition these files to a relational database environment by the end of 2008.

#### PLANNED COUNTERMEASURES

Goals and objectives listed above, and provided in detail in the March 2004 mini assessment, will be accomplished through a variety of avenues, including:

- Seek improvements in the quality of crash data through the adoption of electronic data capture (at present only 1/3 of data is captured); PDO crashes on local roads (at present, approximately 29,000 a year are lost); driver/vehicle file electronic population of the crash as well as citation form; and enhance training and follow up with reporting agencies to accompany the new system.
- Conduct an extensive comparison of the PR-1 crash report with the 2003 MMUCC Crash Reporting Guideline.
- Promote recommendations from the recently completed Traffic Citation Adjudication System Study, including technology support.

### trafficrecordS(TR)\_

- To promote the electronic field data capture of crash and citation incident reporting including, a review of different options, e.g. CAPTAIN, TraCS, TSIMS, Beta Systems, and Polaris.
- Seek a "user-friendly" data analysis software tool, such as CARE, to provide users with the capability to answer questions within minutes, and provide more in-depth capabilities to aid in the process of problem identification.
- Update the PR-1 crash report acknowledging the move towards electronic reporting, but realizing the need to maintain a paper form as well.
- Update the PR-1 instruction manual and provide "train-the-trainer" workshops at State and local law enforcement training facilities.

#### TRAFFIC RECORDS

#### Task 1 — Traffic Records Administration

Administrative Oversight: Department of Transportation, Division of Highway Safety Staff Person: George Bieniaszek

This task will provide funding for a Coordinator to assist in the development of the Connecticut Traffic Records Program. This contract will include planning, program implementation, monitoring and evaluation of traffic record activities.

## hazardelimination\_

#### PROBLEM IDENTIFICATION

Guide rail: In 1993, new performance criteria for roadside safety hardware was published. It is known as the National Cooperative Highway Research Program (NCHRP) Report 350 "Recommended Procedures for the Safety Performance and Evaluation of Highway Features." On September 29, 1994, the Federal Highway Administration (FHWA) issued "Traffic Barrier Safety Policy and Guidance" which outlined specific mandates regarding installations of guide rail and crashworthy end treatments. On March 22, 1996, FHWA issued "Testing and Certification of Roadside Safety Hardware" which listed longitudinal barriers that passed and failed NCHRP Report 350 Test Level-3 (TL-3) guidelines. As a result, Connecticut's W-Beam guide rail types R-I, MD-I, R-B, MD-B, and corresponding guide rail transitions to bridge parapets, do not meet current FHWA-mandated standards.

The Connecticut Guide Rail Program was instituted to support ConnDOT's efforts in the execution of the FHWA mandates. The Program began with an inventory of all deficient guide rail systems on the NHS. In collaboration with Conn DOT's Office of Research and Materials, software was developed to facilitate yearly guide rail inventories. The Department is in the process of upgrading deficient railing to enhance safety.

Signing: Guidance signing is a critical component of an expressway because it is the medium by which a highway agency communicates directional information to users of the roadway. To ensure that the user can detect and read signs during night conditions, retro reflective materials are commonly used. Over time, traffic signs can deteriorate in a number of ways. The signs gradually lose their retro reflectivity and the color portions fade. As a result, the expressway signs

become undetectable or illegible at night or even during the day. This causes highway users to miss the message, resulting in misdirection, increased traffic congestion and even crashes. Inadequate and poorly maintained signing is often cited as a contributing factor to crashes. Observations of the signing within the proposed project limits indicate diminishing colors as well as retro reflectivity. A number of motorists have also complained about the lack of retro reflectivity.

Pavement Markings: ConnDOT has 4,122 miles of roadways and ramps resulting in approximately 16,000 miles of pavement markings. Pavement markings have different uses lives determined by the type of material used for the marking, the location of the marking in relation to vehicle paths, and the volume of traffic that passes over the marking. Pavement markings are essential to provide guidance and information for the road user. Well-marked roadways are necessary to separate travel lanes in the same direction, as well as opposing traffic. Snow plowing and road sanding greatly accelerate the deterioration of certain types of pavement marking material. The Department utilizes maintenance personnel to regularly evaluate and determine the roadways where upgrading of pavement markings are required. In addition, each of the Department's four maintenance districts maintains a log of roadways where pavement markings have been upgraded and also roadways that have been resurfaced and the pavement markings replaced.

