

COMMONWEALTH OF VIRGINIA
MOTOR CARRIER SAFETY ASSISTANCE PROGRAM
IMPLEMENTATION GRANT APPLICATION

Prepared by

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and
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A Proposal Prepared for the Virginia Department of State Police
and the Virginia Division of Motor Vehicles by the Virginia
Highway and Transportation Research Council Under the
Sponsorship of the Transportation Safety Administration of the
Division of Motor Vehicles

Virginia Highway and Transportation Research Council
(A Cooperative Organization Sponsored Jointly by the Virginia
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1

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TABLE OF CONTENTS

	<u>Page</u>
ACKNOWLEDGMENTS-----	v
INTRODUCTION-----	1
IMPLEMENTATION GRANT APPLICATION-----	3
STATE CERTIFICATION (Exhibit I)-----	5
STATE ENFORCEMENT PLAN (Exhibit II)-----	7
1.0 Defining the Problem-----	8
2.0 Current Enforcement Efforts-----	33
3.0 Objectives-----	36
4.0 Resources to be Employed-----	40
5.0 Methodology-----	43
6.0 Self-evaluation Plan-----	45
STATE MOTOR CARRIER SAFETY REGULATIONS (Exhibit III)-----	47
STATE RULE FOR AUTHORITY AND RIGHT OF ENTRY (Exhibit IV)-----	53
MOTOR CARRIER CERTIFICATION (Exhibit V)-----	55
STATE INSPECTION SITES (Exhibit VI)-----	57
CONTINGENT DEVELOPMENT GRANT APPLICATION (Exhibit VII)-----	59

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1

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INTRODUCTION

On January 6, 1983, Congress enacted the Surface Transportation Assistance Act of 1982 (STAA) (Pub. L. 97-424). Sections 401-404 created a new categorical federal assistance program to be financed from the Highway Trust Fund, and authorized five years of funding, beginning with \$10 million in fiscal year 1984 and increasing by \$10 million per year to a maximum of \$50 million in fiscal year 1988. The Federal Highway Administration (FHWA) established the "Motor Carrier Safety Assistance Program (MCSAP)" by adding Part 350 to Title 49 of the Code of Federal Regulations. These regulations set the requirements states must meet to qualify for grants to finance enforcement of motor carrier safety and highway hazardous materials regulations.

Virginia requested developmental funding under the MCSAP and received a \$50,000 development grant on February 27, 1984. This grant has been used to prepare this Implementation Grant Application and the attached State Enforcement Plan (SEP), and to perform other developmental activities. Working with Virginia's MCSAP committee and using information supplied primarily by the Virginia Department of State Police, the Virginia Highway and Transportation Research Council has developed the various documents required by the FHWA, including Virginia's State Enforcement Plan. The SEP is the heart of the application. It explores the state's existing motor carrier safety problems, outlines Virginia's current enforcement activities, enumerates the objectives and goals of the program, lists the resources to be employed, explains the methodology to be followed, and develops a plan for program evaluation.

This document is published for submission to the FHWA under the MCSAP, for the use of state officials involved in motor carrier safety programs, and for the information of other groups or individuals interested in motor carrier safety or the MCSAP.

Department of Transportation
Federal Highway Administration
Motor Carrier Safety Assistance Program

The Department of State Police
(State Agency)

hereby applies to the Federal Highway Administration for a Federal grant authorized in Title IV of the Surface Transportation Assistance Act of 1982 (P. L. 97-424) to develop or implement a Commercial Motor Carrier Safety Program as described in this application.

- [] The State Agency plans to carry out the development of a Motor Carrier Safety Assistance Program during FY 19__ as described in the attached "Development Plan."
- [x] The State Agency plans to carry out the implementation of a Motor Carrier Safety Assistance Program during FY 1985 as described in Exhibit I, "State Certification," and Exhibit II, "State Enforcement Plan."

The Federal share (not to exceed 80%) of the approved costs incurred in performing the effort described in the exhibits are reimbursable to the State and the State agrees to submit vouchers for the reimbursement of funds.

Colonel Denny M. Slane
(Typed Name)


(Signature)

Superintendent
(Title)

August 29, 1984
(Date)

Virginia Department of State Police
(Organizational Unit)

(804) 323-2017
(Telephone Number)

P. O. Box 27472
(Street or P. O. Box)

Richmond, VA, 23261-7472
(City, State, Zip)

Attachments:

EXHIBIT I

STATE CERTIFICATION

I D. M. Slane, Superintendent, on behalf of the State of Virginia, as requested by the Federal Highway Administrator as a condition of approval of a grant under the authority of Sec. 402 of the Surface Transportation Assistance Act of 1982 (P. L. 97-424), do hereby certify as follows:

1. The State (has adopted) ~~(will adopt)~~ commercial motor carrier and highway hazardous materials safety rules and regulations, which (are) ~~(will be)~~ substantially similar to and consistent with the Federal Motor Carrier Safety Regulations and the Federal Hazardous Materials Regulations (a copy of the existing or proposed State rules and regulations to be attached in the first year of the program).

2. The State has designated the Department of State Police as the lead agency to administer the enforcement plan for which the grant is being awarded, and Division of Motor Vehicles the legal authority, resources and qualified personnel necessary for the enforcement of the State's commercial motor carrier and highway hazardous materials safety rules and regulations.

3. The State will devote such of its own funds as may be necessary to provide its matching share to the Federal assistance provided in the grant to administer the plan it is herewith submitting, and to enforce the State's commercial motor carrier safety rules and regulations in a manner to be consistent with the approved plan.

4. The laws of the State provide the State's enforcement officers right of entry and inspection sufficient to carry out the purposes of the enforcement plan as approved (a copy of the applicable State law to be attached in the first year of the program).

5. The State shall require that all reports relating to the program be submitted to the appropriate State agency or agencies; and such reports will be made available to the Federal Highway Administration upon request.

6. The State will adopt such uniform reporting requirements and use such uniform forms for recordkeeping, inspection, and other enforcement activities as may be established by the Federal Highway Administration.

7. The State ~~(has)~~(will have) in effect a requirement that registrants of commercial motor vehicles declare knowledge of the applicable Federal or State commercial motor carrier safety rules and regulations (a copy of the State form used for such purposes to be attached in the first year of the program).

8. The State will maintain the level of its expenditures for motor carrier safety programs, exclusive of Federal assistance, at least at the level of its expenditures for these purposes during the last two full fiscal years immediately prior to January 6, 1983.

Date: August 29, 1984

Location: _____


(Signature)

EXHIBIT II

COMMONWEALTH OF VIRGINIA

STATE ENFORCEMENT PLAN

1.0 Defining the Problem

1.1 Volume and Type of Commercial Motor Vehicle Traffic

The state of Virginia has an area of approximately 40,185 square miles with a variety of geographical features. Virginia ranges from the Atlantic Ocean and the ports along the Chesapeake Bay through the rolling Piedmont to the Blue Ridge and Appalachian mountains in the west, a distance of over 450 miles along its southern border. The heavily traveled I-95 corridor spans the 170 miles along the state's north-south axis, connecting Maryland and the commercial/industrial Northeast with the Carolinas and the Southeastern United States and making Virginia an important bridge for north-south commercial transportation.

Virginia has the nation's second largest state maintained highway system, with over 50,000 miles of roads and streets. The interstate portion of Virginia's system consists of approximately 1,000 miles of roadway, with arterial and primary routes comprising over 7,700 miles. During calendar year 1981, the average daily vehicle miles of travel on the state system was estimated to be 58.7 million. Commercial motor vehicles accounted for over 11% of this total.

All passenger and freight vehicles with more than two axles and all truck-tractors must register with the Virginia State Corporation Commission (SCC) before operating in the Commonwealth. Current SCC figures show 580,521 vehicles properly registered to operate in Virginia. Of this total, 57,920 are Virginia licensed vehicles and 522,601 are out-of-state vehicles.

Virginia relies heavily on the motor transportation industry to support the agricultural and manufacturing sectors of her economy. Virginians harvested 3,165 acres of farmland in 1981, producing crops such as tobacco, corn, hay, and soybeans with a total value of \$918 million. The cash value of 1981 manufacturing shipments exceeded \$33 billion and included chemicals, food, and tobacco products. Virginia's economic reliance on motor transportation, the import/export volume generated by its ports, and its significance as a north-south bridge state combine to justify a strong commitment to improving motor carrier safety within the state.

1.2 Volume of Commercial Motor Vehicle Traffic Transporting Hazardous Materials

Figures showing the number of Virginia commercial motor vehicles transporting hazardous materials are not available. However, of 5,999 commercial motor vehicles inspected by the Virginia Department of State Police during 1982 and 1983, 1,063 (17.7%) carried hazardous materials.

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The Virginia State Police responded to 74 spills of hazardous materials over the two years. While the proportion of inspected vehicles carrying hazardous materials remained virtually constant from 1982 to 1983, the number of spills attended by the State Police rose from 24 in 1982 to 50 in 1983. This alarming trend indicates a need for greater enforcement of regulations on hazardous materials and response capabilities.

Virginia adopted Parts 390-396 of the Federal Motor Carrier Safety Regulations (FMCSR) by reference in 1982, as well as other Federal Hazardous Materials Regulations (see Exhibit III). The Commonwealth is thus prepared to enhance enforcement in this potential problem area through the use of increased manpower under the MCSAP.

1.3 Number and Severity of Commercial Motor Vehicle Accidents

Data published by the Virginia State Police in Virginia Crash Facts for the period 1979 through 1982 are the basis for this analysis of accidents involving commercial motor vehicles (CMVs) on Virginia's highways.

1.3.1 All Crashes

1.3.1.1 The Aggregate

Table 1 presents data on the involvement of CMVs in crashes on Virginia roads for the four-year period analyzed. Over this period, 18.5% of all crashes in Virginia involved CMVs, and approximately 90% of these crashes were associated with carriers in the truck or truck-tractor category. In addition, slightly more than one-half of all CMV crashes occurred in rural areas. With the exception of buses, each type of CMV was more likely to crash in a rural area than in an urban area.

1.3.1.2 Trends

Table 2 presents data on the involvement of CMVs in crashes on Virginia roads for each year in the four-year period analyzed. Both the number of crashes involving CMVs and the number of crashes involving all vehicles declined during the four-year period. CMV crashes consistently constituted slightly less than 19% of all vehicle crashes. In addition, CMV crashes consistently comprised approximately 21% of all vehicle crashes in rural areas and approximately 16% of those in urban areas. With the exception of buses, approximately 50% to 60% of CMV crashes occurred in rural areas; approximately 70% of bus crashes occurred in urban locations.

