Commonwealth of Virginia, Highway Safety Division
Fifth Annual Highway Safety Work Program

July 1, 1975 — September 30, 1976

Compiled and Prepared

by

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(A Report Prepared by the Virginia Highway and Transportation Research Council
Under the Sponsorship of the Highway Safety Division of Virginia)

Virginia Highway and Transportation Research Council
(A Cooperative Organization Sponsored Jointly by the Virginia Department
of Highways and Transportation and the University of Virginia)

Charlottesville, Virginia

May 1975

VHTRC 75-R41

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PART I

INTRODUCTION

This submission is the state's Fifth Annual Highway Safety Work Program. It was prepared by the Virginia Highway and Transportation Research Council for the Commonwealth of Virginia in fulfillment of the state's obligation to the National Highway Traffic Safety Administration.

Again this year, local Highway Safety Commissions were asked to assist the Highway Safety Division in the preparation of the Annual Highway Safety Work Program. The sampled local safety commissions followed a format similar to that of the state, while the remaining local commissions utilized a questionnaire for data input to this program. The local commissions were assisted in this effort by the six area coordinators and the coordinator supervisor of the Highway Safety Division.

At the state level, the compilation of data necessary for this submission was assisted by numerous persons. Among them were the Financial Management Supervisor of the HSD, Supervisor of Driver Education Services, Deputy Director of the Virginia Division of Consolidated Laboratory Services, Supervisor of Pupil Transportation, State Police Property and Finance Officer, Supervisor of Emergency Medical Services, Project Director for VASAP, State Police Safety Officer, Traffic Records Coordinator, Division of Motor Vehicles Driver Services Administrator, and a number of engineers from the Department of Highways and Transportation.

Instructions used for the subject content of the Annual Highway Safety Work Program were found in the February 1972 issue of the Highway Safety Program Manual, Volume 103.

The Annual Highway Safety Work Program for Virginia is divided into five parts. The first part is the Introduction; the second is a Summary of Costs for the FY 1976 AWP. Part III is the Program Analysis, which provides an overview of the Program. Subelement Plans (SEPs), which make up the planning documents, constitute Part IV of the Program. They provide a one-year projection (1975-1976) of the programs and projects under the various standard areas. A narrative discussion on how the activities will implement the State Comprehensive Plan precedes each SEP. Part V of the Program is the Federal-Aid Highway Safety Program Agreement.

It should be noted in reviewing this submission that all projects, programs, tasks, and milestones mentioned are directed toward implementing the third fiscal year of Virginia's FY 74-77 Comprehensive Highway Safety Plan.

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SUMMARY OF COSTS

STATE Virginia

1976 AWP PROGRAM FUNDING BY TASK

Subelement Number	Task No.	Description	Total Cost =	State Cost +	Local Cost +	Federal Share	Federal To Localities
PA76-100	1	Highway Safety Operations	622.486	371.46		251.026	
	2	Highway Safety Awareness Programs	20.0		10.0	10.0	10.0
	3	Evaluation and Survey of Local Commissions	9.0			9.0	9.0
			651.486	371.460	10.0	270.026	19.0
VI76-261	1	Administrative Personnel	104.0	104.0			
	2	Field Supervisory Personnel	248.0	248.0			
	4	Inspection Supplies & Equipment	136.0	136.0			
	5	PMVI Study	15.0			15.0	
			503.0	488.0		15.0	
VR76-261	1	Motor Vehicle Titling	4092.	4092.			
	2	Motor Vehicle Licensing	3664.	3664.			
	3	Motor Vehicle Records	3013.	3013.			
	4	Program Administration	326.	326.			
			11095.	11095.			
MS76-151	2	Public Information Program	30.	15.		15.	15.
			30.	15.		15.	15.
DE76-161	1	Personnel	44.	44.			
	2	Driver Education Certificate	4.	4.			
	8	Revision of State Curriculum Guide	12.	6.		6.	
	9	Program Administration	25.	12.5		12.5	
	10	Motorcycle Driver Education Program	12.	6.		6.	6.

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1976 AWP PROGRAM FUNDING
BY TASK

Subelement Number	Task No.	Description	Total Cost =	State Cost +	Local Cost +	Federal Share	Federal To Localities
	11	Alcohol Curriculum Guide	4.	2.		2.	
	12	Personnel (Local)	16000.		16000.		
	13	Equipment and Communication	1700.		1413.3	286.7	286.7
			17801.	74.5	17413.3	313.2	292.7
DE76-166	2	Statewide Training Center	60.			60.	
DE76-162	4	Equipment	6.	6.			
	5	Travel	6.	6.			
	6	Secretary	6.	6.			
			18.	18.			
DE76-163	1	Boys Home	41.	41.			
	5	Personnel	27.	27.			
	6	Classroom Space	18.	18.			
	7	Travel	2.	2.			
	8	Maintenance	5.	5.			
	9	Special training for instructors	3.	3.			
			96.	96.			
DE76-164	2	Expenses for board	6.	6.			
DL76-161	1	Driver Testing Program	4730.	4506.		224.	
	2	Driver Licensing Program	4094.	4094.			
	3	Driver History Records	2694.	2694.			

SUMMARY OF COSTS

STATE Virginia

1976 AWP PROGRAM FUNDING
BY TASK

Subelement Number	Task No.	Description	Total Cost	= State Cost	+ Local Cost	+ Federal Share	Federal To Localities
	4	Driver Improvement Programs	2011.	2011.			
	5	Driver Vehicle Registration Monitoring & Control Program	3052.	3052.			
	6	Program Administration	285.	285.			
	7	Driver Reexam Study	22.			22.	
			16888.	16642.		246.	
CL76-501	3	State Traffic Codes	28.	14.		14.	14.
	4	Training program for policemen	16.	16.			
			44.	30.		14.	14.
TC76-491	3	Court Personnel	1500.	1500.			
	4	Renovation of courtrooms	14.	7.		7.	7.
	6	Equipment	4.		2.	2.	2.
			1518.	1507.	2.	9.	9.
AL76-471	1	VASAP	2200.		2000.	200.	200.
	2	Awareness courses	16.			16.	
	3	Mid-management	4.			4.	
	4	Breath test devices	21.			21.	21.
	5	Equipment, supplies, personnel	159.			159.	
	6	Equipment	20.		10.	10.	10.
			2420.		2010.	410.	231.

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SUMMARY OF COSTS

STATE Virginia

1976 AWP PROGRAM FUNDING
BY TASK

Subelement Number	Task No.	Description	Total Cost =	State Cost +	Local Cost +	Federal Share	Federal To Localities
TR76-501	1	Evaluation of Va. T. R System	26.			26.	
	2	Phase II	156.			156.	
	3.	Develop TRIS Data Base	131.			131.	
	3.1a	File Conversion	6.			6.	
	3.1b	Teleprocessing system	30.9			30.9	
	3.1c	Data Base	30.			30.	
	3.3a	Logging	13.7			13.7	
	3.6	Jurisdictional Report Program	25.5			25.5	
	4	Personnel	120.		60.	60.	60.
	5	Equipment	12.		6.	6.	6.
			551.1		66.	485.1	66.
EM76-181	3	EMS Office Structure	152.6	152.6			
	4	Equipment & Communications	3016.68		2611.08	405.6	405.6
	5	Training (Categories G & H)	48.48		48.48		
	7	Uniform Reporting Forms	23.1		23.1		
			3240.86	152.6	2682.66	405.6	405.6
PS76-161	1	Public Information Program	30.	15.		15.	15.
	3	Personnel	200.		100.	100.	100.
	4	Bicycle Safety Courses	40.	15.	20.	20.	20.
			270.	15.	120.	135.	135.

SUMMARY OF COSTS

STATE Virginia

1976 AWP PROGRAM FUNDING
BY TASK

Subelement Number	Task No.	Description	Total Cost	= State Cost	+ Local Cost	+ Federal Share	Federal To Localities
PT76-471	1	Personnel	16166.9	16166.9			
	2	Equipment	71.8	71.8			
	3	Training	42.1	21.05		21.05	
	4	Radar Systems	150.	75.		75.	
			16430.8	16334.75		96.05	
PT76-472	1	Personnel	22000.		21960.	40.	40.
	2	Equipment	1310.		1110.	200.	200.
			23310.		23070.	240.	240.
DC76-281	2	Training	15.			15.	15.
	3	Equipment & Communications	225.		170.	55.	55.
			240.		170.	70.	70.
SB76-221	1	Program Improvement and Administration	161.	9.		152.	
	2	Vehicle Requirement	2.	2.			
	3	Operational Costs	47462.	47462.			
			47625.	47473.		152.	

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1976 AWP PROGRAM FUNDING
BY TASK

Subelement Number	Task No.	Description	Total Cost =	State Cost +	Local Cost +	Federal Share	Federal To Localities
AC76-571	1	Equipment	6.		3.	3.	3.
	2	Training	1000.		960.	40.	40.
			1006.		963.	43.	43.
		TOTAL 14½ STANDARDS	143804.246	94318.31	46506.96	2978.976	1540.3
IS76-392	1	Statewide CIT	25.	12.5		12.5	
	2	Crash Facts/Localities	10.	5.		5.	5.
	3	Equipment	1.		.5	.5	.5
			36.	17.5	.5	18.	5.5
HD76-362	1	Personnel	80.		40.	40.	40.
	2	Equipment & Communication	120.		60.	60.	60.
	7	Training	2.		1.	1.	1.
	9	Accident Evaluation Studies	80.			80.	80.
	10	Traffic Flow Study	50.			50.	50.
			332.		101.	231.	231.

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1976 AWP PROGRAM FUNDING
BY TASK

Subelement Number	Task No.	Description	Total Cost =	State Cost +	Local Cost +	Federal Share	Federal To Localities
TE76-361	6.F.	Training	2.			2.	
TE76-362	1	Seminars	12.			12.	12.
	2	Training	16.		8.	8.	8.
	3	Personnel	200.		168.	32.	32.
	4	Equipment and Communication	250.		210.	40.	40.
	5	Inventory	75.		37.5	37.5	37.5
	6	Studies	72.		36.	36.	36.
			625.		459.5	165.5	165.5
PS76-162	2	Bicycle routes	64.		32.	32.	32.
	3	Equipment	52.		26.	26.	26.
	4	Identify high pedestrian accident locations	8.		4.	4.	4.
			124.		62.	62.	62.
		TOTAL $3\frac{1}{2}$ STANDARDS	1119.	17.5	623.	478.5	464.

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SUMMARY OF COSTS
For 3 Month Transitional Period
STATE Virginia
7/1/76 - 9/30/76
1976 AWP PROGRAM FUNDING
BY TASK

Subelement Number	Task No.	Description	Total Cost =	State Cost +	Local Cost +	Federal Share	Federal To Localities
PA76-100	1	Highway Safety Operations	646.46	371.46		275.	
AL76-471	1	VASAP	523.897	120.899		402.998	200.
DL76-161	7	Driver Reexam Study	5.5			5.5	
TR76-501	3	Traffic Records - Ongoing	50.			50.	
		TOTAL 14½ STANDARDS	1225.857	492.359		733.498	200.
IS76-392	1	Statewide CIT	25.	12.5		12.5	
	3	Equipment	1.		.5	.5	.5
HD76-362	7	Training	2.		1.	1.	1.
	9	Accident Evaluation Studies	80.			80.	80.
	10	Traffic Flow Study	50.			50.	50.
TE76-362	1	Seminars	12.			12.	12.
	2	Training	16.		8.	8.	8.
		TOTAL 3½ STANDARDS	186.	12.5	9.5	164.	151.5

PART III

PROGRAM ANALYSIS

Historically, as traffic volume has increased, accidents have increased accordingly. The purpose of the Highway Safety Division is to develop and implement programs designed to provide for safer highways, motor vehicles, and drivers. Successful highway safety programs should reduce both the rate of occurrence and severity of traffic accidents.

Traffic accidents result from a highly complex set of interdependent factors. This makes it very difficult to isolate and determine with any reasonable accuracy the impact of any specific highway safety program on one factor or the set of factors which contribute to the occurrence of a traffic accident. Therefore, this analysis will focus on overall traffic accident statistics to assess the impact of Virginia's highway safety program. The data analyzed indicate that safety programs are playing a significant role in reducing both the rate of occurrence and severity of traffic accidents in Virginia. It is the express purpose of the Highway Safety Division to continue its successful programs and to analyze and seek to identify those factors which have contributed to the success of these programs. The information obtained from the scrutiny of the successful programs is being used to develop new and more effective safety programs and to improve old ones.

Methodology

The data analyzed in this study were obtained from the Virginia Department of Highways and Transportation and the Division of Motor Vehicles. All of the data from which the graphs were drawn and from which projections were made are contained in the tables set forth in Exhibits 2 through 6. The data in the tables reflect the annual accident summaries for the interstate, arterial and primary, and secondary highway systems, including those figures for arterial and primary and secondary routes in incorporated municipalities with a population less than 3,500. The data labeled "All Virginia" include all motor vehicle accidents occurring on all public roads and streets within the entire state. In all instances the data are the most recent available.

Time series analysis was used to project values through 1979 for the relevant accident statistics in the exhibits with the exception of those in Exhibits 11 and 15 through 17, where linear regression analysis was employed to make the projections. The time series projections were done using the least squares formula. The graphic projections were plotted from the last point on the historical data line to the first point on the least squares line corresponding to the predicted value for the first year to be predicted. From this point the least squares line was drawn through 1979 to reflect the predicted values for those years.

Linear regression analysis, using Billion Vehicle Miles of Travel as the independent variable, was used to project the overall accident statistics of Exhibits 15 through 17. Regression analysis was also used to predict the occurrence of motorcycle crashes (Exhibit 11). The independent variable selected for these regressions, however, was total motorcycle registrations, as the total number of motorcycle miles of travel was not available. The regression projections were plotted graphically similar to the time series projections. A line was drawn from the last point on the historical data line to the point on the regression line for the first year to be predicted, and from this point the regression line was extended through 1979.

The impact of the "Energy Crisis" has not been factored into this analysis beyond the use of the preliminary 1974 billion vehicle miles of travel figure, which indicates that traffic volume is about 3.6% below the level of 1973. While the accident figures for 1974 have not yet been completely assembled, a partial data analysis indicates that the accident figures for 1974 will be lower than they would have been in the absence of the gasoline shortages experienced in 1974. It appears that at least in the short run one positive by-product of the "Energy Crisis" in Virginia will be a reduction in the number of traffic accidents, but there is no way to presently determine if this is indicative of the long run trend. The present energy problem with its direct impact on traffic volume is the product of too many volatile factors to lend itself to quantification and inclusion in this analysis. However, it can be said that, if the present "Energy Crisis" continues unabated, the actual accident levels realized in the coming five years should fall below the graphic projections of this analysis. It should be noted that both time series and regression analyses are based on the assumption that past conditions will continue and to that extent projections by these methods are insensitive to future events such as the "Energy Crisis."

All statistical measures in this analysis are significant at the .05 level. For a definition of the terms used in the analysis, see Exhibit 1.

Analysis

The Highway Safety Division has set a goal of reducing both the rate of occurrence and the severity of traffic accidents. Until 1974 and the advent of the "Energy Crisis," the increase in the number of motor vehicles (see Exhibit 7) and the number of licensed operators and chauffeurs (see Exhibit 8) had resulted in a trend of increasing traffic volume in Virginia (see Exhibit 9). This increase in the volume of traffic compounded the seriousness of the highway safety problems to be solved by the Highway Safety Division.

An example of the type of problem faced by the Division is that posed by the growing number of motorcycles on the state's highways. Exhibit 10 shows that the number of motorcycles registered has been increasing at a rate of 22% per year since 1965. This increase in the number of motorcycles has been accompanied by a rapid increase in the number of motorcycle accidents, and this trend is expected to continue (see Exhibit 11). Safety programs in this area are

designed to reduce the severity of these accidents with program emphasis placed on reducing the proportionate number of fatalities as the number of total accident increases. While efforts such as the mandatory safety helmet law have been instituted to reduce the severity of motorcycle accidents, it is recognized that continuing efforts must be made in this area as motorcycle safety becomes an ever increasing concern of Virginia's overall highway safety program.

The drinking driver is yet another major problem area confronting the highway safety program, and the Highway Safety Division is studying closely the pilot Alcohol Safety Action Project in Fairfax, Virginia. Following the lead of the Fairfax program, alcohol safety action programs have been implemented in nine other localities in the state.

The goal of reducing the rate of occurrence of traffic accidents is being realized. From 1972 to 1973, total vehicle miles of travel increased 6 percent, but the all Virginia accident rate for the same period declined by 4.2 percent. The pattern of stabilization and decline of the accident rate over the past 10 years is expected to continue on all Virginia road systems (see Exhibit 12) and is a direct indication of the increasing safety with which traffic is moving over the roads of Virginia.

The programs of the Highway Safety Division are also effectively reducing the severity of traffic accidents in Virginia. While traffic volume was at an all time high in 1973 (see Exhibit 9), the injury rate, accident rate and death rate for all Virginia reached all time lows (see Exhibits 12, 13, and 14). An examination of Exhibit 13 reveals that the injury rate is being reduced on all Virginia's road systems. Another measure of accident severity, the death rate, is also declining on all road systems (see Exhibit 14).

The stabilization of the accident rate trend and the declining trend in the injury and death rates are attributable to a great many factors, such as the increasing use of the interstate system with its inherent safety advantages, improved road conditions, and better vehicular equipment, but the positive impact of the safety programs of the Highway Safety Division has also been a significant factor in achieving this successful safety record.

The interstate, arterial and primary, and secondary highway systems comprise the total mileage under the jurisdiction of the Virginia Department of Highways and Transportation. In 1973 these systems experienced 65 percent of the total annual vehicle miles of travel in the state. Exhibit 3 provides a summary of accident statistics for the interstate system, which remains the safest system in Virginia. The accident, injury, and death rates on the interstate system continued their decline through 1973, and it is projected that this declining trend will continue through 1979 (see Exhibits 12, 13, and 14). The

declining trend in these rates should be positively influenced during the time in which the lowered speed limits remain in effect. In 1973 there was no increase in mileage open to travel, but there was a 9.9 percent increase in annual vehicle miles of travel on the interstate system. While the system carried 29 percent of the total volume of traffic on the highway systems under the control of the Department of Highways and Transportation, it experienced only 12 percent of the total accidents, 14 percent of the fatalities, 12 percent of the injuries, and 12 percent of the property damage accidents. In terms of rates, the frequency per million vehicle miles of travel was 139 for accidents, 56 for injuries and 2.0 for fatalities as compared respectively with 344, 139, and 5.3 on the arterial and primary system, and 622, 229, and 4.7 on the secondary system.

The accident statistic summary for the arterial and primary system is shown in Exhibit 4. The historical and projected accident, injury and death rates for this system are shown in Exhibits 12, 13, and 14. The accident rate, injury rate, and death rate showed a decline from 1972 to 1973 and this trend of gradual decline is expected to continue through 1979. The safety record of this system is also a beneficiary of the lowered speed limits. In 1973 this system carried 5 percent more traffic than in 1972. In comparison with the rest of the state, 51 percent of the travel, 52 percent of the total accidents, 64 percent of the fatalities, 62 percent of the injuries, and 51 percent of the property damage accidents occurred on these highways in 1973.

The secondary road system is inherently the most hazardous of the highway systems under the jurisdiction of the Virginia Department of Highways and Transportation. Exhibit 5 gives the accident statistics summary for this system, and Exhibits 12, 13 and 14 depict the historical and projected accident, injury and death rates for the system. Since the secondary highway system has been identified as the most dangerous system, efforts have been made to make it safer, and the impact of these programs is slowly being realized. In 1973 the secondary system experienced 20 percent of the travel, 37 percent of the total accidents, 22 percent of the fatalities, 34 percent of the injuries, and 30 percent of the property damage accidents.

Exhibits 15 through 17 show the major accident statistics for the state from 1964 to 1973 and projections for these figures through 1979. The projections were calculated using a linear regression analysis with Billion Vehicle Miles of Travel as the independent variable. Exhibit 15 is a graph for total accidents. The correlation coefficient for the linear regression formula used to project these values is .97. The increase in traffic volume projected for Virginia coupled with an increase in urban traffic congestion is expected to result in an increase in the absolute number of accidents occurring in the next five years unless traffic volume declines or stabilizes at current levels because of petroleum shortages. Emphasis will be placed on reducing the severity of these accidents and the relative rate of their occurrence.

Exhibit 16 shows graphically the historical figures and projections for injury accidents based on linear regression analysis. The correlation coefficient of this analysis is very high, .99. The high correlation coefficient of this equation indicates that Billion Vehicle Miles of Travel is a reliable variable from which to predict the occurrence of injury accidents.

Exhibit 17 is a graph of fatalities and fatal accidents, which have very similar regression lines, as would be expected since the ratio of fatalities to fatal accidents hovers about a constant of approximately 1.15/1. The regression coefficient for fatalities is .73 and for fatal accidents is .82. While it is not believed that the number of fatalities and fatal accidents can be expected to decrease in absolute numbers every year, as was the case in 1973, a significant reduction in the rate at which these figures increase is expected. (See Exhibit 13.)

Exhibits 18 and 19 show the pedestrian accident statistics for Virginia for 1964 through 1973 with projections through 1979. These figures are expected to increase absolutely over the next five years but decline relative to the increases in both volume of traffic and general population.

Expenditures of Federal Funds for Highway Safety in Virginia

The distribution of federal funds from the inception of the Federal Highway Safety Program in Virginia is found in Exhibits 20 and 21. For all years, with the exception of the first year, more than 40% of the federal funds have been expended by the local political subdivisions. The exception in the initial year was approved by the National Highway Traffic Safety Administration.

Program Priorities

Approximately 3.5 million dollars in federal funds has been programmed for fiscal year 1976, but it is recognized that less than this amount will probably be allocated to the Highway Safety Division of Virginia for project funding. Hence the Division has established program priorities so that such funds as are made available can be employed in areas to achieve maximum dollar impact or cost-effectiveness.

The establishment of program priorities has been accomplished in Virginia through a series of meetings between the Director of the Division and his immediate staff in which pertinent criteria for evaluating likely project impact are considered in assigning priorities to the various programs and projects in the standard areas.

EXHIBIT 1

DEFINITION OF TERMS

Miles of Road — represent the total miles in the State Highway Systems as of December 31, 1972.

Vehicle Miles — represent the annual vehicle miles of travel on the State Highway Systems for calendar year 1972. The annual vehicle miles is obtained by multiplying the average 24-hour vehicle miles by 365 days.

Fatal Accidents — the accidents in which one or more persons were killed as a result of the crash.

Persons Killed — the total persons killed in fatal crashes.

Injury Accidents — the accidents in which no one was killed but one or more persons sustained injuries due to the accidents.

Persons Injured — the total number of persons injured in the Fatal and Injury Accidents.

Property Damage Accidents — the accidents in which no one was killed or injured but where damage to vehicles or other property was incurred to the extent of $100 or greater.

Property Damage — the total amount of property damage in dollars that occurred as a result of the accident. This includes only the damage to the vehicle and other property.

Total Accidents — the sum of all Fatal, Injury and Property Damage Accidents equals the total accidents.

Frequency Rates — the accident, injury and death rates are calculated in the same manner, and expressed as rates per 100 million vehicle miles of travel. These rates are determined by dividing the total accidents or persons injured or persons killed times 100 million by the annual vehicle miles of travel.
Example: During the year 1972, 3,629 accidents occurred in the Bristol District on the Arterial and Primary System. There was a total of 1,114,941,000 vehicle miles of travel on the Arterial and Primary System in the Bristol District for the year 1972.

$$\text{Accident Rate} = \frac{3,629 \times 100,000,000}{1,114,941,000} = 325 \text{ accidents per 100 million vehicle miles of travel}$$

EXHIBIT 1 (Continued)

DEFINITION OF TERMS

Symbols on Graphs

Y_r = equation for projection line derived using linear regression analysis.

Y_t = equation for projection line derived using time series analysis.

S. E. E. = Standard Error of the Estimate.

r^2 = percent variance explained (coefficient of determination x 100)

EXHIBIT 2

ACCIDENT SUMMARY BY YEARS — ALL VIRGINIA HIGHWAYS, STREETS AND ROADS* — YEARS 1963-1973

YEAR	LENGTH IN MILES	ANNUAL VEHICLE MILES OF TRAVEL (THOUSANDS)	FATAL ACCIDENTS	PERSONS KILLED	INJURY ACCIDENTS	PERSONS INJURED	PROPERTY DAMAGE ACCIDENTS	TOTAL ACCIDENTS	AMOUNT OF PROPERTY DAMAGE	ECONOMIC LOSS	ACCIDENT RATE	INJURY RATE	DEATH RATE	PEDESTRIANS KILLED (INC. IN PERSONS KILLED)	PEDESTRIANS INJURED (INC IN PERSONS INJURED)
1963	57,436	18,277,700	820	989	23,088	35,309	74,908	98,816	31,600,000	178,000,000	541	193	5.4	163	2,377
1964	58,404	19,210,100	871	1,050	25,677	39,246	82,788	109,336	35,000,000	189,000,000	569	204	5.5	185	2,520
1965	58,875	20,550,100	881	1,062	26,079	39,263	84,219	111,179	36,000,000	191,000,000	541	191	5.2	163	2,427
1966	59,319	21,640,000	908	1,106	27,761	41,849	87,606	116,275	37,000,000	200,000,000	537	193	5.1	182	2,521
1967	59,781	23,659,000	1,005	1,223	28,743	43,122	81,313	111,061	37,000,000	230,000,000	469	182	5.2	217	2,514
1968	60,428	25,614,000	1,036	1,218	30,146	45,693	89,255	120,437	43,500,000	245,000,000	470	178	4.8	232	2,535
1969	60,705	26,951,000	1,117	1,304	31,846	48,050	98,636	131,599	**	265,000,000	488	178	4.8	241	2,500
1970	61,136	28,418,000	1,066	1,231	32,296	48,354	103,561	136,923	**	270,000,000	482	170	4.3	240	2,609
1971	61,508	30,504,000	1,054	1,218	33,577	50,051	109,776	144,407	**	305,000,000	473	164	4.0	224	2,527
1972	61,826	32,717,000	1,100	1,256	35,600	52,517	118,557	155,257	**	350,000,000	475	161	3.8	249	2,464
1973	62,351	34,664,000	1,048	1,220	36,070	52,378	120,519	157,637	**	405,000,000	455	151	3.5	197	2,449
PERCENT CHANGE 1973 OVER 1972	+0.85	+5.95	-4.73	-2.87	+1.32	-0.26	+1.65	+1.53	-	+15.71	-4.21	-6.21	-7.89	-20.88	-0.61

*DATA OBTAINED FROM "VIRGINIA TRAFFIC CRASH FACTS" - DEPARTMENT OF STATE POLICE

**DATA UNAVAILABLE

YEAR	LENGTH IN MILES	ANNUAL VEHICLE MILES OF TRAVEL (THOUSANDS)	FATAL ACCIDENTS	PERSONS KILLED	INJURY ACCIDENTS	PERSONS INJURED	PROPERTY DAMAGE ACCIDENTS	TOTAL ACCIDENTS	AMOUNT OF PROPERTY DAMAGE	ACCIDENT RATE	INJURY RATE	DEATH RATE
1964	365.70	1,159,540	32	37	536	849	1,284	1,852	$ 1,248,569	160	73	3.2
1965	468.62	2,115,429	52	73	1,014	1,664	2,596	3,662	2,271,200	173	79	3.5
1966	557.21	2,586,804	73	96	1,200	1,984	2,838	4,111	3,089,400	158	76	3.7
1967	626.96	3,123,253	92	118	1,366	2,126	2,958	4,416	4,021,800	141	68	3.8
1968	666.28	3,759,050	89	98	1,600	2,582	3,684	5,373	4,624,627	143	69	2.6
1969	693.78	4,354,250	108	122	1,782	2,913	4,309	6,199	5,255,359	142	67	2.8
1970	774.00	4,682,993	84	97	1,871	2,914	4,774	6,729	6,069,220	144	62	2.1
1971	813.95	5,212,912	115	135	2,143	3,357	5,875	8,133	8,057,500	156	64	2.6
1972	855.73	5,943,477	115	133	2,306	3,675	6,584	9,005	9,578,800	152	62	2.2
1973	855.57	6,531,408	100	132	2,315	3,643	6,661	9,076	10,490,100	139	56	2.0
PERCENT CHANGE 1973 OVER 1972	-0.02	+9.89	-13.04	0.75	+0.39	-0.87	+1.17	+0.79	+9.51	-8.55	-9.68	-9.09

ACCIDENT SUMMARY BY YEARS ARTERIAL AND PRIMARY SYSTEM YEARS 1964 - 1973

YEAR	LENGTH IN MILES	ANNUAL VEHICLE MILES OF TRAVEL (THOUSANDS)	FATAL ACCIDENTS	PERSONS KILLED	INJURY ACCIDENTS	PERSONS INJURED	PROPERTY DAMAGE ACCIDENTS	TOTAL ACCIDENTS	AMOUNT OF PROPERTY DAMAGE	ACCIDENT RATE	INJURY RATE	DEATH RATE
1964	7,606.43	8,283,656	462	589	8,447	14,199	20,837	29,746	15,984,200	359	171	7.1
1965	7,622.43	8,410,173	434	539	8,078	13,234	20,905	29,417	16,223,900	350	157	6.4
1966	7,629.87	8,695,925	465	569	8,540	13,974	21,386	30,391	16,761,400	349	161	6.5
1967	7,643.09	8,983,525	492	618	8,797	14,191	20,165	29,454	18,204,700	328	158	6.9
1968	7,670.97	9,495,714	515	628	9,176	14,950	21,738	31,429	19,726,760	331	157	6.6
1969	7,682.12	9,968,172	529	638	9,625	15,483	24,463	34,617	23,101,690	347	155	6.4
1970	7,688.87	10,060,743	511	620	9,703	15,544	25,403	35,617	24,644,791	354	155	6.2
1971	7,683.40	10,438,777	527	635	9,961	15,959	26,707	37,195	26,649,100	356	153	6.1
1972	7,686.66	11,051,714	528	619	10,510	16,569	29,328	40,366	29,798,900	365	150	5.6
1973	7,718.37	11,602,751	517	618	10,449	16,176	28,963	39,929	30,795,200	344	139	5.3
PERCENT CHANGE 1973 OVER 1972	+0.41	+4.99	-1.70	-0.16	-0.58	-2.37	-1.25	-1.08	+3.34	-5.75	-7.33	-5.36

YEARS 1964 - 1973

EXHIBIT 5
SECONDARY SYSTEM

YEAR	LENGTH IN MILES	ANNUAL VEHICLE MILES OF TRAVEL (THOUSANDS)	FATAL ACCIDENTS	PERSONS KILLED	INJURY ACCIDENTS	PERSONS INJURED	PROPERTY DAMAGE ACCIDENTS	TOTAL ACCIDENTS	AMOUNT OF PROPERTY DAMAGE	ACCIDENT RATE	INJURY RATE	DEATH RATE
1964	41,515.73	2,583,456	155	182	4,125	6,183	11,000	15,280	$ 6,087,404	591	239	7.0
1965	41,673.26	2,786,025	188	222	4,478	6,748	12,237	16,903	7,047,531	607	242	8.0
1966	41,865.87	2,978,196	163	199	4,933	7,390	13,276	18,372	8,011,614	617	248	6.7
1967	41,983.89	3,195,943	185	222	5,044	7,579	12,231	17,460	7,956,554	546	237	6.9
1968	41,838.89	3,320,096	182	201	5,474	8,110	14,063	19,719	9,915,392	594	244	6.1
1969	41,971.36	3,568,331	242	276	5,737	8,500	15,309	21,288	11,659,717	597	238	7.7
1970	41,937.35	3,711,240	205	235	5,792	8,434	16,316	22,313	12,324,991	601	227	6.3
1971	42,114.17	4,001,956	169	188	6,089	8,943	16,820	23,078	13,143,900	577	223	4.7
1972	42,295.33	4,218,571	198	220	6,532	9,356	18,967	25,697	15,089,000	609	222	5.2
1973	42,488.89	4,548,072	197	216	7,266	10,428	20,818	28,281	17,969,700	622	229	4.7
PERCENT CHANGE 1973 OVER 1972	+0.46	+7.81	-0.51	-1.82	+11.24	+11.46	+9.76	+10.06	+19.09	+2.13	+3.15	-9.62

EXHIBIT 6

SUMMARY OF VEHICLE REGISTRATIONS, OPERATORS, AND ACCIDENTS

Year	Motor Vehicle Registrations	Motorcycle Registrations	Licensed Operators and Chauffeurs	Total Motorcycles Accidents	Fatal Motorcycle Accidents
1965	1,840,000	14,430		1114	19
1966	1,921,000	21,040		1537	23
1967	1,993,000	22,070	2,230,000	1550	48
1968	2,112,000	25,850	2,307,000	1361	24
1969	2,219,000	26,250	2,388,000	1365	24
1970	2,335,000	33,810	2,441,000	1640	27
1971	2,362,000	41,580	2,546,000	2120	40
1972	2,649,000	53,890	2,670,000	2206	58
1973	2,705,647	70,057	2,954,000	3402	58
Change 1973 from 1972	+ 2%	+30%	+10%	+54%	0%

EXHIBIT 7
MOTOR VEHICLE REGISTRATIONS

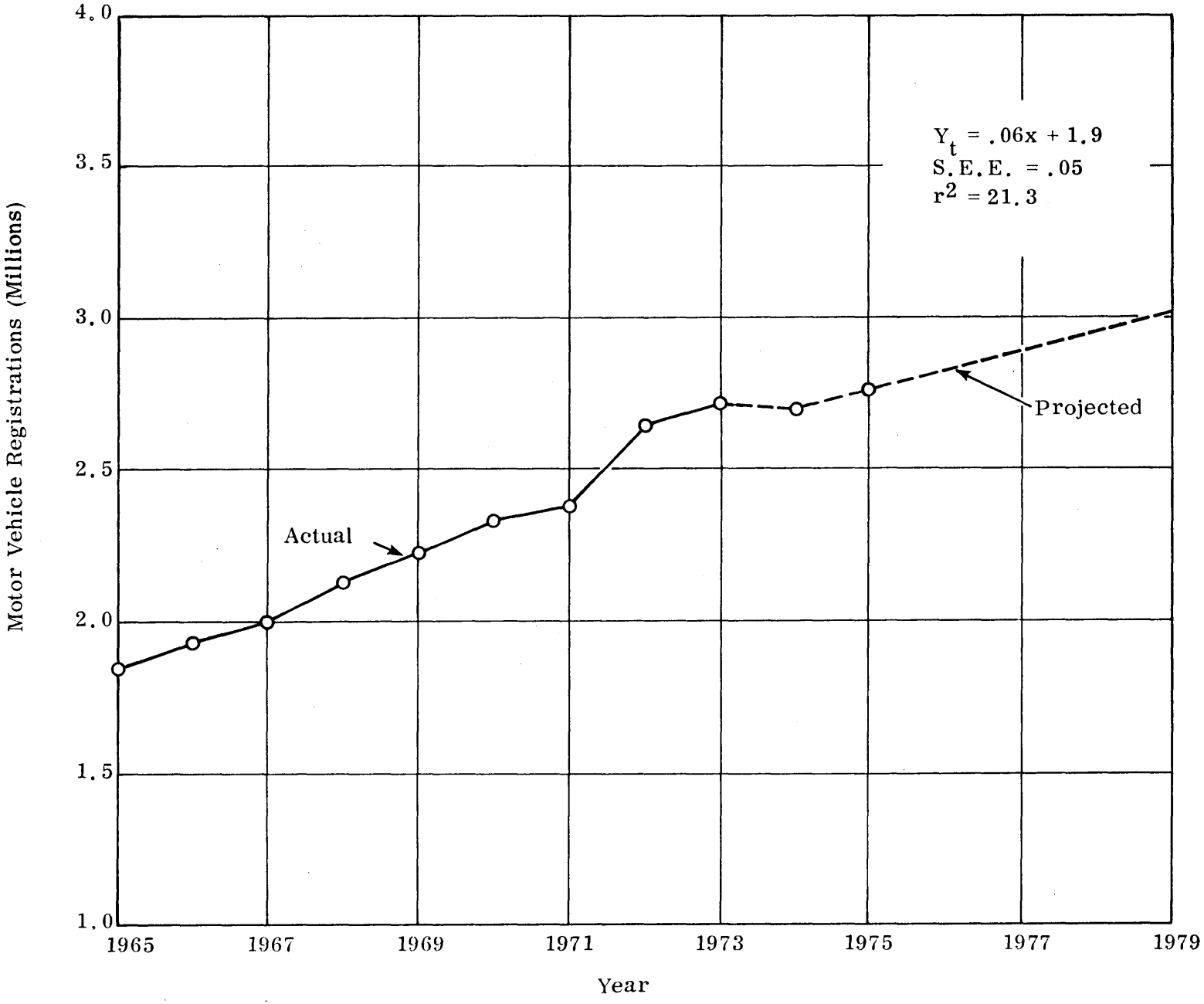


EXHIBIT 8
LICENSED OPERATORS AND CHAUFFEURS

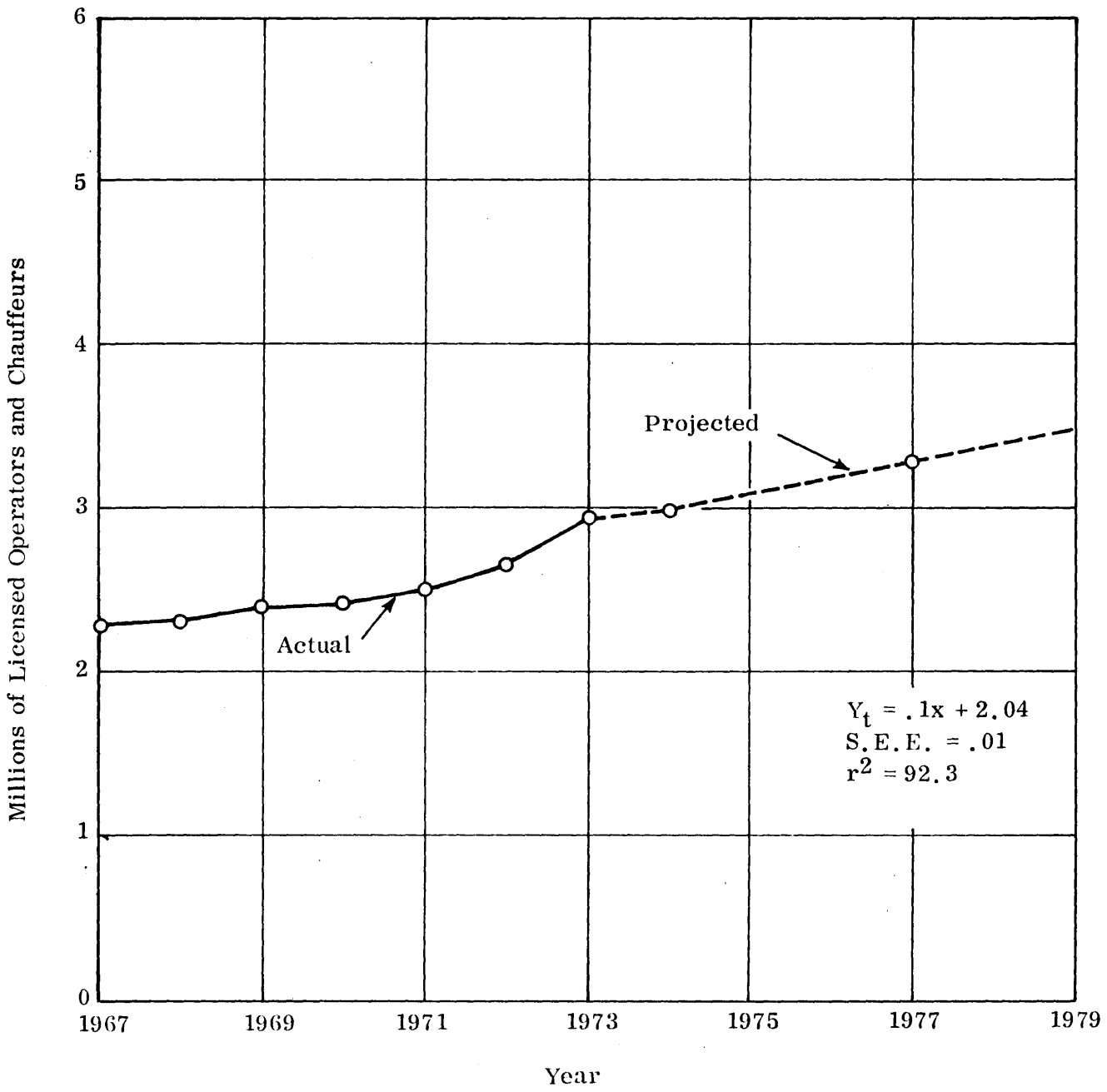


EXHIBIT 9
BILLION VEHICLE MILES OF TRAVEL

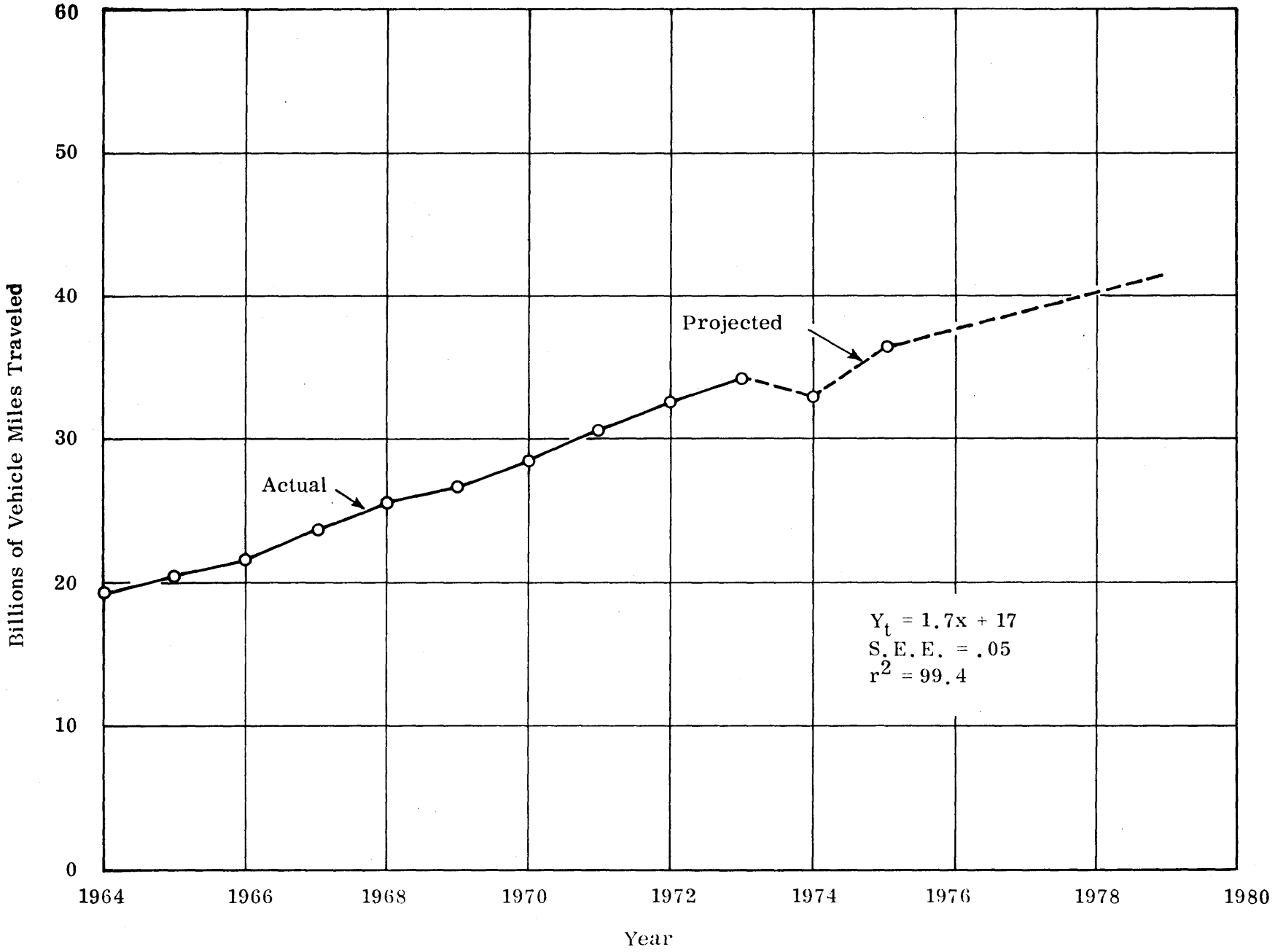
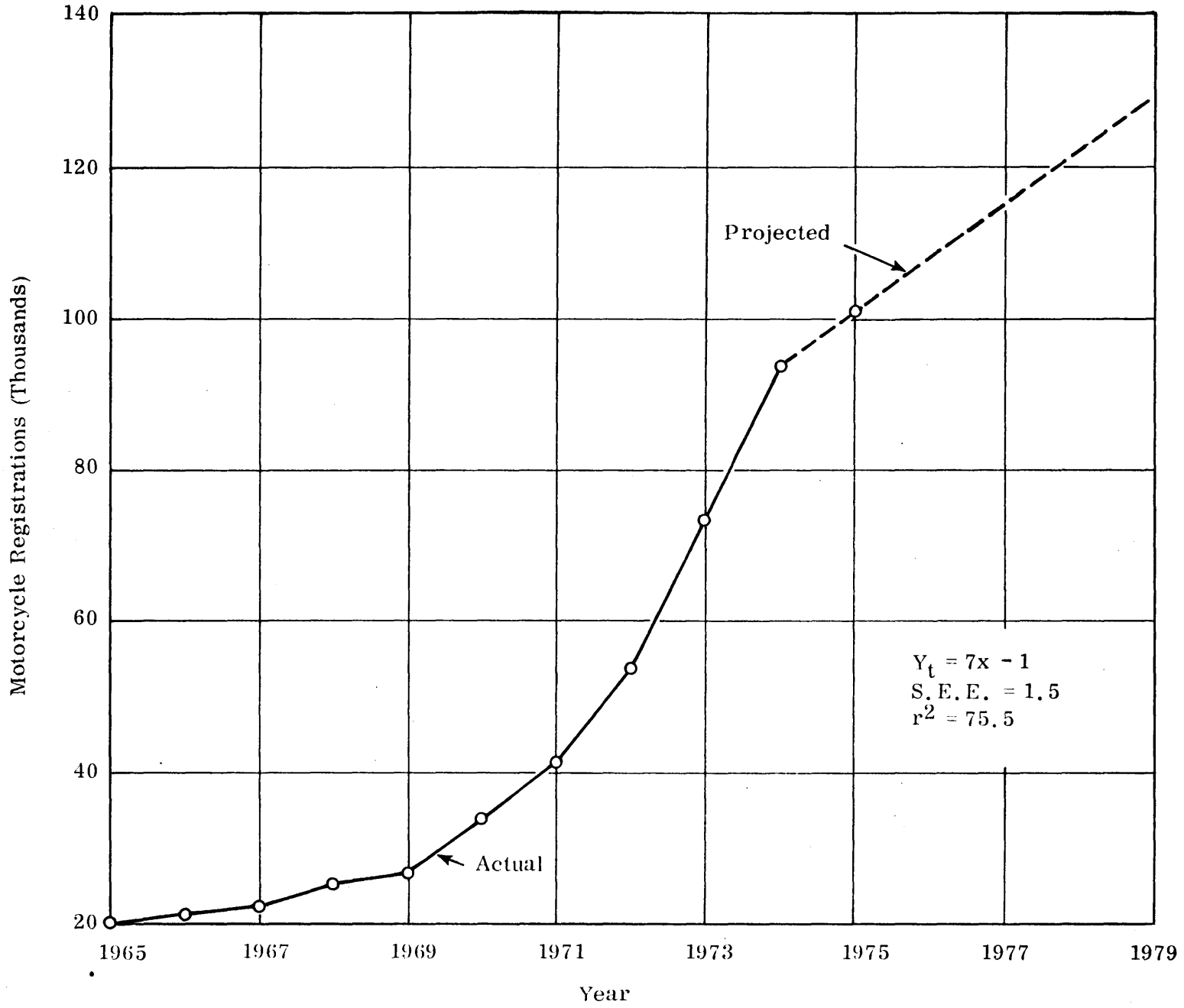