### hazardelimination\_

#### **PERFORMANCE GOALS**

Improve safety and highway operations by reducing motorist misdirection, traffic congestion and crashes due to diminished sign performance and pavement markings. In addition, improve the safety of the State's roadways by upgrading deficient rail protection systems.

#### **PLANNED COUNTERMEASURES**

Upgrade existing sign locations within the project limits. Upgrade deficient railing and pavement markings as identified by the Department's inventory system.

#### PERFORMANCE MEASURES

Conduct before and after evaluations at selected locations to determine if the signing and pavement marking improvements result in a reduction in crashes. The severity of run-off-the-road crashes will also be evaluated at select guide rail installation locations. The data will be kept in project files and available for review upon request.

#### Task 1 — Hazard Elimination Program

Administrative Oversight: Department of Transportation, Division of Highway Safety

Staff Person: Raymond Gaulin

This task will provide support activities to improve safety and highway operations by reducing motorist misdirection, traffic congestion and crashes due to diminished sign performance, pavement markings and deficient rail protection systems.

#### otherareas&factors

#### DRIVER GROUPS

Tables OA-1 and OA-2 outline the age distribution of licensed drivers in Connecticut and the U.S. as a whole during 2001-2003. The data show that the percentage of Connecticut licensed drivers age 19

and younger is less than that of the U.S., and that the percentage of drivers age 70 and older is higher in Connecticut than in the U.S. as a whole.

Table OA-1. — Licensed Drivers by Age Group: 2001-2003 (19 and Under; 20-49)

		AG E GRO U P									
		19 A N D UN D E R 20 - 49									
	2001	2002	2003	2001	2002	2003					
CT—N	94,848	100,309	101,411	1,490,701	1,484,435	1,480,489					
% Total	3.6%	3.8%	3.8%	56.2%	55.6%	55.7%					
US-N	9,420,642	9,298,258	9,263,217	113,296,174	114,019,240	114,012,238					
% Total Source: Federal HighwayAdn	4.9%	4.8%	4.7%	59.2%	58.7%	58.1%					

Table OA-2. — Licensed Drivers by Age Group: 2001-2003 (50-69; 70+)

		AG E GRO U P							
	19 and Under								
	2001	2002	2003	2001	2002	2003			
CT—N	700,353	719,175	731,893	1,490,701	1,484,435	1,480,489			
% Total	26.4%	26.9%	27.5%	56.2%	55.6%	55.7%			
US-N	49,422,403	51,101,451	53,063,320	19,136,500	19,876,684	19,826,892			
% Total	25.8%	26.3%	27.1%	10.0%	10.2%	10.1%			

Table OA-3 contains 2001, 2002 and 2003 fatal crash rates per 100,000 licensed drivers by driver age group for Connecticut operators and for the U.S. as a whole. Table OA-4 shows the 2001, 2002 and 2003 non-fatal injury crash rates per 100,000 licensed drivers by driver

age group for Connecticut and the U.S. The tables indicate that teenage drivers consistently have a much higher involvement in crashes than do older drivers. The tables also show that the involvement rate of Connecticut drivers in fatal crashes is lower than that

otherareas&factors
for the U.S. in each age group, but is generally higher in injury crashes.

#### otherareas&factors

Table OA-3. Number of Drivers Involved in Fatal Crashes by Age Group Per 100,000 Licensed Drivers\*: 2001-2003

Driversin Fatal Crashes								
Dr iver Age Group	2001		2002		2003			
	СТ	US	СТ	US	СТ	US		
19 and Under	48.5	67.8	55.8	70.2	33.5	66.7		
20-49	18.1	30.9	16.5	30.7	17.4	30.8		
50-69	9.4	20.4	9.5	20.4	99.2	20.7		
70-Up	9.6	25.1	10.0	23.6	8.4	24.2		

<sup>\*</sup>Licensed drivers within each age group. Source: FatalityAnalysis Reporting System.

