

**NEW MEXICO  
HIGHWAY SAFETY  
PERFORMANCE PLAN  
1998**

New Mexico  
State Highway and Transportation Department  
Transportation Programs Division  
Traffic Safety Bureau

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## **CERTIFICATIONS AND ASSURANCES**

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

Each fiscal year the State will sign this certification and assurance statement that the State complies with all applicable Federal statutes, regulations, and directives in effect with respect to the periods for which it receives grant funding. Applicable provisions include the following:

- 23 USC Chapter 4 - Highway Safety Act of 1966
- 49 CFR Part 18 - Uniform Administration Requirements for Grants and Cooperative Agreements to State and Local Governments
- 49 CFR Part 19 - Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals and Other Nonprofit Organizations
- 23 CFR Chapter II - NHTSA & FHWA Procedures and General Provisions for State Highway Safety Programs<sup>1</sup>
- 45 CFR Part 74 - Appendix E - Principles for Determining Costs Applicable to Research and Development Under Grants and Contracts with Hospitals
- OMB Circular A-87 - Cost Principles for State, local and Indian Tribal Governments
- OMB Circular A-21 Cost Principles for Educational Institutions
- OMB Circular A-122 - Cost Principles for Nonprofit Organizations
- OMB Circular A-128 - Audit of State and Local Governments
- OMB Circular A-133 - Audits of Institutions of Higher Education and Nonprofit Institutions

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<sup>1</sup>Except that states participating in the pilot program will be exempt from portions of Chapter II, in accordance with Notice of Waiver to be published in the Federal Register prior to the start of the fiscal year.

- NHTSA Order 462-6C - Matching Rates for State and Community Highway Safety Programs
- Highway Safety Grant Funding Policy for NHTSA/FHWA Field-Administered Grants (Effective 7/14/95)
- Pilot 402 Process (If state is participating in the pilot program), as outlined in "A Proposal to Modify and Improve the Current System of Highway Safety Program Management," dated 6/1/95.

### **Certification Statements**

The Governor is responsible for the administration of the State highway safety program through a State highway safety agency that 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 in compliance with 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 that have been approved by the Governor and are in accordance with the uniform guidelines promulgated by the Secretary of Transportation in compliance with 23 USC 402(b) (1) (B);

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

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 in compliance with 23 USC 402(b) (1) (D);

This State's highway safety program provides for programs to encourage the use of safety belts by drivers of, and passengers in, motor vehicles, in compliance with 23 USC 402(b)(1)(E);

Cash drawdowns will be initiated only when actually needed for disbursement, cash disbursements and balances will be reported in a timely manner as required by NHTSA, and the same standards of timing and amount, including the reporting of cash disbursement and balances, will be imposed upon any secondary recipient organizations in accordance with 49 CFR 18.20, 18.21, and 18.40 (failure to adhere to these provisions

may result in the termination of advance financing);

Arrangements have been made for the financial and compliance audit required by the Single Audit Act of 1984 (OMB Circular A-128), which is to be conducted within the prescribed audit reporting cycle (failure to furnish an acceptable audit, as determined by the cognizant Federal agency, may result in denial or require return of Federal funds);

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;

Each recipient of Section 402 funds has a financial management system that complies with the minimum requirements of 49 CFR Part 18.20;

Each recipient of Section 402 funds will comply with all applicable State procurement procedures;

The State is funding programs that are within the NHTSA/FHWA National Priority program areas;

The State highway safety agency will comply with Title VI of the Civil Rights Act of 1964 and Section 504 of the Rehabilitation Act of 1973, as amended, as implemented by 49 CFR Parts 21 and 27, to ensure that no person in the United States shall, on the grounds of race, color, national origin, or handicap, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under this program.

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

The State will provide a drug-free workplace by:

1. 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;
2. Establishing a drug-free awareness program to inform employees about:
  - a) The dangers of drug abuse in the workplace.

- b) The grantee's policy of maintaining a drug-free workplace.
  - c) Any available drug counseling, rehabilitation, and employee assistance programs.
  - d) The penalties that may be imposed upon employees for drug violations occurring in the workplace.
3. 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).
  4. Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will:
    - a) Abide by the terms of the statement.
    - b) Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction.
  5. Notifying the agency within ten days after receiving notice under subparagraph (d) (2) from an employee or otherwise receiving actual notice of such conviction.
  6. 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:
    - a) Taking appropriate personnel action against such an employee, up to and including termination.
    - b) 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.
  7. Making a good faith effort to continue to maintain a drug-free workplace through implementation of the above paragraphs 1. through 6.

**Buy America Act**

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

Only steel, iron and manufactured items produced in the United States may be purchased with Federal funds unless the State can show that such domestic purchases would be inconsistent with the public interest; that such materials are not reasonably available and are of an unsatisfactory quality; or that inclusion of domestic materials will increase the cost of the overall project contract by more than 25 per cent. 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.

## **Certification Regarding 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 or will be paid to any person by, or on behalf of, the undersigned for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all sub-award at all tiers (including subcontracts, subgrants, and contracts under grant, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

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

## **Certification Regarding Debarment and Suspension**

In accordance with the provisions of 49 CFR Part 29, the State agrees that it shall not knowingly enter into any agreement under its Highway Safety Plan with a person or entity that is barred, suspended, declared ineligible, or voluntarily excluded from participation in the Section 402 program, unless otherwise authorized by NHTSA. The State further agrees that it will include the following clause and accompanying instruction, without modification, in all lower tier covered transactions, as provided by 49 CFR Part 29, and in all solicitations for lower tier covered transactions.

## Instructions for Certification

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension 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 their 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 debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -- Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions. (See below)
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not 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 Non-procurement List.

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 suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal government, the  
  
department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

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

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

**Minority Business Enterprise Requirements**

In accordance with the provisions of 49 CFR Part 23, the State agrees to abide by the following statements, and shall ensure that these statements are included in all subsequent agreements and/or contracts assisted by Section 402 funds:

It is the policy of the Department of Transportation that minority business enterprises, as defined in 49 CFR Part 23, shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with Federal funds under this agreement. Consequently, the MBE requirements of 49 CFR Part 23 apply to this agreement.

The recipient or its contractor agrees to ensure that minority business enterprises as defined in 49 CFR Part 23 have the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds provided under this agreement. In this regard, all recipients or contractors shall take all necessary and reasonable steps in accordance with 49 CFR Part 23 to ensure that minority business enterprises have the maximum opportunity to compete for and perform contracts. Recipients and their contractors shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of DOT-assisted contracts.

### **Environmental Impact**

The Governor's Representative for Highway Safety has reviewed the State's Fiscal Year 1998 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 (42 USC 4321 et seq.).

\_\_\_\_\_  
Date

\_\_\_\_\_  
Donna Dossey, Chief  
Traffic Safety Bureau  
State Highway and Transportation Department

\_\_\_\_\_  
Date

\_\_\_\_\_  
Pete K. Rahn  
Secretary  
New Mexico State Highway and Transportation  
Department

# New Mexico Highway Safety Performance Plan 1998

## INTRODUCTION

### Purpose and Mission

The New Mexico Highway Safety Performance Plan describes the state's plan for using Section 402 and 410 Federal Highway Safety Funds, as well as state funds and federal highway funds to reduce motor vehicle deaths and injuries in FY 1998. Based on a detailed analysis of crash data as well as input from national, state and local traffic safety agencies, major problem areas are identified, performance goals established, and objectives/strategies developed to attain them.

*The plan's overall performance goal, as well as the mission of the Traffic Safety Bureau, is to continuously reduce traffic-related fatalities and injuries by developing and supporting a comprehensive, multiple strategy approach that includes prevention, education, screening and treatment, regulation, legislation, enforcement and deterrence initiatives.*

TSB will accomplish this by identifying traffic safety problems and enabling State and community leaders to develop effective activities and programs to address them.

New Mexico's Highway Safety Performance Plan is a key part of the five-year strategic plan developed by the Bureau in 1995 to address the following areas of special interest:

- < **At-risk populations.** Increase the perception among populations most at risk for crash injuries that dangerous behavior is likely to bring certain, severe, and swift consequences from law enforcement. Target behaviors relating to impaired driving, non-use of occupant protection, underage drinking, and excessive speed. Put special emphasis on the 15-34 age group.
- < **Traffic records system.** Complete the foundations for a traffic records system that increases data linkage capacity to access all the information needed to address traffic-related problems, including the planning, management, and evaluation of appropriate prevention activities.
- < **Traffic safety and crash injury prevention.** Market traffic safety and motor vehicle crash injury prevention as an important societal issue and plan, manage, and evaluate traffic safety and crash injury prevention countermeasures. Integrate the national movements for EMS, injury and disability surveillance with health/disability outcome indicators using CODES methods.

- < **Management and marketing skills.** Upgrade the management and marketing skills of the Traffic Safety Bureau and its state and community partners to enable them to develop, implement, and evaluate comprehensive traffic safety and crash injury prevention programs.

The Highway Safety Plan also includes the plans developed for the state's Traffic Safety Education and Enforcement Fund, DWI Prevention and Education Fund, the Motorcycle Training Fund, the Drivers Improvement Fund and the Community DWI Program.

### **Performance-Based Option**

New Mexico has opted to follow the new performance-based 402 process as part of a pilot program offered by the National Highway Traffic Safety Administration (NHTSA) and the Federal Highway Administration (FHWA). This entails submitting a performance plan that describes the processes used to identify New Mexico's highway safety problems, establish its performance goals, and develop the projects contained in its plan. Critical problem areas have been identified, and performance goals developed to address those problems. Administrative and capacity building goals have been identified to improve the state's ability to address traffic safety issues in the broadest and most comprehensive manner possible. Measurement tools are discussed and data sources listed. This report concludes with the *Highway Safety Program Cost Summary*, HS Form 217.

The performance goals, as well as the administrative and capacity building goals identified in the Performance Plan are discussed in greater detail in the Highway Safety Plan, which presents an overview of each problem area and describes the strategies devised to solve those problems.

## **1998 NEW MEXICO HIGHWAY SAFETY PERFORMANCE PLAN**

The New Mexico Highway Safety Performance Plan presents an overview of New Mexico's traffic safety problems and the processes used to identify those issues. Included are a historical overview of traffic safety in New Mexico, a description of goals for FY 1998 as well as three and seven year goals, the strategies for attaining those goals, and the methods that will be used to determine success.

### **Traffic Safety in New Mexico: Historical Overview**

New Mexico's traffic safety program began during the 1940's. In response to its high rate of traffic-related injuries and deaths, New Mexico was one of the first states to adopt per se laws, administrative license revocation, primary safety belts laws for children and adults, and an open container law. New Mexico has a traffic safety fee of \$3.00 attached to each traffic citation. Its DWI laws are some of the toughest and most comprehensive in the country. Since 1991, all convicted DWI offenders are required to pay a \$75 conviction fee, which is used to fund the Traffic Safety Bureau's Community DWI Program. In 1993, the Traffic Safety Bureau initiated Operation DWI, a statewide checkpoint program that now includes saturation patrols. Special enforcement programs have also been initiated for occupant protection, underage drinking, and speed enforcement.

The most dramatic reforms in New Mexico's DWI laws occurred during the 1993 legislature, which enacted a .08 per se law for adults, a .02 per se law for juveniles, and increased penalties for DWI, including mandatory alcohol screening. Alcohol server training was mandated and driver's education required in all secondary schools and for newly licensed drivers. Monies from the state alcohol excise tax were used to establish a local DWI grant program of \$5 million. Funding was also appropriated for court record automation and other DWI prevention efforts.

Collaboration among state and local agencies has increased dramatically since 1993. Several state agencies -- including the Traffic Safety Bureau, Department of Health, and the Local Government Division of the Department of Finance and Administration (DFA) -- provide coordinated efforts through the DWI Interagency Work Group. A Governor's Cabinet Council on DWI Reduction was established in the fall of 1995, and provides overall guidance and direction to cabinet level agencies involved in DWI, as well as developing annual legislative agendas. The 1997 legislative session resulted in mandatory fingerprinting for all persons arrested for DWI. It also increased the DWI lab fee from \$35.00 to \$65.00. And most importantly, the Local DWI grant fund will see an increase from \$5 million to \$10 million in July 1998. The Council will continue to provide oversight and will set a new legislative agenda for the 1998 session.

The Traffic Safety Bureau also works extensively with local communities and law enforcement agencies through its Community DWI, Operation Buckle Down, Operation DWI, STEP, and PTS programs. Injury prevention, including motor vehicle crashes, is a major concern of the Department of Health, whose Injury Prevention and Control

program targets DWI as well as child traffic safety issues. These issues are addressed at a local level by four District Health Promotion teams. The Department of Health also funds a statewide child safety seat program for newborns, the only program in the nation using matching federal dollars for child safety seats, and oversees the New Mexico SAFE KIDS Coalitions. The Emergency Medical Services Bureau funds state as well as regional prevention coordinators, and the Division of Epidemiology has two units that address DWI -- the Injury and the Substance Abuse Epidemiology Units. The Division of Substance Abuse is involved in DWI prevention and treatment, while the Local Government Division of the Department of Finance and Administration oversees the Local DWI Grant Program. The Administrative Office of the Courts has become a key player in the DWI arena, and is assisting in bringing the judiciary in as fully participating partners. The AOC will be conducting a "judicial performance review" of all courts under its jurisdictions over the next few years.

The emerging issue of road rage or aggressive driving resulted in a pilot project last year with the City of Albuquerque. In an effort to slow speeders on the urban interstate, and to address rising crime rates, the Albuquerque "Safe Streets '97" project was initiated using a mixture of state, federal and local funds. This well publicized effort involving saturated traffic enforcement resulted in over 30,000 citations in three months, and a visible slowing of the speeds on the urban interstate. Little negative public reaction was experienced, and this approach seems to have excellent potential.

What results have been achieved by these efforts? During the past 20 years, traffic fatality rates have declined, as have alcohol-involved traffic death rates. Crash injury rates have dropped, and more people are wearing seatbelts. Despite these improvements, New Mexico still has one of the highest traffic-related death and injury rates in the country. These problems are described in the following section.

### **Problem Identification: Analysis of Crash Data**

**Total Traffic Crashes.** New Mexico's traffic fatality rates have declined despite an increase in population, economic activity, and volume of traffic. In 1992, New

Mexico ranked first in the nation for crash deaths per capita. In 1996, the state ranked third (*NHTSA Traffic Safety Facts*). In 1978 New Mexico's crash death rate was 55 per 100,000 population. By 1996 the rate had dropped to 28.1. These improvements correlate with increased safety belt usage. In 1997, 87 per cent of New Mexico motorists were "buckling up," compared to only 27 per cent in 1985.

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*These improvements correlate with increased safety belt usage.*

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Despite these improvements, New Mexico's fatal crash rate is still 70 per cent higher than the national rate. In addition, after experiencing a steady decline from 1978-1993, traffic fatalities rose from 431 in 1993 to 481 in 1996 -- a 10 per cent increase (See Table 1). Motorcyclists are over-represented in fatal crashes, and of those killed in 1996, 93 per cent were not wearing helmets. In 1996, New Mexico raised its speed limit to 75 mph

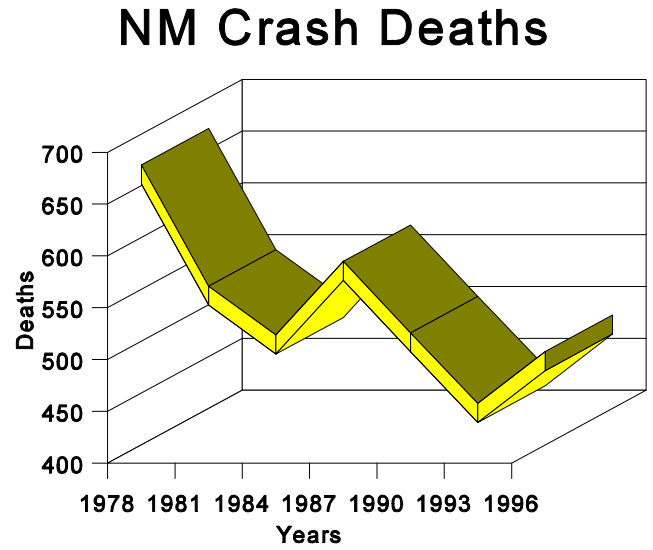
on interstate roads, and 65 mph on some other state roads. The impact of this action is being studied.

**Alcohol-Related Crashes.** For many years, New Mexico was first in the nation for alcohol-related motor vehicle fatalities per capita. During the past 15 years, its rates have steadily declined. In 1980, 417 people were killed in DWI crashes, compared to 235 deaths in 1996. In 1980, 67 per cent of all traffic fatalities and 26 per cent of all traffic injuries were alcohol related. By 1996, 50.5% per cent of motor vehicle fatalities and 14 per cent of traffic injuries were due to alcohol. The reduction in alcohol-related motor vehicle crashes can be attributed, in part, to New Mexico's comprehensive DWI laws, state-funded prevention and treatment efforts, ongoing checkpoints and saturation patrols, and extensive publicity.

**Pedestrian Fatalities.** With a fatality rate of 3.6 deaths per 100,000 people, New Mexico's pedestrian fatality rate for 1996 was considerably higher than the national rate of 2.13 in 1995. Over 66 per cent of these deaths were alcohol-related, with predominantly intoxicated pedestrians. The following tables present New Mexico's crash trends over the past decade.