EXHIBIT 10
MOTORCYCLE REGISTRATIONS



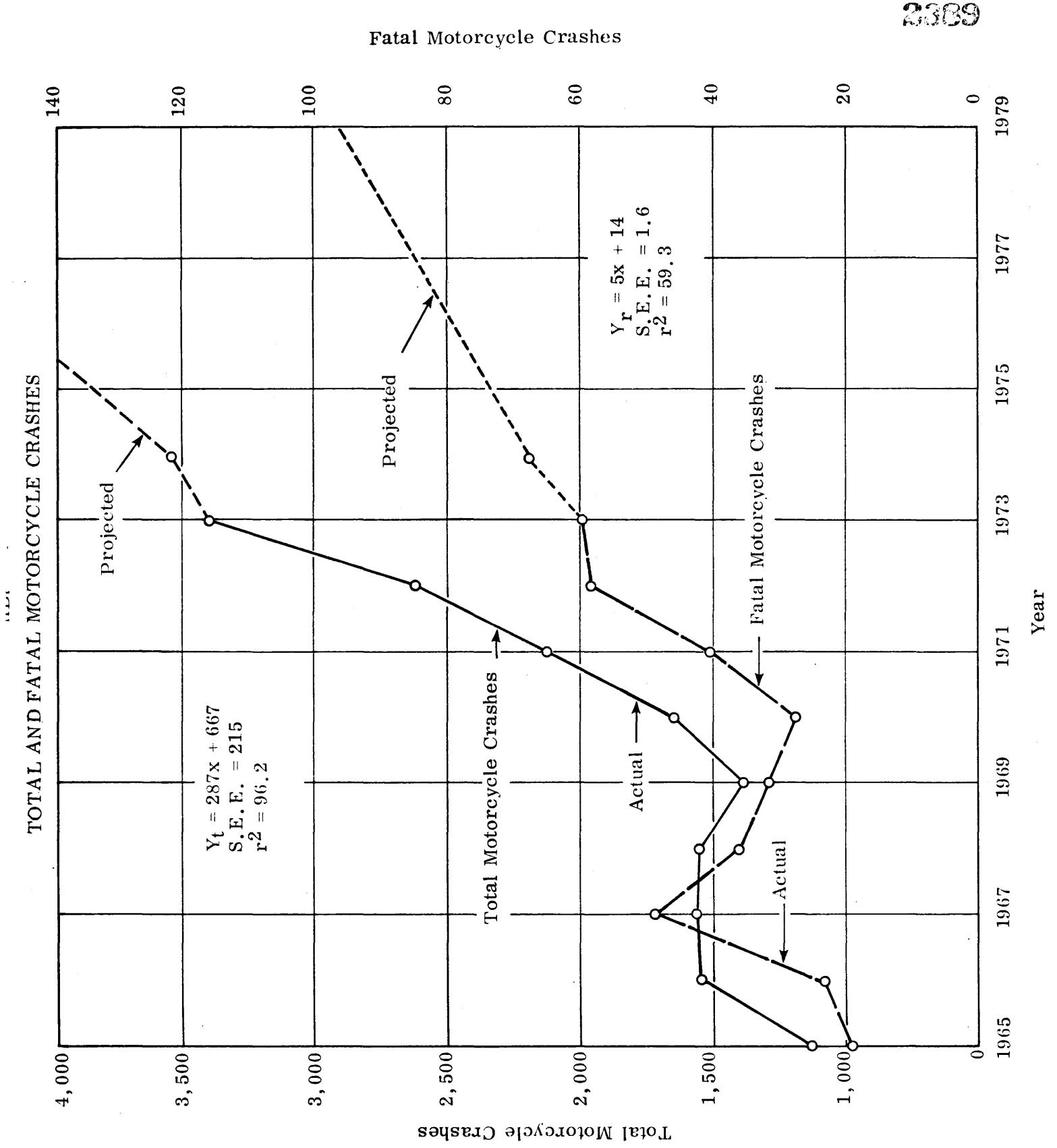

Fatal Motorcycle Crashes
TOTAL AND FATAL MOTORCYCLE CRASHES
Total Motorcycle Crashes
Fatal Motorcycle Crashes
Year
Projected
Projected
Actual
Actual
$Y_t = 287x + 667$
S.E.E. = 215
$r^2 = 96.2$
$Y_r = 5x + 14$
S.E.E. = 1.6
$r^2 = 59.3$
4,000
3,500
3,000
2,500
2,000
1,500
1,000
140
120
100
80
60
40
20
0
1965
1967
1969
1971
1973
1975
1977
1979

EXHIBIT 12
HIGHWAY ACCIDENT RATE TRENDS IN VIRGINIA
1964-1980

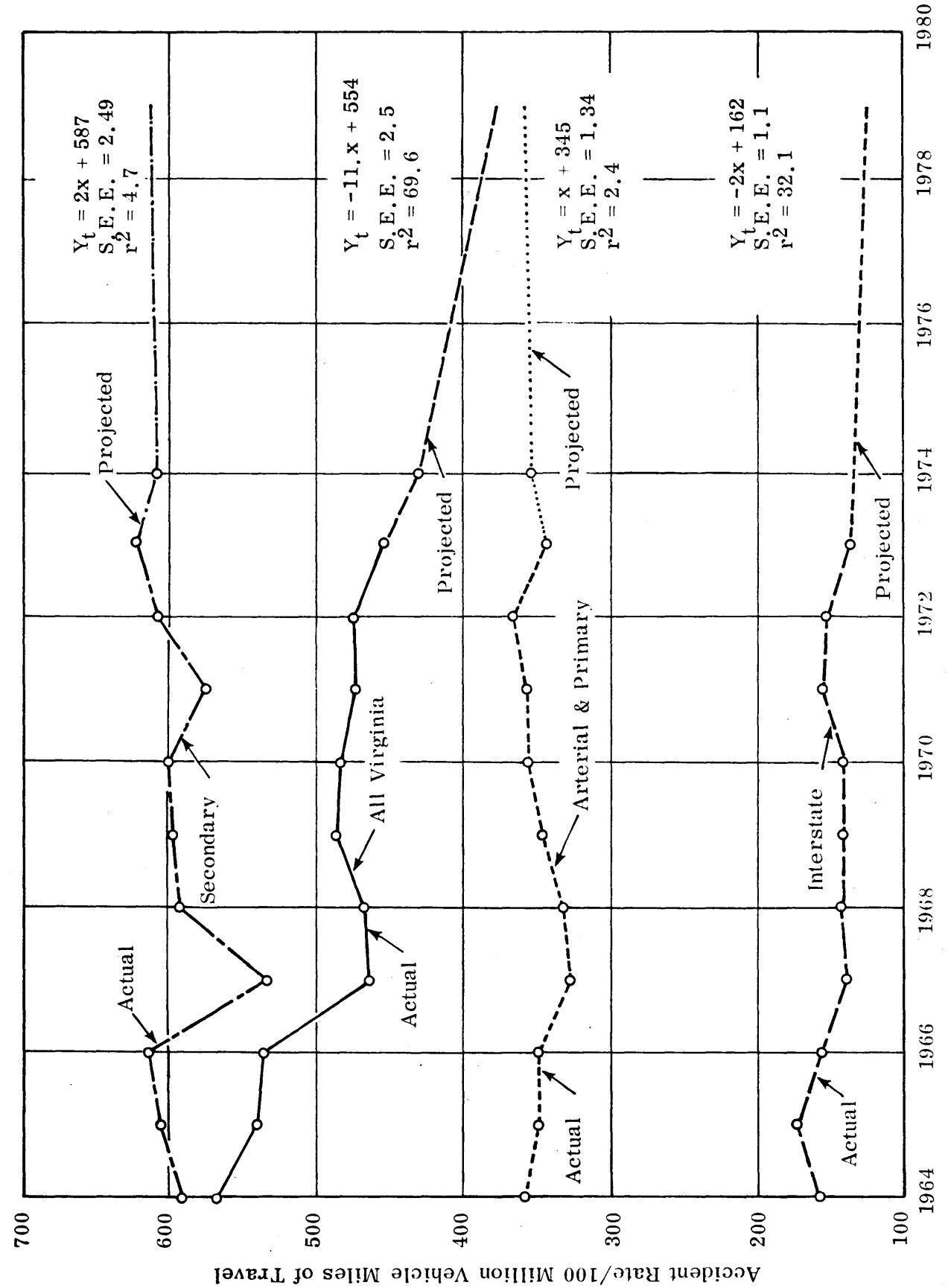


EXHIBIT 3

HIGHWAY INJURY RATE TRENDS IN VIRGINIA
1964-1980

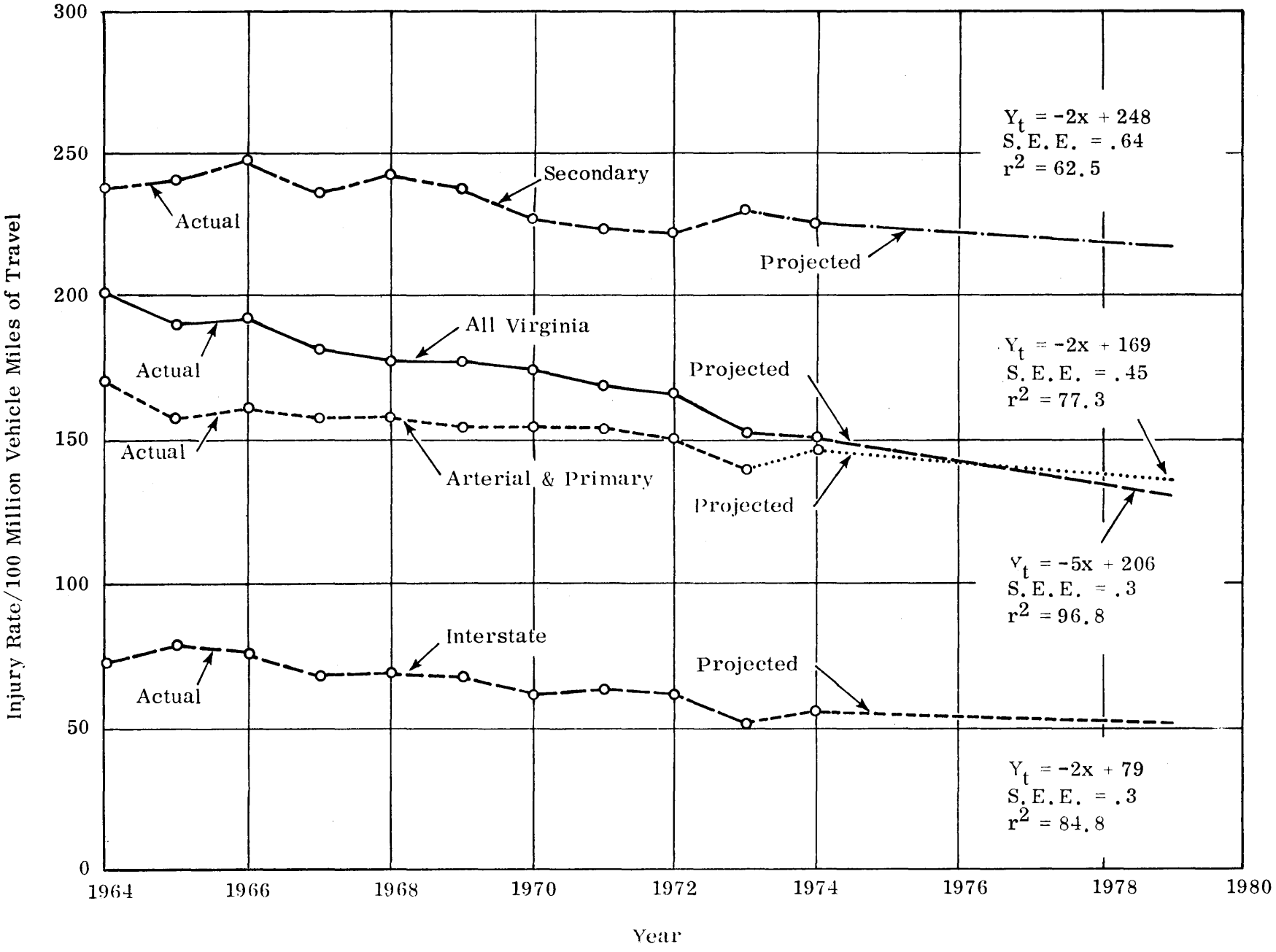


EXHIBIT 14

HIGHWAY DEATH RATE TRENDS IN VIRGINIA
1964-1979

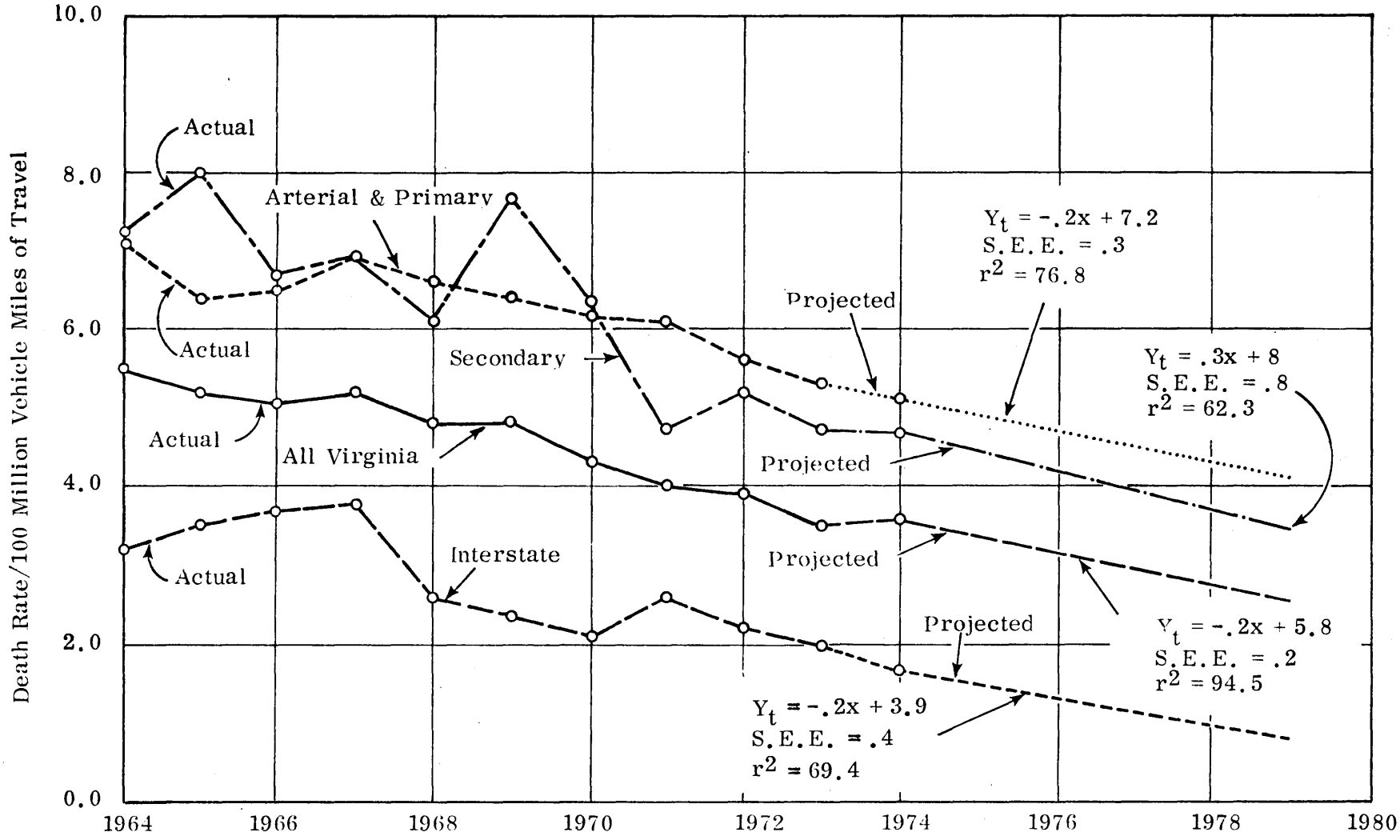


EXHIBIT 15
TOTAL MOTOR VEHICLE ACCIDENTS

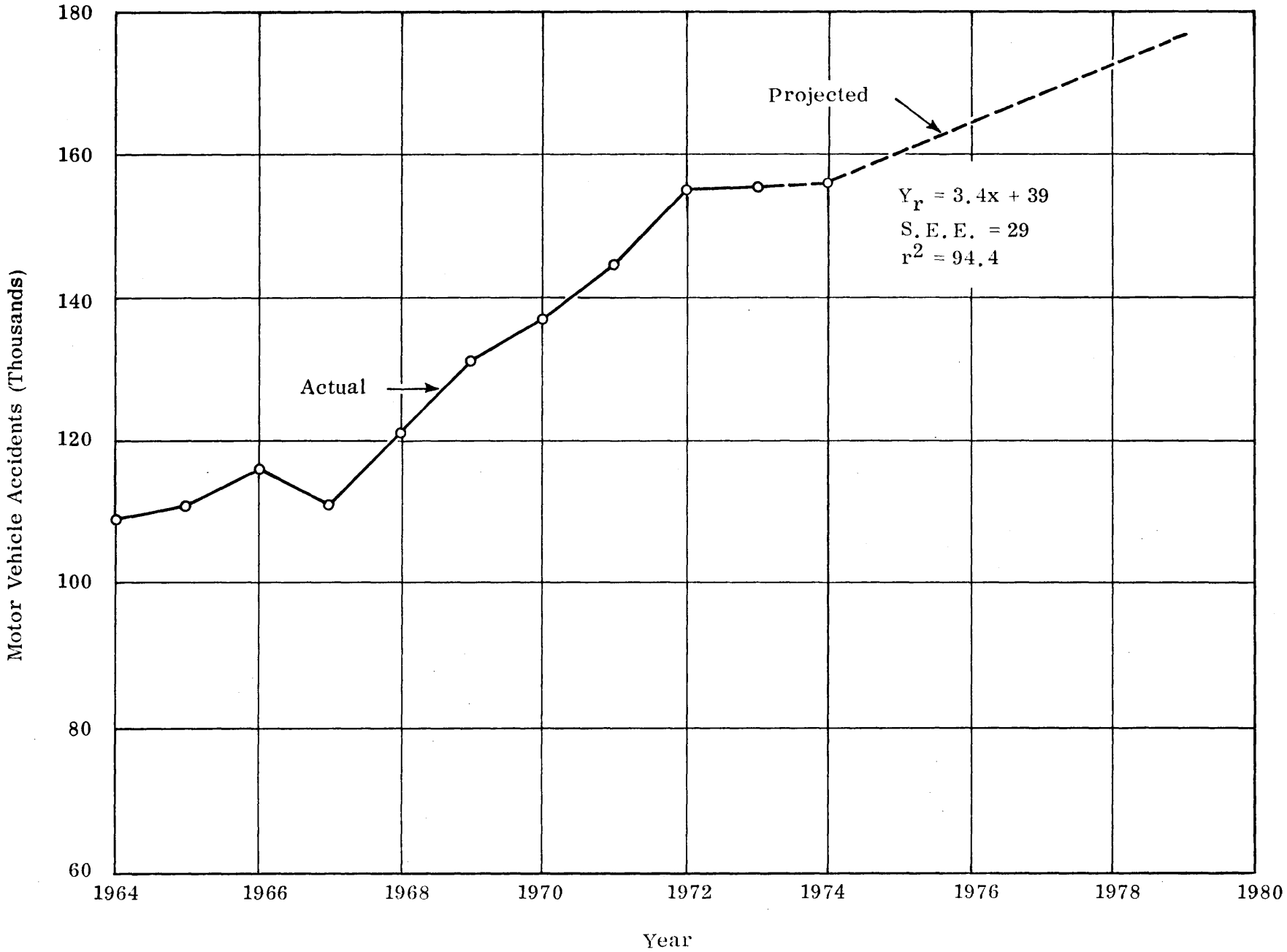


EXHIBIT 16
TOTAL INJURY ACCIDENTS

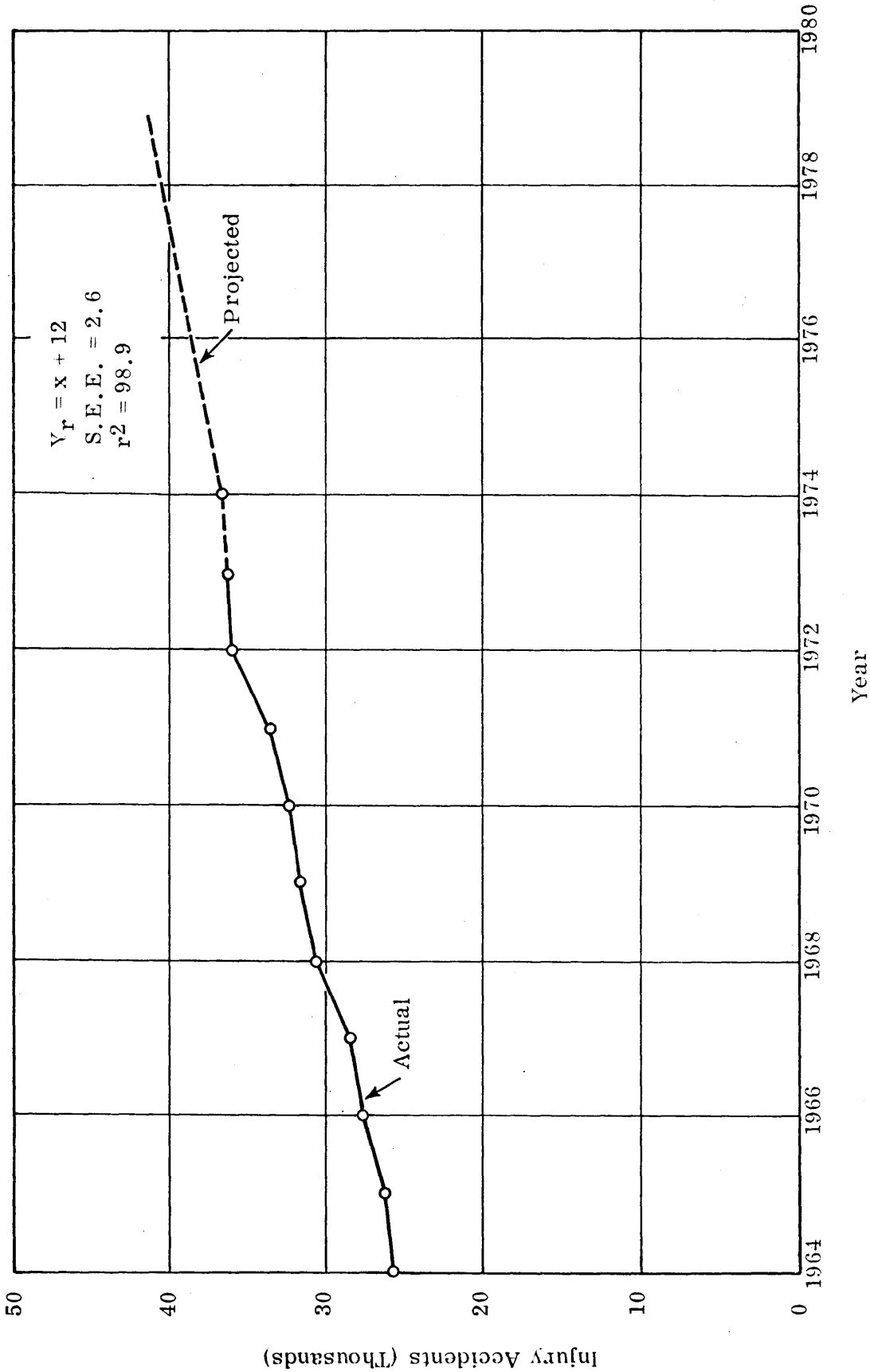


EXHIBIT 17
FATAL ACCIDENTS AND FATALITIES

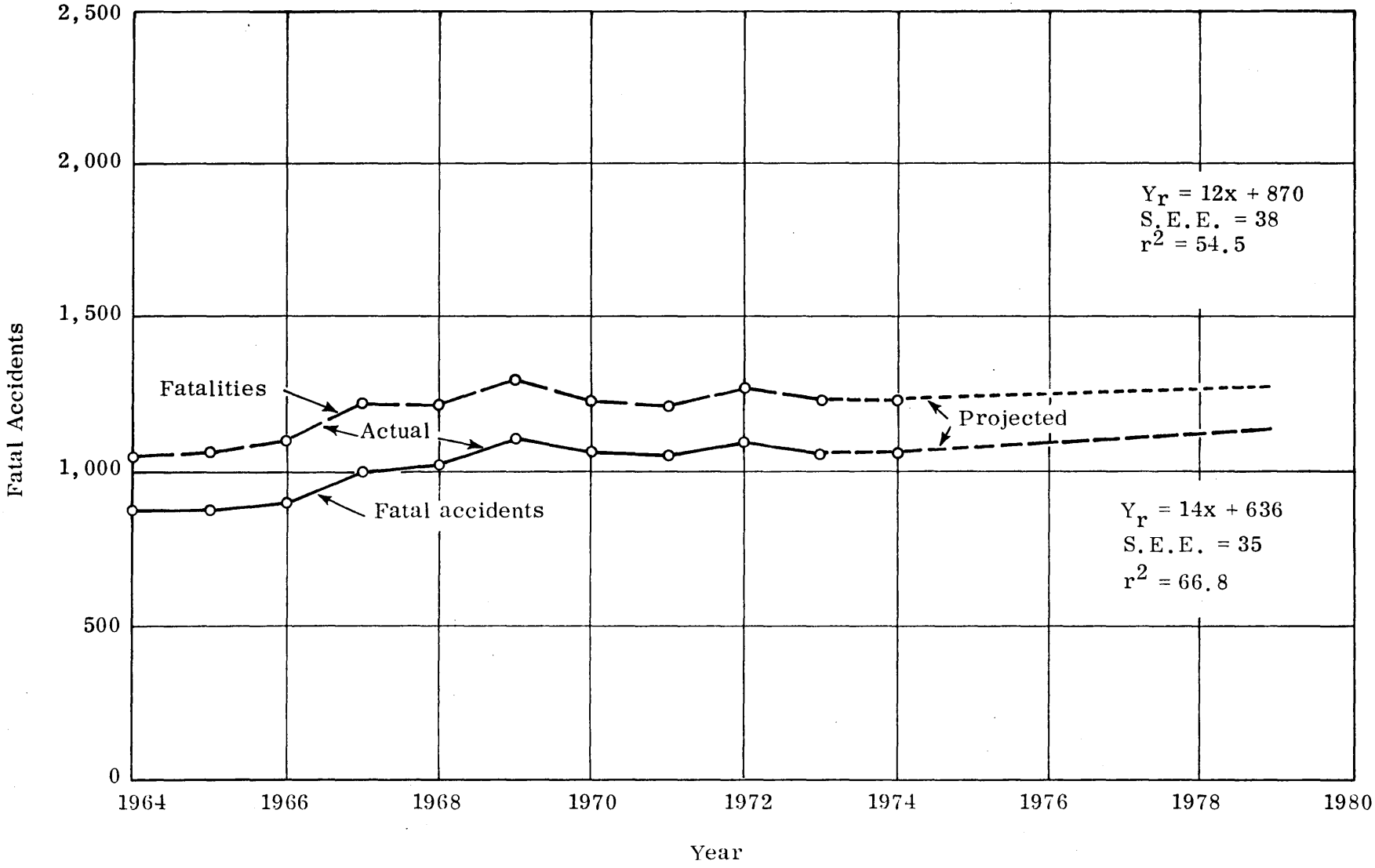


EXHIBIT 18
PEDESTRIAN INJURIES

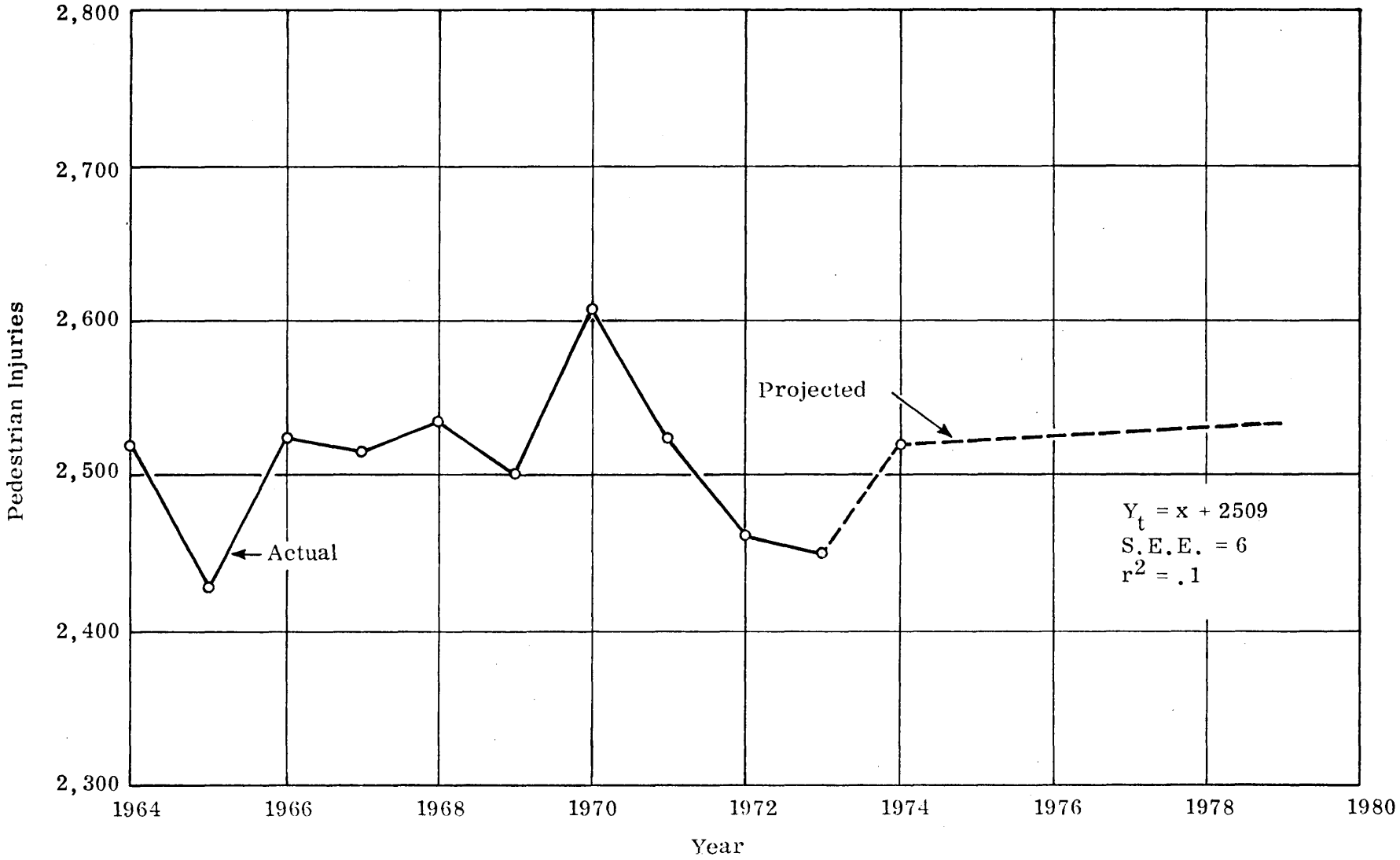


EXHIBIT 19
PEDESTRIAN FATALITIES

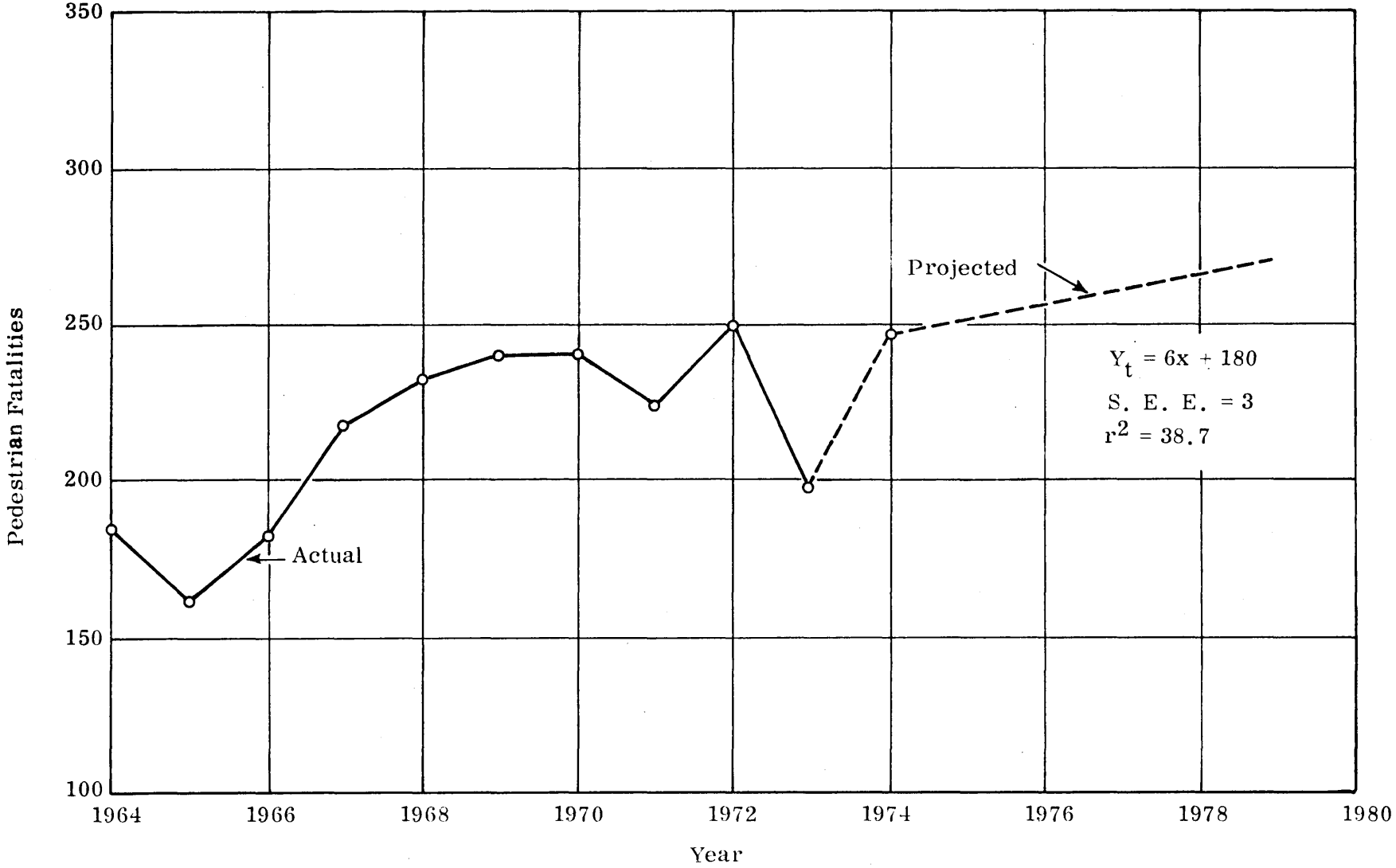


EXHIBIT 20

SUMMARY OF DISTRIBUTION OF FEDERAL FUNDS FOR FY 69-74

Stds.	FY 69		FY 70		FY 71		FY 72		FY 73		FY 74	
	Fed. Funds	Fed. Funds Local	Fed. Funds	Fed. Funds Local	Fed. Funds	Fed. Funds Local	Fed. Funds	Fed. Funds Local	Fed. Funds	Fed. Funds Local	Fed. Funds	Fed. Funds Local
300	115.847		179.		213.15		180.		180		199.233	12.
301												
302												
303							10.				30.	30.
304	894.355	874.946	553.75	507.915	695.41	682.668	327.465	299.908	279.81	256.509	322.148	266.748
305					104.346		177.5		107.5			
306			3.		4.375		13.		18.1	17.5	11.	11.
307			48.15				31.283	16.558	6.2	6.2	29.725	29.725
308	14.6				70.85	2.875	41.		335.173	250.253	223.537	100.057
309	5.633	5.633	1.65	1.65	15.25		21.718	21.718	12.5		13.352	3.352
310	130.545	27.586	24.4	14.4	35.6	8.63	50		41.424	33.424	33.135	28.085
311	157.137	95.109	275.613	162.093	210.545	201.14	227.553	164.383	208.706	173.706	245.243	171.848
312					33.		24.825	24.825	150.798	65.798	29.725	20.725
313					7.2		26.648	1.6	21.523	19.923	118.043	57.839
314					16.		85.31	58.11	71.105	71.105	46.295	46.295
315	99.66	99.66	353.788	68.152	276.491	91.484	380.315	233.605	483.652	293.992	229.747	218.83
316			88.241						11.	11.	70.015	50.565
317											.8	
318												
Total	1417.777	1102.934	1527.592	754.21	1682.217	986.797	1596.617	820.707	1927.491	1199.41	1601.998	1047.069

EXHIBIT 21

DISTRIBUTION OF FEDERAL FUNDS FOR FY 1975*

Standard 300 — Planning and Administration

LOCALITY	FEDERAL AMOUNT FUNDED
VHSD	$ 1,500.
VHSD	240,500.
VHSD	5,500.
Total Federal Funding to Localities - 300	1,500.
Total Federal Funding	$247,500.

Standard 303 - Motorcycle Safety

LOCALITY	FEDERAL AMOUNT FUNDED
VHSD	$ 15,000.
Total Federal Funding to Localities - 303	15,000.
Total Federal Funding	$ 15,000.

Standard 304 — Driver Education

LOCALITY	FEDERAL AMOUNT FUNDED
Amherst	$ 20,000.
Campbell	40,000.
Culpeper	25,000.
Stafford	15,000.
Dept. of Educ.	15,000.
VCU	54,000.
Hampton City	74,800.
Washington Co.	25,000.
Russell Co.	15,000.
Bristol City	25,000.
Gloucester	30,000.
Total Federal Funding to Localities - 304	$284,800.
Total Federal Funding	$338,800.

Standard 305 — Driver Licensing

LOCALITY	FEDERAL AMOUNT FUNDED
DMV	$ 28,000.
Total Federal Funding - 305	$ 28,000.

*Due to the submission date for the report, all projects which will be funded during FY 75 cannot be shown.

EXHIBIT 21 (Continued)

Standard 307 — Traffic Courts

LOCALITY	FEDERAL AMOUNT FUNDED
Franklin Co.	$ 3,150.
Fairfax Co.	2,400.
VHSD	500.
Martinsville City	700.
Roanoke Co. (Vinton)	3,250.
Total Federal Funding to Localities - 307	$ 10,000.
Total Federal Funding	$ 10,000.

Standard 308 — Alcohol in Relation to Highway Safety

LOCALITY	FEDERAL AMOUNT FUNDED
Charles City Co.	$ 276.
Harrisonburg City	250.
Roanoke City	2,557.
Div. of Cons. Labs.	57,500.
Amherst	5,874.
Amherst	10,136.
Newport News	5,551.
Newport News	11,482.
VHSD	10,000.
Div. of Cons. Labs.	30,930.
Div. of Cons. Labs.	20,000.
Portsmouth	9,035.
Arlington Co.	66,500.
Total Federal Funding to Localities - 308	$111,661.
Total Federal Funding	$230,091.

Standard 309 — Identification & Surveillance of Accident Locations

LOCALITY	FEDERAL AMOUNT FUNDED
Danville City	$ 2,500.
Prince Ed. Co.	250.
VHSD	3,850.
Total Federal Funding to Localities - 309	$ 2,750.
Total Federal Funding	$ 6,600.

EXHIBIT 21 (Continued)

Standard 310 — Traffic Records

LOCALITY	FEDERAL AMOUNT FUNDED
Bristol City	$ 5,000.
Henrico Co.	7,000.
Roanoke Co.	6,000.
Va. Beach City	10,128.
Dept. of State Police	5,315.
VHSD	59,685.
Commission on State Governmental Management	20,000
Total Federal Funding to Localities - 310	$ 28,128.
Total Federal Funding	$113,128

Standard 311 — Emergency Medical Services

LOCALITY	FEDERAL AMOUNT FUNDED
Botetourt (Buchanan)	$ 1,968.
Botetourt (Troutville)	7,457.
Botetourt (Troutville)	4,452.
Bristol City	6,000.
Campbell Co.	7,500.
Fairfax Co.	15,000.
Franklin Co. (Snow Creek)	7,500.
Greene Co.	6,000.
King Wm. Co.	7,500.
Nelson Co.	7,500.
Patrick Co. (Vesta)	7,500.
Va. Beach	15,000.
Goochland	650.
Giles Co.	2,400.
Brunswick (Central Rescue)	7,700.
Rappahannock (Flint Hill)	7,000.
Bland Co.	10,877.
Middlesex Co.	8,250.
Carroll Co.	1,500.
Buckingham Co.	8,250.
Rappahannock	8,025.
Total Federal Funding to Localities - 311	$148,029.
Total Federal Funding	$148,029.

2102

Standard 312 — Highway Design, Construction and Maintenance

LOCALITY	FEDERAL AMOUNT FUNDED
Danville City	$ 1,000.
Danville City	25,000.
Lynchburg City	10,000.
VCU (Bridge Inspector)	19,000.
Pulaski County	8,250.
Fairfax Co.	20,960.
VHSD	65,000.
Total Federal Funding to Localities - 312	$130,210.
Total Federal Funding	$149,210.

Standard 313 — Traffic Engineering Services

LOCALITY	FEDERAL AMOUNT FUNDED
Dept. of Hwys. & Trans.	$ 6,500.
Covington City	250.
Richmond City	650.
Richmond City	1,773.
VHSD (VATE)	8,000.
Danville City	750.
Pulaski County	3,750.
Total Federal Funding to Localities - 313	$ 15,173.
Total Federal Funding	$ 21,673.

Standard 314 — Pedestrian Safety

LOCALITY	FEDERAL AMOUNT FUNDED
Henrico Co.	$ 500.
Martinsville City	500.
VHSD	15,000.
Total Federal Funding to Localities - 314	$ 16,000.
Total Federal Funding	$ 16,000.

EXHIBIT 21 (Continued)

Standard 315 — Police Traffic Services

LOCALITY	FEDERAL AMOUNT FUNDED
Dept. State Police	$ 75,000.
Dept. State Police	11,217.
Brunswick Co.	975.
Charles City Co.	335.
Norfolk City	14,026.
Fairfax Co.	9,000.
Henrico Co.	1,008.
Henrico Co.	746.
Henrico Co.	3,575.
Franklin City	1,200.
Lunenburg Co.	1,250.
VHSD (Manuals)	6,028.
Richmond City	12,000.
Roanoke City	3,680.
Roanoke Co.	3,250.
Staunton City	523.
Henrico Co.	424.
Total Federal Funding to Localities - 315	$ 58,020.
Total Federal Funding	$144,237.

Standard 316 — Debris, Hazard Control & Cleanup

LOCALITY	FEDERAL AMOUNT FUNDED
VHSD (Hazardous Materials)	$ 1,075.
Botetourt Co.	2,000.
Campbell Co.	2,000.
Franklin Co.	2,000.
Harrisonburg City	2,000.
Martinsville City	2,000.
Patrick Co.	2,000.
Roanoke City	2,000.
Roanoke Co.	2,000.
Total Federal Funding to Localities - 316	$ 17,075.
Total Federal Funding	$ 17,075.

EXHIBIT 21 (Continued)

Standard 317 — Pupil Transportation

LOCALITY	FEDERAL AMOUNT FUNDED
Dept. of Educ.	$ 29,700.
Bedford City	1,200.
Henrico Co.	508.
Dept. of Educ.	18,000.
Total Federal Funding to Localities - 317	$ 49,408.
Total Federal Funding	$ 49,408.

Standard 318 — Accident Investigation & Reporting

LOCALITY	FEDERAL AMOUNT FUNDED
Dept. State Police	$ 26,073.
Henrico Co.	750.
Total Federal Funding to Localities - 318	$ 750.
Total Federal Funding	$ 26,823.
Total Federal Funding to Localities FY 75	$888,504.
Total Federal Funding FY 75	$1,561,574.

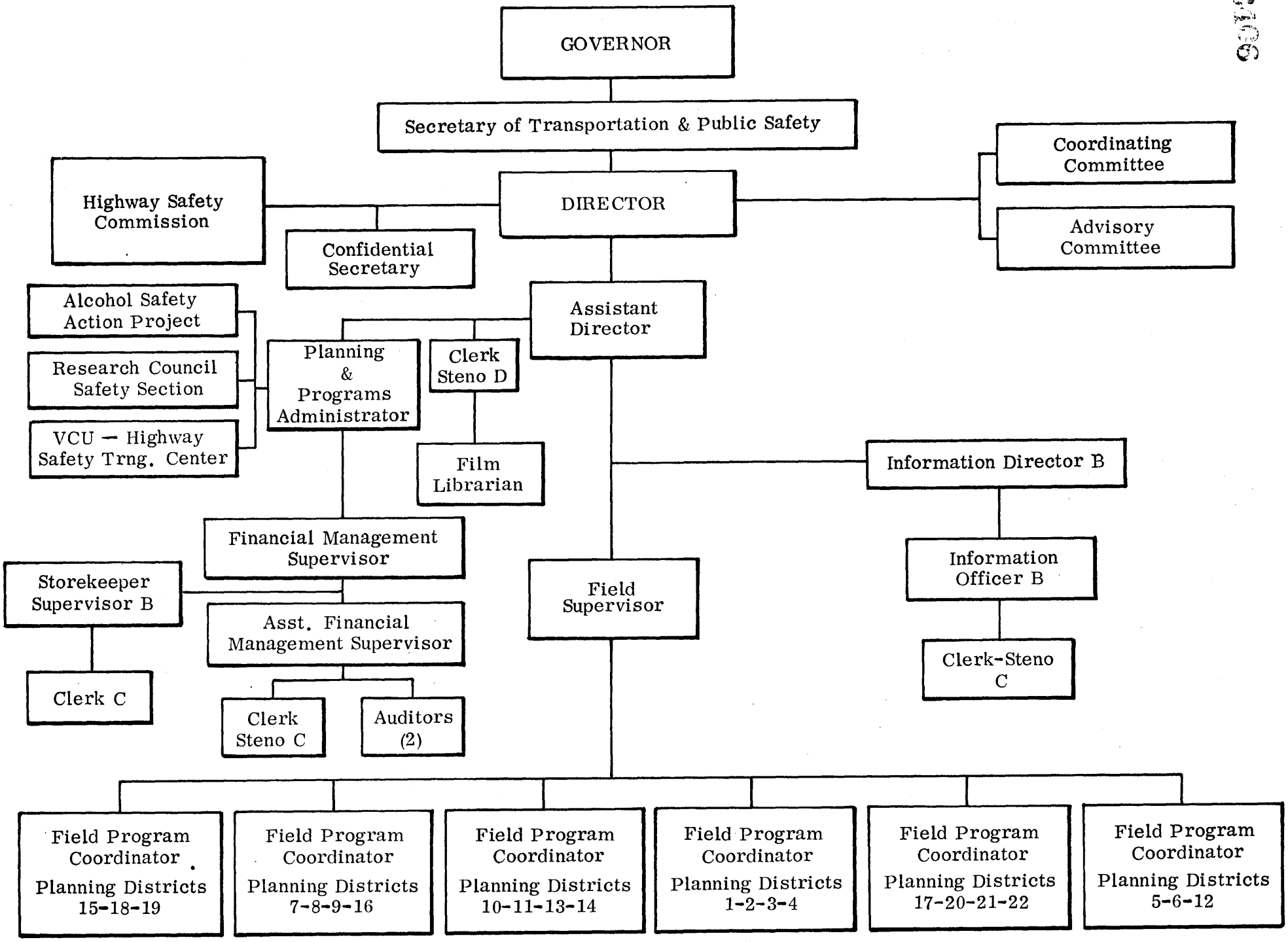
PLANNING AND ADMINISTRATION

In order to comply with the requirements of Public Law 89-564, 89th Congress § 3052, September 9, 1966, that " . . . each state shall have a highway safety program approved by the Secretary of Transportation to reduce traffic accidents and deaths, injuries and property damage therefrom and that such programs shall be in accordance with uniform standards promulgated by the Secretary or risk the loss of 10% of the federal aid highway funds apportioned on or after January 1, 1969 . . ." Virginia established the Highway Safety Division.