Further, the number of fatal crashes involving young drivers (ages 16-20) rose from 53 in 1999 to 66 in 2002, then dropped considerably in 2003 to 47, representing a decrease of 11% between 1999 and 2003.

remained constant (28). Between 1999 and 2003, the number of young drivers killed in crashes in Connecticut rose 27% compared to regional and national increases of 22% and 3% respectively.

Despite the large decreases in fatal crashes involving young drivers in Connecticut between 2002 an 2003, the number of young drivers killed in these crashes

Table OA-4. — Number of Drivers Involved in Injury Crashes by Age Group Per 100,000 Licensed Drivers: 2001-2003

			DRIVERSINFA	TAL CRASHES		
Driver Age Group	2001		2002		2003	
	СТ	US	СТ	SU	СТ	US
19 and Under	6,924	6,173	6,357	4,975	5,995	5,140
20-49	2,696	2,350	2,497	1,957	2,424	1,965
50-69	1,461	1,403	1,360	1,183	1,334	1,172
70-Up	957	1,219	899	970	912	931
* Licensed drivers within each a	ge group. Source:	FatalityAnalysis Re	eporting System.			

Table OA-5 — Fatal Crashes Involving Teenage Drivers (19 and Under) Month, Time of Day, and County, Five-Year Total: 1999-2003

			es Involving Drivers
		N=218	%
Month	January	15	6.9%
	February	11	5.0%
	March	12	5.5%
	April	14	6.4%
	May	15	6.9%
	June	15	6.9%
	July	6	11.9%
	August	25	11.5%
	September	7	7.8%
	October	26	11.9%
	November	12	5.5%
	December	30	13.8%
Time of Day	Mid-3am	52	23.9%
	3 am-6 am	13	6.0%
	6 am-9 am	22	10.1%
	9 am-Noon	8	3.7%
	Noon-3 pm	14	6.4%
	3 pm-6 pm	28	12.8%
	6 pm-9 pm	35	16.1%
	9 pm-Mid	46	21.1%
County	Fairfield	44	20.2%
•	Hartford	55	25.2%
	Litchfield	16	7.3%
	Middlesex	8	3.7%
	New Haven	42	19.3%
	New London	27	12.4%
	Tolland	13	6.0%
	Windham	13	6.0%

### otherareas&factors

The greatest number of fatal crashes involving young drivers occurred in December (30); 45% (98) occurred from 9 p.m.-3 a.m.

The greatest number (55) occurred in Hartford County, second in the state in population, followed by Fairfield County (44) and New Haven County (42).

#### PERFORMANCE GOALS

 To decrease the number of crashes involving young driver injuries per 10,000 registrations by 10% from 171 in 1999 to 154 by the year 2005, and by 20% to 137 in the year 2008.

#### PERFORMANCE OBJECTIVES

 Strengthen driving skills of newly licensed (and soon to be licensed) young drivers.

#### **PLANNED COUNTERMEASURES**

 This goal will be achieved by empowering young drivers with better skills, supplementing their driver's education with a more hands-on approach to safety and collision avoidance techniques. This will be done through classroom and "hands-on" training sessions.

#### Task 1 — Young Driver Skill Development

Administrative Oversight: Department of Transportation, Division of Highway Safety Staff Person: Juliet Little

Predicated on available funding, program administration will plan, coordinate and implement a program for young drivers aged 16–21 that teaches real-life emergency avoidance and response techniques and overall driver safety. This youth program will be taught by driving professionals through a unique combination of behind-the-wheel and classroom experiences. This program will address the unacceptably high number of youth-related automobile collisions and fatalities that occur each year.

## VEHICLE TYPES: SCHOOL BUSES, T R AC TOR-TRAILERS, EMERGENCY VEHICLES

Table OA-6 shows the number of fatal and total crashes in the state that involved school buses, tractor-trailers and emergency vehicles. While there are no

apparent major trends in the involvement of these types of vehicles, the crash involvement of emergency vehicles was higher in 2003 than in the previous four years.