Table 1

All Crashes by Carrier Type and Place of Crash:
1979 - 1982 Aggregate

<u>Carrier</u>	<u>N</u>	<u>Urban</u>	<u>Rural</u>
Bus ^a	2,556 ^b	1,782	774
	100.0 ^b	69.7	30.3
	1.7 ^c	2.6	1.0
	0.3 ^d	0.4	0.2
Truck or Truck-tractor	130,247	60,372	69,875
	100.0	46.4	53.6
	88.0	88.8	87.4
	16.3	14.4	18.4
Truck-tractor and Semitrailer	13,688	5,213	8,475
	100.0	38.1	61.9
	9.2	7.7	10.6
	1.7	1.2	2.2
Other Truck and Combination	1,506	655	851
	100.0	43.5	56.5
	1.0	1.0	1.1
	0.2	0.2	0.2
Total: Carriers	147,997	68,022	79,975
	100.0	46.0	54.0
	100.0	100.0	100.0
	18.5	16.2	21.0
Total: All Vehicles	799,841	419,675	380,166
	100.0	52.5	47.5
	-	-	-
	100.0	100.0	100.0

^aExcludes School Bus

^bRow %

^c% of Total: Carriers

^d% of Total: All Vehicles

Total % may not equal 100.00 due to rounding

Table 2

All Crashes by Type of Carrier and Place of Crash

Carrier	1979			1980			1981			1982		
	N	Urban	Rural	N	Urban	Rural	N	Urban	Rural	N	Urban	Rural
Bus ^a	642 ^b 100.0 ^c 1.6 ^c 0.3 ^d	468 72.9 2.6 0.4	174 27.1 0.8 0.2	727 100.0 2.0 0.4	497 68.4 3.0 0.5	230 31.6 1.2 0.2	667 100.0 1.8 0.3	440 66.0 2.6 0.4	227 34.0 1.1 0.2	520 100.0 1.5 0.3	377 72.5 2.3 0.4	143 27.5 0.8 0.2
Truck or Truck-tractor	34,992 100.0 88.0 16.1	16,191 46.3 88.3 13.8	18,801 53.7 87.7 18.8	32,075 100.0 87.8 16.5	14,643 45.7 88.3 14.5	17,432 54.3 87.3 18.7	32,138 100.0 88.0 16.2	14,884 46.3 88.8 14.5	17,254 53.7 87.2 18.1	31,042 100.0 88.3 16.3	14,654 47.2 89.6 14.8	16,388 52.8 87.1 18.0
Truck-tractor and Semitrailer	3,620 100.0 9.1 1.7	1,463 40.4 8.0 1.2	2,157 59.6 10.1 2.2	3,402 100.0 9.3 1.8	1,274 37.4 7.7 1.3	2,128 62.6 10.7 2.3	3,475 100.0 9.5 1.8	1,322 38.0 7.9 1.3	2,153 62.0 10.9 2.3	3,191 100.0 9.1 1.7	1,154 36.2 7.1 1.2	2,037 63.8 10.8 2.2
Other Truck and Combination	513 100.0 1.3 0.2	219 42.7 1.2 0.2	294 57.3 1.4 0.3	330 100.0 0.9 0.2	163 49.4 1.0 0.2	167 50.6 0.8 0.2	255 100.0 0.7 0.1	107 42.0 0.6 0.1	148 58.0 0.7 0.2	408 100.0 1.2 0.2	166 40.7 1.0 0.2	242 59.3 1.3 0.3
Total: Carriers	39,767 100.0 100.0 18.3	18,341 46.1 100.0 15.6	21,426 53.9 100.0 21.4	36,534 100.0 100.0 18.8	16,577 45.4 100.0 16.5	19,957 54.6 100.0 21.4	36,535 100.0 100.0 18.5	16,753 45.9 100.0 16.4	19,782 54.1 100.0 20.7	35,161 100.0 100.0 18.5	16,351 46.5 100.0 16.5	18,810 53.5 100.0 20.7
Total: All Vehicles	217,733 100.0 100.0	117,579 54.0 100.0	100,154 46.0 100.0	194,230 100.0 100.0	100,762 51.9 100.0	93,468 48.1 100.0	197,980 100.0 100.0	102,438 51.7 100.0	95,542 48.3 100.0	189,898 100.0 100.0	98,926 52.1 100.0	90,972 47.9 100.0

^a Excludes School Bus; ^b Row %; ^c % of Total: Carriers; ^d % of Total: All Vehicles

Total % May Not Equal 100.0 Due to Rounding

1.3.2 Property Damage Crashes

1.3.2.1 The Aggregate

Table 3 presents data on property damage crashes involving CMVs and all vehicles for the four-year period. Of all property damage crashes in Virginia, 18.8% involved CMVs, 16.8% in urban areas and 21.3% in rural areas. Slightly less than 90% of property damage crashes involving CMVs were associated with trucks or truck-tractors, and slightly more than one-half occurred in rural areas. Most of the property damage crashes involving buses occurred in urban areas while most of those for other categories of CMVs were on rural roads.

1.3.2.2 Trends

Table 4 depicts property damage crashes by type of carrier and crash site for 1979 through 1982. While the total number of property damage crashes involving CMVs decreased from 27,869 in 1979 to 23,055 in 1982, the proportion of CMVs involved in all property damage crashes increased from 18.5% in 1979 to 18.9% in 1982.

With the exception of crashes involving buses, most property damage crashes involving CMVs occurred in rural areas, although the gap appears to be narrowing: the figures were 51.2% in 1979 and 50.5% in 1982. Approximately 90% of all property damage crashes involving CMVs were associated with the truck or truck-tractor category.

1.3.3 Personal Injury Crashes

1.3.3.1 The Aggregate

Table 5 presents data on the involvement of CMVs in personal injury crashes on Virginia roads for the four-year period examined. Of all personal injury crashes, 17.7% involved CMVs, 14.8% in urban areas and 20.3% in rural areas. Slightly less than 90% of these crashes involving CMVs were associated with trucks or truck-tractors, and approximately 60% occurred in rural areas. The majority of personal injury crashes involving buses occurred in urban areas while most of those for other categories of CMVs occurred on rural roads.

1.3.3.2 Trends

Personal injury crashes by carrier type and crash location for each year of the four-year period are depicted in Table 6. The number of

Table 3

Property Damage Crashes by Carrier Type and Place of Crash:
1979 - 1982 Aggregate

<u>Carrier</u>	<u>N</u>	<u>Urban</u>	<u>Rural</u>
Bus ^a	1,655 ^b	1,145	510
	100.0 ^b	69.2	30.8
	1.6 ^c	2.3	1.0
	0.3 ^d	0.4	0.2
Truck or Truck-tractor	88,567	43,541	45,026
	100.0	49.2	50.8
	88.3	88.9	87.7
	16.6	14.9	18.7
Truck-tractor and Semitrailer	9,006	3,819	5,187
	100.0	42.4	57.6
	9.0	7.8	10.1
	1.7	1.3	2.2
Other Truck and Combination	1,113	493	620
	100.0	44.3	55.7
	1.1	1.0	1.2
	0.2	0.2	0.3
Total: Carriers	100,341	48,998	51,343
	100.0	48.8	51.2
	100.0	100.0	100.0
	18.8	16.8	21.3
Total: All Vehicles	532,341	291,610	240,731
	100.0	54.8	45.2
	-	-	-
	100.0	100.0	100.0

^aExcludes School Bus

^bRow %

^c% of Total: Carriers

^d% of Total: All Vehicles

Total % may not equal 100.00 due to rounding

Table 4
Property Damage Crashes by Type of Carrier and Place of Crash

Carrier	1979			1980			1981			1982		
	N	Urban	Rural	N	Urban	Rural	N	Urban	Rural	N	Urban	Rural
Bus ^a	441 ^b 100.0 1.6 ^c 0.3 ^d	320 72.6 2.4 0.4	121 27.4 0.8 0.2	455 100.0 1.8 0.4	303 66.6 2.5 0.4	152 33.4 1.2 0.3	429 100.0 1.7 0.3	288 67.1 2.4 0.4	141 32.9 1.1 0.2	330 100.0 1.4 0.3	234 70.9 2.1 0.4	96 29.1 0.8 0.2
Truck or Truck-tractor	24,518 100.0 88.0 16.3	12,001 48.9 88.2 14.2	12,517 51.1 87.8 19.1	21,840 100.0 88.1 16.9	10,620 48.6 88.5 15.1	11,220 51.4 87.6 19.0	21,782 100.0 88.5 16.7	10,689 49.1 89.1 15.2	11,093 50.9 87.9 18.5	20,427 100.0 88.6 16.7	10,231 50.1 89.7 15.4	10,196 49.9 87.5 18.3
Truck-tractor and Semitrailer	2,500 100.0 9.0 1.7	1,111 44.4 8.2 1.3	1,389 55.6 9.7 2.1	2,266 100.0 9.1 1.8	950 41.9 7.9 1.4	1,316 58.1 10.3 2.2	2,221 100.0 9.0 1.7	936 42.1 7.8 1.3	1,285 57.9 10.2 2.1	2,019 100.0 8.8 1.7	822 40.7 7.2 1.2	1,197 59.3 10.3 2.1
Other Truck and Combination	410 100.0 1.5 0.3	175 42.7 1.3 0.2	235 57.3 1.6 0.4	242 100.0 1.0 0.2	123 50.8 1.0 0.2	119 49.2 0.9 0.2	182 100.0 0.7 0.1	79 43.4 0.7 0.1	103 56.6 0.8 0.2	279 100.0 1.2 0.2	116 41.6 1.0 0.2	163 58.4 1.4 0.3
Total: Carriers	27,869 100.0 100.0 18.5	13,607 48.8 100.0 16.1	14,262 51.2 100.0 21.7	24,803 100.0 100.0 19.2	11,996 48.4 100.0 17.1	12,807 51.6 100.0 21.7	24,614 100.0 100.0 18.9	11,992 48.7 100.0 17.0	12,622 51.3 100.0 21.0	23,055 100.0 100.0 18.9	11,403 49.5 100.0 17.2	11,652 50.5 100.0 20.9
Total: All Vehicles	150,381 100.0 100.0	84,705 56.3 100.0	65,676 43.7 100.0	129,249 100.0 100.0	70,119 54.3 100.0	59,130 45.7 100.0	130,469 100.0 100.0	70,373 53.9 100.0	60,096 46.1 100.0	122,242 100.0 100.0	66,413 54.3 100.0	55,829 45.7 100.0

^aExcludes School Bus; ^bRow %; ^c% of Total Carriers; ^d% of Total: All Vehicles

Total % May Not Equal 100.0 Due to Rounding

Table 5

Personal Injury Crashes by Carrier Type and Place of Crash:
1979 - 1982 Aggregate

<u>Carrier</u>	<u>N</u>	<u>Urban</u>	<u>Rural</u>
Bus ^a	887	631	256
	100.0 ^b	71.1	28.9
	1.9 ^c	3.4	0.9
	0.3 ^d	0.5	0.2
Truck or Truck-tractor	40,656	16,609	24,047
	100.0	40.9	59.1
	87.7	88.7	87.1
	15.5	13.1	17.7
Truck-tractor and Semitrailer	4,411	1,334	3,077
	100.0	30.2	69.8
	9.5	7.1	11.1
	1.7	1.1	2.3
Other Truck and Combination	387	158	229
	100.0	40.8	59.2
	0.8	0.8	0.8
	0.1	0.1	0.2
Total: Carriers	46,341	18,732	27,609
	100.0	40.4	59.6
	100.0	100.0	100.0
	17.7	14.8	20.3
Total: All Vehicles	262,501	126,800	135,701
	100.0	48.3	51.7
	-	-	-
	100.0	100.0	100.0

^aExcludes School Bus

^bRow %

^c% of Total: Carriers

^d% of Total: All Vehicles

Total % may not equal 100.00 due to rounding

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these crashes declined in 1980 and rose in 1981 and 1982. The proportion of CMVs involved remained at slightly less than 18% during the period.