The Virginia Highway Safety Division began operations August 1, 1968, with the Director assuming his responsibilities on that date and the Assistant Director joining the organization November 1, 1968. The Division is responsible for carrying out the state's Highway Safety Program by encouraging, stimulating, and developing highway safety programs and activities throughout the state. Since the inception of the organization, active highway safety commissions have been established in every locality and safety projects have been, or are being, conducted in almost every locality in the state with federal participation of over $6 million during the years 1969-74. An organization chart for the Division is shown in Attachment A.

Crash statistics reveal that there were 1,220 persons killed, 52,378 individuals injured, 120,519 property damage crashes and 157,637 total crashes in Virginia during calendar year 1973. The following narrative denotes certain HSD plans and programs which should have the greatest bottom line impact on the problem pertaining to the need to reduce the number and severity of traffic crashes, fatalities, injuries and damages throughout the state.

ATTACHMENT A



In carrying out its responsibility for highway safety, the Division's staff is designed to incorporate the services of six full-time area coordinators whose job is to help the local highway safety commissions develop local highway safety programs as well as aid the Division in carrying out its safety programs. In addition, information officers have been hired to disseminate public information, utilizing media pertinent to highway safety standards, in the highway safety program. The Division also supports the state's Crash Investigation Team, which strives to uncover causative factors in certain traffic crashes in hopes of beneficially impacting highway safety accident variables.

Section 2.1-64.22 of the Code of Virginia authorizes the Director of the Highway Safety Division, subject to the approval of the Governor, to contract for the use of the facilities of any appropriate state agency for purposes of research, evaluation, and traffic accident prevention. If in the judgement of the Governor an additional facility is required, a center may be established in an existing state agency.

On July 1, 1969, the then Highway Research Council at Charlottesville created the Safety Section, a new evaluation group within the Council structure, to conduct research and evaluation projects for the Highway Safety Division. This relationship was secured by memoranda of agreement between the Director of the Highway Safety Division and the State Highway Research Engineer.

The Safety Section works to satisfy the evaluation requirements of the Director of the Highway Safety Division. The Section has seven full-time professional staff members, a secretary, and three part-time graduate research assistants. These staff members are organized into five functional elements of evaluation: (1) Highway Safety Programs, (2) Behavioral Research in Highway Safety, (3) Legal Research, (4) Alcohol Countermeasures, and (5) Engineering - Information Systems.

Evaluation in Highway Safety Programs relates, for the most part, to the administration of the State Highway Safety Program, including preparation of the required Comprehensive Highway Safety Plan and Annual Highway Safety Work Program. Work in this area also involves evaluation of state efforts to implement the Highway Safety Program Standards.

Behavioral Research in Highway Safety encompasses the human element in the man, machine and environment interaction that is driving.

Legal Research relates to the almost continual assessment of the state's statutes on highway safety and a comparison of these statutes with the NHTSA Standards and the Uniform Vehicle Code. Proposed new statutes for highway safety are thoroughly evaluated before they are recommended to the Director of the Highway Safety Division for endorsement.

Research on Alcohol Countermeasures involves evaluation of the Fairfax Alcohol Safety Action Project. The full project is being analyzed for overall project impact, and the success of each individual countermeasure.

Engineering - Information Systems is an important part of the development of expertise in highway safety programming and planning. Data are necessary to enable administrators and planners to develop programs which will impact problem areas. Evaluation in this functional element is designed to better identify problem areas with accurate data.

In striving to reduce the mortality, morbidity and property damage of traffic crashes, the Highway Safety Division of Virginia will sponsor the following programs in the upcoming fiscal year:

(1) Bicentennial Emphasis Program.

(2) Crash Investigation Team. (See additional narrative in Identification and Surveillance of Accident Locations.)

(3) Pedestrian Safety. (See additional narrative in Pedestrian Safety).

(4) Crash facts for each city and county in the state.

(5) Pupil Transportation. (See additional narrative in Pupil Transportation).

(6) Reprint of new laws for police officers. (Selected Acts).

(7) Traffic Records.

(8) Highway Safety Education.

(9) Traffic Engineering Seminars.

(10) Implementation studies to determine specific traffic safety problem areas in the state localities.

(11) Virginia Alcohol Safety Action Programs.

(12) Motorcycle safety.

(13) Engineering and accident evaluation studies in selected localities.

In addition to the aforementioned, the HSD will support certain other programs which aid in the development of a comprehensive and administratively adept network for crash reduction.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Planning & Administration	PA76-100 3. NO. 46-76-00-01	4. DATE 5-1-75
	5. DRAFTED BY R. E. Adams, Financial Mgt. Supv. HSD (Title and Agency) APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	FISCAL YEAR 19 76		

			1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL
			July, Aug, Sept	Oct, Nov, Dec.	Jan, Feb, Mar.	Apr, May, June	
6a. EFFECTIVENESS Statewide death rate per 100 million vehicle miles of travel							3.0
6b. OUTPUT		C Percent of local commissions participating in 402 funding					60%
		V Number of local commissions eligible to participate in 402 funding					135
7. RESP.	8. STD.	9. TASKS & MILESTONES					
Highway Safety Division	300	1. Highway Safety Operations					
		A. Personnel costs - permanent employees, part-time hourly wages, per diem & other special payments	25	25	25	25	25
		B. Contractural Services - operations of evaluation unit, public information office, travel, repairs, communication and printing	Continue	Continue	Continue	Continue	
		C. Supplies and Materials	Purchase	Purchase	Purchase	Purchase	
		D. Equipment	Purchase	Purchase	Purchase	Purchase	
		E. Current charges & obligations	Continue	Continue	Continue	Continue	
		F. Pensions-Retirement Insurance	Continue	Continue	Continue	Continue	

10. DESCRIPTION The long-term goal of the Highway Safety Program in Virginia is to reduce the number of traffic crashes including fatalities, personal injuries and property damage, attributable to poor highway safety practices throughout the state.

In order to accomplish this goal the State of Virginia, through its governor, established a Highway Safety Division responsible for carrying out the State Highway Safety Program and encouraging, stimulating, and developing highway safety programs and activities throughout the state. (See Attachment B) (1) See Block 9.

11. COST BY TASK ($000s)					
1. Highway Safety Operations	155.59	155.59	155.59	155.716	622.486
12. TOTAL COST ($000s)	160.59	160.59	169.59	160.716	651.486
LOCAL SHARE	2.5	2.5	2.5	2.5	10.
STATE SHARE	92.865	92.865	92.865	92.865	371.460
FEDERAL SHARE	65.225	65.225	74.225	65.351	270.026
TO LOCALITIES	2.5	2.5	11.5	2.5	19.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Planning & Administration	PA76-100 3. NO46-76-00-02	4. DATE 5-1-75
	5. DRAFTED BY R. E. Adams, Financial Mgt. Supv. HSD (Title and Agency)	FISCAL YEAR 1976		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C V					

7. RESP.	8. STD.	9. TASKS & MILESTONES					
Local Political Subdivision	300	2. Highway Safety Awareness Programs	Conduct	Conduct	Conduct	Conduct	
HSD	300	3. Evaluation & Survey of Local Commissions	Plan	Contract	Conduct	Complete	

10. DESCRIPTION	11. COST BY TASK ($000s)					
(2) These programs would strive to make the local public aware of the causative factors in personal injury and fatal accidents in hopes of impacting the accident and injury rate of a locality. (3) This program is designed to provide aid and guidance to local Highway Safety Commissions in formulating their Highway Safety programs as they concern the 18 standards as well as public information and evaluation.	2. Highway Safety Awareness Program	5.	5.	5.	5.	20.
	3. Evaluation & Survey of Local Commissions			9.		9.
	12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES					

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. Planning and Administration PA76-100 46-76-00-03	Date 5-1-75	19 74 FY-2	19 75 FY-1	Fiscal Year 1976 1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	19 77 FY+1	19 78 FY+2
6a. EFFECTIVENESS										
Percentage of highway safety standards implemented 1.		90%	92%					94%	95%	96%
Total number of annual work programs submitted (Local and State) 2.		98	103					95	97	99
Total number of projects requested 3.		162	175					211 (Projection)	214	221
Percentage of the total number of projects funded 4.		66%	65%					55% (Projection)	54%	52%
Virginia's death rate per 100 million vehicle miles of travel (Projection) 5.		3.4	3.2					3.0	2.8	2.7
Virginia's death rate over past (5) five years. All projects are effectively evaluated by either the staff of the Highway Safety Division of Virginia or the Safety Section of the Virginia Highway & Transportation Research Council.		1969 4.8	1970 4.3					1971 4.0	1972 3.8	1973 3.5

ATTACHMENT B

CHAPTER 7.2.
HIGHWAY SAFETY

§2.1-64.15. There is hereby created the State Highway Safety Division which shall be under the supervision and direction of the Governor and shall be referred to hereafter as the Division. The Governor shall appoint a Director of the Division who shall hold his position at the pleasure of the Governor and shall be paid such compensation as the Governor may fix.

The Governor shall also appoint a Highway Safety Commission, hereafter referred to as the Commission, consisting of eleven members who shall be appointed as follows: initially three members shall be appointed for two-year terms, four members for three-year terms and four members for four-year terms; and as such initial terms expire and thereafter, all members shall be appointed for four-year terms. No member shall be appointed to serve more than two full four-year terms. Vacancies on the Commission shall be filled for the unexpired term. Members of the Commission shall receive no salaries but shall be paid their necessary traveling and other expenses incurred in the discharge of their duties. The Director shall serve as an ex officio member of the Commission.

§2.1-64.16. The Division, under the supervision and direction of the Governor, is charged with the responsibility of carrying out the State's Highway Safety Program, and encouraging, stimulating and developing highway safety programs and activities throughout the State, including specifically the duties to (a) assist the Governor in the formulation and administration of the State's Highway Safety Program. (b) Assist the Governor in determining which local highway safety programs shall be approved as part of the State's Program and for purposes of federal highway safety legislation. (c) Assist the localities in the development and formulation of local highway safety programs. (d) Assist in the organization and servicing of local citizens' safety councils to the end that they may generate citizen interest and participation in highway safety activities. (e) Review and report to the Governor on the enforcement of and compliance with State and local laws relating to highway safety and develop specific recommendations for administrative and legislative action to the end that such laws are fully enforced and complied with, and (f) assist the Governor in determining the benefits which may accrue to the State under the Federal Highway Safety Act of 1966, and the means to take advantage of the federal Act and federal programs in the field of highway safety.

The Commission shall advise and assist the Division in the performance of its duties and shall assist the Division specifically through the review and evaluation of the State's Highway Safety Program.

§2.1-64.17. The Director shall, under the direction and control of the Governor and acting through the Commissioner of Administration, exercise all powers and perform all duties imposed on him by law, and he shall perform such other duties as the Governor or Commissioner of Administration shall require of him.

In addition, the Director shall be charged with executive and administrative responsibility to (a) carry out the specific duties imposed on the Division under §2.1-64.16, (b) report to the Governor annually on the status of the State's Highway Safety Program which shall include all activities of the State government directed to the promotion of safety on the highways of the Commonwealth, (c) formulate plans for the improvement, coordination and further development of a unified, organized and centrally directed Highway Safety Program for the State, (d) develop standards for the evaluation of local highway safety programs, (e) review the activities, role and contributions of the various State agencies in the State's Highway Safety Program, and (f) maintain appropriate liaison with federal, State and local agencies so that the State's Highway Safety Program may function appropriately within the broad reach of highway safety activities from the national to local levels.

The Director is authorized to employ such personnel and to contract for such consulting services as he may require to carry out the purposes of this chapter. Personnel employed by the Director shall be subject to the provisions of Chapter 10 of Title 2.1 of the Code of Virginia.

The Governor may transfer to the Division the staff personnel of the Governor's Highway Safety Committee, which Committee shall be discontinued.

§2.1-64.18. There is hereby established a Coordinating Committee to be composed of the State Highway Commissioner, Superintendent of State Police, Commissioner of the Division of Motor Vehicles, the State Health Commissioner, the Superintendent of Public Instruction, the Director of the Highway Safety Division who shall be Chairman of the Committee, and such other individual heads of State agencies as the Governor may appoint. The Coordinating Committee shall act to promote full cooperation by the State agencies represented in the execution of the State's Highway Safety Program and all activities related thereto and shall meet on the call of the Chairman.

§2.1-64.19. Each county and city within the State shall have a local highway safety commission which shall be appointed by the governing body thereof and which shall consist of such number of members as the governing body may determine, provided that at least one member shall be a member of such governing body. Such commission shall meet a minimum of four times each year and be charged with the responsibility for recommending to the governing body plans for the formulation of a highway safety program for the county or city and thereafter with the responsibility for a periodic review of the operation and effect of such program.

§2.1-64.20. There is hereby created a State Highway Safety Advisory Committee which shall consist of the chairmen of each county or city highway safety commission and such representatives of the State at large as the Governor may appoint, provided that the number of members shall not exceed one hundred fifty. Initially, one-half of the representatives of the State at large shall be appointed for two-year terms and one-half for four-year terms, and thereafter they shall be appointed for four-year terms. No such representative shall be appointed for more than two four-year terms.

The Director of the Highway Safety Division shall serve as an ex officio member and staff of the Advisory Committee which shall meet at least once annually and at such other times as the Director may call meetings.

The Committee may elect its own chairman, provide bylaws for its operation and divide into subcommittees. The Committee shall review and compare the operation of local highway safety programs and review and offer recommendations for the improvement of the State's Highway Safety Program.

§2.1-64.21. Each county and city shall, upon the advice and with the assistance of the local highway safety commission prepare and submit to the Governor, through the Highway Safety Division, a program for highway safety within such county or city which shall be subject to the approval of the Governor for purposes of determining the eligibility of such county or city to participate in funds and grants available under the Federal Highway Safety Act of 1966 or such State funds as may be made available. Such plans shall specifically include, in addition to such matters as the Governor through the Highway Safety Division may require, material on the status of, need for and means to provide within such locality driver education and driver improvement courses for adults and out-of-school youths and identification of accident-prone locations on roads within the locality's jurisdiction and in cooperation with State agencies. Such programs shall be submitted by January one, nineteen hundred sixty-nine.

PERIODIC MOTOR VEHICLE INSPECTION

As of January 1, 1974, approximately 65% of the states and the District of Columbia had passed legislation requiring periodic motor vehicle inspection. Of the states not requiring periodic inspection, 50% had systems of random or spot-check inspections. Virginia began to inspect automobiles for safety defects rather early, inaugurating its system in 1932.

There are two basic types of periodic inspection programs. One type uses state owned and operated stations. The use of state facilities for inspection purposes is restricted to a small number of states, and appears to work best in states with small land areas, such as Delaware and New Jersey. The other type of program, used by a majority of states including Virginia, utilizes privately owned facilities appointed and supervised by the state. In Virginia, appointment and supervision is under the authority of the Department of State Police. Currently, there are 2,670 inspection stations and 8,495 certified mechanics operating in the state. In 1973, these stations conducted 5,704,844 inspections.

It should be noted that the information from the inspection receipts is important for categorizing vehicle defects and is also an effective tool used to insist on uniformity and thorough inspections. Each inspection station maintains a copy of the inspection receipt for two years. The original of the receipt is filed at State Police Administrative Headquarters. This receipt lists the make, model, body style, license number, vehicle identification number, vehicle defects, inspector's name, official inspection station number, odometer reading and the cost of the inspection and repair.

The laws of Virginia require all Virginia registered motor vehicles to be inspected semiannually prior to operation on the public highways. This law is effective and actively enforced. The inspection is performed by experienced mechanics who are certified by the State Police and covers systems, subsystems, and components having a substantial relationship to safe vehicle performance. The inspector is given individual instruction regarding the use of equipment and his duties. Satisfactory completion of an examination is essential, and in addition a certified mechanic must attend a retraining session annually to maintain certification. It should be further revealed that inspection station applicants are thoroughly investigated to determine if they are well established in a reputable mechanical business. The building itself must meet minimum requirements which have been established by the Department and certain essential mechanical tools are mandatory for operating a motor vehicle inspection facility.

Every year it is necessary to appoint additional stations and certify additional mechanics to meet the public demand and provide for the increased number of vehicles operated on the public highways. The State Police plan to increase both the number of stations and mechanics annually. Supervision will be increased accordingly and any complaint by the public will be investigated. If the mechanic has made an error, the appropriate action will be taken to prevent a reoccurrence. During 1973, 56 stations and 140 mechanics were suspended for failing to follow inspection regulations.

In retrospect, it is apparent that the Virginia Official Inspection Program very closely parallels the National Highway Traffic Safety Administration recommendations contained in the Highway Safety Program Manual. Furthermore, Virginia's inspection program establishes minimum standards which are comparable to the ANSI D.7

Inspection Code and establishes minimum criteria for the establishment and operation of stations. The program requires inspection semiannually to detect vehicle defects, which must be corrected within 7 days. The Department of State Police constantly evaluates the program and makes improvements which are necessary to ensure mechanically safe vehicles on the public highways of the Commonwealth of Virginia.

Vehicle-In-Use-Standards

The Vehicle-In-Use Standards (49CFR Part 570) have been incorporated into the Periodic Motor Vehicle Inspection Standard. In a memorandum dated May 7, 1974, the Acting Associate Administrator, Traffic Safety Programs, NHTSA, prescribed a schedule for the implementation of the standards in stages. The initial stage is to be completed by June 30, 1976, and the final stage by June 30, 1978. The June 30, 1976 deadline applied to the Vehicle-In-Use inspection standards for service brake systems (49CFR §570.5) and steering systems (49CFR § 570.7). As a result of the merger of the above items into the PMVI standard, and the requirement that the state reflect major changes in a standard area via revisions to the Comprehensive Plan, the Virginia Department of State Police was contacted to learn of the state's compliance with the new federal requirements in this highway safety standard area.

After reviewing the standards contained in 49CFR Part 570, the Department of State Police noted the following provisions with which the Virginia Inspection Program is not currently in compliance:

Section 570.5 - Service Brake Systems

(1) The Virginia regulations do not require the inspection of the failure indicator lamp or the application of a force of 125 pounds to the brake pedal in order to determine a decrease in the pedal height.

(2) The Virginia requirements for bonded linings and bounded disc pads are the same as those contained in the Vehicle-In-Use Standards; however, the requirements for riveted linings and pads prohibit them from being worn to the rivet heads instead of the one thirty-second of an inch as required in Section 570.5

(3) The Virginia requirements call for the removal of a minimum of one (1) wheel and drum for brake inspection while Section 570.5 requires the removal of one (1) front wheel and one (1) rear wheel.

Section 570.7 - Steering Systems

(1) The Virginia lash requirements are slightly different from those contained in Table 1 of Section 570.7. The Virginia regulations require a visual alignment test and do not contain a toe-in or toe-out setting as outlined in Section (d) of 570.7.

The Department plans to implement the necessary changes in the state's inspection rules and regulations in order to put Virginia in complete compliance with the first stage of the Vehicle-In-Use Standards.

It should also be pointed out that the Virginia Inspection requirements, which, as noted earlier, have been in effect since July 1, 1932, demand the inspection of the vast majority of all safety components found on a motor vehicle, and, in most cases, greatly exceed the requirements of the Vehicle-In-Use Standards.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Periodic Motor Vehicle Inspection	VI76-261 3. NO 46-76-01-01	4. DATE 5-1-75
	5. DRAFTED BY R. M. Terry, Safety Officer, State Police (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY Department of State Police (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS During 1973, 326,388 vehicles were rejected due to mechanical defects						
6b. OUTPUT	C Percent of registered vehicles inspected prior to operation on roadway (1973)					100%
	V Number of vehicle defects which contributed to crashes					11,576
7. RESP.	8. STD.	9. TASKS & MILESTONES					
State Police	301	Operate an effective and efficient vehicle inspection program to detect and correct vehicle defects. This will be accomplished through the utilization of administrative personnel, supervisory personnel, supplies and equipment, and inspection standards.					
		1. Administrative Personnel					
		Captain	1	1	1	1	1
		Lieutenant	1	1	1	1	1
		Stenographer	2	2	2	2	2

10. DESCRIPTION The ultimate goal of the State Police is to reduce the number of deaths, injuries, and amount of property damage caused by motor vehicles with inspectable defects. In accomplishing this goal the State Police plan to inspect every motor vehicle before entry on the highway and every six months thereafter. The Department plans to correct vehicle defects prior to operation on the public highways and thereby reduce accidents. (For description of tasks, see block 9)

Section 46.1-315 of the Code of Virginia gives the Superintendent of State Police authority to compel inspections and Section 46.1-319 gives the

11. COST BY TASK ($000s)					
1. Administrative Personnel	26.	26.	26.	26.	104.
12. TOTAL COST ($000s)	127.	127.	127.	122.	503.
LOCAL SHARE					
STATE SHARE	122.	122.	122.	122.	488.
FEDERAL SHARE TO LOCALITIES	5.	5.	5.		15.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Periodic Motor Vehicle Inspection	VI76-261 3. NO.46-76-01-02	4. DATE 5-1-75
	5. DRAFTED BY R. M. Terry, Safety Officer, State Police (Title and Agency)	FISCAL YEAR 1976		
	APPROVED BY Department of State Police (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C					
	V					
7. RESP.	8. STD.	9. TASKS & MILESTONES				
State Police	301	1. Administrative Personnel (Continued)				
		Clerk Typists	2	2	2	2	2
		Clerk D	1	1	1	1	1
		Clerk C	1	1	1	1	1
		Clerks B	9	9	9	9	9
		2. Field Supervisory Personnal The stations are supervised by the more than 1,100 State Policemen who spend as much time as is necessary to supervise the mechanics, investigate applicants and conduct investigations. These, however, gradually increase along with the number					
10. DESCRIPTION Superintendent authority to promulgate regulations for the inspection of motor vehicles. Even though Virginia has operated an effective program for many years, the program is constantly evaluted to strengthen, expand and improve: 1. Vehicle inspection standards upgrading A. A retraining program, in which each of the approximately 9,000 certified mechanics were required to be present, was held in 50 locations throughout the State. These mechanics were given instructions regarding the complete inspection of motor vehicles.		11. COST BY TASK ($000s) 2. Field Supervisory Personnel	62.	62.	62.	62.	248.
		12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Periodic Motor Vehicle Inspection	VI76-261 3. NO. 46-76-01-03	4. DATE 5-1-75
	5. DRAFTED BY R. M. Terry, Safety Officer, State Police (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY Department of State Police (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C V					
7. RESP. State Police	8. STD. 301	9. TASKS & MILESTONES 2. Field Supervisory Personnel (Continued) of inspection stations and vehicles inspected. 3. Inspection Standards Efforts will be made to further bring Virginia Inspection Standards into compliance with those items set forth by the National Highway Traffic Safety Administration and recommended by the American National Standards Institute Inspection Code. (Refer to descripition and attachment A & B)				
10. DESCRIPTION Color slides were used as a training aid and special emphasis was placed on the inspection of brake systems, steering and suspension systems and tire and wheel assemblies. The mechanics are given an opportunity to discuss any problems that may exist during a question and answer period at the end of the session. B. Five bulletins have recently been forwarded to the inspection stations in order to keep our regulations in conformance with the current law. An example is the revision of Section 46.1-265 regarding dimension and marker lamps which makes the Code and the inspection regulations comparable to		11. COST BY TASK ($000s)				
		12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES				

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Periodic Motor Vehicle Inspection	3. NO. VI76-261 46-76-01-04	4. DATE 5-1-75
	5. DRAFTED BY R. M. Terry, Safety Officer, State Police (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY Department of State Police (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar,	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C V					
7. RESP. State Police	8. STD. 301	9. TASKS & MILESTONES 4. Inspection Supplies and Equipment Approval stickers, rejection stickers, decals, manuals, procedure sheets and other instructions are furnished to each station as needed.				
10. DESCRIPTION the Federal Motor Vehicle Safety Standard 108. C. It is our long-range goal to keep the safety standards uniform and up to date. The certified mechanics will receive additional training annually and additional stations and mechanics will be appointed in order to continue the semi-annual inspection of all registered motor vehicles which are operated on the public highway.		11. COST BY TASK ($000s) 4. Inspection Supplies and Equipment	34.	34.	34.	34.	136.
		12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Periodic Motor Vehicle Inspection	VI76-261 3. NO. 46-76-01-05	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr., VH&TRC (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL
		July, Aug, Sept	Oct, Nov, Dec.	Jan, Feb, Mar.	Apr, May, June	
6a. EFFECTIVENESS						
6b. OUTPUT	C V					
7. RESP. / 8. STD.	9. TASKS & MILESTONES					
Virginia Highway and Transportation Research Council / 301	5. Periodic Motor Vehicle Inspection Study	Research	Research and Write	Write	Publish	
10. DESCRIPTION (5) This project will provide a means for the determination of method and sample size to be drawn to satisfy state and federal requirements for evaluation of PMVI program.	11. COST BY TASK ($000s)					
	5. PMVI Study	5.	5.	5.		15.
	12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES					

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. Periodic Motor Vehicle Inspection VI76-261 46-76-01-06	Date 5-1-75	19 69 CY-1	19 70 CY-2	Calendar Year 1971 1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	19 72 CY+1	19 73 CY+2
6a. EFFECTIVENESS										
Total number of vehicle defects which contributed to crashes										
Lights Defective		609	655					664	689	598
Brakes Defective		2,695	2,706					2,851	3,259	3,039
1. Steering Defective		529	481					537	590	641
Blowout or Puncture		956	952					976	1,074	1,102
Worn or Slick Tires		2,848	2,760					3,115	3,236	3,108
Motor Trouble		406	481					513	555	608
Other Defects		1,997	2,272					2,207	2,399	2,480
2. Total Defects		10,093	10,317					10,863	11,802	11,576
Total Vehicles		233,655	243,941					257,464	278,608	281,668
100% of all registered vehicles are inspected prior to operation on roadway										
3. Number of vehicles inspected in the Commonwealth			4,627,541					4,950,027	5,343,154	5,704,844
Number of vehicles rejected because of mechanical defects			277,652					297,002	322,883	326,388
4.										
Number of vehicles inspected which had some mechanical defect. (Approximation)			1,156,885					1,237.507	1,335,789	1,540,308
5.										
Number of inspection stations in Virginia			2,389					2,485	2,565	2,670
Number of certified mechanics operating in the State			8,000					8,678	8,678	8,495
6.										

ATTACHMENT A

3. VIRGINIA'S PROGRAM

The Virginia Official Inspection Program closely parallels the National Highway Traffic Safety Administration recommendations contained in the Highway Safety Program Manual.

1. All vehicles which are licensed and operated on the public highway must be inspected semiannually. These inspections are performed by privately owned stations which are appointed and supervised by the Department of State Police.
2. Each inspection station applicant is thoroughly investigated to determine that it is well established in a reputable mechanical business. The building must meet minimum requirements which have been established by State Police and the essential mechanical tools are required.
3. Every mechanic who is to inspect the vehicles must have at least one year's practical experience, and is instructed in the use of special equipment. This person is required to be thoroughly familiar with the inspection manual and he must undergo a written examination. Annual training sessions are conducted by the Department of State Police and each certified mechanic is required to attend.

4. Any complaint by the public is investigated and if the mechanic has made an error, the appropriate action is taken to prevent a reoccurrence. During 1973, 56 stations and 140 mechanics were suspended due to not following prescribed inspection regulations.
5. The inspection covers systems and components having substantial relation to safe vehicle performance.
6. The procedures for the actual inspection equals or exceeds many of the NHTSA recommendations.
7. Each station keeps the records as recommended, including identification number.
8. The state publishes summaries of vehicle defects based on a sample tabulation.

ATTACHMENT B

VEHICLE INSPECTION STANDARDS

The information listed below provides a comparison of those items required to be inspected in Virginia with those recommended by the National Highway Traffic Safety Administration and the ANSI D7.1-1968 Code. It also depicts items being considered for Virginia's Program.

VIRGINIA	NHTSA	ANSI
*	Operator's License	
	Valid Registration	Valid Registration
License Plates	License Plates	License Plates
Brakes	Brakes	Brakes
Headlights	Headlights	Headlights
Signal Lights	Signal Lights	Signal Lights
Other Lights	Other Lights	Other Lights
Horn	Horn	Horn
Electrical Systems	Electrical Systems	Electrical Systems
Windshield	Windshield	Windshield
Other Windows	Other Windows	Other Windows
Rear View Mirrors	Rear View Mirrors	Rear View Mirrors
Tires	Tires	Tires
Wheels and Rims	Wheels and Rims	Wheels and Rims
Wipers	Wipers	Wipers
***	Windshield Washers	Windshield Washers
Steering Assembly	Steering Assembly	Steering Assembly
Alignment & Suspension	Alignment & Suspension	Alignment & Suspension
Exhaust System	Exhaust System	Exhaust System
***	Fuel System	Fuel System
Hazardous Body Items	Hazardous Body Items	Hazardous Body Items
Latches - Hoods	Latches, Hood, Door, etc.	Latches, Hood, Doors, etc,
Seat Belts	Occupant Restraining Devices	Seat Belts
***	Defrosters & Defoggers	Defrosters & Defoggers
Vehicle Emission System	Vehicle Emission System	
**	Auxiliary Safety Equipment	**

* Virginia does not use enforcement personnel for inspection; therefore, this item does not apply.

** D7 states that items must comply with State Statutes and if a device is permissive it shall comply with the requirements for such a device as if it were covered by Statute.

*** These items are being considered for Virginia's program.

MOTOR VEHICLE REGISTRATION

The long-range goal of the Motor Vehicle Registration program is to reduce the number of deaths, injuries, and the amount of property damage caused by traffic law violators whose driving privileges have been or should have been revoked or suspended as a result of previous conviction and/or crash involvement. The immediate goal is to continue to improve response times, content, and quality of vehicle records to enable law enforcement personnel to apprehend traffic violators and crime suspects in a minimum amount of time, and vehicle manufacturers to identify owners of vehicles with safety defects for recall.

The Division of Motor Vehicles is responsible for this endeavor and conducts various programs in complying with the aforementioned goals and objectives.

DMV maintains a motor vehicle titling record of legal owners and leinholders of motor vehicles and trailers and requires that they pay a titling fee and sales tax on the vehicles. The titling tax is appropriated by statute for the construction, reconstruction, and maintenance of highways, the regulation of traffic and the removal of vehicles abandoned thereon.

DMV also requires all motor and towed vehicles to be licensed in order to provide identification of owners. Legislation effective July 1, 1974 requires vehicle owners to notify DMV of a change of address within thirty days of the address change.

Effective October 1, 1972, DMV implemented a staggered renewal for licenses issued to noncommercial passenger vehicles. Effective April 1, 1975,

the staggered license renewal will be extended to all motor vehicles, trailers and semitrailers, under a multi-year plate and decal revalidation system. Extended plate number assignment facilitates identification of problem driver-owners of motor vehicles in DMV records.

License and Uninsured Motor Vehicle Fees, for vehicles licensed without liability insurance coverage, are collected at the time of licensing or revalidation and are processed against the motor vehicle records file. In addition, vehicles which are too large for normal highway operation and licensing are required to obtain mileage permits before being operated on the highways under restricted conditions.

Virginia participates in reciprocal registration of commercial vehicles, which permits registration of the vehicle in the base state with a portion of the fees collected being disbursed to participating states on the basis of miles operated in the participating states.

Motor vehicle records are constantly being updated utilizing automated data processing equipment and techniques. Full service branch offices in major cities and metropolitan areas are currently "on-line" processing 70% of titles and vehicle licenses against the automated vehicle title master file and cross reference files to produce immediate update and printed output. This method of vehicle records update is being expanded as additional full time offices are established. Ultimately, 95% of all vehicle titling and licensing work will be processed at branch offices. The remaining 5% will be processed at DMV Headquarters using the same "on-line" update available at branch offices.

Direct computer links to state and local law enforcement agencies and DMV Headquarters terminals permit immediate response to inquiries for vehicle information. Stolen vehicle information is forwarded to DMV for "on-line" automated files update at the discretion and request of the State Police, with simultaneous update of the NCIC files in Washington, D. C.

Methods for linking the motor vehicle records files with the driver history records files to automatically identify all vehicles owned by a driver is being developed as an aid in law enforcement and control of problem drivers.

Full compliance with motor vehicle registration requirements was achieved with passage of legislation requiring address changes to be furnished the Division of Motor Vehicles within thirty days by vehicle owners. Emphasis is now on the reduction of record update and retrieval times and the improvement of the quality of the record information.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Motor Vehicle Registration	3. NO. VR76-261 16-76-02-01	4. DATE 5-1-75
	5. DRAFTED BY A. D. Harvey, Coordinator, DMV (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS See Effectiveness Supplement						
6b. OUTPUT	C Percent of motor vehicles titled and licensed V Number of motor vehicles titled and licensed (000)		Titled - 1176		Licensed -3712	100%

7. RESP.	8. STD.	9. TASKS & MILESTONES					
DMV	302	1. Motor Vehicle Titling					
		A. Number of Motor Vehicles and Trailers Titled (000)	369	369	369	369	1476
		B. Number of Dealers Licensed	37	37	37	4200	4311
		C. Number of Salesmen Licensed	108	107	107	15794	16116
		D. Record Odometer Reading on Title	Continuous since July 1, 1972				
		E. Number of Personnel - State Level					
		1. Managers	14	14	14	14	14
		2. Supervisors and Specialists	5	5	5	5	5
		3. Secretaries and Stenographers	3	3	3	3	3
		4. Regional Representatives	15	15	15	15	15
		5. Accounting/Bookkeeping Machine Operators	45	45	45	45	45
		6. Typists	34	34	34	34	34

10. DESCRIPTION The long-term objective of the Motor Vehicle Registration program is to reduce the number of deaths, injuries and the amount of property damage caused by crashes. The immediate goal is to make available record information that will permit the police to identify, apprehend and prosecute in the courts violators of motor vehicle laws and crime suspects; and to identify owners of vehicles recalled by manufacturers for safety defects. The Division of Motor Vehicles is responsible for this activity and performs the following in complying with the above goals: (1) The Motor Vehicle Titling program which: A. Ensures the

11. COST BY TASK ($000s)					
1. Motor Vehicle Titling	1023.	1023.	1023.	1023.	4092.
12. TOTAL COST ($000s)	2773.	2773.	2774.	2775.	11095.
LOCAL SHARE					
STATE SHARE	2773.	2773.	2774.	2775.	11095.
FEDERAL SHARE					
TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN		1. State of Virginia	2. TITLE Motor Vehicle Registration		3. NO. VR76-261 46-76-02-02		4. DATE 5-1-75
		5. DRAFTED BY A. D. Harvey, Coordinator, DMV (Title and Agency) APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	FISCAL YEAR 19 76				
			1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS							
6b. OUTPUT		C V					
7. RESP.	8. STD.	9. TASKS & MILESTONES					
		1. Motor Vehicle Titling (Continued)					
		7. Clerks	78	78	78	78	81
		TOTAL	182	182	182	182	197
DMV	302	2. Motor Vehicle Licensing					
		A. Motor Vehicles and Trailers Licensed (000)	928	928	928	928	3712
		B. Motor Vehicles Licensed as Uninsured (000)	7*	7*	7*	7*	28*
		C. Mileage and Use Permits Revenue Collected ($000)	81.	81.	81.	82.	325.
		D. Reflectorized License Plates	Implement subject to passage of enabling legislation				
		E. Quarterly Truck License Plates	Continue				
		F. Staggered Truck Renewal Licensing	Continue				
		G. Reciprocal registration of commercial vehicles	Continue				

10. **DESCRIPTION** proper titling of all vehicles and trailers for the purpose of having a record of all legal owners, lienholders, and odometer readings in order to prevent fraud upon the consumer in the purchase of a stolen vehicle, and to permit owner identification in vehicle manufacture recall programs, for law enforcement and a measure in purchaser evaluation of vehicle condition. B. Ensures the licensing of all motor vehicle dealers and salesmen to promote the interest and protection of the general public in the purchase, trade or sale of motor vehicles. (2) The Motor Vehicle Licensing program which: A. Ensures the proper

11. COST BY TASK ($000s)					
	* Assumes that act is not repealed by enactment of a "no-fault" insurance law.				
2. Motor Vehicle Licensing	916.	916.	916.	916.	3664.
12. TOTAL COST ($000s)					
LOCAL SHARE					
STATE SHARE					
FEDERAL SHARE					
TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Motor Vehicle Registration	3. NO. VR76-261 46-76-02-03	4. DATE 5-1-75
	5. DRAFTED BY A. D. Harvey, Coordinator, DMV (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C					
	V					
7. RESP. / 8. STD.	9. TASKS & MILESTONES					
	2. Motor Vehicle Licensing (Continued)					
	II. Number Personnel - State Level					
	1. Managers	13	13	13	13	13
	2. Supervisors and Specialists	3	3	3	3	3
	3. Secretaries and Stenographers	2	2	2	2	2
	4. Regional Representatives	15	15	15	15	15
	5. Accounting/Bookkeeping Machine Operators	43	43	43	43	43
	6. Typists	30	30	30	30	30
	7. Clerks	77	77	77	77	77
	TOTAL	183	183	183	183	183
10. DESCRIPTION licensing of motor vehicles and trailers in order that proper and instant identification is available and to provide revenue for highway construction, reconstruction and maintenance. B. Ensures the collection of Uninsured Motor Vehicle Fee on licensed vehicles that are not insured and to encourage owners to obtain liability insurance for coverage in the event of a crash. C. Issues mileage and use permits and collects fees for motor vehicles too large to license that are operated over the highways under restricted conditions. D. Subject to passage of enabling legislation, issue reflectorized vehicle licensing	11. COST BY TASK ($000s)					
	12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Motor Vehicle Registration	3. NO. VR76-261 46-76-02-04	4. DATE 5-1-75
	5. DRAFTED BY A. D. Harvey, Coordinator, DMV (Title and Agency) APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	FISCAL YEAR 19 76		

7. RESP.	8. STD.	9. TASKS & MILESTONES	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
		6a. EFFECTIVENESS					
		6b. OUTPUT C					
		V					
DMV	302	3. Motor Vehicle Records					
		A. Vehicle Registration via Magnetic Tape (000)	1565	1565	1565	1565	6261
		B. Inquiry for Vehicle Information (000)	3360	3360	3360	3361	13441
		C. Automated Data Processing	Continued expansion of "on-line" vehicle titling and licensing locations.				
		D. Current Address on Licensed Vehicles	Notice to DMV required by statute within 30 days of address change				
		E. Owner Social Security/Taxpayer ID Number	Cross reference to Driver History File.				
		F. Vehicle Odometer Reading	Posted to automated file at time of titling.				
		G. Personnel - State Level					
		1. Managers	2	2	2	2	2
		2. Coordinators, Supervisors and Specialist	7	7	7	7	7
		3. Analysts	3	3	3	3	3

10. DESCRIPTION plates to provide better visual markings on vehicles during bad weather and night travel. 3. The Motor Vehicle Records program which: A. Answers correspondence and furnishes automated files information for the public, courts and law enforcement agencies by direct computer inquiry with a minimum of response time. (B) Is expanding the number of locations where citizens may obtain titles and motor vehicle licences with a simultaneous update of the motor vehicle record file. (C) Requires citizens to report address changes on licensed motor vehicles to permit location of owners whose vehicles have been

11. COST BY TASK ($000s)					
3. Motor Vehicle Records	753.	753.	753.	754.	3013.
12. TOTAL COST ($000s)					
LOCAL SHARE					
STATE SHARE					
FEDERAL SHARE					
TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Motor Vehicle Registration	3. NO. VR76-261 46-76-02-05	4. DATE 5-1-75
	5. DRAFTED BY W. D. Harvey, Coordinator, DMV (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C					
	V					
7. RESP.	8. STD.	9. TASKS & MILESTONES				
		4. Programmers	10	10	10	10	10
		5. Secretaries and Stenographers	3	3	3	3	3
		6. Accounting/Bookkeeping	14	14	14	14	14
		7. Typists	10	10	10	10	10
		8. Clerks	90	90	90	90	90
		4. Program Administration TOTAL	139	139	139	139	139
DMV	302	A. Personnel - State Level					
		1. Administrators	2	2	2	2	2
		2. General Managers	1	1	1	1	1
		3. Secretaries and Stenographers	4	4	4	4	4
		4. Specialists	1	1	1	1	1
		TOTAL	8	8	8	8	8
10. DESCRIPTION involved in crashes and/or traffic violations and other law enforcement acticities. (D) Requests social security or Internal Revenue Service Identification number as a method of linking the motor vehicle files with the Driver History File to identify all vehicles owned by a driver and as an aid in control of vehicles registered to drivers under financial responsibility filing requirements. 4. The Program Administration personnel are responsible for the overall administration and management of programs and projects.		11. COST BY TASK ($000s)					
		4. Program Administration	81.	81.	82.	82.	326.
		12. TOTAL COST ($000s)					
		LOCAL SHARE					
		STATE SHARE					
		FEDERAL SHARE					
		TO LOCALITIES					

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. Motor Vehicle Registration VR76-261 46-76-02-06	Date 5-1-75	1974	1975	Fiscal Year 1976					1977	1978
				1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total		
6a. EFFECTIVENESS										
1. Number of motor vehicles titled (000)		1373.	1589.	369.	369.	369.	369.	1476.		
Number of dealers licensed		3815.	4565.	37.	37.	37.	4200.	4311.		
Number of salesmen licensed		1476.	21058.	108.	107.	107.	15794.	16116.		
2. Number of motor vehicles licensed (000)		3812.	3887.	928.	928.	928.	928.	3712.		
Number of motor vehicles licensed as uninsured		59.	59.	7.	7.	7.	7.	28.		
3. Vehicle registration via magnetic tape (000)			5256.	1565.	1565.	1565.	1566.	6261.		
"On-line" inquiries for vehicle information		7216.	10301.	3360.	3360.	3360.	3361.	13441.		
4. Accuracy of files		Files are 99% accurate as information and data are reported to DMV								
5. Average time for updating files		On-line files are updated instantaneously Average time for files updated in-house is 48 hours								
6. Average time of record retrieval from file-on line		Average retrieval time is usually less than 5 minutes								
Average entry time of registration records on-line		Average entry time is usually less than 20 minutes								

MOTORCYCLE SAFETY

In the Commonwealth of Virginia the number of motorcycle registrations continues to increase annually. As the motorcycle registrations climb, elements which promote motorcycle use also increase. Motorcycle enthusiasts contend that the motorcycle is compact, economical and inexpensive to maintain. Factors of this nature tend to make authorities on the subject agree that greater increases in motorcycle registrations can be logically anticipated.

It should also be recognized that the motorcyclist is extremely vulnerable to serious injury or death when involved in a crash. During 1970, twenty-nine motorcyclists lost their lives in Virginia as compared to sixty-seven in 1974. The number of annual motorcycle accidents with motor vehicles also increased from 1,585 to 3,342 betweeen 1970 and 1973. These increases, coupled with increased motorcycle sales during the current energy crisis, should serve to further focus attention on this particular problem area in the highway safety field.

In an effort to reduce the number of motorcycle-related crashes, Virginia has established programs in accident-prevention measures and in post-crash procedures for the minimization of injuries. These programs include:

(1) Establishment of motorcycle training classes and facilities for both in-school and out-of-school motorcycle operators.

(2) Public information programs, via news media, to familiarize the motoring public with the inherent limitations and hazards of motorcycle operators.

Recognizing that crashes will occur, regardless of precautions, Virginia has enacted legislation requiring that all motorcycle drivers and passengers wear

state approved helmet and some type of eye protection, and that each motorcycle carrying a passenger be equipped with a seat and a footrest for the passenger. In addition, the Division introduced legislation in the 1975 General Assembly which required motorcycle operators to keep their vehicle's headlight on at all times during operation. It was reasoned that a requirement of this nature would enhance the visibility of the vehicle and thus beneficially impact the motorcycle crash record. Unfortunately, this bill was not passed.

In fiscal year 1976, the Highway Safety Division will also sponsor the motorcycle training simulator program, motorcycle training seminars and motorcycle informational training programs in attempting to attain a reduction in the number of motorcycle related crashes. Many aspects of these activities could be viewed as serving in a supplemental capacity to Virginia's driver education program. In fact, it is believed that the motorcycle training simulator will be actively employed as an instructional aid in driver training classes throughout the state's secondary school system.

Guidelines for developing a motorcycle education program have been completed and sent to all political subdivisions by the Driver Education Service of the State Department of Education. Multiple-car driving ranges and other equipment at high schools will be utilized in teaching the motorcycle safety program. At present the state has eight (8) motorcycle education programs operating in this manner. Virginia is also looking into the possibility of building several training courses for instruction in the proper operation of motorcycles. These courses would be similar to the multiple-car driving ranges. It is hoped that within the near future a data system will be developed

through the efforts of the Highway Safety Division, Driver Education Services and the Division of Automated Data Processing that will enable the Commonwealth to effectively evaluate the entire motorcycle safety program throughout the state.