Table OA-6. — Crashes Involving School Buses, Tractor-Trailers, and Emergency Vehicles: 1999-2003

	1999	2000	2001	2002	2003
School Bus					
Total # Fatal Crashes	3	1	0	0	1
% of All Fatal Crashes	1.1%	0.3%	0.0	0.0	0.0%
Total # of All Crashes	367	451	505	379	438
% of All Crashes	0.5%	0.5%	0.6%	0.5%	0.5%
Tractor Trailers					
Total # Fatal Crashes	12	16	15	12	11
% of All Fatal Crashes	4.4%	5.0%	5.3%	4.0%	4.0%
Total # of All Crashes	2,653	2,834	2,605	2,512	2,774
% of All Crashes	3.4%	3.4%	3.1%	3.2%	3.4%
Emergency Vehicles					
Total # Fatal Crashes	1	1	3	0	4
% of All Fatal Crashes	0.4%	0.3%	1.1%	0.0%	1.5%
Total # of All Crashes	339	432	384	433	439
% of All Crashes	0.4%	0.5%	0.5%	0.6%	0.5%
Source: Connecticut Departm	nent of Transportation				

Source: Connecticut Department of Transportation.

The Connecticut Department of Motor Vehicles
Commercial Vehicle Safety Division is dedicated
toward delivering a comprehensive commercial motor
vehicle safety program to everyone who travels

Connecticut roadways. Each year, the Governor's Highway Safety Representative meets with officials from the Division to assure coordination and cooperation with respect to programming efforts.

#### **VEHICLE TYPES: BICYCLES AND PEDESTRIANS In**

Connecticut, two bicyclists were killed in motor vehicle crashes in the year 2003. This accounted for 0.7% of the total number of traffic fatalities that occurred during that year. Annual bicyclist fatalities ranged between 2 and 4 during the 1999-2003 period. Also in 2003, there were 6,668 non-fatally injured bicyclists involved in motor vehicle crashes

in Connecticut, the fewest number in the last five years. The 2003 injury figure represents 1.5% of all motor vehicle related injuries.

Nationally, in 2003, 1% of fatalities and 2% of injuries were bicyclists, indicating that Connecticut's rate is lower than that of the U.S. as a whole.

Table OA-7. — Bicyclists Killed and Injured, 1999-2003

YEAR							
	1999	2000	2001	2002	2003		
Number Killed	4	3	3	4	2		
Number Injured	835	812	804	674	668		

This brief analysis indicates that the bicyclist crash problem in Connecticut is currently not a critical highway safety priority, as compared with other identified crash problem areas.

#### BICYCLE PERFORMANCE MEASURES

	YEAR					
Performance Me asure	1999	2000	2001	2002	2003	
Bicyclists Killed and Injured	26	24	23	20	19	
per 100,000 Population						
Percent Bicyclists Helmeted	25%	24%	26%	29%	27%	

### otherareas&factors

Table OA-8

BICYCLIST FATALITIES	1999	2000	2001	2002	2003	Change 1998-02 %
U.S. Total	754	693	732	662	622	-17.5%
NER Total	14	23	18	12	18	+28.6%
NER Total	3	3	3	4	2	-33.3%

During the five years, 1999-2003, the number of bicyclist fatalities in Connecticut each year ranged between 2 and 4.

Table OA-9 — Connecticut Bicyclist Fatalities as Percent of Total Fatalities

	1999	2000	2001	2002	2003
Nationwide	1.8%	1.7%	1.7%	1.5%	1.5%
NHTSA Region 1	1.2%	1.9%	1.4%	0.9%	1.4
Connecticut	1.0%	0.9%	0.9%	1.2%	0.7%

Caution should be used in interpreting these data due to the small number of bicyclist fatalities in Connecticut. 0

TABLE OA-10 – Connecticut Pedestrian and Bicycle Fatalities Month, Time of Day, and County, Five Year Total: 1999-2003