**Table 1. Motor Vehicle Crash Deaths  
in New Mexico, 1978-1996**

Year	Crash Deaths	Change Prior Year	Death Rate Per Capita
1978	661	-13	54.5
1979	650	-11	51.4
1980	613	-37	47.2
1981	544	-69	41.0
1982	577	-33	42.3
1983	531	-46	38.2
1984	497	-34	36.9
1985	535	38	36.9
1986	499	-36	33.7
1987	568	69	37.9
1988	487	-81	32.3
1989	538	51	35.8
1990	499	-39	33.2
1991	469	-30	31.7
1992	460	-09	29.9
1993	431	-29	26.9
1994	447	16	27.8
1995	485	38	28.8
1996	481	-4	28.1



**Table 2. New Mexico Motor Vehicle Crashes and Injuries, 1983-1996**

Year	Total Crashes	Fatal Crashes	Injury Crashes	Property damage	Crash Deaths	Crash Injuries
1983	48,362	467	15,174	32,721	531	23,442
1984	49,962	426	15,660	32,879	497	24,040
1985	50,606	453	16,327	33,826	535	24,893
1986	52,726	436	16,189	36,101	499	24,793
1987	55,060	493	16,965	37,602	568	26,144
1988	50,872	433	16,800	33,639	487	26,369
1989	49,389	469	16,076	32,844	538	24,960
1990	49,779	440	15,966	33,373	499	24,904
1991	47,218	422	15,937	30,859	469	25,019
1992	50,227	398	17,219	32,610	460	27,195
1993	48,729	386	17,828	30,515	431	28,032
1994	50,275	388	18,949	30,938	447	29,910
1995	52,377	425	19,757	32,195	485	31,041
1996	52,166	412	19,707	32,053	481	31,352

**Table 3a. Traffic Crash Trends, 1989-1996  
Fatal Crashes, Fatalities, and Injuries**

Year	100 MVM	Fatal Crashes		Fatalities		Injuries	
		Number	Rate	Number	Rate	Number	Rate
1989	175.86	469	2.67	538	3.06	24,962	141.94
1990	185.28	440	2.37	499	2.69	24,904	134.41
1991	190.17	442	2.32	469	2.47	24,619	129.46
1992	200.15	398	1.99	460	2.30	27,195	135.87
1993	207.91	386	1.86	431	2.07	28,032	134.83
1994	222.62	388	1.74	447	2.01	29,910	134.35
1995	228.17	425	1.86	485	2.13	31,041	136.04
1996	232.51	412	1.77	481	2.07	31,352	134.72

**Table 3b. Traffic Crash Trends, 1989-1996  
Alcohol-Related Crashes**

Year	100 MVM	Fatal Crashes		Fatalities		Injuries	
		Number	Rate	Number	Rate	Number	Rate
1989	175.86	255	1.45	296	1.68	3,419	19.44
1990	185.28	262	1.41	304	1.64	4,120	22.24
1991	190.17	236	1.24	261	1.37	4,181	21.99
1992	200.15	233	1.16	274	1.37	4,458	22.27
1993	207.91	220	1.06	249	1.20	4,454	21.42
1994	222.62	201	0.90	228	1.02	4,466	20.06
1995	228.17	202	0.89	231	1.01	4,326	18.96
1996	232.51	204	.88	235	1.01	4,132	17.77

**Table 3c. Traffic Crash Trends, 1989-1996  
All Crashes and Injury Crashes**

Year	All Crashes		Injury Crashes	
	Number	Rate	Number	Rate
1989	49,389	280.84	16,076	91.4
1990	49,779	268.67	15,966	86.2
1991	47,218	248.29	15,937	83.8
1992	50,227	250.95	17,219	86.0
1993	48,729	234.38	17,828	85.7
1994	50,275	225.83	18,849	84.7
1995	52,377	229.55	19,757	86.6
1996	52,166	224.36	19,701	84.73

**Table 3d. Traffic Crash Trends, 1989-1996  
Non-Alcohol Fatal Crashes**

Year	Fatal Crashes		Fatalities	
	Number	Rate	Number	Rate
1989	214	1.22	242	1.3761
1990	178	0.96	195	1.0525
1991	206	1.08	208	1.0938
1992	165	0.82	186	0.9293
1993	166	0.80	182	0.8754
1994	187	0.84	219	0.9837
1995	223	0.98	254	1.1132
1996	208	.89	246	1.0600

## **PROBLEM IDENTIFICATION PROCESS**

**Procedures Used:** The procedures used to identify New Mexico's traffic safety problems and to set performance goals included: 1.) analysis of crash and other relevant health and traffic safety data; 2.) review and assessment of the ability and willingness of state and local entities, especially law enforcement, to implement the strategies necessary to obtain the goals, and 3.) the participation of state and local agencies in the development of the strategies. A broad spectrum of traffic safety agencies and advocates were involved in the review of the relevant data, especially the effectiveness of current programs. Using the Partners for Progress "Impaired Driving Guide for Action", the DWI Interagency Work Group and the Governor's Cabinet Council on DWI Reduction were asked to assess New Mexico's strengths and gaps in the area of impaired driving, and develop action steps in this arena.

Other groups that reviewed the relevant data and current resources and gaps included:

The NM Law Enforcement Committee  
UNM Pedestrian Safety Committee  
NM SAFE KIDS Coalition  
The Safety Management System Advisory Group  
Traffic Safety Advisory Committee  
Injury Surveillance Alliance  
Underage Drinking Advisory Committee  
Safer New Mexico Now  
EMS data standards group  
DWI Process and Data Standards Committee  
Alcohol Issues Consortium  
Child Fatality Review Team  
DOH Office of Epidemiology  
DOH EMS and Injury Prevention and Control Bureau  
UNM Emergency Medicine Department  
UNM Division of Government Research  
UNM Institute of Public Law

The members of these entities were asked to assist in setting the performance goals and the direction of the FY 98 projects, as well as overall traffic safety priorities and strategies for New Mexico.

**Analyses Performed.** To determine the causes of New Mexico's high traffic injury and death rate, crash data and other relevant health and economic data are analyzed in terms of: 1) time and day of crash, 2) weather conditions, 3) age, gender, and ethnicity of drivers and victims, 2) road conditions, 3) type and condition of vehicle, 4) degree of driver impairment, 5) unlawful or risk taking behavior, 6) medical/disability outcomes, and 7) costs of motor vehicle crashes. Motor vehicle laws are also examined and traffic safety policies reviewed.

**Factors Identified.** The contributing factors to New Mexico's crashes have been analyzed to determine which are statistically significant. The factor most responsible for New Mexico's severe traffic crash rate is risk-taking behavior. This can be seen from the high percentage of traffic injuries and deaths resulting from failure to wear seatbelts, drinking and driving, excessive speed, and not using motorcycle helmets. In terms of occupant deaths, 71 per cent of those killed in 1996 were not wearing seatbelts. Excessive speed was involved in 36 per cent of fatal crashes. The 20 per cent who drink and drive caused 41 per cent of New Mexico's crash deaths. Although motorcycles comprise only 3½ per cent of the vehicles on the road, they were involved in 5 per cent of all crash deaths. Of those killed, over 90 per cent were not wearing helmets. In short, most traffic injuries and deaths result from risk-taking behavior. Enforcement of traffic laws is hampered by shortfalls in staffing and resources. Nearly two per cent of New Mexico's licensed drivers are arrested each year for DWI. Although high by national standards, this rate is low when compared to the scope of the problem.

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*The factor most responsible for New Mexico's severe traffic crash rate is risk-taking behavior.*

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Social norms, socioeconomic factors, demographic characteristics, and road conditions also affect driving behavior, as indicated below:

- < Social norms influence people's use of alcohol and its availability. In many New Mexico communities, alcohol is easily obtained by adults as well as teenagers. It is sold at liquor stores, drive-up windows, supermarkets, pharmacies, gas stations, convenience stores, and restaurants. The Traffic Safety Bureau conducted an Underage Drinking Assessment, and will use this document as a planning guide for future underage drinking initiatives.
- < Low family incomes and an "accommodating climate" result in a high average vehicle age. Consequently, safety features such as air bags found in newer vehicles are slower to reach New Mexico highways.
- < New Mexico has a population density of only 12.4 people per square mile. As a result, travel per road mile is comparatively low, as are highway improvement dollars. While road problems rarely cause crashes or fatalities, improvements such as broad shoulders, rumble strips, controlled access, guardrails, and frequent resurfacing can make them more forgiving of driver error. Inadequate funding for such improvements leaves New Mexicans with sub-standard roads that are subject to higher crash rates.
- < In terms of geography and population size, New Mexico is very similar to Utah. Utah, however, has a much lower crash rate. The primary difference is in the degree of high risk behavior. In New Mexico, this is the primary cause of traffic deaths and injuries.

**Groups at Risk.** Motor vehicle crashes are a major cause of injury and death for all age groups, every ethnicity and both sexes. Despite the “egalitarian nature” of this public health problem, some groups have much higher rates than others. In New Mexico, those most at-risk are described below.

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*Young people, especially teenagers, are injured more frequently than older residents.*

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- < Males are injured more than females in nearly every age range and transportation mode. Young adult males die in crashes nearly four times as often as young adult females, while male teenagers die three times more frequently than female teens.
- < Young people, especially teenagers, are injured more frequently than older residents. 14% of all drivers in crashes were young adult drivers although young adults comprised only nine percent of New Mexico’s drivers.
- < While New Mexicans in urban communities are more likely to be involved in a crash, rural residents are more at risk for injury and death. In 1996, 73% of the traffic fatalities were in rural areas. Rural citizens use safety belts at slightly lower rates and drive at higher speeds than their urban counterparts. Crashes involving overturned vehicles and collisions with pedestrians are also more common in rural areas.
- < New Mexico motor vehicle crash mortality rates per capita are extremely high for Native American males, nearly three times higher than for their Hispanic and non Hispanic white counterparts. Alcohol is a major factor among Native American and Hispanic male crash victims.
- < New Mexico children and teenagers have lower seatbelt use rates than adult drivers. Observational surveys in four New Mexico communities reveal that the average use rate for adults is 87%, compared to 55% for children under 12.

## **NEW INITIATIVES FOR FY 98**

This extensive review of New Mexico’s traffic safety issues resulted in several major areas of program attention. New Mexico has taken a high visibility enforcement approach with Operation DWI, Operation Buckle Down, and “Know Your Speed” campaigns. These programs address statewide problems identified in crash data as well as support local enforcement’s willingness and ability to conduct traffic safety initiatives. Impaired driving will remain as a major focus for efforts and resources. Occupant protection will continue to strive for increases in seatbelt use rate, while also bringing more resources to the issue of child restraint use. Speed will be monitored for its impact, and resources will be directed as available. The newest area of concern is overall traffic enforcement under the issue of “road rage” or aggressive driving. The “Safe Streets ‘97” project initiated by the City of Albuquerque is being seen as a potential model for traffic enforcement throughout New Mexico, and a number of pilot projects are planned.

A new initiative is a planned traffic records assessment, which will be used to develop a traffic records improvement plan incorporating a traffic safety data management plan. Other important initiatives will address either administrative improvements needed or capacity-building efforts, such as development of a statewide EMS run report system, and continuation of the CODES data linkage activities. Two other areas of increased attention will involve initiatives to increase and expand partnerships with the judiciary, and continued efforts in underage drinking reduction.

### **Strategic Directions**

Several strategic directions will be used to attain the established goals as follows:

- < **Spread the data** - Improve and enhance the use of traffic-related data to enable communities and traffic safety advocates to obtain and use information on traffic crashes to plan, implement, and promote effective traffic safety programs.
- < **Spread successful programs** - Increase the exchange of information about effective highway safety programs, activities, resources, strategies and policies.
- < **Spread the word** - Increase marketing efforts and media advocacy to develop and implement effective public information initiatives.
- < **Spread partnerships** - Improve and expand partnerships at the local, state, and national levels.

### **Data and Information Sources**

The information and data described in the 1998 Highway Safety Performance Plan were obtained from a variety of agencies, including the Health Policy Commission, HSD Income Support Division, and the Centers for Disease Control/Center for Injury Prevention. The majority of the data, however, were obtained from the following five sources:

1. **New Mexico Crash Data System** - a comprehensive crash data repository dating back to 1978. It incorporates all NAG and most CADRE-required elements. Data are derived from police reports submitted on the Uniform Accident Reporting form used by law enforcement agencies in New Mexico.
2. **CODES** - a data linkage system housed at the Division of Epidemiology, Department of Health. It links together data from the state trauma registry, vital records, OMI, hospital emergency rooms, inpatient discharge records, Albuquerque ambulance service, and Medicaid.

3. **Motor Vehicle Data Base** - a comprehensive driver data base from the Motor Vehicle Division of New Mexico 's Taxation and Revenue Department. It includes DWI offenses and case outcomes.
4. **Division of Government Research** - using data analysis and data linkage techniques, DGR combines crash records, highway tabulations, driver records, geographic information, census data and CODES data to produce reports and provide information upon request.
5. **New Mexico State Highway and Transportation Department** - highway data. It provides data on highway usage, vehicle miles traveled, and speed monitoring.

### **Measurements**

Performance goals will be measured using quantitative data from police crash records, highway department traffic volume and speed monitoring data and other relevant traffic safety, census and health related data bases, as well as observational surveys of occupant restraint usage. Administrative goals will be assessed through process measures, including the percentage of subgrantees trained in program management, the implementation rate of subgrantees, the number and quality of site visits, and the percentage of monitoring tasks completed. Capacity-building goals will be measured by tracking progress toward system development, improvement, and/or expansion, such as the development of the EMS run report system, improvements in the court systems, and data linkage efforts.

The performance goals established for the 1998 New Mexico Highway Safety Performance Plan are the result of the above described process, and represent an inclusive and thoughtful planning process.

# 1998 New Mexico Highway Safety Goals

## Overall Performance Goals

Continuously reduce traffic-related fatalities and injuries by developing and supporting a comprehensive, multiple strategy approach that includes prevention, education, screening and treatment, regulation, legislation, enforcement and deterrence initiatives.

Reduce New Mexico's traffic fatality rate from 28.1 per 100,000 population in 1996 to 26 in 1998; to 24 in 2000; and 22 in 2005.

Reduce New Mexico's traffic fatal crash rate from 1.77 in 1996 per 100 million vehicle miles traveled to 1.70 in 1998; 1.68 in 2000; and 1.66 in 2005.

## Program Performance Goals

### Impaired Driving

- a. Reduce alcohol-involved traffic fatalities from 51 per cent of total traffic fatalities (1996) to 47 per cent in 1998; 45 per cent in 2000; and 42 per cent in 2005.
- b. Reduce alcohol-involved fatal crashes from 50 per cent of fatal crashes (1996) to 47 per cent in 1998; 45 per cent in 2000; and 42 per cent in 2005.
- c. Reduce the percentage of alcohol-involved fatal crashes among young adults (20-24) from 61 per cent (1996) to 58 per cent in 1998; 56 per cent in 2000; and 54 per cent in 2005.

### Occupant Protection

- a. Increase the front seat occupant seatbelt use rate to 88 per cent or higher in 1998; 90 per cent in 2000; and 92 per cent in 2005.
- b. Increase the use of occupant restraints by children under 12 from 55 per cent (1995) to 75 per cent in 1998.

### Speed

Achieve 85% compliance with the 75 mile per hour posted speed limits on interstates.

## **Pedestrian Safety**

Reduce the pedestrian fatality rate from 3.6 per 100,000 (1996) to 3.4 in 1998; 3.2 in 2000; and 3.0 in 2005.

## **Youth Alcohol**

Reduce the percentage of adolescents (15-20) involved in alcohol-related fatal crashes from 49 per cent (1996) to 48 per cent in 1998; 46 per cent in 2000; and 44 per cent in 2005.

## **Program Planning, Administrative and Capacity Building Goals:**

### **Planning and Administration**

- a. Improve and expand the development, coordination, implementation and evaluation of traffic safety programs at the state and local level.
- b. Improve the quality of traffic safety projects through the optimal use of resources and through increased compliance by grantees and Bureau staff with all programmatic and fiscal requirements.

### **Traffic Records**

- a. Increase the use of traffic records by state agencies and communities to plan, manage and evaluate the effectiveness of traffic-related injury prevention activities and programs.
- b. Improve the quality, accuracy, integrity, timeliness, completeness, consistency, accessibility, and “user-friendly” mode of crash report data.
- c. Conduct a traffic records assessment by the end of FY 98.

### **Police Traffic Services**

- a. Train local law enforcement agencies in problem identification and strategic utilization of available resources.
- b. Improve police traffic services in order to increase the public’s perception of the risk of enforcement consequences.
- c. Improve accessibility to traffic safety resources by law enforcement agencies and partners.
- d. Provide coordination and technical assistance to promote the linkage

between traffic enforcement, crime and the reduction of crashes, injuries and fatalities.

### **Emergency Medical Services**

- a. Establish a population-based, computerized, and standardized data system for emergency medical services by the end of 1998.
- b. Link data bases to assess predictors for motor vehicle crash outcomes, comparing rural versus urban incidents for severity scores, medical outcomes, final dispositions, financial costs and mortality at 30, 60 and 90 days.

### **Safe Communities**

Implement Safe Communities in four pilot sites and evaluate the results.

### **Motorcycle Safety**

Increase awareness of and participation in motorcycle training programs.

### **Bicycle Safety**

Collaborate with SAFE KIDS coalitions to promote bicycle helmet use at state and local levels.

### **Roadway Safety and Intermodal management**

- a. Improve and expand coordination between traffic safety programs and highway safety engineers at the local, district, and state levels.
- b. Increase public awareness of the dangers of traffic crashes involving trains and railroad crossings.

### **Road Users Initiatives**

- a. Provide drivers training programs attendees with the most updated techniques and information on developing and/or maintaining safe driving habits.
- b. Increase the availability of each of the drivers training programs in the rural portions of our state.

**Highway Safety Program Cost Summary  
HS Form 217**

# **NEW MEXICO 1998 HIGHWAY SAFETY PLAN**

New Mexico's Highway Safety Plan presents the state's strategy for reducing traffic-related injuries and deaths in FY 1998 through the year 2005. Critical program areas are identified. These include eight of the nine "National Priority Program Areas" identified by NHTSA and FHWA. Each area is described in terms of its presenting problem, performance goals, and the strategies/projects devised to address them.

# Traffic Records

**Problem:** Questions crucial to the planning, management, and evaluation of traffic safety programs can only be answered with adequate traffic records systems that are accessible and of high quality.