While efforts such as the aforementioned have been made to reduce the severity of motorcycle crashes, it is imperative that continuing efforts be made in this area as motorcycle safety becomes an increasingly significant factor in the highway safety field.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Motorcycle Safety	3. NO. MS76-151 46-76-03-01	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr., Res. Anal., VHT&RC (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar,	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS Number of motorcycle crashes (1973)						3,342
6b. OUTPUT	C Percent of drivers licensed to operate a motorcycle (1974)					5%
	V Number of motorcycle registrations (1974)					93,699
7. RESP.	8. STD.	9. TASKS & MILESTONES					
Driver Education Services	303	1. Motorcycle Education Program	Continue	Continue	Continue	Continue	

10. DESCRIPTION	11. COST BY TASK ($000s)					
In attempting to reduce the number of motorcycle related crashes, certain Virginia governmental agencies have endorsed programs which are designed to improve or eliminate the problems in this standard area. These programs include: (1) The motorcycle education program purports to educate the appropriate individuals in the safety aspects of motorcycle operations, purchase and distribute the materials necessary for conducting the program, and, when possible, utilize existing multiple-car driving ranges in the training of prospective motorcycle operators. (2) The public information program will continue to familiarize the general	1. Motorcycle Education Program	(Cost shown in Standard Area 304-Driver Education)				
	12. TOTAL COST ($000s)	7.5	7.5	7.5	7.5	30.0
	LOCAL SHARE					
	STATE SHARE	3.75	3.75	3.75	3.75	15.0
	FEDERAL SHARE	3.75	3.75	3.75	3.75	15.0
	TO LOCALITIES	3.75	3.75	3.75	3.75	15.0

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Motorcycle Safety	MS76-151 3. NO. 46-76-03-02	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr. Res. Anal., VHT&RC (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C V					
7. RESP.	8. STD.	9. TASKS & MILESTONES				
Highway Safety Division	303	2. Public Information Program	Continue	Continue	Continue	Continue	
		A. Motorcycle Training Simulator (Purchased) with prior FY grant)					
		B. Motorcycle Training Seminars (Funded in Standard 304- Highway Safety Education)	Conduct			Conduct	
Local Political Subdivision	303	3. Training and Instructional Aids	These materials would be supplied throughout the year as the need arises.				
10. DESCRIPTION populace with the various aspects of motorcycle safety. (3) These aids include the following; audio visual films and equipment, instructor training and equipment.		11. COST BY TASK ($000s)					
		2. Public Information Program	7.5	7.5	7.5	7.5	30.0
		3. Training & Instructional Aids	(Cost to be incurred in Standard 304-Driver Education)				
		12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES					

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. Motorcycle Safety MS76-161 46-76-03-03	Date 5-1-75	19 69 CY-2	19 70 CY-1	Calendar Year 1971 1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	19 72 CY+1	19 73 CY+2
6a. EFFECTIVENESS										
Urban Motorcycle Crashes		740	873					1,150	1,403	1,734
Fatal		10	11					24	22	20
Personal Injury		555	664					838	1,000	1,245
Property Damage		175	198					288	381	469
1.										
Rural Motorcycle Crashes		581	712					894	1,156	1,608
Fatal		13	16					12	35	38
Personal Injury		483	588					755	949	1,300
Property Damage		85	108					127	172	270
2.										
Number of motorcycle registrations (1973 figures are not available)		1970 33,583	1971 42,609					1972 53,727	1974 93,699	
3.										
Number of licensed motorcycle operators (1973 figures are not available)		1970 43,182	1971 60,166					1972 85,473	1974 128,221	
4.										
Number of motorcycle deaths		1970 29	1971 40					1972 57	1973 59	1974 67
5.										
It is anticipated that upon implementation of the new traffic records system in Virginia, the number of motorcycle fatalities can be placed in categories of: A. Years of Driving Experience. B. Types of Accidents. 6.										

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DRIVER EDUCATION

High School Driver Education

In the 1973-74 school year, state approved driver education programs were offered in all of Virginia's senior high schools and in several of its junior high schools. Of the 88,713 eligible students, 69,492 successfully completed the state approved program. Efforts will continue to be made to insure that all eligible students are provided with the opportunity to participate in a state approved Driver Education Program.

This year, federal funding requests in excess of $700,000 have been received. These funds will be used primarily to build 6 multi-car driving ranges, purchase 5 simulators, 2 drivocators, and other equipment needed to enable the state to attempt to train all eligible students in driver education. Through funds for the aforementioned, the lack of training facilities/equipment problem may be resolved in the near future.

In the 1973-74 school year, 44 schools used simulators while 110 utilized multiple-car driving ranges in teaching the state's driver education program. During this period, 83 percent of the eligible students completed the state approved program; an increase of 4 percent over the 1972-73 school year. The per student cost for the program in SY 73-74 was $26.07. Funds requested for reimbursement to school divisions from the Driver Education fund totaled $2,701,709.62 for this period. The actual monies prorated to school divisions using the percentage of 33 during SY 73-74 was $891,564.17. The Driver Education Service plans to continue to accept the responsibility at the state level for leadership in the direction, coordination, supervision and promotion of quality driver education.

Two assistant supervisors and their secretaries will be funded through state sources to assure a well coordinated program throughout the state. These

assistants will establish adult driver education courses, assist in the handicapped driver education program, and aid the localities in their high school programs. Projects and programs being utilized to implement the total driver education program are as follows:

(1) Alcohol Program — curriculum distribution.

(2) Preparation of driver education teachers.

(3) Membership in professional organizations; Virginia Association for Driver and Traffic Safety Education (VADETS) and the Virginia Education Association.

(4) Passage in 1968 of legislation requiring that all persons successfully complete a state approved driver education program consisting of both classroom and in-car instruction before being eligible to apply for a Virginia operator's license prior to age 18.

(5) Driver education certification.

(6) Driver education car control program.

(7) Semester course scheduling.

(8) Revision of Curriculum Guide for Driver Education.

(9) Statistical report for driver education.

(10) Continuation of support for the statewide training center at Virginia Commonwealth University.

The Division of Motor Vehicles has designed a data system to analyze the driving history of persons completing a driver education training course and those receiving a driver education certificate to determine the effectiveness of the driver

education training course in preparing the individual to be a better, safer driver. The frequency and type of accidents and convictions are analyzed and related to whether or not the individual had a driver training course, and the jurisdiction in which the course was given. This report is sent to all school systems. The report includes the number of accidents, violations, and fatalities within each school division, and personal injury and property damage figures broken down by type, as well as by male and female drivers. (See attachment A for example.)

Private and parochial school students may be enrolled in the public school driver education program during the summer, and state reimbursement may be claimed by the public school system for these students.

State reimbursement may be claimed for conducting state approved driver education programs when the programs are approved by the State Department of Education annually, and teachers of classroom and in-car instruction are endorsed in driver education by the Department. Insurance Credit Certificates and Driver Education Certificates cannot be awarded if the program is not approved by the Department. Since July 1, 1968, requirements for an endorsement in driver education have consisted of three semester hours in general safety and three in basic driver education, along with a Virginia teaching certificate.

ATTACHMENT A

SAMPLE COPY

BREAKDOWN OF DRIVER EDUCATION STATISTICS

VIRGINIA PUBLIC SCHOOLS

_____ SCHOOL DIVISION _____

			1972-73
1.	Total number of students successfully completing a State-approved Driver Education program in the State:		65,975
2.	Total number of students successfully completing a State-approved Driver Education program in your school division:		122
3.	Total number of operator's licenses issued to students successfully completing a State-approved Driver Education program in your school division:		94
4.	Total number of Driver Education Certificates (DEC-1) without School Codes issued to students successfully completing a State-approved Driver Education program in your school division who obtained their operators' licenses:		30
5.	Percent of students in your school division successfully completing a State-approved Driver Education program and issued operators' licenses:		77%
6.	Total number of violations in the State (city and county) charged to students successfully completing a State-approved Driver Education program:	City	1,423
		County	2,958
		Total	4,381
7.	Total number of violations charged to students successfully completing a State-approved Driver Education program in your school division:		5
8.	Percent of students in your school division who obtained an operator's license and were charged with violations:		5.3%
9.	The percent of students in the State successfully completing a State-approved Driver Education program who were issued operators' licenses and were charged with violations:	City	7.7%
		County	7.7%

ATTACHMENT A (Continued)

DRIVER EDUCATION STATISTICS

FOR FISCAL YEAR ENDING JUNE 30, 1973

ACCIDENTS	NO.	NO. DRIVERS INVOLVED		VIOLATIONS TYPE	NO.	NO. DRIVERS INVOLVED	
		M	F			M	F
PERSONAL INJURY	0	0	0	SPEEDING	2	2	0
PROPERTY DAMAGE	5	4	1	RECKLESS DRIVING	0	0	0
FATALITY	0	0	0	IMPROPER DRIVING	2	2	0
				NO. OPER. LIC.	1	1	0
TOTALS	5	4	1		5	5	0

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE High School Driver Education	3. NO. DE76-161 46-76-04-01	4. DATE 5-1-75
	5. DRAFTED BY B. G. Johnson, Sup. of Driver Ed., Dept. of Ed. (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY W. W. Wilkerson, Supt. of Public Instruc. Dept. of Ed. (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS	Number of students successfully completing a state approved Driver Education program (SY 73-74)					69,492
6b. OUTPUT	C Percent of students completing a state approved Driver Education Program (SY 73-74)					83%
	V Number of students eligible for Driver Education Program (SY 73-74)					83,713
7. RESP. Driver Education Service	8. STD. 304					
	9. TASKS & MILESTONES 1. Personnel - Salaries of supervisors, assistant supervisors and secretaries					
10. DESCRIPTION The long-term goal of the high school driver education program in Virginia is to help reduce the number of traffic crashes, fatalities, personal injuries, and property damage caused by drivers with bad driving habits or attitudes. To accomplish this the state has made a driver education program available to all eligible students and accepts the responsibility at the state level for providing leadership in directing, coordinating, supervising, and promoting such a program. (1) See Block 9.	11. COST BY TASK ($000s) 1. Personnel (State)	11.	11.	11.	11.	44.
	12. TOTAL COST ($000s)	5724.25	4028.25	4024.25	4024.25	17801.
	LOCAL SHARE	5413.3	4000.	4000.	4000.	17413.3
	STATE SHARE	18.125	20.125	18.125	18.125	74.5
	FEDERAL SHARE	292.825	8.125	6.125	6.125	313.2
	TO LOCALITIES	288.2	1.5	1.5	1.5	292.7

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE High School Driver Education	3. NO DE76-161 46-76-04-02	4. DATE 5-1-75
	5. DRAFTED BY B. G. Johnson, Sup. of Driver Ed., Dept. of Ed. (Title and Agency) APPROVED BY W. W. Wilkerson, Supt. of Public Instruc. Dept. of Ed. (Title and Agency)	FISCAL YEAR 19 76		

6a. EFFECTIVENESS			1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6b. OUTPUT		C V					
7. RESP.	8. STD.	9. TASKS & MILESTONES					
Driver Education Service	304	2. Requirement of Driver Education Certificate	Continue	Continue	Continue	Continue	
		3. Semester Program (No.)	9	9	9	9	9
		4. Driver Education Car Control Program	Continue	Continue	Continue	Continue	
		5. Membership in Professional Organizations	240	240	240	240	240
		6. Program for the Preparation of Driver Education Teachers (No. of Colleges with Approved Curriculum).	16	16	16	16	16

10. DESCRIPTION	11. COST BY TASK ($000s)					
(2) Passage in 1968 of legislation requiring that all persons successfully complete a state approved driver education program consisting of both classroom and in-car instruction before being eligible to apply for a Virginia operator's license prior to age 18.	2. Driver Education Certificate	1.	1.	1.	1.	4.
(3) Semester course scheduling program for Driver Ed.						
(4) Supervision & inspection program	12. TOTAL COST ($000s)					
(5) Membership on Virginia Association for Driver and Traffic Safety Education (VADETS).	LOCAL SHARE					
(6) See Block 9.	STATE SHARE					
	FEDERAL SHARE					
	TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE High School Driver Education	DE76-161 3. NO. 46-76-04-03	4. DATE 5-1-75
	5. DRAFTED BY B. G. Johnson, Sup. of Driver Ed., Dept. of Ed. (Title and Agency)	FISCAL YEAR 1976		
	APPROVED BY W. W. Wilkerson, Supt. of Public Instruc. Dept. of Ed. (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C V					
7. RESP.	8. STD.	9. TASKS & MILESTONES				
Driver Education Service	304	7. Statistical report for Driver Education (Produced annually)	Continue	Continue	Continue	Continue	

10. DESCRIPTION	11. COST BY TASK ($000s)					
(7) The Division of Motor Vehicles and the Driver Education Service of the State Department of Education have designed a method to analyze the driving history of students completing a driver education program in order to determine the effectiveness of the program in preparing them to become better drivers. Statistics showing the frequency, type of accidents, and convictions are analyzed to determine if the students involved had successfully completed a driver education program and the school division in which the program was completed.	12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE High School Driver Education	DE76-101 3. NO. 46-76-04-04	4. DATE 5-1-75
	5. DRAFTED BY B. G. Johnson, Sup. of Driver Ed., Dept. of Ed. (Title and Agency) APPROVED BY W. W. Wilkerson, Supt. of Public Instruc. Dept. of Ed. (Title and Agency)	FISCAL YEAR 19 76		

			1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL
			July, Aug, Sept	Oct, Nov, Dec	Jan, Feb, Mar	Apr, May, June	
6a. EFFECTIVENESS							
6b. OUTPUT		C					
		V					
7. RESP.	8. STD.	9. TASKS & MILESTONES					
Driver Education Service	304	8. Revision of State Curriculum Guide	Revise	Implement	Continue	Continue	
		9. Program Administration	Continue	Continue	Continue	Continue	
		10. Motorcycle Driver Education Program	Continue	Continue	Continue	Continue	
		11. Alcohol Curriculum Guide		Distribute			

10. DESCRIPTION A report containing this information is sent annually to all school divisions. This report includes the number of accidents, violations, and fatalities within each school division, and personal injury and property damage figures broken down by types, as well as by male and female drivers.
(8) See Block 9.
(9) Items requested for funding include; equipment, furniture, supplies, travel, in service training, maintenance for 3 convincers.
(10) Refer to description block. for Standard 303 - Motorcycle Safety.
(11) See Block 9.

11. COST BY TASK ($000s)					
8. Revision of State Curriculum Guide	3.	3.	3.	3.	12.
9. Program Administration	6.25	6.25	6.25	6.25	25.
10. Motorcycle Program	3.	3.	3.	3.	12.
11. Alcohol Curriculum Guide		4.			4.
12. TOTAL COST ($000s)					
LOCAL SHARE					
STATE SHARE					
FEDERAL SHARE					
TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE High School Driver Education	3. NO. DE76-161 46-76-04-05	4. DATE 5-1-75
	5. DRAFTED BY B. G. Johnson, Sup. of Driver Ed., Dept. of Ed. (Title and Agency)	FISCAL YEAR 1976		
	APPROVED BY W. W. Wilkerson, Supt. of Public Instruc., Dept. of Ed. (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C V					
7. RESP.	8. STD.	9. TASKS & MILESTONES				
Local School Board	304	12. Personnel - salaries of coordinators, classroom instructors, in-car instructors and temporary employees				
		13. Equipment and Communication Aids	Purchase			
10. DESCRIPTION (12) See Block 9. (13) Items requested for funding under this task include but are not limited to the following; projectors, traffic boards, file cabinets, porto clinics, tape recorders, films, driving ranges and all necessary equipment, simulators, office equipment, drivocators, teaching aids, and two-way radios.		11. COST BY TASK ($000s)					
		12. Personnel (Local)	4000.	4000.	4000.	4000.	16000.
		13. Equipment and Communication Aids	1700.				1700.
		12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES					

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. DE76-161 High School Driver Education 46-76-04-06	Date 5-1-75	19 71 FY-2	19 72 FY-1	Fiscal Year 1973 1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	19 74 FY+ 1	19 FY +2
6a. EFFECTIVENESS										
1. Number of violations among those completing a high school driver education course.		10,969	4,476					4,381	4,100	
2. Personal injuries among those having completed high school driver education.		2,716	490					2,711	1,264	
3. Property damage among those having completed high school driver education.		7,425	1,652					1,523	3,981	
4. Fatalities among those having completed high school driver education.		25	6					11	13	
5. Average percentage of students who completed high school driver education program, were issued operator's license and were charged with violations.		17.5%	6.5%	(Based on per 100 students trained, those charged did not in all cases have an operator's license for 70-71 and 71-72 school years.)				7.7%	6.6%	
6. Number of students completing the state approved driver education program.		63,087	65,976					65,975	69,492	

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. DE76-161 46-76-04-07 High School Driver Education	Date 5-1-75	19 71 FY - 2	19 72 FY - 1	Fiscal Year 1973 1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	19 74 FY + 1	19 FY + 2
6a. EFFECTIVENESS										
Number of students eligible for state approved driver education program. 1.		78,495	81,505					83,710	88,713	
Number of teachers endorsed to teach driver education. 2.		3,750	4,352					4,955	5,334	
Number of schools using the traditional single car. 3.		256	232					236	148	
Number of schools using simulators. 4.		43	49					44	44	
Number of schools using multiple-car driving ranges. 5.		80	91					100	110	
Total number of cars used in the driver education program. 6.		947	852					866	1,060	

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Highway Safety Education	3. NO. DE76-166 46-76-04-01	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr. Res. Anal. VHTRC (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C Number of enforcement and safety officials served					506
	V Number of workship services and training conferences held					10
7. RESP. HSD	8. STD. 304	9. TASKS & MILESTONES				
		1. Seat Belt Education Program (funded in FY 75)	Continue	Continue	Continue	Continue	
		2. Statewide Training Center (VCU)	Continue	Continue	Continue	Continue	
		3. Training Program for Operators of Emergency Vehicles	Develop Curriculum	Implement	Train	Train	
10. DESCRIPTION (1) This task seeks to encourage and increase the voluntary use of safety belts in Virginia. The objectives of this program are: (A) to increase the use of safety belts in the state, (B) to save lives, (C) to lesson the hardships of personal injuries, (D) to reduce wage loses and medical expenses of Virginians, (E) to reduce the number of accidents in Virginia each year. (2) A Statewide Training Center has been established at Virginia Commonwealth University for the purpose of providing training facilities and conducting seminars throughout Virginia on small fleet safety, new and used cars, police traffic records, alcohol and drugs, accident investigation, etc., under the direction of the Highway Safety Division. (3) See Block 9.		11. COST BY TASK ($000s)					
		2. Training Center	15.	15.	15.	15.	60.
		12. TOTAL COST ($000s)	15.	15.	15.	15.	60.
		LOCAL SHARE					
		STATE SHARE					
		FEDERAL SHARE	15.	15.	15.	15.	60.
		TO LOCALITIES					

DRIVER EDUCATION

Adult and Out-of-School Youth Driver Education

During the 1973-74 school year, 70 schools offered adult and out-of-school youth programs, which were completed by 2,846 students. Consequently, the Driver Education Service will continue to employ a full-time staff member to travel throughout the state to help localities establish out-of-school driver education programs. The adult program will include additional training for adults, out-of-school youth and motorcyclists. The course could also be available to policemen and firemen if they so desire. Programs established by the Driver Education Service include defensive driving and driver improvement programs for all of the aforementioned classifications of drivers. Adult driver education programs are conducted through the public school system and financed by tuition fees. Equipment, classrooms, and personnel from high schools are used for the program.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Adult and Out-of-School Youth Driver Education	3. NO. DE76-162 46-76-04-01	4. DATE 5-1-75
	5. DRAFTED BY B. G. Johnson, Sup. of Driver Ed., Dept. of Educ. (Title and Agency)	FISCAL YEAR 19_76		
	APPROVED BY W. W. Wilkerson, Supt. of Public Instruc. Dept. of Education (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C Number of schools offering this particular Driver Ed. Program (1973-74)					70
	V Number of students completing this particular Driver Ed. Program (1973-74)					2,846
7. RESP. Driver Education Service	8. STD. 304	9. TASKS & MILESTONES				
		1. Professional Staff	1	1	1	1	1
		2. Adult Driver Education Curriculum (No. courses & people)	15,600 Instruct	15,600 Instruct	15,600 Instruct	15,600 Instruct	15,600
		3. Motorcycle Safety Curriculum					
10. DESCRIPTION To reduce the number of crashes and fatalities, personal injuries, and property damage, the Driver Education Service has employed a full-time staff member to travel throughout the state to help locaoities establish out-of-school driver education programs. (1-6) The adult program will include additional training for adults, out-of-school youth and motorcyclists. The course could also be available to policemen and firemen. The Driver Education Service has completed "A Suggested Guide for Driver Improvement Programs for adults and Out-of-School Youth" and "Guidelines for Developing a Motorcycle Education Program."		11. COST BY TASK ($000s)					
		12. TOTAL COST ($000s)	4.5	4.5	4.5	4.5	18.
		LOCAL SHARE					
		STATE SHARE	4.5	4.5	4.5	4.5	18.
		FEDERAL SHARE TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Adult and Out-of-School Youth Driver Education	DE76-162 3. NO. 46-76-04-02	4. DATE 5-1-75
	5. DRAFTED BY B. G. Johnson, Sup. of Driver Ed., Dept. of Educ. (Title and Agency) APPROVED BY W. W. Wilkerson, Supt. of Public Instruc. Dept. of Education (Title and Agency)	FISCAL YEAR 19 76		

			1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS							
6b. OUTPUT		C V					
7. RESP.	8. STD.	9. TASKS & MILESTONES					
Driver Education Service	304	4. Equipment (State D. E. S.) Supplies (Office) Furniture (Office)					
		5. Travel (State D. E. S.)					
		6. Secretary (State D. E. S.)	1	1	1	1	1

10. DESCRIPTION The defensive driving course will be taught through the adult driver education program. Equipment, classroom, and personnel from the local high school will be utilized for this program. Driver impvoement clinics across the state will be organized by the Division of Motor Vehicles and the Driver Education Service utilizing the facilities and Driver Education teachers in the local school divisions. This will implement the Driver Improvement Act passed by the General Assembly in 1974.

11. COST BY TASK ($000s)					
4. Equipment	1.5	1.5	1.5	1.5	6.
5. Travel	1.5	1.5	1.5	1.5	6.
6. Secretary	1.5	1.5	1.5	1.5	6.
12. TOTAL COST ($000s)					
LOCAL SHARE					
STATE SHARE					
FEDERAL SHARE					
TO LOCALITIES					

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. Adult and Out-of School Youth Driver Education DE76-162 46-76-04-03	Date 1-5-75	19 71 SY - 2	19 72 SY - 1	School Year 1973 1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	19 74 SY + 1	19 SY + 2
6a. EFFECTIVENESS										
1. Number of schools offering adult and out-of-school youth driver education		73	77					54	70	
2. Number of students completing adult and out-of-school youth driver education		1,303	1,460					1,035	2,846	
3.										
4.										
5.										
6.										

Driver Education for the Handicapped

The program for driver education for the handicapped has moved forward in recent years, but needs additional funds and instructors to maintain its progressive pace.

The Driver Education Service of Virginia is attempting to make available a driver education program to help drivers with both mental and physical handicaps. At present some high schools offer vocational driver education along with their regular curriculum. Several communities have special driver education programs for the handicapped. Driver education is also offered at one detention home for boys.

State approved driver education programs are offered at the following state rehabilitation centers: the Woodrow Wilson Rehabilitation Center, the Virginia School for the Deaf and Blind at Staunton, and the Virginia School at Hampton.

Driver education certificates developed by the Driver Education Service and Division of Motor Vehicles will be issued to all handicapped drivers completing the state approved program.

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HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN

1. State of Virginia

2. TITLE Driver Education for the Handicapped

3. NO. DE76-163 46-76-04-01

4. DATE 5-1-75

5. DRAFTED BY B. G. Johnson, Sup. of Driver Ed., Dept. of Education (Title and Agency)

APPROVED BY W. W. Wilkerson, Sup. of Public Instruc. Dept. of Education (Title and Agency)

FISCAL YEAR 19 76

	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar,	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS See Effectiveness Supplement					
6b. OUTPUT — C Percent of handicapped drivers completing Driver Ed. / V Number of handicapped drivers completing Driver Ed.		DATA NOT AVAILABLE			

7. RESP.	8. STD.	9. TASKS & MILESTONES	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL
Department of Education	304	1. Driver education at boys home (No. of students)	205	205	205	205	205
		2. Special Driver Education for the handicapped					
Local Politica Subdivisions		A. No. of cities with programs	10	10	10	10	10
		B. No. of students at Woodrow Wilson Rehabilitation Center	455	455	455	455	455
Local School Board		3. High schools with vocational driver education (No.)	20	20	20	20	20

10. DESCRIPTION To reduce the number of crashes including fatalities, personal injury and property damage among those drivers with both physical and mental handicaps, the Driver Education Service of Virginia is attempting to make available the type of driver education program necessary to help the handicapped learn to drive and/or become better drivers. (1-3) At present, certain high schools offer vocational driver education along with their regular curriculum. Driver education is also offered at one detention home for boys. The detention home has applied for certification from the state to make available a

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL
11. COST BY TASK ($000s)					
1. Boys home	41.				41.
12. TOTAL COST ($000s)	96.				96.
LOCAL SHARE					
STATE SHARE	96.				96.
FEDERAL SHARE TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Driver Education for the Handicapped	3. NO. DE76-163 46-76-04-02	4. DATE 5-1-75
	5. DRAFTED BY B. G. Johnson, Supt. of Driver Educ., Dept. of Ed. (Title and Agency)	FISCAL YEAR 1976		
	APPROVED BY W. W. Wilkerson, Supt. of Public Instruc. Dept. of Ed. (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C V					

7. RESP.	8. STD.	9. TASKS & MILESTONES				
Woodrow Wilson Rehabilitation Center	304	4. Equipment (Woodrow Wilson) A. One multi-car-driving range B. Misc. teaching materials C. Simulator (13 unit)				
10. DESCRIPTION driver education course to all those eligible. (4-9) Driver education is also offered at three of the state's rehabilitation centers. The course at Woodrow Wilson started in 1966 with one instructor, another instructor was hired in 1971 and an additional instructor began in February of 1972. The course consists of approximately 40 hours of classroom discussion, 16 sessions on simulators and approximately 14 hours in-car driving, or longer in some cases. Courses are offered to those handicapped drivers who have never been licensed and those who have become disabled since they received their permits. The course includes all types of adaptation from left		11. COST BY TASK ($000s)				
		12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES				

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Driver Education for the Handicapped	3. NO. DE76-163 46-76-04-03	4. DATE 5-1-75
	5. DRAFTED BY B. G. Jonson, Supt. of Driver Ed., Dept. of Education (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY W. W. Wilkerson, Supt. of Public Instruc. Dept. of Education (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C V					
7. RESP.	8. STD.	9. TASKS & MILESTONES				
Woodrow Wilson Rehabilitation Center	304	5. Personnel (Woodrow Wilson) A. Instructors B. Secretary 6. Classroom space (Woodrow Wilson) 7. Travel (Woodrow Wilson)				 3 1

10. DESCRIPTION foot acceleration to full hand control. Equipment at the center includes: Three cars; twelve place AETNA driver simulators with 16 films, instructor's console and digital recorder plus a Porto-Glare visual and reaction tester. Each instructor will serve approximately 150 students per year. The average cost per student is $96.00 per year. It is anticipated that the school's needs for fiscal 1976 will include the salary of one additional instructor, funds for completion of the multiple-car driving range and miscellaneous teaching materials. The Virginia School for the Deaf and Blind at Staunton and the

11. COST BY TASK ($000s)					
5. Personnel					
A. Instructors	22.				22.
B. Secretary	5.				5.
6. Classroom Space	18.				18.
7. Travel	2.				2.
12. TOTAL COST ($000s)					
LOCAL SHARE					
STATE SHARE					
FEDERAL SHARE					
TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Driver Education for the Handicapped	3. NO. DE76-163 46-76-04-04	4. DATE 5-1-75
	5. DRAFTED BY B. G. Johnson, Sup. of Driver Ed., Dept. of Education (Title and Agency) APPROVED BY W. W. Wilkerson, Supt. of Public Instruc., Dept. of Education (Title and Agency)	FISCAL YEAR 19 76		

			1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS							
6b. OUTPUT		C V					
7. RESP.	8. STD.	9. TASKS & MILESTONES					
Woodrow Wilson Rehabilitation Center	304	8. Maintenance - 3 cars and simulator (Woodrow Wilson) 9. Special training for instructors 10. Driver education certificate					
10. DESCRIPTION and the Virginia School at Hampton also offer the state-approved driver education program. Driver education certificates developed by the Driver Education Service and Division of Motor Vehicles for evaluation of the program will be issued to all handicapped drivers completing the state approved driver education program.		11. COST BY TASK ($000s) 8. Maintenance 9. Special training for instructors	5. 3.				5. 3.
		12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES					

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. Driver Education for the Handicapped DE76-163 47-76-04-05	Date 5-1-75	19 72	19 73	Fiscal Year 1974					19 75	19 76
				1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total		
6a. EFFECTIVENESS										
* Number of handicapped drivers eligible for the special driver education program 1.			* Information in regards to this aspect of the driver education program may be collected within the near future for inclusion in the FY 77 AWP. At present, the Driver Education Service handles driver education for the handicapped as the need arises, but due to the nature of the requests and demands made on the program, accurate statewide statistical statements pertaining to this realm of training and instruction are difficult to ascertain.							
* Number of handicapped drivers successfully completing the special driver education program 2.										
* Number of violations among those completing the driver education for the handicapped program 3.										
* Fatalities among those having completed the driver education for the handicapped program 4.										
* Personal injuries among those having completed the driver education for the handicapped program 5.										
* Total number of crashes involving those who have completed the driver education for the handicapped program 6.										

Commercial Driver Education

The goal of the commercial driver education program in the Commonwealth is to make available a state-approved driver education course to those individuals (drivers or learners) unable to attend a school-sponsored course. Upon completion of this or any driver education course, the driver may be less likely to become involved in a traffic crash, and the number of crashes including fatalities, personal injuries, and property damage would be reduced. (For example of statistical information available on Commercial Driver Education schools see Attachment B.)

In Virginia anyone under the age of 18 wishing to apply for a Virginia operator's license must first complete a state-approved driver education program consisting of both classroom instruction and in-car instruction. In some cities and counties the local school division is unable to offer driver education to all eligible students. For this reason students are enrolling in state-approved commercial driving schools so they may obtain their operator's licenses prior to becoming 18 years of age. At present, any commercial school offering driver education to a person under 18 must teach from the state-approved "Curriculum Guide for Driver Education in Virginia." This curriculum is identical to that used in the public schools. The Driver Education Service of the State Department of Education must approve all commercial schools that instruct students under 18 and issue driver education certificates and insurance credit certificates. Other commercial schools, whose main function is to train adults, are licensed by the Department of Professional and Occupational Registration.

ATTACHMENT B SAMPLE COPY

BREAKDOWN OF DRIVER EDUCATION STATISTICS

VIRGINIA COMMERCIAL DRIVER TRAINING SCHOOLS

_____ DIVISION _____

			1972-73
1.	Total number of operators' licenses issued to students successfully completing a State-approved commercial Driver Education program in your division:		21
2.	Total number of Driver Education Certificates (DEC-1) without School Codes issued to students successfully completing a State-approved commercial Driver Education program in your division who obtained their operators' licenses:		5
3.	Total number of violations in the State (city and county) charged to students successfully completing a State-approved commercial Driver Education program:	City	221
		County	559
		Total	780
4.	Total number of violations charged to students successfully completing a State-approved commercial Driver Education program in your division:		4
5.	Percent of students in your division who obtained an operators' license and were charged with violations:		19.0%
6.	The percent of students in the State successfully completing a State-approved commercial Driver Education program who were iseued operators' license and were charged with violations:	City	14.9%
		County	27.1%

ATTACHMENT B (Continued)

DRIVER EDUCATION STATISTICS

FOR FISCAL YEAR ENDING JUNE 30, 1973

ACCIDENTS	NO.	NO. DRIVERS INVOLVED M	F	VIOLATIONS TYPE	NO.	NO. DRIVERS INVOLVED M	F
PERSONAL	1	1	0	SPEEDING	0	0	0
PROPERTY DAMAGE	2	2	0	RECKLESS DRIVING	1	1	0
FATALITY	0	0	0	FAIL YIELD WHEN REQ.	3	3	0
TOTALS	3	3	0		4	4	0

The 1968 session of the General Assembly passed an act establishing the State Board for Commercial Driver Training Schools. In creating this Board, the legislature gave it authority to license all commercial driver training schools and to establish rules and regulations relating to location, equipment, courses of instruction, instructors, previous courses of instruction, previous records of each school and instructors, financial statements, schedule of fees and charges, character and reputation of the operators, and insurance in such sums and with such provisions as deemed necessary to protect adequately the interest of the public. The Board also adopts rules and regulations which it deems necessary for the protection of the public.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Commercial Driver Education	3. NO. DE76-164 46-76-04-01	4. DATE 5-1-75
	5. DRAFTED BY B. G. Johnson, Supt. of Driver Ed., Dept. of Education (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY W. W. Wilkerson, Supt. of Public Instruc., Dept. of Education (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS	Traffic crash and other related-data for Commercial Driver Education — (See Effectiveness Supplement)					
6b. OUTPUT	C Percent of graduates of comm. driver education charged with violations (1973-74)			City - 17.7	County 15.4	
	V Number of violations charged to graduates of commercial driver education (1973-74)					1,039

7. RESP.	8. STD.	9. TASKS & MILESTONES					
Driver Education Service	304	1. Commercial Driver Education Schools					
		A. Schools licensed by state					54
		B. Certified teachers					125
		C. Schools licensed by the agency of professional and occupational registration					54
		2. State Board for Commercial Driver Training Schools	Continue	Continue	Continue	Continue	

10. DESCRIPTION	11. COST BY TASK ($000s)					
The long-range goal of the commerical driver education program in Virginia is to make available a state-approved driver education program to drivers or learners who are unable to attend a school-sponsored driver education program. It is felt that after the successful completion of the driver education program through a state-approved commercial school, the students should become better traffic citizens; and therefore, the number of accidents including fatalities, personal injuries and property damage may be reduced by the students who successfully completed the program (1 & 2) See Block 9.	2. Expenses for board	1.5	1.5	1.5	1.5	6.0
	12. TOTAL COST ($000s)	1.5	1.5	1.5	1.5	6.0
	LOCAL SHARE					
	STATE SHARE	1.5	1.5	1.5	1.5	6.0
	FEDERAL SHARE					
	TO LOCALITIES					

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. Commercial Driver DE76-164 Education 46-76-04-02	Date 5-1-75	19 71 SY - 2	19 72 SY- 1	School Year 1973 1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	19 74 SY + 1	19 75 SY + 2
6a. EFFECTIVENESS										
Fatalities among those completing driver education program							TOTAL City County	1 1 0	3 2 1	
1.										
Personal injuries among those completing driver education program							TOTAL City County	148 53 95	324 131 93	
2.										
Property damage among those completing driver education program							TOTAL City County	354 97 267	732 461 271	
3.										
Number of violations charged to students successfully completing a state-approved commercial driver education program							TOTAL City County	780 221 59	1,039 655 384	
4.										
The percent of students in the state successfully completing this driver education program who were issued operators' licenses and were charged with violations							AVG. % City County	21% 14.9% 27.1%	16.6% 17.7% 15.4%	
5.										
6.										

DRIVER TESTING AND LICENSING

The immediate goal of driver licensing by the Virginia Division of Motor Vehicles is to test all first applicants for the Virginia vehicle operator's license and all license holders as outlined in paragraph 2 below. The long-term objective of this program is the reduction of crashes, property damage, injuries, and deaths by (1) preventing unqualified persons from becoming drivers on the highways, and (2) removing drivers who fail to maintain standards of qualifications from the highways.

DMV conducts the following driver testing programs to achieve the aforementioned goals and objectives:

(1) For citizens who have never held a driver's license, passage of an examination of Virginia's motor vehicle laws and a vision test is required prior to the issuance of a temporary license (instruction permit). This permit allows the citizen to learn proper driving habits and skills under the supervision of a licensed driver and is valid only when the holder has a licensed driver occupying a seat by him.

(2) For citizens who are renewing their driver's license, personal appearance is required and the citizen must pass a visual examination. Depending upon the driver's previous four years' driving history, the driver may be required to pass a written or oral test on traffic regulations and a road test. These tests provide a periodic screening of all drivers and the removal from the highways of those no longer qualified for licensing.

(3) For citizens who have never held a Virginia driver's license or who have let their license expire, passage of an examination on Virginia motor vehicle laws, a vision test, and a road test are required. However, the road test may be waived if the citizen holds a valid license from a reciprocating state.

(4) For citizens who (a) are qualified to operate only under restricted conditions such as the use of hand controls or during daylight hours only; and (b) whose driving history has required a mandatory revocation of the driving license, a complete examination is required prior to the issuance or reissuance of a driver's license.

(5) Virginia Automated Driver Testing Project — The Commonwealth has constructed a federally funded automated driver testing range in Hampton, Virginia. This range allows objective testing of the applicant without an examiner in the car. The written examination at the Hampton and Richmond offices were replaced by the automated visual display testing units, with the Alexandria office rataining the paper examination as a control. This enables Virginia to evaluate the effectiveness of objective versus subjective license examinations in fully automated, semi-automated, and non-automated testing environments. In addition to testing applicants for driver's license during FY 76, knowledge and range test scores will be accumulated and stored for evaluation purposes. For individuals tested in these facilities, a record check of accidents and convictions will also be conducted during this period. The evaluation of this project will be conducted during this

period. The evaluation of this project will be conducted by the Virginia Highway and Transportation Research Council in Charlottesville, Virginia.

In licensing a motorist, the examination station issues a color photograph bearing the identifying number and signature of the individual who successfully completes the required examinations, or who is seeking a replacement license. In non-automated and part-time examination stations, a temporary license bearing the person's name, address, identifying number, date of birth, type of license and classes of vehicles for which the person is qualified to operate, and any known or new restrictions are issued to accompany the photograph. The temporary license expires after ninety days. The permanent license issued at Division of Motor Vehicles Headquarters carries the above information plus the legal jurisdiction of the address and an expiration date of one or four years in the future, depending upon the type of license.

Proof of date of birth is required by statute before a license can be issued.

The on-line issuance of driver licenses at the time of examination with simultaneous driver history file update began in June 1973, with full service branch offices in major cities. This service will be expanded to additional offices as they are established, and volumes justify equipment.

Driver history records are maintained by automated data processing utilizing direct access magnetic storage. Numerous on-line processing techniques are used to immediately enter and retrieve information furnished by driver licensing, driver testing, driver improvement, and vehicle registration monitoring and control programs. Personnel assigned to this program area administer the Virginia Habitual Offender Act, and notifications to the Department of Transportation.

Investigation into the Driver History Records is by video display device and/or printing devices when a printed copy of the driver history is required. Prepunched cards are also used to obtain printed records. Direct computer links to state and local police departments have been established to provide driver identification and status of driving privilege for immediate use, with a printed record being available upon request from Division of Motor Vehicles Headquarters. Printed records are usually furnished on a twenty-four to seventy-two hour turn-around time depending upon the day of the week on which the request is received. Persons requesting printed records in person at Division of Motor Vehicles Headquarters are normally serviced in twenty minutes or less. Reduction of printed record turn-around and the improvement in the quality of record information are continuing goals in this area. Remote inquiry and printing of record information by large commercial customers is being explored.

Driver improvement involves the processing of: (1) The revocation and/or suspension of licenses as required by statute or the courts as a result of conviction; (2) all convictions received from the courts for entry into Driver History Records; (3) a formal hearing program which may result in the revocation or suspension of the driving privilege for those drivers whose history indicates multiple crashes and/or traffic violations of a minor nature; and (4) the referral of records of drivers with conflicting medical information, unusual conditions, or who appear to have conditions no longer requiring medical control to the Medical Advisory Board for review. The routine examination of drivers after crash involvement or conviction of non-mandatory revocation offenses prior to resinstatement of driving privilege has been moved to license renewal.

Effective January 1, 1975, the Virginia Driver Improvement Act was implemented as a three phase driver improvement program which was partially financed with federal funds. Phase I consists of detecting and sending warning letters to those drivers whose driving record has begun to deteriorate. Phase II requires drivers with a rapid accumulation of points as a result of convictions to appear for group and/or individual interviews. Phase III requires participation in driver improvement clinics. Drivers assigned to clinics must successfully complete the National Safety Council Defensive Driving Course and pass a written examination or be suspended. Virginia feels this program will be more effective in upgrading driver skills than mass written examinations at time of license renewal which penalizes the safe drivers.

The Vehicle Registration Monitoring and Control deals with (1) the control of vehicles operated by drivers whose privileges are contingent upon maintaining proof of financial responsibility as a result of previous uninsured vehicle crash involvement, convictions, or judgments; (2) the processing of vehicle crash reports for drivers' records; and (3) verification of liability insurance or the payment of the Uninsured Motor Vehicle Fee on vehicles involved in crashes.

Failure to meet or maintain requirements for vehicle licensing results in the suspension of the driving and/or registration privilege of the vehicle owner.

A major step in the processing of vehicle crash reports was implemented July 1, 1972, as a result of legislative changes, when Virginia changed from a positive to negative reporting of liability insurance of vehicles involved in crashes.

Recording of fact of accident involvement on the Driver History File for internal use within three days of receipt of an accident report was implemented in 1974. The feasibility of automated matching of accident reports will be investigated.

The reduction of time required to process insurance forms for proof of financial responsibility, crash reports, and the identification of all vehicles owned by a driver and the quality of information recorded for the driver history file are continuing goals in this standard area.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Driver Testing and Licensing	DL76-161 3. NO. 46-76-05-01	4. DATE 5-1-75
	5. DRAFTED BY A. D. Harvey, Coordinator, DMV (Title and Agency) APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	FISCAL YEAR 19_76		

7. RESP.	8. STD.	9. TASKS & MILESTONES	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
		6a. EFFECTIVENESS See Effectiveness Supplement					
		6b. OUTPUT C Percent of total drivers tested	(CY 74)				99%
		V Number of drivers licensed					3,066,935
DMV	305	1. Driver Testing Program					
		A. Instruction Permits Issued (000)	40	40	40	40	160
		B. Driver Licenses Outstanding (000)	3112	3164	3195	3237	3237
		C. Classified Driver's Licenses Outstanding (000)*	257	261	264	268	268
		D. Restricted Licenses Outstanding	914	926	938	951	951
		E. Automated Driver Testing					
		1. Visual	Upgrade Testing Equipment (Subject to legislation)				
		2. Automated Written Examination	Expand				
		3. Automated Road Test	Expand subject to favorable evaluation of pilot project				

* Virginia's driver license is fully classified. Licenses shown are endorsed for motorcycles, school bus operation, passenger carrying buses with more than 32 seats except school buses, any vehicle or combination of vehicles having 3 or more axles and a gross weight in excess of 40,000 pounds

10. DESCRIPTION The long-term objectives of the Driver Testing and Licensing Program by Virginia Division of Motor Vehicles' personnel are to reduce the number of deaths and injuries and the amount of property damage caused by crashes. The immediate goals are to test 100% of applicants for first drivers license for vision, laws, and vehicle operation to prevent unqualified persons from becoming drivers; to require licensed drivers to appear every four years for a minimum of a visual examination with additional testing with respect to laws and vehicle operation being based on their driving history since the previous examination; to remove drivers who

11. COST BY TASK ($000s)					
1. Driver Testing Program	1350.	1126.	1127.	1127.	4730.
12. TOTAL COST ($000s)	4387.5	4164.5	4167.5	4168.5	16888.
LOCAL SHARE					
STATE SHARE	4158.	4159.	4162.	4163.	16642.
FEDERAL SHARE	229.5	5.5	5.5	5.5	246.
TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Driver Testing and Licensing	3. NO. DL76-161 46-76-05-02	4. DATE 5-1-75
	5. DRAFTED BY A. D. Harvey, Coordinator, DMV (Title and Agency) APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)			

7. RESP.	8. STD.	9. TASKS & MILESTONES	FISCAL YEAR 19 76 1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS							
6b. OUTPUT		C V					
		1. Driver Testing Program (Continued)					
		F. Personnel - State Level					
		1. Managers	7	7	7	7	7
		2. Supervisors and Specialists	1	1	1	1	1
		3. Field Service Representatives	209	209	209	209	209
		4. Clerks	28	28	28	28	28
		TOTALS	245	245	245	245	245

10. DESCRIPTION fail to maintain standards of qualification from the highways; and to maintain accurage records of driver licensing, crash involvement, traffic convictions and control activities that affect the driving privilege and vehicle registration privilege. The Division of Motor Vehicles performs the following to achieve these goals. (1) Conducts a Driver Testing Program which: A. Initially tests and temporarily licenses citizens who have never held a driver's license to allow them to learn proper driving habits and skills under the direction of licensed drivers. B. Tests those citizens who were temporarily licensed; who never held a Virginia

11. COST BY TASK ($000s)					
12. TOTAL COST ($000s)					
LOCAL SHARE					
STATE SHARE					
FEDERAL SHARE					
TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Driver Testing and Licensing	3. NO. DL76-161 46-76-05-03	4. DATE 5-1-75
	5. DRAFTED BY A. D. Harvey, Coordinator, DMV (Title and Agency)			
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)			

			FISCAL YEAR 19 76				
			1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL
			July, Aug, Sept	Oct, Nov, Dec	Jan, Feb, Mar	Apr, May, June	
6a. EFFECTIVENESS							
6b. OUTPUT		C V					
7. RESP.	8. STD.	9. TASKS & MILESTONES					
DMV	305	2. Driver Licensing Program					
		A. Original Licenses Issued (000)	68	69	69	69	275
		B. Renewal Licenses Issued (000)	211	211	211	211	844
		C. Duplicate Licenses Issued (000)	24	24	24	25	97
		D. Licenses Reissued (000)	48	48	49	49	194
		E. Personnel - State Level					
		1. Managers	8	8	8	8	8
		2. Supervisors and Specialists	2	2	2	2	2
		3. Regional Representatives	9	9	9	9	9
		4. Secretaries and Stenographers	2	2	2	2	2

10. DESCRIPTION driver's license; who let their valid license expire; who are being reinstated as the result of control measures; whose licenses are to be renewed to ensure they are licensed with the proper classification and/or restrictions for motor vehicle operation. This permits periodic screening of all drivers and removal from the highways those who do not meet mental and physical qualifications for licensing. C. Driver testing is automated in the areas of visual examination, written examination, and at one location for road testing, on a driving range. Subject to legislative approval and availability of federal funds, four TRACOR vision

11. COST BY TASK ($000s)					
2. Driver Licensing Program	1023.	1023.	1024.	1024.	4094.
12. TOTAL COST ($000s)					
LOCAL SHARE					
STATE SHARE					
FEDERAL SHARE					
TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Driver Testing and Licensing	3. NO. DL76-161 46-76-05-04	4. DATE 5-1-75
	5. DRAFTED BY A. D. Harvey, Coordinator, DMV (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C					
	V					
7. RESP. / 8. STD.	9. TASKS & MILESTONES					
	5. Accounting Machine Operators	52	52	52	52	52
	6. Typists	62	62	62	62	62
	7. Clerks	75	75	75	75	75
	TOTALS	210	210	210	210	210
10. DESCRIPTION testors will be acquired for evaluation and updating of vision testing to include glare recovery time and night vision. Federal funds may also be requested to expand the automation of written examinations to all full-time stations processing 15,000 applicants or more per year. (2) Conducts a Driver Licensing Program which: A. Issues driver's licenses to those citizens who have successfully completed the required examinations and are otherwise qualified. Each license issued is classified with respect to vehicles and restrictions required as a result of testing and/or other control measures. The license is issued at	11. COST BY TASK ($000s)					
	12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Driver Testing and Licensing	3. NO. DL76-161 46-76-05-05	4. DATE 5-1-75
	5. DRAFTED BY A. D. Harvey, Coordinator, DMV (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar,	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C					
	V					
7. RESP. DMV	8. STD. 305	9. TASKS & MILESTONES				
		3. Driver History Records				
		A. Law Enforcement Records Furnished (000)	137	137	138	138	550
		B. Commercial and Individual Records Furnished (000)	308	308	308	308	1232
		C. Drivers Certified to Courts as Meeting Definition of Habitual Offender	175	175	175	175	700
		D. Drivers Adjudged Habitual Offenders by the Courts	92	93	93	93	371
		E. Inquiries to Automated Driver Records (000)	1443	1444	1444	1444	5775
		F. Personnel - State Level					
		1. Managers	3	3	3	3	3
		2. Secretaries and Stenopgraphers	6	6	6	6	6
		3. Coordinators	1	1	1	1	1
10. DESCRIPTION point of examination at all full-time examination stations with simultaneous update of the Driver History File using "on-line" data processing techniques. This capability is being expanded as new offices are built and volumes justify equipment. B. Proof of date of birth is required by statute. (3) Maintains an automated Driver History File containing the record of licenses issued, crash involvement, traffic convictions, court actions, and other items directly related to the operation of motor vehicles and resultant control action by the courts and DMV. Data input is from the areas responsible for .		11. COST BY TASK ($000s)					
		3. Driver History Records	673.	673.	674.	674.	2694.
		12. TOTAL COST ($000s)					
		LOCAL SHARE					
		STATE SHARE					
		FEDERAL SHARE					
		TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Driver Testing and Licensing	3. NO. DL76-161 46-76-05-06	4. DATE 5-1-75
	5. DRAFTED BY A. D. Harvey, Coordinator, DMV (Title and Agency) APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)			