	Pe o	DESTRIAN	Віс	YC L E
	Fata L	CRASHES	<b>Г</b> ата і	CRASHES
Month	(N =256)	%	(N=16)	%
January	22	8.2%	0	0.0%
February	10	3.9%	0	0.0%
March	21	8.2%	0	0.0%
April	17	6.6%	1	6.3%
May	15	5.9%	3	18.8%
June	16	6.3%	2	12.5%
July	20	7.8%	2	12.5%
August	18	7.0%	2	12.5%
September	36	14.1%	2	12.5%
October	26	10.2%	1	6.3%
November	27	10.5%	1	12.5%
Time of Day	(N =255)	%	(N=15)	%
Mid-3 am	23	9.0%	1	6.7%
3 am-6 am	8	3.1%	0	0.0%
6 am-9 am	25	9.8%	1	6.7%
9 am-Noon	22	8.6%	3	20.0%
Noon-3 pm	20	7.8%	7	46.7%
3 pm-6 pm	52	20.4%	2	13.3%
6 pm-9 pm	52	20.4%	1	6.7%
9 pm-Mid	53	20.8%	0	0.0%
Country	(N=256)	%	(N=16)	%
Fairfield	48	18.8%	6	37.5%
Hartford	82	32.0%	6	18.8%
Litchfield	7	2.7%	0	0.0%
Middlesex	13	5.1%	2	12.5%
New Haven	69	27.0%	3	18.5%
New London	23	9.0%	0	0.0%
Tolland	8	3.1%	1	6.3%
Windham	6	2.3%	1	6.3

#### otherareas&factors

In 2003, 35 pedestrians were killed and 1,173 were injured in motor vehicle crashes in Connecticut.

Pedestrian fatalities occurred more frequently during September-December then during other months of the year. Over 60% of fatalities occurred in the 3 p.m. to midnight time period. The largest number of pedestrian fatalities occurred in Hartford (82), New Haven (69), and Fairfield (48) countries, accounting for almost 78% of the victims.

The small number of bicyclist fatalities does not permit detailed analyses.

Table OA-11 — Connecticut Pedestrian and Bicyclist Fatalities

Related Factors for Pedestrians and Bicyclists, Five-Year Total: 1999-2003

	PEDESTRIAN	Вісусціятя
Fatalities	N=227	N=17
Fatalities with no factor reported	33	2
Fatalities with one or more factors reported	194	15
Factors Reported	N=322	N=25
Darting, running into road	43	0
Improper crossing	104	3
Walking, running against traffic (Ped only)	44	NA
Failure to yield	16	4
Failure to obey traffic signs	18	7
Not visible	54	2
All other factors	43	9

The majority of pedestrians and bicyclists killed in crashes were caused by one or more reported factors. By far the most common factor for pedestrians was "improper crossing" (104). "Failure to obey traffic signs" was cited for 7 of the 17 bicycle fatalities.

Table OA-12 - Pedestrian Fatal Crashes and Pedestrian Fatalities

2003	1999	2000	2001	2002	Total 1999-03	Change 1999-03 %
Connecticut						
Pedestrian Fatal Crashes	53	50	34	49	221	-34.0%
35 Pedestrian Fatalities	51	48	33	50	216	-33.3%
34 Pedestrian Fatalities/100K Population 0.98	1.55	1.49	.96	1.44	NA	-36.8%
New England Region						
Pedestrian Fatal Crashes	159	167	151	140		
172 Pedestrian Fatalities Pedestrian Fatalities/100K Population 1.21	159 1.18	165 1.18	148 1.05	142 1.00	172 24,118 NA	-4.2% -9.4%
u.s.						
Pedestrian Fatal Crashes	4,928	4,772	4,867	4,830		
4,721 Pedestrian Fatalities	4,939	4,763	4,901	4,851		
4,749 Pedestrian Fatalities/100K Population 1.63	1.80	1.73	1.71	1.67		

Completed by Institute for Traffic Safety Management and Research.

Between 1999 and 2003, the number of pedestrian fatal crashes and fatalities that occurred in Connecticut fluctuated each year; between 1999 and 2003, the overall number of pedestrian fatal crashes and fatalities decreased by approximately one third. There was also a decrease in the pedestrian fatality rate per 100,000 population from 1.55 in 1999 to 0.98 in 2003. Due to the small numbers, caution must be used in interpreting trends in these data.

In the New England region, pedestrian fatal crashes also fluctuated over the five-year period, 1999-2003. In 2003, there were 172 pedestrian fatal crashes and fatalities, an 8% increase over the number that occurred in 1999; over the same time period, the pedestrian fatality rate per 100,000 population increased by 3%. In comparison, there was a downward trend in pedestrian fatal crashes and fatalities nationwide: between 1999 and 2003, there were 4%

decreases in pedestrian fatal crashes and fatalities and a 9% decrease in the pedestrian fatality rate per 100,000 population.