## Overview

New Mexico's traffic records system provides for the routine generation of management information system reports that draw data from eight major sources: statewide uniform crash data, DWI arrest records, driver histories, forensic chemical test results, roadway configuration and traffic volume data, health data systems, public training records, and geographic information systems. This system has served the state well, but there are still significant deficiencies in EMS and emergency department data. In addition, more work is needed in the area of data linkage, as well as in making the information accessible and available in a user friendly mode.

Training is needed by community DWI groups in order for them to be able to access the data, and apply it to evaluate their traffic safety programs. For four years, communities have been asked to develop comprehensive DWI prevention and reduction plans and activities. Increased emphasis needs to be placed on assessing current programs, service availability, and gaps in resources. State and local data on enforcement activities and resources needs to be comprehensive and inclusive. With the exception of Operation DWI and Operation Buckle Down, only cursory information exists as to the extent and effectiveness of these programs.

New Mexico has a comprehensive crash data system dating from 1978 -- with less complete data available back to 1972. Crash data incorporates most CADRE-recommended elements and in the case of commercial vehicle crashes, all NGA elements. Data are obtained from a centralized source, which derives its information from the Uniform Accident Reports submitted by New Mexico police. The state captures more information about crashes than about the persons involved. Crash report data are sometimes incomplete, and EMS, emergency department, and rehabilitation data systems are still being developed.

New Mexico, however, possesses a strong data matching capability that can be used for traffic safety analyses. Based on a decentralized model, it utilizes advanced programming techniques to link together administrative data systems. The Division of Government Research at the University of New Mexico oversees much of this activity. Its capabilities include the Box-Jenkins time series, geographic information approaches, forecasting, and creative display techniques.

In 1995, the Department of Health's Injury Epidemiology Center implemented a Crash Outcome Data Evaluation System. Known as the CODES project, this system involves

the matching of different data sets to obtain medical outcome information. This capacity will be expanded and refined, and used for specific analyses of particular traffic safety problem areas. Other studies conducted by this division include tracking clinical records for crash victims, calculating DWI recidivism rates, and evaluating the effectiveness of traffic safety programs. Studies on dangerous intersections and other roadway problems have been conducted by the Department of Civil Engineering at the University of New Mexico.

Data are provided by state agencies to counties to assist in their program planning and evaluation processes, especially in the area of DWI. Increased training and technical assistance are needed to improve their ability to access and use data to design their programs.

### **Current Data Bases**

Current data systems are maintained by various state agencies. These include the following nine systems:

- < **State Police crash report system** -- captures the following information about each occupant: age, sex, vehicle, seat position, occupant protection, injury category (K-A-B-C). In 1996, it began recording identity information for passengers.
- < **Highway Department planning database** - includes traffic volume and speed monitoring equipment data.
- < **Motor Vehicle Division comprehensive driver data base** -- includes centralized DWI arrest and case outcome records. This data base is accessible to local police, courts, and insurers. However, "institutional factors" compromise driver records so that information is often incomplete. Police citations are recorded for drivers only when they result in a conviction that is reported to the state. DWIs are posted at the time of arrest as required by administrative license revocation procedures. Although courts are required by law to report convictions to the state, they often fail to do so. Sentencing policies, management problems, and under staffing are contributing factors. State driver records do not incorporate photographs or fingerprint information, which makes them difficult to use for enforcement, warrant service, or preventing fraudulent license requests. Funding for implementing enhanced licenses was authorized in statute, and beginning in 1997, drivers licenses will incorporate the advanced technology that would improve their effectiveness in traffic safety programs. Moreover, national data systems are not consulted prior to issuing New Mexico drivers licenses. When problems are discovered, licenses must be reclaimed.
- < **EMS run data** -- This system is being totally redone. The new system will utilize the NHTSA recommended data elements incorporated into a statewide reporting format. Reporting will be accomplished through a number of electronic and/or scanning methods, and will be analyzed and disseminated at the state level.

- < **Emergency Department data** -- no statewide system for ED injury data exists. In fact, few emergency departments routinely collect information on injury cases seen in their facilities. Currently five hospitals report emergency department data to the Department of Health. It is hoped that the University Hospital data will be available to the DOH by the end of 1997. The future of this system will be dependent upon DOH commitment of resources.
- < **Trauma Registry** -- has recently been expanded to include most sizeable hospitals, and since 1994, captures all trauma cases involving an overnight hospital admission. Some portions of the state are not included, and the Indian Health Service does not contribute information uniformly.
- < **Hospital Inpatient Discharge Data system (HIDD)** -- as of January 1995, it includes personal identifiers and E-codes, which greatly enhances its value as a source of injury prevention information.
- < **Disability or Rehabilitation data** -- no central repository exists. Effort is being made to establish a surveillance system for inpatient traumatic brain injury patients in New Mexico hospitals. Working in conjunction with the CODES project, the Injury Prevention and Control section of the Department of Health is funding the development and implementation of such a system.
- < **Office of the Medical Investigator** -- operates a complete and detailed data system on the cause of unattended deaths. This includes toxicology analysis results.
- < **Scientific Laboratory Division** -- provides testing of BAC levels for all New Mexico traffic fatalities and training and calibration of breathalyzers used by law enforcement. This effort is vital for planning and evaluation purposes, as well as to make New Mexico eligible for federal 410 monies.

### **1998 Initiatives**

The development of a coordinated, decentralized data system for hospital emergency departments and rehabilitation services was listed as a priority in the 1996 New Mexico Highway Safety Plan. That plan also recommended updating the EMS and Trauma Registry systems to enhance the value of its data for use in developing traffic safety programs. Some progress has been made. Using the CODES concept, a pilot system for emergency department injury data has recently been implemented in five New Mexico emergency departments. This system will be maintained and hopefully expanded by the Department of Health. The Traffic Safety Bureau will focus its resources on the CODES data linkage efforts which have shown to be successful, as well as useful to other agencies in the state.

The Bureau will support the development of a new statewide EMS run report system, detailed in the Emergency Medical Services section of the plan.

Other activities in this area will involve expansion and refinement of the Traffic Safety Bureau web page, which will also include access to the crash data base at the Division of Government Research, UNM. The Bureau plans to increase utilization of electronic data transfer to local government and law enforcement agencies, including localized crash summaries, intersection analyses and maps of high traffic crash areas. The TSB will also increase training efforts to local communities on how to use data to plan, develop, implement and evaluate their traffic safety programs. TSB staff will receive additional training in this area and will work with local agencies to improve and expand their skills and capacities.

TSB, in partnership with Safer New Mexico Now, will institute a process by which local law enforcement agencies receiving grants from TSB will report on all monthly traffic citation activity. This will provide a more comprehensive picture of statewide activity in traffic safety enforcement efforts.

The Traffic Safety Bureau will request from the National Highway Traffic Safety Administration a traffic records assessment. The Bureau has already had an Alcohol assessment as well as a follow-up, an EMS assessment, and a Police Traffic Services Assessment. The timing seems appropriate for a thorough examination of the traffic records systems. From this assessment, a five year traffic records improvement plan will be developed.

## **Goals and Strategies**

### **Goals**

- a. Increase the use of traffic records by state agencies and communities to plan, manage, and evaluate the effectiveness of traffic-related injury prevention activities and programs.
- b. Improve the quality, accuracy, integrity, timeliness, completeness, consistency, accessibility, and “user-friendly” mode of crash report data.
- c. Conduct a traffic records assessment by the end of FY 98.

### **Strategies:**

1. Distribute traffic crash data to communities annually through community specific profiles, as well as the annual crash and DWI booklets.
2. Obtain training for TSB staff in planning, operating, evaluating, and tracking safety programs.

3. Train community safety leaders to use traffic safety information more effectively through the TSB state and local forums.
4. Incorporate the analysis of traffic safety information in program planning, management, and evaluation of traffic injury prevention activities at the state and local level.

## **Projects**

**98-TR-01-01 Traffic Safety Problem Identification and Information Program:** Use advanced data analysis and data merging techniques to identify problem locations and conditions. Disseminate that information in a series of reports targeting traffic safety leaders. Provide critical planning, management, and evaluation to priority traffic safety initiatives.

**98-TR-02-01 (P) Traffic Safety Information Coordination:** Improve traffic safety management information systems in order to increase access by activists to critical financial, traffic safety, evaluation, and programmatic information. Organize the traffic records assessment in order to develop a five year traffic records improvement plan.

**98-TR-03-01 Traffic Safety Information and Training Program:** Assess the informational and training needs of community-based traffic safety programs. Develop and implement training and technical assistance for local and state level traffic safety programs to enable New Mexico to meet its performance goals. Provide ongoing participation by state and local traffic safety advocates in training events.

**98-TR-04-01 Traffic Records Assessment:** Conduct a NHTSA sponsored traffic records assessment by the end of 1998.

## **Related projects**

**98-EM-01-06 Crash Outcome Data Evaluation System Development Program:** Utilize the state's expertise in data linkage and analysis gained in building the CODES to determine predictors for motor vehicle crash outcomes based on rural and urban incidents.

**98-EM-02-06 EMS Data Standardization Project:** Initiate a 3-year project with the EMS Bureau of the Department of Health to develop and implement a statewide uniform EMS run reporting system.

**98-J7-04-03 Operation DWI/Operation Buckle Down Evaluation Program:** Evaluate Operation DWI and Operation Buckle Down to assess their effectiveness and find strategies for improving them.

**98-FRS-01-10 Traffic Safety Almanac Program:** Provide geographically-based safety information to state and community traffic safety program managers to improve their

targeting of scarce resources.

## Impaired Driving

**Problem:** New Mexicans who drive while impaired by alcohol or other drugs produce crash deaths and injuries in disproportionately large numbers.

### Magnitude, costs, and trends

Driving while impaired is a critical social, political, economic and public health problem that affects everyone who lives in or may travel through New Mexico. It is also the leading cause of injury and death for all New Mexicans under the age of 45. Table 4 shows the reported number of alcohol-impaired deaths and injuries for 1980-1996.

**Table 4. New Mexico Impairment-Related Death and Injury, 1980-1996**

Year	Alcohol Related Deaths	Total Traffic Deaths	Percent Alcohol Related	Alcohol Related Injuries	Total Traffic Injuries	Percent Alcohol Related
1980	417	613	66.9	6,006	22,784	26.4
1981	356	544	66.5	6,076	23,050	26.4
1982	365	577	63.3	5,762	23,252	24.8
1983	350	531	65.9	5,448	23,442	23.2
1984	319	497	64.2	4,837	24,041	20.1
1985	299	535	55.9	4,225	24,893	17.0
1986	285	499	57.3	4,296	24,793	17.3
1987	339	568	59.6	3,858	26,144	14.8
1988	289	487	59.3	3,969	26,369	15.1
1989	296	538	57.1	3,419	24,960	13.7
1990	305	499	63.4	4,120	24,904	16.5
1991	261	469	57.8	4,181	25,019	16.7
1992	274	460	59.6	4,458	27,195	16.4
1993	249	431	57.8	4,454	28,032	15.9
1994	228	447	51.8	4,466	29,910	14.9
1995	231	485	50.0	4,326	31,041	13.9
1996	235	481	50.5	4,132	31,352	13.2

During the past 16 years, DWI deaths have decreased by 44 per cent. Because drunk driving fatalities have been so thoroughly investigated, there is reason to believe that the trend is real and that it stems, in part, from the effectiveness of state and local prevention programs. Demography is also a factor in that the percentage of drivers in high-risk age groups has declined as baby boomers matured. This decline has now ceased as their children become teenagers and young adults.

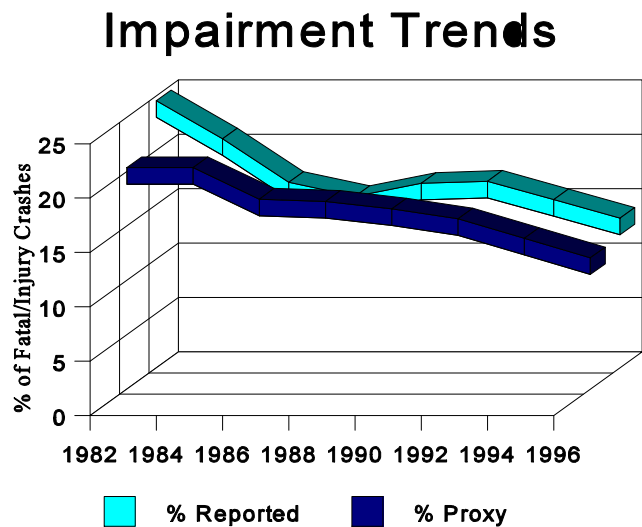
New Mexico's lowest DWI death rates have occurred during the past three years ('94, '95, and '96). As can be seen in Table 4, the percentage of alcohol-related fatalities and injuries has also declined. These decreases corresponded with the introduction of new

DWI programs, tougher DWI laws, increased public awareness due to well-publicized crashes, and increased seatbelt enforcement. The Community DWI Program (supported by a \$75.00 fee imposed on each person convicted of DWI and generating @ \$800,000 annually) began in 1992 and the Local DWI Grant Program (providing @ \$5 million in state General Funds to counties) in 1993. Operation DWI, a statewide checkpoint program, started in December 1993. A .08 per se law for adults and a .02 per se law for juveniles became effective in 1994.

With respect to DWI-related injuries, Table 4 reveals sharp annual variations with a general decreasing trend. It's likely that some of this decrease is real. However, some may be the result of variation in police investigative practices for non-fatal crashes. Table 5 presents this trend in a "proxy" measure that should correlate closely with actual (vs. reported) impaired driving in New Mexico. The numbers shown for "% Reported" indicate the percentage of "reported" alcohol-involved fatal and injury crashes. The numbers shown for "% Proxy" indicate Wednesday-through-Saturday-night (10pm through 4am) fatal and injury crashes, which are reported as a percentage of all fatal and injury crashes.

**Table 5. New Mexico Impairment-Related Crash Reported and Proxy Percentage by Year, 1982-1996**

Year	% Reported	% Proxy
1982	23.8	20.3
1983	22.5	19.6
1984	19.6	17.8
1985	16.5	16.2
1986	16.3	16.7
1987	14.4	15.5
1988	15.0	16.5
1989	13.7	15.8
1990	16.2	15.8
1991	16.4	15.7
1992	16.4	14.7
1993	16.0	12.9
1994	14.7	13.1
1995	13.8	12.2
1996	13.0	11.8



To judge from the proxy measure in Table 5, it appears that the relative proportion of impaired driving crashes dropped markedly in 1984 with the onset of New Mexico's administrative license revocation for DWI. It remained fairly level through 1992, when it dropped again. Reporting, meanwhile, dropped drastically, then climbed back again. The proxy measure corresponds well to the trend observed for fatal crashes, where reporting of alcohol involvement has been consistent and reliable throughout this period. As a result, the proxy measure is probably one of the best indicators of the overall trend in impaired driving.

Although alcohol-involved deaths and injuries have declined since 1982, impaired driving is still a serious problem. Half of all traffic-related fatalities in 1996 were still alcohol-related. As a result, a major focus of New Mexico's Highway Safety Plan is DWI prevention and enforcement.

### **Strategies**

**Public Awareness Campaigns.** During the past ten years, New Mexico has made substantial progress in raising public awareness about DWI. Major newspapers have taken strong editorial stands against DWI and provide extensive coverage of cases involving public officials. Many print the names and addresses of those convicted of DWI. The effectiveness of public awareness campaigns is indicated by a recent study conducted by the Department of Health, which surveyed the number of column inches of newspaper coverage devoted to DWI activities throughout the state. The results suggested that the greater the publicity on DWI, the fewer the alcohol-related deaths.

Unfortunately, the groups at greatest risk for DWI-related injuries are also those least likely to be reached by mass media campaigns, especially print media. The Traffic Safety Bureau needs to assist state and local entities in developing accurate and effective messages to reach these high-risk populations. Pro-active rather than reactive marketing and media campaigns that focus and target effective messages to those who are most likely to drink and drive also needs to be a Bureau priority.

Many of those arrested for DWI are already driving on revoked or suspended licenses. We must develop a more aggressive strategy for reaching these offenders. "Normal" deterrence, enforcement, and correction measures frequently fail to prevent these offenders from repeatedly getting behind the wheel while impaired. Vehicle confiscations or special vehicle identification (license plates) is one avenue that must be pursued to increase the impact on these repeat offenders.

**Community Involvement.** To increase public awareness, teachers, school administrators, religious officials, and other community leaders must be educated and given the support they need to address DWI and develop policies and procedures to combat this problem. For example, School Boards need to develop effective in-school education programs and effective deterrence programs, especially during Homecoming, Prom, and graduation "seasons." Such programs should begin at the elementary grades, and continue (increasing the level of information and sophistication) through High

School. The goal is to reach target populations through the social institutions that impact their lives -- i.e. the community, work place, church, school, and family.

**Law Enforcement.** New Mexico has strong DWI laws and an effective support system for enforcement activities. This includes a testing program for alcohol and drugs, a large pool of officers trained in standard field sobriety testing, DWI squads with mobile breath testing units in larger cities, an established body of law which supports using checkpoints, breath tests, and blood tests in court, and numerous agencies trained and equipped to conduct checkpoints. In December 1993, the Traffic Safety Bureau launched Operation DWI -- a statewide checkpoint program. In 1996, checkpoints were conducted monthly in every State Police district, 29 cities, and the state's five largest counties, covering over 85% of the state's total population. This program has received intense statewide and local publicity, which has contributed to its success. DWI fatality rates have dropped as a result of the statewide checkpoint program. Based on these results, the 1997 Highway Safety Plan included this program as one of its top priorities. In 1998 we will continue monthly DWI enforcement activities throughout the state, and will concentrate on making Checkpoints and Saturation Patrols more effective and efficient. Appropriate steps will be taken to ensure that enforcement agencies are a) making a maximum effort under this program and b) maintaining an adequate DWI enforcement effort at times other than the structured blitzes. In addition, media and public information efforts will be more focused and intensified at specific times throughout the year.