6a. EFFECTIVENESS							
6b. OUTPUT	C V						
7. RESP.	8. STD.	9. TASKS & MILESTONES	FISCAL YEAR 19 76 1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
		3. Driver History Records (Continued)					
		4. Specialists and Supervisors	3	3	3	3	3
		5. Analysts	5	5	5	5	5
		6. Programmers	8	8	8	8	8
		7. Evaluators	5	5	5	5	5
		8. Accounting Machine Operators	10	10	10	10	10
		9. Typists	7	7	7	7	7
		10. Clerks	40	40	40	40	40
		TOTALS	88	88	88	88	88

10. DESCRIPTION	11. COST BY TASK ($000s)					
processing source documents. Record information, subject to restrictions imposed by the Federal Fair Credit Reporting Act, is available to the individual involved and his attorney, courts, law enforcement agencies, insurance companies, employers and other authorized users. Direct automated inquiry by law enforcement agencies permits rapid detection of citizens whose privileges are revoked, suspended or controlled. When the automated records indicate that the definition of a habitual offender has been met by a driver, a printout is produced to permit processing of record certifications and resultant court action.	12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Driver Testing and Licensing	3. NO. DL76-161 46-76-05-07	4. DATE 5-1-75
	5. DRAFTED BY A. D. Harvey, Coordinator, DMV (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C					
	V					
7. RESP.	8. STD.	9. TASKS & MILESTONES					
DMV	305	4. Driver Improvement Programs					
		A. Conviction Processing Program					
		1. Convictions Abstracts Processed (000)	133	133	134	134	534
		2. Court Suspension Processed (000)	8	9	9	9	35
		3. Revocation Orders Issued (000)	5	5	5	6	21
		B. Hearing Program					
		1. Formal Hearings Held	57	58	58	58	229
		2. Suspension/Revocation as result of Hearings	50	50	52	52	202
		C. Driver Improvement Program					
		1. Advisory Letters (000)	41	41	42	42	166
		2. Driver Interviewed (000)	16	16	17	17	66
		3. Drivers Assigned Clinics (000)	5	5	5	5	20
10. DESCRIPTION The Driver History File is a primary source for the Traffic Records and Motorists Data base. (4) Maintains Driver Improvement Programs which are responsible for: A. The processing of all conviction abstracts for traffic violations received from courts and subsequent action required by DMV by the courts or statute in the revocation and/or suspension of driving and vehicle licensing privileges to the Driver History File. B. Conducting a formal hearing program for individuals with numerous offenses that reflect poor driving attitudes but which do not revoke or suspend the driving privilege without this action.		11. COST BY TASK ($000s)					
		4. Driver Improvement Programs	502.	503.	503.	503.	2011.
		12. TOTAL COST ($000s)					
		LOCAL SHARE					
		STATE SHARE					
		FEDERAL SHARE					
		TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Driver Testing and Licensing	3. NO. DL76-161 46-76-05-08	4. DATE 5-1-75
	5. DRAFTED BY A. D. Harvey, Coordinator, DMV (Title and Agency) APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)			

6a. EFFECTIVENESS			FISCAL YEAR 19 76				
			1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL
			July, Aug, Sept	Oct, Nov, Dec	Jan, Feb, Mar	Apr, May, June	
6b. OUTPUT		C					
		V					
7. RESP.	8. STD.	9. TASKS & MILESTONES					
		D. Medical Evaluation and Control Program					
		1. Persons placed under control as a result of adjudication or release from hospitals	247	247	247	248	989
		2. Persons suspended as a result of adjudication or release from hospitals	29	30	30	30	119
		3. Driver required to file medical statements	2	3	3	3	11
		E. Personnel State Level					
		1. Managers	7	7	7	7	7
		2. Driver Improvement Analysts	15	15	15	15	15
		3. Specialists and Supervisors	2	2	2	2	2
		4. Secretaries and Stenographers	14	14	14	14	14

10. DESCRIPTION	11. COST BY TASK ($000s)					
C. Conducting a three phase Driver Improvement Program to: (1) provide advisory letters for drivers whose records begin to deteriorate; (2) conduct group and individual interviews and counsel drivers whose records continue to deteriorate, and (3) require participative driver training for those drivers who show no improvement after phases one and two. D. Maintaining a medical evaluation and control program concerned with those citizens who for mental and/or physical reasons cannot operate motor vehicles with safety to persons or property, or who may do so under restricted conditions by filing acceptable	12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Driver Testing and Licensing	3. NO. DL76-161 46-76-05-09	4. DATE 5-1-75
	5. DRAFTED BY A. D. Harvey, Coordinator, DMV (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C					
	V					
7. RESP.	8. STD.	9. TASKS & MILESTONES				
		5. Hearings Examiner	1	1	1	1	1
		6. Evaluators	8	8	8	8	8
		7. Regional Representatives	9	9	9	9	9
		8. Accounting Machine Operators	16	16	16	16	16
		9. Typists	8	8	8	8	8
		10. Clerks	65	65	65	65	65
		TOTAL	145	145	145	145	145
DMV	305	5. Driver Vehicle Registration Monitoring & Control Program					
		A. Crash Reporting Program					
		1. Crash reports processed (000)	111	112	112	112	447
		2. Crash cases handled (000)	58	58	58	58	232
		3. Owners suspended for failure to file certificate of insurance (000)	7	7	7	7	28
10. DESCRIPTION evidence that the disability is under medical control and vehicles may be operated. A medical advisory board is utilized for hearings and consultation in those cases were precedents have not been established or expert opinions are needed. (5) Operating a Drivers' Vehicle Registration Monitoring and Control program which is responsible for: A. The manual processing and preparation of crash reports for entry to the Driver History File the fact of accident involvement against the driver. If the driver fails to file a crash report or the vehicle owner has not paid the Uninsured Motor Vehicle fee or proved		11. COST BY TASK ($000s) 5. Driver Vehicle Registration Monitoring and Control Program	763.	763.	763.	763.	3052.
		12. TOTAL COST ($000s)					
		LOCAL SHARE					
		STATE SHARE					
		FEDERAL SHARE					
		TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Driver Testing and Licensing	3. NO. DL76-161 46-76-05-10	4. DATE 5-1-75
	5. DRAFTED BY A. D. Harvey, Coordinator, DMV (Title and Agency) APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)			

6a. EFFECTIVENESS						
6b. OUTPUT	C V					
7. RESP. / 8. STD. / 9. TASKS & MILESTONES	FISCAL YEAR 19 76					
		1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
	A. Owners suspended for denial of certificate of insurance by auto liability insurance company	716	716	717	717	2866
	B. Financial Responsibility Monitoring and Control Program					
	1. Financial Responsibility Filings Processed (000)	20	20	20	21	81
	2. Suspension order issued for failure to give or maintain proof of financial responsibility	5	5	5	5	20
	3. Automobile liability insurance verification processed for Law Enforcement Officers (000)	5	5	5	6	21

10. DESCRIPTION automobile liability insurance, orders of suspension are issued. B. The Financia Responsibility Monitoring and Control Program which detects drivers who own motor vehicles and attempt to title, register and operate them while under a proof of financial responsibility requirement or other control as a result of crash involvement or conviction before all requirements have been met. (6) Personnel listed under the Program Administration task are responsible for the overall management of programs required to achieve our stated goals. (7) Virginia proposes to undertake a study of the effectiveness of selective writte

11. COST BY TASK ($000s)					
12. TOTAL COST ($000s)					
LOCAL SHARE					
STATE SHARE					
FEDERAL SHARE					
TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Driver Testing and Licensing	3. NO. DL76-161 46-76-05-11	4. DATE 5-1-75
	5. DRAFTED BY A. D. Harvey, Coordinator, DMV (Title and Agency) APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	FISCAL YEAR 19 76		

6a. EFFECTIVENESS			1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6b. OUTPUT		C V					
7. RESP.	8. STD.	9. TASKS & MILESTONES					
		C. Personnel - State Level					
		1. Managers	7	7	7	7	7
		2. Specialists and Supervisors	6	6	6	6	6
		3. Evaluators	26	26	26	26	26
		4. Regional Representatives	9	9	9	9	9
		5. Secretaries and Stenographers	15	15	15	15	15
		6. Accounting Machine Operators	26	26	26	26	26
		7. Typists	22	22	22	22	22
		8. Clerks	121	121	121	121	121
		TOTALS	232	232	232	232	232

10. DESCRIPTION re-examinations. The primary objective of the study is to test the relationship between knowledge, as determined by a written test given selected applicants for a renewal license, and the number of accidents and violations in subsequent driving performance. This written test will not be modified during the first six months of the study. The results of this study will provide both NHTSA and the Commonwealth of Virginia with information which will permit an informed decision into the feasibility of implementing retesting on a statewide basis.

11. COST BY TASK ($000s)				
12. TOTAL COST ($000s)				
LOCAL SHARE				
STATE SHARE				
FEDERAL SHARE				
TO LOCALITIES				

2496

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Driver Testing and Licensing	3. NO. DL76-161 46-76-05-12	4. DATE 5-1-75		
	5. DRAFTED BY A. D. Harvey, Coordinator, DMV (Title and Agency) APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	FISCAL YEAR 19 76				
		1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar,	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C V					

7. RESP.	8. STD.	9. TASKS & MILESTONES	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL
DMV	305	6. Program Administration					
		A. Personnel - State Level					
		1. Administrators	2	2	2	2	2
		2. Managers	2	2	2	2	2
		3. Secretaries and Stenographers	3	3	3	3	3
		TOTAL	7	7	7	7	7
		7. Conduct a study which investigates the effectiveness of written driver reexamination.	Conduct	Conduct	Conduct	Conduct	

10. DESCRIPTION	11. COST BY TASK ($000s)	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL
	6. Program Administration	71.	71.	71.	72.	285.
	7. Driver Reexam study	5.5	5.5	5.5	5.5	22.
	12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES					

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. DL76-161 Driver Testing and Licensing 46-76-05-13	Date 5-1-75	1973 FY-2	1974 FY-1	Fiscal Year 1975 1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	1976 FY+1	1977 FY +2
6a. EFFECTIVENESS										
Driver Testing Program										
A. Instructions Permits Issued (000)			208					160	160	
B. Driver Licenses Outstanding (000)			2865					3110	3237	
C. Classified Driver Licenses Outstanding (000)			182					224	268	
1. D. Restricted Licenses Outstanding (000)			746					910	951	
Driver Licensing Program										
A. Original Licenses Issued (000)			282					301	275	
B. Renewal Licenses Issued (000)			452					859	844	
C. Duplicate Licenses Issued (000)			49					82	97	
2. D. Licenses Reissued (000)			46					180	194	
Driver History Records										
A. Law Enforcement Records Furnished (000)			595					600	550	
B. Commercial and Individual Records Furnished (000)			1089					1278	1232	
C. Drivers Certified to Courts/Habitual Offenders			900					255	700	
3. D. Drivers Adjudged Habitual Offenders			400					307	371	
E. Injuries to Automated Driver Records (000)			4613					5110	5775	
Driver Improvement Program										
A. Conviction Processing Program										
1. Conviction Abstracts Processed (000)			558					541	534	
2. Court Suspensions Processed (000)			19					27	35	
3. Revocation Orders Issued (000)			32					17	21	
B. Hearings Programs										
1. Formal Hearings Held			120					1000	229	
2. Suspension and Revocation as a Result of Hearings			90					900	202	
C. Driver Improvement Program										
1. Advisory Letters (000)			145					147	166	
2. Driver Interviewed (000)									66	
3. Drivers Assigned Clinics (000)									20	
D. Medical Evaluation and Control Program										
1. Persons placed under control as a result of adjudication or release from hospitals			1300					1600	989	

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. DL76-161 46-76-05-14 Driver Testing and Licensing	Date 5-1-75	1973	19 74	Fiscal Year 1975					19 76	19 77
				1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total		
6a. EFFECTIVENESS										
2. Persons suspended as a result of adjudication or release from hospitals			200					200	119	
3. Drivers required to file medical statement			900					11000	11	
4.										
Driver Vehicle Registration Monitoring and Control										
A. Crash Reporting Program										
1. Crash reports processed (000)			423					514	447	
2. Crash cases handled (000)			241					220	232	
3. Owners suspended for failure to file certificate of insurance (000)								19	28	
B. Financial Responsibility Monitoring and Control Program										
1. Financial responsibility filings processed (000)			46					67	81	
2. Suspension orders issued for failure to give or maintain proof of financial responsibility (000)			9					13	20	
3. Automobile liability insurance verification processed for law enforcement officers (000)			49					40	21	
5.										
6.										
7.										

CODES AND LAWS

The Commonwealth of Virginia is working to reduce the number of traffic crashes, including fatalities, personal injuries, and property damage, caused by those drivers who are not cognizant of Virginia laws as well as those of other states. In many instances this ignorance is not the fault of the driving public, but the fault of many cities and towns because of the vast array of changing and conflicting traffic laws both within the state and between states.

Traditionally, Virginia has been plagued with a lack of compliance with majority practice as embodied in the Uniform Vehicle Code (UVC) and insufficient dissemination of information. In attempting to alleviate these problems, Virginia plans to continue to strive for complete uniformity of traffic laws among its cities and towns. The initial step toward concurrence of the Code of Virginia with the Uniform Vehicle Code has been accomplished with the submission of the updated Michie Company comparative analysis (1971) of the rules of the road. The study provides a ready tool to allow legislators to recommend changes in the COV based on the inconsistencies revealed in the comparison. During the 1974 General Assembly, the Code Commission conducted an extensive review of the Virginia Code in order to bring the COV in further compliance with the UVC. Through passage of certain pieces of legislation in a number of areas, progress was made toward reaching the aforementioned goal.

The Highway Safety Division plans to continue a public information program to: familiarize the public with new and existing codes and laws; distribute copies of the Motor Vehicle Law of Virginia throughout the state; continue a training

program to familiarize policemen with the provisions of the code; and update, publish, and distribute model traffic ordinances to Virginia's cities and counties. In addition, the HSD will contract for the reprinting of new Virginia traffic laws, for law enforcement officials, as soon as they are passed.

A program has been developed to encourage the adoption of the model traffic ordinances by the cities and counties. Several cities and counties have requested funds to conduct individual studies dealing with the adoption of model traffic laws and ordinances.

In closing it should be noted that current efforts are based on a recognition of the interstate and international character of motor vehicle travel and the corresponding need for uniformity in traffic laws to reduce the probability of traffic crash occurrence through the inadvertent violation of laws, as well as the need of the public to know those statutes which govern its driving conduct.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Codes and Laws	3. NO. CL76-501 46-76-06-01	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr., Res. Anal. VH&TRC (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director HSD (Title and Agency)	1st Quarter July, Aug., Sept.	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS	See Effectivensss Supplement					
6b. OUTPUT	C Percent of localities supplied with Virginia's Model Traffic Ordinances V Number of localities using Virginia's Model Traffic Ordinances		Unknown			100%
7. RESP.	8. STD.	9. TASKS & MILESTONES					
HSD	306	1. Legislation to bring Virginia Traffic Code in compliance with Uniform Vehicle Code insofar as it enhances Highway Safety.			Legislate		
		2. Public Information Campaign (Refer to task 3B.)	Continue	Continue	Continue	Continue	
		3. Publish and distribute appropriate sections of the State Traffic Codes throughout the Commonwealth					
		A. Print and distribute § 46.1- (Traffic Code)			Contract	Print and Distribute	
		B. Reprint copies of new Virginia Traffic Laws.				Reprint	
		C. Edit and print Traffic Ordinances for Localities	Edit & Print	Distribute	Distribute	Distribute	

10. DESCRIPTION The Commonwealth is attempting to diminish traffic crashes, personal injuries and property damage caused by those motorists who are not aware of Virginia laws as well as those statutes of other states. (1) In certain cases, this lack of knowledge is excusable due to the constantly changing and conflicting traffic laws both within the urban areas of Virginia and neighboring states. In order to mitigate this problem, the Commonwealth plans to continue working for total uniformity of traffic laws among its cities and towns. Efforts will also be made to bring the codes and laws of Virginia into compliance with the Uniform Vehicle Code.

11. COST BY TASK ($000s)					
3. State Traffic Codes	1.	2.	2.	20.	28.
12. TOTAL COST ($000s)	8.	6.	6.	24.	44.
LOCAL SHARE					
STATE SHARE	6.	5.	5.	14.	30.
FEDERAL SHARE	2.	1.	1.	10.	14.
TO LOCALITIES	2.	1.	1.	10.	14.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Codes and Laws	3. NO. CL76-501 46-76-06-02	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr., Res. Anal. VH&TRC (Title and Agency)	FISCAL YEAR 1976		
	APPROVED BY T. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C V					
7. RESP.	8. STD.	9. TASKS & MILESTONES				
HSD	306	4. Training program for policemen	Continue	Continue	Continue	Continue	
10. DESCRIPTION (2-3) Familiarize the public with new and existing codes and laws. (4) Continue the training program to familiarize policemen with the provisions of the code.		11. COST BY TASK ($000s) 4. Training	4.	4.	4.	4.	16.
		12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES					

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. CL76-501 46-76-06-04 Codes and Laws	Date 5-1-75	19 74	19 75	Fiscal Year 1976					19 77	19 78
				1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total		
6a. EFFECTIVENESS										
National ranking of the VTC in as much as it complies with the UVC.		46	44					41	38	37
1. Percentage increase		4.2	4.4					6.8	7.3	2.6
* Number of localities not in compliance with Model Traffic Ordinances for counties and cities. Number of localities in compliance with Model Traffic Ordinances for counties and cities 2.										
Number of crashes involving out-of-state drivers — Rural Urban 3.		**1969 12,220 6,885	**1970 12,371 7,138					**1971 13,732 7,337	**1972 14,940 8,093	**1973 13,833 7,733
Number of fatal crashes involving out-of-state drivers — Rural Urban 4.		190 29	170 37					188 31	213 41	182 37
Number of crashes involving Virginia resident — Rural Urban 5.		83,943 103,537	87,808 108,917					94,142 115,539	102,788 125,737	103,740 124,810
Number of fatal crashes involving Virginia resident — Rural Urban 6.		944 307	874 328					908 322	923 341	918 287

* This information will be available upon implementation of Traffic Records System

** Calendar Y

TRAFFIC COURTS

Basic to any discussion of the Virginia traffic court system is a general understanding of its structure. The majority of traffic offenders enter the traffic court system in a "court not of record," which is a court having jurisdiction limited to claims of $3,000 or less and to trials of misdemeanors (most traffic offenses are misdemeanors). Appeals may then proceed to the circuit court level, and, in a few instances, to the Virginia Supreme Court of Appeals. While this analysis is a bit oversimplified, it suffices for purposes of discussion due to the fact that most of the offenses are disposed of at the lowest level (the court not of record). Consequently, it is this court that potentially has the greatest impact on the bulk of traffic offenders.

In recognition of the importance of a viable traffic law system in achieving the deterrence of behavior involving danger to the motoring public, a good deal of critical analysis is being directed toward the Virginia traffic court system. The first phase of the analysis consisted of a contract between the Highway Safety Division and Peat, Marwick, Mitchell, and Co. (consultants) to study the Virginia traffic court system in terms of its impact on highway safety and to determine the degree of compliance with the NHTSA standards dealing with traffic courts. A number of the study's recommendations have been acted upon. Perhaps the major recommendation of the study was the suggestion that a standardized administrative procedures manual be developed for the use of the lower courts. While the Supreme Court has promulgated rules of procedure for other courts, as yet it has not promulgated rules for the courts not of record. There is, however, a

degree of uniformity among local courts; a committee of judges proposed rules some years ago, and many were adopted by the courts. Nevertheless, the study noted that there was little standardization of approach among the courts. During the upcoming fiscal year, emphasis will be directed toward resolving the following problems in this standard area: (1) Development of an administrative procedures manual for the lower courts, and (2) quick and accurate reporting of traffic convictions to the traffic records system.

Related to the goal of improving the image of the court is the question of the adequacy of court facilities. The study discovered that a number of the courts visited were operating in near deplorable conditions. Given the importance of infusing the administration of justice with the proper indicia of authority, the Highway Safety Division has initiated a court restoration project to enable the courts to meet certain minimum standards of decorum deemed necessary (for the efficient administration of justice) in a court of law. Some of the courts where restoration has been completed include those of Patrick and Botetourt Counties and the cities of Galax and Norton, Virginia. Additional court restoration projects are planned for FY 76.

The Highway Safety Division has provided funds for the preparation and distribution of driver's permit presentation pamphlets. This document not only welcomes a new driver to the motoring public but also alerts the individual to the motor vehicle laws which call for mandatory revocation of one's license as well as provides a concise description of Virginia's Driver Improvement Program. It is felt that by making the new motorist cognizant of the seriousness of the right to drive, the entire highway safety program can be benefitted.

There always exists the need for increased opportunities for exchanges between judicial personnel. Consequently, an annual seminar may be held to provide additional training for judges and to promote an interchange of ideas as to the proper administration of justice and interpretation of existing and new legislation.

Finally, greater involvement of the judicial system in the rehabilitation of problem drivers is contemplated. Through the cooperation of local courts, traffic offenders are now being processed through the driver improvement program.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Traffic Courts	3. NO. TC76-491 46-76-07-01	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr., Res. Anal., VH&TRC (Title and Agency)	FISCAL YEAR 1976		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS See Effectiveness Supplement						
6b. OUTPUT	C Percent of traffic crashes where there was a violation charged (1973)					83.5%
	V Total number of traffic violations (1973)					142,964
7. RESP.	8. STD.	9. TASKS & MILESTONES					
HSD	307	1. Drivers permit presentation pamphlets (Previously funded)	Distribute	Distribute	Distribute	Distribute	
Local Political Subdivisions	307	2. Court personnel					
		3. Renovation of courtrooms (No.)	2				2
10. DESCRIPTION One of the most beneficial programs in reducing the number of traffic crashes, fatalities, personal injuries and property damage is that of a viable traffic courts and adjudication system. (1) See Block 9. (2) See Block 9. (3) The Highway Safety Division is working with localities in the renovation of courtrooms to enable the courts to meet minimum standards deemed necessary for the proficient administration of justice.		11. COST BY TASK ($000s)					
		2. Court personnel	375.	375.	375.	375.	1500.
		3. Renovation of courtrooms	14.				14.
		12. TOTAL COST ($000s)	393.	375.	375.	375.	1518.
		LOCAL SHARE	2.				2.
		STATE SHARE	382.	375.	375.	375.	1507.
		FEDERAL SHARE	9.				9.
		TO LOCALITIES	9.				9.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Traffic Courts	3. NO. TC76-491 46-76-07-02	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr., Res. Anal., VHTRC (Title and Agency)	FISCAL YEAR 1976		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C					
	V					
7. RESP.	8. STD.	9. TASKS & MILESTONES				
Local Political Subdivisions	307	4. Seminar for traffic court judges - number attending the session	155			155
		5. Greater involvement of judicial system in rehabilitating problem drivers by fully cooperating with the driver improvement school movement				
		6. Equipment	Purchase			
10. DESCRIPTION (4) An annual seminar for judicial personnel may be held to provide additional training for judges and to encourage an interchange of ideas relating to the proper administration of justice and interpretation of existing and new legislation. (5) See Block 9. (6) Requests for funding include the following: Slide projectors, projection screen, magnetic accident simulation boards and recording systems.		11. COST BY TASK ($000s) 6. Equipment	4.			4.
		12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES				

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. Traffic Courts TC76-491 46-76-07-03	Date 5-1-75	19 69 CY - 2	19 70 CY - 1	Calendar Year 1971 1st Qt.	 2nd Qt.	 3rd Qt.	 4th Qt.	 Total	19 72 CY + 1	19 73 CY + 2
6a. EFFECTIVENESS										
All Type of Crashes										
Percent of total crashes where driver violated traffic law 1.		85.9%	84.3%					84.2%	84.4%	83.5%
Percent of fatal crashes where driver violated traffic law 2.		82.3%	79.4%					81.0%	78.0%	82.1%
Percent of total crashes where driver violated speed law 3.		13.5%	12.9%					12.7%	12.1%	11.9%
Percent of fatal crashes where driver violated speed law 4.		44.5%	45.0%					43.1%	40.2%	43.8%
Percent of total crashes where pedestrian violated law		1.3%	1.3%					1.2%	1.3%	1.2%
Percent of fatal crashes where pedestrian violated law 5.		11.0%	10.7%					12.1%	10.8%	10.9%
Total number of traffic violations		123,602	126,188					132,558	142,436	142,964
Total number of crashes		131,599	136,923					144,407	155,257	157,637
Total number of fatal crashes 6.		1,117	1,066					1,054	1,100	1,048

ALCOHOL IN RELATION TO HIGHWAY SAFETY

The Commonwealth of Virginia has long recognized that the drinking driver represents a serious threat to safety on the highway. Though statistically a small percentage of drivers, these drunken drivers annually cause a large proportion of the state's highway fatalities. For example, in 1973 there were 305 fatal crashes involving drinking drivers on the Commonwealth's roads and a total of 19,274 crashes. The Virginia Department of State Police, compilers of the statistics, are quick to point out, however, that the figures do not indicate the true numbers since intoxication is frequently unreported when there does not exist sufficient evidence to justify prosecution.

Administrators in Virginia who recognize the need to reduce the annual highway death toll feel that the drinking driver problem is particularly amenable to state governmental initiatives through the legislative, administrative and judicial branches. Sociologists also agree that the control of the drinking driver is perceived by the public as a legal or law enforcement problem rather than a medical one. Whether or not that particular attitude is correct, it seems clear that the public will accept countermeasures designed to protect them from the drinking driver.

In the 1970 General Assembly, a bill was passed allowing the use of preliminary breath tests as a screening device for all drivers believed to be driving under the influence of alcohol. In 1972, the General Assembly passed legislation permitting the use of quantitative breath testing devices. Consequently, the Highway Safety Division has trained experts in the use of breath test devices.

These trained operators travel throughout the state demonstrating the use and efficiency of the devices. Their efforts have increased the public's knowledge and make ultimate public acceptability much easier. These personnel were instrumental in the implementation of a major police training program in the use of quantitative breath tests. Additional purchases of these breath test devices are required in order to provide all localities with the equipment. Hardware purchases in the upcoming fiscal year include drug identification kits and video cameras and projectors to be used in filming psychomotor tests of suspected DWIs.

One of the more significant programs initiated in the state during fiscal year 1973 was the Fairfax Alcohol Safety Action Project (ASAP). This cooperative effort between the Commonwealth of Virginia and the Department of Transportation is designed to identify the problem drinker and get that person off the road. As a result of experience gained in the administration and evaluation of the § 403 funded Fairfax Alcohol Safety Action Project, the Highway Safety Division plans to sponsor a statewide program of alcohol countermeasure projects.

The ultimate goal of the Virginia Alcohol Safety Action Project (VASAP) is to significantly reduce the number of alcohol related traffic accidents which cause property damage, personal injury or death.

The achievement of this goal is being sought through the enactment of specific alcohol countermeasures which involve local enforcement officials, the courts, and agencies which deal with rehabilitation and public education.

Defendants become aware of the efforts of these countermeasures as they progress through the system. Drivers arrested for driving while intoxicated (DWI) by local police officers are judicially screened before being invited to enter the program. Should they accept, their cases are more thoroughly examined and they are referred to the most appropriate form of treatment. Each defendant's progress through the VASAP is monitored, and feedback as to relative success in the program is returned to the court, whose duty it is to make the final disposition of the case.

The long-range goal of the VASAP's is to become operational on a statewide basis. In order to achieve this goal, various jurisdictions have been encouraged to examine the possibility of having a VASAP. To assist these areas in their attempts to implement VASAP operations, funding has been made available to assist in the completion of feasibility studies.

In addition to the long-range goal of the VASAP's, there are more immediate goals which must be met before the program becomes operational in Virginia. One intermediate goal is to complete the previously mentioned feasibility studies now in progress by local jurisdictions in order to examine the needs of the community and evaluate how the VASAP's can best fulfill these needs. These studies include a survey of community resources, a recommended organizational structure based on community conditions, plans for preliminary staffing patterns and systems operation, and guidelines for soliciting indirect support. Also included is an estimate of operational costs. These feasibility studies are necessary not only for use in the community, but also for obtaining legislation which will permit statewide operation of the VASAPs. It should be revealed that the 1975 Virginia

General Assembly has passed House Bill No. 1662 (See attachment A) which would permit the implementation of VASAPs in those areas where necessary planning is complete. Now that the Governor has signed the bill into law, work will begin to initiate the program.

During the upcoming fiscal year the Virginia Division of Consolidated Laboratory Services will undertake a number of projects in the alcohol & drugs standard area. (1) The awareness courses offered by the Division will seek to enable police officers to better recognize those drivers who have significant BAC levels. This program will increase highway safety by removing these drivers from the public highways. (2) The course for management personnel will increase their commitment to the DUI program and will enable them to understand the rational for lowering the BAC limit to .10% and the chemical principles of the tests involved. With this understanding, it is hoped that better acceptance will follow. (3) Due to the increased use of the breath test devices and the enforcement programs of law enforcement agencies in urban areas, additional devices are required to avoid long waits for the accused. Experience has shown that the use of the breath test device increases greatly as law enforcement efforts are increased by Alcohol Safety Action Programs to remove the drinking driver from our highways. (4) Approximately 10% of those persons arrested for driving under the influence have blood alcohol concentrations of less than 0.10%. These persons should be tested for other drug components. Drug abuse is a real problem in Virginia. This laboratory is receiving drug specimens from law enforcement agencies at the annual rate of

ATTACHMENT A

ENGROSSED

AMENDMENT IN THE NATURE OF A SUBSTITUTE
FOR HOUSE BILL NO. 1662
(Proposed by the House Committee for Courts of Justice)
House Amendments in [ ] -February 7, 1975

A BILL to amend the Code of Virginia by adding a section numbered 18.2-271.1, so as to provide for probation, education and rehabilitation in certain trials on charges of driving under the influence of alcohol or drugs; how financed; violation of probation; penalties; and to appropriate funds.

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia is amended by adding a section numbered 18.2-271.1 as follows:

§ 18.2-271.1. (a) Upon the trial of [*any person for*] *a violation of § 18.2-266, or any ordinance of a county, city or town similar to the provisions thereof, and upon motion of the defendant, the court may order probation to the defendant, on condition that he be assigned to a driver education program, and, in the discretion of the court, to an alcohol treatment or rehabilitation program, or both such programs. Such trial may be continued for a period up to one year and during such time of continuance the court may:*

(1) Require the defendant to cooperate in any investigation conducted by any probation officer assigned to the case or such other person working in a driver education program, and

(2) Require the defendant moving for probation under the provisions of this section to pay a fee not to exceed one hundred fifty dollars, which amount shall be forwarded by the clerk to be deposited with the State Treasurer [~~*if the program is provided by the Highway Safety Division, or the local treasurer if the program is provided by any county or city or town*~~] *. Fees shall be kept in a separate fund in the State* [~~*or local*~~] *Treasury for expenditure by the Highway Safety Division* [~~*or the county or city*~~] *, for the maintenance of the provisions set out in this section, for which such funds as may come to the State are hereby appropriated.*

(b) If the court finds that the defendant is not eligible for probation or violates any of the provisions of probation, the court shall dispose of the case as if no probation had been ordered. [*If the court finds that the defendant has complied with its probation order, such compliance may be accepted by the court in lieu of a conviction under § 18.2-266 or the requirements specified in § 18.2-271, upon payment of all fines and costs, if any, as required by law.*]

(c) The State Treasurer or any city or county is authorized to accept any gifts or bequests of money or property, and any grant, loan, service, payment or property from any source, including the Federal government, for the purpose of driver alcohol education. Any

such gifts, bequests, grants, loans or payments shall be deposited in the separate fund provided in (a) (2) hereof.

(d) The Highway Safety Division, or any county, city, town, or cities or any combination thereof may establish driver alcohol education programs and alcohol treatment and rehabilitation programs in connection with highway safety [; and . The Highway Safety Division] is authorized to establish standards and criteria for the implementation of such programs. It may establish criteria for the modalities of administration of such programs, as well as public information, accounting procedures and allocation of funds. Funds paid to the State hereunder shall be utilized by the Division to offset the costs of State and local probation, rehabilitation, administration, driver education and public information. The Highway Safety Division shall establish standards of evaluation for the programs set out herein, and shall submit an annual report as to its actions taken at the close of each calendar year to the Governor and the General Assembly.

(e) Nothing in this section shall be construed to prevent the exercise by a court of its authority to make any lawful deposition of a change of a violation of [§ ~~18.2-270~~ § 18.2-266] or a similar offense under any county, city or town ordinance.

2. That any provision in this act referring to Title 18.2 shall be also construed to mean a reference to any applicable or similar provision in Title 18.1 of the Code of Virginia, until such time as Title 18.2 thereof shall become effective.

3. That an emergency exists and this act is in force from its passage.

Official Use by Clerks

Passed By The House of Delegates	Passed by The Senate
with / without amendment	with / without amendment
Date:	Date: .....
.....	.....
Clerk of the House of Delegates	Clerk of the Senate

400,000. Many people who abuse drugs will also drive and are a real danger on our highways. Testing is more difficult and chemical ionization mass spectrometer is the best equipment available for this purpose.

As alluded to earlier, a related and constantly changing field is drug abuse in relation to highway safety. A study conducted by A. J. Lorman of the Safety Section, Virginia Highway and Transportation Research Council, sought to upgrade drug provisions of the Virginia Code. For complete disclosure of Lorman's research, please refer to the report entitled "Drugs, Driving and the Law," of October 1, 1973.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Alcohol and Drugs	3. NO. AL76-471 46-76-08-01	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr., Res. Anal., VHT&RC (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS See Effectiveness Supplement						
6b. OUTPUT	C Percent of fatal crashes involving drinking drivers V Number of fatal crashes involving drinking drivers	(CY 73)				29.1% 305
7. RESP.	8. STD.	9. TASKS & MILESTONES					
HSD and Local Political Sub-divisions	308	1. Virginia Alcohol Safety Action Programs (No. of VASAP programs) A. State Administration B. Local Programs	22	22	22	22	22
10. DESCRIPTION A major highway safety problem facing society today is the drinking driver. Statistics indicate that a large number of all fatal accidents can be attributed to alcohol. In order to reduce the number fo traffic crashes, including fatalities, personal injuries and property damage attributed to alcohol, Virginia has placed a high priority on alcohol and drugs during fiscal year 1976. (1) VASAP's will incorporate certain portions of the Fairfax ASAP into Virginia's statewide highway safety program in order to bring about a reduction in the number of deaths, injuries and property damage on the state's roadway systems. Funds re-		11. COST BY TASK ($000s) 1. VASAP	550.	550.	550.	550.	2200.
		12. TOTAL COST ($000s)	717.	581.	561.	561.	2420.
		LOCAL SHARE	500.	510.	500.	500.	2010.
		STATE SHARE					
		FEDERAL SHARE	217.	71.	61.	61.	410.
		TO LOCALITIES	71.	60.	50.	50.	231.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Alcohol and Drugs	3. NO. AL76-471 46-76-08-02	4. DATE 5-1-75
	5. DRAFTED BY C. E. O'Rear, Deputy Director, Div. of Consolidated Laboratory Services (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY A. W. Tiedemann, Director, Div. of Consolidated Laboratory Services (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C V					
7. RESP. Division of Consolidated Laboratory Services	8. STD. 308	9. TASKS & MILESTONES				
		2. To continue to provide awareness training to law enforcement personnel in the recognition of the drinking driver, particularly the .10 - .15 BAC grams vs. .05 - .10 grams.	Training	Training	Training	Training	
		3. To continue to provide basic training to mid-management personnel of law enforcement personnel concerning the problem of the drinking driver and highway safety.	Training	Training	Training	Training	
		4. Purchase and assign breath test devices to Virginia law enforcement agencies.	Purchase and Distribute				
10. DESCRIPTION quested under this task will help initiate the programs, at the state level and supply support equipment needs for the project. (2-5) See Block 9. (6) Items requested for funding include but are not limited to the following: drug identification kits, camera and TV monitor (video recording and reproducing equipment) and accessories, and maintenance, and breath testing devices.		11. COST BY TASK ($000s)					
		2. Awareness courses	4.	4.	4.	4.	16.
		3. Mid-management	1.	1.	1.	1.	4.
		4. Breath test devices	21.				21.
		12. TOTAL COST ($000s)					
		LOCAL SHARE					
		STATE SHARE					
		FEDERAL SHARE					
		TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Alcohol and Drugs	3. NO. AL76-471 46-76-08-03	4. DATE 5-1-75
	5. DRAFTED BY C. E. O'Rear, Deputy Director, Div. of Consolidated Laboratory Services (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY A. W. Tiedemann, Director, Div. of Consolidated Laboratory Services (Title and Agency)	1st Quarter (July, Aug, Sept)	2nd Quarter (Oct, Nov, Dec)	3rd Quarter (Jan, Feb, Mar)	4th Quarter (Apr, May, June)	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C V					
7. RESP.	8. STD.	9. TASKS & MILESTONES				
Division of Consolidated Laboratory Services	308	5. To purchase a Gas Chromatograph-Chemical Ionization Mass Spectrometer equipped with computer capabilities plus library and to purchase supplies and material for the extraction of drug components from blood or other body fluids such as urine for qualitiatve and quantitative analysis. Personnel required for such analysis: Chemist, Laboratory Technician					
Local Political Subdivisions		6. Equipment	2 Bids	2 Purchase	2	2	2
10. DESCRIPTION		11. COST BY TASK ($000s)					
		5. Equipment, supplies and personnel	141.	6.	6.	6.	159.
		6. Equipment		20.			20.
		12. TOTAL COST ($000s)					
		LOCAL SHARE					
		STATE SHARE					
		FEDERAL SHARE					
		TO LOCALITIES					

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. Alcohol and Drugs AL76-471 46-76-08-04	Date 5-1-75	19 69 CY - 2	19 70 CY - 1	Calendar Year 71 1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	1972 CY + 1	19 73 CY + 2
6a. EFFECTIVENESS										
Number of crashes involving drinking drivers										
Urban		8,546	8,172					8,695	8,998	8,625
Rural		10,009	9,872					10,181	10,807	10,649
1.										
Number of fatal crashes involving drinking drivers										
Urban		82	91					62	74	73
Rural		280	244					250	221	232
2.										
Total number of crashes involving drinking drivers		18,555	18,044					18,876	19,805	19,274
3.										
Fatal crashes involving drinking drivers		362	335					312	295	305
4.										
Personal injury crashes involving drinking drivers		6,865	6,744					6,743	6,821	6,742
5.										
Property damage crashes involving drinking drivers		11,328	10,965					11,821	12,689	12,227
6.										

Background

The goal of Virginia's traffic records program is to determine the facts about traffic crashes including fatalities, injuries, and property damage, develop countermeasure programs, based on crash statistics, to impact the state's accident record and evaluate existing and newly developed traffic safety programs. Accident statistics generated by a traffic records system are the only data for evaluating the effectiveness or success of highway safety programs. The National Highway Traffic Safety Administration indicated to the Commonwealth of Virginia in 1969 and 1970 that the state's performance in the area of traffic records was one of the defficient areas enumerated in the state's comprehensive highway safety program. The Governor's Management Study also mirrored this inefficiency. Hence, significant efforts toward improvement were begun in 1970. The current responsibility for the maintenance of traffic records is shared by three agencies: (1) DMV, (2) State Police, and (3) Highway and Transportation Department. There is no certralized effort at managing the automated processing of traffic records in Virginia.

In order to accomplish the implementation and continuation of a viable traffic records system, the Highway Safety Division established a Traffic Records Committee to scrutinize the current traffic records system and make recommendations for its improvement. The committee, in turn, appointed an interagency Feasibility Study Team to evaluate the current system, make recommendations for improvement, and propose a new system to satisfy three tests of feasibility: technical, operational, and economic.

The Feasibility Study Team defined the deficiencies in the present traffic records system of the Commonwealth as: (1) Non-uniform use of accident reporting form among localities; (2) untimely processing and dissemination of addident data; and (3) imprecise and inchoate recording of accident data. To improve the system the study team made the following recommendations: (1) A central authority must be established that will be responsible for the control, integrity and operation of the total system. This authority must have the responsibility for cost effectiveness in the areas of computer equipment, software and programming systems, priorities and expertise in the planning, implementation and continuity of the system. (2) A uniform accident reporting system must be drafted and adopted in the Commonwealth of Virginia. (3) A training program must be instituted to educate law enforcement agencies throughout the Commonwealth in the administration and use of the uniform reporting system. (4) The amount of time allowed for an officer to submit a preliminary accident report to the entering agency must be reduced to 72 hours from the time of the accident. (5) All accidents must be investigated and reported by a law enforcement officer. (6) A uniform traffic records locator system must be established for the Commonwealth.

Status of the Traffic Records Project

As an outgrowth of the work of the Traffic Records Committee and the Feasibility Team's report,the Traffic Records Information System (TRIS) project began in August of 1974. Phase I of this project will produce a Functional Description of TRIS which would (1) provide a description of the current system, identify unmet requirements and identify duplicative processes.

Phase II of this project will provide a system design and an implementation plan, showing system alternatives and their costs for implementation, operation and maintenance. The objectives of this project are: (1) to improve operational effectiveness at the state and local level, and (2) to provide improved highway safety data. The project ream consists of a full-time program manager from the Division of Automated Data Processing, and other full-time and part-time personnel from the involved state and local agencies. The program manager communicates to a Management Review Committee through the program director, the Assistant Director of the Highway Safety Division. The Management Review Committee is currently headed by the Governor's Secretary for Transportation and Public Safety and its membership includes the Commissioner of the Division of Motor Vehicles, the Commissioner of the Department of Highways and Transportation, the Superintendent of State Police, the Director of the Highway Safety Division and a representative of the Henrico County Police Department. Expansion of the Committee to include representatives of the Health Department, Education, the courts and the legislature is planned. The project team, in addition to the program manager, consists of full-time personnel from the Division of Motor Vehicles and the Highway and Transportation Research Council. A part-time analyst has been assigned by the Department of State Police and contact persons have been designated by the Department of Health, Emergency Medical Services, Driver Education and Pupil Transportation. It is anticipated that an analyst from a locality will be assigned to work full-time in the design phase of the project.

The requirements were defined on the local level through a questionnaire and personal interviews. On the state level a survey was made by the project team. The Design Manual for states Traffic Records Systems was used as an initial guideline in the requirements definition.

Once defined and described, the individual requirements will be approved and prioritized by the Management Review Committee and the agencies it represents. Subsequent to approval by the Management Review Commitee the system design will then proceed, with an agreed objective and priority definition, to meet the defined basic TRIS ingredients (information, procedures and products) necessary to support the operational and administrative requirements of the state and local agencies and the highway safety program of the Commonwealth.

The areas to be addressed, in keeping with the feasibility study and those previously stated in the comprehensive plan, are (1) an integrated data base, (2) a revised accident reporting system, (3) revised information products to provide state and local governments specific data and summary statistics required to fulfill operational requirements and support the highway safety program, (4) improved data entry to provide more timely, accurate and complete information, (5) expanded periodic motor vehicle inspection applications, (6) a statewide accident location identification system, (7) an effective system to evaluate TRIS in operation, and (8) the evaluation of the highway safety programs of the Commonwealth.

The current schedule calls for completion of the first step of the Functional Description, the requirements definition (Phase I), to be completed in April 1975. System Analysis Design (Phase II), the second step following approval of the

Management Review Committee, will take approximately 8 to 12 months additional, depending on the personnel designated. This phase will offer alternatives, including the cost of each, for satisfying the requirements of the Commonwealth.

Following the completion of Phase I and II, the Management Review determination of the design alternatives to be implemented, Phase III – the writing of detailed design and program specifications, can begin. Phase IV, the Development Phase, which will include the actual development of the system, will follow. The development Phase will culminate in the testing of the program and procedures required, the conversion of data and the implementation of the system.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Traffic Records	3. NO. TR76-501 46-76-10-01	4. DATE 5-1-75
	5. DRAFTED BY Harvey, DMV, Heitzler, MRC, Holcomb, State Police (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY Hiram Johnson, Traffic Records, Project Coordinator, VDH&T (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS Average data retrieval time						2.5 sec.
6b. OUTPUT	C Percent of records on automated integrated files					0%
	V Number of records on existing files					8,600,000
7. RESP. Commission on State Governmental Management	8. STD. 310	9. TASKS & MILESTONES 1. An Economic and Organizational Evaluation of Virginia's Traffic Records System	Conduct	Conduct	Conduct	Report	
10. DESCRIPTION The Traffic Records Information System (TRIS) will be undertaken to bring the Commonwealth into compliance with Federal Standards, to eliminate duplicate efforts at local and state levels of government, to satisfy unmet requirements for Highway Safety data, and to improve Highway Safety program evaluation and quality. The current Traffic Records System will continue to provide the Highway Safety data and information until implementation of TRIS. (1) The original Traffic Records Feasibility Study examined 3 tests (technical, operational, and economic) for a viable Traffic Records System. This initial report did not fully satisfy requirements for the operational and economic tests. Task one is designed to satisfy these tests by		11. COST BY TASK ($000s) 1. Evaluation of Virginia's Traffic Records System	6.5	6.5	6.5	6.2	26.
		12. TOTAL COST ($000s)	125.5	96.9	92.8	235.9	551.1
		LOCAL SHARE	16.5	16.5	16.5	16.5	66.
		STATE SHARE					
		FEDERAL SHARE	109.	80.4	76.3	219.4	485.1
		TO LOCALITIES	16.5	16.5	16.5	16.5	66.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Traffic Records	3. NO. TR76-501 46-76-10-02	4. DATE 5-1-75
	5. DRAFTED BY Harvey, DMV, Heitzler, MRC, Holcomb, State Police (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY Hiram Johnson, Traffic Records Project Coordinator, VDH&T (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C V					
7. RESP. Management Review Committee	8. STD. 310	9. TASKS & MILESTONES 2. System Analysis and Design, including comprehensive identification and evaluation of alternatives to satisfy Virginia's Traffic Records data needs. (Phase II — includes costs for analysts, managers and part-time and advisory personnel).	Design 6	Design 6	Design 6	Write 8	
10. DESCRIPTION studying questions related to organizational administration and costs associated with implementation of a Traffic Records system for the state. (2) The analysis and design phase of TRIS will produce alternatives for satisfying unmet requirements including cost identification, benefits, and a systems description which upon development and implementation will result in a Traffic Records Management Information System (TRIS). (3) See block 9. (3.1) Communication linkage of accident, roadway, driver and vehicle data will provide a management information system data base for TRIS. Current redundancy will be eliminated, and the		11. COST BY TASK ($000s) 2. Phase II, TRIS Systems Analysis	36.	36.	36.	48.	156.
		12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Traffic Records	3. NO. TR76-501 46-76-10-03	4. DATE 5-1-75
	5. DRAFTED BY Harvey, DMV, Heitzler, MRC, Holcomb, State Police (Title and Agency)	FISCAL YEAR 1976		
	APPROVED BY Hiram Johnson, Traffic Records (Title and Agency) Project Coordinator, VDH&T			

6a. EFFECTIVENESS			1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6b. OUTPUT		C V					
7. RESP.	8. STD.	9. TASKS & MILESTONES					
MRC	310	3. Develop agency modules of TRIS					
		3.1 Develop data base to include accident roadway, driver and vehicle data.					
		3.1a Mass storage file conversion of Traffic Records accident data.			Develop	Develop	
		3.1b Traffic Records accident data teleprocessing system providing on-line injury/update program			Develop	Develop	
		3.1c Motorist data base project.	Develop	Develop	Develop	Develop	

10. DESCRIPTION	11. COST BY TASK ($000s)					
steps taken to develop statistical data for program evaluation for state and local agencies. These steps are necessary as a prelude for developing a common data base accessible to all users of traffic records information. These modules will then be incorporated into the functional TRIS at the appropriate time. (3.1a) The first step of this subtask will be the conversion of accident data from serial type files to random access files on mass storage devices. Disk files offer the considerable benefit of flexibility in data management and utilization. The general aim for this phase of development is to construct an accident file which conforms	3.1 Develop TRIS data base				131.	131.
	3.1a Convert serial data to random access mass storage	6.				6.
	3.1b Teleprocessing system	2.4	7.1	10.7	10.7	30.9
	3.1c Motorist data base	30.				30.
	12. TOTAL COST ($000s)					
	LOCAL SHARE					
	STATE SHARE					
	FEDERAL SHARE					
	TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Traffic Records	3. NO. TR76-501 46-76-10-04	4. DATE 5-1-75
	5. DRAFTED BY Harvey, DMV, Heitzler, MRC, Holcomb, State Police (Title and Agency) APPROVED BY Hiram Johnson, Traffic Records Project Coordinator, VDH&T (Title and Agency)	FISCAL YEAR 19 76		

			1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL
			July, Aug, Sept	Oct, Nov, Dec	Jan, Feb, Mar	Apr, May, June	
6a. EFFECTIVENESS							
6b. OUTPUT		C					
		V					
7. RESP.	8. STD.	9. TASKS & MILESTONES					
DMV	310	3.1 (Continued)					
		3.1d Traffic Records Automated Data Processing					
		A. Motor Vehicle Records (000)	5,082	5,145	5,207	5,271	5,271
		B. Driver History Records (000)	4,556	4,612	4,668	4,725	4,725
		C. Data Transactions (000)	1,425	1,456	1,487	1,519	1,519
		D. Personnel - State Level					
		Personnel will be assigned from standard area 302 Motor Vehicle Registration and/or Standard Area 305 Driver Testing and Licensing as required					

10. DESCRIPTION essentially to the National Highway Traffic Safety Administration recommendations. The necessary foundation will then be laid for a long range program for improving Virginia traffic records processing.

(3.1b)This computer system will provide for magnetic disk storage of records, with rapid access forty hours each week via video-terminals. These terminals will be used to enter new records, to delete or change existing records, and to search for specific records. Single records can be retrieved or the disk file can be searched, several records at once, using the video screen. Special searches can be made by using key

11. COST BY TASK ($000s)

3.1d Traffic Records Automated Data Processing

Local funds for this standard will be drawn from Standard area 302 Motor Vehicle Records ($3,013) Standard area 305 Driver Testing and Licensing ($2,694)as required. (Dollars are total for year in $000)

12. TOTAL COST ($000s)

LOCAL SHARE

STATE SHARE

FEDERAL SHARE

TO LOCALITIES

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Traffic Records	3. NO. TR76-501 46-76-10-05	4. DATE 5-1-75
	5. DRAFTED BY Harvey, DMV, Heitzler, MRC, Holcomb, State Police (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY Hiram Johnson, Traffic Records Project Coordinator, VDH&[illegible] (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C V					

7. RESP.	8. STD.	9. TASKS & MILESTONES					
		3. (Continued)					
MRC	310	3.2 Reporting System (Data Entry)	Design	Training	Develop	Develop	
DMV	310	3.2a Redesign Crash Report Form Project	Develop	Develop	Implement		
MRC	310	3.3 Location System			Develop	Develop	
State Police	310	3.3a Secondary Highway System Logging					

10. DESCRIPTION	11. COST BY TASK ($000s)					
data elements. This provides raw data and statistics within minutes. Cost for this service depends on usage. (3.1c) The development, testing, and implementation of computer programs to automatically link driver and vehicle information common to both the driver history and the motor vehicle files as well as to accident data. Federal funds will be requested for this project with matching funds being drawn from Standards 302 and 305 as required. (3.1d) This program is responsible for the maintenance, input and output of information from the	3.3a Logging	3.4	3.4	3.4	3.5	13.7
	12. TOTAL COST ($000s)					
	LOCAL SHARE					
	STATE SHARE					
	FEDERAL SHARE					
	TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Traffic Records	3. NO. TR76-501 46-76-10-06	4. DATE 5-1-75
	5. DRAFTED BY Harvey, DMV, Heitzler, MRC, Holcomb, State Police (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY Hiram Johnson, Traffic Records Project Coordinator, VDH&? (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C V					

7. RESP.	8. STD.	9. TASKS & MILESTONES					
		3. (Continued)					
MRC	310	3.4 Training System			Develop	Develop	
MRC	310	3.5 Evaluation System			Develop	Develop	
State Police	310	3.6 Jurisdictional Report Program					

10. **DESCRIPTION** driver history and motor vehicle records files. Although these are maintained as separate and distinct automated files, programming changes have made driver and vehicle information available from the same computer inquiry/input terminals.
(3.2) Uniform reporting will modify and revise the current system to provide more accurate related data, in a uniform manner, on a more timely basis, and will eliminate the redundant process of the current system. It is anticipated that a single point on-line transaction entry and update system will be utilized.
(3.2a) This project is designed to replace the

11. COST BY TASK ($000s)					
3.6 Jurisdictional Report Program	8.2	10.9	3.2	3.2	25.5
12. TOTAL COST ($000s)					
LOCAL SHARE					
STATE SHARE					
FEDERAL SHARE					
TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Traffic Records	3. NO. TR76-501 46-76-10-07	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr., Res. Anal., VH&TRC (Title and Agency)	FISCAL YEAR 1976		
	APPROVED BY Hiram Johnson, Traffic Records Project Coordinator, VDH&T (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C V					
7. RESP. Local Political Subdivision	8. STD. 310	9. TASKS & MILESTONES 4. Personnel — includes salaries of Traffic Records Analyst, Technicians, Secretaries, and Programmers 5. Procure Equipment — office space and supplies, desks, file cabinets, telephone services, disc packs and magnetic tapes, and typewriters				
10. DESCRIPTION existing crash report form with one that is easier to complete by the citizen and investigating officers. The new report will also request information not currently required particularly in the area of personal injury and emergency service. (3.3) The locator system, being an integral part of uniform reporting, will provide a statewide identification system for use by all traffic records and law enforcement personnel, for both urban and rural locations, and will possibly be developed and demonstrated in selected localities as a pilot project. Interim needs will be met by the State Police secondary system logging which will also provide input to the		11. COST BY TASK ($000s) 4. Personnel 5. Equipment	30. 3.	30. 3.	30. 3.	30. 3.	120. 12.
		12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES					

local system design.

(3.3a) These clerks will be used to extract approximately 14 columns of information from logs supplied by the Highway and Transportation Department. These logs will consist of approximately two thousand miles of the most heavily traveled secondary roads. This information, when extracted, will be prepared for data processing and sent to the Highway and Transportation Department for future engineering studies.

The information will consist of type of roadway, surface type, section number, speed limit and mile post.

(3.4) An on-going program for the training and continuing education of all persons involved in the TRIS to assure that quality is maintained, procedures are efficient and followed, and changes are correctly implemented, will be developed.

(3.5) The program evaluation function will provide for the auditing of the TRIS in operation and provide assistance, through statistical data and personnel aid in the evaluation of the effectiveness of Highway Safety programs.

(3.6) A project of very high priority is the proposed jurisdictional report program. These reports will consist of locality-specific information similar to that in crash facts. The level of detail, of course, may vary between crash facts and the jurisdictional reports, but essential data will be provided on traffic accidents within a closely defined geographical area. Present plans call for the report to be available on a quarterly basis, with the option of a monthly report if the user's response and cost considerations warrant. We feel that supplying city and county officials with vital information relating to their jurisdiction will be a valuable step in highway safety planning.

(4. & 5.) See Block 9.

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. Traffic Records TR76-501 46-76-10-09	Date 5-1-75	19 74 FY-2	19 75 FY-1	Fiscal Year 1976 1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	19 77 FY+1	19 78 FY+2
6a. EFFECTIVENESS										
Economic and organizational evaluation of Virginia's Traffic Records System . 1.				Conduct	Conduct	Conduct	Report			
System analysis and design 2.				Design	Design	Design	Write			
Data base Reporting System Locator System 3.				Design	Training	Develop Develop Develop	Develop Develop Develop			
Training System Evaluation System 4.						Develop Develop	Develop Develop			
The statistics and coorelations which will be made available through the TRIS will allow program evaluations to be made which currently do not exist. 5.										
Upon implementation of the TRIS, data can be retrieved on an accurate as well as timely basis by various levels of governmental agencies. 6.										

EMERGENCY MEDICAL SERVICES

Prior to the action of the 1968 General Assembly, the Commonwealth of Virginia did not have laws governing the operation of emergency medical service vehicles (ambulance services) nor were there any requisites for medical supplies or equipment. Ambulance attendants involved in handling victims of motor vehicle accidents or sudden illness were not required to have specialized training. The possession of a valid American Red Cross advanced first aid card or a United Bureau of Mines card was sufficient.

The ambulance situation before 1968 was of little concern to most local political subdivisions. If an ambulance was needed, contact was made with a funeral home, fire company, private establishment, or the rescue squad. These services were generally used only as a means of transportation for the sick, injured, helpless or incapacitated. Emergency care at the scene or enroute to a medical facility was almost nonexistent. The services rendered were inadequate and the existing special emergency care equipment aboard the ambulance could not be used by the attendants with confidence.

The General Assembly of 1968 enacted under Title 32 a new chapter 16.1 governing ambulance operations. The law included the creation of an Advisory Committee on Emergency Medical Services to establish standards, rules, and regulations governing emergency services. The Governor created by executive order the Office of Emergency Medical Services within the Department of Health. A study was made of emergency medical services in Virginia in 1968. This study revealed that only 82 percent of the ambulance attendants held a valid advanced

class first aid training card and only 65 percent of the ambulances had two-way radios; seven of the 96 Virginia counties were without emergency medical services based within their boundaries; 27 counties had inadequate ambulance coverage; and 10 counties were in the process of establishing 13 emergency medical agencies. Local agencies and civic clubs were approached with a suggested plan to organize an operational local emergency medical service agency. Progress has been made since 1968 in overcoming the deficiencies mentioned above. In Virginia today, there are 185 volunteer rescue or life saving squads and another 100 fire companies maintaining ambulance services. Additionally, there are 73 funeral homes offering ambulance transportation. The total number of emergency medical agencies is 408 but there continues to be a lack of an emergency medical service agency within the confines of several political subdivisions. Several counties lack emergency medical service, and the citizens depend on neighboring jurisdictions for emergency service assistance. The maximum response time should be 20 minutes, and most of the localities can meet this response time.

A recent study of existing emergency medical service two-way radio communications installations showed that 82.7 percent of the agencies had voice contact with their base of operations. Only 10 percent of the individual base agencies have voice contact with medical facilities.

The Emergency Medical Services now have a priority program to combat the communications problem by expanding communications between ambulance and health care facilities. Plans are being made to hire a reputable consulting firm to conduct a study which would determine the most appropriate EMS communications system for the entire state.

This project would be coordinated with the Virginia Tele-Communications Council and funded through the Highway Safety Division. It should be noted that a statewide communications system would require cooperation and support from other state agencies — The Regional Medical Program, Virginia Hospital Association, Comprehensive Health Planning, and local participation would also be expected.

Communications facilities are essential for the mobilization of rescue squads, and equipment is needed for the establishment of an "on-site" center whereby law enforcement personnel, emergency ambulance crews, and highway and utility authorities are immediately advised of existing circumstances and anticipated future action. This will enable all personnel involved to: (1) prevent any additional mishaps at the scene; (2) restore movement of traffic and repair utilities as soon as possible, and (3) provide emergency care and transportation for all injured.

The communications control center can advise medical facilities of the number and types of injuries while ambulances are enroute and can reroute ambulances to another medical facility when the assigned facility is overcrowded. Improved communications can provide for adequate physician and nursing teams in the emergency room to receive the injured and thereby reduce waiting time. Communications control can also locate life saving medical supplies and drugs at facilities within the state or in neighboring states.

Immediate voice radio communications between the ambulance, the emergency room and other medical centers will be instrumental in saving lives, particularly in times of disaster.

Perhaps at this point it should be mentioned that a HSD sponsored study of "Spatial and Temporal Distribution of Accidental Injuries Requiring Emergency Medical Services in Central Virginia" was used by the University of Virginia's Department of Bio-Medical Engineering in the preparation of a proposal for funds for an EMS communications system for four counties in the Charlottesville-Albemarle area. The proposal was accepted and funded by the Robert Wood Johnson foundation for approximately $330,000. Additionally the Medical Center has sought and acquired funding under the Emergency Medical Services Act for "Rural EMT and Nurse Practitioner Training" in the amount of approximately $200,000. A final proposal is in progress on this matter, seeking funds from HEW through the State Health Department, for the development of (1) an Emergency Medical Data System, (2) An Advisory Council for project management and implementation, and (3) the development of the 911 Emergency call number. Funding is also expected for this project. The Advisory Council was formed effective November 15, 1974. There is reason to believe that the lessons learned from this experience will be of great value in further developing a quality EMS communications system for Virginia.

The training needs problem is another priority item along with improved communications. In 1968, 82 percent of the ambulance attendants were trained in advance first aid. In 1970, this percentage climbed to 90 percent, and, as of October 1971, 98 percent of the attendants had advanced first aid training. In 1972, the percentage reached 98.6 percent, and in 1973 it increased to 99 percent.

The Emergency Medical Technician (EMT) Training Program began in 1971. A 71-hour paramedic training program has been adopted as the course of instruction

for all potential emergency medical technicians. The training program was endorsed by the Medical Society of Virginia and the Virginia Association of Volunteer Rescue Squads. The EMT course is progressing. At present, of the 11,692 personnel registered with all categorized EMS agencies, over 5,000 should have received the EMT (71-hour) training program by the end of the current fiscal year. The Emergency Medical Services Lay Instructor Institute, when completed, will make available to all areas of the Commonwealth a staff numbering close to 200 state certified instructors. By FY 77, a minimum of 85 percent of all EMS personnel will be Emergency Medical Technicians. It should also be noted that in attempting to satisfy additional training needs the 20-hour refresher classes are being activated in order to keep an individual's certification valid.

The Emergency Medical Services have made significant gains since the enactment of the 1968 Chapter 16.1 of the Virginia Code. The recognition by the Department of Transportation, Emergency Medical Service Program Division, of Virginia as a model state in the implementation of standard 311 is gratifying. Much of this credit must be given to the individuals and Emergency Medical Service organizations throughout the Commonwealth that continue to serve those who are sick, injured, wounded or helpless.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Emergency Medical Services	3. NO. EM76-181 46-76-11-01	4. DATE 5-1-75
	5. DRAFTED BY C. K. Mutter, Acting Supervisor, EMS (Title and Agency)			
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)			

			FISCAL YEAR 1976				
			1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL
			July, Aug, Sept	Oct, Nov, Dec	Jan, Feb, Mar	Apr, May, June	
6a. EFFECTIVENESS See Effectiveness Supplement							
6b. OUTPUT		C Percent of people within 20 min. response time of EMS facilities					80%
		V Number of road miles which can be covered within 20 min. response time of EMS facilities					48,000
7. RESP.	8. STD.	9. TASKS & MILESTONES					
Local Political Subdivisions State Department of Health	311	1. EMS Advisory Councils	135	135	135	135	135
		2. EMS Facilities	412	415	418	421	421
		3. EMS Office Structure - salaries of director, supervisor, training officer field representatives, clerical staff and state advisory committee on EMS					
10. DESCRIPTION The emergency medical services goal is to reduce among the reported injured: (a) severity of injuries, (b) complications created by mishandling, (c) number of days out of work, school and/or society, (d) economic loss, (e) length of hospital stay, and (f) death or premanent disabling injuries. (1-3) See Block 9. (4) Funding requests for items in this task include but are not necessarily limited to the following: ambulances, cardiac/intensive care units, aspirators, jacks, defibrillators, warning PA systems, EMS base of operations, walkie-talkies, alerting units, and temporary system (5-7) See Block 9. By providing funds for items enumerated in task 4, it would help enable achievement of the EMS goal by:		11. COST BY TASK ($000s)					
		3. EMS Office Structure	38.15	38.15	38.15	38.15	152.6
		12. TOTAL COST ($000s)	1369.45	1014.06	457.95	399.4	3240.86
		LOCAL SHARE	811.25	1014.06	457.95	399.4	2682.66
		STATE SHARE	152.6				152.6
		FEDERAL SHARE	405.6				405.6
		TO LOCALITIES	405.6				405.6

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Emergency Medical Services	EM76-131 3. NO.46-76-11-02	4. DATE 5-1-75
	5. DRAFTED BY C. K. Mutter, Acting Supervisor, EMS (Title and Agency) APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	FISCAL YEAR 19 76		

			1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS							
6b. OUTPUT		C V					
7. RESP. EMS and Local Political Subdivisions	8. STD. 311	9. TASKS & MILESTONES 4. Procurement of equipment and communication aids	Purchase	Purchase	Purchase	Purchase	
10. DESCRIPTION establishing additional EMS agencies and medical facilities, continuing the upgrading of emergency care training, installing a long overdue state EMS communications system for all ambulances and hospitals, making available equipment to extricate entrapped persons and to read and monitor vital signs at the scene and enroute to the hospital, and providing trained Cardiac-EMTs with life sustaining medical equipment that the lay person could use. The state EMS also needs to: (1) provide better training, (2) provide radio communications for all emergency ambulances to any hospital providing a		11. COST BY TASK ($000s) 4. Equipment and Communications	1307.17	958.09	399.77	351.65	3016.68
		12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Emergency Medical Services	3. NO. EM76-181 46-76-11-03	4. DATE 5-1-75
	5. DRAFTED BY C. K. Mutter, Acting Supervisor, EMS (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C V					
7. RESP. EMS	8. STD. 311	9. TASKS & MILESTONES				
		5. Training				
		A. First Aid, Standard (Number certified)				
		1. EMS Personnel	300	400	200	300	1200
		2. Police	1000	1000	1000	1000	4000
		3. Fire	2250	2250	1250	2250	7000
		4. Industrial	2500	2500	2500	2500	10000
		5. General Public	500	500	500	500	2000
		6. Other - Schools	15000	15000	15000	15000	60000
		B. First Aid, Advanced (Number certified)					
		1. EMS Personnel	300	400	200	300	1200
		2. Police	250	250	500	500	1500
		3. Fire	1000	1000	1000	1000	4000
10. DESCRIPTION facility of prompt emergency care, (3) continue our training in the Community Colleges in order to provide college credits where desired, (4) provide to qualified hospitals and cardiac medical technicians telemetry capabilities to reduce deaths caused by or related to cardiac disorders, (5) establish a standard uniform reporting form and require statewide usage, (6) constantly evaluate the existing laws, rules, regulations and procedures governing ambulance and emergency care services and amend as necessary, (7) expand emergency medical services so that the distressed ill persom will receive as prompt and competent emergency medical care as		11. COST BY TASK ($000s)					
		5. Training - (Categories G & H)	16.43	10.12	16.18	5.75	48.48
		12. TOTAL COST ($000s)					
		LOCAL SHARE					
		STATE SHARE					
		FEDERAL SHARE					
		TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Emergency Medical Services	3. NO. EM76-181 46-76-II-04	4. DATE 5-1-75
	5. DRAFTED BY C. K. Mutter, Acting Supervisor, EMS (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C					
	V					
7. RESP.	8. STD.	9. TASKS & MILESTONES				
EMS	311	5. Training (Continued)				
		B. (Con't) 4. Industrial	500	500	500	500	2000
		5. General Public	500	500	500	500	2000
		6. Other - Schools	7500	10000	7500	5000	32000
		C. Emergency Medical Technicians					
		1. EMS Personnel certified	500	500	500	500	2000
		2. Police	25	25	25	25	100
		3. Fire	50	100	100	50	300
		4. Other	50	50	50	50	200
		D. Lay Instructors for EMT course EMS Personnel	100	100	50	50	300

10. DESCRIPTION those suffering from trauma on the highways. (8) implement a total comprehensive health care system for all people, (9) cooperate with the MAST program whenever requested, (10) maintain continued good mutual cooperation with all other state and federal agencies which seek an improved emergency care system, (11) continue the lay instructor training program whereby all individuals associated in our emergency medical service program will have the opportunity to attend, complete and be so certified as an 'emergency medical technician,' (12) encourage and assist in emergency care training for all public safety agencies (fire and

11. COST BY TASK ($000s)				
12. TOTAL COST ($000s)				
LOCAL SHARE				
STATE SHARE				
FEDERAL SHARE				
TO LOCALITIES				

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Emergency Medical Services	3. NO. EM 76-181 46-76-11-05	4. DATE 5-1-75
	5. DRAFTED BY C. K. Mutter, Acting Supervisor, EMS (Title and Agency) APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	FISCAL YEAR 19 76		

6a. EFFECTIVENESS			1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6b. OUTPUT		C V					
7. RESP.	8. STD.	9. TASKS & MILESTONES					
EMS	311	5. Training (Con't)					
		E. Cardiac - EMT	25	25	25	25	100
		F. Cardiopulmonary Resuscitation Course					
		1. EMS Personnel initial course	250	250	250	250	1000
		2. EMS Personnel, refresher course	500	250	500	250	1500
		G. Community Colleges					
		1. EMT-A Training $5.00 (per)	250	0	500	0	750
		2. Lay Instructor Training	100	100	50	50	300

10. DESCRIPTION police), (13) continue the hospital service sign program, (14) encourage first aid training as a requirement for all high school students, (15) develop the data concept and provide an up-to-date public information service program.

In April of 1974, the General Assembly of Virginia took the first major step necessary for us to accomplish many of the above mentioned tasks by expanding the State Board of Health's authority and responsibilities to provide for a comprehensive Emergency Medical Care System. It also expanded the Advisory Committee on Emergency Medical Services from nine to twenty-six members. (See attachment A)

11. COST BY TASK ($000s)

12. TOTAL COST ($000s)
LOCAL SHARE
STATE SHARE
FEDERAL SHARE
TO LOCALITIES

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Emergency Medical Services	EM76-181 3. NO. 46-76-11-06	4. DATE 5-1-75
	5. DRAFTED BY C. K Mutter, Acting Supervisor, EMS (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar,	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C					
	V					
7. RESP. EMS	8. STD. 311	9. TASKS & MILESTONES				
		5. Training (Con't)				
		H. Procurement of Training Material				
		1. Manuals, related text, etc. $ 11.50	750	500	1000	500	2750
		2. Resuci. Anne for CPR 322.00	15	10	5	0	30
		3. Infusion Training Kits 115.00	15	10	5	0	30
		6. Other					
		1. Date reporting system	Study	Study	Study	Study	
		2. Evaluation, State EMS Program	Implemented	Report	Report	Report	
		3. Comprehensive State EMS Plan Revision	Implemented	Report	Report	Report	
		7. Uniform Reporting Forms					
		Provision of Uniform Reports ($77.05 per M) 300 M	100M	100M	50M	50M	300M
10. DESCRIPTION		11. COST BY TASK ($000s)					
		7. Uniform Reporting Forms	7.7	7.7	3.85	3.85	23.1
		12. TOTAL COST ($000s)					
		LOCAL SHARE					
		STATE SHARE					
		FEDERAL SHARE					
		TO LOCALITIES					

EFFECTIVENESS SUPPLEMENT
TO THE SUBELEMENT

Title and No. EM76-181 Emergency Medical 46-76-11-07 Services	Date 5-1-75	19 70 FY-2	19 71 FY-1	Fiscal Year 72 1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	19 73 FY+1	19 74 FY+2
6a. EFFECTIVENESS										
Total number of registered emergency medical services ambulances 1.		865	837					889	931	972
Average response time Urban Rural 2.		10-15 min. 30-50 "	10-15 min. 30-50 "					10-15 min. 30-50 "	10-15 min. 30-50 "	10-15 m 30-50 "
Number of registered EMS personnel 3.		9,831	9,432					9,704	10,550	11,692
Number of EMT's trained 4.		1972 597	1973 3378					1974 4,484	1975 (No. trained 4,829 of 2/26/75)	
Ambulance to people ratio Urban Rural 5.					For 1974 1 ambulance to every 13,696 persons 1 ambulance to every 2,490 persons					
In 1974 there were 73 trained cardiac Emergency Medcial Technicians, operating throughout the state. In 1974 there were 175 Lay Instructors, for EMTs, teaching in Virginia. 6.										

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. EM76-181 Emergency Medical Services 46-76-11-08	Date 5-1-75	19 71 CY - 2	19 72 CY - 1	Calendar Year 1973 1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	19___ CY + 1	19___ CY + 2
6a. EFFECTIVENESS										
* Summary Data for State Rescue Squads										
No. of Calls								160,239		
No. Miles								4,596,919		
No. Hours								842,181		
1. No. Vehicles								515		
No. Members								5,385		
Avg. miles/call								28		
Avg. calls/squad								989		
2. Avg. Vehicles/squad								2		
Avg. Hrs./squad								5,199		
Avg. Miles/squad								28,387		
3.										
No. squads which answered over 4,000 calls								2		
No. squads which answered over 3,000 calls								11		
No. squads which answered over 2,000 calls								12		
4.										
No. squads which answered over 1,000 calls								24		
No. squads which answered less than 1,000 calls								113		
No. squads which answered less than 100 calls								5		
5.										
* This information is based on Senate Document No. 19 in re Emergency Medical Services. 162 of the state's 167 squads participated in the survey.										
6.										

ATTACHMENT A

CHAPTER 446

An Act to amend the Code of Virginia by adding a section numbered 32-310.1:1, providing the State Board of Health with the authority and responsibility for Statewide planning and development of a comprehensive emergency medical care system; and to further amend and reenact § 32-310.2 of the Code of Virginia, relating to the Advisory Committee on Emergency Medical Services.

[S 467]

Approved APR 5 1974

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia is amended by adding a section numbered 32-310.1:1 and to further amend and reenact § 32-310.2 of the Code of Virginia as follows:

§ 32-310.1:1. The State Board of Health shall have the authority and shall be responsible for Statewide planning and development of a comprehensive, coordinated, emergency medical care system in the Commonwealth, with coordination of planning between State, regional, and community services. The objectives of such planning shall include, but not be limited to, the following:

(1) To establish a comprehensive, Statewide emergency medical care system which will incorporate facilities, transportation, manpower, communications, and other components as integral parts of a unified system that will serve to improve the delivery of emergency medical services and thereby decrease morbidity, hospitalization, disability, and mortality; and

(2) To reduce the time period between the identification of an acutely ill or injured patient and the definitive treatment and to increase the accessibility of high quality emergency medical services for all citizens of Virginia; and

(3) To stimulate the development of regional and community emergency medical service committees to help facilitate coordinated planning and comprehensive emergency medical services on the local level; and

(4) To promote continuing improvement in system components including ground and air transportation, communications, hospital emergency departments and other emergency medical care facilities, consumer health information and education, and health manpower and manpower training; and

(5) To improve the quality of emergency medical care delivered on site, in transit, in hospital emergency departments and within the hospital environment; and

(6) To work with medical societies, hospitals, and other public and private agencies to develop approaches whereby the many persons who are presently using the existing emergency department for routine, nonurgent, primary medical care will be served more appropriately and economically; and

(7) To conduct, promote, and encourage programs of education and training designed to upgrade the knowledge and skills of health manpower involved in emergency medical services; and

(8) To provide review and consultation for agencies and organizations that wish to make application to governmental or other sources for grants or other funding to support emergency medical services programs.

§ 32-310.2. Advisory Committee on Emergency Medical Services.—For the purpose of assisting the State Board of Health in developing standards for use in the administration of this chapter, there is hereby created the Advisory Committee on Emergency Medical Services. Such committee shall be composed of nine *not less than twenty-one nor more than twenty-six* members appointed by the Governor,

PEDESTRIAN SAFETY

On the national level, over 157,000 people were injured in vehicle-pedestrian accidents in 1973. Virginia in 1973 experienced 2,379 vehicle-pedestrian traffic crashes in which 197 pedestrians were killed. Nearly every pedestrian who is struck sustains an injury. These facts make it imperative that the driver maintain the greatest vigilance to protect pedestrians.

On a national level, far more pedestrians are injured in urban areas than in rural areas, probably because of the much greater population density in the urban areas. But, a pedestrian struck in the rural area is more likely to be killed because of the generally greater speeds involved.

The goal of the Pedestrian Safety Program in Virginia is to reduce the number of vehicle-pedestrian accidents. The reduction of rural pedestrian deaths is the first priority in this problem area. It is felt the major thrust of the program should be educationally and informationally oriented so as to ease the formidable task of protecting the pedestrian, a duty relegated for the most part solely to the driver. Though the education of pedestrians has advanced, efforts to change maladaptive behavior patterns have been less than successful.

The informational campaign in Virginia will be keynoted by a stepped-up emphasis on informing the public as to the scope of the problems of a pedestrian in an automobile-oriented society and exactly what the individual can do to alleviate these problems. This program is being implemented by widespread dissemination of advertising material and talks given by highway safety personnel to local citizen groups. The program also includes demonstrations, news conferences, news stories and public service announcements on radio and television.

The Division's program is conducted in conjunction with the AAA. Awards are given annually to localities which have the best pedestrian safety programs and the lowest number of pedestrian fatalities by the AAA and HSD. It seems clear that the success of these efforts will depend more on the individual initiative of persons at the grass roots level than it will on the aggregate total allotment of funds.

Organizationally similar to the information dissemination program is the educational campaign designed to improve pedestrian safety. The subprogram could be characterized as merely different in degree from the information program. Basically, it seeks to inform the public of the dangers to pedestrians from vehicle traffic, but focuses on those who are already in an educational environment. It also attempts to focus more directly on the task; hopefully it can determine through testing exactly how much the audience learns. Elementary school children throughout the state will be treated to safety magic shows which graphically illustrate what can happen to a pedestrian when he tangles with a moving automobile. It is felt that impressing upon the younger age groups the precautions needed to be taken by a pedestrian will decrease accident involvement in future years. The behavior patterns of youths are also more easily modified by psychological training than are rigid habits of middle-aged citizens. Pedestrian safety films, to be distributed to schools and civic organizations throughout the state, are designed to accomplish the same end as magic shows but to an older audience. These films will probably be most extensively used in high school driver education classes.

In view of the increase in pedestrian traffic as a result of the recurring energy crisis, it should be pointed out that the Highway Safety Division sponsored a study entitled "Implications of the Energy Crisis on Virginia's Highway Safety Program" by Alan M. Voorhees and Associates (AMV) of McLean, Virginia. The study noted the following:

> Available information indicates that between 1970 and 1972, the annual number of pedestrians involved in motor vehicle accidents decreased from 2,251 to 2,149. The number of pedestrians injured also decreased from 2,367 to 2,272. Those pedestrians fatally injured each year, however, increased from 215 to 224.
>
> While the energy crisis obviously provoked increased motorcycle, bicycle and pedestrian activity, the change in accident trends (particularly for bicycles and motorcycles, which have been increasing) could well have increased significantly as a result of the energy crisis.

A part of the Commonwealth's pedestrian safety program utilizes a series of teaching devices designed to decrease accidents between vehicles and bicycles. Experimental studies showing the probability of accidents between automobiles and bicycles that cause injury have been rare. The problem is complicated by the lack of a rational, nationally accepted code that regulates the operation of bicycles. But it seems clear that a significant percentage of the population has at one time or another been involved in an automobile-bicycle collision. The Department of the Interior has documented an increased interest in bicycling which is expected to continue over the coming decade. It has concluded that bicycling will enjoy a 32% growth rate from 1965 to 1980 and that bicycling has shown the greatest increase of all outdoor sports since 1965.

The anticipated major growth in the use of bicycles warrants an added administrative effort toward improving bicycle safety.

The aforementioned study by Alan M. Voorhees & Associates also dealt with the bicycle issue as it relates to highway safety and the energy crisis. The ensuing summary comments were offered in regards to this particular matter:

> Between 1969 and 1972, motor vehicle/bicycle accidents increased 28 percent (from 654 in 1969 to 840 in 1972). Fatalities remained fairly stable. During the energy crisis there was widespread interest in bicycles and new issues continue to arise. For example (1) bicycles with a wheel size less than 20 inches have been classified as pedestrians in accident investigations up to 1973; (2) if the property damage limit is raised from $100 to $250, many bicycle accidents would never be reported; (3) bicycle/object and bicycle/bicycle accidents, even with an injury, are not listed in motor vehicle accident statistic; and (4) bicyclists do not have to report accidents. More bicycle information can be found in the Virginia Department of Highways and Transportation's feasibility report for establishing a system of bicycle trails.

Virginia will seek to inform that section of the public most likely to be riding bicycles (school age children between the ages of 6 and 14) of the dangers inherent in operating slow moving, unprotected bicycles in an automobile-oriented transportation system. This will be accomplished by animated talking bicycles calculated to be both entertaining and educational to the children. It is hoped that redirecting behavior at such an early age will result in safety gains for years to come. The state will also purchase bicycle testing machines which determine whether a bicycle has any safety hazards such as faulty braking systems, unbalanced wheels or loose construction. After training the bicycle rider to operate his bicycle

in a safe manner, it is imperative to remove physical impediments (such as faulty, hazardous bicycles) in order to achieve the goal of accident-free, enjoyable bicycle riding. Included within the bicycle safety programs sponsored by the HSD is the Danny and the Demon Cycle exhibit and the periodical published in comic-book form, entitled "Danny and the Demon Cycle," which points out safety principles that should be followed when bicycle riding.

The long-standing program to structure traffic flow and pedestrian movements (particularly as related to elementary school children) will be continued at an increased participatory level. The school safety guards employed by the local police direct traffic flow during school ingress and egress periods while the school patrols (composed of upper elementary school students) control student pedestrians approaching and leaving the school area.

A statewide program to improve the visibility of pedestrians to motorists driving at night is continuing throughout the state. The program utilizes reflective stick-on circles called Hot Dots. These dots are attached to books or clothing by pedestrians to increase their visibility to passing drivers and can be purchased on the commercial market.

Bicycle and Pedestrian Safety Education

All public schools in Virginia have a definite responsibility for including safety education in the school curriculum. This responsibility is established through school law 22-235, which is stated below:

> "In one or more of the elementrary grades or in one or more of the high school grades of every public school there shall be provided a course of study including elementary training in accident

prevention, in proper conduct on streets and highways in the operation of motor vehicles as required by the traffic law of this state, and in ways and means of preventing loss of lives and damage to property through preventable fires. Such course shall be required of every pupil completing the course of study in any such school."

For many years the Department of Education has considered safety education as an important part of its health education program. The curriculum guides, Health Education, Grades K-7 and Health Education, Grades 7-12, present a comprehensive health education program which focuses attention on current health problems, one of which is accident prevention. The guides have as one of their general aims the following:

"To help the pupil understand and practice habits of safe living and develop the ability to provide first aid when necessary."

Bicycle and pedestrian safety have been interwoven into the safety units throughout the guides. The content is "designed to develop those skills and knowledge necessary to safe performance as a pedestrian." It also informs "the students about the dangers involved in bicycling and provides them with the information necessary to safe operation as a bicyclist in the highway environment." The specific content relating directly to bicycle and pedestrian safety count in the guides can be found in Appendix C of a document entitled "State Comprehensive Highway Safety Plan Revisions," by Clinton H. Simpson, Jr., of the Virginia Highway and Transportation Research Council.

All of the state adopted elementary basic health textbooks contain content related directly to both bicycle and pedestrian safety. A list of the books and page references to pedestrian safety and bicycle safety is also included in the aforementioned.

Bicycle and pedestrian safety are covered also in the publication, Planning Together For Health. A copy of the content found in this publication can also be found in the Appendix C mentioned above.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Pedestrian Safety (NHTSA)	3. NO. PS76-161 46-76-14-01	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr., Res. Anal., VH&TRC (Title and Agency)	FISCAL YEAR 1976		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS See Effectiveness Supplement						
6b. OUTPUT	C Percent of total traffic deaths involving pedestrians V Number of pedestrian deaths (1973)	(1973)				16.1% 197
7. RESP.	8. STD.	9. TASKS & MILESTONES					
Highway Safety Division Driver Education Services	314	1. Public Information Program — encompasses the Division's bicycle safety program 2. Bicycle and Pedestrian Safety Education Program	Continue Continue	Continue Continue	Continue Continue	Continue Continue	
10. DESCRIPTION The long term goal of Virginia's pedestrian safety program is to reduce the number of vehicle-pedestrian related accidents. (1) Funds requested for this task will allow the Division to continue an effective statewide pedestrian safety program not only to acquaint the residents of the state with the problems related to this highway safety area, but to also provide a positive program for continued improvement in pedestrian and bicycle safety. (2) Actual classroom instruction of bicycle & pedestrian safety is interwoven with primary and secondary schools health curriculum. (3-4) See Block 9.		11. COST BY TASK ($000s) 1. Public Information Program	7.5	7.5	7.5	7.5	30.
		12. TOTAL COST ($000s)	67.5	67.5	67.5	67.5	270.
		LOCAL SHARE	30.0	30.0	30.0	30.0	120.
		STATE SHARE	3.75	3.75	3.75	3.75	15.
		FEDERAL SHARE	33.75	33.75	33.75	33.75	135.
		TO LOCALITIES	33.75	33.75	33.75	33.75	135.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Pedestrian Safety (NHTSA)	3. NO. PS76-161 46-76-14-02	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr.; Res. Anal., VH&TRC (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C V					
7. RESP. Local Political Subdivisions	8. STD. 314	9. TASKS & MILESTONES				
		3. Personnel - safety directors, safety officers, crossing guards and supervisors	Conduct	Conduct	Conduct	Conduct	
		4. Bicycle inspection, registration and safety courses					
10. DESCRIPTION		11. COST BY TASK ($000s)					
		3. Personnel	50.	50.	50.	50	200.
		4. Bicycle Safety Courses	10.	10.	10.	10.	40.
		12. TOTAL COST ($000s)					
		LOCAL SHARE					
		STATE SHARE					
		FEDERAL SHARE					
		TO LOCALITIES					

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. PS76-161 Pedestrian Safety 46-76-14-03	Date 5-1-75	19 69 CY - 2	19 70 CY - 1	Calendar Year 1971 1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	19 72 CY - 1	19 73 CY + 2
6a. EFFECTIVENESS										
Number of pedestrian-vehicle related injuries										
Urban		1,751	1,833					1,733	1,715	1,727
Rural		749	776					754	749	722
1.										
Number of pedestrian-vehicle related deaths										
Urban		94	98					92	99	80
Rural		147	142					132	150	117
2.										
Number of pedestrian-vehicle related deaths among: A. Individuals (0-4 Years)		15	20					8	13	7
(5-14 Years)		34	52					46	48	36
(15-64 Years)		138	127					121	133	116
3. (65 + Years)		53	41					46	55	37
B. Drinking Pedestrians										
Urban		14	15					15	17	5
Rural		40	33					33	39	31
4.										
Bicylists injured — Age										
1. 0-4 Years		10	8					7	8	16
2. 5-9- Years		240	246					227	201	221
3 10-14 Years		286	309					292	329	440
4. 15-19 Years		61	71					119	140	206
5. 20-24 Years		8	8					28	38	78
6. 25-34 Years		5	11					14	24	41
7. 35 + Years		35	43					40	33	30
5.										

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EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. PS76-161 Pedestrian Safety 46-76-14-04	Date 5-1-75	19 69	1970	Calendar Year 71					19 72	1973
		CY - 2	CY - 1	1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	CY + 1	CY + 2
6a. EFFECTIVENESS										
Bicyclists killed										
Age: 1. 0-4 Years		0	0					0	0	0
2. 5-9- Years		0	4					1	0	3
3. 10-14 Years		5	6					3	5	14
4. 15-19 Years		2	1					1	3	1
5. 20-24 Years		0	0					1	0	1
6. 25-34 Years		0	3					0	0	2
7. 35 + Years		1	2					2	2	1
6. Nighttime pedestrian deaths		88	92					83	89	69
Daytime pedestrian deaths		153	148					141	160	128
7. Number of pedestrian - vehicle related injuries among:										
A. Individuals (0-4 Years)		234	257					239	218	206
(5-14 Years)		984	1,026					918	987	970
(15-64 Years)		1,061	1,085					1,132	1,019	1,052
(65 + Years)		128	146					157	144	144
8. Number of vehicle-pedestrian traffic crashes		2,383	2,466					2,410	2,377	2,379
For Pedestrian Crashes Only										
Percent of total crashes where pedestrian violated law		69.9%	70.0%					70.9%	72.4%	64.1%
9 Percent of fatal crashes where pedestrian violated law		55.4%	53.0%					64.0%	52.2%	52.3%

POLICE TRAFFIC SERVICES

State Police

Police agencies in the state of Virginia are divided into two groupings: local law enforcement agencies of the counties, cities, and towns, and state law enforcement agencies, the largest of which is the State Police Department.

In the field of highway safety, the ultimate goal of the Virginia State Police Department is the reduction of motor vehicle crashes involving deaths, personal injuries and property damage. To accomplish this, many services are performed. These services include, but are not limited to those discussed below.

Well-rounded Traffic Law Enforcement

Members of the Virginia Department of State Police reported over 200,000 arrests which cleared the courts during the 1973 calendar year. Arrests for offenses involving the highway totaled over 175,000.

The Department also actively enforces the pedestrian laws. More than 5,500 arrests are made annually for these violations, which include hitchhiking and other related pedestrian offenses.

Investigation of Accidents

Troopers investigate more than 43,000 accidents annually, In addition to interviewing witnesses and gathering factual information at the scene, arrests are made for violations of the law which contribute to accidents.

Patrol of Highways

Troopers operating State Police vehicles travel almost 31 million miles annually. During this patrol more than 2,000 abandoned vehicles are discovered and removed from the highways. The almost 165,000 motorists assisted are those who are experiencing mechanical difficulty, seeking directions, etc. More than 750 stolen vehicles are recovered annually. During these patrols, highway and traffic conditions are scrutinized for adverse circumstances.

The police traffic services of the State Police have gradually been expanded, improved, and updated. The Department is constantly re-evaluating and seeking improvements which will make the greatest contribution toward highway safety as demonstrated in the following description of the programs conducted by Virginia's Department of State Police.

Police Training

The Department training greatly exceeds the recommendations of the Highway Safety Program Manual.

The basic recruit training consists of approxmately 500 hours of on-the-job training. (During this time the conditional employee performs various duties under the direction of and in the presence of an experienced police officer.) Once this training is completed satisfactorily the trainee must undergo 958 hours of formal instruction. One hundred and sixty subjects are taught, with emphasis on the highway transportation

system, state motor vehicle laws, relationship of violations and accidents, patrol procedures, laws of evidence, traffic direction and control, report writing, accident investigation, police-court relations, police driver training, and first aid.

Formal in-service training is conducted in the classroom for 36 hours annually, with supervisors receiving an additional 24 hours. Other special training is conducted as the need arises. The subjects covered include each of those recommended in Volume 15 of the Highway Safety Program Manual. Representatives also periodically attend the Northwestern University Traffic Institute, the F.B.I. National Academy and other schools.

Traffic Law Enforcement

The State Police are assigned to the counties according to the need, based on traffic volume, accidents and miles of highways. Individual assignments and patrol are based on accident frequency, violations, radar surveys, traffic, etc. Studies are conducted to determine if arrests are occurring in the same vicinity as accidents.

Special studies regarding wrong-way driving are often indicative of areas where problems exist. Accident prone locations are given special attention.

Traffic Direction and Control

Troopers are trained to use uniform signals when directing traffic at accident scenes and other congested areas.

Accident Investigation and Reporting

A written policy has been established by the Department regarding the response to accidents and their investigation. The investigations closely parallel the Highway Safety Program Manual.

Hazardous Conditions - Crash Prone Locations

The State Police report hazardous conditions which are observed or come to their attention. These reports cover defective highways, signing, lighting, and incompetent drivers.

In addition to the routine analysis of Virginia's 1972 motor vehicle crash experience to provide meaningful information for enforcement, engineering and educational purposes, the logging operation of the Accident Records Section identified over 2,500 crash-prone locations. These locations were brought to the attention of enforcement and engineering personnel for further analysis and corrective action as the existing conditions warranted in furtherance of the cooperative efforts with the Department of Highways and Transportation to eliminate highway hazards and correct unsafe driver behavior.

Additional Police Traffic Services

The Department cooperates with other agencies and furnishes assistance to police agencies requesting and needing aid. To supplement traditional methods in fulfilling the Department's primary mission of reducing death, injury and property damage on Virginia highways, the Department of State Police acquired two helicopters. The helicopters enable State Police to further reduce reaction time in responding to accident

calls and also provides a method of response for calls from inaccessible areas. The helicopters supplement existing methods of monitoring traffic flow and will aid in determining traffic volume. Fixed-wing aircraft are also utilized in performing these functions.

Of immediate concern to the Department is the need for additional manpower. More troopers are required to enable the State Police to continue to provide traffic services which will result in a reduction of motor vehicle crashes. It is noted in the following discussion that according to arrest statistics over 97% of State Police activity is directly related to the highways. An increase in manpower is necessary for State Police to continue its vital function of highway patrol.

It should also be noted that as in all other branches of law enforcement, expenditures of the Department of State Police are expected to rise due to the anticipated increase in the number of rural highways, motor vehicle registrations, number of motor vehicle crashes, extension of mileage of interstate highway systems, and increased crime rate both statewide and in rural Virginia. According to projections of this Department, the Department of Highways and Transportation and the Division of Motor Vehicles, rural miles travelled, motor vehicle registrations, and motor vehicle crashes should increase annually. These increases will demand more efficient services from this Department. Such services, of course, would necessitate a greater expenditure of funds.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Police Traffic Services (State)	3. NO. PT76-471 46-76-15-01	4. DATE 5-1-75
	5. DRAFTED BY Capt. A. Holcomb, Property & Finance Officer, State Police (Title and Agency)	FISCAL YEAR 1976		
	APPROVED BY Major C. M. Boldin, Field Supervisor, State Police (Title and Agency)			

7. RESP.	8. STD.	9. TASKS & MILESTONES	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS		Miles of highway per trooper					58.2
6b. OUTPUT		C Percent of troopers involved in patrol activities					100%
		V Miles of highway under State Police jurisdiction					52,000
State Police	315	1. Personnel					
		A. Field Supervisor	1	1	1	1	1
		B. Captains	6	6	6	6	6
		C. Lieutenants	12	12	12	12	12
		D. First Sergeants	6	6	6	6	6
		E. Sergeants	49	49	49	49	49
		F. Troopers	894	894	894	894	894
		2. Equipment					
		A. Helicopters (Operating Cost)					
		3. Nine month training course dealing with accident investigation and reporting. Course will be conducted at Northwestern University. (No. trained)	2	2	2	2	2
		4. Purchase 100 traffic radar systems at $1,500 each		100			100

10. DESCRIPTION

(1) Virginia's Department of State Police provides many services which are designed to reduce the number of traffic crashes, fatalities, personal injury and property damage. Services include: (a) directing and controlling of traffic, (b) surveillance of highways and traffic for adverse conditions, (c) well-rounded enforcement of traffic laws, (d) providing of emergency assistance to the motoring public and (e) investigation of motor vehicle crashes. The objective is to increase the strength of the Department in order to adequately carry out the aforementioned services. State troopers are assigned to

11. COST BY TASK ($000s)

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL
1. Personnel	1565.5	4170.2	3715.6	3715.6	16166.9
2. Equipment	10.2	7.2	14.2	10.2	71.8
3. Training	14.1	14.	14.		42.1
4. Radar Systems		150.			150.
12. TOTAL COST ($000s)	1619.8	4341.4	3743.8	3725.8	16430.8
LOCAL SHARE					
STATE SHARE	1612.75	4259.4	3736.8	3725.8	16334.75
FEDERAL SHARE	7.05	82.	7.		96.05
TO LOCALITIES					

counties throughout the Commonwealth according to the following factors: (a) traffic volume, (b) miles of highway, and (c) motor vehicle crashes. Increases in these factors dictate a need for additional manpower.