Each year from 1999-2003, pedestrian fatalities accounted for 10%-17% of the total fatalities in Connecticut; in 1999, 2000 and 2002, the proportion of pedestrian fatalities in Connecticut exceeded the proportions in the New England region and nationwide.

In 2003, 12% of the fatalities in Connecticut were pedestrians, compared to 15% in 2002; in comparison, the proportion of pedestrian fatalities in the

region as a whole increased from 11% to 14% between 2002 and 2003, and remained at 11% nationwide.

The number of pedestrian fatalities in Connecticut fluctuated over the five-year period of 1999-2003. In 2003, the number of pedestrian fatalities declined substantially (from 50 in 2002 to 34). Table OA-13 shows the number of fatally and non-fatally injured pedestrians in the State over the 1999-2003 period.

Table OA-13. — Number of Pedestrians Killed and Injured: 1999-2003

IN JURY SEVERITY	1999	2000	2001	2002	2003
Killed	51	49	35	50	35
Total Injured	1,272	1,295	1,377	1,172	1,173
Serious (A) Injury	293	284	297	233	222
Moderate (B) Injury	476	532	576	495	490
Minor (C) Injury	503	479	504	444	502

Source: Connecticut Department of Transportation.

The pedestrian fatality rate for Connecticut in 2003 was 1.0 per 100,000 population compared to 1.3 per 100,000 in the other New England states and 1.6 per 100,000 nationally. Pedestrian fatalities in Connecticut accounted for 11.7% of all motor vehicle crash victims

in 2003 as compared to 15.5% in 2002. Nationally, the figures were 11.1% in 2003 and 11.2% in 2002. The State's non-fatal injury pedestrian rate was 34 per 100,000 population compared with a rate of 24 nationally. Please refer to Table OA-14.

Table OA-14. — Percent of Pedestrians Killed: Fatal/Non-Fatal Rates/100,000 Population: 2002/2003

	Сомместісит		New England		U.S.	
YE AR	2002	2003	2002	2003	2002	2003
Pedestrians Killed: Percentage of all Fatalities	15.5%	11.7%	9.5%	13.6%	11.2%	11.1%
Fatality Rate Per 100,000 population	1.4	1.0	0.9	1.3	1.7	1.6
Non-Fatal Injury Rate Per 100,000 population	34	34	N/A	N/A	25	24

Source: Fatality Analysis Reporting System; General Estimates System (NHTSA.)

#### PERFORMANCE MEASURES

Performance Me asure	1999	2000	2001	2002	2003
Pedestrians Killed	1.5	1.5	1.0	1.4	1.0
Per 100,000 Population					
Pedestrians Injured Per 100,000 Population	38	41	40	34	34

#### BICYCLE AND PEDESTRIAN COUNTERMEASURES

Although no Section 402 highway safety funds are anticipated to be allocated to these areas, concerned groups will be encouraged to approach various organizations that support such safety programs. Local programs in various regions of the State will continue to implement public information and education initiatives as part of their overall highway safety plans.

## VEHICLE TYPES: PICKUP T RUCKS & SPORT UTILITY VEHICLES

In 2003, there were 231,389,998 motor vehicles registered in the U.S. Of these, 135,669,897 (58.6%) were automobiles; 38,482,613 (16.6) were pickup trucks; and 28,291,752 (12.2%) were sport utility vehicles.

In Connecticut in 2003, there were 2,963,540 motor vehicles registered. Of these, 2,041,237 (68.9%) were automobiles; 295,788 (10.0%) were pickup trucks; and 368,012 (12.4%) were sport utility vehicles. (Source: FHWA.) Automobiles in Connecticut make up a larger percentage (68.9%) of registered motor vehicles than nationally (58.6%). Pickup trucks make up a smaller percentage of registered vehicles (10.0%) than nationally (16.6%). Sport utility vehicles make up approximately the same percentage (12.4% vs. 12.2%).

#### otherareas&factors

In the U.S. during 2003, 58,512 motor vehicles were involved in the 38,252 fatal crashes that occurred. Automobiles made up 44.7% of these vehicles; pick-up trucks made up 18.8% and sport utilities made up 18.5%. The involvement rates were 1.9 per 10,000 registered for automobiles, 2.9 per 10,000 registered for pickup trucks, and 3.8 per 10,000 registered for SUVs.