**Table 6. New Mexico DWI Arrests by Year, 1985-1996**

<b>Year</b>	<b>DWI Arrests</b>	<b>Per cent DWI Convictions</b>	<b>Per cent Lacking Disposition</b>	<b>Per cent Requesting Hearings</b>	<b>Per cent Sustained</b>
1985	24,220	69.5	18.0	10.1	64.6
1986	23,054	67.2	13.0	11.6	63.7
1987	21,180	69.4	17.9	12.9	61.2
1988	21,019	70.9	13.8	13.5	57.3
1989	22,202	69.3	11.7	15.8	57.9
1990	24,445	69.3	12.2	18.4	62.2
1991	23,761	69.1	11.2	20.5	59.2
1992	24,354	67.3	16.1	20.9	62.2
1993	24,427	72.8	11.2	19.9	66.8
1994	23,898	66.8	14.2	18.0	57.8
1995	22,094	66.4	16.5	18.2	58.1
1996	20,482	51.4	34.5	20.5	52.9

Table 6 shows that the number of arrests has declined from the 1985 level, which was the first full year of administrative license revocation. While the total number of licensed drivers has increased significantly during this period, and the number of crashes and deaths has declined, we can assume that our prevention efforts (including enforcement as

a deterrent tool) are working. In 1996, 1.7 per cent of New Mexico drivers were arrested for impaired driving. **New Mexico's arrest rate exceeds the national average.** Our conviction rate, however, appears low. This may be due not to dismissals, but rather to the high volume of unreported dispositions and manual record keeping that has been the rule rather than the exception in most courts in the state. Many are probably from cases in which the offender failed to appear in court. Cases dropped by prosecutors may result in no disposition, and many routinely drop refusal cases because they face judges who will not convict such offenders. Twenty per cent of offenders refuse to be tested for BAC. The widespread practice of deferring sentencing is also a factor. Finally, some judges may fail to report convictions in order to keep an offender's record "clean." The lack of available space in detention facilities, coupled with a shortage of alternative sentencing or treatment programs in some jurisdictions may also play a part in case dispositions.

Administrative license revocation, however, has proven to be an effective system. In 1996, 76.6 per cent of arrests resulted in administrative revocation, versus only 51.4 per cent reported as convictions as of 3/17/96. For those who refused the BAC test, administrative revocation was sometimes the only consequence. Unfortunately, the administrative hearing process can be very burdensome for police. More affluent offenders hire attorneys, who generally request a hearing in hope that a procedural flaw will result in a dismissal. Very often, repeated continuances are requested by the attorney. Although the majority of hearings result in "sustaining the action," considerable resources and time delays are involved in the process.

One area which requires further study is the effect increasing DWI penalties has had on the number of cases going to trial rather than "plead" and the impact any increase may have had on the court system. Perhaps a NHTSA-funded Court Assessment would be helpful with this issue.

Another major factor in delaying the hearings is waiting for the results of blood tests from scientific laboratories. The State Legislature has provided additional resources to the Scientific Laboratory Division in order to reduce this problem by raising the lab fee from \$35.00 to \$65.00.

Driving while impaired by drugs is also a problem in New Mexico, as indicated by studies conducted by the Department of Health's Scientific Laboratory. A recent analysis of blood samples from DWI offenders showed that 36 per cent were impaired by drugs other than alcohol. Nearly half (48 per cent) of those with low BACs -- 23 per cent of the total sample -- tested positive for drugs. New Mexico law permits collecting blood samples for the purpose of drug testing in cases where low BACs are detected. However, it does not allow urine testing under Implied Consent provisions. Unfortunately, many police officers, as well as judges and prosecutors, lack the training needed to deal with this issue.

Action has been taken to correct this situation. In 1992, with the help of NHTSA, law enforcement officers in three urban areas were trained as Drug Recognition Experts

(DREs). In 1996, the program includes 20 DREs and 6 instructors in 8 sites around the state. Coordination of this program is being handled by the Albuquerque Police Department, with the Traffic Safety Bureau providing support for training and recertification as needed. This program should be expanded to more communities as well as the Officers of the Motor Transportation Division (“Truck Cops”) in view of the well documented use of certain drugs by a small number of truck drivers.

### **Legislation and Policy Initiatives**

In 1993, the New Mexico Legislature enacted landmark, sweeping DWI law reforms, including a law requiring that all alcohol servers be trained. The legislature also appropriated \$15.1 million to state agencies and local communities for DWI and alcohol abuse prevention. Of this amount, nearly \$7 million was designated for court automation and personnel; \$1.2 million for prosecutors; \$800,000 for public defenders; \$5.5 million for the Local DWI Grant Program; and \$5.1 million for state agencies to expand DWI prevention and education, and other DWI related efforts within state agencies. Although funds were not specifically designated for law enforcement, communities could request monies for enforcement activities through the Local DWI Grant Program.

In 1997, the Legislature passed a bill increasing the amount allocated to this fund to \$10 million. Revenues for the fund are generated by the liquor excise tax. \$7 million will be allocated through formula funding, and \$2 million will be allocated for special projects by the DWI Grant Council, on which the TSB Bureau Chief participates by statutory authority. Also, the 1997 Legislature passed bills requiring that all persons arrested for DWI be fingerprinted, and that all persons convicted of DWI receive screening services for alcoholism or alcohol abuse problems. The DWI crime lab fee was increased from \$35 to \$65 and hopefully will provide the means to reduce the waiting period for the results of laboratory testing.

New Mexico has nearly the full arsenal of DWI laws most experts say will control and reduce DWI. And New Mexico’s DWI rates have been decreasing in the face of increasing population and miles traveled. However, while New Mexicans are impatient for further dramatic decreases, it must be recognized that these changes are only four years old, and the impact of many of the legislative efforts and increased resources may not yet be apparent. Changing the drinking and driving habits of New Mexicans is not a “quick fix”. The problem did not develop in a few years, and will not be solved in a few years. Given our powerful DWI laws, and the substantial funding now dedicated to DWI for community programs, our task must be to improve the implementation and effectiveness of the new laws and programs, and to evaluate for both success and failure. New Mexico has the opportunity to provide valuable lessons and information on the impact of strong legislation coupled with increased resources. All entities involved must now work together to increase the effectiveness and efficiency of DWI laws and programs.

## **Collaborative Efforts**

Increased resources and expanded responsibilities of state and local agencies mandated by the 1993 DWI legislative reforms brought about the imperative for collaborative efforts. The DWI Interagency Work Group, (composed of a number of state agencies including TSB, DOH, DFA/LGD, DPS, AOC and Alcohol & Gaming) has met on a nearly monthly basis since 1993. The work group provides ongoing technical assistance to community/local DWI programs as well as plans and implements systems changes at the state level. This past year the group completed the planning phase and instituted the implementation phase for the establishment of a standardized screening and compliance tracking system. The group is participating in the DWI efforts related to the start up of a statewide court tracking system through the Administrative Office of the Courts. The work group continues to serve as a forum for review of the CDWI and Local DWI plans and applications to ensure efforts and resources are not duplicated. Currently the work group serves as the implementation arm of the Governor's Cabinet Council on DWI Reduction, which is utilizing the Partners in Progress "Impaired Driving Guide for Action" to develop strategic priorities.

One innovative initiative planned for the upcoming year is the development of a prevention matrix defining the various DWI efforts in communities throughout the state, with subsequent development of DWI prevention program standards.

Another ongoing collaborative effort among state agencies involve the DWI Process and Data Standards Committee. This committee focuses on improving processes involving the DWI offender from arrest through sentence compliance. Areas targeted for improvement include electronic access to motor vehicle and court databases by law enforcement and consistent reporting of DWI convictions across databases. With state funding from TSB, the committee is providing education on these process issues to community DWI programs. In 1998, the Department of Health has committed funding for continuation of the committee's efforts.

Leaders in the DWI collaborative efforts will continue to be the Governor's Cabinet Council on DWI Reduction, which will set policy and strategic directions. Secondly, the DWI Interagency Task Force will develop operational strategies to implement these directives, and ensure coordination of all the players in the DWI effort. Areas of increased focus for 1998 will involve the judiciary as full partners, implementation of the standardized DWI screening and compliance tracking package, as well a broad marketing campaign on public health issues and DWI.

## Performance Goals and Strategies

To impact the impaired driving problem in New Mexico, three performance goals have been established. These goals and accompanying strategies are described below.

### Performance Goals

- a. Reduce alcohol-involved traffic fatalities from 51 per cent of total traffic fatalities (1996) to 47 per cent in 1998; 45% in 2000; and to 42% in 2005.
- b. Reduce alcohol-involved fatal crashes from 50 per cent of fatal crashes (1996) to 48 per cent in 1998; 46 percent in 2000; and 44% in 2005.
- c. Reduce the percentage of alcohol-involved fatal crashes among young adults (20-24) from 61 per cent (1996) to 58 per cent in 1998; 56 per cent in 2000; and 54% in 2005.

### Strategies

1. Increase the perception of risk of enforcement consequences for DWI among targeted high risk groups.
2. Utilize community and public information/education strategies to reach targeted groups.
3. Coordinate with other DWI prevention programs at the national, state and local levels in order to avoid confusion, conflict and duplication and increase cooperation and coordination between law enforcement, judicial, correction, treatment, and prevention sectors.
4. Expand information, training and technical assistance to local DWI programs to improve the effectiveness of their prevention, enforcement, screening, treatment, and alternative sentencing programs.
5. Increase the effectiveness of specific deterrence systems to alter the behavior of arrested DWI offenders.
6. Increase the perception of the risk of consequences for underage drinking and DWI among persons less than 21.

### AL Projects

**98-AL-01-02 Traffic Safety Information Program:** Develop and disseminate traffic safety information through a monthly newsletter and traffic safety forums. Ensure maximum communication with and between enforcement, judicial, correction, treatment,

and prevention sectors. Integrate Native American citizens and tribal governments in New Mexico's DWI programs and initiatives.

**98-AL-02-02 (P) Community Programs Coordinator:** Develop and implement strategies to help communities implement effective DWI prevention and reduction strategies.

**98-AL-03-02 (P) Public Information and Education Coordinator:** Develop and implement strategies to increase public awareness of alcohol-related traffic problems.

**98-AL-04-02 (P) Traffic Safety Prevention Programs Management:** Oversee all programs related to DWI prevention and coordinate activities with Operation Buckle Down.

**98-AL-05-02 DRE Development Program:** Conduct a statewide program utilizing NHTSA's approach to increase the apprehension of persons driving while impaired by drugs other than alcohol.

#### **J7 PROJECTS (410 FUNDS)**

**98-J7-02-03 Operation DWI Community Coordination and Visibility Program:** Coordinate police activities and state and community media advocacy and publicity efforts to ensure the effectiveness and visibility of law enforcement efforts during the implementation of Operation DWI.

**98-J7-03-03 Lab Technology Project:** Improve expertise in chemical testing issues and the application of management information at the Scientific Laboratory.

**98-J7-04-03 Operation DWI/Operation Buckle Down Evaluation Program:** Evaluate Operation DWI and Operation Buckle Down to determine their effectiveness and provide direction for program improvement.

**STATE/FHWA FEDERAL FUNDS: Operation DWI Checkpoint Enforcement Program:** Conduct specialized DWI enforcement operations on a monthly basis statewide.

#### **Related Projects**

**98-YA-01-11 Teen Mobilization Program:** Engage teenagers in projects that strengthen their communities' DWI prevention efforts. Support targeted community programs to encourage local police to conduct underage alcohol sales enforcement.

## POLICE TRAFFIC SERVICES

**Problem: Public perception concerning the effectiveness and importance of traffic enforcement affects its potential for reducing traffic-related deaths and injuries.**

Local attitudes, judicial policies, and police involvement result in a diversity of opinions about the importance of traffic enforcement and its legitimacy in New Mexico. These differences stem, in part, from the availability of local resources such as funding, equipment, and training that support enforcement efforts. Jurisdictional divisions are sometimes also a factor. Municipal police, for example, are charged with enforcing municipal laws, while county sheriffs cover the rural areas, and tribal police enforce laws on tribal lands. State police can provide enforcement in both municipal and rural areas, but need cross jurisdictional agreements to provide enforcement on tribal lands. City and county agencies frequently sign cross jurisdictional agreements, but usually within a small geographic area.

Commercial vehicle laws, on the other hand, are enforced by the Motor Transportation Division of the Taxation and Revenue Department. Recently, under a directive from the Governor, the Motor Transportation Division has authorized any MTD inspector encountering a situation with a non-commercial vehicle relative to speeding violations or any other moving violations that could contribute to an accident with a commercial motor vehicle, or could be the cause of a commercial motor vehicle accident, the Inspector will be authorized to act on the situation immediately.

With limited resources available for police traffic services, it is crucial that problems and strategies be prioritized. A major goal of the 1998 Highway Safety Plan is to utilize the resources available for police traffic services to increase awareness of the importance of traffic enforcement in reducing crime and increasing public safety. This involves increasing public perception that consequences will be imposed if laws are broken. Awareness combined with enforcement will help create a more consistent and positive attitude towards traffic enforcement activities. This in turn will help support the development of a comprehensive traffic enforcement program in New Mexico.

In 1990, the State Legislature acted to create the Traffic Safety Education and Enforcement Fund by attaching a \$3 fee to each penalty assessment and traffic conviction under the state Motor Vehicle Code. By law, \$1.50 of that amount can go to the issuing police agency to pay for improvements to its traffic safety education and enforcement activities. To receive the funds, the agency must submit to the Traffic Safety Bureau its plans for how the funds will be used for traffic safety education and enforcement. Once approved, agencies proceed to make the expenditures and are reimbursed by the Traffic Safety Bureau from the Traffic Safety Education and Enforcement fund.

We are now entering the sixth year of the Fund's existence. During the 1997 Legislative Session the Traffic Safety Education and Enforcement Fee was raised to \$5.00. We continue to have problems with determining grant amounts by agency. We receive periodic funds transfers from the Motor Vehicle Division and the Administrative Office of the Courts,

without information about the agencies that generated the citations for which fees were paid. We therefore try to allocate funds based on other sources of data about citation activity, but no strong system for this purpose exists to provide this data on a uniform basis statewide.

Projects awarded from this fund include the overall coordination as well as public information and education activities promoting state traffic safety programs, assessment of specific law enforcement agencies throughout the state, training on the use of breathalyzers and standard field sobriety tests, sobriety checkpoint equipment, the high school seatbelt campaign known as "Buckle Your Bod", and printing of traffic safety calendars for use by law enforcement agencies and partners in traffic safety.

A total of 58 law enforcement agencies throughout the state use their portion of the funding, administered by the Traffic Safety Bureau, for traffic safety activities such as speed DWI, and/or OP enforcement, development of traffic safety public information and education materials for use in special community events or for officers to use during presentations at school or other youth-related activities, and the purchase of equipment for use in traffic enforcement.

In partnership with the Albuquerque Police Department, the Traffic Safety Bureau utilized a combination of funding sources to help support APD's "Safe Streets '97" project. This project focused on highly visible traffic enforcement targeting the urban interstates as well as the problem arteries in the city. High traffic problem and high crime areas were correlated for focus and follow through efforts. In the first four months of this project, over 45,000 citations were issued, and traffic related fatalities were cut in half as compared to the same time period in 1996. Other communities are interested in replicating this project. Resources are being sought to continue and expand if possible this effort.

### **Needs**

Attitudes held by the public and law enforcement need to be altered to ensure that perception of enforcement is high and the value of traffic enforcement is realized. Many believe that traffic enforcement does not impact crime reduction. As a result, resources may be targeted at reducing violent crimes and drug-related offenses. To increase public safety, it is imperative that efforts be made to combine crime reduction and traffic enforcement initiatives. To accomplish this goal, the following needs must be met:

- < Information and awareness campaigns need to stress the link between traffic enforcement, crime, and injury reduction and should target public entities responsible for resource allocation.
- < Officers need to be familiar with the procedures required for the detection and apprehension of criminals encountered during routine traffic stops. This entails providing law enforcement agencies with the technical assistance and resources necessary to train and motivate officers.
- < Resources should target problem areas as identified through the analysis of data

such as that provided in Table 7. The latter lists the number of traffic convictions per 1,000 licensed drivers in 1995 and 1996.

**Table 7. New Mexico Traffic Conviction Rates per 1,000 Licensed Drivers**

Area	Speeding		DWI		Occupant Prot.	
	<u>1995</u>	<u>1996</u>	<u>1995</u>	<u>1996</u>	<u>1995</u>	<u>1996</u>
State	91	86	10	8	22	25
Highest County	525	398	31	23	59	32
Lowest County	33	37	1	0	11	4

To identify rural problem areas, New Mexico uses a process in which highway segments are identified according to character and traffic volume. Crashes are aggregated for each segment. The segments are then ranked according to the number of DWI related, speed-related and total crashes per 100 million vehicle miles traveled. Segments are identified as problems if their rates are more than two standard deviations above the mean for all segments. Table 8 provides information on New Mexico's rural problem segments.

**Table 8. New Mexico Rural Problem Segments**

Road System	Number of Problem Segments	Highest Fatal./Injury Rate	System Fatal./Injury Rate	Per cent of System Fat./Inj. Crashes	Per cent of System Miles	Per cent of System VMT
Rural Interstate	14	320	27	17	3	2
Rur. Non-Interstate	88	970	40	25	8	6
Total Rural	102	970	92	21	8	6

A large concentration of fatal and injury crashes on a small proportion of roads indicates a need to focus resources on those roads. Since 73% per cent of traffic fatalities in 1996 occurred on rural roads, traffic enforcement efforts also need to target these problem segments.

## **Goals and Strategies**

To help resolve problems pertaining to police traffic services, this plan identifies four capacity-building goals, nine strategies, and eight projects, which are described below.

### **Goals**

- a. Train local law enforcement agencies in problem identification and strategic utilization of available resources.
- b. Improve police traffic services in order to increase the public's perception of the risk of enforcement consequences.
- c. Improve accessibility to traffic safety resources by law enforcement agencies and partners.
- d. Provide coordination and technical assistance to promote the linkage between traffic enforcement, crime, and the reduction of crashes, injuries, and fatalities.