(2) The use of two helicopters to supplement other methods and facilities of law enforcement materially aids in fulfilling the Department's primary mission of reducing death, injury, and property damage on Virginia's highways.

According to arrest statistics, approximately 97% of the Department's activity is directly related to the highways.

(3) While we as an agency make every effort to upgrade all of our members through our own schools, we find it desirable and in good practice to send selected members to schools outside our department for purposes of new ideas, techniques and proven methods of supervision and training.

(4) This equipment is a vast improvement over stationary radar equipment in that speed of approaching vehicles can be checked from a moving patrol car. The new equipment will enable the troopers to maintain regular patrol and at the same time to constantly monitor approaching traffic for speeding violations in intensifying enforcement of the 55 mph speed limit. Since this is primarily a one-man operation it will also allow better utilization of personnel.

POLICE TRAFFIC SERVICES

Local

The goal of the police traffic services program in Virginia is to reduce the number of traffic crashes, deaths, injuries and property damage caused by those individuals violating the traffic laws. A major obstacle faced by Virginia localities in attempting to achieve this goal is the lack of sufficient enforcement at high accident locations and the lack of training in handling all aspects of enforcement.

In striving to eliminate the above referenced problem area and accomplish the aforementioned objective, the cities and towns throughout Virginia are conducting the following programs:

(1) A minimum of at least 200 hours of training for all new recruits;

(2) refresher training and in-service training courses are made available to officers performing traffic duties;

(3) additional training for supervisory personnel in the fundamentals of organization, administration and in the use of records;

(4) the development of traffic sections within the police departments,

(5) traffic records systems; and

(6) additional training in all phases of traffic investigation.

To further accomplish this goal, many of the law enforcement agencies in Virginia are in the process of developing a selective traffic enforcement program which provides for the assignment of law enforcement officers to traffic functions by time, location, and on the basis of demonstrated need,

determined by the application of the following factors: (1) traffic volume, (2) crash experience, (3) traffic violations, (4) alcohol and other drug usage in specific geographic areas. This selective utilization of manpower is one of the best usages of police resources and should have a substantial impact on traffic crash reduction. Virginia spent federal funds totaling $210,000 during FY 1973 on the various aspects of selective traffic enforcement program. In fiscal year 1975 the "Virginia Selective Traffic Law Enforcement Manual" was prepared by the Highway Safety Training Center at Virginia Commonwealth University. Funds were provided by contract with the Highway Safety Division of Virginia.

This manual is designed to provide law enforcement personnel in the State of Virginia with a practical guide to the implementation of the concept known as Selective Traffic Law Enforcement.

Additionally, the police departments plan to hire additional personnel, purchase new equipment and establish better communications systems. The Highway Safety Division will provide funding for additional police equipment, communications, personnel and training.

The law enforcement officer's training standards commission is developing a visual file that will contain information pertaining to the training of all police officers in the state and the amount and type of training they have had. This system will be available for use in the evaluation of the police traffic services program.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2 TITLE Police Traffic Services (Local)	3. NO. PT76-472 46-76-15-01	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr., Res. Anal., VJI&TRC (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL
		July, Aug, Sept	Oct, Nov, Dec	Jan, Feb, Mar	Apr, May, June	
6a. EFFECTIVENESS See Effectiveness Supplement						
6b. OUTPUT	C Percent of the crashes where a violation was committed	(1973)				83.5%
	V Number of contributory violations (1973)					142,964
7. RESP. Local Political Subdivisions	8. STD. 315	9. TASKS & MILESTONES				
		1. Personnel (Ongoing Program)	Continue	Continue	Continue	Continue	
		2. Procure Equipment and Communication Aids	Bids	Purchase			
		3. Selective Traffic Enforcement Programs (Cost shown in Standard 304-Highway Safety Education)	Conduct	Conduct	Conduct	Conduct	
10. DESCRIPTION The objective of the police traffic services program in Virginia is to reduce the number of traffic crashes, including fatalities, personal injuries and property damage, caused by those individuals violating traffic laws. (1) Expenditures subsumed in this task are for policemen (cities and counties), additional and replacement officers as well as personnel for Traffic Divisions (AIU). (2) Items requested for funding include but are not limited to the following: radar units, sirens, cameras, measuring wheels, tape measures, traffic cones and barriers, police communicating consoles, two-way radios, console equipment, tape decks, T.V. monitors, and walkie-talkies. (3) STEP's assign officers to traffic functions on the basis of demonstrated need.		11. COST BY TASK ($000s)					
		1. Personnel	5500.	5500.	5500.	5500.	22000.
		2. Equipment		1310.			1310.
		12. TOTAL COST ($000s)	5500.	6810.	5500.	5500.	23310.
		LOCAL SHARE	5490.	6600.	5490.	5490.	23070.
		STATE SHARE					
		FEDERAL SHARE	10.	210.	10.	10.	240.
		TO LOCALITIES	10.	210.	10.	10.	240.

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. PT76-472 Police Traffic 46-76-15-02 Services	Date 5-1-75	19 69	19 70	Calendar Year 1971					19 72	19 73
		CY - 2	CY - 1	1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	CY + 1	CY + 2
6a. EFFECTIVENESS										
Total Violations										
(1) Total Crashes										
A. Urban		65,935	67,189					70,277	75,427	75,338
B. Rurarl		57,667	58,999					62,282	67,009	67,626
1.										
(2) Total Crashes										
A. Urban		200	240					229	225	214
B. Rural		795	744					736	715	744
2.										
(3) Personal Injury Crashes										
A. Urban		13,264	12,987					13,581	14,361	14,217
B. Rural		16,055	15,950					16,519	17,427	17,526
3.										
(4) Property Damage Crashes										
A. Urban		52,451	53,962					56,517	60,841	60,907
B. Rural		40,817	42,305					45,027	48,867	49,356
4.										
Speed Violations										
(1) Total Crashes										
A. Urban		5,514	5,494					5,641	5,681	5,606
B. Rural		12,421	12,385					12,894	13,406	13,349
5.										
(2) Fatal Crashes										
A. Urban		102	115					96	89	96
B. Rural		410	374					369	361	376
6.										

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. PT76-472 Police Traffic 46-76-14-03 Services	Date 5-1-75	19 69	19 70	Calendar Year 1971					19 72	19 73
		CY - 2	Cy - 2	1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	CY + 1	CY + 2
6a. EFFECTIVENESS										
Violations by Pedestrians										
A. Total Crashes		1,711	1,780					1,723	2,018	1,892
B. Fatal Crashes		123	114					128	119	114
7.										
Number of road miles patrolled by State Police (Estimations)		FY 74 48,647	FY 75 50,113					FY 76 52,000	FY 77 53,249	FY 78 54,691
8.										
* Estimated number of cities and counties which have a selective enforcement system		19	20					24	32	39
9.										
Number of troopers		870	944					894 (Projections)	932	985
10.										
Miles of highway per trooper (estimations)		55.91	53.08					58.16	57.13	55.52
11.										
Upon implementation of Traffic Records System, the number of high accident locations by locality and road system will be ascertainable		* More accurate and detailed information pertaining to Selective Traffic Enforcement systems is available from the Department of Administration of Justice and Public Safety at VCU.								
12.										

DEBRIS, HAZARD CONTROL AND CLEANUP

Local political subdivisions, in cooperation with the Commonwealth, are continuing to develop programs which provide for the rapid, orderly, and safe removal from the roadway of wreckage, spillage and debris resulting from motor vehicle crashes. Rapid cleanup should reduce the likelihood of secondary and chain-reaction collisions and conditions which are hazardous to the public health and safety. A study was conducted by Wilbur Smith and Associates which deals with Virginia's debris, hazard control and cleanup program. The study resulted in the creation of a manual which recommends procedures and guidelines for restoring an accident scene to its original condition. It also identifies the important state government resources and contacts which may be used for assisting in site restoring activities.

This procedure manual is indexed, categorized, and designed for use by local and state officials. All known resources and capabilities for restoring the accident sites to safe conditions are listed with administrative officials who need to be notified for site restoration.

An important result of the study is the familiarization of each governmental agency and contributory group with its responsibility in the area of debris, hazard control and cleanup. Hopefully, this manual and follow-up meetings between certain local and state agencies will assure a more thorough understanding by public officials of the importance of debris control and cleanup and will ensure a uniform and effective statewide program in this standard area. This operational procedures manual provides for: (a) Enabling rescue and salvage equipment personnel to get to the scene of accidents rapidly and to operate effectively upon arrival;

(b) extricating trapped persons from wreckage with reasonable care; (c) warning approaching drivers and detouring them, with reasonable care, past hazardous wreckage or spillage; (d) safe handling of spillage or potential spillage; and (e) removing wreckage or spillage from roadways so as to facilitate the resumption of safe, orderly traffic flow.

In short, efforts have been made to ensure a uniform and effective statewide program of debris hazard control and cleanup.

At present, wrecker services in most cities and counties throughout the state are required to clean up all accident sites. The Virginia Department of Highways and Transportation also has available special crews for debris cleanup in emergency situations as well as continuous cleanup of dead animals and trash from the highways. In addition, regional training courses are planned for the upcoming fiscal year. The purpose of these meetings would be to train appropriate local officials in the handling and disposition of hazardous materials as well as encouraging a uniform procedure for accident and disaster cleanup.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2 TITLE Debris, Hazard Control and Cleanup	3. NO. DC76-281 46-76-16-01	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr., Res. Anal., VH&TRC (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar,	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS Crashes involving previous crash debris						110
6b. OUTPUT	C Percent of crash sites cleaned of debris within 20 minutes					88%
	V Number of crash sites cleaned of debris within 20 minutes		(Projections)			140,100
7. RESP. / 8. STD.	9. TASKS & MILESTONES					
HSD 316	1. Uniform Accident Cleanup Procedures Manual	Review	Update	Publish	Distribute	
	A. Disaster Operations Manual (Funded in FY 74)	Publish	Publish	Distribute	Distribute	
	2. Training for cleanup personnel on accident cleanup and disaster operations manuals (No. trained)	60	60	60	60	240
Local Political Subdivison 316	3. Procure Equipment and Communication Aids	Bids	Purchase			
10. DESCRIPTION Each year in Virginia there are over 95 crashes involving previous crash debris. With the number of car registrations and licensed drivers increasing this figure could also increase. Virginia's objective in this standard area is to diminish the number of traffic crashes, fatalities, personal injuries and property damage which are attributable to these types of conditions by providing for a rapid, orderly and safe removal from the roadway of wreckage, spillage and debris from previous motor vehicle crashes. (1) In order to achieve these goals, a study was conducted which reviewed Virginia's debris, hazard control and	11. COST BY TASK ($000s)					
	2. Training	3.75	3.75	3.75	3.75	15.
	3. Equipment and Communications		225.			225.
	12. TOTAL COST ($000s)	3.75	228.75	3.75	3.75	240.
	LOCAL SHARE		170.0			170.
	STATE SHARE					
	FEDERAL SHARE	3.75	58.75	3.75	3.75	70.
	TO LOCALITIE	3.75	58.75	3.75	3.75	70.

cleanup program. As a result of the study, a manual was published and distributed to all political subdivisions explaining proper cleanup techniques. In the upcoming fiscal year, this document will be reviewed, revised (if needed), and made available to the appropriate agencies and individuals involved with this field. Also, a disaster operations manual has been published and distributed to the aforementioned.

(2) Training courses for cleanup personnel will be conducted in FY 76. These courses train appropriate local officials in the handling and disposition of hazardous materials as well as encourage a uniform procedure for accident and disaster cleanup.

(3) Requests submitted under this task include but are not necessarily limited to items such as: crash trucks, first aid kits, tow trucks, Hurst rescue tools, cutting torch, radio base stations and consoles as well as two-way radios. Some localities do not have the essential items for an effective highway safety program in this standard area. The equipment requested in this task should enhance the Debris, Hazard Control and Cleanup program throughout the state by providing localities with the necessary tools to quickly and safely remove from the highway, debris resulting from motor vehicle crashes.

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. Debris, Hazard Control and Cleanup DC76-281 46-76-16-03	Date 5-1-75	19 74 FY-2	19 75 FY-1	Fiscal Year 1976 1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	19 77 FY+1	19 78 FY+2
6a. EFFECTIVENESS										
Number of crashes involving previous crash debris or blockage 1.		100	105		Projections			110	110	105
Percent of crash sites cleaned of debris within twenty minutes 2.		83%	85%		Projections			88%	90%	92%
Number of crash sites cleaned of debris within twenty minutes 3.		125,000	135,000		Projections			140,100	142,000	149,643
4.										
5.										
6.										

PUPIL TRANSPORTATION SAFETY

One of the major purposes of the Board of Education, Department of Education, and the local school systems of Virginia is to promote the safe, efficient, and effective transportation of pupils to and from public schools. The paramount goal is that of providing for the operation of pupil transportation systems without personal injury to pupils and other highway users or damage to property. Programs directed toward the accomplishment of the above goals include, but are not limited to, the following:

A. Study and assessment of laws and regulations affecting the transportation of pupils as required by Chapter 13, Title 22, of the Code of Virginia, as well as pertinent sections of Title 46.1

B. Provision of information and assistance to local school divisions related to: the determination of needs to be met, instruction for school bus drivers, routing of buses to attain maximum use, review of bus routes for hazardous environmental conditions, inspection and preventive maintenance programs for school buses, and a review of pedestrian and vehicular traffic at school sites involving operation of school buses.

C. Analysis and use of data compiled from reports on all crashes involving school buses, school pupils and personnel who ride school buses, including injury or death while crossing the road and/or while waiting at bus stops.

Guideline information is available for implementation of Federal Highway Safety Program Standard No. 17 — Pupil Transportation Safety. The Department has developed the following broad program objectives to ensure that Virginia is in compliance with the Standard within the time period available. Included in the program objectives are:

A. A continuous review of the "State-of-the Art" of pupil transportation and determination of needs to be met annually.

B. To meet the determined needs, existing programs and procedures will be reviewed and revised. New programs will be developed where needed.

In keeping with the aim and goal expressed in the introductory paragraphs of Pupil Transportation Safety, and the requirements of Section 22-276 of the Code of Virginia, the Board of Education has adopted standards and specifications for the design, construction, and equipment for public school buses used in Virginia. The purpose of these efforts is to assure safe usage as well as protection of passengers.

These specifications are made available to operators of private and parochial schools upon request. The trend toward using State specifications is widespread among many private and parochial schools; however, this is voluntary action on their part. They do have to comply with minimum requirements of various sections of Title 46.1 Motor Vehicle Code which relate to school buses. These are, in part, based upon specifications and regulations of the Board of Education. The Administration when issuing Standard No. 17 indicated that vehicle requirements may require more time for compliance. Crash related data may also be helpful in the development of vehicle requirements for school buses.

During FY 1976, efforts will continue to be directed toward the investigation and revision of State school bus specifications needed for compliance with provisions of Standard No. 17 and to cope with changing conditions affecting the safety of pupil riders. Significant among these continuing investigations is the one necessary for

the integration of amber pre-warning lamps as a part of the Virginia traffic warning light system. The purpose of these efforts is to eliminate areas of confusion which have evolved from the current, varied vehicle requirements which are related to the preceding elements.

The responsibilities of the school bus driver in safely transporting pupils between home and school are wide ranging in depth and scope. It is, therefore, imperative that great care be taken in the screening, selection, placement, training, and supervision of school bus drivers to ensure that they have the mental and physical capabilities necessary to perform their duties.

Programs directed toward the accomplishment of the above objectives have been carried out to varying degrees by local school systems with assistance and guidance from the Department of Education.

Various requirements for school bus drivers have been established by state law, regulations of the Board of Education, and policy provisions of the local school boards. Title 22, Code of Virginia lists specific annual requirements for drivers of public, parochial, and private school buses. These include:

A. Certification by a physician that the person is physically and mentally capable of safely operating a school bus.

B. Statement from a physician that the person is free of infectious diseases.

C. Certification by the Division of Motor Vehicles that the person's driving record is free of certain serious driving offenses during the previous five years.

D. Endorsement by two citizens that the person is of good moral character.

E. Issuance of a special license classification showing that the person has passed a special school bus driver license examination.

Effective January 1, 1974, all public school bus drivers in Virginia were required to complete an instructional program of pre-service and/or in-service training, the format of which is determined by the individual localities. This training must include, however, classroom instruction, demonstration, and behind-the-wheel training, the length of which is to be determined by the experience of each driver. (In addition, all school bus drivers are required by law to obtain a school bus license qualification issued by the Division of Motor Vehicles and to meet other requirements of law pertaining to age, health and driving record. This requirement applies to both public and private school bus drivers.) Training for school bus drivers operating in private or parochial institutions remains on a voluntary basis.

The following materials have been developed for use in the state's required training program.

I. A Training Guide for School Bus Drivers — This guide outlines training requirements for each locality and provides suggestions for useful exercises and listings of some available materials. This guide provides that:

1. Class instruction shall include but not be limited to the following;

   (a) Responsibilities of the driver, pupil, parents, principal, and superintendent.

   (b) Applicable laws and regulations.

   (c) Local reports and policies governing pupil transportation.

(d) Proper driving practices.

(e) Planning for emergencies.

2. The demonstration portion of instruction shall include but not be limited to the following;

(a) Pre-trip inspection.

(b) Care of school bus.

(c) Emergency evacuation drills.

(d) Proper driving practices.

(e) Defensive driving techniques.

3. The behind-the-wheel portion of instruction, which is under supervision of a trainer, shall require that the applicant;

(a) Operate an empty bus until proficient.

(b) Operate a loaded bus - (minimum - complete route for two days).

4. In-service training shall be devoted to improving skills, attitudes and knowledge of all school bus drivers, and at least two hours of in-service training shall be provided during the first half of the school year and at least two hours during the second half.

5. The superintendent of schools or his designate shall maintain a record of the applicant's completion of the training and subsequent approval to operate a school bus.

In addition to this guide, a number of localities employ an instructional package prepared by the International Harvester Company, entitled School Bus Safety and Operation. To familiarize local pupil transportation personnel with available curricula and with standard 17 requirements, regional workshops are held in the various localities.

II. Audio-Visual Materials — The Department of Education, Pupil Transportation Service has produced a number of films and other audio-visual materials, and made these available to the school districts. These include both the films, Riding Your School Bus and Bus Driver Helpers, as well as newly released filmstrip and discussion guide entitled, Laws and Regulations for School Bus Operation. Topics discussed in this package include the purpose of state regulations and laws, driver requirements and responsibilities, bus operation, and emergency conditions. Other materials which were not specifically produced in Virginia but which are considered useful include (but are not limited to) the films School Bus Driver, Chrome Yellow-Extra Caution, Car Ahead, First Aid on the Spot, School Bus Safety With Strings Attached and Buses that Serve the Community.

In keeping with the aim and goal initially expressed in this plan, local school divisions, supported by the Department, have acted responsibly in the area of safety instruction for bus riders.

A. A program of safety instruction for riders designed to alert school bus riders to the safety hazards involved in riding to and from school will be finalized and distributed to local schools. It will supplement the safety units of the health education curriculum for both the K through 7 and 8 through 12 levels. The following topics are discussed:

(1) Riding a yellow school bus.

(2) Riding a transit bus.

(3) Walking to and from the bus stop.

(4) Waiting at the bus stop.

(5) Bus loading and unloading zones.

(6) Walking to school.

(7) Other (including the use of safety patrols).

B. Local law enforcement agencies or members of the Department of State Police promote and/or conduct such safety programs with the approval and cooperation of the local school authorities.

C. Suitable materials for this purpose are made known to school administrators.

D. Another film, Riding Your School Bus, was recently released by the Department to supplement this program.

E. Emergency evacuation drills have been required in Virginia for several years.

F. Department personnel assist localities in promoting school bus safety programs.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Pupil Transportation Safety	3. NO. SB76-221 46-76-17-01	4. DATE 5-1-75
	5. DRAFTED BY R. A. Bynum, Supt. Pupil Trans. Service (Title and Agency) APPROVED BY W. W. Wilkerson, Supt. of Public Instr. Dept. of Ed. (Title and Agency)	FISCAL YEAR 19 76		

			1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL
			July, Aug, Sept	Oct, Nov, Dec	Jan, Feb, Mar	Apr, May, June	
6a. EFFECTIVENESS		Average number of pupils transported daily in 7723 regular bus runs			(SY 73-74)		688,868
6b. OUTPUT		C Percent of school vehicles involved in fatal crashes					.2%
		V Number of school buses involved in fatal crashes		(1973)			3
7. RESP.	8. STD.	9. TASKS & MILESTONES					
Pupil Transportation Service	317	1. Program Improvement and Administration					
		A. Program Evaluation and Reports					
		Design, develop and implement data collection — reporting system	Continuing				
Department of Education	317 T	B. Training of school bus drivers(					
		(a) Development of curriculum guide and training materials	Continuing		50	50	100
		(b) Conducting orientation programs for local school bus driver instructors (the need for qualified instructors at local level is estimated to be 350)	7		7	7	21

10. DESCRIPTION The long-range goal of Pupil Transportation Safety in Virginia is to provide for the operation of pupil transportation systems with a reduction of death and personal injury to students, as well as other highway users, and property damage. (1) The task Program Improvement and Administration, provides for the continuing development and implementation of a statewide data collection and reporting system in keeping with the administrative agency's responsibility for programs related to the transportation of pupils within the Commonwealth. This task also incorporates the continuing development of a curriculum guide and materials

11. COST BY TASK ($000s)					
1. Program Improvement and Administration	66.	2.5	60.5	32.	161.
12. TOTAL COST ($000s)	11930.5	11869.0	11928.0	11897.5	47625.0
LOCAL SHARE					
STATE SHARE	11870.5	11869.0	11868.0	11865.5	47473.0
FEDERAL SHARE TO LOCALITIES	60.		60.	32.	152.0

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Pupil Transportation Safety	3. NO SB76-221 46-76-17-02	4. DATE 5-1-75
	5. DRAFTED BY R. A. Bynum, Supt. Pupil Trans. Service (Title and Agency) APPROVED BY W. W. Wilkerson, Supt. of Public Instr. State Dept. of Education (Title and Agency)			

			FISCAL YEAR 19 76				
			1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL
			July, Aug, Sept	Oct, Nov, Dec	Jan, Feb, Mar	Apr, May, June	
6a. EFFECTIVENESS							
6b. OUTPUT		C V					
7. RESP.	8. STD.	9. TASKS & MILESTONES					
Pupil Transportation Service	317	C. Safety Instruction - Riders Development of curriculum guide for school bus riders safety program	Continuing				
		D. Application and administration of activities required for compliance of Highway Safety Standard No. 17	Continuing				
		2. Vehicle Requirements A. Development of specifications for amber pre-warning light system	Continuing				

10. DESCRIPTION to be used in the training of school bus drivers at the local level and orientation programs for local school bus driver training instructors by personnel at the State level. This task also promoted a continuing effort for the development of safety instruction for school bus riders and the administration of projects and requirements necessary for compliance with Highway Safety Standard No. 17.

The short-term goals of training of school bus drivers are aimed at implementing a required statewide program for pre-service and in-service training which will improve the quality and competencies

11. COST BY TASK ($000s)					
2. Vehicle Requirements	1.0	1.0			2.0
12. TOTAL COST ($000s)					
LOCAL SHARE					
STATE SHARE					
FEDERAL SHARE					
TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Pupil Transportation Safety	SB76-221 3. NO. 46-76-17-03	4. DATE 5-1-75
	5. DRAFTED BY R. A. Bynum, Supt. Pupil Trans. Service (Title and Agency) APPROVED BY W. W. Wilkerson, Supt. of Public Instruc. State Dept. of Education (Title and Agency)	FISCAL YEAR 19 76		

6a. EFFECTIVENESS							
6b. OUTPUT		C V					
7. RESP.	8. STD.	9. TASKS & MILESTONES	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
Pupil Transportation Service	317	3. Operation					
		A. State Level					
		1. Department of Education personnel					
		Supervisor	1	1	1	1	1
		Assistant Supervisors	3	3	3	3	3
		Secretaries	2	2	2	2	2
		2. Division of Motor Vehicles					
		Issuance of school bus driver's license	800	800	800	800	3200
		3. Department of State Police					
		Assistance in vehicle and highway safety (cost unknown)					
		4. Virginia Department of Highways & Transportation					
		Assistance in correcting road hazards (cost unknown)					

10. DESCRIPTION of school bus drivers. This program is designed to upgrade their knowledge, attitudes, and driving skills to better enable them to cope with their expanding responsibilities in traffic. These relate directly to the long-range goal of licensing only qualified drivers. Plans are continuing for the completion, distribution, and implementation of specific curriculum guides for the safety instruction of pupil riders. A project grant for the period 10-1-74 to 9-30-75 has been approved in support of this effort. Plans will be made to evaluate the instruction.

(2) The short-term goal of the Vehicle

11. COST BY TASK ($000s)					
3. Operational Costs					
A. State Level	27.0	27.0	27.0	27.0	108.0
B. Local	11838.5	11838.5	11838.5	11838.5	47354.0
12. TOTAL COST ($000s)					
LOCAL SHARE					
STATE SHARE					
FEDERAL SHARE					
TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Pupil Transportation Safety	3. NO. SB76-221 46-76-17-04	4. DATE 5-1-75
	5. DRAFTED BY R. A. Bynum, Supt. Pupil Trans. Service (Title and Agency) APPROVED BY W. W. Wilkerson, Supt. of Public Instr. State Dept. of Education (Title and Agency)	FISCAL YEAR 1976		

			1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL
			July, Aug, Sept	Oct, Nov, Dec	Jan, Feb, Mar	Apr, May, June	
6a. EFFECTIVENESS							
6b. OUTPUT		C V					
7. RESP. Pupil Transportation Service	8. STD. 317	9. TASKS & MILESTONES 5. Highway Safety Division of Virginia Assistance in operational safety and development of plans required by Federal Highway Safety Acts (cost unknown) B. Local Level Public schools 117 school bus systems 77 local supervisors 26 local assistant supervisors 484 local mechanics	688,868 pupils in Average Daily Attendance plus transportation for extra-curriculum summer school, Federal Programs, etc., were transported in 7723 regular run buses.				
10. DESCRIPTION Requirements task is to increase safety and protection for pupil passengers, school bus drivers, and other highway users through the continuing standardization of requirements related to the lettering, cross-over mirrors, and re-lettering of buses when repainted, as well as the possible implementation of an amber pre-warning light system. These efforts are designed to achieve standardization and thereby eliminate elements of confusion which result from former varied requirements related to these topics. Affected components will be subject to inspection by state personnel. (3) See block 9.		11. COST BY TASK ($000s)					
		12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES					

EFFECTIVENESS SUPPLEMENT
TO THE SUBELEMENT

Title and No. SB76-221 Pupil Transportation 46-76-17-05 Safety	Date 5-1-75	1969 FY-2	1971 FY-1	Fiscal Year 1970 1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	1972 FY+1	1973 FY+2
6a. EFFECTIVENESS										
Number of school bus vehicles involved in fatal crashes 1.		7	3					8	5	3
Number of school bus vehicles involved in personal injury crashes 2.		119	149					155	181	216
Number of school bus vehicles involved in property damage crashes 3.		535	616					665	822	881
Number of school bus vehicles involved in all crashes 4.		661	768					828	1,008	1,100
School Bus Related Accidents		SY70-71	SY71-72					SY72-73	SY73-74	
A. Fatalities - Total		10	8					4	6	
Pupils		5	2					1	3	
Others 5.		5	6					3	3	
B. Personal Injuries - Total		320	491					428	404	
Pupils		260	384					331	325	
Bus Drivers		8	23					25	15	
Others 6.		52	84					72	64	

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. SB76-221 46-76-17-06 Pupil Transportation Safety	Date 5-1-75	1969 CY-2	1970 Cy-1	Calendar Year 1971 1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	1972 CY +1	1973 CY +2
6a. EFFECTIVENESS										
Percent of school bus vehicles involved in fatal crashes 1.		.5%	.2%					.5%	.3%	.2%
Percent of school bus vehicles involved in personal injury crashes 2.		.2%	.3%					.3%	.3%	.4%
Percent of school bus vehicles involved in property damage crashes 3.		.3%	.3%					.3%	.4%	.4%
Percent of school bus vehicles involved in all crashes 4.		.3%	.3%					.3%	.4%	.4%
Average number of pupils transported daily 5.		SY71-72 652,000	SY72-73 669,313					SY73-74 688,868		
Number of regular bus runs		7,312	7,521					7,723		
Total number of accidents reported 6.		883	862					782		

ACCIDENT INVESTIGATION AND REPORTING

Government agencies at all levels meet the responsibility for safety on the highway transportation system through various programs of control, such as: motor vehicle inspection, driver standards, traffic law enforcement, uniform traffic control devices, highway design standards, and motor vehicle safety regulations.

Each agency needs information to plan, implement, and evaluate the effectiveness of its program, and to identify new requirements. Common to all programs is the need for factual information on the "who, what, when, where, why, and how" of motor vehicle traffic accidents. Such data are acquired through uniform accident investigation procedures and systematically entered into an efficient traffic records system. They provide the basic means for identifying and understanding accident and injury causation.

The various government agencies then have the objective tools needed to measure the magnitude and identify characteristics of the problem, determine needed legislation, allocate resources to accident prevention programs, plan research, and evaluate ongoing activities in terms of reductions in deaths, injury and property damage.

The purpose of this Accident Investigation and Reporting Standard is to establish a uniform, comprehensive motor vehicle traffic accident investigation program for:

(1) Gathering information — who, what, when, where, why and how — of motor vehicle traffic accidents and associated deaths, injuries and property damage.

(2) Entering the information into the traffic records system for use in planning, evaluating, and furthering highway safety program goals.

The specific objectives of the program are to:

(1) Determine the accident data needs of enforcement agencies, traffic, highway, and automotive engineers, educators, licensing authorities, medical, and other groups and organizations having a responsibility for highway safety. Such data needs should be consistent with the organization's assigned mission.

(2) Develop and implement procedures to gather the required data as identified in the aforementioned.

(3) Identify the media used to acquire, store, and enter accident data into the state's traffic records system.

(4) Assure that the data gathered has a high degree of uniformity and compatibility.

With increasing emphasis being placed in this standard area, the entire highway safety program should be enhanced.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Accident Investigation and Reporting	AC76-571 3. NO. 46-76-18-01	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr., Res. Anal., VH&TRC (Title and Agency) APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	FISCAL YEAR 19 76		

			1st Quarter (July, Aug, Sept)	2nd Quarter (Oct, Nov, Dec)	3rd Quarter (Jan, Feb, Mar)	4th Quarter (Apr, May, June)	TOTAL
6a. EFFECTIVENESS See Effectiveness Supplement							
6b. OUTPUT		C Percent of crashes reported (1973)					100%
		V Number of crashes which occurred (1973)					157,637
7. RESP. Local Police Departments	8. STD. 318	9. TASKS & MILESTONES					
		1. Procure equipment	Bids	Purchase			
		2. Training	Train	Train	Train	Train	
		A. No. Acc. Inv. & Reporting Seminars Conducted by VCU (Funded in Std. 304 - Highway Safety Education)	1	1	1	1	4
		No. people in attendance	30	30	30	30	120
		3. Conduct training courses on the new crash report form (See Std. 310)	Specific date not available at this time, subject to completion of project by DMV				

10. DESCRIPTION	11. COST BY TASK ($000s).					
The goal in this standard area is to establish a uniform, comprehensive motor vehicle traffic crash investigation program for gathering information pertinent to the effort of reducing deaths, injuries and property damage in traffic crashes. (1) Initial requests for equipment include tape recorders, transcribers, cameras, and accident investigation films. (2) Training for policemen in all cities and counties includes but is not limited to the following: Inservice training, refresher training, training for new recruits, supervisors, seminars for new recruits, supervisors, seminars for law enforcement planning officers, and cadet	1. Equipment		6.			6.
	2. Training	250.	250.	250.	250.	1000.
	12. TOTAL COST ($000s)	250.	256.	250.	250.	1006.
	LOCAL SHARE	240.	243.	240.	240.	963.
	STATE SHARE					
	FEDERAL SHARE	10.	13.	10.	10.	43.
	TO LOCALITIES	10.	13.	10.	10.	43.

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. Accident Investigation and Reporting AC76-571 46-76-18-02	Date 5-1-75	1969 CY -2	1970 CY -1	Calendar Year 1971 1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	1972 CY +1	1973 CY +2
6a. EFFECTIVENESS										
Number of crashes 1.		131,599	136,923					144,407	155,257	157,637
Percent of crashes where there was a violation 2.		85.8%	84.3%					84.2%	84.4%	83.5%
Total crashes reported by: State Police Other Police Officers Individuals 3.		35,352 66,779 29,468	35,842 71,849 29,232					38,128 80,328 25,951	42,441 89,132 23,684	43,847 88,633 25,157
Total crashes reported by: State Police Other Police Officers Individuals 4.		757 348 12	664 391 11					646 401 7	695 399 6	657 360 13
Personal injury crashes reported by: State Police Other Police Officers Individuals 5.		11,922 16,643 3,281	11,908 17,379 3,009					12,260 18,874 2,443	13,011 20,345 2,244	13,323 20,236 2,511
Property damage crashes reported by: State Police Other Police Officers Individuals 6.		22,673 49,788 26,175	23,270 54,079 26,212					25,222 61,053 23,501	28,735 68,388 21,434	29,849 68,037 22,633

IDENTIFICATION AND SURVEILLANCE OF ACCIDENT LOCATIONS

Before the advent of a federal-state highway safety improvement program, Virginia formulated a project designed to identify and eliminate hazardous locations on highways within the state. A hazardous location is defined in terms of three criteria: (1) Whether the site has been identified as potentially accident generative through analysis of past accidents (number and/or severity of accidents occurring at a location within a one-year time span), (2) whether the accident site can be improved to substantially diminish the number and severity of accidents, and (3) whether the improvement project will result in a favorable cost-benefit relationship.

The minimum requirements of the total program as set out by the federal government can be found in the Federal Aid Highway Program Manual 6.8.2.1. Of course, a state can go beyond the bare essentials found in this document and fill in the interstices so as to adapt the program to fit its needs.

Virginia's administrative organization lends itself to a two-part division of authority, one program under the auspices of the Virginia Department of Highways and Transportation (VDH&T) and another under the direction of the cities The Department of Highways and Transportation has jurisdiction over primary, secondary and interstate roads in all the counties except Arlington and Henrico and in all cities with a population less than 3,500. In 1973 the highways within the Department's jurisdiction experienced 65% of the vehicle miles traveled, 49% of all reported accidents, 79 % of all fatalities, and 82% of the road miles in the state. Thus, 51% of all accidents occurred on the 18% of the total miles in the state not within the VDH&T's jurisdiction. Governing bodies of cities with

populations over 3,500 have jurisdiction over all roads within their city limits if, in fact, they opt to maintain their road systems.

Virginia Department of Highways and Transportation Program

In order to achieve the goals and objectives of this program, an accident identification and surveillance system, consistent with increasing volumes in traffic and accidents, requires utilization, to an extensive degree, of automatic data processing to afford maximum and definite coverage. Efforts are currently being made to adapt such a system. This effort includes a computer program to identify hazardous sections of the highway based upon accident, traffic, and geometrical data. After all available data about a hazardous location are compiled by the computer system, a field check is made of the site and recommendations calculated to improve the site are made. Traffic and safety engineers hired by the state have the major responsibility for formulating these recommendations.

Implicit in this program is the assumption that accurate identification of accident sites is a prerequisite to the accomplishment of any further goals in the subelement plan on the surveillance of accident locations. Consequently, a major goal of the current highway safety program is to develop and implement a statewide locator system which will furnish the means for uniform and accurate recording of accident locations on all secondary, primary, and interstate roads, as well as serve the internal needs for registering highway locations at the VDH&T.

In further pursuance of the aforementioned objectives of this program, the Virginia Department of Highways and Transportation will continue to maintain a continual paper mile posting system, integrate traffic conflict studies into the

program to determine improvement needs at certain designated locations, and increasingly utilize the findings of Virginia's Crash Investigation Team in striving to achieve the goals in this standard area. It should be noted that the VDH&T has prepared a report which addresses the Department's categorical highway safety programs. The report is entitled "Virginia's Annual Highway Safety Improvement Report," of August 31, 1974.

City Program

The cities (all those jurisdictions with a population greater than 3,500) have in the past been hampered in their efforts by lack of organization and adequate funding. Traditionally their program to identify accident locations has been solely a manually developed spot map for each city listing all previous accident locations. The Highway Safety Division has hired consultants to work with the cities. It is hoped that these employees created more efficient programs for identifying accident prone traffic sites and also formulated effective countermeasures after in-depth studies of these locations.

At the present time a Crash Facts booklet is prepared by the Department of State Police providing Crash Facts data for the State of Virginia as a whole.

While this is an effective and necessary program for statewide use, numerous local political subdivisions have need of a crash information breakdown specifically related to their area.

This suggested program would provide an individual Crash Facts booklet for each city and county which would pinpoint the individual problems of each locality and enable local governments to take specific action to directly combat the problem areas.

In sum, the effectiveness of city programs for the identification and surveillance of accident locations depends primarily on the efforts of local officials. If these administrators are unconvinced of the worth of the program their individual commitments will be correspondingly diminished. It takes a strong public and private stance in support of these programs to both increase budgetary outlays and mobilize supportive personnel. Recognizing this need, the Highway Safety Division will continue to push its educational campaign toward city officials so as to create a more favorable operating climate in this particular sphere of highway safety.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Identification and Surveillance of Accident Locations	IS76-391 3. NO. 46-76-09-01	4. DATE 5-1-75
	5. DRAFTED BY C. D. Hall, Associate Traffic Engr., VDH&T (Title and Agency) APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	FISCAL YEAR 19 76		

		1st Quarter (July, Aug, Sept)	2nd Quarter (Oct, Nov, Dec)	3rd Quarter (Jan, Feb, Mar)	4th Quarter (Apr, May, June)	TOTAL
6a. EFFECTIVENESS	Reduction in the number of accidents per volume of traffic at identified and improved hazardous locations					33%
6b. OUTPUT	C Percent of hazardous locations improved					48%
	V Number of hazardous locations identified			(Projections)		205

7. RESP.	8. STD.	9. TASKS & MILESTONES				
VDH&T	309	1. Continue the automatic data processing identification system with revisions		Continue	Program	
		2. A continuous data base for the above		Continue	Program	
		3. A continuous analysis system with necessary revisions		Continue	Program	

10. DESCRIPTION The long-term goal of the VDH&T in this standard is to reduce the number of traffic crashes, including severe injuries and property damage, by identification and surveillance of accident locations, location correction and follow up evaluations and analyses. (1-7) See Block 9.

Basic processes utilized in implementation of these functions have been established with the demand for updating of base data being required annually. Changing characteristics, new methods, and the multi-faceted deviations constantly occurring in highway engineering require this to be a non-static program that can absorb applicable

11. COST BY TASK ($000s)					
12. TOTAL COST ($000s)	153.65	153.65	153.65	153.65	614.6
LOCAL SHARE					
STATE SHARE	153.65	153.65	153.65	153.65	614.6
FEDERAL SHARE					
TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Identification and Surveillance of Accident Locations	3. NO. 46-76-09-02 IS76-391	4. DATE 5-1-75
	5. PREPARED BY: C. D. Hall, Associate Traffic Engr., VDH&T (Title and Agency)		FISCAL YEAR 1976	
	APPROVED BY: J. T. Hanna, Director, HSD (Title and Agency)			

			1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS							
6b.. OUTPUT		C V					
7. RESP. VDH&T	8. STD. 309	9. TASKS & MILESTONES					
		4. A continual mile posting system (Interstate System)		Continue	Program		
		5. Traffic conflict studies will be further integrated into the program to determine improvement needs at identified locations	Integrate	Integrate	Integrate	Integrate	
		6. Increased utilization of the findings of the Crash Investigation Team	Utilize	Utilize	Utilize	Utilize	
10. DESCRIPTION modifications into the overall program. The internal structural organization has perhaps experienced the most substantial changes. The Highway Safety Act of 1973 has resulted in specialization with subsections assigned specific responsibilities for the implementation of each part of the act. The sections of the new instructions are very comprehensive in scope and thus have required that certain facets of the program such as priority listings, cost benefit analysis, and projections of effectiveness reflect state rather than national characteristics. We are thus, at present, in the process of using initial findings		11. COST BY TASK ($000s)					
		* 7. Personnel					
		A-1 State Traffic & Safety Engr.	1.30	1.30	1.30	1.30	5.20
		A-2 Asst. State Traffic & Safety Engr.	2.70	2.70	2.70	2.70	10.80
		A-3 Highway Traffic Engineer B	10.00	10.00	10.00	10.00	40.00
		A-4 Highway Traffic Engineer A	18.50	18.50	18.50	18.50	74.00
		A-5 Highway Traffic Technician Supv.		26.50	26.50	26.50	106.00
		12. TOTAL COST ($000s)					
		LOCAL SHARE					
		STATE SHARE					
		FEDERAL SHARE					
		TO LOCALITIES					

* In keeping with certain conditions placed on Virginia's Second Annual Work Program this money is not included in the grand total of HSD funds for FY 76.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Identification and Surveillance of Accident Locations	3. NO. IS76-391 46-76-09-03	4. DATE 5-1-75
	5. DRAFTED BY C. D. Hall, Associate Traffic Engr., VDH&T (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)			

			1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL
			July, Aug, Sept	Oct, Nov, Dec	Jan, Feb, Mar	Apr, May, June	
6a. EFFECTIVENESS							
6b. OUTPUT		C					
		V					
7. RESP. VDH&T	8. STD. 309	9. TASKS & MILESTONES					
		7. Operations					
		A. Personnel					
		1 - State Traffic and Safety Engineer	1	1	1	1	1
		2 - Asst. Traffic Traffic & Safety Engineer	2	2	2	2	2
		3 - Highway Traffic Engineer B	3	3	3	3	3
		4 - Highway Traffic Engineer A	5	5	5	5	5
		5 - Highway Traffic Technician Supervisor	8	8	8	8	8
		6 - Highway Traffic Technician C	14	14	14	14	14
		7 - Highway Traffic Technician B	12	12	12	12	12
		8 - Highway Traffic Technician A	1	1	1	1	1
		9 - Clerk Stenographer C	3	3	3	3	3
		10 - Clerk Stenographer B	2	2	2	2	2

10. DESCRIPTION and criteria to establish state and area patterns and are developing more refined methods for use in our selection and priority rankings.

The identification, data gatherings, analysis, and evaluation have become highly sophisticated and is expected to become even more so in the future. These needs necessitate even greater utilization of computer time for updating present programs and in implmenting new ones that are now so important. There is also the need for equipment and qualified personnel to assemble, analyze and integrate these various phases into an efficient and effective

11. COST BY TASK ($000s)					
7. Personnel (Con't)					
A-6 Highway Traffic Technician C	38.75	38.75	38.75	38.75	155.00
A-7 Highway Traffic Tecnhician B	26.90	26.90	26.90	26.90	107.60
A-8 Highway Traffic Technician A	1.50	1.50	1.50	1.50	6.00
A-9 Clerk Stenographer C	4.00	4.00	4.00	4.00	16.00
A-10 Clerk Stenographer B	3.70	3.70	3.70	3.70	14.80
12. TOTAL COST ($000s)					
LOCAL SHARE					
STATE SHARE					
FEDERAL SHARE					
TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2 TITLE Identification and Surveillance of Accident Locations	IS76-391 3. NO.46-76-09-04	4. DATE 5-1-75
	5. DRAFTED BY C. D. Hall, Associate Traffic Engr., VDH&T (Title and Agency) APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	FISCAL YEAR 19 76		

			1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL
			July, Aug, Sept	Oct, Nov, Dec	Jan, Feb, Mar	Apr, May, June	
6a. EFFECTIVENESS							
6b. OUTPUT		C V					
7. RESP. VDH&T	8. STD. 309	9. TASKS & MILESTONES 7. Operations (Con't) B. Supplies C. Rent (Office) D. Computer Time E. Travel F. Training (OJT and other formalized courses at the higher education level	3 15	3 15	3 17	3 20	3 20

10. DESCRIPTION	11. COST BY TASK ($000s)					
program to insure that our before mentioned goals are achieved. The elimination or reduction of fatal, injury and property damage accidents through the identification, analysis and improvement of accident prone or high hazard locations still remains the principal objective along with an evaluation of the effectiveness of each improvement.	7B Supplies	2.30	2.30	2.30	2.30	9.20
	7 C Rent	2.10	2.10	2.10	2.10	8.40
	7 D Computer Time	7.50	7.50	7.50	7.50	30.00
	7 E Travel	6.40	6.40	6.40	6.40	25.60
	7 F Training	1.50	1.50	1.50	1.50	6.00
	12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Identification and Surveillance of Accident Locations	3. NO. IS76-392 46-76-09-01	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr., Res. Anal., VHTRC (Title and Agency) APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	FISCAL YEAR 19 76		

6a. EFFECTIVENESS		1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6b. OUTPUT	C V					
7. RESP.	8. STD.	9. TASKS & MILESTONES				
HSD	309	1. A Statewide Multidisciplinary Crash Investigation Team (No. of Teams)	1	1	1	1
		2. Crash Facts for each city and county	Produce	Distribute	Distribute	Distribute
		3. Equipment	Purchase			

10. DESCRIPTION Before the number of traffic crashes, deaths, injuries and property damage can be reduced on Virginia's highways, hazardous accident locations must be identified and corrected. In attempting to achieve this goal, the following programs warrant financial support: (1) Continued funding of Virginia's CIT, which conducts indepth investigations of certain accidents in attempting to uncover contributory accident causation factors; plans are being formulated to establish additional crash investigation teams to serve in localities throughout Virginia. (2) An individual Crash Facts booklet would be provided for each locality. (3) Equipment requests include but are not limited to; dameras and traffic count boards.

11. COST BY TASK ($000s)					
1. Statewide CIT	6.25	6.25	6.25	6.25	25.
2. Crash Facts/Localities	2.5	2.5	2.5	2.5	10.
3. Equipment	1.				1.
12. TOTAL COST ($000s)	9.75	8.75	8.75	8.75	36.
LOCAL SHARE	.5				.5
STATE SHARE	4.375	4.375	4.375	4.375	17.5
FEDERAL SHARE	4.375	4.375	4.375	4.375	18.
TO LOCALITIES	1.75	1.25	1.25	1.25	5.5

HIGHWAY DESIGN, CONSTRUCTION AND MAINTENANCE

The design, construction and maintenance of highways, streets and roads in the Commonwealth are presently under the management of two levels of government. The Virginia Department of Highways and Transportation has jurisdiction over all highways within the 171 municipalities which have populations of less than or equal to 3,500. This amounts to 51,063 miles of highways. The remaining 11,288 miles of roadways fall within the jurisdiction of the cities with populations of over 3,500, and the counties of Arlington and Henrico. There are 59 municipalities and two counties which design, construct, and maintain their own highways. The Department of Highways and Transportation works with these municipalities in this undertaking.

In Virginia, the cities must meet the design standards of the Virginia Department of Highways and Transportation if they wish the Department to participate in the maintenance of their roads. Consequently, most of the streets and roads in the state comply with VDH&T standards. Even with this restriction placed upon the cities, there are still interstices within the design, construction and maintenance of roads not under the jurisdiction of the Department of Highways and Transportation. This is revealed by the fact that last year 51% of the highway accidents occurred on the roads not under the jurisdiction of the Department; yet city streets constitute only about 18% of the highway network.

Consequently, in attempting to assure that; (a) existing streets and highways are maintained in a condition that promotes safety, (b) capital improvements either to modernize existing roads or to provide new facilities meet approved safety standards, and (c) appropriate precautions are taken to protect passing

motorists as well as highway workers from accident involvement at highway construction sites, Virginia in cooperation with local governments strives to have a program of highway design, construction, and maintenance to improve highway safety. Standards applicable to specific programs are those issued or endorsed by the Federal Highway Administration.