In 2003 in Connecticut, 399 vehicles were involved in the 273 fatal crashes that took place. Automobiles made up 58.9% of these vehicles, pickup trucks made up 9.8% of these vehicles, and SUVs made up 16.2%. The involvement rates we re 1.2 per 10,000 registered automobiles, 1.3 per 10,000 registered pickup trucks, and 1.8 per 10,000 registered SUVs (Source: FARS.) Connecticut has a lower fatal crash rate than the country as a whole. This is reflected in lower fatal crash involvement for the various vehicle types.

#### **VEHICLE RO L LOVERS (FARS)**

A review of national 2003 fatal crash data indicates that 18.7% of the vehicles involved rolled over. Automobiles accounted for 58.6% of all vehicles involved and 37.7% of the vehicles that rolled over. Pickup trucks accounted for 16.6% of all vehicles involved and 24.5% of the roll over vehicles. SUVs accounted for 12.2% of all vehicles involved and 30.1% of the vehicles that rolled over.

In Connecticut, 16.8% of the vehicles involved in fatal crashes rolled over. Automobiles made up 68.9% of all vehicles involved and 59.7% of the vehicles that rolled over. Pickup trucks made up 10.0% of the vehicles involved and 6.0% of the vehicles that rolled over. SUVs made up 12.4% of the vehicles involved in the State's fatal crashes and 26.9% of those that rolled over.

#### SINGLE UNIT T RUCK (2 AXLES, 4 TIRES)

The following table shows the involvement of this vehicle type in crashes during the 1999-2003 period:

SINGLEUNIT					
TRUCKS IN VOLVEDIN:	1999	2000	2001	2002	2003
Fatal Crashes	25	45	38	35	36
Injury Crashes	4308	4560	4547	3948	3983
Property Damage Crashes	7065	7319	7598	6835	7548
Clasiles					

Source: Connecticut Department of Transportation.

Table OA-15 shows geographical area (county) and municipal crash data. For each of the State's geographic counties, the table shows the total number of fatal and injury crashes during 1999-2003; the percentage change in these crash levels from 1999

to 2003; and the 2001, 2002 and 2003 fatal/injury crash rates per 100,000 residents. Also shown are the three municipalities within each geographic county with the highest 2003 crash rates.

Table OA-15 — Fatal/Injury Crashes: Geographical County/Municipality 1999-2003

	City/Town With Highest	Fata L/ In Jury Crashes	Pc t. Change	FATA L/ IN JURY CRASHES 100,000 Pop.		
COUNTY	2003 RAT E	1999-2003	1999-2003	2001	2002	2003
Fairfield		44,622	-6%	1,029	1,002	957
	Bridgeport	10,200	-11%	1,557	1,405	1,319
	Darien	1,373	-12	*	*	1,290
	Westport	1,707	+1%	1,305	1,534	1,235
Hartford		39,932	-23%	955	700	826
	Plainville	1,142	-2%	1,472	1,316	1,223
	Berlin	1,011	-21%	*	1,043	1,016
	Hartford	9,194	-54%	1,386	1,119	1,007
Litchfield		5,799	+1	623	645	603
	Salisbury	137	+116%	*	*	1,031
	Barkhamsted	127	+94%	*	*	1,002
	Canaan	54	+13%	*	*	833
Middlesex		6,107	-17%	744	973	632
	Middlefield	274	-31%	1,356	1,309	999
	Cromwell	717	-23%	1,064	1,080	956
	Old Saybrook	466	+3	*	*	916
New Haven		50,132	-5%	1,345	1,219	1,153
	Orange	1,605	+11%	2,743	2,788	2,176
	New Haven	14,180	+13%	3,298	2,232	1,957
	Middlebury	450	+41%	*	*	1,798

Table OA-15 — Fatal/Injury Crashes: Geographical County/Municipality 1999-2003 (Continued)

	City/Town With Highest	FATAL/INJURY CRASHES	Pc t. Change	Fata L/ In Jury Cr as h 100,000 Po		
OUNTY	2003 RAT E	1999-2003	1999-2003	2001	2002	2003
New London		10,386	-4%	755	826	777
	Preston	285	+36	*	*	1,451
	Franklin	147	-13%	1,744	1,635	1,417
	North Stonington	297	-12%	*	1,242	1,222
Tolland		4,687	-5%	656	661	663
	Union	112	+120%	2,597	3,608	4,762
	Vernon	1,273	+6%		823	987
	Bolton	204	0%			857
Windham		3,856	-4%	682	764	686
	Windham	1,023	-6%	836	932	888
	Pomfret	155	-14	*	*	843
	Plainfield	590	+9	*	*	828

Source: Connecticut Department of Transportation. \* Not among 3 highest in year.