### **Strategies**

1. Identify strategies to address problems identified in the Police Traffic Services Assessment.
2. Improve the coordination between law enforcement agencies and potential partners.
3. Increase access to and exchange of information among all law enforcement agencies.
4. Promote increased interest in traffic safety.
5. Define and illustrate the importance of traffic enforcement in reducing death, injury, and crime.
6. Utilize selective traffic enforcement efforts to promote compliance with traffic laws relating to occupant protection, DWI, and speed such as the Albuquerque "Safe Streets" project.
7. Conduct public information and education campaigns to increase the public's awareness of the penalties and consequences resulting from unsafe driving.
8. Report on the outcome of enforcement efforts at the community level to inform local drivers about the impact of statewide and local operations
9. Improve the involvement of existing judicial and enforcement systems to increase the public's perception that laws are enforced and penalties imposed.

## Projects

**98-PT-01-04 (P) Traffic Services Promotion Program:** Coordinate a statewide program of development and quality assurance for police traffic services.

**98-PT-02-04 State Police STEP:** Focus enforcement on problem highway segments, extend Operation Buckle Down and Operation DWI to rural areas, and develop the technical skills of state police managers to increase the visibility of traffic enforcement efforts.

**98-PT-03-04 Ruidoso Regional STEP:** Initiate a regional approach to high-visibility traffic enforcement in the Ruidoso area as a way to reduce traffic problems.

**98-PT-04-04 Fleet Automation:** Promote and develop a plan for implementation of Fleet Automation to include pre-testing and updating of the software developed by ATR, pilot testing, and cooperation/acceptance of its use by State and local enforcement agencies.

**98-TR-05-04 Enforcement Training and Information:** Promote traffic safety activities and provide traffic safety information to all involved in traffic enforcement.

**98-PT-06-04 PTS Resource Repository:** Create a central repository on traffic safety resources available to law enforcement agencies, including funding, equipment, training, materials, information, etc.

**98-PT-08-04 Citation Tracking Evaluation:** Assess citation tracking systems in existence, identify problems, and provide recommendations for implementation of a statewide citation tracking system.

**98-PT-09-04 PTS Quality Enhancement:** Advocate and coordinate the implementation of the PTS Assessment recommendations at the State and community levels.

**98-PT-10-04 Farmington Regional Training Center Project:** Develop capacity in the northwest region of the state to provide police traffic services training.

## Related Projects

**State designated/self-sufficient revenue--Traffic Safety Education and Enforcement grants** -- total approximately 60 per year.

**FHWA funded Speed Enforcement and Education Campaign:** Provide technical assistance and materials to assist agencies in launching high visibility enforcement efforts targeted at speeding.

**STATE FUNDED(98-PT-07-04) - Operation Safe Streets projects** - using targeted, saturated traffic enforcement to reduce traffic related deaths and injuries and to reduce crime.

**STATE/FHWA FUNDED - Operation DWI Checkpoint Enforcement Program:** Conduct special DWI enforcement operations statewide.

**98-0P-02-07 Operation Buckle Down Enforcement Program:** Provide mini grants to agencies to increase their ability to enforce occupant protection laws as part of Operation Buckle Down.

**Private funding/403 funding - “Enforcing the law for children’s safety”:** a high visibility enforcement project targeting enforcement of the child restraint law combined with increased media attention to child restraint issues.

**98-AL-05-02 DRE Development Program:** Conduct a statewide enforcement effort targeting persons driving while impaired by drugs other than alcohol, following NHTSA's DEC approach.

**98-SP-01-32 Speed Control Program:** Coordinate statewide speed control activities; encourage compliance with speed limits with public information and education and through speed enforcement activities.

# SPEED

**Problem:** Speeding is one of the three major contributing factors in fatalities and injuries resulting from traffic crashes. Speeding accounts for approximately 25% of all fatal crashes in NM.

## Historical Overview

Prior to 1974, speed limits on the rural Interstate highways in New Mexico were generally 70 mph, and many other rural highways had limits of 65 mph during the day and 55 mph at night. With the Arab oil embargo of 1974 and the resulting energy shortage, Congress enacted the National Maximum Speed Limit (NMSL) of 55 mph. Compliance with the NMSL by the states was assured by a provision that denied Federal highway funding to states that did not comply. Like other western states, New Mexico complained but changed the speed limit signs. Nationally, the number of traffic fatalities dropped sharply after the implementation of the NMSL.

In 1987, the NMSL was changed to allow speed limits of 65 mph on rural Interstate highways. New Mexico was the first state in the nation to adopt the higher speed limit. The speed limit was changed in April, and during the late spring and early summer of 1987 there was a 50 percent increase in traffic fatalities on New Mexico's rural Interstate highways. Further analysis showed that almost all of the increase in fatalities was in overturning crashes in older pickups and vans. After the end of the summer, fatalities on the rural Interstate dropped back to a level about ten percent above the number prior to the 65 mph speed limit. It appears that there were vehicles that were not safe at the higher speeds, and perhaps some drivers who did not adapt well to the change,

In the fall of 1995, Congress passed the National Highway System Designation Act, which included a provision to repeal the NMSL as of December 8, 1995. The New Mexico State Highway and Transportation Department had begun engineering studies to determine appropriate speed limits in the fall of 1995. The criteria included the design speed of the roadway, the condition for the pavement, traffic congestion and existing travel speeds. The New Mexico Legislature amended the speed limit law during the 1996 session to set the maximum permissible speed at 75 mph. The new speed limit law was effective on May 15, 1996, and the speed limits began to change.

For most of the rural Interstate, the new speed limit was 75 mph. Many other rural arterial routes had speed limits set at 65 mph and some were set at 60 mph. One section of the rural Interstate and one section of rural arterial now have 70 mph speed limits. The new speed limits were posted first on the Interstate and then on the rural arterials. The process of changing the signs was time consuming, as there are a great many signs. The signs on the rural Interstate were changed in a matter of days, but speed limits on other roads took somewhat longer to change.

The State Highway and Transportation Department supported the change in speed laws and assumed its responsibilities by doing everything in its power to safeguard the public through careful analysis of changes to speed limits and provided State resources for the implementation of a speed program within the Traffic Safety Bureau. The Bureau worked closely with partners to develop a statewide speed campaign known as “KNOW YOUR SPEED” which focused on informing and educating the public of the varying speeds, and “arming” law enforcement with equipment, training, and overtime enforcement funding.

### **1998 Initiatives and Needs**

Since funding is limited and continuation of funding is unknown, the Speed program will focus on providing long-term resources for speed enforcement, public information and education to change the perception that violating a speed law is an “acceptable” minor violation of the law. Traffic safety projects will include Speed activities when feasible, and coordination of existing resources and activities must continue. Below is a listing of some of the needs which must be met:

A public information and education campaign to encourage the traveling public to ‘voluntarily’ comply with the posted speed limits, be aware that ‘speed limits vary’, and the consequences of violating speed laws.

Continuous training for law enforcement on the proper use of speed enforcement equipment, and educating judges and prosecutors about this equipment.

Training for engineers on how to set proper speed limits and allow for a process by which the need for speed limit changes are addressed in a timely manner by using available data or other resources.

Fund programs for controlling and enforcement of speed on all public roads; maintain visibility to increase perception of risk of enforcement.

Funding for the purchase, replacement or maintenance of speed equipment, including the purchase of state-of-the art equipment for enforcing limits.

Changes in legislation which would allow for mailing citations to traffic offenders or owner of vehicles photographed defying traffic laws.

Collect and analyze data for problem identification and evaluation of program so as to continuously improve program effectiveness.

Collect information on citation tracking for use in evaluation of program activities and to target resources for increasing conviction rates.

## Goals and Strategies

### Goals:

Achieve 85% compliance with the 75 mile per hour posted speed limit on the interstates.

### Strategies:

1. Provide training and technical assistance to enforcement agencies and others in continuing a comprehensive statewide speed control plan by those involved with traffic enforcement and integrate speed control as part of enforcement and engineering programs.
2. Provide public information and education materials on the scope & severity of the problem.
3. Coordinate statewide speed activities and resources in order to maximize effectiveness of existing programs; encourage use of local traffic safety education and enforcement funds for speed enforcement.
4. Conduct an ongoing speed impact study, including monitoring the 85th percentile speed on the interstates (the speed that 15% of the vehicles are exceeding).

### Projects:

**98-SP-01-32 Speed Control Program (state-funded):** Coordinate statewide speed control activities; encourage compliance with speed limits with public information and education and through speed enforcement activities.

### Related Projects

**98-PT-01-04 Traffic Services Promotion Program:** Coordinate a statewide program of development and quality assurance for police traffic services.

**98-PT-02-04 State Police STEP:** Focus enforcement on problem highway segments, extend Operation Buckle Down and Operation DWI to rural areas, and develop the technical skills of state police managers to increase the visibility of traffic enforcement efforts.

**98-PT-03-04 Ruidoso Regional STEP:** Initiate a regional approach to high-visibility traffic enforcement in the Ruidoso area as a way to reduce traffic problems.

**98-PT-04-04 Fleet Automation:** promote and develop a plan for implementation of Fleet Automation to include pre-testing and updating of the software developed by ATR, pilot testing, and cooperation/acceptance of its use by State and local enforcement agencies.

**98-TR-05-04 Enforcement Training and Information** - promote traffic safety activities and provide traffic safety information to all involved in traffic enforcement.

**98-PT-06-04 PTS Resource Repository:** create a central repository on traffic safety resources available to law enforcement agencies, including funding, equipment, training, materials, information, etc.

**98-PT-07-04 PTS Quality Enhancement:** advocate and coordinate the implementation of the PTS Assessment recommendations at the State and community levels.

**98-PT-08-04 Citation Tracking Evaluation:** assess citation tracking systems in existence, identify problems, and provide recommendations for implementation of a statewide citation tracking system.

# Planning and Administration

**Problem:** The Traffic Safety Bureau must plan and coordinate traffic safety activities among a growing diversity and number of partners.

## Overview

Traffic safety advocates in New Mexico face a formidable challenge in identifying problems, selecting strategies, implementing those strategies, and evaluating their effectiveness. Social change is a difficult task. It involves researching ideas, obtaining data, using accurate management information, mustering resources, and organizing roles and responsibilities across diverse entities. A comprehensive program that involves training, public information, planning, financial management, coordination and communication among “partners” is crucial to the success of the 1998 Highway Safety Plan. Traffic safety programs have multiplied during the past five years. Some of them are administered by the Traffic Safety Bureau, but a majority are coordinated through partnerships with other lead agencies such as Safer New Mexico Now, the Department of Health, Local Government Division (DFA), Department of Public Safety, Regulation and Licensing, Motor Vehicle Division and the Administrative Office of the Courts. Also, local governments and local law enforcement are not longer passive recipients of programs, but instead have been empowered as proactive traffic safety partners.

## 1998 Initiatives

Many new partners have recently become involved in traffic safety issues in response to increased public interest and funding opportunities. These new participants need to be educated about traffic safety issues, including the use of relevant traffic crash data and proven effective strategies. To maximize the effectiveness of these partners, the following needs must be met:

- < Continue to utilize the partnerships with the health community, including but not limited to emergency medical services and injury prevention programs.
- < Improve the skills of traffic safety activists to influence and impact on policy and legislation in a positive manner.
- < Involve the judiciary as full partners in preventing and reducing traffic related deaths and injuries
- < Involve the business community in educational as well as policy related strategies to reduce the impact of traffic related deaths and injuries on their businesses.
- < The media needs to be provided with information that is accurate, meaningful and tied to policy or program efforts.

- < Coordination between substance abuse and DWI prevention programs needs to be expanded.
- < Local programs need expanded information on enforcement, policy and legislative changes, social marketing, media advocacy, community organizing, and other proven effective strategies in addition to educational and public information strategies.
- < Public information programs need to target specific populations and utilize messages and strategies that research shows are effective in changing behavior.
- < Many traffic safety grantees need technical assistance in managing the programmatic and financial aspects of their grants.

### **Goals and Strategies**

#### **Goals:**

- a. Improve and expand the development, coordination, implementation and evaluation of traffic safety programs at the state and local level.
- b. Improve the quality of traffic safety projects through the optimal use of resources and through increased compliance by grantees and Bureau staff with all programmatic and fiscal requirements.

#### **Strategies:**

- 1. Develop and implement traffic safety training, education, and informational programs to increase knowledge of traffic safety issues. Conduct traffic safety forums as well as specialized regional trainings as requested.
- 2. Develop and implement an ongoing system for providing technical assistance and programmatic oversight to grantees and contractors. Improve their skills at project development, implementation, and management. Conduct an annual training for grantees.
- 3. Develop and implement well-documented procedures and processes for compliance with all applicable laws, regulations and management policies. Update TSB grant procedures manual on an annual basis.
- 4. Expand and improve coordinated efforts among state and local traffic safety partners.

**Projects:**

**98-PA-01-05 (P) Financial Management System Coordination:** Coordinate efficient processes for the financial management of grants.

**98-PA-02-05 (P) Quality Assessment Program Management:** Coordinate processes for grant compliance, technical assistance, and documentation of procedures and processes.

# Emergency Medical Services

**Problem:** Comprehensive evaluation of crash injury outcomes and quality improvement within the EMS system are limited by significant gaps and incomplete linkage capability among the statewide EMS-related data systems.

## Magnitude and Trends

Emergency Medical Service providers report more than 45,000 responses to motor vehicle related crashes every year. This is almost 20% of the total EMS responses. Of these, about one percent involve fatal injuries. According to NHTSA's FARS system, 86 percent of New Mexico fatalities died on the day of their crash, a figure comparable to that of other states.

A major obstacle facing New Mexico's EMS system is sheer geography. New Mexico is the fifth largest state in the US and has many areas classified as "frontier" due to their sparse population. Seventy-six percent of crash deaths occur in rural areas, often far from EMS providers, and are served by volunteer responders. Although 911, cellular phone service, and CB radio call monitoring are common and have improved the situation, delays in reporting crashes do occur. Cases arise in which crash victims may lay dead or injured for hours or days before the crash is discovered. This is particularly of concern in mountainous areas where travel volumes are low and off-road crashes are out of view from the highway. Death or further injury from exposure sometimes occurs. Fortunately, such cases are the exception rather than the rule. Most New Mexicans and visitors, and the highways they travel, are well-served by a comprehensive and well organized EMS and Trauma Care System that is pervasive from border to border.

## Historical Overview of New Mexico's EMS System

The excellence of New Mexico's EMS system can be partially attributed to NHTSA's 402 Program, which helped to initiate and/or fund: 1) the Department of Health's EMS coordination program, which later evolved into the EMS Bureau; 2) the EMS Training Academy at the University of New Mexico School of Medicine; 3) the EMS Technician Register at the Academy; 4) 60 ambulances, which were given to 45 EMS service agencies; 5) the Trauma Registry system at the University of New Mexico; and 6) an EMS run reporting system.

Most of these efforts were eventually expanded and incorporated into the statewide EMS program at the Department of Health. The rest were adopted by other state and local agencies. In 1987, legislation was enacted that provided a \$1 vehicle registration fee surcharge to support EMS service providers. This amount totaled approximately \$1.8 million per year and was used for equipment and training. In 1994, this fund was "de-earmarked" for EMS and replaced by a general fund appropriation of almost \$3 million annually, which permitted further improvements. With this increase, the program was expanded to allow for broader use of the funds for operations, local system projects, vehicle purchase assistance, trauma system development and some administrative support. This

latter support is being used to hire a full time systems analyst to assist the development of a comprehensive pre-hospital data system.

New Mexico's EMS system is characterized by state-of-the-art technology. For example, a surcharge on telephone bills has enabled communities to centralize and improve 911 service by displaying caller addresses generated by telephone switching systems. This is called Enhanced or E-911 and currently covers about 90% of the population. In Albuquerque, EMS responders have access to computerized, response routing services, which include in-car display devices for ambulances and paramedics. San Juan County has developed an integrated approach -- considered a model for the state--which consists of city and county EMS, fire departments, police dispatch, and communications. Helicopter rescue and transport services are available through UNM Hospital, San Juan Regional Medical Center and local military bases. All air ambulances must be certified by the EMS Bureau. Finally, New Mexico cellular telephone providers offer \*911 access to emergency services. Problems exist with this system. Cellular operators connecting callers to EMS sometimes dispatch to the wrong counties. Better coordination is needed to ensure that calls are transferred to the appropriate party.

New Mexico conducted a Traffic Safety Bureau supported, NHTSA conducted State EMS Assessment in September, 1994. Overall the reviewers were impressed with the comprehensive developments and high level of support for EMS in New Mexico. The major areas requiring improvement were identified as: increased support and coordination of the communications system; development of a 5-year EMS Plan; categorization of hospital capacities and implementation of a stronger, better defined Trauma System; and, development of a statewide EMS data system capable of being linked to other data bases. Many of these recommendations have been adopted as management priorities by the EMS Bureau and many have been accomplished over the past three years. A full time communications coordinator position was created and funded.

The Trauma Care system is now under comprehensive regulations including standards for designated centers and mandatory Trauma Registry reporting. The EMS 2000/2005 Plan has been developed and formally adopted. In 1995, New Mexico formally adopted regulations that established statewide trauma care system with defined levels of service. All Level 1, 2 and 3 Trauma Centers, as well as many non-participating hospitals, now contribute data to the State Trauma Registry. The EMS Bureau uploads that data and analyzes it as management information for planning. The Registry criteria for injury inclusion have been expanded to include all injuries requiring hospitalization overnight or longer. Past problems with linkages to crash reports and missing medical outcome data are being corrected through the CODES initiative.

### **EMS Data System Developments - 1998 Initiatives**

The highest priority "deficiency" currently being addressed is the lack of a comprehensive, pre-hospital data system. New Mexico's EMS Run reporting system, which has operated since 1985 is hampered by a lack of data from several major participants and by its rather archaic operation which included hard copy forms, batch processing, data entry into a main

frame computer and static, retrospective quarterly reports. At this time, the EMS Bureau continues to make the form available but has discontinued state level processing until a new system is in place. The “old” system is in direct contrast to the Trauma Registry system which is PC-based, provides immediate information to each user hospital, uploads a subset of data to the System Register and produces pre-programmed and ad hoc reports at all levels. The EMS Bureau is committed to converting to the nationally recognized uniform EMS data set approach that will offer service providers the option of submitting the required data on paper or electronically. Data elements will be based on those required by NHTSA. The effort to plan and implement a new prehospital data system was initiated in late May, 1996 with a meeting of all relevant stakeholders with an expert faculty and technical assistance program being field tested by the EMS Office within NHTSA. Since then, the actual project is being implemented through a statewide task force and involves close collaboration between the Traffic Safety and EMS Bureaus, along with EMS providers, the University of New Mexico, and many others.