1. The program provides as a minimum that:

   A. There are design standards relating to safety features such as sight distance, horizontal and vertical curvature, spacing of decision points, and width of lanes, for all new construction or reconstruction, at least on expressways, major streets and highways, and through streets and highways.

   B. Street systems are designed to provide a safe traffic environment for pedestrians and motorists when subdivisions and residential areas are developed or redeveloped.

   C. Roadway lighting is provided or upgraded on a priority basis at the following locations:

      (1) Expressways and other major arteries in urbanized areas.

      (2) Junctions of major highways in rural areas.

      (3) Locations or sections of streets and highways having high ratios of night-to-day motor vehicle and/or pedestrian accidents.

      (4) Tunnels and long underpasses.

   D. There are standards for pavement design and construction with specific provisions for high skid resistance qualities.

E. There is a program for resurfacing or other surface treatment with emphasis on correction of locations or sections of streets and highways with low skid resistance and high or potentially high accident rates susceptible to reduction by providing improved surfaces.

F. There is guidance, warning and regulation of traffic approaching and traveling over construction or repair sites and detours.

G. There is a systematic identification and tabulation of all rail-highway grade crossings and a program for the elimination of hazards and dangerous crossings.

H. Roadways and the roadsides are maintained consistent with the design standards which are followed in construction to provide safe and efficient movement of traffic.

I. Hazards within the highway right-of-way are identified and corrected.

J. There are highway design and construction features wherever possible for accident prevention and survivability including at least the following:

(1) Roadsides clear of obstacles, with clear distance being determined on the basis of traffic volumes, prevailing speeds, and the nature of development along the street or highway.

(2) Supports for traffic control devices and lighting that are designed to yield or break away under impact wherever appropriate.

(3) Protective devices that afford maximum protection to the occupants of vehicles wherever fixed objects cannot reasonably be removed or designed to yield.

(4) Bridge railings and parapets which are designed to minimize severity of impact, to retain the vehicle, to redirect the vehicle so that it will move parallel to the roadway, and to minimize danger to traffic below.

(5) Guardrails and other design features which protect people from out-of-control vehicles at locations of special hazard such as playgrounds, schoolyards, and commercial areas.

K. There is a post-crash program which includes at least the following:

(1) Signs at freeway interchanges directing motorists to hospitals having emergency care capabilities.

(2) Maintenance personnel trained in procedures for summoning aid, protecting others from hazards at accident sites, and removing debris.

(3) Provisions for access and egress for emergency vehicles to freeway sections where this would significantly reduce travel time without reducing the safety benefits of access control.

L. There is a Skid Program Inventory

2. This program is periodically evaluated by the state for its effectiveness in terms of reductions in accidents and their end results. Upon completion of the evaluation proceedings, the Federal Highway Administration is provided with a summary of the findings.

It should be noted that the VDH&T has prepared a report on its categorical highway safety programs. The study is entitled "Virginia's Annual Highway Safety Improvement Report," of August 31, 1974.

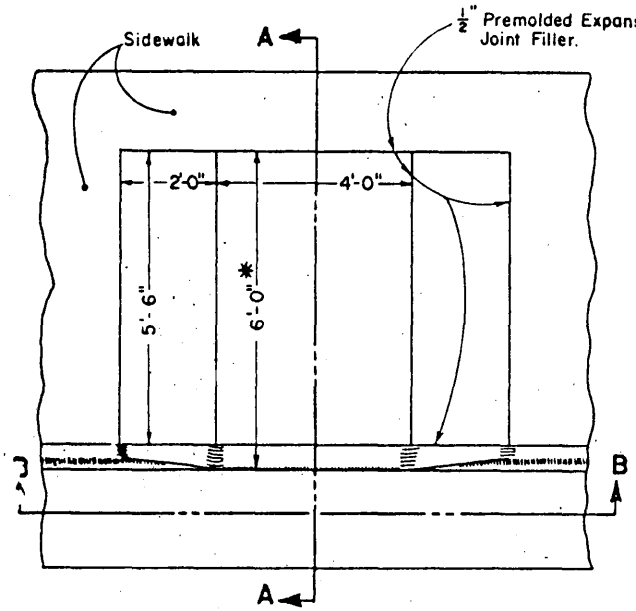
Curb Ramps for the Handicapped

By memorandum number LD-71(D)55 of September 20, 1971, P.B. Coldiron, then Location and Design Engineer for the Virginia Department of Highways, issued guidelines for the incorporation of curb cut ramps for the physically handicapped into the Department's plans for future highway projects. Mr. Coldiron pointed out that the primary use of the design would be restricted to urban area projects which specify curb or curb and gutter on the typical section. It was also noted that the immediate areas which should be investigated would include high-rise apartments, major office buildings, medical offices and services, stadiums and coliseums, central business districts, or any other area where there is a concentration of pedestrians. Land use areas beyond the actual limits of a project were also to be studied where it would appear that approach patterns to these vicinities might be significant. Also as a result of the above memorandum, the design for curb cut ramps for the physically handicapped (See Attachment A) has been included in the 1972 and all subsequent editions of the Highway and Transportation Department's publication entitled "Road Designs and Standards."

The FHWA Notice N7580.1, issued October 29, 1973, stated that Section 228 of the Highway Safety Act of 1973 requires that the Secretary of Transportation not approve any State Highway Safety Program which does not "provide 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 throughout the State."

3616 In keeping with the requirement that each state submit appropriate revisions to the Comprehensive Plan which accurately reflect major changes in a standard area, the Virginia Department of Highways and Transportation, was asked to indicate the state's plans to implement Section 228 of the 1973 Highway Safety Act. In response to the request, the Department stated that the "Road Design and Standards" document presently includes a standard design for curb cut ramps. It was also noted that these ramps have been included in a number of the VDH&T's projects and constructed at locations where there has been a demonstrated need for the facilities. Department officials further indicated the Commonwealth's intentions to fully comply with Section 228 of the Act by stating that current construction plans, which are in the development stage and where pedestrian walks are being provided, are undergoing review for the purpose of incorporating the specific locations of curb cuts into these projects.

CG-12



PLAN

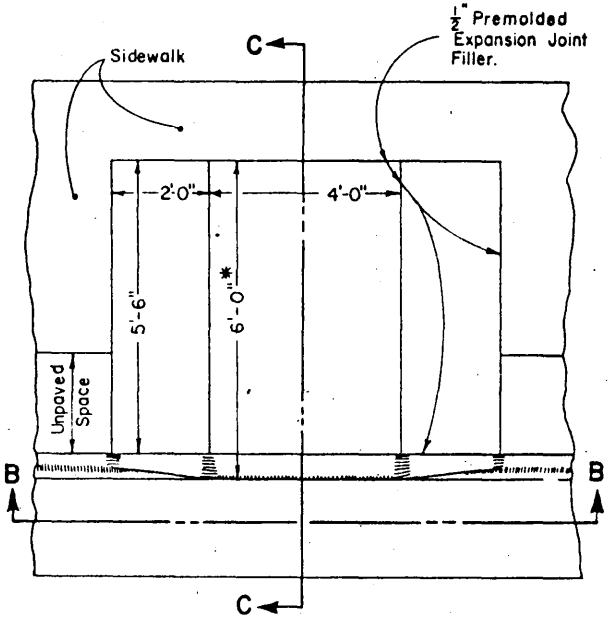
All concrete to be Class A3.

Ramp surface shall be constructed with a non-skid finish. Ramp shall not exceed a maximum slope of 12:1.

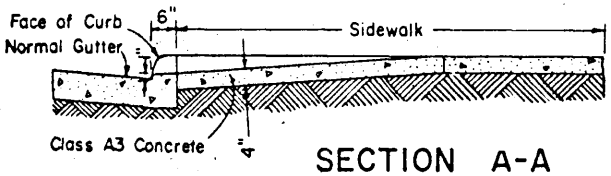
Curb cut ramps are to be located as shown on the plans or as directed by the Engineer. They should be offset from pedestrian cross-walks but should not be located behind vehicle stop lines. Existing light poles, fire hydrants, drop inlets, etc. will also affect placement.

Basis of Payment: contract unit price per square yard of portland cement concrete side-walk.

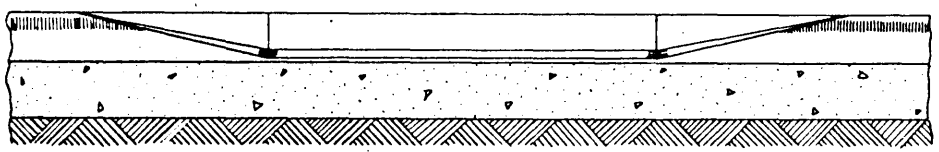
*Dimension may vary if curb is other than 6" in height.



PLAN



SECTION A-A



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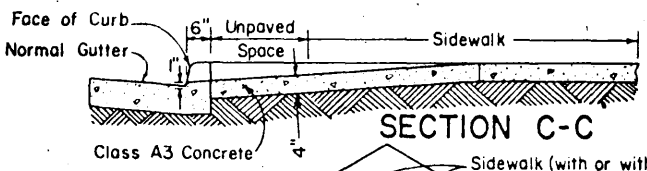
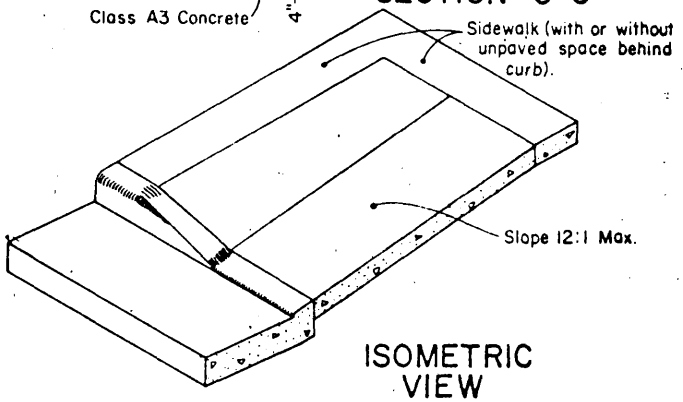


SECTION C-C



ISOMETRIC VIEW

CURB CUT RAMP

(FACILITY FOR PHYSICALLY HANDICAPPED)

VIRGINIA
DEPARTMENT OF HIGHWAYS

203.9

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Highway Design, Construction and Maintenance	3. NO. HD76-361 46-76-12-01	4. DATE 5-1-75
	5. DRAFTED BY W. L. Brittle, Jr., L&D Engr., VDH&T (Title and Agency)	FISCAL YEAR 1976		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS	Accident rate on all Virginia highways, streets and roads		(1973)			455
6b. OUTPUT	C Design, construction, maintenance; (% highway system)					82%
	V Design, construction, maintenance; (1,000 miles)	(1973)				51,062.83
7. RESP. 8. STD.	9. TASKS & MILESTONES					
VDH&T 312	1. Design (Miles)					
	(a) InterstateSystem	19.8	8.9	3.9	9.0	41.6
	(b) Primary System	22.9	36.5	20.8	18.0	98.2
	(c) Secondary System	141.0	94.0	94.0	141.0	470.0
	(d) Urban System	7.2	4.0	10.5	7.8	29.5
	(e) Bridge Widening	-	-	-	-	-
	(f) Safety Improvements		-	-	-	-

10. DESCRIPTION The long-term goal of the Department's program in the area of Highway Design, Construction and Maintenance, is to reduce the number of traffic crashes including fatalities, personal injuries and property damage through adequate design, construction and maintenance of all roadways within the Commonwealth. The design standards utilized are being updated continuously to include any new safety features. An example of this is a standard for curb ramps for the physically handicapped which are now being installed where pedestrian facilities are being provided. (1-5) See Block 9.

11. COST BY TASK ($000s)					
* 1. a. Interstate System	1798.	652.	769.	2369.	5588.
b. Primary System	1150.	1711.	1016.	780.	4657.
c. Secondary System	924.	616.	616.	924.	3080.
d. Urban System	814.	370.	1477.	651.	3312.
e. Bridge Widening	4.	4.	4.	4.	16.
f. Safety Improvement	83.	79.	83.	83.	328.
12. TOTAL COST ($000s)	140126.	105797.	119086.	142660.	507669.
LOCAL SHARE					
** STATE SHARE	140126.	105797.	119086.	142660.	507669.
FEDERAL SHARE					
TO LOCALITIES					

* In keeping with certain conditions placed on Virginia's Second Annual Work Program, this money is not included in the grand total of HSD funds for FY 76.
State and Federal Highway Funds.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Highway Design, Construction and Maintenance	3. NO. HD76-361 46-76-12-02	4. DATE 5-1-75
	5. DRAFTED BY F. L. Burroughs, Constr. Engr., VDH&T (Title and Agency)	FISCAL YEAR 1976		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS Accident rate on all Virginia road systems		(1973)				455
6b. OUTPUT	C Construction; % of highway system (estimation)					1.0
	V Construction; miles					639.3
7. RESP. / 8. STD.	9. TASKS & MILESTONES					
VDH&T 312	2. Construction (miles)					
	a. Interstate System	19.8	8.9	3.9	9.0	41.6
	b. Primary System	22.9	36.5	20.8	18.0	98.2
	c. Secondary System	141.0	94.0	94.0	141.0	470.0
	d. Urban System	7.2	4.0	10.5	7.8	29.5
	e. Bridge Widening	-	-	-	-	-
	f. Safety Improvements	-	-	-	-	-
10. DESCRIPTION	11. COST BY TASK ($000s)					
	2. a. Interstate System	42602.	15448.	18231.	56131.	132412.
	b. Primary System	24320.	36179.	21484.	16500.	98483.
	c. Secondary System	15600.	10400.	10400.	15600.	52000.
	d. Urban System	17210.	7815.	31225.	13770.	70020.
	e. Bridge Widening	100.	100.	100.	100.	400.
	f. Safety Improvement	1762.	1664.	1762.	1762.	6950.
	12. TOTAL COST ($000s)					
	LOCAL SHARE					
	STATE SHARE					
	FEDERAL SHARE					
	TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Highway Design, Construction and Maintenance	3. NO. HD76-361 46-76-12-03	4. DATE 5-1-75
	5. DRAFTED BY F. L. Burroughs, Constr. Engr., VDH&T (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C					
	V					
7. RESP. VDH&T	8. STD. 312	9. TASKS & MILESTONES				
		3. Administration				
		a. Interstate System				
		b. Primary System				
		c. Secondary System				
		d. Urban System				
		e. Bridge Widening				
		f. Safety Improvement				
10. DESCRIPTION		11. COST BY TASK ($000s)				
		* 3. a. Interstate System	1260.	1544.	1823.	5613.	13240.
		b. Primary System	2432.	3618.	2148.	1650.	9848.
		c. Secondary System	1560.	1040.	1040.	1560.	5200.
		d. Urban System	1721.	781.	3122.	1377.	7001.
		e. BridgeWidening	10.	10.	10.	10.	40.
		f. Safety Improvement	176.	166.	176.	176.	694.
		12. TOTAL COST ($000s)					
		LOCAL SHARE					
		STATE SHARE					
		FEDERAL SHARE					
		TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Highway Design & Construction and Maintenance	3. NO. HD76-361 46-76-12-04	4. DATE 5-1-75
	5. DRAFTED BY R. L. Fink, Maintenance Engr., VDH&T (Title and Agency)	FISCAL YEAR 1976		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS Accident rate on all Virginia road systems		(1973)				455
6b. OUTPUT	C Percent of state highways serviced					100%
	V Number of miles serviced					51,063
7. RESP. VDH&T / 8. STD. 312.	9. TASKS & MILESTONES					
	4. Maintenance (Miles)					
	a. Interstate System	216	216	216	216	864
	b. Primary System	1969	1969	1969	1969	7876
	c. Secondary System	10750	10750	10750	10750	43000
	5. Skid Program	Continue	Continue	Continue	Continue	
10. DESCRIPTION	11. COST BY TASK ($000s)					
	* 4. a. Interstate System	3350.	3350.	3350.	3350.	13400.
	b. Primary System	8250.	8250.	8250.	8250.	33000.
	c. Secondary System	12000.	12000.	12000.	12000.	48000.
	12. TOTAL COST ($000s)					
	LOCAL SHARE					
	STATE SHARE					
	FEDERAL SHARE					
	TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Highway Design, Construction and Maintenance	3. NO. HD76-362 46-76-12-01	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr., Res. Anal., VH T&RC (Title and Agency)	FISCAL YEAR 1976		
	APPROVED BY John T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS See Effectiveness Supplement						
6b. OUTPUT	C Percent of roadway miles under local jurisdiction					18%
	V Number of roadway miles under local jurisdiction		(1973)			11,288
7. RESP. Local Political Subdivisions	8. STD. 312					
	9. TASKS & MILESTONES 1. Personnel - salaries of traffic engineers, draftsmen, and supervisors 2. Equipment and Communications	Bids	Purchase			
10. DESCRIPTION The long-term goal of the highway, design, construction, and maintenance programs in Virginia localities, as well as in the Virginia Department of Highways and Transportation, is to reduce the number of traffic crashes including fatalities, personal injuries and property damage attributed to poorly designed, constructed, and maintained highways by providing adequate design, construction and maintenance of all roadways. (1) See Block 9. (2) Requests include but are not limited to the following: Traffic cones, portable radios, barricades, flashers, trucks, paint marking and stripping machines, tar kettles and com-	11. COST BY TASK ($000s) 1. Personnel	20.	20.	20.	20.	80.
	2. Equipment and Communications		120.			120.
	12. TOTAL COST ($000s)	108.	240.	95.	97.	540.
	LOCAL SHARE	78.	100.	65.	66.	309.
	STATE SHARE					
	FEDERAL SHARE	30.	140.	30.	31.	231.
	TO LOCALITIES	30.	140.	30.	31.	231.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Highway Design Contruction and Maintenance	3. NO. HD76-362 46-76-12-02	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr., Res. Anal., VH&TRC (Title and Agency) APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)			

6a. EFFECTIVENESS			FISCAL YEAR 19 76				
			1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6b. OUTPUT		C					
		V					
7. RESP.	8. STD.	9. TASKS & MILESTONES					
Local Political Subdivisons	312	3. Install guardrails at hazardous locations	Install	Install	Install	Install	
		4. Upgrade street lighting by installing mercury vapor street lights	Install	Install	Install	Install	
		5. Installation of curb cut ramps	Install				
		6. Installation of railroad crossing gate and rubber railroad crossing	Install		Install	Install	
		7. Training seminar at Northwestern (No. Trained)				1	1

10. DESCRIPTION	11. COST BY TASK ($000s)					
munications equipment. (3-7) See Block 9, tasks are self-explanatory, (8) Roadway improvements include but are not necessarily limited to the following: bridge repair and widening, pavement of road shoulders, street widening, relesign of intersections and general road improvements. (9) Consultants with expertise in traffic engineering will be employed to conduct studies at accident prone locations selected by the localities. (10) This study covers the following components; expected avenues of entrance and exit form the state, number of people expected for the celebration, non-residents visiting Virginia	* 3. Guardrail	3.	3.	3.	3.	12.
	* 4. Street lighting	2.	2.	2.	2.	8.
	* 5. Curb cut ramps	25.				25.
	* 6. Railroad gate and crossing	13.		25.	25.	63.
	7. Training				2.	2.
	12. TOTAL COST ($000s)					
	LOCAL SHARE					
	STATE SHARE					
	FEDERAL SHARE					
	TO LOCALITIES					

* In keeping with certain conditions placed on Virginia's Second Annual Work Program, this money is not included in the grand total of HSD funds for FY 76.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Highway Design, Construction and Maintenance	3. NO. HD76-362 46-76-12-03	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr., Res. Anal., VHT&RC (Title and Agency) APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	FISCAL YEAR 19 76		

			1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL
			July, Aug, Sept	Oct, Nov, Dec	Jan, Feb, Mar	Apr, May, June	
6a. EFFECTIVENESS							
6b. OUTPUT		C V					
7. RESP.	8. STD.	9. TASKS & MILESTONES					
Local Political Subdivisions	312	8. Roadway Improvements	Construct	Construct	Construct	Construct	
		9. Engineering and Accident Evaluation Studies	Conduct	Conduct	Conduct	Conduct	
HSD	312	10. Preliminary Traffic Flow Study — Virginia Bicentennial Celebration	Solicit Bids	Develop	Implement		
10. DESCRIPTION and their origination point, movement of residents and modes of travel; the study will attempt to familiarize the public with the use of roadways and streets centered around those areas featured in the Bicentennial celebration focal points.		11. COST BY TASK ($000s)					
		* 8. Roadway Improvements	25.	25.	25.	25.	100.
		9. Accident Evaluation Studies	20.	20.	20.	20.	80.
		10. Traffic Flow Study		50.			50.
		12. TOTAL COST ($000s)					
		LOCAL SHARE					
		STATE SHARE					
		FEDERAL SHARE TO LOCALITIES					

* In keeping with certain conditions placed on Virginia's Second Annual Work Program this money is not included in the grand total of HSD funds for FY 76.

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. Highway Design, Construction and Maintenance HD76-362 46-76-12-04	Date 5-1-75	19 69 CY-2	19 70 CY-1	Calendar Year 1971 1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	19 72 CY + 1	19 73 CY+ 2
6a. EFFECTIVENESS										
Accidents										
Deaths										
Economic loss										
Due to roadway design defects										
1.										
Road Defects Accidents										
1. Under repair		1496	1818					2553	2326	2432
2. Loose material		2189	2310					2267	2310	2549
3. Holes in road		799	913					1129	1290	1395
2. 4. Soft or low shoulders		1327	1393					1662	1792	1946
Road Defects Fatalities										
1. Under repair		14	16					15	10	12
2. Loose material		12	11					6	7	7
3. Holes in road		3	5					5	5	7
3. 4. Soft or low shoulders		18	17					12	15	26
Alignment of Road Accidents										
1. Level road - straight		73208	76830					81527	88966	89692
2. Level road - curve		13336	13352					14190	14965	15206
3. On grade - straight		23115	24229					25534	27037	27398
4. 4. On grade - curve		13743	14021					14415	15314	15734
5. Hillcrest - straight		3242	3614					3810	3887	4106
6. Hillcrest - cruve		1373	1312					1357	1434	1481
7. Dip - straight		1118	1229					1194	1226	1282
8. Dip - curve		573	588					592	579	629
5.										
Alignment of Road Fatalities										
1. Level road - straight		431	391					402	457	405
2. Level road - surve		197	196					174	158	181
3. On grade - straight		218	205					243	244	206
4. On grade - curve		220	214					181	180	190
6.										

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. Highway Design, Construction and Maintenance HD76-362 46-76-12-05	Date 5-1-75	1969 CY - 2	1970 CY - 1	Calendar Year 1971 1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	1972 CY + 1	1973 CY + 2
6a. EFFECTIVENESS										
Alignment of Road Fatalities (Cont')										
5. Hillcrest - straight		34	31					27	23	34
6. Hillcrest - curve		15	15					10	19	17
7. Dip - straight		6	7					10	13	9
8. Dip - curve		4	4					4	4	4
Character of Location Accidents										
1. Street or highway intersection		52772	56776					59435	64657	64429
2. Alley or driveway intersection		17029	17183					18925	20472	20164
3. At railroad crossing		205	151					169	167	180
7. 4. Not at intersection		61593	62813					65878	69961	72864
Character of Location Fatalities										
1. Street or highway intersection		163	172					209	198	172
2. Alley or driveway		52	52					45	55	39
3. Railroad crossing		8	13					9	10	11
8. 4. Not at intersection		894	829					791	837	829
Kind of Locality Accidents										
1. Business or industrial district		44153	46400					48729	53790	53899
2. Residential		39454	41841					43793	46181	46720
3. School or playground zone		1805	2066					2104	2251	2328
9. 4. Open country		43054	43649					47073	50235	51411
Kind of Locality Fatalities										
1. Business or industrial district		110	128					127	140	110
2. Residential		187	194					180	184	160
3. School or playground		11	5					12	9	7
10. 4. Open country		796	726					719	756	756
Accident frequency rate/100 million vehicle miles on state highway system		1974 450	1975 447					1976 441	1977 438	1978 435
11.										

TRAFFIC ENGINEERING SERVICES

Section 46.1-173 of the Code of Virginia authorizes the State Highway & Transportation Commission to classify, designate, and mark state highways and provide a uniform system of marking and signing such highways, and provides that such system of marking and signing shall correlate with and so far as possible conform to the system adopted in other states.

Section 46.1-187 of the Virginia Code provides that traffic signs erected on and after January 1, 1959, and traffic signals and markings placed or erected on and after January 1, 1969, by local authorities shall conform in size, design, and color to those erected for the same purpose by the State Highway and Transportation Department. Also, Section 33-36 of the Virginia Code provides that all markings and traffic signals installed or erected by towns on primary roads maintained by the State Highway and Transportation Department shall first be approved by the State Highway and Transportation Commission.

In Virginia, the major problem with the traffic engineering services lies with the municipalities not under the jurisdiction of the Virginia Department of Highways and Transportation. Many of the localities lack sufficient funds for the development of a program that would eliminate "signing" difficulties. There is also a lack of qualified traffic engineers to carry out the necessary programs for uniform traffic control devices.

In order to alleviate this problem, the HSD hired consultants to work with those localities unable to justify a full-time traffic engineering staff. Provisions for upgrading the skills of practicing traffic engineers and providing basic instruction in traffic engineering techniques to professionals, subprofessionals and technicians is also a part of the highway safety program.

The traffic engineering services program at the local level includes:

(1) An inventory of traffic control devices.

(2) Periodic review of devices.

(3) A maintenance schedule adquate to ensure the proper operation and timely repair of control devices, including daytime and nighttime inspections. Additional programs (as funds permit) will be developed by the consultants.

(4) Hiring of personnel and procurement of necessary equipment.

The Virginia Department of Highways and Transportation is in compliance with the standards as they apply to traffic engineering services. Below are statements reflecting this compliance.

1. The program as a minimum consists of:

   (a) A comprehensive manpower development plan to provide the necessary traffic engineering capability, including:

      1. Provisions for supplying traffic engineering assistance to those jurisdictions unable to justify a full-time traffic engineering staff.

2. Provides for upgrading the skills of practicing traffic engineers and providing basic instruction in traffic engineering techniques to subprofessionals and technicians.

(b) Utilization of traffic engineering principles and expertise in the planning, design, construction, and maintenance of the public roadways, and in the application of traffic control devices.

(c) A traffic control devices plan including:

1. An inventory of all traffic control devices.

2. Periodic review of existing traffic control devices, including a systematic upgrading of substandard devices to conform with standards issued or endorsed by the Federal Highway Administration.

3. A maintenance schedule adequate to ensure proper operation and timely repair of control devices, including daytime and nighttime inspections.

4. Where appropriate, the application and evaluation of new ideas and concepts in applying control devices and in modifying existing devices to improve their effectiveness through controlled experimentation.

(d) An implementation schedule to utilize traffic engineering manpower to:

1. Review road projects during the planning, design, and construction stages to detect and correct features that may lead to operational safety difficulties.

2. Install safety-related improvements as a part of routine maintenance and/or repair activities.

3. Correct conditions noted during routine operational surveillance of the roadway system to rapidly adjust for the changes in traffic and road characteristics as a means of reducing accident frequency or severity.

4. Conduct traffic engineering analyses of all high accident locations and implement corrective measures.

5. Analyze potentially hazardous locations, such as sharp curves, steep grades, and railroad grade crossings and develop appropriate countermeasures.

6. Identify traffic control needs and determine short-and long-range requirements.

7. Evaluate the effectiveness of specific traffic control measures in reducing the frequency and severity of traffic accidents.

8. Conduct traffic engineering studies to establish traffic regulations such as fixed or variable speed limits.

II. This program is periodically evaluated by the state, or appropriate federal department or agency where applicable, and the Federal Highway Administration is provided with an evaluation summary.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Traffic Engineering Services	3. NO TE76-361 46-76-13-01	4. DATE 5-1-75
	5. DRAFTED BY M. G. Alderman, Traffic Technician Supervisor, VDH&T (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS See Effectiveness Supplement						
6b. OUTPUT	C ~~Percent of serviced traffic signal locations improved since~~ 1969		(Estimations)			90%
	V Number of traffic signal locations serviced since 1969					261
7. RESP. VDH&T / 8. STD. 313	9. TASKS & MILESTONES					
	1. Continue to maintain and promote the uniformity of Traffic Control Devices in the State.					
	A. Maintenance of the Virginia Manual on Uniform Traffic Control Devices					
	B. Preparation of bikeway publications					
	2. Field investigations and studies conducted to make recommendations for traffic control devices and safety improvements other than traffic signals					
	A. Special Devices					
	1. Ice detection and display					
	2. Fog detection and display					
	3. Overheight detection and display					
10. DESCRIPTION The Virginia Department of Highways and Transportation has complete control over all traffic control devices within its jurisdiction, which includes all but two of Virginia counties. It has limited authority in the cities. (1-6) See Block 9. The long-term goal in this standard area is to assure the full and proper application of modern traffic engineering principles and uniform standards for traffic control to reduce the likelihood and severity of traffic crashes, fatalities, personal injuries and property damage. The VDH&T plans to improve the program by continuing to improve and update all	11. COST BY TASK ($000s)					
	* 4. Installment of Traffic Control Devices					
	A-1 Signs	391.88	391.88	391.88	391.88	1567.52
	A-2 Signals	375.00	375.00	375.00	375.00	1500.00
	B-1 Signs	104.40	104.40	104.40	104.40	417.60
	12. TOTAL COST ($000s)	1941.36	1941.36	1941.36	1941.36	7765.44
	LOCAL SHARE					
	STATE SHARE	1940.86	1940.86	1940.86	1940.86	7763.44
	FEDERAL SHARE	.5	.5	.5	.5	2.
	TO LOCALITIES					

* In keeping with certain conditions placed on Virginia's Second Annual Work Program this money is not included in the grand total of HSD funds for FY 76.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Traffic Engineering Services	TE76-361 3. NO. 46-76-13-02	4. DATE 5-1-75
	5. DRAFTED BY M. G. Alderman, Traffic Technician Supervisor, VDH&T (Title and Agency)	FISCAL YEAR 1976		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C V					

7. RESP.	8. STD.	9. TASKS & MILESTONES (continued)					
VDH&T	313	3. Following Too Close Device 4. Highway and Tunnel Illumination B. Signing 3. Field investigations and studies conducted for the installation of traffic signals and the modification of existing traffic signals A. Traffic Control Signals (Stop & Go) B. Drawbridge Signals C. Fire Warning Signals D. Flashing Beacons E. Lane Use Control Signals F. Pedestrian Signals					
		11. COST BY TASK ($000s)					
		6. Operations					
		A-1	.61	.61	.61	.61	2.44
		A-2	.49	.49	.49	.49	1.96
		A-3	4.48	4.48	4.48	4.48	17.92
		A-4	4.73	4.73	4.73	4.73	18.92
		A-5	.43	.43	.43	.43	1.72
		12. TOTAL COST ($000s)					
		LOCAL SHARE					
		STATE SHARE					
		FEDERAL SHARE					
		TO LOCALITIES					

10. **DESCRIPTION** traffic control devices as need demands. It is VDH&T policy, upon request for a traffic control device to investigate said location, with the use of specially trained personnel, and make recommendations accordingly. Breakaway signs are now installed at new sign locations and also where replacements have to be made. Changeable message signs are being considered for installation on certain Virginia highway systems. These signs may prove beneficial in the realization of outlined goals in this area. The VDH&T plans to develop a more effective evaluation of the program by keeping records on traffic signals that have been improved since 1969.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Traffic Engineering Services	3. NO. TE76-361 46-76-13-03	4. DATE 5-1-75
	5. DRAFTED BY M. G. Alderman, Traffic Technician Supervisor, VDH&T (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C V					
7. RESP. VDH&T	8. STD. 313	9. TASKS & MILESTONES (Continued) G. Railroad Grade Crossing Signals H. Modification of the above traffic signals 4. Installment of Traffic Control Devices A. Primary 1. Signs at $95 each 2. Signals at $15,000 each B. Interstate 1. Signs at $464 each 5. Research conducted by the Traffic Section of the Research Council					16,500 100 900
10. DESCRIPTION		11. COST BY TASK ($000s)					
		A-6	20.64	20.64	20.64	20.64	82.56
		A-7	14.13	14.13	14.13	14.13	56.52
		A-8	30.71	30.71	30.71	30.71	122.84
		A-9	5.90	5.90	5.90	5.90	23.60
		A-10	56.21	56.21	56.21	56.21	224.84
		A-11	35.77	35.77	35.77	35.77	143.08
		12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Traffic Engineering Services	3. NO. TE76-361 46.76-13-04	4. DATE 5-1-75
	5. DRAFTED BY M. G. Alderman, Traffic Technician Supervisor, VDH&T (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C					
	V					
7. RESP.	8. STD.	9. TASKS & MILESTONES				
VDH&T	313	6. Operations				
		A. Personnel				
		1. State Traffic and Safety Engineer	1	1	1	1	1
		2. Assistant State Traffic and Safety Engineer	1	1	1	1	1
		3. Research Engineer	2	2	2	2	2
		4. Traffic Engineer B	2	2	2	2	2
		5. Electrical Engineer	1	1	1	1	1
		6. District Traffic Engineer	8	8	8	8	8
		7. Engineer A	6	6	6	6	6
		8. Technician Supervisor	12	12	12	12	12
		9. Electrical Superintendent	2	2	2	2	2
		10. Technician	28	28	28	28	28
10. DESCRIPTION		11. COST BY TASK ($000s)					
		12. TOTAL COST ($000s)					
		LOCAL SHARE					
		STATE SHARE					
		FEDERAL SHARE					
		TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Traffic Engineering Services	3. NO. TE76-361 46-76-13-05	4. DATE 5-1-75
	5. DRAFTED BY M. G. Alderman, Traffic Technician Supervisor, VDH&T (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)			

6a. EFFECTIVENESS							
6b. OUTPUT	C V						
7. RESP.	8. STD.	9. TASKS & MILESTONES	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec.	3rd Quarter Jan, Feb, Mar.	4th Quarter Apr, May, June	TOTAL
VDH&T	313	11. Technician B	21	21	21	21	21
		12. Technician A	13	13	13	13	13
		13. Research Assistants (part-time)	4	4	4	4	4
		14. Maintenance Personnel	426	426	426	426	426
		a. Pavement Marking Crews					
		b. Sign Crews					
		c. Electrical Crews					
		d. Miscellaneous					
		15. Clerk Stenographer C	11	11	11	11	11
		16. Clerk Stenographer D	1	1	1	1	1
10. DESCRIPTION		11. COST BY TASK ($000s) (continued)					
		A-12	12.24	12.24	12.24	12.24	48.96
		A-13	2.65	2.65	2.65	2.65	10.60
		A-14	751.47	751.47	751.47	751.47	3005.88
		A-15	14.9	14.92	14.92	14.92	59.68
		A-16	.22	.22	.22	.22	.88
		12. TOTAL COST ($000s)					
		LOCAL SHARE					
		STATE SHARE					
		FEDERAL SHARE					
		TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Traffic Engineering Services	3. NO. TE76-361 46-76-13-06	4. DATE 5-1-75
	5. DRAFTED BY M. G. Alderman, Traffic Technican Supervisor, VDH&T (Title and Agency) APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	FISCAL YEAR 19 76		

6a. EFFECTIVENESS						
6b. OUTPUT	C V					

7. RESP.	8. STD.	9. TASKS & MILESTONES (Continued)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
VDH&T	313	B. Equipment					
		1. Survey Wagons	12	12	12	12	12
		2. ½ Ton Pickups	19	19	19	19	19
		3. ¾-1 Ton Trucks	79	79	79	79	79
		4. 1-1½ Ton Trucks	2	2	2	2	2
		5. 3 Ton Trucks	28	28	28	28	28
		6. Paint Markers	24	24	24	24	24

10. DESCRIPTION	11. COST BY TASK ($000s)					
	B-1	6.51	6.51	6.51	6.51	26.04
	B-2	4.29	4.29	4.29	4.29	17.16
	B-3	23.84	23.84	23.84	23.84	95.36
	B-4	1.24	1.24	1.24	1.24	4.96
	B-5	15.10	15.10	15.10	15.10	60.40
	B-6	22.47	22.47	22.47	22.47	89.88
	12. TOTAL COST ($000s)					
	LOCAL SHARE					
	STATE SHARE					
	FEDERAL SHARE					
	TO LOCALITIES					

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Traffic Engineering Services	3. NO. TE76-361 46-76-13-07	4. DATE 5-1-75
	5. DRAFTED BY M. G. Alderman, Traffic Technician Supervisor, VDH&T (Title and Agency)	FISCAL YEAR 19__76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)			

6a. EFFECTIVENESS			1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL
			July, Aug, Sept	Oct, Nov, Dec	Jan, Feb, Mar	Apr, May, June	
6b. OUTPUT		C					
		V					
7. RESP. VDH&T	8. STD. 313	9. TASKS & MILESTONES (Continued)					
		B. Equipment					
		7. Bucket Trucks	28	28	28	28	28
		8. Trenchers	2	2	2	2	2
		9. Pole Trailers	5	5	5	5	5
		10. Pole Trucks	1	1	1	1	1
		11. Automobiles	31	31	31	31	31
		C. Supplies					
		D. Rent (Offices)	3	3	3	3	3
		E. Travel					
		F. Training (OJT and other major institutions of higher learning)	2	2	2	2	2

10. DESCRIPTION	11. COST BY TASK ($000s)					
	B-7	23.63	23.63	23.63	23.63	94.52
	B-8	.72	.72	.72	.72	2.88
	B-9	.30	.30	.30	.30	1.20
	B-10	.95	.95	.95	.95	3.80
	B-11	9.54	9.54	9.54	9.54	38.16
	C	1.44	1.44	1.44	1.44	5.76
	D	3.20	3.20	3.20	3.20	12.80
	12. TOTAL COST ($000s) E.	.75	.75	.75	.75	3.0
	LOCAL SHARE ** F.	.5	.5	.5	.5	2.0
	STATE SHARE					
	FEDERAL SHARE					
	TO LOCALITIES					

** This money is included in the grand total of HSD funds for FY 76.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Traffic Engineering Services	3. NO. TE76-362 46-76-13-01	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr., Res. Anal., VHT&RC (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS	See Effectiveness Supplement					
6b, OUTPUT	C					
	V					
7. RESP. HSD	8. STD. 313	9. TASKS & MILESTONES				
		1. Traffic Engineering Seminars	Conduct		Conduct	
		2. Training (No. Trained)	2	2		4	8
		3. Personnel- Salaries of traffic engineers, asst. traffic engineers, clerks and temporary employees, and equipment operators					

10. DESCRIPTION In Virginia those municipalities not under the jurisdiction of the Virginia Department of Highways & Transportation install and maintain all traffic control devices and apply traffic control tactics when the need arises. Their objective is to reduce the number of crashes including fatalities, personal injuries and property damage caused by (A) nonuniform markings and signing, and (B) poor traffic markings and signing. (1) These seminars acquaint Traffic Engineers in Virginia with new ideas, developments and procedures which can be utilized by the localities to enhance their Highway Safety Program.

11. COST BY TASK ($000s)					
1. Seminars	6.		6.		12.
2. Training	4.	4.		8.	16.
3. Personnel	50.	50.	50.	50.	200.
12. TOTAL COST ($000s)	96.75	340.75	92.75	94.75	625.0
LOCAL SHARE	62.375	272.375	60.375	64.375	459.5
STATE SHARE					
FEDERAL SHARE	34.375	68.375	32.375	30.375	165.5
TO LOCALITIES	34.375	68.375	32.375	30.375	165.5

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Traffic Engineering Services	3. NO. TE76-362 46-76-13-02	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr., Res. Anal., VHT&RC (Title and Agency)	FISCAL YEAR 1976		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS						
6b. OUTPUT	C V					
7. RESP. Local Political Suvdivisions	8. STD. 313	9. TASKS & MILESTONES				
		4. Equipment and Communication	Bids	Purchase		
		5. Inventory and update of certain traffic control devices	Continue	Continue	Continue	Continue	
		6. Study roadway systems to determine where traffic engineering improvements can contribute to safety	Continue	Continue	Continue	Continue	
		A. Development of a more comprehensive program of lane marking and crosswalks					
10. DESCRIPTION (2) Funds for the training of traffic engineering assistants, technicians, and engineers as well as attendance at traffic engineering schools are requested under this particular task. (3) See Block 9. (4) Requests for funding include but are not limited to the following items; sign and signal maintenance, mobile radios, traffic counters, stripping tank, paint machinery, supplies, and other communication equipment. (5-6) See Block 9.		11. COST BY TASK ($000s)					
		4. Equipment and Communication		250.			250.
		5. Inventory	18.75	18.75	18.75	18.75	75.
		6. Studies	18.	18.	18.	18.	72.
		12. TOTAL COST ($000s) LOCAL SHARE STATE SHARE FEDERAL SHARE TO LOCALITIES					

EFFECTIVENESS SUPPLEMENT
TO THE SUBELEMENT

Title and No. TE76-362 Traffic Engineering 46-76-13-03 Services	Date 5-1-75	19 69 CY - 2	19 70 CY - 1	Calendar Year 1971 1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	19 72 CY + 1	19 73 CY + 2
6a. EFFECTIVENESS										
Number of accidents and deaths at traffic signal locations										
1.										
Number of accidents at traffic control locations										
1. Traffic lanes marked		38223	39345					43955	48256	47345
2. Yield signs		3993	4165					4427	4886	4576
3. Automatic stop and go signals		16079	16885					17513	19039	20751
2. 4. Stop sign or signal		16324	18669					20796	23008	21824
5. Slow sign		2138	2000					1939	1880	1723
6. Traffic officer		392	456					439	494	431
7. No passing lines		3732	3767					4207	4992	5160
8. Railroad watchman		30	29					30	30	36
3. 9. Railroad gates or signals		270	301					286	275	272
10. No control present		44483	45600					45307	47061	49681
11. One way street		1251	1252					1207	1110	1234
4.										
Number of fatalities at traffic control locations										
1. Traffic lanes marked		614	555					590	601	578
2. Yield signs		10	2					10	5	3
3. Automatic stop and go signals		30	24					38	36	30
5. 4. Stop sign or signal		65	72					90	99	87
5. Slow sign		31	38					31	31	24
6. Traffic officer		1	3					1	4	1
7. No passing lines		72	78					81	69	93
8. Railroad watchman		0	0					0	0	0
6.										

EFFECTIVENESS SUPPLEMENT

TO THE SUBELEMENT

Title and No. TE76-362 / 46-76-13-04 Traffic Engineering Services	Date 5-1-75	19 69 CY - 2	19 70 CY - 1	Calendar Year 1971 1st Qt.	2nd Qt.	3rd Qt.	4th Qt.	Total	19 72 CY + 1	19 73 CY + 2
6a. EFFECTIVENESS										
9. Railroad gates or signals		2	6					3	8	4
10. No control present		260	263					195	228	202
11. One way street		18	13					9	7	7
1.										
Total crashes at traffic control locations		131599	136923					144407	155257	157637
2.										
Total fatal crashes at traffic control location		117	1066					1054	1100	1048
3.										
Total personal injury crashes at traffic control locations		31846	32296					33577	35600	36070
4.										
Total property damage crashes at traffic control locations		98636	103561					109776	118557	120519
5.										
6.										

PEDESTRIAN SAFETY

The goal of the Pedestrian Safety Program in Virginia is to reduce the number of vehicle-pedestrian accidents including fatalities, personal injuries and property damage attributed to poor walking habits and insufficient facilities in areas of high volume pedestrian traffic.

The Commonwealth's pedestrian program has a further goal in minimizing environmental hazards in attempting to protect pedestrians. This task must necessarily begin by identification of high pedestrian accident locations. In cities, where it is easier to identify these high risk areas, spot maps are the technique likely to be used.

In the recent past, several localities have been confronted with a substantial increase in the utilization rate of bicycles due, in part, to the energy crisis. Concomitantly, these local political subdivisions have also witnessed an increase in the number of bicycle — motor vehicle accidents. Consequently, plans are being made to study the feasibility aspects of bicycle trail construction along recreational and commuter routes of travel in attempting to assist local officials in the development of bicycle trail plans for certain localities throughout the Commonwealth. This project will enhance the municipalities' Highway Safety Program and help alleviate this particular problem area by reducing the number of motor vehicle — bicycle accidents while at the same time increasing the capacity of roadway systems by assigning bicycles to a specific route of travel.

The 1973 session of Virginia's General Assembly enacted a resolution directing the Department of Highways and Transportation to conduct a study of

the need for bikeways in the Commonwealth. In conducting that study, the Department contacted various government agencies and private firms throughout the United States and assembled an extensive collection of materials related to bicycles and bikeways.

The Bikeway Development Study report submitted to the General Assembly provided general information which summarized the growing interest in bicycling as documented by various statistics, the planning of various bikeway facilities, the design of bikeway geometrics and traffic controls, bikeway costs and potential sources of funding for bikeways. In addition, recommendations were presented which might be utilized to assist in the development of bikeways in the Commonwealth.

In light of the aforementioned study, the Planning and Design of Bikeways report was prepared to supplement the information contained in the previously mentioned report to the General Assembly. The primary purpose of the most recent study was to present detailed information and procedures which might be utilized to plan and design bikeways.

HIGHWAY SAFETY PROGRAM ANNUAL SUBELEMENT PLAN	1. State of Virginia	2. TITLE Pedestrian Safety (FHWA)	3. NO. PS76-162 46-76-14-01	4. DATE 5-1-75
	5. DRAFTED BY C. H. Simpson, Jr., Res. Anal., VDH&TRC (Title and Agency)	FISCAL YEAR 19 76		
	APPROVED BY J. T. Hanna, Director, HSD (Title and Agency)	1st Quarter July, Aug, Sept	2nd Quarter Oct, Nov, Dec	3rd Quarter Jan, Feb, Mar	4th Quarter Apr, May, June	TOTAL
6a. EFFECTIVENESS See Effectiveness Supplement on pp. IV-148, 149						
6b. OUTPUT	C Percent of high pedestrian accident locations corrected V Number of high pedestrian accident locations identified	(Estimations)				91% 107

7. RESP.	8. STD.	9. TASKS & MILESTONES					
Local Political Subdivisions	314	1. Safety town operations (No. students trained — CY 74)	5325	7400	2275	5365	20365
		2. Undertake a program to guide the development of recreational and commuter bicycle routes	Study	Study	Develop	Develop	
		3. Equipment	Bids	Purchase			
		4. Program to identify high pedestrian accident locations	Continue	Continue	Continue	Continue	
VDH&T		5. Construction of bike paths along commuter routes	(Due to current economic situation, specific dates for construction cannot be determined)				

10. DESCRIPTION The objective of the pedestrian safety program in Virginia is to reduce the number of accidents, including fatalities, personal injury and property damage, attributable to insufficient facilities in areas of high volume pedestrian traffic and poor walking habits and/or attitudes. (1) The operating expenses for safety towns will continue to be funded solely by local funds. (2) See Block 9. (3) Items requested for funding include but are not limited to the following: a hand applicator for hot extruded reflective thermoplastic stripping machine, pedestrian safety films, projectors, paint lining machine and sundry supplies. (4-5) See Block 9.

11. COST BY TASK ($000s)					
2. Bicycle routes	16.	16.	16.	16.	64.
3. Equipment		52.			52.
4. Identify high pedestrian accident locations	2.	2.	2.	2.	8.
5. Construction of bike paths (Cost to be incurred within Std. 312)					
12. TOTAL COST ($000s)	18.	70.	18.	18.	124.
LOCAL SHARE	9.	35.	9.	9.	62.
STATE SHARE					
FEDERAL SHARE	9.	35.	9.	9.	62.
TO LOCALITIES	9.	35.	9.	9.	62.