 $Su^{pp}$  lemental Information - H. S. Cost Summar  $^{y}$ \_

# SupplementalInfor mation-H.S.CostSummar $y_-$

Highway Safety Program Cost Summary, HS Form 217 State of Connecticut Federal Fiscal Year: 2006, Date: July 1, 2005

						_
_	AP P ROV E D	STATE/LOCAL		FEDERALLY FU	NDED PROGRAMS	FEDERAL
Program	Pro g r a m	Funds	Pr Evious	IN CREASE/	Current	SHARE
AR E A		Со в тв	BALANCE	(DECREASE)	BA LANCE	TO LO CAL
AL	\$550,000.00	\$150,000.00	\$0.00	\$550,000.00	\$550,000.00	\$200,000.00
СР	\$100,000.00	\$50,000.00	\$0.00	\$100,000.00	\$100,000.00	\$75,000.00
CR	\$100,000.00	\$25,000.00	\$0.00	\$100,000.00	\$100,000.00	\$50,000.00
J2	\$950,000.00	\$2,000,000.00	\$0.00	\$950,000.00	\$950,000.00	\$250,000.00
J3	\$50,000.00	\$25,000.00	\$0.00	\$50,000.00	\$50,000.00	\$25,000.00
J8	\$500,000.00	\$125,000.00	\$0.00	\$500,000.00	\$500,000.00	\$400,000.00
J9	\$75,000.00	\$75,000.00	\$0.00	\$75,000.00	\$75,000.00	\$75,000.00
MC	\$325,000.00	\$125,000.00	\$0.00	\$325,000.00	\$325,000.00	\$125,000.00
ОР	\$350,000.00	\$150,000.00	\$0.00	\$350,000.00	\$350,000.00	\$225,000.00
PA	\$150,000.00	\$150,000.00	\$0.00	\$150,000.00	\$150,000.00	\$0.00
PT	\$550,000.00	\$300,000.00	\$0.00	\$550,000.00	\$550,000.00	\$500,000.00
RS	\$100,000.00	\$50,000.00	\$0.00	\$100,000.00	\$100,000.00	\$75,000.00
TR	\$300,000.00	\$2,000,000.00	\$0.00	\$300,000.00	\$300,000.00	\$150,000.00
154 AL	\$6,250,000.00	\$1,000,000.00	\$0.00	\$6,250,000.00	\$6,250,000.00	\$4,500,000.00
154 HE	\$6,250,000.00	\$1,000,000.00	\$0.00	\$6,250,000.00	\$6,250,000.00	\$2,500,000.00
157 IN	\$500,000.00	\$100,000.00	\$0.00	\$500,000.00	\$500,000.00	\$250,000.00
157 PT	\$100,000.00	\$25,000.00	\$0.00	\$100,000.00	\$100,000.00	\$100,000.00
164 AL	\$800,000.00	\$150,000.00	\$0.00	\$800,000.00	\$800,000.00	\$500,000.00
TOTAL	\$18,000,000.00	\$7,500,000.00	\$0.00	\$18,000,000.00	\$18,000,000.00	\$10,000,000.00
NHTSA						
TOTAL	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FHWA						
TOTAL	\$18,000,000.00	\$7,500,000.00	\$0.00	\$18,000,000.00	\$18,000,000.00	\$10,000,000.00
NHTSA &						
FHWA						

State Official Authorized Signature

Susan C. Maloney, Governor's Highway Safety

Representative/Transportation Highway Safety Program Director

## CONNECTICUT DEPARTMENT OF TRANSPORTATION DIVISION OF HIGH WAY SAFETY

PO Box 317546

2800 Berlin Turnpike Newington, Connecticut 06131-7546