Like property damage crashes, most personal injury crashes except those involving buses occurred in rural locations. This phenomenon is particularly true for the truck-tractor and semitrailer category, where approximately 70% of the crashes occurred in rural locations. Approximately 90% of all personal injury crashes involving CMVs were associated with the truck or truck-tractor category.

1.3.4 Fatal Crashes

1.3.4.1 The Aggregate

Table 7 presents data on the involvement of CMVs in fatal crashes on Virginia roads for the four-year period under analysis. Of all fatal crashes, 26.3% involved CMVs, 22.6% in urban areas and 27.6% in rural areas. Slightly more than 75% of these were associated with trucks or truck-tractors, and approximately 78% occurred in rural areas. Only fatal crashes involving other truck and combination were most likely to have occurred in urban areas. Fatal crashes involving all other categories of CMVs were more likely to have occurred on rural roads.*

1.3.4.2 Trends

Table 8 depicts fatal crashes by carrier type and crash site for each year in the four-year period. The number of fatal crashes increased slightly in 1980 and then declined through 1981 and 1982. The proportion of CMVs involved in fatal crashes remained at approximately 27%.

Like property damage and personal injury crashes, most fatal crashes involving CMVs occurred in rural locations, although the proportion appears to be declining. In 1979, 79.2% occurred in rural locations while in 1982 the proportion dropped to 71.7%.

*Because of the comparatively small N (6) in the category of other truck and combination, comparisons to other categories of carriers may be misleading.

Table 6

Personal Injury Crashes by Type of Carrier and Place of Crash

Carrier	1979			1980			1981			1982		
	N	Urban	Rural	N	Urban	Rural	N	Urban	Rural	N	Urban	Rural
Bus ^a	199 ^b 100.0 1.7 ^c 0.3 ^d	148 74.4 3.2 0.5	51 25.6 0.7 0.2	268 100.0 2.4 0.4	193 72.0 4.3 0.6	75 28.0 1.1 0.2	233 100.0 2.0 0.4	150 64.4 3.2 0.5	83 35.6 1.2 0.2	187 100.0 1.6 0.3	140 74.9 2.9 0.4	47 25.1 0.7 0.1
Truck or Truck-tractor	10,214 100.0 88.5 15.5	4,136 40.5 88.7 12.7	6,078 59.5 88.3 18.1	9,951 100.0 87.5 15.6	3,969 39.9 87.9 13.1	5,982 60.1 87.2 17.9	10,114 100.0 87.1 15.3	4,145 41.0 88.3 13.1	5,969 59.0 86.3 17.3	10,377 100.0 87.9 15.6	4,359 42.0 89.6 13.5	6,018 58.0 86.7 17.5
Truck-tractor and Semitrailer	1,033 100.0 8.9 1.6	334 32.3 7.2 1.0	699 67.7 10.2 2.1	1,069 100.0 9.4 1.7	313 29.3 6.9 1.0	756 70.7 11.0 2.3	1,190 100.0 10.3 1.8	370 31.1 7.9 1.2	820 68.9 11.9 2.4	1,119 100.0 9.5 1.7	317 28.3 6.5 1.0	802 71.7 11.5 2.3
Other Truck and Combination	101 100.0 0.9 0.2	43 42.6 0.9 0.1	58 57.4 0.8 0.2	88 100.0 0.8 0.1	40 45.5 0.9 0.1	48 54.5 0.7 0.1	72 100.0 0.6 0.1	27 37.5 0.6 0.1	45 62.5 0.7 0.1	126 100.0 1.1 0.2	48 38.1 1.0 0.1	78 61.9 1.1 0.2
Total: Carriers	11,547 100.0 100.0 17.5	4,661 40.4 100.0 14.3	6,886 59.6 100.0 20.6	11,376 100.0 100.0 17.9	4,515 39.7 100.0 14.9	6,861 60.3 100.0 20.6	11,609 100.0 100.0 17.5	4,692 40.4 100.0 14.8	6,917 59.6 100.0 20.1	11,809 100.0 100.0 17.7	4,864 41.2 100.0 15.1	6,945 58.8 100.0 20.2
Total: All Vehicles	66,047 100.0 100.0	32,547 49.3 100.0	33,500 50.7 100.0	63,690 100.0 100.0	30,323 47.6 100.0	33,367 52.4 100.0	66,231 100.0 100.0	31,752 47.9 100.0	34,479 52.1 100.0	66,533 100.0 100.0	32,178 48.4 100.0	34,355 51.6 100.0

^aExcludes School Bus; ^bRow %; ^c% of Total: Carriers; ^d% of Total: All Vehicles

Total % May Not Equal 100.0 Due to Rounding

Table 7

Fatal Crashes by Carrier Type and
Place of Crash: 1979 - 1982 Aggregate

<u>Carrier</u>	<u>N</u>	<u>Urban</u>	<u>Rural</u>
Bus ^a	14	6	8
	100.0 ^b	42.9	57.1
	1.1 ^c	2.0	0.8
	0.3 ^d	0.5	0.2
Truck or Truck-tractor	1,025	223	802
	100.0	21.8	79.2
	77.9	76.1	78.4
	20.5	17.2	21.7
Truck-tractor and Semitrailer	271	60	211
	100.0	22.1	77.9
	20.6	20.5	20.6
	5.4	4.6	5.7
Other Truck and Combination	6	4	2
	100.0	66.7	33.3
	0.5	1.4	0.2
	0.1	0.3	0.1
Total: Carriers	1,316	293	1,023
	100.0	22.3	77.7
	100.0	100.0	100.0
	26.3	22.6	27.6
Total: All Vehicles	4,999	1,295	3,704
	100.0	25.9	74.1
	-	-	-
	100.0	100.0	100.0

^aExcludes School Bus

^bRow %

^c% of Total: Carriers

^d% of Total: All Vehicles

Total % may not equal 100.00 due to rounding

Table 8

Fatal Crashes by Type of Carrier and Place of Crash

Carrier	1979			1980			1981			1982		
	N	Urban	Rural	N	Urban	Rural	N	Urban	Rural	N	Urban	Rural
Bus ^a	2 ^b 100.0 0.6 ^c 0.2 ^d	0 - - -	2 100.0 0.7 0.2	4 100.0 1.1 0.3	1 25.0 1.5 0.3	3 75.0 1.0 0.3	5 100.0 1.6 0.4	2 40.0 2.9 0.7	3 60.0 1.2 0.3	3 100.0 1.0 0.3	3 100.0 3.6 0.9	0 - - -
Truck or Truck-tractor	260 100.0 74.1 19.9	54 20.8 74.0 16.5	206 79.2 74.1 21.1	284 100.0 80.0 22.0	54 19.0 81.8 16.9	230 81.0 79.6 23.7	243 100.0 77.6 19.0	51 21.0 72.9 16.3	192 79.0 79.0 19.9	238 100.0 80.1 21.2	64 26.9 76.2 19.1	174 73.1 81.7 22.1
Truck-tractor and Semitrailer	87 100.0 24.8 6.7	18 20.7 24.7 5.5	69 79.3 24.8 7.1	67 100.0 18.9 5.2	11 16.4 16.7 3.4	56 83.6 19.4 5.8	64 100.0 20.4 5.0	16 25.0 22.9 5.1	48 75.0 19.8 5.0	53 100.0 17.8 4.7	15 28.3 17.9 4.5	38 71.7 17.8 4.8
Other Truck and Combination	2 100.0 0.6 0.2	1 50.0 1.4 0.3	1 50.0 0.4 0.1	0 - - -	0 - - -	0 - - -	1 100.0 0.3 0.1	1 100.0 1.4 0.3	0 - - -	3 100.0 1.0 0.3	2 66.7 2.4 0.6	1 33.3 0.5 0.1
Total: Carriers	351 100.0 100.0 26.9	73 20.8 100.0 22.3	278 79.2 100.0 28.4	355 100.0 100.0 27.5	66 18.6 100.0 20.6	289 81.4 100.0 29.8	313 100.0 100.0 24.5	70 22.4 100.0 22.4	243 77.6 100.0 25.1	297 100.0 100.0 26.4	84 28.3 100.0 25.1	213 71.1 100.0 27.0
Total: All Vehicles	1,305 100.0 - 100.0	327 25.1 - 100.0	978 74.9 - 100.0	1,291 100.0 - 100.0	320 24.8 - 100.0	971 75.2 - 100.0	1,280 100.0 - 100.0	313 24.5 - 100.0	967 75.5 - 100.0	1,123 100.0 - 100.0	335 29.8 - 100.0	788 70.2 - 100.0

^a Excludes School Bus; ^b Row %; ^c % of Total: Carriers; ^d % of Total: All Vehicles

Total % May Not Equal 100.0 Due to Rounding

1.4 Carrier Defects Associated With Commercial Motor Carrier Accidents

This section discusses carrier defects associated with CMV accidents. Information compiled from Virginia Crash Facts (1979-1982) again is the data source.

1.4.1 All Crashes

1.4.1.1 The Aggregate

Table 9 presents data on the involvement of carrier defects in CMV crashes for the four-year period. Carrier defects were found in 5.3% of all CMV crashes. Of the 7,785 CMV crashes involving carrier defects, slightly more than one-third (2,665) involved carriers with defective brakes, slightly less than one-fourth (1,930) involved carriers with defective tires, and less than 10% (640) involved carriers with defective lights. Defective equipment was approximately twice as likely to be found among truck-tractors and semitrailers and other truck and combination than among the other categories.

1.4.1.2 Trends

Data on the involvement of carrier defects in CMV crashes for each of the four years are presented in Table 10. The number of carrier crashes declined in 1980, held steady in 1981, then dropped approximately 4% in 1982. The percentage of carriers found to have defects remained relatively constant at slightly more than 5%.

The proportion of brake defects declined in all categories during the four-year period, with the exception of the other truck and combination category, which showed a proportionate increase of approximately 50% in crashes where brakes were found to be defective.