In the data system under development, participation by EMS providers will be mandatory and universal. Once established, the state will be able to produce high quality and timely reports that can be used as a management tool at all levels--local, regional, statewide and national. The system will allow both hard copy and electronic transfer of data and will integrate with the Trauma Registry and be linkable to other systems--particularly the Crash Outcome Data Evaluation System (CODES) Project that is actively under development in New Mexico.

Based upon the planning accomplished in the past year, a 3 year project will be developed to implement a statewide uniform EMS run reporting system. The system will be operated by the EMS Bureau of the Department of Health, which has made a commitment for matching operating funds from the Bureau and use of funding from the EMS fund Act.

## CODES Approach

To improve highway safety, New Mexico needs to establish surveillance systems using the analytical structure of NHTSA's Crash Outcome Data Evaluation System. To reduce the number and severity of traffic related injuries, the New Mexico health care system must have access to appropriate data in order to develop, manage, and evaluate that system's ability to provide effective prevention and intervention strategies. To achieve this goal, the Department of Health formed the State Trauma Advisory Committee

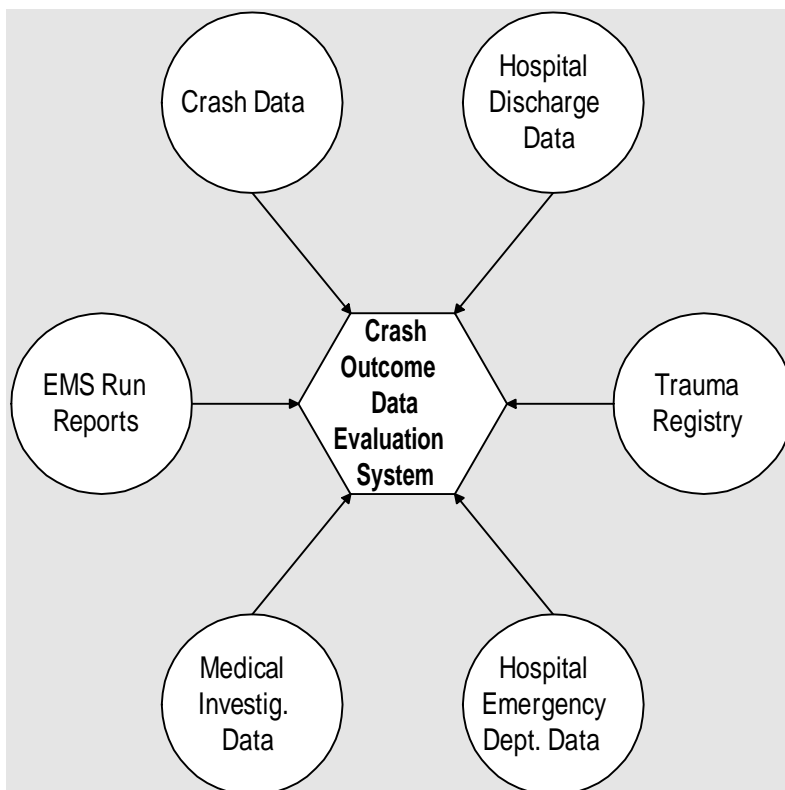


Figure 6.1: New Mexico CODES System Structure

(TAC). TAC and its Data Collection Committee, now a separate entity known as the Injury Surveillance Alliance, have proposed the establishment of a statewide data system that would include information on the nature of the injury, its severity, system demand, cost, and life impact on each person in every motor vehicle crash.

The Injury Surveillance Alliance is composed of diverse partners from public and private agencies, and includes the Emergency Medicine Department of the University of New Mexico, Lovelace Health Care, the Department of Health, Traffic Safety Bureau, Albuquerque Ambulance Services, Fiore Industries, the Health Policy Commission, the Division of Government Research, UNM and the Human Services Department. The Alliance serves as the advisory body for the CODES project, and for injury data linkage efforts.

The Alliance's vision -- based in part on NHTSA's CODES approach -- involves the linking of diverse data sources to answer critical program and resource utilization questions. Fulfilling this vision will be costly, but the price for not doing so is even greater. To accomplish the initial phase of the effort, New Mexico submitted a proposal to NHTSA in 1992. NHTSA was not able to fund it at this time. Since then, however, much of the work

has been completed using 153 diversion funds, the state trauma grant and the Disability Prevention grants from CDC. These efforts included adding E-codes and personal identifiers to hospital inpatient data, establishing statutory authority for mandating the reporting of EMS run data, developing trauma system regulations, expanding the trauma registry, and adding occupant names to crash data systems. As a result, New Mexico can now accomplish much more with the same level of funding than would have been possible at the time.

The long-term goal is to have a comprehensive data base that will contain information on all persons in crashes, including their involvement with the medical system. At present, information on physician visits and routine clinical care is lacking. However, data that currently exists, including outpatient emergency department care, can be collected initially.

The CODES system will now be operated by the Department of Health in partnership with the Traffic Safety Bureau and the Division of Government Research.. The objective is to institutionalize a permanent system from the one-time infusion of funds. Self-sufficiency will be achieved through a model based on that used by the Trauma Registry. Each contributing data system will continue to be operated by its current owners. To address the need for management information and quality assurance, each institution will develop and fund its own data base and data collection system. This is the essence of the CODES project.

### **Accomplishments and 1998 Initiatives**

A statewide system for tracking injury-related visits to the emergency department was initiated under the CODES project. To recruit hospitals, the state offered them the hardware and software they need to track visits and fulfill their own requirements. The intent was to help emergency departments build systems that are consistent statewide in the types of data collected, and to channel this data to the Department of Health for compilation and analysis. Hopefully, the Department of Health will use its own resources and efforts to continue this effort.

Carryover funds were used in 1997 to continue the CODES data linkage efforts of the project. Several data bases have been successfully linked, including OMI, Vital records, State Trauma Registry, Crash data, and Medicaid data. A technical report has been produced. The Department of Health has made a commitment to maintain the project, and the TSB plans to fund a specific data linkage project in FY 98.

Long-term future plans include the collection of rehabilitation data as well as records from physicians and medical clinics. The former will be used to analyze the life impact of crash injuries, while the latter will provide information on less severe injuries. An initial venture regarding inpatient traumatic brain injury services was launched in 1995 with the establishment of the New Mexico Rehabilitation Registry. *A Profile of 1994 Head Injuries in New Mexico* provided a good example of CODES data linkage.

## Goals and Strategies

### Goals:

- a. Establish a population-based, computerized, and standardized data system for emergency medical services by the end of 1998.
- b. Link data bases to assess predictors for motor vehicle crash outcomes, comparing rural versus urban incidents for severity scores, medical outcomes, final disposition, financial costs and mortality at 30, 60, and 90 days.

### Strategies:

1. Serve on the EMS Data Standardization Steering Committee to plan the development of the state EMS run report data system.
2. Use linked data to assist in planning, managing and evaluating traffic safety problems and strategies.
3. Serve on the New Mexico Injury Surveillance Alliance to promote the use of injury data for planning and evaluation of injury prevention programs.
4. Promote the continued development and expansion of the Rehabilitation Registry.

### Projects:

**98-EM-01-06 Crash Outcome Data Evaluation System Development:** . Utilize the state's expertise at data linkage and analysis gained in building the CODES to determine predictors for motor vehicle crash outcomes based on rural and urban incidents.

**98-EM-02-06 EMS Data Standardization Project:** Initiate a 3-year project with the EMS Bureau of the Department of Health to develop and implement a statewide uniform EMS run reporting system.

# Occupant Protection

**Problem:** Low use rates of occupant protection devices by high-risk groups continue to produce high rates of severe traffic-related deaths and injuries among these groups.

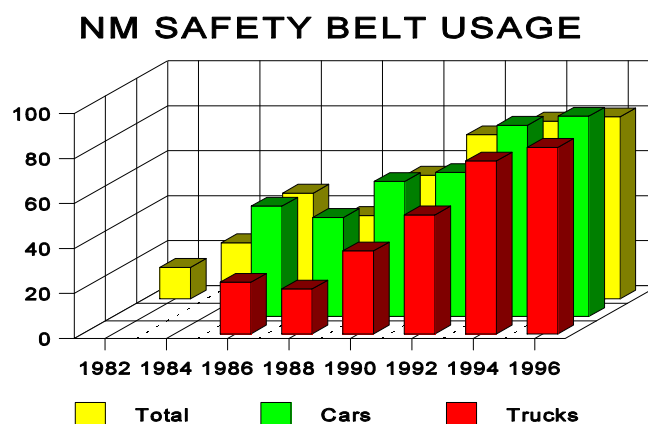
## Magnitude and Trends

In 1996, 70 per cent of deaths of New Mexico motor vehicle occupants involved failure to use occupant protection. Among those under age 13, 68 per cent were not wearing belts or child restraints. National studies have shown that seatbelt use can reduce traffic fatalities by as much as 75%. If 100 percent usage had been achieved, an estimated 125 lives would have been saved, reducing the motor vehicle death toll by 28 per cent.

Despite considerable progress, New Mexico is far from achieving that ambitious goal. Table 9, however, shows a very favorable trend in observed use. Usage rates remain slightly lower for pickup truck occupants than for those in passenger cars, due in part to the exclusion of pickups from safety belt laws between January 1986 and June 1989.

**Table 9. New Mexico Observed Percent Restraint Use, 1982-1996**

Year	Cars	Trucks	Total
1982			14
1983			12
1984			25
1985	29	19	27
1986	49	23	47
1987	46	16	41
1988	44	20	37
1989	65	39	58
1990	60	37	55
1991	70	51	67
1992	64	53	73
1993			75
1994	85	77	79
1995	90	83	86
1996	89	83	87



Starting in July 1989, belt use was required for front seat occupants of all vehicles under 10,000 pounds provided they were originally manufactured with them. Only mail carriers and those with doctor's excuses are eluded. New Mexico's safety belt use act and child protection laws provide for primary enforcement.

The safety belt law has been New Mexico's most effective inducement to use occupant protection. During the period (1986-1989) when pickups were exempt from the law, pickup truck deaths climbed 30 per cent above their pre-law average, while passenger cars rose by just 1 per cent despite growth in travel and population. An estimated 170 would have been

lost if passenger car deaths had risen at the same rate as pickup deaths. After pickups were included in the law, pickup deaths from July 1989 through May 1990 declined 14 percent while passenger car deaths remained the same. During the 1990's, a steady rise in safety belt usage corresponded with a steady decline in fatalities.

The rise in safety belt usage shown in Table 9 stems from steady improvements in the visibility of occupant protection enforcement efforts. By 1996, the primary cause of variation in safety belt usage was degree of enforcement by local police. Of New Mexico's 30 largest cities, 29 participate in Operation Buckle Down.

Public knowledge of the law and vigorous enforcement are the two most crucial ingredients in increasing safety belt usage. Table 10 shows how New Mexicans view the safety belt law, as revealed in motor vehicle field office surveys.

**Table 10. Attitudes About the Safety Belt Law, 1986-1996**

	1994	1995	1996				
Question	%	%	%	%	%	%	%
Personally cited?			10.5				
Friend cited?*	24	25	39.5				
Child restraint citation			12.4				
Always use restraint			71.5				

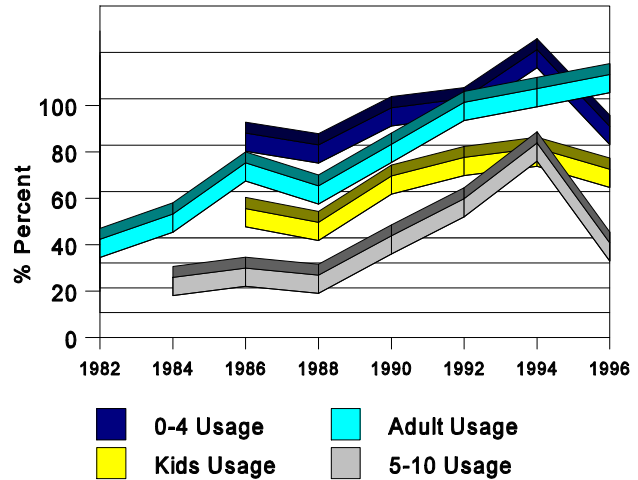
Aside from overall usage, a key problem in occupant protection is the failure of those most at risk for traffic-related injuries to use occupant protection. This includes young adults, teenagers and children. Children are particularly at risk because they are more fragile than adults in crashes. Despite a strong child restraint law that covers children through age 11 in all seat positions, children use seatbelts at a lower rate than adults, and usage for children 5-11 is particularly low (55 per cent, according to data from four communities). Perceived enforcement is low. Only 15 per cent of those surveyed knew someone who had been cited under the child restraint law.

Age-specific measurements from crash data show that persons between the ages of 15-24 have the lowest use rate of any group except children 0-4. Both surveys show teens in pickups to have the lowest usage of any group. They also receive occupant restraint citations at a rate more than twice that for the general population, so inadequate enforcement is not the problem.

**Table 11. Child Restraint Usage in New Mexico, 1982-1996**

Year	0-4	5-10	Adult	Kids
1982			14	
1983			12	
1984			25	
1985	29	19	27	37
1986	49	23	47	38
1987	46	15	41	38
1988	44	20	37	32
1989	64	39	58	56
1990	60	37	55	52
1991	70	51	67	64
1992	64	53	73	60
1993			75	59
1994	85	77	79	64
1995	55.5	49	86	55
1996	52.5	34	87	55

### NM Restraint Usage



### Occupant Protection Strategies

Since 1991, New Mexico's approach to safety belt usage has focused on Operation Buckle Down, an intensive statewide program of safety belt law enforcement involving 50 local agencies. Of these, 56 law enforcement agencies receive funding through mini grants for overtime enforcement. The effort is working well, as demonstrated by a steady increase in safety belt usage. To maintain these high usage rate, the state will continue this program.

New Mexico's overall high rate conceals low use rates among the following sub-populations: youth, children, rural residents, drunk drivers, citizens of non-participant cities, and Native Americans. Public information and education campaigns have been designed to target these groups. For example, *Buckle Your Bod* provides high schools with financial incentives to conduct in-school seatbelt campaigns and enforcement activities. The latter involves the use of police officers, who are stationed at school entrances. The program produces phenomenal rises in safety belt use, which seems to carry over to non-school activities.

The Indian Health Service is also active, particularly on the Navajo Reservation. Several tribes have enacted belt laws and have applied for 70 per cent usage awards. Navajo usage in Window Rock, Arizona -- just across the New Mexico border -- rose from 3 per cent to over 60 per cent in one year after promotion by the Indian Health Service and Navajo Tribe. It should be noted that the state of Arizona had no belt law at the time. Usage in the New Mexico portion of the reservation is lower but shows a comparable trend. At one time the Navajo Nation's overall usage rate exceeded the national goal of 70 per cent. It has since slipped below that level, but usage rates are expected to increase. The Navajo Police Department currently participates in Operation Buckle Down.

With respect to child restraints, child safety seat availability is a major factor, particularly for low income families. Loaner and low cost programs operate in many parts of the state. Some organizations offer child safety seats at wholesale cost to encourage their use. The Traffic Safety Bureau maintains a current list of such programs. In 1996, the Department of Health's Injury Prevention and Control Section implemented a project under the Emergency Medical Assistance program to provide child safety seats to newborns of families eligible for Aid to Families with Dependent Children. Twenty-two hospitals currently participate in this program, which provides every newborn AFDC client with a child seat at birth. This program, which is operated through Safer New Mexico Now, is the only program of its kind in the nation using federal matching funds. In FY 98, the Department of Health will expand its hospital based car seat distribution program to include all families in need of a car seat while resources permit.

The Injury Prevention and Control Section had received a three year CDC grant in 1994 to implement a child safety seat project in three New Mexico communities. To evaluate this project, use rates are collected annually in Santa Fe, Las Vegas, Las Cruces and Shiprock. Use rates averaged 55 per cent in these counties, with over 4,000 observations conducted. Special enforcement efforts will begin in the fall of 1996 in the three pilot communities. Final results of these efforts will be available in the fall of 1997.

Another issue is the debut of airbags in New Mexico. There is tremendous potential for public misunderstanding of the way air bags work, with the primary danger being the perception that belts are not needed in air bag vehicles. Public attitude surveys should examine this issue, which also needs to be addressed by the manufacturers as well as federal and state information programs.

As a result of the air bag issue, New Mexico is one of seven states nationwide that received funding from the National Air Bag Safety Campaign. New Mexico's project is the only one targeting increasing child restraint use. With additional 403 funding from NHTSA, New Mexico is launching Operation Buckle Down - "Enforcing the law for children's safety" to give increased emphasis and resources to child occupant restraint usage. The campaign will focus on high visibility enforcement efforts through June 1998.

An effective complement to occupant protection promotion is New Mexico's self-funded educational program for occupant protection violators. Judges provide offenders with the opportunity to attend a short course on occupant protection, in exchange for having their citations dismissed. Started by Safer New Mexico Now, the program is currently offered in 30 New Mexico cities. Classes are usually conducted by officers and are funded by a \$5 attendance fee. In some, revenues from a slightly higher fee pay for child safety seats for needy children.

To evaluate these programs, New Mexico used a uniform method for measuring urban usage from 1985 through 1992. A new method, based on police agency observations, began in 1993. A second approach involving the use of independent observers was launched later that year. Spot surveys measure child passenger protection. These current survey methods

will be examined to assess the need to improve current methodology. One proposed method is to compare non-use rates with Class A and B injuries through time.

### **Performance Goals and Strategies**

The following performance goals are designed to improve usage rates among at-risk populations while maintaining the state's high overall rates for adults.

#### **Performance Goals:**

- a. Increase the front seat occupant seatbelt use rate to 88 per cent or higher in 1998; 90 per cent in 2000; and 92 per cent in 2005.
- b. Increase the use of occupant restraints by children under 12 from 55 per cent (1996) to 75 per cent by 1998.

#### **Strategies:**

1. Promote the use of occupant protection devices through campaigns designed to maintain the perceived risk of enforcement consequences for nonuse.
2. Promote the use of occupant protection devices among targeted groups of non-users through campaigns designed to increase the perceived risk of enforcement consequences for nonuse. This includes working with the schools to increase seatbelt usage among teenagers, and outreach to other agencies such as pediatricians, and day care centers.
3. Increase public awareness of the importance of occupant restraints for children under 12.
4. Increase public awareness of the benefits and cautions around air bags.
5. Increase high visibility enforcement efforts of the child restraint law.

#### **Projects:**

**98-OP-01-07 Operation Buckle Down Enforcement Program:** Provide grants to agencies to increase their ability to enforce occupant protection laws as part of Operation Buckle Down.

#### **Related Projects**

**98-AL-03-02 Public Information and Education Program Coordination:** Coordinate occupant protection programs with statewide DWI information and educational campaigns.

**98-J7-04-03 Operation DWI/Operation Buckle Down Evaluation Program:** Measure and evaluate Operation DWI and Operation Buckle Down to determine their effectiveness and to provide direction for improvement.

**98-AL-04-02 Traffic Safety Prevention Program Management** - Oversee all programs related to DWI prevention and coordinate activities with Operation Buckle Down.

**Private funding/403 funding - “Enforcing the law for children’s safety** - a high visibility enforcement project targeting enforcement of the child restraint law combined with increased media attention to child restraint issues.

## Motorcycle Safety

**Problem:** Motorcyclists are injured at alarming rates as the result of risky driving, non-compliance with licensing rules, failure to use safety equipment, and poor visibility to other drivers.

### Magnitude of Problem

Motorcycles are over-represented in motor vehicle crashes, a pattern that has prevailed for many years (see Table 12). The number of registered motorcycles, however, has declined since 1983. Crash counts and fatalities have declined proportionately as well.

**Table 12. New Mexico Motorcycle Crashes and Injuries, 1977-1996**

Year	Motorcycle Crashes	Crashes per 1,000 Motorcycles	Motorcyclist deaths	Deaths per 100,000 Motorcycles	Registered Motorcycles
1977	1,543	39.8	28	72.3	38,750
1978	1,683	39.5	49	115.1	42,557
1979	1,864	39.8	50	106.8	46,803
1980	1,828	36.1	66	130.5	50,576
1981	2,053	38.9	46	87.1	52,810
1982	1,989	33.9	47	80.2	58,587
1983	2,103	36.1	61	104.8	58,217
1984	1,979	35.2	50	89.1	56,148
1985	2,006	38.3	48	91.7	52,336
1986	1,815	43.1	50	118.6	42,152
1987	1,525	36.1	36	85.2	42,230
1988	1,385	39.1	40	113.0	35,400
1989	1,342	37.9	35	90.8	38,528
1990	1,339	43.6	48	156.3	30,696
1991	1,290	40.3	39	122.0	31,975
1992	1,284	42.1	33	122.0	30,466
1993	1,273	40.8	31	99.3	31,217
1994	1,179	37.8	23	73.8	31,158
1995	967	31.0	33	105.9	31,146
1996	863	27.0	27	86.3	31,280

The alarming rise in death rate shown for 1978 reflects the 1977 repeal of the state's motorcycle helmet law. New Mexico's EMS providers unsuccessfully tried to reinstate a helmet law in 1991 and again in 1992. The current helmet law, which is not strongly enforced, applies to minors only. The motorcycle death rate per 100,000 vehicles is more than twice the rate for automobiles, which has been estimated at 31.1.

A decrease in the number of motorcycle crashes during the 1980's is largely due to a decline in the popularity of motorcycles, particularly small ones. Change in demography may also be a factor. Between 1984-1991, crashes involving motorcyclists declined 58 per cent, while

the number of drivers in that age group dropped 8 percent. Crashes for those between the ages of 20-29 dropped 59 per cent, while driver population decreased 13 per cent.

Failure to wear helmets and alcohol impairment are also factors in New Mexico's high motorcycle crash rate. Of the 27 motorcyclists killed in 1996, 93 per cent were not wearing helmets and 44 per cent were alcohol-impaired. No sober motorcyclists were killed by impaired drivers of other vehicles. During the past few years, two separate campaigns were conducted to encourage motorcyclists to wear helmets. Neither had much success. Lack of skills and poor visibility to other drivers are also contributing factors.

### **Motorcycle Training Requirements**

In order to drive a motorcycle in New Mexico, potential drivers are required to pass written and driving tests. To help drivers develop skills, the Traffic Safety Bureau operates an effective motorcycle training program, which is funded by a \$2 motorcycle registration fee plus a \$75 tuition assessed each student. Approximately 1,300 successfully complete that training each year. However, compared to a rider population of 31,000, these figures are relatively small. One reason for low participation is that many new motorcyclists are unaware of the program. Some state they don't need training, while others claim they lack the time and money to attend. Although some motorcycle dealers sponsor attendance for their customers, course promotion is generally "hit-or-miss", especially outside Albuquerque, where classes are intermittent. Motorcyclists under 18, however, can be licensed only after completing the state's motorcycle training program. Despite the state's testing and training programs, many of the motorcyclists killed and injured in crashes lacked the motorcycle endorsement required by law. Unfortunately, the endorsement requirement is not strongly enforced in the state. A major exception occurs on New Mexico's military bases, which require that all motorcycle drivers be trained, licensed, and insured.

### **Goal and Strategies**

#### **Goal:**

Improve public awareness of and participation in state-operated motorcycle training programs.

#### **Strategies**

1. Promote motorcycle safety through educational efforts that increase the perception that operating, licensing, and helmet laws are enforced.
2. Utilize community traffic safety groups to promote motorcycle education and enforcement initiatives, participation in training programs, helmet usage, and state and local law reform.

## **Project**

**State funding Community Motorcycling Safety Program:** Operate a strong motorcycle training program, which includes interaction with community traffic safety initiatives. (no funding projected for this year)

# Pedestrian and Bicycle Safety

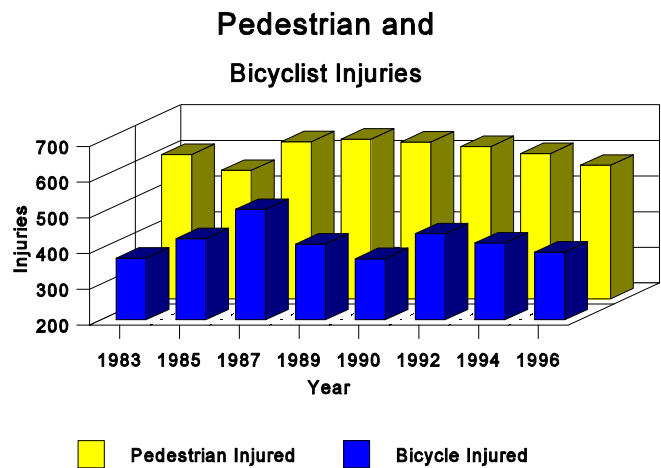
**Problem:** Pedestrian fatalities are high and bicyclists experience high rates of severe crash injuries.

## Pedestrian Crashes

New Mexico's pedestrian death rate per capita is among the highest in the nation. The most common victims are drunk adult pedestrians in rural areas. Although rates are high, the trend is level, as indicated in Table 13. Specific details are described below.

**Table 13. Bicycle and Pedestrian Injury Trends**

Year	Bicycle Dead	Bicycle Injured	Pedestrian Dead	Pedestrian Injured
1983	6	372	115	604
1984	5	419	105	555
1985	7	427	97	560
1986	10	388	102	572
1987	6	509	94	640
1988	4	376	86	607
1989	5	412	85	647
1990	5	371	83	639
1991	4	398	91	588
1992	2	441	90	627
1993	5	433	67	620
1994	8	415	73	607
1995	6	448	88	587
1996	2	389	62	574



- < During the past 10 years, pedestrian deaths have declined by 34 per cent, while injuries show a slow decline since 1992.
- < The lowest pedestrian death toll in the past ten years occurred in 1996 and the highest in 1989.
- < Pedestrian and bicyclist injuries generally follow the same pattern as total injury crashes. Pedestrian fatalities traditionally followed the same pattern as total motor vehicle fatalities, but the trends separated when soaring safety belt usage produced steady drops in occupant deaths.

**Table 14. New Mexico Pedestrian Crash Characteristics**

Year	Pedestrians age 0-14		Pedestrians age 15 and up			
	Dead	Injured	Dead	Injured	Fatal Pedestrian Crashes	
					Pedestrians % Drinking	Drivers % Drinking
1983	11	185	104	419	65	14
1984	11	157	94	398	55	18
1985	6	170	91	390	55	14
1986	8	166	94	406	54	11
1987	6	185	88	455	67	15
1988	13	188	73	419	70	11
1989	6	186	79	461	80	10
1990	7	186	76	453	82	11
1991	5	178	86	410	73	7
1992	8	158	82	469	78	13
1993	7	171	60	449	85	17
1994	7	194	66	413	79	15
1995	5	193	83	394	56	13
1996	2	159	60	415	61	5

- < Adult pedestrian deaths are usually alcohol-related. Like other alcohol-related crashes, these deaths commonly occur on weekend nights. However, as shown in Table 14, the drivers involved in such crashes are rarely alcohol-impaired.
- < Analysis of the blood alcohol content of fatal crash victims reveals a higher average BAC for pedestrian victims than for occupant victims. Pedestrian victims tend to be older than impaired drivers, and have more severe alcohol problems.
- < In comparison with adults, child pedestrians are seldom killed. However, available figures may understate the problem, especially regarding children under age 5. Many child pedestrian injuries occur on private property, particularly with toddlers in driveways. Private property crashes are not included in the state crash data system.

**Bicycle Crash Data**

During the past 10 years, bicyclist deaths have remained fairly low. However, an average of 420 people are injured each year in bicycle crashes. It should be noted that few New Mexico cities or rural areas have trail systems for pedestrians and bicyclists. Indeed, few New Mexico cities have sidewalks. The result is that pedestrians, bicycles, and motor vehicles often compete for the same roadway -- a practice that contributes to New Mexico's high injury rates.

## Pedestrian and Bicycle Injury Prevention Strategies

A broad array of pedestrian and bicycle safety measures have been implemented in New Mexico by the SAFE KIDS coalitions and the Safety Management System Task Force. These programs are briefly described below.

- < The Department of Health, in conjunction with Safer New Mexico Now, oversees the state *SAFE KIDS* program. A major priority is pedestrian and bicycle safety for children. To achieve this goal, bicycle rodeos are conducted and discounted bicycle helmets are provided to school children. Some advocates have begun lobbying for bicycle helmet laws in their communities.
- < The Highway and Transportation Department has created a statewide Pedestrian and Bicyclist Safety Committee. Its members are currently developing a long-term safety program that includes the expansion of separate “travel ways” for bicyclists and pedestrians.
- < After extensive school bus safety initiatives, school bus drivers and transportation coordinators have created an informal statewide network whose purpose is to educate children about bicycle and pedestrian safety.
- < Epidemiological studies of pedestrian injuries have been conducted from both a public health and engineering perspective, and appropriate countermeasures identified.
- < Resolving safety problems for alcohol-impaired pedestrians is difficult, especially since the most severe crashes generally occur at night on rural highways. Nevertheless, successful efforts targeting adult pedestrians in rural areas have succeeded, as described below.
- < Zuni, in conjunction with the Indian Health Service and the Highway and Transportation Department, built separated walkways and marked crosswalks in rural areas where several pedestrians had been injured.
- < To reduce pedestrian risk along US 666 near Gallup, lighting was installed by the Indian Health Service and the Highway and Transportation Department.
- < In the Española area, pedestrian injuries often occur during the annual Good Friday pilgrimage, during which hundreds of pilgrims walk along rural highways to Chimayo. To address this problem, state and local agencies collaborated to establish pedestrian aid stations, post cautionary signs, bus pilgrims home from Chimayo, reduce the availability of alcohol, and increase enforcement and traffic control.
- < In San Juan County, community activists collaborated with the University of New Mexico School of Medicine to install lighting at a site near bars where numerous pedestrian crashes had occurred.

- < In 1995, the University of New Mexico’s School of Medicine expanded its community-based approach to develop a five-year, statewide pedestrian safety plan.

### **Goals and Strategies**

To improve bicycle and pedestrian safety, two goals, two strategies, and one project have been developed.

#### **Goals:**

- a. Performance Goal: Reduce the pedestrian fatality rate from 3.6 per 100,000 (1996) to 3.4 in 1998; 3.2 in 2000 and 3.0 in 2005.
- b. Capacity-Building Goal: Collaborate with SAFE KIDS coalitions to promote bicycle helmet use at state and local levels.

#### **Strategies:**

1. Collaborate with public health agencies to promote the environmental and policy changes needed to reduce pedestrian and bicycle injuries.
2. Promote community action to reduce pedestrian and bicycle injury among targeted high-risk groups.
3. Increase public awareness of pedestrian safety issues and practices through an expanded public information effort.
4. Integrate pedestrian safety as a “Walkability” component of the “Safe Communities” model.
5. Coordinate with the Highway Department’s Bicycle Safety program to develop and promote policies designed to reduce the risk of bicycle related injuries.
6. Continue to work collaboratively with SAFE KIDS coalitions to promote bicycle helmet use and develop other venues for increasing awareness of bicycle safety.
7. Produce community specific maps analyzing traffic safety problems.

#### **Projects:**

**98-FRS-01-10 Traffic Safety Almanac Program:** Provide detailed roadway-based problem analyses and reports joining problem and countermeasure data, presented clearly and conveyed on a routine, systematic basis to traffic safety activists in New Mexico’s communities.

**98-FRS-02-10 Pedestrian Safety Project:** Conduct studies on pedestrian safety problems and strategies designed to reduce pedestrian deaths and injuries. Implement a statewide public awareness campaign on pedestrian safety.

# ROADWAY SAFETY AND INTERMODAL MANAGEMENT IN TRAFFIC SAFETY

**Problem:** Safety strategies based on altering roadways are seldom employed due to inadequate communication among enforcement officials, traffic safety advocates, and traffic engineers.

## Overview of the Roadway Safety Problem

New Mexico possesses diverse traffic engineering programs that are accustomed to providing good roads with restricted funding. Although such programs are concerned about safety, there is little communication between them and other safety disciplines. Improved coordination would enhance the quality of roadway projects and build a broader political base to win support for needed improvement.

The New Mexico State Highway and Transportation Department has multi modal responsibilities in ground, air, and public transportation. Its Secretary serves as the Governor's Representative for Highway Safety. The Department maintains a strong network of regional and metropolitan planning organizations that oversee transportation planning in communities and districts. Although counties and cities oversee their own network of roads, few have full-time traffic engineers. Drawing on resources from the Bureau of Indian Affairs, tribes operate their own roads.

Training for traffic engineers and technicians is provided by universities, which have civil engineering programs but few courses in safety; Highway and Transportation Department programs for technology transfer and training; and by other providers. An advanced engineering technician certification program is sponsored by the Highway and Transportation Department for engineering technicians and contractors. Special efforts are being made to provide a positive introduction to traffic safety issues for engineer interns in the Department.

Traffic engineers play a crucial role in New Mexico safety. They have been involved in countless local controversies over traffic signal installation, speed limits, and school zone designation. They post signs concerning pedestrians for seasonal events and provide lighting for pedestrians in problem areas. They also provide technical assistance to police on DWI checkpoint layouts and loan them safety equipment

Despite strong traffic safety activist groups in most New Mexico communities, traffic engineers are seldom involved. Few traffic safety activists are acquainted with the principles of roadway safety or know the engineers responsible for designing safe roads. Recent assessments have shown that contact between traffic police and traffic engineers is limited as well. Four traffic safety forums in 1997 have involved engineers and local law enforcement agencies in networking and planning efforts. This effort will be expanded in 1998.

The Highway and Transportation Department has initiated a state Safety Management System, which is consistent with ISTEA. Several components are in place, while others are being developed through the Department's Planning Division. Efforts are underway to improve coordination among the many partners needed to implement that system. The Traffic Safety Bureau participates in the Safety Management Advisory Group.

### **Goals and Strategies**

#### **Goal:**

- a. Improve and expand coordination and information exchange between traffic safety programs and highway safety engineers at the local, district, and state levels

#### **Strategies:**

1. Conduct a program to improve communication and collaboration between traffic engineering workers and others with roles in traffic safety.
2. Break down barriers between disciplines by finding non-traditional ways of combining engineering, enforcement, and educational approaches.
3. Provide a structured mechanism to inform traffic safety activists about roadway safety problems, practices, and opportunities.
4. Provide detailed crash information to traffic engineers at the local, district and state levels to assist them in planning and resource allocation.
5. Participate in the state Safety Management System Advisory Group.

#### **Projects:**

**98-FRS-01-10 Traffic Safety Almanac Program:** Provide traffic safety activists and highway safety engineers with regular reports on roadway problems. Utilize traffic records review, engineering analysis, field data collection, key informant interviews, and community involvement to improve traffic engineering in local communities.

#### **Related Projects**

**98-PT-01-04 (P) Traffic Services Promotion Program:** Coordinate a statewide program of development and quality assurance for police traffic services.

**98-TR-01-01 Traffic Safety Problem Identification and Information Program:** Use advanced data analysis and data merging techniques to identify problem locations and conditions and provide this information to traffic safety leaders. Plan, manage, and evaluate priority traffic safety initiatives.

# **INTERMODAL MANAGEMENT AND TRAFFIC SAFETY**

**Problem; Death and injury involving New Mexico's highway and rail system have increased dramatically in the last year(1996) and no discussion is taking place to impact the situation.**

## **Overview of the Problem**

The Intermodal Management Bureau(IMB) of the New Mexico State Highway and Transportation Department has as its mission "to support the New Mexico State Highway and Transportation Department, in being the leader in advancing safe, efficient transportation systems to provide public and commercial mobility, to stimulate economic development, and to improve the quality of life of our customers." The Bureau also has as its goal "to serve as the Department's liaison between state government and the private sector to promote safe and efficient transportation of passengers and freight between and among transport modes."

Between 1977 and 1987, there was a 27% decrease in total traffic crashes involving trains. Between 1987 and 1996, there was a 30% increase in the same statistic. Four people were killed in 1995 in crashes involving trains and in 1996 that figure doubled to eight. Eleven people were injured in 1995 and twenty-one injuries occurred in 1996.

In order to advance "safe, efficient transportation systems," there needs to be a closer collaboration between the Traffic Safety Bureau and the Intermodal Management Bureau. Prevention programs need to be developed and implemented to alert the traveling public to the dangers of roadway/railway crossings and how to avoid those dangers.

## **Performance Goals and Strategies**

In order to improve roadway/railway safety, the following goal and strategies have been developed:

### **Goal:**

a. Increase public awareness of the dangers of traffic crashes involving trains and railroad crossings.

### **Strategies:**

1. Collaborate with the Intermodal Management Bureau to develop a statewide public information and education campaign concerning the dangers of roadway/railway crossings and how to prevent injuries and fatalities.

2. Collaborate with the four pilot Safe Communities in New Mexico to develop public information messages that can be used at the local level to inform the driving and walking public of the dangers of roadway/railway crossings and how to avoid those dangers.

## Youth Alcohol

**Problem:** Youth are injured in alcohol-related crashes at disproportionate rates due to widespread use and availability of alcohol, driving after drinking, community denial, and lack of consistent penalties.

### Overview of Problem

Motor vehicle crashes remain the leading killer of New Mexico's adolescents and a major cause of teen injury, even though in many states in the nation teen homicide is the leading cause of teen death. Although alcohol continues to play a role in crashes involving teenagers, that role is diminishing. In 1992, 60% of all traffic fatalities involving teenagers also involved alcohol. That percentage had decreased in 1996 to 49%.

**Table 15: New Mexico Young Impaired Drivers in Crashes, 1990-1996  
Ages 14-20**

Year of Crash	Fatal Crashes	Injury Crashes
1990	51	392
1991	33	318
1992	20	410
1993	32	395
1994	33	365
1995	29	373
1996	27	392
<b>Seven Year Total</b>	<b>225</b>	<b>2645</b>

From the beginning of 1990 through the end of 1995, 80 individuals 21 years of age or older were killed by alcohol-involved teen drivers.

In 1995, more alcohol-involved adolescent drivers appeared in fatal and injury crashes in Bernalillo, Dona Ana, Santa Fe, San Juan and Rio Arriba counties. The counties changed in 1996 and the top five counties involving alcohol-involved adolescent drivers in fatal and injury crashes were Bernalillo, Dona Ana, McKinley, San Juan and Santa Fe. Rio Arriba County dropped to tenth, decreasing adolescent alcohol-involved crashes and fatalities by over 50%.

Despite overall population growth, the number of young drivers decreased from 1975-1987 as baby boomers matured. Since 1987, the youth population has grown and can be expected to increase dramatically during the next 10 years as the offspring of baby

boomers become teenagers. Given the fact that teens have poorer driving skills and lower seat belt use rates than drivers over 21 years of age, teen traffic crashes will probably increase both in numbers and severity.

In a January, 1997 study, Minor Under the Influence, developed by the New Mexico Traffic Safety Bureau, the link between alcohol and high risk behavior behind the wheel was noted. New Mexico's youth rank from 12% to 19% higher than the national average for those who reported drinking while they were driving and approximately 30% higher for reported riding with an impaired driver during the past year.

Access to alcohol by youth has been illegal since 1925 when the 21 minimum drinking age was passed. This law, however is easily circumvented by adolescents. In the open meetings and focus groups held to develop Minor Under the Influence, young people reported that it was easy to obtain false i.d.s, including learning the technology over the Internet, easy to obtain alcohol from parents, older family members, i.e. siblings, aunts, uncles and friends.

### **Juvenile Laws**

The New Mexico Children's Code and local policies concerning juvenile (under 18 years of age) enforcement impose heavy restrictions on police. Consequently, some officers deal with intoxicated juvenile offenders by calling their parents or by having them pour out their alcohol. A lack of holding facilities for juveniles contributes to this problem. Individuals who are 18, 19, and 20 years of age are subject to the Motor Vehicle Code or Liquor Control Act. Underage drinking is tolerated in many communities, and therefore, consequences are minimal.

Laws pertaining to underage drinking have become more severe in recent years. In 1993, a new law was enacted that imposes severe penalties on alcohol retailers who knowingly sell alcohol to minors. These penalties include suspension and revocation of liquor licenses. State law now mandates server training for all persons who sell alcohol -- whether in bars, restaurants, package stores, or supermarkets -- as a requirement for liquor license renewal. To improve enforcement of these laws, the 1994 Legislature appropriated funds for new staff positions at the Department of Public Safety, which houses the Special Investigations Division.

The 1993 legislature also enacted a .02 BAC law for drivers under 21. This law pertains only to administrative license revocation. The criminal per se limit for both youth and adults is .08. Law enforcement personnel indicate that it would be difficult to identify impairment at .02; so the .02 provision by itself is unlikely to have much direct effect.

## Strategies

To reduce underage drinking and DWI, the state has implemented the following programs:

**Juvenile Enforcement.** The state continues its vigorous support of youth-targeted enforcement practices. Clovis one of the pilot sites of the Cops in Shops program has completed its final year and continues with local support. Farmington and Rio Rancho are continuing their programs and Alamogordo and Bernalillo County are finishing their second year. The Dona Ana County Sheriff's Office in southern New Mexico reports considerable success in enforcing underage drinking laws by locating parties involving underage drinkers, breaking up the party and having parents or responsible adults pick up the youth. They call their program Wolf Pack and two adjacent areas, Otero and Luna counties have requested training in the technique.

**Teen Court.** Over 20 state-funded teen court programs have been established in New Mexico. The state's first teen court was started in Silver City as a 410 pilot project. In 1994, a two year STEP project focusing on youth was also implemented in that community as part of an integrated youth enforcement/adjudication program. Statewide this program has had a desirable recidivism effect on adolescent alcohol issues such as minor under the influence and DWI. A judge and teen from the Cibola County Teen Court represented New Mexico on a panel at the 1997 Life Saver's in Orlando, Florida. The New Mexico Administrative Office of the Courts is investigating permanent funding for this program.

**Publicity.** To support the perception that New Mexico's underage drinking laws are enforced, the state will continue an extensive publicity campaign. Conducted in conjunction with Operation DWI, the campaign emphasizes the penalties for DWI and the severity of the .02 per se law for juveniles. In 1997, one of the three major ODWI media campaigns was targeted at the underage and young adult drinker.

**Teens Need Teens(TNT) Program.** Counties throughout the state have adopted a teen empowerment program designed to prevent DWI. Based on California's "Friday Night Live" model, this program was piloted in 1993 by the Injury Prevention and Control Section of the Department of Health with a 410 grant from the Traffic Safety Bureau. The program was adapted to meet New Mexico's needs and renamed "Teens Need Teens"(TNT) by local youth. Over 40 communities have adopted this program or programs with similar goals such as Youth to Youth or Natural Helpers. TNT includes three components: 1) leadership and skill development, 2) opportunities for alternative activities without alcohol, drugs and violence, and 3)community service and advocacy. This program is based on practices known to be effective for changing attitudes and behavior. The program is funded through the local DWI Grant Programs, the CDWI programs and other state and foundation grants. The Traffic Safety Bureau provides training and technical assistance. TNT was featured at the 1996 International Injury Conference in Australia, 1996 Lifesavers Conference in Albuquerque, and the 1997 Southwest Regional Substance Abuse Conference in Albuquerque.

**Underage Drinking Reduction Project.** This state-funded project involved, in 1997, an assessment of current laws and practices around underage drinking. Twelve county profiles were developed, and a statewide advisory panel made recommendations for needed changes. The result of the efforts was the previously mentioned study Minor Under the Influence.

### **Performance Goal and Strategies**

The following performance goal and accompanying strategies have been developed to address New Mexico's high rate of underage drinking:

#### **Performance Goal:**

Reduce the percentage of adolescents (15-20) involved in alcohol related fatal crashes from 49 per cent in 1996 to 48% in 1998; 46% in 2000; and 44% in 2005.

#### **Strategies:**

1. Promote innovative approaches to youth enforcement to prevent underage drinking and DWI.
2. Promote model prevention and education programs for adolescents using a youth development and empowerment model.
3. Promote model training programs to assist parents to talk to their adolescents about alcohol and to assist parents in understanding responsible social host liability.
4. Develop a statewide media and marketing campaign on underage drinking and parental responsibilities.

#### **Projects:**

**98-YA-01-11 Statewide Teen Mobilization Program:** Utilize social advocacy and marketing techniques to train and support adolescents in developing and implementing programs to reduce DWI at the local level.

#### **Related projects**

**State-funded--Underage Drinking Reduction Project.**

# Safe Communities

**Problem:** Although a leading cause of injury and death, motor vehicle crashes are frequently viewed as isolated incidents rather than as public health issues impacting the entire community.

## Overview

Uncoordinated approaches to traffic-related problems can be solved through the establishment of Safe Communities -- an initiative designed to develop, support and evaluate community programs that address traffic-related injuries within a public health framework. Including traffic safety within the larger injury problem allows traffic safety professionals to forge new and expanded partnerships, leverage resources and share strategies and ideas. These new partnerships will expand the constituency base for traffic-related issues as well as enhance the visibility of successfully operating programs.

Safe Communities seeks to expand its traffic safety focus to include not only fatalities but traffic injuries as well. In many communities, the most common cause of injury is motor vehicle crashes. Fortunately, strategies proven to be effective are available to combat this problem. Incorporating a public health approach to injury prevention, Safe Communities emphasizes the need to coordinate prevention, acute care and rehabilitation efforts. Its major attributes include data linkage, expanded partnerships, citizen involvement, and a comprehensive injury control system.

## Data Linkage

Safe Communities will focus not only on reducing traffic fatalities, but on decreasing injuries and health care costs as well. This shift in emphasis means that additional data bases need to be identified, assessed, validated, and linked to traffic data bases. Injury-related data bases are available through health departments, hospital discharge and emergency departments, trauma registries, emergency medical services, rehabilitation programs, insurance companies, Medicaid and Medicare. Data linkage involves identifying common risk factors. For example, young adults who drink and drive are also at risk for domestic violence, unprotected sexual activity, drowning, child abuse, suicide and homicide. Traffic safety and violence prevention efforts can join forces to reduce alcohol-related problems with youth.

New Mexico has extensive experience in such issues. The New Mexico CODES project has linked several fatality-related data bases, including those from Vital Records, OMI and traffic crash records. It has also linked injury databases from the state Trauma Registry, hospital emergency departments, Medicaid, and EMS. Drawing on these data, the New Mexico Injury Surveillance Alliance produced the 1993 *Injury in New Mexico* booklet -- an effort spearheaded by the Traffic Safety Bureau and the Department of Health's Injury Prevention and Control Section.

## **Expanded Partnerships**

Traffic-related problems are too complex and the resources too limited for traffic safety advocates to work in isolation. Alcohol-related traffic problems cannot be separated from the overall alcohol problem of a community. Policies that promote alcohol consumption also promote DWI. Conversely, policies that decrease access and availability also decrease consumption and DWI, especially among young drivers. Safe Communities encourages enlisting businesses, employers, medical facilities, and rehabilitation communities as full partners. Local government, law enforcement, schools, and courts will also be encouraged to participate.

## **Citizen Involvement**

Citizen involvement is essential to the establishment of community priorities through problem identification. Through the Safe Communities process, local leaders and interested citizens will examine the leading causes of death and disability, look at years of productive life lost, cost to the community, impact on different segments of the population, and resources available to affect change. Community coalitions will develop and implement effective strategies. The latter should involve education, enforcement, policy and laws, roadway engineering and economic incentives.

## **Comprehensive Injury Control System**

An integrated and comprehensive injury control system lies at the foundation of the Safe Communities approach. To solve community injury problems, it is essential that prevention, acute care and rehabilitation programs be involved, for their perspectives are invaluable.

## **Approach**

Safe Communities is basically a public health approach to community development. In this approach, citizen ownership of local problems is essential. Reduction of fatal and non-fatal injuries is viewed in terms of health care as well as cost to the community. Systems-based solutions are developed by integrating prevention, acute care and rehabilitation. Traffic safety advocates are offered the opportunity to work with new partners and to integrate traffic safety issues into broader injury control efforts.

New Mexico currently implements the Safe Communities approach in several ways. The Community DWI Task Forces and County DWI Planning Councils utilize a basic public health oriented problem identification approach by bringing together interested parties to assess the problem, identify resources, develop and implement strategies, and evaluate the results. These two groups, however, focus specifically on DWI. State and local SAFE KIDS coalitions address traffic safety as part of a global approach to childhood injury prevention. However, they rarely analyze injury problems and generally utilize education as the primary strategy. There are several substance abuse partnerships in New Mexico that analyze substance abuse problems. These partnerships utilize a Safe

Communities approach that involves citizen and partnership participation. In addition, several communities have “Healthier Communities” organizations that take a broad approach to community health. Injury prevention is viewed as just one of their areas of interest, which also include chronic and infectious disease, environmental issues, and economic development. Existing community groups have the advantage of an infrastructure and a network of interested citizens to implement programs, obtain resources, and establish new relationships. However, some are too narrowly focused, while others are so broad that traffic-related injuries may get “lost in the shuffle.”

The Traffic Safety Bureau will provide training and technical assistance to communities who are willing to implement the Safe Communities program. These communities will utilize the principles of Safe Communities in their own way to meet their special needs.

### **Performance Goal and Strategies**

To address the need for an integrated approach to preventing traffic-related injuries, one performance goal and four strategies have been devised. They are described below.

#### **Goal:**

Implement Safe Communities in four pilot sites and evaluate the results.

#### **Strategies:**

1. Identify existing state and local resources that can support the Traffic Safety Bureau’s Safe Communities initiative.
2. Appoint a Safe Communities advisory group to guide the Traffic Safety Bureau and the pilot communities in the development and execution of an implementation plan.
3. Provide resources, training, technical assistance and monitoring to the four pilot communities.
4. Provide resources and technical assistance to New Mexico communities and community activists in traffic safety related issues.

#### **Projects:**

**98-SA-01-12 Safe Communities** - train communities to implement the safe communities approach.

**98-SA-02-12 Activist Information and Training:** Provide for participation by New Mexico traffic safety activists in training events, conferences, task forces, and seminars to develop their skills and knowledge in traffic safety program issues.

**98-SA-03-12 Training for MADD chapters:** Provide advocacy and victim impact panel training for local DWI activists, including MADD chapters.

# Road Users

**Problem:** Many novice and experienced drivers of all ages lack knowledge and education that is helpful in becoming a safe driver.

## Purpose

The drivers training section of the Traffic Safety Bureau is designed to regulate programs that provide driving instruction, information, and education to the public. One of the training sections main goals is to try to get individuals to self evaluate their own driving attitudes and behaviors. Through self evaluation, the drivers training program can assist in developing an individual's safe driving behavior.

## New Mexico's Driver Training Programs

**Novice Driver Education** - New DWI laws in 1993 transferred regulatory responsibility for commercial training of beginning drivers to the Traffic Safety Bureau. In 1994, the new laws also mandate and fund new beginner driver training courses in public high schools. The Bureau is responsible for monitoring and certifying instructors, curriculum, and commercial schools.

**Adult DWI Education** - In 1994, it was required that new drivers over the age of eighteen (18) attend short DWI training sessions. The Bureau launched the program with an innovative approach. Students learn about DWI while serving as jurors in interesting "mock trial" class sessions. Many students express some hostility toward the course prior to attending. However, 86% of the individuals rate the course either good or excellent upon completion.

**Older Driver Training** - Every driver's abilities change with age. New Mexico law gives liability insurance discounts to drivers over fifty-five (55) years of age who take defensive driver training. The Bureau works with AARP, AAA, and others to promote and certify programs to help drivers understand and adapt to effects of age.

**Help for Problem Drivers** - This course concentrates on changing attitudes of traffic offenders sent by courts and MVD. Since 1993, the Bureau regulates all providers of this training. The Bureau has researched the area of problem drivers and found that both law enforcement and education deter this type of driving behavior.

**DWI School Program** - The course is a twelve (12) hour, three to six (3-6) week minimum, driver rehabilitation program for first time DWI offenders of any age. The new curriculum, which was developed in 1993 and is standard throughout the State, uses

innovative learning methods. Rather than a lecture course, the instructor acts as a “facilitator.” Each student must participate individually, in groups, and complete several homework assignments to get credit for the course. The Bureau provides course monitoring, facilitator training and certification, and regulates school operations.

<b>1996-1997</b>	
<b><u>Program</u></b>	<b><u>Number of Students</u></b>
<b>Novice Training</b>	<b>15,000</b>
<b>Adult DWI Training</b>	<b>38,000</b>
<b>Older Drivers</b>	<b>1,100</b>
<b>Problem Drivers</b>	<b>450</b>
<b>DWI School</b>	<b>5,800</b>

### **Goals and Strategies**

#### **Goals:**

- a. To provide the driving training programs attendees with the most updated techniques and information for developing and/or maintaining safe driving habits.
- b. Increase the availability of each of the training programs in the rural portions of the State.

#### **Strategies:**

1. Host regional and statewide training workshops for program instructors, directors, and the interested public so that individuals can come together and share information.
2. Contact rural city officials and courts to encourage training program availability in their area.
3. Provide regulatory oversight and technical assistance to state certified and licenses drivers training programs.

#### **Projects:**

STATE FUNDED - Revise state drivers license test and manual; develop standardized training for drivers test examiners (behind the wheel).