

# EMERGENCY MEDICAL SERVICES/TRAUMA SYSTEMS

FUNDING IN THE UNITED STATES AND  
PROPOSED LEGISLATION FOR TEXAS

GREATER SAN ANTONIO HOSPITAL COUNCIL  
SAN ANTONIO, TEXAS

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JANUARY 1997

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**U.S. ARMY - BAYLOR UNIVERSITY**

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**FUNDING IN THE UNITED STATES AND  
PROPOSED LEGISLATION FOR TEXAS**

Submitted to:

FACULTY: U.S. ARMY - BAYLOR UNIVERSITY  
MASTER OF HEALTHCARE ADMINISTRATION PROGRAM

JANUARY 1997

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## LIST OF ABBREVIATIONS

ACS	American College of Surgeons
CCTCB	Critical Care Transfer Coordinating Board
DTEMS	Division of Trauma and Emergency Medical Services
DUI	Driving Under the Influence
DWI	Driving While Intoxicated
EMS	Emergency Medical Services
EMS/TSF	Emergency Medical Services/Trauma Systems Fund
EMT	Emergency Medical Technician
FY	Fiscal Year
GSAHC	Greater San Antonio Hospital Council
RAC	Regional Advisory Council
STRAC	Southwest Texas Regional Advisory Council
TDH	Texas Department of Health
TSA	Trauma Service Area

## ABSTRACT

Funding for Emergency Medical Services (EMS)/Trauma Systems is being brought to the forefront of debate as states struggle to reduce budgets and federal funding shrinks. All state EMS directors or health departments having responsibility over emergency and trauma program planning, were contacted during a telephone survey in September 1996 and asked seven questions designed to elicit specific funding limits, sources of those funds and current state positions and policies on funding EMS and trauma programs. Cumulatively, the states spent \$14.5 million in fiscal year 1996 from federal government sources and \$161.6 million in state monies to fund EMS and trauma. The national average for per capita expenditures on EMS and trauma is \$0.57. There is no consistency in how states fund EMS and trauma programs. Most states fund both programs from one budget and few actually denote funds specially for trauma programs. The states that receive revenues from fines assessed on traffic violations and fees from motor vehicle registration have the best funding. These states consistently fund EMS/Trauma systems above the national per capita average and have reduced or no dependence on federal funding. Seven states have very successful programs which are not dependent on federal funding and utilize monies generated by fines assessed on moving traffic violations. Texas should follow the lead of these states since current funding levels fail to provide adequate resources to operate a comprehensive statewide EMS/Trauma system.

# CHAPTER 1

## INTRODUCTION

The importance of emergency medical services (EMS) and trauma programs cannot be overstated. No one questions the vital services provided by either program. EMS/Trauma systems are designed to meet the medical needs of the most seriously injured people in a defined region. The components of an EMS/Trauma system include emergency response which provides triage and administers prompt pre-hospital life support, hospitals committed to meeting the standards set by the American College of Surgeons (ACS) for providing state-of-the-art trauma care and inpatient and outpatient rehabilitative care. However, it is incumbent upon each state to ensure adequate funding is available for consistent services throughout the state. Rural communities should not suffer with insufficient services or dilapidated equipment due to an inability to fund the services, equipment or training. Consistent quality emergency health care should be the standard throughout each state and the country as a whole.

### **Conditions Which prompted the Study**

Trauma system planning gained momentum in Texas in 1989 with the passage of trauma legislation and the establishment of twenty-two Trauma Services Areas (TSA) (Appendix A) (Texas 1992, §773.111-773.172). The state of Texas recognized that a regional approach that places trauma centers at the center of a comprehensive EMS system is the best way to reduce

deaths caused by traumatic injuries (Cales and Trunkey 1985; Shackford and others 1985). The concept of regionalized trauma care places the sickest and most costly patients at Level One trauma centers. Because of low reimbursement rates and the growing volume of uncompensated care, Level One trauma facilities quickly exhaust resources and in some cases must cease to provide trauma care or seek alternative funding sources to continue to provide trauma service (Cornwell and others 1996; MacKenzie, Steinwachs, and Ramzy and others 1991; Chulis 1991; Schwab and others 1988). Current Texas State Legislation and Texas Department of Health (TDH) Rules call for multiple initiatives to reduce death due to trauma in Texas. Specific measures are in place to address access and the quality of trauma care. Neither document, however, addresses the issue of funding for statewide or local activities that can help attain the ambitious goals set by the state. The state of Texas has recognized the fundamental need for an integrated EMS/Trauma system to address the emergent health care needs of its residents but to date, has failed to fund this initiative adequately to accomplish its defined mission.

In 1994, there were 10,052 trauma related deaths in Texas and 3,319 were a result of motor vehicle collisions (Texas Department of Health, Bureau of Epidemiology 1996). In 1995, 9,338 Texans died as a result of trauma related or poisoning injuries (Texas Department of Health, Bureau of Vital Statistics 1996). Those who died represent society at large from children to the elderly, male and female. A breakout of these deaths illustrates that 35.36 percent are the result of motor vehicle collisions. Gunshot wounds were the second leading cause at 30.46 percent. The remaining 34.18 percent were a combination of drowning, hanging, suffocation,

falls, poisoning, stabbing and fires (Texas Department of Health, Bureau of Vital Statistics 1996). See Table 1 and Figure 1.

**TABLE 1. -- 1995 TEXAS DEATHS DUE TO TRAUMA**

<b>Cause</b>	<b>Deaths</b>
Motor Vehicle Collisions	3,302
Gunshot Wounds	2,844
Drowning, Hanging, Suffocation	961
Poisoning	911
Falls	810
Fire	266
Stabbing	<u>244</u>
Total	9,338

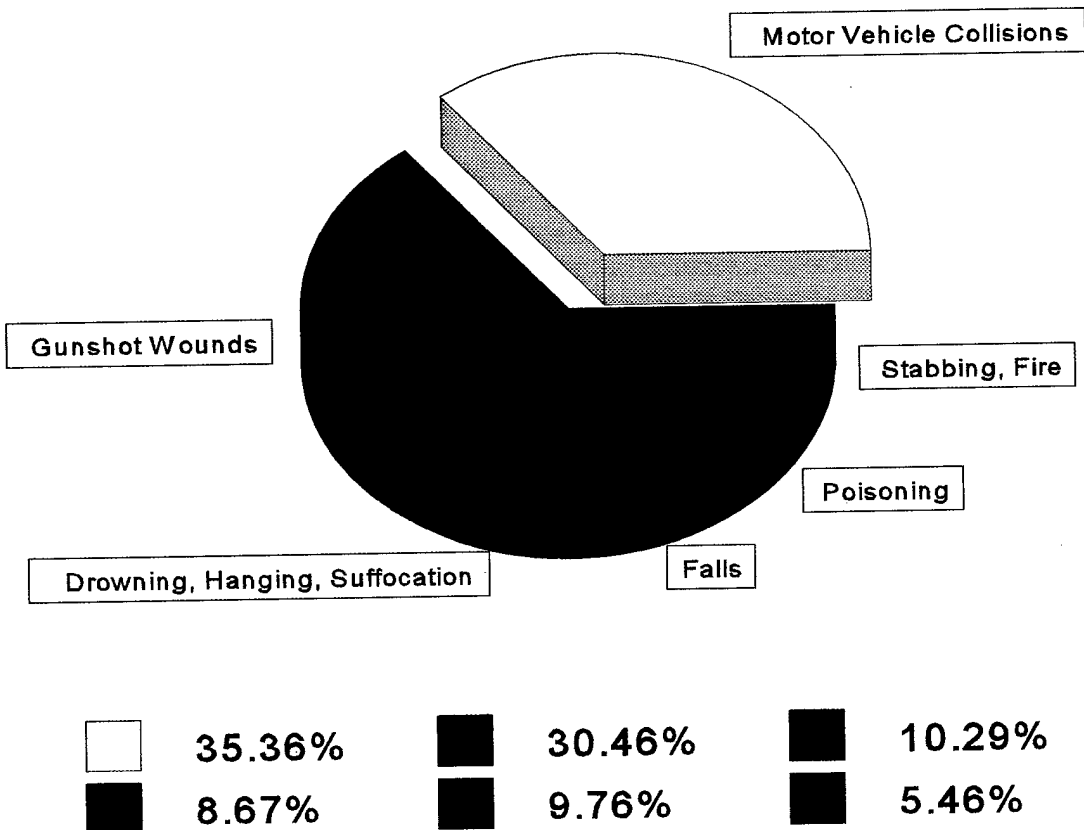
Source: Texas Department of Health, Bureau of Vital Statistics 1996

Trauma does not always kill. Trauma victims are often left disabled, disfigured or otherwise permanently affected by the incident. The purpose of a trauma system is to work closely with EMS to reduce unnecessary death and disability through efficient and effective triage and treatment. Unfortunately, the system is not perfect and efficient and effective triage and treatment are not always rendered. The deciding factor is very often time; patients are not able to get to the required medical care fast enough to prevent permanent effects or death. Without a source of funding to support EMS/Trauma systems, this scenario will become more and more frequent.