1.4.2 Property Damage Crashes

1.4.2.1 The Aggregate

Table 11 presents data on the involvement of carrier defects in CMV property damage crashes for the four-year period. Approximately 5% of the CMVs involved in property damage crashes were found to be defective. Of the 4,963 CMV property damage crashes involving carrier defects, slightly more than one-third (1,693) involved carriers with defective brakes, slightly more than one-fifth (1,115) involved carriers with defective tires, and less than one-tenth (450) involved carriers with defective lights. As with all crashes, defective equipment was

Table 9

Profile of All Crashes by Carrier Type and Selected Defects:
1979 - 1982 Aggregate

<u>Carrier</u>	<u>N</u>	<u>Total Defects</u>	<u>Brakes</u>	<u>Tires</u>	<u>Lights</u>
Bus ^a	2,556	121 4.7 ^b	72 59.5	12 9.9	8 6.6
Truck or Truck-trailer	130,247	6,299 4.8 ^b	1,995 31.7	1,641 26.1	548 8.7
Truck-tractor and Semitrailer	13,688	1,216 8.9 ^b	549 45.1	255 21.0	73 6.0
Other Truck and Combination	1,506	149 9.9 ^b	49 32.9	22 14.8	11 7.4
Total	147,997	7,785 5.3 ^b	2,665 34.2	1,930 24.8	640 8.2

^aExcludes School Bus

^b% of crashes with defects; other % represents % of defects per category

Table 10

Profile of All Crashes by Carrier Type and Selected Defects

Carrier	1979					1980					
	N	Total Defects	Brakes	Tires	Lights	N	Total Defects	Brakes	Tires	Lights	
Bus ^a	642	25 ^b 3.9	17 68.0	2 8.0	2 8.0	727	34 ^b 4.7	21 61.8	2 5.9	3 8.8	
Truck or Truck-tractor	34,992	1,748 ^b 5.0	573 32.8	465 26.6	141 8.1	32,075	1,548 ^b 4.8	513 33.1	394 25.5	148 9.6	
Truck-tractor and Semitrailer	3,620	352 ^b 9.7	174 49.4	66 18.8	22 6.3	3,402	300 ^b 8.8	139 46.3	59 19.7	20 6.7	
Other Truck and Combination	513	45 ^b 8.8	10 22.2	10 22.2	3 6.7	330	31 ^b 9.4	9 29.0	4 12.9	2 6.5	
Total	39,767	2,170 ^b 5.5	774 35.7	543 25.0	168 7.7	36,534	1,913 ^b 5.2	682 35.7	459 24.0	173 9.0	
			1981					1982			
Bus ^a	667	40 ^b 6.0	23 57.5	6 15.0	2 5.0	520	22 ^b 4.2	11 50.0	2 9.1	1 4.5	
Truck or Truck-tractor	32,138	1,533 ^b 4.8	482 31.4	414 27.0	134 8.7	31,042	1,470 ^b 4.7	427 29.0	368 25.0	125 8.5	
Truck-tractor and Semitrailer	3,475	296 ^b 8.5	125 42.2	65 22.0	16 5.4	3,191	268 ^b 8.4	111 41.4	65 24.3	15 5.6	
Other Truck and Combination	255	20 ^b 7.8	11 55.0	1 5.0	0 -	408	53 ^b 13.0	19 35.8	7 13.2	6 11.3	
Total	36,535	1,889 ^b 5.2	641 33.9	486 25.7	152 8.0	35,161	1,813 ^b 5.2	568 31.3	442 24.4	147 8.1	

^aExcludes School Bus; ^b% Of Crashes with Defects; Other % are % of Defects Per Category

approximately twice as likely to be found among truck-tractors and semitrailers and other truck and combination than among other carrier categories.

1.4.2.2 Trends

Data on the involvement of carrier defects in CMV property damage crashes for each of the four years are presented in Table 12. In 1980, the number of property damage crashes declined approximately 10% from 1979, and has shown a steady, slower rate of decline through 1982. The proportion of carriers found to have defects declined steadily from 5.2% in 1979 to 4.7% in 1982.

As was the case for all accidents, brakes were the most common source of defective equipment for CMVs involved in property damage crashes, although their proportionate representation declined from 35.1% in 1979 to 31.3% in 1982.

1.4.3 Personal Injury Crashes

1.4.3.1 The Aggregate

Table 13 presents data on the involvement of carrier defects in CMV personal injury crashes. Approximately 6% of the CMVs involved in personal injury crashes were found to be defective. Of the 2,748 personal injury crashes involving carrier defects, 34.4% (946) involved carriers with defective brakes, 28.6% (786) involved carriers with defective tires, and 6.8% (186) involved carriers with defective lights.

As with all crashes and property damage crashes, defective equipment was approximately twice as likely to be found among truck-tractors and semitrailers and other truck and combination than among other carrier categories.

1.4.3.2 Trends

Data on the involvement of carrier defects in CMV personal injury crashes are presented in Table 14. The number of personal injury crashes involving CMVs remained relatively constant over the four years (11,547 in 1979; 11,376 in 1980; 11,609 in 1981; and 11,809 in 1982). The proportionate involvement of defects also remained comparatively steady at approximately 6%.

Table 11

Profile of Property Damage Crashes by Carrier Type and Selected Defects:
1979 - 1982 Aggregate

<u>Carrier</u>	<u>N</u>	<u>Total Defects</u>	<u>Brakes</u>	<u>Tires</u>	<u>Lights</u>
Bus ^a	1,655	73 _b 4.4	37 50.7	6 8.2	6 8.2
Truck or Truck-tractor	88,567	4,038 _b 4.6	1,295 32.1	952 23.6	399 9.9
Truck-tractor and Semitrailer	9,006	750 _b 8.3	329 43.9	143 19.1	38 5.1
Other Truck and Combination	1,113	102 _b 9.2	32 31.4	14 13.7	7 6.9
Total	100,341	4,963 _b 4.9	1,693 34.1	1,115 22.5	450 9.1

^aExcludes School Bus

^b% of crashes with defects; other % represents % of defects per category

Table 12

Profile of Property Damage Crashes by Carrier Type and Selected Defects

Carrier	1979				1980					
	N	Total Defects	Brakes	Tires	Lights	N	Total Defects	Brakes	Tires	Lights
Bus ^a	441	15 ^b 3.4	8	1	2	455	19 ^b 4.2	8	1	3
Truck or Truck-tractor	24,518	1,165 ^b 4.8	383	282	104	21,840	1,017 ^b 4.7	334	245	106
Truck-tractor and Semitrailer	2,500	239 ^b 9.6	114	42	15	2,266	194 ^b 8.6	89	33	13
Other Truck and Combination	410	33 ^b 8.0	5	6	2	242	20 ^b 8.3	3	4	1
Total	27,869	1,452 ^b 5.2	510	331	123	24,803	1,250 ^b 5.0	434	283	123
			1981				1982			
Bus ^a	429	23 ^b 5.4	12	3	1	330	16 ^b 4.8	9	1	0
Truck or Truck-tractor	21,782	964 ^b 4.4	319	225	96	20,427	892 ^b 4.4	259	200	93
Truck-tractor and Semitrailer	2,221	168 ^b 7.6	68	34	7	2,019	149 ^b 7.4	58	34	3
Other Truck and Combination	182	16 ^b 8.8	9	0	0	279	33 ^b 11.8	15	4	4
Total	24,614	1,171 ^b 4.8	408	262	104	23,055	1,090 ^b 4.7	341	239	100

^aExcludes School Bus; ^b% of Crashes with Defects; Other % are % of Defects Per Category

Table 13

Profile of Personal Injury Crashes by Carrier Type and Selected Defects:
1979 - 1982 Aggregate

<u>Carrier</u>	<u>N</u>	<u>Total Defects</u>	<u>Brakes</u>	<u>Tires</u>	<u>Lights</u>
Bus ^a	887	46, 5.2 ^b	34 73.9	6 13.0	2 4.3
Truck or Truck-tractor	40,656	2,215, 5.4 ^b	690 31.2	664 30.0	146 6.6
Truck-tractor and Semitrailer	4,411	442, 10.0 ^b	205 46.4	108 24.4	34 7.7
Other Truck and Combination	387	45, 11.6 ^b	17 37.8	8 17.8	4 8.9
Total	46,341	2,748, 5.9 ^b	946 34.4	786 28.6	186 6.8

^aExcludes School Bus

^b% of crashes with defects; other % represents % of defects per category

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Brakes again were the most common source of defective equipment, although their proportionate representation in accidents appears to have declined during 1981 and 1982.

1.4.4 Fatal Crashes

1.4.4.1 The Aggregate

Table 15 depicts data on the involvement of carrier defects in CMV fatal crashes. Here, approximately 6% of CMVs were found to be defective. In 39.2% (29) of the 74 fatal crashes, the carriers had defective tires, in 35.1% (26) they had defective brakes, and in 5.4% (4) they had defective lights.

1.4.4.2 Trends

Data on fatal crashes for each of the four years are presented in Table 16. The number declined from a high of 355 in 1980 to 297 in 1982; however, the proportionate involvement of defects almost doubled from 1979 to 1982 (4.8% and 8.1%, respectively).

Defective tires appeared to be most involved in fatal crashes of trucks or truck-tractors, defective brakes in crashes of truck-tractors and semitrailers.

1.5 Projected Impact of Increased Enforcement

Increased enforcement of motor carrier safety regulations by Virginia authorities will increase the likelihood that safety defects, driver deficiencies, and unsafe carrier practices will be detected and corrected. Higher levels of enforcement activity may increase operating costs for carriers operating in violation of Virginia laws and regulations, but greater enforcement should reduce deaths and injuries, produce economic savings, and promote safer travel on Virginia's highways.

Virginia citizens will benefit from increased enforcement of motor carrier safety regulations through safer travel on state highways. All motor vehicle operators should experience a reduction in total accidents and a significant reduction in the risk of personal injury or death. Motorists may feel more secure as well: safer motor carrier operation may reduce the perceived threat of heavy trucks and buses to lighter passenger vehicles.

Table 14

Profile of Personal Injury Crashes by Carrier Type and Selected Defects

Carrier	1979				1980					
	N	Total Defects	Brakes	Tires	Lights	N	Total Defects	Brakes	Tires	Lights
Bus ^a	199	10 ^b 5.0	9 90.0	1 10.0	0 -	268	13 ^b 4.9	12 92.3	1 7.7	0 -
Truck or Truck-tractor	10,214	573 ^b 5.6	188 32.8	177 30.9	36 6.3	9,951	519 ^b 5.2	177 34.1	143 27.6	41 7.9
Truck-tractor and Semitrailer	1,033	106 ^b 10.3	56 52.8	23 21.7	6 5.7	1,069	97 ^b 9.1	43 44.3	25 25.8	7 7.2
Other Truck and Combination	101	12 ^b 11.9	5 41.7	4 33.3	1 8.3	88	11 ^b 12.5	6 54.5	0 -	1 9.1
Total	11,547	701 ^b 6.1	258 36.8	205 29.2	43 6.1	11,376	640 ^b 5.6	238 37.2	169 26.4	49 7.7
			1981				1982			
Bus ^a	233	17 ^b 7.3	11 64.7	3 17.6	1 5.9	187	6 ^b 3.2	2 33.3	1 16.7	1 16.7
Truck or Truck-tractor	10,114	562 ^b 5.6	159 28.3	188 33.5	37 6.6	10,377	561 ^b 5.4	166 29.6	156 27.8	32 5.7
Truck-tractor and Semitrailer	1,190	125 ^b 10.5	56 44.8	30 24.0	9 7.2	1,119	114 ^b 10.2	50 43.9	30 26.3	12 10.5
Other Truck and Combination	72	4 ^b 5.6	2 50.0	1 25.0	0 -	126	18 ^b 14.3	4 22.2	3 16.7	2 11.1
Total	11,609	708 ^b 6.1	228 32.2	222 31.4	47 6.6	11,809	699 ^b 5.9	222 31.8	190 27.2	47 6.7

^a Excludes School Bus; ^b % of Crashes with Defects; Other % are % of Defects Per Category.

Table 15

Profile of Fatal Crashes by Carrier Type and Selected Defects:
1979 - 1982 Aggregate

<u>Carrier</u>	<u>N</u>	<u>Total Defects</u>	<u>Brakes</u>	<u>Tires</u>	<u>Lights</u>
Bus ^a	14	2 14.3 ^b	1 50.0	0 -	0 -
Truck or Truck-tractor	1,025	46 4.5 ^b	10 21.7	25 54.3	3 6.5
Truck-tractor and Semi-trailer	271	24 8.9 ^b	15 62.5	4 16.7	1 4.2
Other Truck and Combination	6	2 33.3 ^b	0 -	0 -	0 -
Total	1,316	74 5.6 ^b	26 35.1	29 39.2	4 5.4

^aExcludes School Bus

^b% of crashes with defects; other % represents % of defects per category

Table 16

Profile of Fatal Crashes by Carrier Type and Selected Defects

Carrier	1979				1980					
	N	Total Defects	Brakes	Tires	Lights	N	Total Defects	Brakes	Tires	Lights
Bus ^a	2	0 ^b 0.0	-	-	-	4	2 ^b 50.0	1	0	0
Truck or Truck-tractor	260	10 ^b 3.8	2 20.0	6 60.0	1 10.0	284	12 ^b 4.2	2 16.7	6 50.0	1 8.3
Truck-tractor and Semitrailer	87	7 ^b 8.0	4 57.1	1 14.3	1 14.3	67	9 ^b 13.4	7 77.8	1 11.1	0
Other Truck and Combination	2	0 ^b 0.0	-	-	-	0	-	-	-	-
Total	351	17 ^b 4.8	6 35.3	7 41.1	2 11.8	355	23 ^b 6.5	10 43.5	7 30.4	1 4.3
			1981				1982			
Bus ^a	5	0 ^b 0.0	-	-	-	3	0 ^b 0.0	-	-	-
Truck or Truck-tractor	243	7 ^b 2.9	4 57.1	1 14.3	1 14.3	238	17 ^b 7.1	2 11.8	12 70.6	0
Truck-tractor and Semitrailer	64	3 ^b 4.7	1 33.3	1 33.3	0	53	5 ^b 9.4	3 60.0	1 20.0	0
Other Truck and Combination	1	0 ^b 0.0	-	-	-	3	2 ^b 66.7	0	0	0
Total	313	10 ^b 3.2	5 50.0	2 20.0	1 10.0	297	24 ^b 8.1	5 20.8	13 54.2	0

^a Excludes School Bus; ^b % of Crashes with Defects; Other % are % of Defects Per Category

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A reduction in accidents should also result in economic savings in a number of areas. During 1982 alone, 189,898 accidents in Virginia resulted in death, personal injury, or property damage, with trucks and buses accounting for 18.5% of this total. Virginia Department of Highways and Transportation figures for 1982 show that 58,923 of these accidents occurred on state maintained roads and resulted in \$100,764,300 in property damage and an estimated \$415 million in economic loss. At a rate of \$1,710 in property damage and \$7,043 in economic loss per accident, even a slight decrease in the number of accidents can result in significant economic savings. These savings will be realized by taxpayers through reduced damage to state property and by motorists in the form of lower insurance premiums and reduced personal loss.

Commercial motor carriers may also experience long-run benefits from increased enforcement. Stricter enforcement of motor carrier regulations will increase the risk, and therefore the cost, of operating substandard equipment on state highways. Through enforcement, Virginia can influence carriers to repair equipment defects and institute more rigid maintenance and driving standards. The resulting decrease in accidents, mechanical failures, and out-of-service time may well prove cost-efficient for many carriers and enable them to provide better service at a lower ultimate cost. Carriers already having extensive maintenance programs in the interest of service and safety will no longer be forced to compete with carriers running unsafe equipment at a lower cost.

Increased enforcement will positively affect motor carriers, owners and operators, as well as improve highway safety generally, to the benefit of all Virginians.

1.6 Ability to Prevent or Discourage Commercial Motor Vehicle Operators from Circumventing Inspection Sites

Virginia anticipates no significant problem from attempts of commercial motor vehicle operators to bypass safety inspections. The Virginia Department of State Police plans to counter this potential problem by shortening inspection time to reduce operator delay, expanding the availability of motor carrier safety teams to cover some alternative routes, and continuing close cooperation with road troopers on routine patrol.

A major reason drivers and carriers are inclined to circumvent inspection sites is to avoid the delay accompanying roadside checks. By improving training and using a shorter critical item inspection format, Virginia inspection teams can decrease inspection time to under thirty minutes. This will expedite the process and cause complying operators less annoyance and less delay. This should reduce resistance to

roadside safety inspections and alleviate some of the associated problems.

As described in section 4.0, MCSAP personnel will be used with current staff to establish fifteen two-man motor carrier safety teams under the program. This will allow strategic use of available teams on alternative routes to deter attempts to bypass inspection sites. Commercial motor vehicle operators will be less inclined to travel a longer route to avoid inspection sites if that route may be monitored as well.

Finally, the Department of State Police can detect detouring on a number of routes through coordinating inspection locations with division personnel. The vehicles used by the inspection teams will be equipped with radios to facilitate communication with patrol officers. Systematic patrol of alternative routes will detect and prevent attempts to bypass inspection sites.

Virginia recognizes that circumvention of inspection sites is a potential problem for its program of increased enforcement. Enforcement authorities believe the above responses will sufficiently deter these activities. However, attempts to bypass will be monitored closely, and the authorities are prepared to use other enforcement strategies if needed.

2.0 Current Enforcement Efforts

2.1 Agency Responsibility and Resources

The Virginia Department of State Police has the sole responsibility for enforcing motor carrier safety regulations in Virginia. The SCC promulgates rules and regulations governing the supervision, control, and operation of motor carriers and handles economic enforcement through its motor carrier division.

The Department of State Police currently employs twenty-one troopers specializing in enforcement of hazardous materials and motor carrier safety regulations. The members of this force are assigned to the Department's Safety Division. They have received training from the Transportation Safety Institute, Oklahoma City, Oklahoma (DOT); Materials Transportation Bureau, Washington, D. C. (DOT); U. S. Coast Guard, Yorktown, Virginia (DOT); and elements of the chemical, trucking, and railroad industries.

The safety officers are divided into seven three-man teams and assigned to six field districts across Virginia. This force has primary responsibility for enforcing motor carrier safety regulations and devotes its full time to programs relating to motor carrier safety and hazardous materials. The teams conduct roadside safety inspections, post-crash investigations, accident reconstructions, and public awareness and education programs, and respond to hazardous materials spills and incidents.

Roadside safety inspections are the primary means of safety enforcement. During 1982 and 1983, motor carrier safety officers inspected an average of 3,000 vehicles per year. Inspections are currently performed at permanent weighing stations, incomplete rest areas, and roadside weighing turnouts (see Exhibit VI).

2.2 Current State Authority

The Virginia Department of State Police has the authority to enforce Virginia's laws regarding motor vehicle operation generally and motor carrier operation specifically, as well as the regulations on hazardous materials promulgated by the Virginia State Board of Health and other motor carrier regulations promulgated by the SCC.

The Code of Virginia sets forth most of the rules governing motor carrier operation within the Commonwealth. These rules are in the form of statutes controlling motor vehicle operation generally, as well as individual provisions applicable only to buses, trucks, trailers, or combinations. Virginia's statutes are for the most part coextensive and

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consistent with the Federal Motor Carrier Safety Regulations (FMCSR), although some current state provisions are less restrictive than the corresponding federal rules.

This statutory framework is supplemented by a series of rules and regulations promulgated by the SCC to govern the supervision, control, and operation of motor vehicle carriers. Carriers are divided into six broad categories, and there is a separate body of regulations for each. The categories are as follows: common carriers of passengers, common carriers of property, special or charter party carriers, sight-seeing carriers, household goods carriers, and petroleum tank truck carriers. SCC regulation of the different categories is essentially the same, with minor variations as appropriate. SCC rules establish tariffs and other economic regulations, but they also contain valuable safety provisions. For instance, even though the Code of Virginia does not require the installation of a fire extinguisher on all commercial motor vehicles, SCC regulations contain a fire extinguisher provision similar to that of the FMCSR.

Virginia's Regulations Governing the Transportation of Hazardous Materials were adopted by the State Board of Health in 1981. In addition to the state rules, the Board adopted the federal hazardous materials regulations by reference. The regulations include all of 49 C.F.R. Parts 390 through 396, as well as other selected specifications from Title 49 of the Code of Federal Regulations. (For specific Parts, see Exhibit III.) These regulations make Virginia's hazardous materials enforcement authority identical to that for the FMCSR and cover both interstate and intrastate carriers of hazardous materials.

Exhibit III contains Virginia statutes, rules, and regulations governing motor carrier safety and the transport of hazardous materials. These rules are not so comprehensive as the FMCSR, but state authorities will institute a campaign for legislative reform in these areas if the state receives MCSAP implementation funding. However, Virginia's current rules and regulations are compatible with the FMCSR and are sufficiently comprehensive to enable the success of an enhanced motor carrier safety program. Coordinated enforcement of Virginia statutes and regulations can reduce vehicle defects, driver deficiencies, and unsafe carrier practices to effect a decrease in commercial motor vehicle accident rates.

2.3 Costs -- Motor Carrier Safety/Hazardous Materials Enforcement

On November 1, 1981, the Virginia Department of State Police formally instituted a specialized program in the area of motor carrier/hazardous materials safety enforcement. This twenty-one member force, previously described, has as their sole activity the enforcement of state laws and regulations dealing with commercial motor vehicles.

While it is recognized that all road troopers currently have authority to enforce statutes and rules governing motor carriers and have done so in the past, any costs associated with these activities are not included in computations of the base year level of effort. The following costs, supplied by the Department of State Police, are costs associated with the twenty-one member motor carrier safety force. The aggregate cost of this force from November 1, 1981, through June 30, 1982, is used as the state's expenditure for commercial motor carrier and highway hazardous materials safety programs during the state's last two full fiscal years preceding January 6, 1983. This aggregate cost is divided by two to reach the base year level of effort.

Enforcement Costs Beginning November 1, 1981 and Ending June 30, 1982

Salaries and Fringe Benefits	\$367,127
Gasoline	30,190
Telephone	1,288
Meals	8,280
Motor Vehicles	30,921
Telecommunications	8,587

Total Cost for 8 Months \$446,393

Base year level of effort ($\$446,393 \div 2$) = \$223,196

Source: Department of State Police

2.4 Maintenance of Effort

The base year level of effort, which shall be maintained by the state of Virginia, is \$223,196.

Maintenance of enforcement effort by the Virginia State Police will not be difficult to ascertain. Current enforcement efforts in the state are vested in a clearly identifiable field force. This force will be continued by the state and supplemented with MCSAP personnel. Since MCSAP personnel will not replace current staff and since costs may be expected to rise, Virginia's expenditures on motor carrier safety should not drop below pre-1983 levels.

3.0 Objectives of Virginia State Enforcement Plan

3.1 Overall Goal

Virginia's State Enforcement Plan is designed to promote safer travel on the public highways of the Commonwealth. The objective is to reduce the number and severity of accidents and hazardous materials incidents involving commercial motor vehicles by substantially increasing the level of enforcement activity and the likelihood that safety defects, driver deficiencies, and unsafe carrier practices will be detected and corrected.

Virginia recognizes that a coordinated program of inspection and enforcement activities is needed to avoid duplication of effort by state and federal agencies as well as by the various agencies within the state. Virginia further recognizes that motor carrier regulations governing operation on state highways should be reasonably consistent with what is required in other parts of the country. Coordinated enforcement of uniform regulations is the best means of promoting compliance by carriers and drivers in order to achieve significant accident reductions.

Virginia's State Enforcement Plan identifies its goals and objectives as short-term (first year), medium-term (second, third, and fourth years), and long-term (fifth year and beyond).