Trauma Service Area P (TSA-P), covering twenty-two counties with Bexar County and San Antonio providing the majority of trauma care within the area (Texas Department of Health, Trauma Rules 1995), has made major strides at addressing emergency medical services and

### Fig. 1. 1995 Texas Deaths Due to Trauma

Source: Texas Dept. of Health, Bureau of Vital Statistics 1996



trauma services in that area. Concerned about the high incidence of trauma in Bexar County and the lack of communication between the trauma centers, County Judge Cyndi Taylor Krier appointed the Bexar County Critical Care and Trauma Task Force to examine communications, transportation, financing of the trauma system and needs assessment for TSA-P (Bauer 1996; Bexar County Critical Care Trauma Task Force 1994). Out of the task force grew the Critical Care Transfer Coordinating Board (CCTCB), which brought together representatives of the three regional trauma centers (University Health System, Wilford Hall Medical Center and Brooke Army Medical Center), Southwest Texas Regional Advisory Council (STRAC), Bexar County

Medical Society, Greater San Antonio Hospital Council (GSAHC), San Antonio AirLife, San Antonio EMS, and the U.S. Army Institute of Surgical Research (Rasco 1996).

The coordinated effort and communication of this group provided a seamless communication network between hospitals, trauma centers, physicians, emergency medical services and San Antonio AirLife in TSA-P. This communication package allows all hospitals and EMS systems in the trauma service area to call one toll free phone number to receive access to an available trauma center with an accepting physician. In the first sixty days of operation, the average time from when a call was placed to initiate trauma care until the patient was actually accepted by a physician and assigned to a trauma center was reduced from over two hours to just 8.6 minutes (Epley 1996).

The CCTCB successfully obtained a \$118,500 grant from the Bexar County Health Facilities Development Corporation in July 1996 to develop this pilot project named MEDCOM. The grant allows this project to be funded for one year. The project is in jeopardy of ceasing operations unless funding can be secured from another source. TSA-P and all other trauma service areas which have similar locally beneficial and lifesaving initiatives are looking to the state for assistance in continuing valuable initiatives like MEDCOM. TSAs are currently unfunded. Funds are not provided for any activities, initiatives or mailings to communicate with TSA members. This issue must be addressed if the EMS/Trauma system in Texas is going to meet the emergent health care needs of its residents.

## **Statement of Problem**

Funding for EMS and trauma is being brought to the forefront of debate as states struggle to reduce budgets. These vital programs are also losing precious resources as federal funding shrinks and, in some cases, ceases. The U.S. Congress rescinded all funding for trauma under the Health Resources Administration Division of Trauma and Emergency Medical Services (DTEMS) for 1996 as part of deficit reduction (American College of Surgeons 1995). The intent of this paper is to examine the current funding position and policies of all fifty states and the District of Columbia, with particular emphasis on Texas. Each state's funding position and policy will be examined and conclusions with legislative recommendations will be presented on the most judicious position Texas should take to meet the challenge of adequately funding the statewide EMS/Trauma system.

## **Literature Review**

State Emergency Medical Services (EMS)/Trauma system planning programs are designed to facilitate and coordinate a multi disciplinary systems approach for timely responsiveness to severely injured patients. Studies over the preceding four decades have demonstrated that trauma patients have improved chances of survival if they receive appropriate triage, prompt pre-hospital life support and expeditious transportation to a designated trauma center where the specialized care is available to treat their multiple and complex injuries (Bruser 1970; Cales 1984; Certo, Rogers and Pilcher 1983; Detmer and others 1977; Fitts and others 1964; Foley, Harris and Pilcher 1977; Frey, Huelke and Gikas 1969; Gertner and others 1972; Houtchens 1977; Lowe, Gately and Goss 1983; McKoy and Bell 1983; Moylan and others 1976;

Neuman and others 1982; Ottosson and Krantz 1984; Perrine, Waller and Harris 1971; Perry and McClellan 1964; Ramenofsky and others 1984; Root and Christiansen 1957; Trunkey 1982; Trunkey and Lim 1974; Van Wagoner 1961; Waller, Curran and Noyes 1964; Waters and Wells 1973; West 1982; West, Cales and Gazzaniga 1983; West, Trunkey and Lim 1979; Zollinger 1955). Additionally, studies have demonstrated that one-third of all trauma related deaths initially treated in non-trauma facilities may have been prevented if an effective EMS/Trauma system had been in place (Cales 1984; Cales and Trunkey 1985; National Committee on Trauma and Committee of Shock 1966; Trunkey and Lim 1974).

Research has demonstrated that a nation-wide EMS/Trauma system as set forth by the American College of Surgeons (ACS) could lower national health care cost by as much as \$3.2 billion annually. Additionally, the study demonstrates that a savings of \$7.1 billion in worker productivity could have been achieved with an effective EMS/Trauma system (Miller and Levy 1995). Despite the obvious need and the call to arms by the National Research Council, trauma is labeled "the neglected disease of modern society." Only two states, Maryland and Virginia, had recognized established trauma systems in place in 1987 (West, Williams, Trunkey and Wolfert 1988). By 1992, forty-one recognized regional and/or state trauma systems were identified (Bazzoli, Madura, Cooper, MacKenzie and Maier 1995).

Funding trauma systems is a contentious issue in many states. The majority of the states do not address trauma system funding. Most states group trauma system funding under the Emergency Medical Services (EMS) budget and fail to augment the EMS budget to fund trauma initiatives. Most states fund EMS with a combination of federal grant monies and state general funds (State and Province Survey 1995). Other states have taken creative steps to fund EMS and

trauma. In 1992, Maryland placed an \$8.00 surcharge on motor vehicle registration specifically to fund its nationally renowned trauma system (Skolnick 1992). In Illinois, however, proposals to fund a trauma system with a \$20.00 tax on firearm sales failed in 1992 (Skolnick 1992).

### **Purpose**

The purpose of this study is to contact all state EMS directors or health departments having responsibility over emergency medicine and trauma programs to inquire into the mechanisms currently in place to fund EMS and trauma initiatives, the source of such funding and current policies and legislation addressing EMS and trauma funding. The data will be analyzed to determine common funding initiatives or differences in funding that demonstrate program effectiveness. State policies will also be analyzed to identify policies which have successfully and consistently funded EMS and trauma initiatives.

## CHAPTER 2

### METHODS AND PROCEDURES

All state EMS directors or health departments having responsibility over emergency and trauma program planning, were contacted during a telephone survey in September 1996 and asked the following questions:

1. Does your state have an established trauma system?
2. Do you have a separate budget for trauma or is it funded out of the EMS budget?
3. For fiscal year (FY) 1996, how much federal funding did you receive for EMS?
4. For fiscal year (FY) 1996, how much federal funding did you receive for trauma?
5. For fiscal year (FY) 1996, how much state funding did you receive for EMS?
6. For fiscal year (FY) 1996, how much state funding did you receive for trauma?
7. Do you have any unique funding initiatives to fund EMS and/or trauma? If so, please describe these initiatives.

These specific questions were designed to elicit specific funding limits, sources of those funds and current state positions and policies on funding EMS and trauma programs. A fiscal year (FY) was not defined as January to December or any other delineations. It was

decided that the state fiscal year was the best measure for comparison with other state fiscal years independent of the actual start and stop dates.

## CHAPTER 3

### THE RESULTS

All fifty states and the District of Columbia were contacted during September 1996. Each state responded to all questions with the exception of Delaware, which preferred not to participate in the study. A summary table of state responses is presented in Table 2. Twenty-seven states reported they had an established trauma system. Fourteen states reported that they were at various stages of the implementation process of a trauma system and nine states reported that no established trauma system existed in their state. Only New York and Wyoming reported that a budget has been established specifically to fund their trauma programs. All other states reported that trauma was either unfunded or funded from the state EMS budget.

Cumulatively, the states received \$14.5 millions in fiscal year 1996 from the federal government to fund EMS and trauma programs. Eighteen states did not receive any federal monies and half of these states had unique funding initiatives which made it unnecessary for them to use federal funds. The federal monies generally came from the Department of Transportation, Preventive Health and Human Services Block Grants, the National Highway Traffic Safety Administration and EMS for Children Grants. Oklahoma and Utah were the only states that received federal funding specifically designated for trauma system development or trauma services. All federal programs previously utilized to acquire trauma system development

**TABLE 2. SUMMARY OF SURVEY DATA**

State	Established Trauma System (0=no, 1=yes) (X=Inprocess)	Separate Trauma Budget (0=no, 1=yes)	Federal EMS Funding (thousands) (FY 1996)	Federal Trauma Funding (thousands) (FY 1996)	State EMS Funding (thousands) (FY 1996)	State Trauma Funding (thousands) (FY 1996)	Unique Funding Initiatives	Total Funding (thousands) (FY 1996)
Alabama	0	0	\$25	\$0	\$5,190	\$0	Sales Tax	\$5,215
Alaska	X	0	\$485	\$0	\$2,424	\$0		\$2,909
Arizona	X	0	\$0	\$0	\$2,854	\$0	Moving Violations	\$2,854
Arkansas	1	0	\$0	\$0	\$400	\$0		\$400
California	1	0	\$2,700	\$0	\$2,435 (1)	\$0		\$5,135
Colorado	X	0	\$0	\$0	\$3,223	\$0	Auto Registration	\$3,223
Connecticut	1	0	\$200	\$0	\$1,000	\$0		\$1,200
District of Columbia	1	0	\$462	\$0	\$232	\$0		\$694
Florida	1	0	\$0	\$0	\$14,000	\$0	Moving Violations	\$14,000
Georgia	0	0	\$1,000	\$0	\$2,000 (1)	\$0		\$3,000
Hawaii	1	0	\$0	\$0	\$31,319	\$0	Auto Registration	\$31,319
Idaho	X	0	\$0	\$0	\$1,533	\$0	Driver's License	\$1,533
Illinois	1	0	\$164	\$0	\$1,112	\$2,500 (2)	Moving Violations	\$3,776
Indiana	0	0	\$0	\$0	\$300	\$0		\$300
Iowa	1	0	\$260	\$0	\$1,100	\$0		\$1,360
Kansas	X	0	\$0	\$0	\$814	\$0		\$814
Kentucky	X	0	\$0	\$0	\$1,730	\$0		\$1,730
Louisiana	X	0	\$568	\$0	\$250	\$0	Self Generating	\$818
Maine	X	0	\$190	\$0	\$850	\$0		\$1,040
Maryland	1	0	\$0	\$0	\$7,000	\$0	Auto Registration	\$7,000
Massachusetts	0	0	\$950	\$0	\$100	\$0		\$1,050
Michigan	0	0	\$800	\$0	\$700	\$0		\$1,500
Minnesota	0	0	\$291	\$0	\$3,034	\$0	Seat Belt	\$3,325
Mississippi	1	0	\$0	\$0	\$2,530	\$0	Moving Violations Driver's License	\$2,530
Missouri	1	0	\$500	\$0	\$350	\$0		\$850
Montana	X	0	\$240	\$0	\$545	\$0		\$785
Nebraska	1	0	\$480	\$0	\$230	\$0		\$710
Nevada	1	0	\$0	\$0	\$700	\$27		\$727
New Hampshire	1	0	\$780	\$0	\$180	\$0		\$960
New Jersey	1	0	\$678	\$0	\$4,233 (3)	\$0	Auto Registration	\$4,911
New Mexico	1	0	\$0	\$0	\$4,000	\$0	Auto Registration	\$4,000
New York	1	1	\$0	\$0	\$16,000	\$2,500		\$18,500
North Carolina	1	0	\$652	\$0	\$2,400	\$0		\$3,052

**TABLE 2. SUMMARY OF SURVEY DATA (con't)**

State	Established Trauma System (0=no, 1=yes) (X=Inprocess)	Separate Trauma Budget (0=no, 1=yes)	Federal EMS Funding (thousands) (FY 1996)	Federal Trauma Funding (thousands) (FY 1996)	State EMS Funding (thousands) (FY 1996)	State Trauma Funding (thousands) (FY 1996)	Unique Funding Initiatives	Total Funding (thousands) (FY 1996)
North Dakota	X	0	\$101	\$0	\$293	\$0	Seat Belt Law	\$394
Ohio	X	0	\$120	\$0	\$3,900	\$0		\$4,020
Oklahoma	X	0	\$0	\$100	\$425	\$0		\$525
Oregon	1	0	\$164	\$0	\$943	\$326		\$1,433
Pennsylvania	1	0	\$0	\$0	\$9,000	\$0	Moving Violations	\$9,000
Rhode Island	0	0	\$298	\$0	\$334	\$0	Moving Violations	\$632
South Carolina	1	0	\$660	\$0	\$2,089	\$0		\$2,749
South Dakota	X	0	\$53	\$0	\$350	\$0		\$403
Tennessee	1	0	\$145	\$0	\$760	\$0		\$905
Texas	1	0	\$371	\$0	\$3,076	\$0	Moving Violations	\$3,447
Utah	1	0	\$40	\$20	\$2,212	\$85		\$2,357
Vermont	0	0	\$125	\$0	\$275	\$0		\$400
Virginia	1	0	\$0	\$0	\$10,380	\$0	Auto registration	\$10,380
Washington	1	0	\$0	\$0	\$2,180	\$0		\$2,180
West Virginia	X	0	\$500	\$0	\$2,200	\$0		\$2,700
Wisconsin	0	0	\$280	\$0	\$2,550	\$0		\$2,830
Wyoming	1	1	\$112	\$0	\$330	\$119		\$561
<b>Totals</b>	<b>27</b>	<b>2</b>	<b>\$14,394</b>	<b>\$120</b>	<b>\$156,065</b>	<b>\$5,557</b>		<b>\$176,136</b>

(1) \$1 million designated for state poison control centers  
 (2) \$2.5 million designated for uncompensated trauma care  
 (3) \$425,000 designated for state poison control centers

funds ceased as part of deficit reduction; funds will no longer be disbursed and these programs are not expected to receive funding in future years (American College of Surgeons 1995).

Collectively, states spent in excess of \$161.6 million in EMS and trauma. The funds typically come from state general funds. Fourteen states have, however, developed unique funding initiatives. Arizona, Florida, Illinois, Mississippi, Pennsylvania, Rhode Island and Utah devote a portion of the fine assessed on various motor vehicle/traffic violations for use specifically to fund statewide EMS and trauma programs. Colorado, Idaho, Maryland, New Jersey, New Mexico and Virginia give a portion of the funds generated by motor vehicle registration to EMS and trauma programs. A portion of fines assessed for seat belt violations in Ohio and Minnesota are also used to fund the EMS and trauma programs in these states. Additionally, Mississippi and Idaho use a portion of the driver's license renew fee to fund EMS and trauma programs.

Only New York (\$2.5 million) and Wyoming (\$119,000) had a separate budget for trauma programs. However, Illinois (\$2.5 million), Florida (\$1.5 million), Nevada (\$27,000), Utah (\$85,000) and Oregon (\$652,000) had state monies identified for use in trauma programs but these funds are included in the state EMS budget. The funds designated for trauma care in Illinois are used to reimburse statewide trauma centers for uncompensated trauma care. These funds are distributed to the trauma centers to combat the deleterious effects of uncompensated trauma health care services. Three states fund the state poison control centers through the EMS budget; California (\$1 million), Georgia (\$1 million), and New Jersey (\$425,000).

The states were compared using total expenditures on trauma and EMS from all sources per capita. Hawaii was clearly the best funded at \$26.59 per capita. However, the EMS

Branch Chief for Hawaii reported that the office was funded to perform various billing functions in conjunction with EMS and trauma services. This caused a grossly inflated budget due to the additional staff authorized to maintain a billing department. The state office was unable to determine exactly what portion of the budget was apportioned to actual EMS and trauma services and what part was used for other support services. Hawaii was, therefore, not considered in the comparative analysis.

Indiana was also not considered in the per capita comparative analysis because they provide minimal funding (\$.05 per capita) and require counties and localities to fund all EMS and trauma initiatives. The state does provide oversight, however.

Excluding Hawaii and Indiana the national average for per capita expenditures on EMS and trauma is \$0.57. A summary of state per capita expenditures is presented in Table 3. Further analysis revealed that those states with unique funding initiatives were above the national per capita average of \$0.57 with the exception of Illinois and Ohio. Ohio only collects revenues on seat belt violations. A summary of each state's program and policies for funding is presented in Appendix B.

**TABLE 3. PER CAPITA FUNDING SUMMARY**

State	State Population (1) (thousands) (July 1994)	Total Funding (thousands) (FY 1996)	State Per Capita Spending
Alabama	4,218	\$5,215	\$1.236
Alaska	605	\$2,909	\$4.808
Arizona	4,075	\$2,854	\$0.700
Arkansas	2,452	\$400	\$0.163
California	31,430	\$5,135 (2)	\$0.163
Colorado	3,655	\$3,223	\$0.882
Connecticut	3,275	\$1,200	\$0.366
District of Columbia	567	\$694	\$1.224
Florida	13,950	\$14,000	\$1.004
Georgia	7,055	\$3,000 (2)	\$0.425
Idaho	1,133	\$1,533	\$1.353
Illinois	11,751	\$3,776 (3)	\$0.321
Iowa	2,829	\$1,360	\$0.481
Kansas	2,554	\$814	\$0.319
Kentucky	3,826	\$1,730	\$0.452
Louisiana	4,314	\$818	\$0.190
Maine	1,240	\$1,040	\$0.839
Maryland	5,001	\$7,000	\$1.400
Massachusetts	6,041	\$1,050	\$0.174
Michigan	9,496	\$1,500	\$0.158
Minnesota	4,567	\$3,325	\$0.728
Mississippi	2,669	\$2,530	\$0.948
Missouri	5,277	\$850	\$0.161
Montana	856	\$785	\$0.917
Nebraska	1,623	\$710	\$0.437
Nevada	1,457	\$727	\$0.499
New Hampshire	1,136	\$960	\$0.845
New Jersey	7,903	\$4,911 (4)	\$0.621
New Mexico	1,653	\$4,000	\$2.420
New York	18,172	\$18,500	\$1.018
North Carolina	7,068	\$3,052	\$0.432
North Dakota	638	\$394	\$0.618
Ohio	11,102	\$4,020	\$0.362
Oklahoma	3,258	\$525	\$0.161
Oregon	3,086	\$1,433	\$0.464
Pennsylvania	12,052	\$9,000	\$0.747
Rhode Island	996	\$632	\$0.635
South Carolina	3,663	\$2,749	\$0.750
South Dakota	723	\$403	\$0.557
Tennessee	5,175	\$905	\$0.175
Texas	18,378	\$3,447	\$0.188
Utah	1,907	\$2,357	\$1.236
Vermont	580	\$400	\$0.690
Virginia	6,550	\$10,380	\$1.585
Washington	5,343	\$2,180	\$0.408
West Virginia	1,822	\$2,700	\$1.482
Wisconsin	5,081	\$2,830	\$0.557
Wyoming	475	\$561	\$1.181
Totals	252,677	\$144,517	\$0.572 (national average)

(1) Source: U.S. Census Bureau

(2) \$1 million designated for state poison control centers

(3) \$2.5 million designated for uncompensated trauma care

(4) \$425,000 designated for state poison control centers

## CHAPTER 4

### DISCUSSION

There is no consistency in how states fund EMS/Trauma systems. Most states fund EMS and trauma from one budget and few actually denote funds specially for trauma programs. The states that receive revenues from fines assessed on traffic violations and fees from motor vehicle registration have the best and most consistent funding. These states typically fund EMS and trauma above the national per capita average (\$.57) and have reduced or no dependence on federal funding (Table 4).

Federal funding is also sharply lower than in previous years and is expected to continue to decrease as federal programs become more fiscally restrained or cease to exist as deficit reduction efforts continue. Table 5 demonstrates the percentage change for those states providing funding information in a 1995 state survey conducted by Emergency Medical Services Journal in comparison with fiscal year 1996 data collected as part of this study. It is evident that states can no longer depend on federal monies to support EMS/Trauma system programs. For the states reporting, a total reduction of nearly 29 percent was identified; Texas reported a total reduction in federal funding of nearly 58 percent.

While funding continues to tighten at the county, state and federal levels, there is no shortage of demand for EMS/Trauma systems support. This is particularly evident when

**TABLE 4. PER CAPITA AND FEDERAL FUNDING ANALYSIS**

<b>STATE</b>	<b>PER CAPITAL FUNDING</b>	<b>FEDERAL FUNDING (thousands) (FY 1996)</b>	<b>UNIQUE FUNDING INITIATIVES</b>
Arizona	\$0.70	0	Moving Violations
Colorado	\$0.88	0	Auto Registration
Florida	\$1.00	0	Moving Violations
Idaho	\$1.35	0	Auto Registration & License Renewal
Illinois	\$0.32	\$164	Moving Violations
Maryland	\$1.40	0	Auto Registration
Mississippi	\$0.95	0	Moving Violations & License Renewal
New Jersey	\$0.62	\$678	Auto Registration
New Mexico	\$2.42	0	Auto Registration
Pennsylvania	\$0.75	0	Moving Violations
Rhode Island	\$0.64	\$298	Moving Violations
Utah	\$1.18	\$30	Moving Violations
Virginia	\$1.59	0	Auto Registration
National Average	\$0.57	\$323	

**TABLE 5. PERCENT CHANGE IN FEDERAL**

<b>State</b>	<b>Total Federal Funding (thousands) (95 Survey)</b>	<b>Total Federal Funding (thousands) (FY 1996)</b>	<b>Percent Change</b>
Alabama	176	25	-85.80%
Alaska	485	485	0.00%
California	3100	2700	-12.90%
Connecticut	278	200	-28.06%
Illinois	164	164	0.00%
Louisiana	588	568	-3.40%
Maine	190	190	0.00%
Minnesota	455	291	-36.04%
Montana	502	240	-52.19%
Nebraska	490	480	-2.04%
New Mexico	1100	0	-100.00%
North Carolina	452	652	44.25%
North Dakota	86	101	17.44%
Ohio	150	120	-20.00%
Oregon	360	164	-54.44%
Rhode Island	334	298	-10.78%
South Carolina	957	660	-31.03%
South Dakota	53	53	0.00%
Tennessee	145	145	0.00%
Texas	877	371	-57.70%
Utah	300	60	-80.00%
Wyoming	113	112	-0.88%
<b>Totals</b>	<b>11355</b>	<b>8079</b>	<b>-28.85%</b>

one looks at the highways of America. Motor vehicle collisions are the number one cause of injury/trauma related deaths in the nation and the second leading cause of nonfatal injuries (Rice and McKennie 1989). Motor vehicle collisions are the leading cause of death and trauma to persons 1-34 years of age and are also responsible for the majority of new cases of quadriplegia and paraplegia each year (National Commission for Injury Prevention and Control 1989).

Motor vehicle collisions have long been recognized as a leading cause of trauma and the number one cause in trauma related deaths in Texas (Texas Department of Health, Bureau of Vital Statistics 1996). In 1995, there were 351,073 motor vehicle collisions reported in Texas (Texas Department of Public Safety, Accidents Record Bureau 1996) and these traffic collisions accounted for 3,302 deaths (Texas Department of Health, Bureau of Vital Statistics 1996). Compounding the problem, 2,108,439 convictions of traffic violations were entered into the Texas driver record file from September 1, 1994 to August 31, 1995. From September 1, 1995 through July 31, 1996 an additional 1,901,624 convictions were entered into driver records (Texas Department of Public Safety, Drivers Record Bureau 1996). These numbers do not include traffic violations that are adjudicated with probation or driver safety school and not reported to the state driver records. This does demonstrate that the laws designed to keep our highways safe and to reduce the risk of motor vehicle collisions are being violated everyday and have a direct impact on trauma related deaths and injuries.

## CHAPTER 5

### CONCLUSIONS AND RECOMMENDATIONS

Seven states have very successful programs which are not dependent on state general funding or federal funding. These states also exceed the national per capita expenditures for EMS/Trauma systems. States typically fund the EMS/Trauma system by utilizing monies generated by fines assessed on moving traffic violations. Texas should take steps to bring their EMS/Trauma system in line with other states by following the lead of these states and implement a self funding initiative. There are only eight states which have per capita expenditures for EMS/Trauma systems less than Texas' expenditures. The current funding levels fail to provide adequate resources to operate a comprehensive EMS/Trauma system statewide.

Texas must take steps to prepare for the inevitable challenges of decreased federal funding for EMS/Trauma systems. The state should establish an Emergency Medical Services/Trauma System Fund (EMS/TSF). An additional \$6 fee should be assessed on all moving traffic violations with the exception of parking violations and deposited in the EMS/TSF. Current disposition of fines assessed on moving traffic violations allows the municipality or county to use the fines for highway/road maintenance, law enforcement and to defray expenses of county traffic officers. Specifically, "each fiscal year, a municipality may retain . . . an amount equal to 30 percent of the municipality's revenue for the preceding fiscal year. . . [and] . . . shall send to

the state treasurer" the remainder (Texas 1995, §542.402).

Given that approximately two million traffic violations are adjudicated each year, (Texas Department of Public Safety, Drivers Record Bureau 1996) approximately \$12 million will be collected each year by assessing an addition \$6 fee for each fine imposed. This level of assessment will allow Texas to fund EMS and trauma initiatives at 65 cents per capita which is consistent with the national average of 57 cents per capita.

A reserve of \$250,000 should be maintained in the EMS/TSF for extraordinary emergencies. Funds in excess of the reserve should be disbursed as follows:

**25% should be made available to the 22 TSAs for use in the operation of the**

TSAs, equipment, communications and education and training. These monies should be disbursed to each TSA on a per capita basis for the geographic area served. Therefore, if the fund nets \$12 million, 25 percent or \$3 million will be available to the TSAs. Given that Texas has a population of 18,378,000, (U.S. Bureau of the Census 1996) each TSA will receive \$0.163 for each resident within the TSA. TSA-P with a total population of 1,658,762 (State of Texas 1996) would receive approximately \$270,000 to fund trauma initiatives in their area. Consideration will also be given to the relative amount of trauma care provided in each area. These monies should be distributed to the county where the RAC chairperson sits on behalf of the recipients.

**70% should be made available as funding for local EMS systems** to be used for services and operational expenses, education and training, equipment, vehicles and communications systems. This money should be disbursed to the counties on behalf of the eligible recipients. A county's share of the fund should be based on the relative geographic size and population of each county. The county's share will also be based on the relative number of EMS runs of each local recipient.

**3% should be made available to Texas Department of Health** for administrative costs associated with administering the state EMS/Trauma System Program, the Emergency Medical Services/Trauma System Fund, monitoring and technical assistance.

**2% of the fund and money in the fund not distributed otherwise pursuant to these provisions in excess of the reserve,** should be used to fund a portion of the uncompensated trauma care provided at state trauma facilities. Each TSA Regional Advisory Council Chairperson will petition the department for disbursement of funds to trauma centers in their TSA which have suffered deleterious effects due to uncompensated trauma care. Funds should be disbursed based on each facility's share of the statewide uncompensated trauma care. That is, if Trauma Center X has trauma care valued at \$10,000 for which compensation will not be received, and the total value of uncompensated trauma care for the state is \$1,000,000, Trauma Center X will receive a proportion of the funds

available for disbursement not to exceed 10,000:1,000,000 or 1 percent of those available funds. This provision will not fund all uncompensated care provided in the state trauma centers; it will, however, give some relief to the trauma centers. Innovative projects which impact EMS and trauma care may also be submitted to TDH for consideration for funding. Appendix C is the legislative summary for proposed legislative changes and Appendix D delineates proposed legislation to amend or change existing law to accomplish necessary changes.

These percentages are based on like disbursements in other states with similar programs and the anticipated funding necessary to fund the TSAs. TDH should be given the authority to review these percentages on an annual basis. Recommendations for proposed changes should be made to provide fair and appropriate funding for all initiatives covered under the EMS/Trauma System. Funds disbursed to counties for EMS and trauma initiatives not disbursed to eligible recipients for approved functions by the end of the fiscal year in which the funds were disbursed, will be return to the EMS/TSF and utilized to help reimburse trauma centers for uncompensated trauma care.

Other options for funding the EMS/Trauma system in Texas were considered and decidedly less attractive than the proposal to collect an additional \$6 fee on fines assessed for moving traffic violations. The first option considered was the utilization of monies generated by increasing the fee charged for motor vehicle registration and/or drivers' license renewal. In 1995, 3.1 million drivers' licenses were renewed/issued (Texas Department of Public Safety, Drivers Record Bureau 1996). To generate \$12 million to fund the EMS/Trauma system, it

would be necessary to increase the fee by \$3.87 or 24.2 percent. Additionally, 15.2 million motor vehicles were registered in 1995 (Texas Department of Transportation 1996). Efforts to generate \$12 million to fund the EMS/Trauma system would necessitate increasing the fee by 79 cents. Either of these actions would have the perceived effect of raising 'taxes' on the entire state and both were discounted as not likely to be well received as a result of that perception. Most individuals are aware of the fees paid in previous years to renew their motor vehicle registration or drivers' license. If these fees were increased, it would be very unpopular and perceived as an increase in taxes.

A second option considered was utilization of lottery monies. This option was quickly disqualified since these monies are currently directed for specific purposes. Pursuing this option would require competition with other designated recipients of those monies and would not be conducive to a timely and permanent resolution.

A third option considered was 911 monies. These are funds generated by a three-tenths of one percent surcharge assessed on intrastate long-distance telephone service (Texas 1996, §255.1). This assessment, however, fails to generate sufficient funding for the EMS/Trauma systems and the state poison control centers which are currently funded by these monies (Texas 1996, §255.9). Additionally, this source of revenue is declining as more people utilize E-mail and the Internet for communications and depend less on long-distance telephone service.

The most feasible option is the assessment of an additional fee of \$6 on all moving traffic violations. This option does not take monies from any existing entity, does not cause any undue burden on any agency and could have a dual effect of reducing unsafe motor vehicle operation in Texas due to the punitive nature of higher fines/penalties.

## CHAPTER 6

### SUMMARY

The importance of EMS and trauma programs cannot be overstated. No one questions the vital services provided by either program. It is, however, incumbent upon the state to ensure adequate funding for consistent services throughout the state. Rural communities should not suffer with insufficient services or dilapidated equipment due to an inability to fund the services, equipment or training. Consistent quality emergency medical care should be the standard throughout the state. This consistency should be in equipment, training and care provided as well as a state wide infrastructure designed to coordinate the movement of patients to more capable treatment facilities when medically necessary.

Texas has a unique opportunity to make those most responsible for causing trauma fund the injuries that result. People who violate motor vehicle/traffic laws, which are designed to keep our highways safe, should share the burden of funding EMS and trauma services. Though not every speeding driver or every drunk driver will cause an accident, these dangerous actions make highways unsafe and contribute significantly to the overall problem. Actions taken to adequately fund EMS and trauma initiatives in Texas will save lives, reduce disfigurement and disability and, perhaps, make our highways safer as violators face more stringent penalties for their reckless actions.

# APPENDIX A

## Texas Trauma Support Areas (County Assignment)

**Area A:** Armstrong, Briscoe, Carson, Childress, Collingsworth, Dallam, Deaf Smith, Donley, Gray, Hall, Hansford, Hartley, Hemphill, Hutchinson, Lipscomb, Moore, Ochiltree, Oldham, Parmer, Potter, Randall, Roberts, Sherman, Swisher, Wheeler

**Area B:** Bailey, Borden, Castro, Cochran, Cottle, Crosby, Dawson, Dickens, Floyd, Gaines, Garza, Hale, Hockley, Kent, King, Lamb, Lubbock, Lynn, Mitchell, Motley, Scurry, Terry, Yoakum

**Area C:** Archer, Baylor, Clay, Foard, Hardeman, Jack, Montague, Wichita, Wilbarger, Young

**Area D:** Brown, Callahan, Coleman, Comanche, Eastland, Fisher, Haskell, Jones, Knox, Nolan, Shackelford, Stephens, Stonewall, Taylor, Throckmorton

**Area E:** Collin, Cooke, Dallas, Denton, Ellis, Erath, Fannin, Grayson, Hood, Hunt, Johnson, Kaufman, Navarro, Palo Pinto, Parker, Rockwell, Somervell, Tarrant, Wise

**Area F:** Bowie, Cass, Delta, Hopkins, Lamar, Morris, Red River, Titus

**Area G:** Anderson, Camp, Cherokee, Franklin, Freestone, Gregg, Harrison, Henderson, Houston, Marion, Panola, Raines, Rusk, Smith, Upshur, Van Zandt, Wood

**Area H:** Angelina, Nacagdoches, Polk, Sabine, San Augustine, San Jacinto, Shelby, Trinity

**Area I:** Culberson, El Paso, Hudspeth

**Area J:** Andrews, Brewster, Crane, Ector, Glasscock, Howard, Jeff Davis, Loving, Martin, Midland, Pecos, Presidio, Reeves, Terrell, Upton, Ward, Winkler

**Area K:** Coke, Concho, Crockett, Irion, Kimble, Mason, McCulloch, Menard, Reagan, Runnels, Schleicher, Sterling, Sutton, Tom Green

**Area L:** Bell, Coryell, Falls, Hamilton, Lampassas, Milam, Mills

**Area M:** Bosque, Hill, Limestone, McLennan

**Area N:** Brazos, Burleson, Grimes, Leon, Madison, Robertson, Washington

- Area O:** Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, Llano, San Saba, Travis, Williamson
- Area P:** Atascosa, Bandera, Bexar, Comal, Dimmit, Edwards, Frio, Gillespie, Gonzales, Guadalupe, Karnes, Kendall, Kerr, Kinney, La Salle, Maverick, Medina, Real, Uvalde, Val Verde, Wilson, Zavala
- Area Q:** Austin, Chambers, Colorado, Fort Bend, Harris, Matagorda, Montgomery, Walker, Waller, Wharton
- Area R:** Brazoria, Galveston, Jefferson, Hardin, Jasper, Liberty, Newton, Orange, Tyler
- Area S:** Calhoun, Dewitt, Goliad, Jackson, Lavaca, Victoria
- Area T:** Jim Hogg, Webb, Zapata
- Area U:** Aransas, Bee, Brooks, Duval Jim Wells, Kenedy, Kleberg, Live Oak, McMullen, Nueces, Refugio, San Patricio
- Area V:** Cameron, Hidalgo, Starr, Willacy

## APPENDIX B

### STATE SUMMARY

**Alabama** does not have an established trauma system. The state EMS program is funded with \$950,000 from the state general fund. \$4.24 million which is generated by sales tax is in a Special Education Trust Fund to support regional lead agencies.

**Alaska** is in the process of establishing a trauma system. The state EMS program is funded with federal funds totaling \$485,000 and \$2.424 million from the state general fund. A large portion of the budget is used for regional grants. Some regional offices receive additional revenues by providing training, continuing education and from published materials (State and Province Survey 1995).

**Arizona** is in the process of establishing a trauma system. The state EMS program is funded with \$2.854 million from the assessment of civil, criminal and local ordinance violations (State and Province Survey 1995). Arizona has established an Emergency Medical Services Operating Fund (Arizona 1993, §36-2218) to be a repository of fines, penalties and forfeitures imposed and collected by the courts for a violation of DWI laws and moving violations. These funds are expended for funding personnel expenses, education, training and equipment purchases for local and state EMS systems (Arizona 1993, §36-2219).

- Arkansas** has an established trauma system. Funding is provided under the state EMS budget which is funded with \$400,000 from the state general fund. Local EMS services are provided by volunteers and/or subscription services.
- California** has an established trauma system. Funding is provided under the state EMS budget which is funded with \$2.7 in federal monies from a Preventive Health and Health Services Block Grant. State funding exists in the amount of \$2.435 million. \$1 million of the state funding is specifically designated for poison control centers and the remainder for high tourist impact in rural areas (State and Province Survey 1995).
- Colorado** is in the process of establishing a trauma system. The state EMS program is funded completely by \$3.223 million generated by vehicle registration fees. Colorado has an established Emergency Medicine Services Account (Colorado 1989, §25-3.5.603) to be a repository of funds generated by motor vehicle registration. \$100,000 always remains in the account for unexpected emergencies. Sixty percent of the monies are appropriated as grants to local EMS providers. Twenty percent of the monies are appropriated to counties. The remaining 20% of the monies is appropriated for direct and indirect cost of planning, developing, implementing and improving statewide EMS systems (Colorado 1989, §25-3.5.708). The state trauma legislation calls for funding to implement the statewide trauma system. These funds will be subject to

availability of Federal Department of Transportation monies and EMS Account monies that are unexpected portions of state administrative funds (Colorado 1989, §25-3.5.708).

**Connecticut** has an established trauma system. Funding is provided under the state EMS budget which is funded with \$200,000 federal monies and \$1 million from the state general funds.

**District of Columbia** has an established trauma system. Funding is provided under the district EMS budget which is funded with \$462,000 from federal sources and \$232,000 from the district general fund.

**Florida** has an established trauma program. Funding is provided under the state EMS budget which is funded with \$14 million; \$1.5 million is specifically designated for trauma. Florida has established an Emergency Medical Services Trust Fund which receives constant revenues from certification fees, EMS penalties and fines from various traffic tickets, and other motor vehicle fines (State and Province Survey 1995) Specifically, additional revenues come from driver license renewal (\$0.10), motor vehicle registration on all commercial vehicles having a gross weight of 10,000 pounds or more (\$5), (Florida 1990, §320.0801) reckless driving convictions (\$5) (Florida 1990, §316.192) and leaving the scene of an accident (\$5) ( Florida 1990, §316.061). Seven and two-tenths percent of all civil

penalties imposed by county courts are also being deposited in the EMS Trust Fund (Florida 1990, §318.210). These funds can be used to improve and expand pre-hospital emergency medical services in the state (Florida 1990, §401.113).

**Georgia** does not have an established trauma system. The state EMS program is funded with \$1 million from federal sources and \$2 million from the state general fund. \$1 million of the state monies budgeted to EMS go to fund the state poison control centers.

**Hawaii** has an established trauma system. Funding is provided under the state EMS budget which is \$31.3 million in state general funds. Hawaii is unique in that its EMS office performs various billing functions.

**Idaho** is in the process of establishing a trauma system. The state EMS program receives no federal funding and no state general funds. All funding is generated by revenues from motor vehicle registration and driver's license renewals. Funding for FY 96 was \$1.11 million. The Idaho State Legislature enacted a \$1.25 fee for each motor vehicle registration (\$1 for state EMS program and \$0.25 being retained by county EMS where the vehicle is registered) and a \$2.00 fee for all drivers' license renewals (every four years). Funds are deposited into an Emergency Medical Services Account to "be used exclusively for the purposes of EMS training, communications, vehicle and equipment grants and other programs

furthering the goals of highway safety and emergency response providing medical services" (Idaho 1993, §39-146).

**Illinois** has an established trauma system. It is funded under the state EMS budget which is funded with \$164,000 in federal monies and \$1.112 million from the state general fund. An additional \$2.5 million in revenue is collected from "all fees, fines, costs, additional penalties, and bail balances assessed or forfeited" (Illinois 1993, §25.27.5). Six and nine-sevenths of these monies are distributed to the Trauma Center Fund (Illinois 1993, §25.27.6). The Trauma Center Fund is disbursed to trauma centers in an effort to adjust for uncompensated trauma care provided (Illinois 1993, §3.5-5.03).

**Indiana** does not have an established trauma system. The state EMS program is funded with \$300,000 from the state general funds. Each county is responsible for funding local EMS programs.

**Iowa** has an established trauma system. Funding is provided under the state EMS budget which is funded with \$260,000 in federal monies from \$1.1 million from the state general fund.

**Kansas** is in the process of establishing a trauma system. The state EMS program is funded with \$814,000 from the state general fund.

**Kentucky** is in the process of establishing a trauma system. The state EMS program is funded with \$1.73 million from the state general fund. Ambulance taxing districts are authorized by Kentucky Revised Statutes, Chapter 108. Localities can also receive prepaid subscriptions (State and Province Survey 1995).

**Louisiana** is in the process of establishing a trauma system. The state EMS program is funded with \$568,000 from federal sources and \$250,000 from state funds which are self generating. These monies are raised by the EMS program, mainly through certification fees.

**Maine** is in the process of establishing a trauma system. The state EMS program is funded with \$190,000 in federal funds and \$850,000 from the state general fund.

**Massachusetts** is in the process of establishing a trauma system. The state EMS program is funded with \$950,000 in federal funds and \$100,000 in state general funds.

**Maryland** has an established trauma system. Funding is provided under the state EMS budget which is funded with \$7 million generated by vehicle registration fees. One dollar of each motor vehicle registration is designated to trauma systems and \$7 goes to an EMS trust fund.

**Michigan** does not have an established trauma system. The state EMS program is funded with \$800,000 in federal funds and \$700,000 in state general funds.

**Minnesota** does not have an established trauma system. The state EMS program is funded with \$291,047 in federal funds and \$3,034,629 in state funds, \$2,274,930 from general funds and \$759,691 from seat belt fines. A \$25 fine collected for each violation of the state mandatory seat belt statute (Minnesota 1989, §169.686) is deposited into the Emergency Medical Services Relief Account. These funds are used for personnel education and training, equipment and vehicle purchases, and operational expenses of emergency life support transportation services (Minnesota 1989, §169.686). Ninety-three and one-third percent of the fund is distributed evenly among each of the eight regional emergency medical services systems. Six and two-thirds percent of the fund is used to support region wide reporting systems (Minnesota 1989, §144.8093).

**Mississippi** has an established trauma system. Funding is provided under the state EMS budget which is funded with \$316,836 from state general funds, \$2,031,731 from moving violation fines and \$181,354 from license fees. In addition to any monetary penalty imposed for any moving traffic violation, an additional \$5 is assessed and deposited into the Emergency Medical Services Operating Fund (Mississippi 1993, §41-59-61). Funds are disbursed to local governments to fund local EMS programs.

**Missouri** has an established trauma system. Funding is provided under the state EMS budget which is funded with \$500,000 from federal sources and \$350,000 from

state general funds. Local ambulance districts are authorized up to a \$0.30 tax levy per \$100 assessed property value to generate funding for local EMS programs (State and Province Survey 1995).

**Montana** is in the process of establishing a trauma system. The state EMS program is funded with \$240,000 in federal funding and \$545,000 from state general funds.

**Nebraska** has an established trauma program which is funded under the state EMS budget. The EMS budget receives \$400,000 from federal sources and \$230,000 from the state general fund. Local EMS programs are supported with taxes, donations and subscription fees (State and Province Survey 1995).

**Nevada** has an established trauma program which is funded under the state EMS budget. The EMS budget receives no federal funds. The state general fund provides \$727,000 for EMS with \$27,000 specifically designated for trauma. Local innovations for funding EMS programs include raffles, auctions, supers, and dances. There is no regional fund raising and no special tax dedicated to EMS (State and Province Survey 1995).

**New Hampshire** has an established trauma system. Funding is provided under the state EMS budget which is funded with \$780,000 in federal monies and \$180,000 in state general funds.

**New Jersey** has an established trauma system. Funding is provided under the EMS budget which is funded with \$678,000 from federal sources. State funding is \$4.233 million and \$1.894 million of this amount comes from the New Jersey Emergency Medical Service Helicopter Response Program (New Jersey 1990, §26:2K-36.1). This fund receives a constant flow of revenues from an additional fee of \$1 assessment on all motor vehicle registrations (New Jersey 1990, §39:3-8.2).

**New Mexico** has an established trauma system which is funded under the state EMS budget. New Mexico's "Dollar for Life" program generates \$4 million annually. The state Emergency Medical Services fund was established to make money available to municipalities and counties to establish and enhance local EMS services (New Mexico 1996, §24-10A-2). Funds are accumulated by assessing an additional \$1 fee on all motor vehicle registration (State and Province Survey 1995). At a minimum, 75 percent of the fund is used annually to fund local EMS programs, including supplies, equipment and operating costs. No more than 22 percent is used annually for EMS system improvements, including statewide trauma care; no more than three percent may be used for administrative costs (New Mexico 1996, §24-10A-3).

**New York** has an established trauma program which is funded separate from the state EMS budget. The trauma budget was funded entirely by state general funds in the amount of \$2.5 million. The EMS budget consists of \$16 million from the state

general funds. No federal monies were designated for EMS on trauma.

**North  
Carolina**

has an established trauma program which is funded with the state EMS budget. Federal funding accounts for \$652,000. State general funds account for \$2.4 million.

**North  
Dakota**

is in the process of establishing a trauma program. The state EMS program is funded with \$101,000 in federal monies and \$293,161 in state general funds.

**Ohio**

is in the process of establishing a trauma program. The state EMS program is funded with \$120,000 from a federal EMS for Children Grant and \$3.9 million in state funds received from fines assessed for violation of state seat belt laws (Ohio 1995, §4513.263).

**Oklahoma**

is in the process of establishing a trauma program. It is funded with \$100,000 from the federal government and is budgeted separately from the EMS budget. The EMS program is funded with \$425,000 state funds collected from ad valorem taxes, earmarked sales tax, earmarked city utility assessments, trust funds, subscriptions and donations (State and Province Survey 1995).

**Oregon**

has an established trauma system. Funding is provided under the state EMS budget and a portion of the funds are designated specifically for the trauma program. Federal monies allocated for EMS are \$335,000. State allocations

come from two sources: state general funds and from fees paid for testing, certification and surveys. General funds allocated for EMS were \$508,513 and \$291,110 for trauma. \$1,377,458 in fees were generated for EMS and \$361,140 for trauma. Oregon has a biennial budget. These figures represent funding for a twenty-four month period. All figures were appropriately adjusted for the comparative analysis.

**Pennsylvania**

has an established trauma system and funding is provided under the state EMS budget. State funding for EMS and trauma is approximately \$9 million which is wholly funded by revenues generated by an additional assessment of \$10 on all traffic violation fines and \$25 on all DUI/DWI penalties.

**Rhode Island**

is in the process of establishing a trauma system. The state EMS program is funded with \$298,000 from federal sources and \$334,000 state monies. The EMS program receives \$1 from each moving violation fine (approximately \$75,000 annually) and limited EMS license fees (approximately \$60,000 annually) (State and Province Survey 1995). Funds are deposited into the budget at the Department of Health for EMS (Rhode Island 1995, §31-26-18).

**South Carolina**

has an established trauma system which is funded with the state EMS budget. Federal funds committed to the EMS budget total \$659,907 and state funds total \$2,089,450.

**South  
Dakota**

is in the process of establishing a trauma system. The state EMS program program is funded with \$53,000 from federal sources and \$350,000 from the state general fund.

**Tennessee**

has an established trauma system which is funded with the state EMS budget. The program receives \$145,000 from federal sources and \$100,000 from the state general funds and \$160,000 from EMT licensure fees.

**Texas**

has an established trauma program which is funded with the state EMS program budget. Federal monies designated to the EMS program totaled \$370,795. State funding included \$606,000 from general funds, \$407,007 for sexual assault grants and \$2 million in general funds is allocated for grants to local EMS programs for total state funding of \$3.076 million.

**Utah**

has an established trauma program which is funded with the state EMS program. Funds are, however, specified in the budget for trauma. Federal funding for EMS is \$40,000 and trauma is \$20,000. State general funds for EMS are \$815,000 and for trauma are \$85,000. Additionally, \$105,000 is generated each year through certification fees and equipment rentals. Approximately \$1.293 million is also available in the EMS grants program. These funds are generated from receipt of traffic violation fines or bail (Utah 1995, §26-8-25).

**Vermont** does not have a trauma program. The state EMS budget is funded with \$125,000 from federal sources and \$275,000 from the state general fund.

**Virginia** has an established trauma program. It is funded under the state EMS program with a budget of \$10,380,308. These funds are generated by a \$2 per year charge on each motor vehicle registration and are set aside as a special fund to be used only for emergency medical services. These funds can be used as follows:

2.5%	Virginia Association of Volunteer Rescue Squads
13.5%	State Department of Health for Training
31.75%	Rescue Squad Assistance Fund
27.25%	State Department of Health for EMS
25.00%	Returned to locality where vehicles are registered to fund local EMS initiatives (Virginia 1996, §46.2-694).

**Washington** has an established trauma program which is funded under the state EMS budget. The program is funded exclusively with state general funds in the amount of \$2,180,000 for training, development and implementation of EMS programs. Additionally, the state poison control centers are funded biannually with \$3.9 million of state general funds. All figures were appropriately adjusted for the comparative analysis.

**West  
Virginia**

is in the process of establishing a trauma program. The state EMS program program is funded with \$300,000 from federal sources and \$2.2 million from the state general fund. Some county commissioners do support local EMS programs with levies (State and Province Survey 1995).

**Wisconsin**

does not have an established trauma program. The state EMS budget receives \$280,000 from federal sources and \$2.55 million from the state general fund.

**Wyoming**

has an established trauma program which is funded separate of the state EMS budget. Funding for fiscal year 1996 was set at \$119,000 which came exclusively from state general funds. The EMS program is funded with \$122,000 from federal sources and \$330,000 from the state general fund.

*Note: All funding figures are for fiscal year 1996 as defined by each state*

# **APPENDIX C**

## **LEGISLATIVE SUMMARY**

### **EMERGENCY MEDICAL SERVICES (EMS)/TRAUMA FUND**

#### **WHY DO WE NEED AN INITIATIVE?**

State Emergency Medical Services (EMS)/Trauma system planning programs are designed to facilitate and coordinate a multidisciplinary systems approach for timely responsiveness to severely injured patients. Studies over the preceding four decades have demonstrated that trauma patients have improved chances of survival if they are transported to a designated trauma center where the specialized care is available to treat their multiple and complex injuries. Additionally, studies have demonstrated that a full one-third of all trauma related deaths initially treated in non-trauma facilities may have been prevented if an effective EMS/Trauma system were in place.

Funding for EMS and trauma is being brought to the forefront of debate as states struggle to reduce budgets. These vital programs are also losing precious resources as federal funding shrinks and, in some cases, ceases.

Trauma system planning gained momentum in Texas in 1989 with the passage of trauma legislation and the establishment of twenty-two Trauma Services Areas (TSA). The state of Texas recognized that a regional approach that places trauma centers at the center of a comprehensive EMS system is the best way to reduce deaths caused by traumatic injuries. The concept of regionalized trauma care places the sickest and most costly patients to care for at the

Level One trauma centers. Based on reimbursement rates and uncompensated care, these facilities quickly exhaust resources and in some cases must cease to provide trauma care or seek alternative funding sources to continue trauma service.

Current Texas State Legislation and Texas Department of Health Rules call for multiple initiatives to reduce death due to trauma in Texas. Specific measures are in place to address access and the quality of trauma care. Neither document, however, addresses the issue of funding for statewide or local activities that can help attain the goals set by the state. The State of Texas has recognized the fundamental need for an integrated EMS/Trauma system to address the emergent health care needs of its residents but has failed to fund these initiatives adequately.

### **WHAT WILL THE BILL/INITIATIVE DO?**

Seven states have very successful programs which are not dependent on federal funding and exceed national per capita expenditures for funding EMS/Trauma systems. These states utilize monies generated by fines assessed on moving traffic violations. Texas should follow the lead of these states given that there are only eight states which have per capita expenditures for EMS/Trauma systems less than Texas' expenditures. The current funding levels fail to provide adequate resources to operate a comprehensive EMS/Trauma system to meet the emergent health care needs of all Texans.

Texas must take steps now to prepare for dwindling federal funding. The state should establish an Emergency Medical Services/Trauma System Fund. An additional \$6 fee should be assessed on all moving traffic violations and deposited in the fund.

## **WHAT ARE WE DOING NOW? (CURRENT PROCESS)**

Texas has an established trauma program which is funded with its EMS program. Federal monies designated to the EMS program totaled \$370,795 for FY 1996 and the state contributed \$606,000 from general funds, \$407,007 for sexual assault grant and \$2 million in general funds which are allocated for grants to local EMS programs for total state funding of \$3.076 million. Current per capita spending on EMS/Trauma systems in Texas is eighteen cents; the national average is fifty-seven cents per capita. Funding short falls are addressed at the county or local level if at all. Trauma related initiatives are not funded at all by the state. Trauma initiatives currently in place are funded by grants which, in most cases, cannot be renewed.

Current disposition of fines assessed on moving traffic violations allows the municipality or county to use the fines for highway/road maintenance, law enforcement and to defray expenses of county traffic officers. Specifically, "each fiscal year, a municipality may retain . . . an amount equal to 30 percent of the municipality's revenue for the preceding fiscal year. . . [and] . . . shall send to the state treasurer" the remainder.

## **WHAT WILL THE INITIATIVE COST/SAVE?**

Given that approximately two million traffic violations are adjudicated each year, approximately \$12 million will be collected annually by assessing an additional \$6 fee for each fine levied for moving violations. This level of assessment will allow Texas to fund EMS and trauma initiatives at 65 cents per capital which is consistent with the national average of 57 cents per capita.

A reserve of \$250,000 should be maintained in the EMS/Trauma System account for

extraordinary emergencies. Funds in excess of the reserve should be disbursed as follows:

25% should be made available to the 22 TSAs for use in operation of TSAs

70% should be made available as funding for local EMS systems

3% should be made available to the Texas Department of Health for administrative cost associated with running the state EMS/Trauma Program

2% of the fund, and money in the fund not distributed otherwise pursuant to these provisions in excess of the reserve, should be used to fund a portion of the uncompensated trauma care provided in the state.

## **HOW WILL WE PAY FOR THE INITIATIVE?**

An additional \$6 fee should be assessed on all moving traffic violations and deposited in the Emergency Medical Services/Trauma System Fund. Expenditures from the fund would not exceed the assets of the fund.

## **WHO WILL BENEFIT?**

The importance of EMS and trauma programs cannot be overstated. No one questions the vital services provided by either program. It is however, incumbent upon the state to ensure adequate funding is available for consistent services throughout the state. Rural communities should not suffer with insufficient services or dilapidated equipment due to inability to fund the services, equipment or training. Consistent quality of care should be the standard throughout the

state. This consistency should be in equipment, training and care provided.

Texas has a unique opportunity to make those most responsible for causing trauma in our state fund the injuries they are responsible for causing. In 1995, there were 9,338 Texans who died as a result of trauma related or poisoning injuries. More than 351,000 motor vehicle collisions were reported in Texas and as a result of these traffic collisions, 3,302 Texans lost their lives. Compounding the problem, 2,108,439 convictions of traffic laws were entered into the Texas driver record file from September 1, 1994 to August 31, 1995. People who violate motor vehicle/traffic laws, which are designed to keep our highways safe, should bear the burden of funding EMS and trauma services. Though not every speeding driver or every drunk driver will cause an accident, these actions do make our highways unsafe and contribute significantly to the overall problem.

Actions taken now to adequately fund EMS and trauma initiatives in Texas will save lives, reduce disfigurement and disability and, perhaps, make our highways safer as violators face more stringent penalties for their reckless actions.

# APPENDIX D

## PROPOSED LEGISLATION

### A BILL TO BE ENTITLED

#### AN ACT

relating to the establishment of an Emergency Medical Services(EMS)/Trauma System Fund by prescribing penalty assessment on certain moving traffic violations and prescribing deposit of assessed monies in order to provide money to regions and counties in proportion to their needs for the use in establishing, maintaining and improving local and regional EMS/Trauma Systems in pursuit of reducing injury, disfigurement, disability and loss of life.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Section 773.111, Health and Safety Code, is amended to read as follows:

Sec. 773.111. LEGISLATIVE FINDINGS. (a) The legislature finds that death caused by injury is the leading cause of death for persons one through 44 years of age, and the third overall cause of death for all ages. Emergency Medical Services (EMS)/Trauma System planning programs are designed to facilitate and coordinate a multidisciplinary systems approach for timely responsiveness to severely injured patients and a regional approach that places trauma centers at the center of a comprehensive EMS/Trauma System is the best way to reduce deaths caused by traumatic injuries.

(b) It is estimated that trauma cost more than \$63 million a day nationally, which includes lost wages, medical expenses, and indirect cost. Proportionately, this cost to Texas would be more than \$4 million a day. Motor vehicle collisions have long been recognized as a leading

cause of trauma and the number one killer in trauma related deaths in Texas. Many hospitals provide emergency medical care to patients who are unable to pay for catastrophic injuries directly or through an insurance or entitlement program.

(c) In order to improve the health of the people of the state, it is necessary to improve the quality of the EMS/Trauma System in providing medical care to the people of Texas who are victims of unintentional, life-threatening injuries by encouraging hospitals to provide trauma care and increasing the availability and effectiveness of emergency medical services and trauma care. This will be accomplished by establishment of the Emergency Medical Services/Trauma Systems Fund. The fund shall be used for the general purpose of promoting systematic, cost-effective delivery of emergency medical and trauma care throughout the state and identifying common local, regional, and state emergency medical/trauma system needs and providing assistance in addressing those needs.

SECTION 2. Subchapter E, Chapter 773, Health and Safety Code is amended by adding Sections 773.120-773.123 to read as follows:

Section 773.120. FUND ESTABLISHMENT. (a) The Emergency Medical Services (EMS)/Trauma System Fund is created in the state treasury. Monies shall not revert to the general fund at the end of the fiscal year.

(b) This fund shall receive deposits from an assessment of an additional \$6 to every fine, penalty and forfeiture imposed and collected by the courts for a violation of any provision of Title 10, Chapter 49, Section 49.03 through 49.08 of the Texas Penal Code and Title 7, Chapter 545, Section 545.051 through 545.423 except for a violation of Section 545.301 through 545.306 (Stopping, Standing, or Parking) of the Texas Transportation Code.

(c) Monies in the fund may be appropriated only to the department for the purposes delineated in Section 773.121.

Sec. 773.121. PAYMENTS FROM THE FUND. (a) The director of the department of health with advice and counsel from the chairpersons of the Regional Advisory Councils (RAC), shall expend monies collected pursuant to Section 773.120 for funding of county and regional Emergency Medical Services/Trauma Systems.

(b) A reserve of \$250,000 will be maintained in the Emergency Medical Services/Trauma Fund for extraordinary emergencies.

(c) In any fiscal year:

(1) no less than 70 percent of the money in the fund shall be used for funding the local emergency medical services to support the cost of supplies, operational expenses, education and training, equipment, vehicles and communications systems. This money shall be distributed to counties on behalf of eligible recipients. A county's share of the fund shall be based on the relative geographic size and population of each county. The county's share shall also be based on the relative number of runs of each local recipient. Funds not disbursed by the counties to eligible recipients for approved functions by the end of the fiscal year in which the funds were disbursed to the counties, shall be returned to the Emergency Medical Services (EMS) /Trauma System Fund to be disbursed in accordance with Section 773.121.c.4.

(2) no more than 25 percent of the fund shall be used to fund the twenty-two Trauma Support Areas (TSA) for use in operation of the TSA, equipment, communications, and education and training. This money shall be distributed to the county where the chairperson of the Regional Advisory Councils (RACs) sits on behalf of eligible recipients. A RACs share of

the fund shall be based on the relative geographic size and population of each TSA and the relative amount of trauma care provided. Funds not disbursed by the counties to eligible recipients for approved functions by the end of the fiscal year in which the funds were disbursed to the counties, shall be returned to the Emergency Medical Services (EMS) /Trauma System Fund to be disbursed in accordance with Section 773.121.c.4.

(3) no more than three percent of the fund shall be used to fund the Texas Department of Health, Bureau of Emergency Management for administrative cost associated with administering the state Emergency Medical Services Program, Trauma Program, and the Emergency Medical Services/Trauma Systems Fund, monitoring and technical assistance.

(4) no less than two percent of the fund, and money in the fund not distributed otherwise pursuant to the provisions of Subsection C of this section in excess of the reserve, shall be used to fund a portion of the uncompensated trauma care provided at state trauma facilities designated as such by the department. Each TSA Regional Advisory Council Chairperson will petition the department for disbursement of funds to trauma centers in their TSA which have suffered deleterious effects due to uncompensated trauma care. Funds may be disbursed based on a proportionate share of uncompensated trauma care provided in the state. This designated money may also be disbursed to fund innovative projects which enhance the delivery of patient care in the overall Emergency Medical Services/Trauma System.

d. The department will review the percentages for disbursement of funds in the Emergency Medical Services/Trauma Systems Fund on an annual basis. Recommendations for proposed changes shall be made to ensure appropriate and fair funding is provided for all initiatives of this section.

Sec. 773.122. CONTROL OF EXPENDITURES FROM THE FUND. (a) Money distributed from the fund shall be expended pursuant to Section 773.121 and for purposes outlined there on the authorization of the county judge upon vouchers issued by its appropriate finance authority.

Section 773.123 LOSS OF FUNDING ELIGIBILITY (a) A county, municipality or local recipient that is found to have expended money in violation of this act may be ineligible to receive funding from the Department of Health for a period not less than one year or more than three years, as determined by the Department of Health.

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