3.2 Short-term

During the first year of MCSAP funding, Virginia will increase its motor carrier enforcement staff, reorganize its enforcement activity to increase the volume of roadside safety inspections, and improve reporting, data collection, and evaluation procedures. These short-range objectives will induce greater compliance with Virginia motor carrier laws and regulations, and should begin to reduce the frequency of commercial motor vehicle accidents.

The first year of operations will be devoted largely to program development and improvement to enable the program to reach its intermediate goals and to ultimately reduce motor carrier accidents and hazardous materials incidents with maximum effectiveness. Virginia identifies the following short-term objectives:

1. Seek legislative and regulatory improvements in Virginia statutes, rules, and regulations consistent with the FMCSR and with greater safety in the operation of commercial motor vehicles in Virginia.

2. Recruit and train nine new troopers and seven support personnel as soon as possible to provide increased enforcement and administrative support; MCSAP line staff should work approximately 15,480 hours in the first year.
3. Reorganize staff deployment from seven three-man teams to fifteen two-man teams in order to use increased manpower to expand motor carrier safety team availability by 50%.
4. Increase roadside safety inspections by 2,000 inspections over base effort through increased manpower, more efficient deployment, and a focused effort on inspection activity.
5. Develop a statewide public information campaign to raise awareness of and support for motor carrier safety regulations and safety programs within the general public as well as the motor carrier industry.
6. Improve reporting and data collection regarding motor carrier accidents, vehicle inspections, and hazardous materials incidents.

3.3 Medium-term

The second, third, and fourth years of Virginia's MCSAP funding will be devoted to establishing state program activity at a steady, effective level, expanding enforcement to include terminal safety audits, stabilizing data generated by the program, keeping training abreast of changes in hazardous materials transportation, and continuing focused public information and legislative reform campaigns. Virginia identifies the following medium-term objectives:

1. Increase staff and expand training as needed to implement an efficient, comprehensive motor carrier safety program, particularly in the event that funding levels do not allow full enhancement to projected levels in the first year.
2. Institute safety management audits on Virginia motor carriers.
3. Develop a public information program to focus on a selected motor carrier safety problem each year (e.g., hazardous materials, hours of service, or speed limits). The problem should be one that is indicated by accident data to be a leading cause of motor carrier crashes. This program will follow the general awareness campaign of the first year (or two, if deemed appropriate).
4. Develop a consistent data base over a number of years from which to evaluate motor carrier safety problems. Reporting and data

collection improvements in the first year of implementation may render pre-1984 data inadequate for comparison with current figures. Consistent data must be collected over a period of years in order to accurately evaluate enforcement impact, analyze motor carrier safety trends, and assess the magnitude of selected safety problems.

5. Reduce hazardous materials spills by 5%; develop training, inspection, and emergency procedures to ensure continued safety in the transportation of new hazardous materials which may enter the transportation stream. As Virginia's chemical and nuclear industries expand, new products and wastes will be generated and Virginia must be prepared to handle the safety problems associated with the entry of these new materials into the transportation system.
6. Continue efforts to influence legislative and regulatory reform in such a direction as will best facilitate motor carrier safety enforcement.
7. Increase the number of out-of-service violations detected, summonses issued, and warnings given by 30% through increased enforcement activity while reducing the ratio of each to vehicles inspected through a lowered number of defective vehicles operating on state highways.

3.4 Long-term

The long-term goal of Virginia's State Enforcement Plan is to reduce the number and severity of accidents and hazardous materials incidents involving commercial motor vehicles. Virginia's long-term objectives specify areas of continuing emphasis in maintaining the quality motor carrier safety program established in the first years of MCSAP funding. Virginia identifies the following long-term objectives:

1. Maintain roadside safety inspection volume at or above levels of previous years as long as significant motor carrier safety problems warrant concentrated enforcement activity.
2. Continue safety management audits on Virginia motor carriers.
3. Develop training programs to keep staff abreast of new legislation and regulations, enforcement strategies, transportation issues, and current hazardous materials safety problems.
4. Evaluate previous public information campaigns and continue public information/public relations programming in specific areas thought

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to be most effective in promoting compliance with Virginia laws and regulations and reducing commercial motor vehicle accidents.

5. Maintain data collection and reporting efforts at levels sufficient to evaluate overall program effectiveness, assess motor carrier safety problems, and target problems for specific program emphasis.
6. Continue efforts in support of legislative and regulatory reform favorable to motor carrier safety enforcement.
7. Reduce total commercial motor vehicle accidents/commercial motor vehicle mile traveled by 5.0%, personal injury accidents/vehicle mile by 7.5%, and fatal accidents/vehicle mile by 10.0% by the fifth year of MCSAP funding.

4.0 Resources to be Employed

4.1 State Agencies

The Department of State Police will function as the lead agency under MCSAP with full enforcement authority for motor carrier safety and hazardous material regulations.

4.2 Personnel

As previously indicated, the Department of State Police currently has a staff employed in the base program. This base activity will be maintained. In addition and specifically for the MCSAP, it is proposed that staff be increased as follows:

- o 9 troopers
- o 2 field sergeants
- o 1 first sergeant
- o 1 motor carrier safety administrative program coordinator
- o 3 clerk-typists

This increase in staff should be made as soon as possible to provide an increase in enforcement effort, public awareness, and administrative support.

The nine additional trooper positions will increase the availability of the motor carrier safety teams in excess of 50%. This will be accomplished by deviating from the three-man team concept to increase enforcement capabilities from seven three-man teams to fifteen two-man teams.

Virginia's motor carrier safety teams --

- o enforce motor carrier safety regulations, hazardous materials regulations, motor vehicle laws, and criminal laws;
- o conduct post-crash investigations of heavy commercial vehicles, including accident reconstruction;
- o conduct audits and safety evaluations of commuter buses;
- o respond to hazardous materials spills and incidents, and
- o participate in public awareness programs through training seminars, teaching assignments, and personal contact with motor carriers.

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The two field sergeants will be located centrally in each region to assist in coordinating MCSAP field activities.

The first sergeant will be assigned to Division Headquarters and will coordinate the administrative functions associated with motor carrier safety and hazardous material enforcement, as well as supervise the field operations through the two field sergeants.

The motor carrier safety administrative program coordinator will be responsible for the development of computer software and for the proper entry, retrieval, assessment, and filing of all documentation relative to motor carrier safety and hazardous material enforcement. This employee will also be responsible for all administrative correspondence and documentation associated with these programs.

The three clerk-typists will support the administrative staff at strategic district offices where a need has been established.

4.3 Equipment

The following equipment will be required under the MCSAP:

- o 6 vans for motor carrier safety teams (one at each district office)
- o 12 encapsulated suits (for hazardous material emergency response, 2 for each van)
- o 12 passenger vehicles with auxiliary equipment
- o uniforms and personal issued equipment for officers
- o office equipment for administrative support staff

4.4 Costs - see following page.

Table 17

Estimate of Costs MCSAP -- Enhancement Only

	<u>Federal</u>	<u>State</u>	<u>Total</u>
Labor			
Troopers 9 @ \$20,791	\$187,119		\$ 187,119
Field Sergeants (2) @ \$27,150	54,300		54,300
Motor Carrier Safety Administra- tive Program Coordinator	15,905		15,905
Clerk-typist B (3) @ \$11,144	33,432		33,432
First Sergeant	29,690		29,690
Fringe Benefits @ 22 Percent of Direct Labor	70,498		70,498
Other Direct Costs			
<u>Vehicles</u>			
Passenger 12 @ \$9,868		118,416	118,316
Vans 6 @ \$12,000	72,000		72,000
<u>Vehicle Equipment</u>			
18 @ \$5,600	100,800		100,800
<u>Uniforms/Inspection & Duty</u>			
12 @ \$2,462	29,544		29,544
<u>Emergency Response Equipment</u>			
9 @ 1,428	12,852		12,852
<u>Encapsulated Suits</u>			
12 @ \$1,200	14,400		14,400
<u>Administrative Equipment</u>			
3 desks @ \$336	4,263		4,263
3 chairs @ \$36.45			
3 typewriters @ \$585			
3 Calculators @ \$91.00			
Travel and Per Diem	8,880		8,880
Vehicle Maintenance and Fuel	<u>12,348</u>	<u>43,092</u>	<u>55,440</u>
Total	\$646,031	\$161,508	\$807,539
Federal Share	\$646,031 (80 Percent)		
State Share	\$161,508 (20 Percent)		
Total	\$807,539 (100 Percent)		

5.0 Methodology

5.1 Staffing Utilization

Virginia will continue to operate the base year effort of \$704,307. The enhanced MCSAP effort provides for 100% full-time dedication of the staff described in section 4.2 and budgeted in Table 17.

The nine troopers and two field sergeants will be utilized to complement the present field force employed to conduct motor carrier safety and hazardous materials checks at predetermined locations throughout the state as dictated by traffic volume and other statistical information generated by current departmental documentation. The objective of the additional MCSAP manpower will be to augment the existing State Police motor carrier safety field force to gain extended coverage and quicker response time by changing the present team concept from seven three-man teams to fifteen two-man teams.

In addition, these MCSAP personnel will augment the existing staff in monitoring drivers and vehicles for drug and alcohol related violations. The MCSAP personnel will also check heavy commercial vehicles suspected of being stolen because the VIN number has been altered or removed.

The MCSAP personnel will be assigned to conduct mobile inspections, post-crash investigations, accident reconstruction, and motor carrier safety public awareness programs, and will respond to hazardous material spills and incidents in this state.

The first sergeant will perform administrative functions at Division Headquarters relative to motor carrier safety, hazardous material enforcement, and MCSAP, as well as supervise field operations through the two field sergeants located centrally in each region of the state.

The motor carrier safety administrative program coordinator will perform duties as assigned to enhance motor carrier safety, hazardous materials, and MCSAP involvement by the Department of State Police.

The clerk-typists will be utilized in district offices to handle motor carrier safety, hazardous material, and MCSAP duties.

Virginia's motor carrier safety and hazardous material program was established primarily to conduct roadside safety checks of heavy commercial vehicles at safe strategic locations throughout the state. All MCSAP enforcement personnel will be utilized for the same basic

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purpose. These safety checks are predicated on pre-established schedules.

All inspections by both base effort personnel and MCSAP staff will be conducted in accordance with instructions received from the Bureau of Motor Carrier Safety. The criteria established by MCSAP will be used for placing vehicles and drivers out of service. All records will be maintained according to such requirements as may be established by the FHWA.

All line functions staffed under the federal grant will submit daily activity reports that will be reviewed weekly, monthly, and annually.

Staff funded under MCSAP will be monitored for the quality and quantity of safety inspections performed. Counselling will be administered as necessary for officers not meeting the quality or quantity standard desired.

Upper level management will supervise the sixteen federally funded positions, but these costs are not included as a cost factor under the MCSAP enhancement.

5.2 Projections of Roadside Commercial Vehicle Safety Inspections

The MCSAP line staff funded under this grant will work approximately 15,840 hours in the first year. Initial training will require a significant time commitment before routine safety enforcement activities can proceed. Once trained, Virginia MCSAP personnel will conduct post-crash investigations, accident reconstructions, and motor carrier safety public awareness programs, as well as respond to hazardous materials spills and incidents across the state. These activities reduce the time spent performing roadside safety inspections, but they are equally important to the success of the program.

When performing roadside safety inspections, staff should be able to average one safety inspection every hour. This is an average and is not intended to preclude an officer from performing more than one per hour. Scheduling of officers is premised on the performance of a safety inspection every thirty minutes. Virginia projects that 2,000 safety inspections will be performed during the first program year (enhancement only). In addition to MCSAP personnel, the current motor carrier safety enforcement staff will continue to perform safety inspections as part of their daily enforcement activity.

6.0 Self-evaluation Plan

6.1 Plan Design

Virginia's evaluation plan is designed to collect data to determine if the quantifiable goals and objectives (section 3.0) of its State Enforcement Plan have been met. The plan will operate on three levels designed to correspond to the short-, medium-, and long-term objectives. The first level of inquiry will identify and measure activity data. This will determine whether the enforcement tasks planned for each year have, in fact, been performed. At the second level, data reflecting immediate enforcement impact will be evaluated. This will determine whether recent enforcement activity has increased regulatory compliance by the motor carrier industry. Finally, accident data will be collected and analyzed to decide whether the long-term objectives of the plan are being met.

6.2 Evaluation Factors

Several categories of activity data are readily available. This information will be captured primarily from employment records and daily activity reports. Activity data to be evaluated include:

- o Number of MCSAP personnel funded, employed, and trained.
- o Total hours worked annually by MCSAP personnel; number of MCSAP hours spent inspecting commercial motor vehicles.
- o Total vehicles inspected by MCSAP personnel; number of hazardous materials carriers inspected.

Data for evaluating immediate enforcement impact will come from daily activity reports, citations, and post-crash investigation reports. Enforcement impact data include:

- o Out of service violations detected; vehicles placed out of service; drivers placed out of service; ratio of out of service violations to vehicles inspected.
- o Number of summonses issued; ratio of summonses to vehicles inspected.
- o Number of warnings issued; ratio of warnings to vehicles inspected.
- o Number of hazardous materials spills attended.

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- o Probable causes of a sample of commercial motor vehicle accidents as revealed by post-crash investigations.

The Commonwealth of Virginia currently collects reliable information on commercial motor vehicle accidents. The state's reporting categories were revised beginning with 1983 statistics from the categories "bus," "truck or truck-tractor," "truck-tractor and semitrailer," and "other truck and combinations," to the classifications "city transit bus," "intercity bus," "straight truck," "tractor-trailer," and "twin trailer." The state is developing an improved accident reporting form which will provide more useful and detailed information about Virginia accidents. Data for analyzing accident frequency and severity will include:

- o Total accidents involving commercial motor vehicles (categorized as described above); ratio of accidents to commercial motor vehicle miles traveled.
- o Fatal accidents involving commercial motor vehicles; ratio of fatal accidents to miles traveled.
- o Personal injury accidents; ratio of personal injury accidents to miles traveled.
- o Property damage accidents; ratio of property damage accidents to miles traveled.

6.3 Evaluation Methodology

The evaluation factors listed above will verify the levels of enforcement activity, carrier compliance, and vehicle accidents for the evaluation year. These levels will be compared with the objectives for the year and with measured levels of the previous year(s). In this manner, each evaluation factor can be categorized as follows:

- o No progress shown over previous year.
- o Progress is shown over previous year, but falls short of target levels.
- o Objectives reached or exceeded.

This method is proposed for evaluating program effectiveness in the first year of MCSAP funding. Reporting and data collection improvements planned for the first program year may provide access to more useful evaluation data in subsequent years. Virginia will be receptive to changes suggested by the FHWA or by the experience gained in the first year of the program.

EXHIBIT III

COMMONWEALTH OF VIRGINIA

MOTOR CARRIER SAFETY LAWS, RULES, AND REGULATIONS

1
As authorized by Title 18.2, Chapter 7, Article 3.1 of the Code of Virginia, (1950) as amended, the State Board of Health has, in conformity with the provisions of Title 9, Chapter 1.1:1, Code of Virginia (1950) as amended, adopted the Regulations Governing Transportation of Hazardous Materials. Amendment 2 incorporates by reference the 1981 changes to the U.S. Department of Transportation Regulations cited in Section 3.00.

Preliminary approval by the State Board of Health:
March 3, 1981
Public hearing held: April 13, 1981
Adopted by the State Board of Health: May 4, 1981
Effective date: June 22, 1981

Preliminary Approval of Amendment 1: September 2, 1981
Public Hearing on Amendment 1: December 4, 1981
Amendment 1 Adopted: January 10, 1982
Amendment 1 Effective Date: April 20, 1982

Amendment 2 Preliminary Approval: March 17, 1982
Public Hearing on Amendment 2: June 2, 1982
Amendment 2 Adopted: July 21, 1982
Amendment 2 Effective Date: December 1, 1982

Amendment 3 Preliminary Approval: January 12, 1983
Public Hearing on Amendment 3: April 6, 1983
Amendment 3 Adopted: May 18, 1983
Amendment 3 Effective Date: September 1, 1983

Copies can be obtained from:

Division of Solid & Hazardous Waste
Management
906 Madison Building, 109 Governor Street
Richmond, Virginia 23219
(804) 786-5271

1.00 General Information and Legislative Authority

1

1.01 Authority for Regulation

1.01.01 These regulations are issued under the authority of the Code of Virginia, as amended, Title 18.2, Chapter 7, Article 3.1, Sections 18.2-278.1 through 18.2-278.7, Transportation of Hazardous Materials.

1.01.02 The Code of Virginia, Section 18.2-278.2, assigns the Board of Health the responsibility for promulgating regulations governing the transportation of hazardous materials.

1.01.03 The Board is authorized to promulgate rules and regulations designating the manner and method by which hazardous materials shall be loaded, unloaded, packed, identified, marked, placarded, stored and transported, such rules to be no more restrictive than applicable federal regulations.

1.02 Purpose of Regulations. The purpose of these regulations is to regulate the transportation of hazardous materials in Virginia.

1.03 Administration of Regulations

1.03.01 The Commissioner of Health is designated by the Board of Health with the responsibility to carry out these regulations.

1.03.02 The Division of Solid and Hazardous Waste Management is designated as the organizational portion of the Department of Health responsible to the Commissioner for the planning, development and implementation of programs to meet the requirements of Article 3.1, Chapter 7 of Title 18.2.

1.04 Application of Regulations. Subject to the exceptions set forth in §1.05 below, these regulations apply to any person who transports hazardous materials, or offers such materials for shipment.

1.05 Exceptions. Nothing contained in these regulations shall apply to regular military or naval forces of the United States, nor to the duly authorized militia of any state or territory thereof, nor to the police or fire departments of this Commonwealth, providing the same are acting within their official capacity and in the performance of their duties; nor to the transportation of hazardous radioactive materials in accordance with §44-146.30 of the Code of Virginia.

1.06 Regulations Not to Preclude Exercise of Certain Regulatory Powers. Per §18.2-278.5 of the Code, the provisions of these regulations shall not be construed so as to preclude the exercise of the statutory and regulatory powers of any agency, department or political subdivision of the Commonwealth having statutory authority to regulate hazardous materials on specified highways or portions thereof.

1.07 Transportation under United States Regulations. Per §18.1-278.7 of the Code, any person transporting or offering for shipment hazardous materials in accordance with regulations promulgated under the laws of the United States, shall be deemed to have complied with the provisions of these regulations, except when such transportation is excluded from regulation under the laws or regulations of the United States.

1.08 Enforcement

1.08.01 Law Enforcement Officers. The Department of State Police, together with all law enforcement and peace officers of the Commonwealth shall enforce the provisions of these regulations. Per §18.2-278.3 and §32.1-27 of the Code, violation of these regulations is a Class 1 Misdemeanor.

1.08.02 Civil judicial enforcement of these regulations shall be governed by §32.1-27 of the Code of Virginia.

1.09 Application of Administrative Process Act. The provisions of the Virginia Administrative Process Act, which is codified as Chapter 1.1:1 of Title 9, Section 9-6.14:1 *et seq.*, Code of Virginia, 1950, as amended, govern the adoption, amendment, modification, and revision of these regulations, and the conduct of all proceedings hereunder.

1.10 Severability. If any provision of these regulations, or the application of any provision of these regulations to any person or circumstances, is held invalid, the application of such provision to other persons or circumstances, and the remainder of these regulations, shall not be affected thereby.

2.00 Definitions

2.01 Hazardous Material means a substance or material in a form or quantity which may pose an unreasonable risk to health, safety or property when transported, and which the Secretary of Transportation of the United States has so determined by regulation or order;

2.02 Transport or transportation means any movement of property by any mode, and any packing, loading, unloading, identification, marking, placarding, or storage incidental thereto.

2.03 Explosive means "any chemical compound or mechanical mixture that is commonly used or intended for the purpose of producing an explosion, that contains any oxidizing and combustible units, or other ingredients, in such proportions, quantities, or packing that an ignition by fire, by friction, by concussion, by percussion, or by detonator, or any part of the compound or mixture may cause such a sudden generation of highly heated gases that the resultant gaseous pressures are capable of producing destructive efforts on contiguous objects or of destroying life or limb.

3.00 Compliance With Federal Regulations

3.01 Every person who transports or offers for transportation hazardous materials within or through the Commonwealth of Virginia shall comply with the federal regulations governing the transportation of hazardous materials promulgated by the United States Secretary of Transportation with **amendments promulgated through December 31, 1982** pursuant to the Hazardous Materials Transportation Act, and located at Title 49 of the Code of Federal Regulations as set forth below:

3.01.01 Exemptions—Hazardous Materials Program Procedures in 49 CFR, Part 107, Subpart B.

3.01.02 Hazardous Materials Regulations in 49 CFR, Parts 171 through 177.

3.01.03 Shipping Container Specifications in 49 CFR, Part 178.

3.01.04 Specifications for Tank Cars in 49 CFR Part 179.

3.01.05 Driving and Parking Rules in 49 CFR Part 397.

3.01.06 Motor Carrier Safety Regulations in 49 CFR Parts 390 through 396.

4.00 Hauling Explosives in Passenger-Types Vehicles

Explosives must not be transported in or on any motor vehicle licensed as a passenger vehicle or a vehicle which is customarily and ordinarily used in the transportation of passengers except upon written permission of the State Police and under their direct supervision and only in the amount and between points authorized. If the movement is intracity, the permission of properly designated authority of said city must be secured. Dangerous articles, including small arms ammunition, but not including other types of explosives, may be transported in passenger type vehicles provided the maximum quantity transported does not exceed one hundred pounds in weight. Such transportation shall not be subject to these rules.

5.00 Out of Service

5.01 The Department of State Police shall be the Agents authorized to perform inspections of motor vehicles in operation and to declare and mark vehicles "out of service" as set forth in 49 CFR Part 396.9.

As section 2.2 of Virginia's State Enforcement Plan indicates, Virginia has adopted state motor carrier laws, rules, and regulations compatible with the FMCSR. The state rule adopting federal hazardous materials regulations is reproduced on the preceding pages. The remaining motor carrier provisions are contained in the Code of Virginia and in regulatory pamphlets published by the State Corporation Commission. These materials are included in a separate packet submitted with this document. The following Virginia publications are enclosed:

- o Motor Vehicle Laws of Virginia, 1981 (with 1983 Cumulative Supplement)
- o Rules and Regulations Governing the Supervision, Control, and Operation of:
 - Common Carriers of Property by Motor Vehicle
 - Common Carriers of Passengers by Motor Vehicle
 - Special or Charter Party Carriers by Motor Vehicle
 - Sight-seeing Carriers by Motor Vehicle
 - Household Goods Carriers by Motor Vehicle
 - Petroleum Tank Truck Carriers

EXHIBIT IV

STATE RULE FOR AUTHORITY AND RIGHT OF ENTRY

§ 56-334

CODE OF VIRGINIA

§ 56-334

§ 56-334. **Enforcement of motor vehicle laws; appointment, powers and duties, and defense of agents, inspectors and investigators; powers of officers of Department of State Police.** — (a) The Commission may appoint such agents, inspectors or investigators as it may deem necessary and such agents, inspectors or investigators and officers of the Department of State Police shall have the authority and powers of a sheriff to enforce the laws, rules and regulations governing the operation of motor vehicles on the highways of the state, and such agents, inspectors or investigators and officers of the Department of State Police shall have jurisdiction throughout the state and are given authority upon displaying badge or other credential of office to arrest any person found in the act of violating any of the laws, rules and regulations governing the operation of motor vehicles which the Commission is required to administer and they are hereby given authority to stop motor vehicles for such purposes. However, after having stopped the motor vehicle, the agent, inspector or investigator may exercise the power of arrest in any criminal violation coming to his attention, and may issue a summons for violations of Title 46.1 pertaining to operator's and chauffeur's licensing violations and to vehicle registration and licensing violations.

(b) Agents, inspectors or investigators of the Commission and officers of the Department of State Police may stop, and if found necessary examine the lading of any motor vehicle, trailer or semitrailer operating on any highway of this State and may also examine all documents relating to such lading, motor vehicle, trailer, semitrailer or operation thereof for the purpose of determining that it is operating in accordance with the laws, rules and regulations governing the operation of motor vehicles which the Commission is required to administer.

(c) Any agent, inspector or investigator or officer of the Department of State Police is given the authority to remove from any motor vehicle or to secure from any person to whom issued any warrant, exemption card, registration card, tag, plate or other evidence of authority to operate such motor vehicle issued by the Commission which is being improperly used or which has been properly suspended or cancelled and any person refusing to surrender any warrant, exemption card, registration card, tag, plate or other evidence of authority shall be guilty of a misdemeanor, and subject to the penalties provided in § 56-335.

(d) Any agent, inspector or investigator or state police officer shall have the authority to issue a summons and accept a written promise to appear in like manner as is provided in § 46.1-178 of the Code; and the penalty for the violation of such promise shall be as therein provided.

(e) No agent, inspector or investigator appointed by the Commission shall receive any compensation from any source other than through the Commission unless approved by the Commission.

(f) The Commission or any agent, inspector or investigator may request the assistance of any State police officer in the enforcement of the laws, rules and regulations governing the operation of motor vehicles on the highways of the State which the Commission is required to administer and any agent, inspector or investigator shall assist any State police officer when his services are requested.

(g) Every agent, inspector or investigator shall, before entering upon or continuing in his duties, enter into bond with some solvent guaranty company authorized to do business in this State as surety, in the penalty of six thousand dollars and with the condition for the faithful and lawful performance of his duties. Such bond shall be filed in the Commission's office and the premiums thereon shall be paid out of the fund appropriated for the enforcement of the laws regulating the operation of motor vehicles on the highways of the State. All persons injured or damaged in any manner by the unlawful, negligent or improper conduct of any such officer while on duty may maintain an action upon such bond, provided, however, that the aggregate liability of his surety to all such persons shall, in no event, exceed the penalty of such bond.

(h) If any such agent, inspector or investigator shall be arrested or indicted or otherwise prosecuted on any charge arising out of any act committed in the discharge of his official duties, the Commission may employ special counsel approved by the Attorney General to defend such agent, inspector or investigator. The compensation for special counsel employed pursuant to this section shall, subject to the approval of the Attorney General, be paid out of the funds appropriated for the administration of the Virginia motor carrier laws.

(i) Nothing in this section shall be considered as restricting or limiting in any way the powers, authority and duties of the State police. (1936, p. 244; Michie Code 1942, § 4097y(13d); 1950, p. 630; 1956, c. 131; 1958, c. 342; 1960, c. 68; 1973, c. 534; 1981, c. 459.)

The 1981 amendment added the language beginning "and may issue a summons for violations of Title 46.1" to the end of subsection (a).

Law Review. — For an article on the evolution of the State Corporation Commission, see 14 Wm. & Mary L. Rev. 523 (1973).

EXHIBIT V

MOTOR CARRIER CERTIFICATION

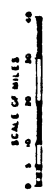
Upon receiving an MCSAP implementation grant, Virginia will require registrants of commercial motor vehicles to declare knowledge of the state's motor carrier safety laws, rules, and regulations. A copy of the form used for this purpose will be submitted to the FHWA upon implementation of the state's MCSAP program.

EXHIBIT VI

STATE INSPECTION SITES

DEPARTMENT OF HIGHWAYS
AND TRANSPORTATION

INTERSTATE AND ARTERIAL HIGHWAY SYSTEM



LEGEND
 SHIMMLED LINE
 DASHED LINE
 SOLID LINE

WEIGH STATIONS LOCATIONS
 Operates 24 hours a day-7 days a week
 Operates 24 hours a day-5 days a week
 Operates 16 hours a day-5 days a week
 Operates 8 hours a day-5 days a week
 Operates on an irregular schedule

**POTENTIAL WEIGHING LOCATIONS
IN REST AREAS**
WEIGHING TURNOUT LOCATIONS

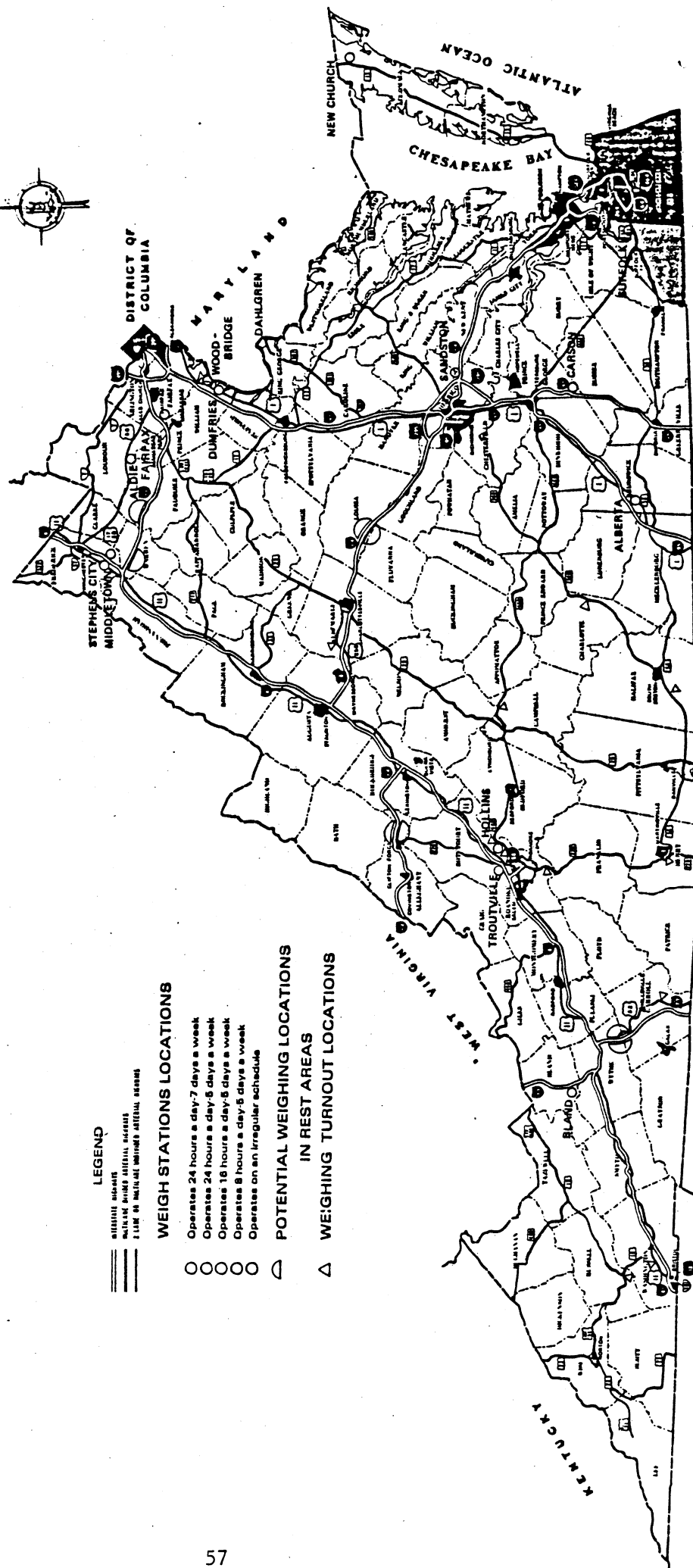


EXHIBIT VII

CONTINGENT DEVELOPMENT GRANT APPLICATION
FOR THE COMMONWEALTH OF VIRGINIA

Should Virginia's Implementation Grant Application/State Enforcement Plan for fiscal year 1985 be rejected for any reason, the Commonwealth requests a second Development Grant for that year. This grant would be used to correct any defects in the 1985 application and to prepare a revised State Enforcement Plan to begin implementation in fiscal year 1986. Part of the grant would also be used to fund the state's Computerized Accident Process Project (CAPP) to get an improved motor carrier accident reporting system in place before 1986 MCSAP implementation.

Lead Agency: Virginia Department of State Police
P. O. Box 27412
Richmond, Virginia 23269

Contact : Capt. B. R. Belsches, Safety Officer
Phone 804/323-2017

Development Grant Budget Estimate

I. Computerized Accident Process Project	\$47,500
II. Preparation of 1986 Implementation Grant Application/State Enforcement Plan	<u>15,000</u>
Total	\$62,500
Federal Share	\$50,000 (80 Percent)
State Share	<u>12,500</u> (20 Percent)
Total	\$62,500 (100 Percent)

- 1

Department of Transportation
Federal Highway Administration
Motor Carrier Safety Assistance Program

The Department of State Police
(State Agency)

hereby applies to the Federal Highway Administration for a Federal grant authorized in Title IV of the Surface Transportation Assistance Act of 1982 (P. L. 97-424) to develop or implement a Commercial Motor Carrier Safety Program as described in this application.

- The State Agency plans to carry out the development of a Motor Carrier Safety Assistance Program during FY 1985 as described in the attached "Development Plan."
- The State Agency plans to carry out the implementation of a Motor Carrier Safety Assistance Program during FY 19 as described in Exhibit I, "State Certification," and Exhibit II, "State Enforcement Plan."

The Federal share (not to exceed 80%) of the approved costs incurred in performing the effort described in the exhibits are reimbursable to the State and the State agrees to submit vouchers for the reimbursement of funds.

Colonel Denny M. Slane
(Typed Name)


(Signature)

Superintendent
(Title)

August 29, 1984
(Date)

Virginia Department of State Police
(Organizational Unit)

(804) 323-2017
(Telephone Number)

P. O. Box 27472
(Street or P. O. Box)

Richmond, VA. 23261-7474
(City, State, Zip)

Attachments:

