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Instructi	•	of Optimal	dent of Public School Bus Speed		School Bus Speed Limit
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Supplementa	iry Notes				

Abstract

The study was prompted by the fact that on Virginia's rural interstate highways there is a three-tiered speed limit: 45 mph for school buses, 55 mph for other buses and trucks, and 65 mph for passenger vehicles. On the urban interstate system, school buses are restricted to 45 mph, but other traffic has a 55 mph speed limit. Further, the speed limit for school buses on roads other than interstate highways is 35 mph or the minimum speed limit, whichever is greater, or 45 mph if the school bus neither loads nor discharges passengers between the points of origin and destination.

The study will examine the safety characteristics of the current multitiered speed limits and how these characteristics relate to the operation of school buses. A survey of other states revealed that 17 states other than Virginia had statutes creating speed limits for school buses lower than those for other vehicles. Generally, these states restricted the speeds of school buses to 55 mph. Three other states have administrative regulations that restrict school buses to 55 mph. However, 19 states have no special laws or regulations governing school bus speed limits. Data acquisition is still in progress for the remaining states.

Research is continuing on this project, and a final report on the subject is scheduled to be completed in September 1989.

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A Status Report

to the Superintendent of Public Instruction

on a Study of

Optimal School Bus Speed Limits on Virginia Highways

(The opinions, findings, and conclusions expressed in this report are those of the authors and not necessarily those of the sponsoring agencies.)

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

Charlottesville, Virginia

December 1988 VTRC 89-SPR1

SAFETY RESEARCH ADVISORY COMMITTEE

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- C. W. THACKER, Director, Office of Substance Abuse Services, Department of Mental Health and Mental Retardation
- E. W. TIMMONS, Director of Public Affairs, Tidewater AAA of Virginia, Norfolk, Virginia

SUMMARY

- There is currently a three-tiered speed limit on Virginia's rural interstate highways: 45 mph for school buses, 55 mph for trucks and other buses, and 65 mph for passenger vehicles.
- o On Virginia's urban interstate highways and on trips during which a school bus neither takes on nor discharges passengers, its maximum speed limit is 45 mph. On other roads and on trips during which passengers are loaded onto or discharged from the school bus, its maximum speed limit is 35 mph or the minimum speed limit, whichever is greater.
- o A total of 17 states other than Virginia have statutes creating speed limits for school buses lower than those for other vehicles. The most common restriction is that school buses are not to exceed 55 mph.
- Early returns from a survey of other states show that in addition to the 18 states that restrict school bus speeds by statute, 3 states limit school bus speeds to 55 mph by administrative regulation, and 19 states have no special provisions concerning school bus speed limits. Data acquisition is still in progress for the remaining states.
- A final report on the advantages and disadvantages of setting lower speed limits for school buses is scheduled to be completed in September 1989.

A Status Report

to the Superintendent of Public Instruction

on a Study of

Optimal School Bus Speed Limits on Virginia Highways

INTRODUCTION

On July 1, 1988, Virginia increased the maximum speed limit for passenger vehicles traveling on the state's rural interstate highway system; consequently, there now exists a three-tiered speed limit on the rural interstate highways: 45 mph for school buses, 55 mph for other buses and trucks, and 65 mph for other vehicles. On urban interstate highways, there is a two-tiered speed limit: 45 mph for school buses and 55 mph for other vehicles. On any highway other than an interstate, the maximum speed limit for school buses is 35 mph or the minimum posted speed, whichever is greater; however, if a school bus does not pick up or discharge passengers between its point of origin and point of destination, its maximum speed limit is 45 mph. The difference between the maximum speed limits for school buses and other vehicles raises important issues related to the safety of pupil transportation in Virginia. There is strong evidence that increasing the variance of vehicle speeds (i.e., the differences among the traveled speeds of vehicles) on a given road increases the probability of a crash.

If the multitiered speed limits on Virginia's highways increase the difference in actual traveled speeds among school buses, large trucks, and passenger vehicles, then there is some basis for concern that the lower speed limits for school buses may increase the risk of school bus crashes. This concern appears especially valid on sections of highway on which limited sight distance and heavy traffic volume decrease other drivers' ability to react to slower-moving school buses.

On the other hand, if school bus speed limits were to be raised, there are questions as to the ability of school buses to perform at the increased speeds. For instance, there is some concern that older school buses and school buses owned and operated by private schools may not be able to travel safely at speeds higher than the current limits. Even for those buses meeting the current standards set by the <u>Regulations Governing</u> <u>Pupil Transportation</u>, many variables affect their ability to perform at increased speeds--including sight distance, braking, engine size, torque, gear ratio, and seating capacity. Also, as the speed of any vehicle increases, the severity of a crash involving that vehicle will increase. Decision makers in Virginia must be able to make informed policy decisions concerning school bus speed limits on the state's highways. In order to do this, the Virginia Department of Education (DOE) has entered into an agreement with the Virginia Transportation Research Council (VTRC) to study the advantages and disadvantages of the various speed limit options. (A copy of the agreement appears in Appendix A.) This study will be conducted with the advice and assistance of the DOE's Pupil Transportation Advisory Committee and with that of the Secretarial Task Force on Interstate Highway Speed Limits. The purpose of the study is to examine the safety characteristics of the current multitiered speed limits and how those characteristics relate to the operation of school buses. If any problems are found with the current system, this study, which is to be completed in September of 1989, will provide recommendations concerning how best to alleviate those problems. (The working plan for the study is shown in Appendix B.)

THE LAWS AND POLICIES OF THE FIFTY STATES

The first step in examining the advantages and disadvantages of the multitiered system was to determine if other states had established lower speed limits for school buses than for other traffic. The staff of the VTRC conducted library research on statutes and administrative regulations regarding school bus speed limits in the fifty states. Seventeen states regulate school bus speed limits by statute, but states that have no statute on the subject, nevertheless, sometimes set a maximum speed limit for school buses by administrative regulation. Such regulation may also dictate the types of highways school buses may use. For example, prohibiting buses from rural interstate highways where the speed limit is 65 mph could operate as a de facto speed limit for school buses.

Because state regulations are not always accessible by library research and are not always well-indexed, it was decided that the best way to obtain comprehensive information about administrative rules was by survey. In December 1988, R. A. Bynum, Associate Director of Pupil Transportation Service for Virginia, sent a survey to the Directors of Pupil Transportation in the other 49 states. (A copy of the survey form and the cover letter appear in Appendix C.) The data gathered from this survey through December 30, 1988, are described only briefly in this report; however, these data will be analyzed fully in the final report.

Table 1 shows that 17 states other than Virginia have statutes that create lower speed limits for school buses than for other traffic.* In these states, the most common restriction is that school buses are not to

^{*}One of these states, Washington, does not specifically mention school buses, but its restrictions on large vehicles presumably would include standard school buses.

exceed 55 mph, but other traffic may travel 65 mph on the rural interstate highways. The 9 states with this provision are California, Florida, Georgia, Indiana, Kansas, Maine, Ohio, Oregon, and Tennessee, which represent virtually all regions of the country. Georgia, Maine, and Ohio appear to have deliberately chosen this policy when they raised the rural interstate speed limit to 65 mph, as the school bus speed limit is an integral part of the maximum speed limit statute. In other states, the school bus speed limits are in a separate part of the code and were not amended at the time of raising the rural interstate speed limits.

Georgia, Indiana, Kansas, Maine, and Tennessee have additional restrictions concerning the maximum speed limits for school buses on roads other than the rural interstate highways. Usually, school buses in these states are limited to 40 mph or 45 mph based on the type of road on which they travel, such as "any highway other than interstate," "county or township roads," or "dirt, sand, or gravel roads." Maine restricts its school buses to 45 mph whenever they are traveling to or from school (as opposed to special trips). Thus, in Maine, the school buses are almost always restricted to a lower speed limit than other traffic.

Six states--Michigan, Mississippi, North Carolina, South Carolina, Texas and Virginia--increased the maximum speed limit to 65 mph for most traffic but restricted their school buses to less than 55 mph. Michigan, Mississippi, and Texas limit their school buses to 50 mph, and Mississippi limits its school buses further to 45 mph for trips to and from school. Virginia and North Carolina have the most restrictive statutes, limiting school buses in some situations to 35 mph. In Virginia, the 35 mph limit applies to noninterstate highways, whereas in North Carolina, the 35 mph limit applies to all trips to and from school, regardless of the type of road. South Carolina also has a 35 mph limit on public school buses, but it is imposed by regulation rather than statute. Their statutory limit, 45 mph, applies only to special buses carrying handicapped children long distances.

Two states, Connecticut and Maryland, retained 55 mph as the maximum speed limit for most traffic but have lower limits for their school buses. In Connecticut, the maximum speed limit for school buses is 50 mph on interstate highways and 40 mph on other roads, and in Maryland the maximum speed limit for school buses is 45 mph. In addition, the state of Washington limits all vehicles over 10,000 lbs. gross weight, which presumably would include most school buses, to 60 mph, but other traffic has a maximum speed limit of 65 mph.

Ten states have further restrictions: four based on type of roadway, four on the type of trip, and two on both the type of roadway and the type of trip. When the classification is based on the type of trip (e.g., "no pickups or discharges," or "to and from special activities"), the problem of enforceability arises. Under current Virginia law, it is possible to have two school buses driving down the same noninterstate road at the same time, subject to two different speed limits: 45 mph if there are no

TABLE 1

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States with Statutes Setting Lower Speed Limits for School Buses

State	Speed Limit for School Buses	Speed Limit for Other Vehicles	Notes
California	55	65	
Connecticut	50	55	50 on limited access highways; 40 on other roads
Florida	55	65	
Georgia	55	65	55 on interstates; 40 on other roads if no pickups/discharges, 55 if there are
Indiana	55	65	55 on federal/state highways; 40 on county/township roads
Kansas	55	65	45 on dirt/sand/gravel surface
Maine	55	65	55 on "other trips"; 45 to & from school
Maryland	45	55	
Michigan	50	65	
Mississippi	50	65	50 on other trips; 45 to & from school
North Carolina	ı 45	65	35 to & from school; 45 if no pickups/ discharges; 45 if fewer than 16 passengers; 55 for "special activity" buses (these are special vehicles)
Ohio	55	65	
Oregon	55	65	
South Carolina	u 45	65	45 for buses carrying handicapped children (admin. regulations limit public school buses to 35 mph)

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TABLE 1 (continued)

States with Statutes Setting Lower Speed Limits for School Buses

State	Speed Limit for School Buses	Speed Limit for Other Vehicles	Notes
Tennessee	55	65	55 on federal/state highways; 35 on county roads
Texas	50	65	-
Virginia	45	65	45 on interstates; 35 on noninterstates; 45 if no pickups/ discharges
Washington	60	65	applies to all vehicles over 10,000 lb gross

pickups or discharges on the trip and 35 mph if there are. This is virtually impossible for the police to enforce, as there is almost no way for them to know which type of trip the bus is making.

As has already been discussed, only 18 states regulate school bus speeds by statute. It is important to remember that this represents less than one third of the states.

As of December 30, 1988, 22 of the remaining 32 states that did not have a statute setting school bus speed limits had responded to a survey of state regulations. Of these 22, only 3--Idaho, Kentucky, and New Mexico--have established lower speed limits by administrative regulation. Each has a 65 mph speed limit on the rural interstate highways for most traffic but restricts school buses to 55 mph. However, in New Mexico school buses on special activity trips may travel at 65 mph on the rural interstate highways. Further, there are at least 19 states that allow school buses to travel at the same speed as other traffic. Data acquisition is still in progress for the remaining states.

FUTURE RESEARCH EFFORTS

In addition to studying the laws and regulations of the 50 states, this study will investigate a number of other areas that should be considered in setting optimal speed limits. Early in 1989, all superintendents of schools in the Commonwealth, a sample of private school administrators, and a sample of 1500 school bus drivers, will be mailed a questionnaire requesting their opinions concerning current school bus speed limits and possible changes of the limits. (Copies of these questionnaires are included in Appendix D and Appendix E.) These questionnaires will also ask for information on special activity and field trips, which may account for many of the miles that school buses travel on the interstate highway system. The school bus drivers, the school superintendents, and the private school administrators will be asked what they consider optimal school bus speed limits are under various situations and whether it is possible or desirable to prohibit school buses from using the interstate highway system. In addition to collecting this anecdotal information, the school superintendents and the private school administrators will be asked to provide data on the routing of school buses and on how school bus routes are selected. The school bus drivers will be asked to provide information on the type of bus that they drive and whether they drive a regular route to determine if these factors are related to their opinions.

The sample of school bus drivers will be chosen randomly from the master list of active school bus drivers maintained by the DOE. Addresses of the bus drivers will be obtained from the payroll records of each school division to help ensure that the most current address will be used. This random sample should provide a representative perspective of those school bus drivers who are working under the current laws. Further, selecting the sample from the DOE's records should provide the most representative sample possible, because it gives every bus driver--the best to the worst--an equal opportunity of being selected. The sample of private school administrators will also be selected from a list maintained by the DOE.

Later in 1989, a sample of other interested parties will be surveyed concerning their opinions on school bus speed limits. Although the specifics of this survey have not been decided, it is anticipated that this survey would provide enforcement officials, parents, private school associations, and public officials an opportunity to voice their opinions on the issue.

Aside from studying opinions, crash data will be compiled and analyzed in an attempt to determine if the three-tiered speed limit has adversely affected school bus safety. The relationship between school bus crashes, crash rates, and crash severity and road classification (e.g., rural interstate, urban interstate, divided primary, etc.) will be explored. Relationships between school bus crashes, crash rates, and crash severity will be examined for roadway characteristics such as grade, curvature, and sight distance. Finally, crashes, crash rates, and crash severity will be compared among alternate routes.

Once the factors associated with school bus crashes have been examined, the study will recommend whether the current speed limits should be maintained or changed. A final report will be prepared by September 1989 documenting the reasons why the present system is, or is not, the safest option for Virginia. Further, the report will contain a risk-assessment model to help administrators establish the safest school bus routes.

APPENDIX A

Study Agreement Between

the Virginia Department of Education

and

the Virginia Department of Transportation

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OSCAR K. MABRY

DEPUTY COMMISSIONER

DEPARTMENT OF TRANSPORTATION 1401 EAST BROAD STREET RICHMOND, 23219

COMMONWEALTH of VIRGINIA

RAY D. PETHTEL

September 28, 1988

Dr. S. John Davis Superintendent of Public Instruction Monroe Building 101 North 14th Street Richmond, Va 23219

RE: Memorandum of Agreement

Dear Dr. Davis:

As per this memorandum of agreement, the Research Council will be undertaking a study of school bus speed limits on Virginia highways. The purpose of this study is to document any problems with school bus transportation of pupils resulting from Virginia's multitiered speed limit system. In particular, the Research Council will be examining the impact of school bus speed limits on school bus accident rates/severity. The final report will propose solutions to the problems identified.

Step 1 of the project involves the collection of school bus accident records in Virginia as well as other states. This phase will commence immediately upon receipt of your confirmation of this agreement. The target date for publication of the final report is September 15, 1989.

In conducting this study, the Research Council is working in conjunction with and on behalf of the Virginia Department of Education. As a result, by the terms of this letter agreement, the Department of Education shall reimburse the Research Council for any expenditures necessitated by the project up to a maximum amount of \$35,849. Monthly invoices shall be submitted by the Research Council to the Department of Education for reimbursement up to the maximum amount specified. Furthermore, the Department of Education shall assist the Research Council in the conduct of the speed limit study by surveying the statutes, practices, and perceptions that local school divisions and other states have developed in response to school bus accidents. Dr. S. John Davis September 28, 1988 Page 2

If the terms of this agreement are acceptable to you, please sign and date the original copy of the letter where indicated and return to Mr. Howard H. Newlon, Jr., Director of the Research Council. We look forward to working with your department in this endeavor.

Sincerely,

Recar K. Ma

Oscar K. Mabry Commissioner

cc: Mr. Howard H. Newlon, Jr.

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Date

APPENDIX B

Working Plan for the Study of

Optimal School Bus Speed Limits on Virginia Highways

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EPARTMENT OF TRANSPORTATION RAY D. PETHTEL, COMMISSIONER SCAR K. MABRY DEPUTY COMMISSIONER OWARD NEWLON, JR RESEARCH DIRECTOR



UNIVERSITY OF VIRGINIA ROBERT M O'NEIL, PRESIDENT 23 SCHOOL OF ENGINEERING & APPLIED SCIENCE EDGAR A. STARKE, JR., DEAN DR. LESTER A. HOEL, CHAIRMAN DEPARTMENT OF CIVIL ENGINEERING

COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION TRANSPORTATION RESEARCH COUNCIL BOX 3817 UNIVERSITY STATION CHARLOTTESVILLE, 22903

IN REPLY PLEASE REFER TO FILE NO. 7.122

December 9, 1988

MEMORANDUM

- TO: Oscar K. Mabry, Chairman, Research Council Administration Board Donald E. Williams, Commissioner, Department of Motor Vehicles
- FROM: Howard H. Newlon, Jr., Director Virginia Transportation Research Council
- SUBJECT: Working Plan, "Optimal School Bus Speed Limits on Virginia_ Highways" by Adam C. Thackston

Please find attached the working plan for the above project.

This study is the result of a growing concern that the difference between maximum speed limits for school buses and maximum speed limits for other vehicles on Virginia highways may increase the risk of school bus accidents.

On July 1, 1988 Virginia increased the maximum speed limit for passenger vehicles traveling on interstate highways in the state's rural areas. The result is a three-tiered limit for rural interstates: 45 mph for school buses, 55 mph for other buses and trucks, and 65 mph for other vehicles. On urban interstates, there remains a two-tiered limit: 45 mph for school buses and 55 mph for other vehicles. On highways other than an interstate, the maximum speed limit for school buses is 35 mph. There is strong evidence that this variance in speeds increases the probability of accidents.

There are, however, questions as to the ability of school buses to perform safely at increased speeds. There are also questions regarding the safety of alternative routes for pupil transportation.

The purposes of this study are to identify safety problems associated with Virginia's current multitiered speed limits as they relate to school buses, recommend how best to alleviate those problems, and provide decision makers with a model that will enable them to evaluate the risks associated with pupil transportation by school bus. December 9, 1988 Working Plan - Optimal School Bus Speed Limits Page 2

The study will be sponsored by the Virginia Department of Education, and an interim report will be prepared for the 1989 Session of the General Assembly. The final report on the project is scheduled to be completed in September 1989.

toward wendon, fr. HB

Howard H. Newlon, Jr. Director

HHNjr:sdc attachment

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cc: Mr. J. M. Tumlin, FHWA Mr. R. D. Pethtel Ms. L. J. South Ms. A. F. Ober Mr. W. S. Ferguson Ms. E. L. Knight Mr. J. D. Jernigan Safety Research Advisory Committee Secretarial Task Force on Interstate Highway Speed Limits Pupil Transportation Advisory Committee

WORKING PLAN

Optimal School Bus Speed Limits on Virginia Highways

by

Adam C. Thackston Graduate Legal Assistant

(The opinions, findings, and conclusions expressed in this report are those of the author and not necessarily those of the sponsoring agencies.)

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

Charlottesville, Virginia

November 1988 VTRC 89-WP11

WORKING PLAN

Optimal School Bus Speed Limits on Virginia Highways

by

Adam C. Thackston Graduate Legal Assistant

PROBLEM STATEMENT

On July 1, 1988, Virginia increased the maximum speed limit for passenger vehicles traveling on the interstate highway system in the state's rural areas. The result is a three-tiered limit for rural interstates: 45 mph for school buses, 55 mph for other buses and trucks, and 65 mph for other vehicles. On urban interstate highways, there remains a two-tiered speed limit: 45 mph for school buses and 55 mph for other vehicles. On any highway other than an interstate, the maximum speed limit for school buses is 35 mph. The variance between maximum limits for school buses and other vehicles raises important issues related to the safety of pupil transportation in Virginia. There is strong evidence that increasing the variance of vehicle speeds on a given road increases the probability of accidents.

If the multitiered speed limits on Virginia's highways increase the difference in actual travel speeds among school buses, large trucks, and passenger vehicles, then there is some basis for concern that the lower speed limits for school buses may increase the risk of school bus accidents. This concern appears especially valid on sections of highway on which limited sight distance and heavy traffic volume decrease drivers' ability to react to slower-moving school buses.

On the other hand, if school bus speed limits are raised, there are questions as to the ability of school buses to perform at the increased speeds. There are school buses operating on Virginia roads that do not meet the current standards set by the <u>Regulations Governing Pupil Transportation</u>. Even for those buses meeting the current standards, many variables affect their ability to perform at increased speeds, including sight distance, braking, engine size, torque, gear ratio, and seating capacity. Also, as the speed of a vehicle increases, the severity of any crash involving that vehicle will increase.

Decision makers in Virginia must be able to make informed policy decisions concerning school bus speed limits on the state's highways. In order to do this, they need to be aware of the advantages and disadvantages of various speed limit options.

PURPOSE AND SCOPE

The objectives of this study are:

- 1. To examine the safety characteristics of Virginia's current multitiered speed limits and to determine how those characteristics relate to the operation of school buses.
- 2. To document any problems associated with the multitiered system as it relates to pupil transportation by school bus.
- 3. To make recommendations concerning how best to alleviate those problems.
- 4. To establish a risk-assessment model that will allow decision makers to evaluate potential risks associated with the transportation of pupils by school bus on Virginia highways.

A study of the impact of differential speed limits on trucks and passenger vehicles is beyond the scope of this study.

METHODOLOGY

To accomplish the first objective, the following tasks will be performed:

- 1. School bus accident records of Virginia and other states will be collected.
- 2. An interim report will be prepared that will explain the background of this study.
- 3. The accident records collected will be coordinated with a survey of the statutes, practices, and perceptions that local school divisions and other states have developed in response to school bus accidents. This survey will be conducted by the Department of Education.
- 4. An historical analysis of school bus accidents by road class (rural interstate, urban interstate, divided primary, secondary, etc.) will be performed.
- 5. The relationships between the following will be analyzed: (a) differential speed limits and school bus accident rates/severity; (b) increased school bus speed and school bus accident rates/ severity; and (c) school bus accident rates/severity and roadway characteristics such as grade, curvature, sight distance, etc.
- 6. The rate/severity of school bus accidents on various sections of Virginia highways will be compared to the rate/severity of school bus accidents on alternate routes.

To accomplish the second objective, the following tasks will be performed:

- 1. Once the causal factors in school bus accidents have been established, a determination will be made whether an arrangement other than Virginia's current routes and speed limits would provide better safety for school bus transportation.
- 2. A report will be prepared documenting the reasons why the present system is or is not safe.

To accomplish the third and fourth objectives, the following tasks will be performed:

- 1. It will be determined which of the various measures that local school divisions and other states have developed as a response to school bus accidents will provide the greatest reduction in school bus accident rate/severity on Virginia highways.
- 2. A final report will be prepared recommending measures to alleviate the problems in the present system.
- 3. A final report will be published.

WORK SCHEDULE

	Tasks	Termination Date
1.	Collection of accident data	December 1, 1988
2.	Prepare interim report	December 15, 1988
3.	Coordinate data with survey	January 15, 1989
4.	Historical analysis by road class	February 1, 1989
5.	Analyze various relationships:	March 1, 1989
6.	Compare alternate routes	April 15, 1989
7.	Determine advantages and disadvantages of current system	June 1, 1989
8.	Progress report	June 15, 1989
9.	Evaluation of alternatives	July 15, 1989
10.	Prepare final report	September 1, 1989
11.	Publish final report	September 15, 1989

BUDGET

Personnel	Amount
Research Scientist Additive Rate 54.2%	\$15,000 8,130
Programmer/Analyst Additive Rate 54.2%	1,500 813
Data Entry Technician Additive Rate 7.51%	750 56
Graduate Research Assistant Additive Rate 7.51%	5,000 375
Commodities	
Computer Time	1,000
Direct Costs	
Rent	1,000
Indirect Costs	
10% of Salaries	2,225
TOTAL	\$35,849

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APPENDIX C

Survey of State Regulations and Laws on

School Bus Speed Limits

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COMMONWEALTH of VIRGINIA

DEPARTMENT OF EDUCATION P.O. BOX 6Q RICHMOND 23216-2060

December 9, 1988

State Directors/Administrators of School Transportation Programs

FROM: R. A. "Buster" Bynum Associate Director, Pupil Transportation Service

SUBJECT: Survey of State Regulations and Laws on School Bus Speed Limits

The Virginia Department of Education, in conjunction with the Virginia Transportation Research Council, is studying the issue of optimal speed limits for school buses. Currently, Virginia law limits school buses to a maximum of 35 mph on regular routes, and 45 mph on trips with no pickups or discharges and on the interstate highway system. Because other vehicles on the highways may have a speed limit up to 20 mph faster than that of school buses, the possibility of accidents being caused by such a speed differential has caused some concern. On the other hand, there is concern that school buses may not be able to travel safely at higher speeds.

We are interested in finding out how other states have dealt with the issue of setting speed limits for school buses. We know that fifteen states besides Virginia have statutes dealing specifically with school bus speed limits. The remaining states have statutory provisions that allow school bus speed limits to be established through administrative regulations. We would appreciate your cooperation in advising us of the situation in your state. Please take a few minutes to complete the enclosed questionnaire. Should you have questions about this study, you may call me at (804) 225-2037 or Mr. Jack Jernigan at (804) 293-1909.

When we complete the study in the fall of 1989, we will forward a copy to you. Thank you for your assistance.

RAB:sdc

TO:

enclosure

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SURVEY OF STATE REGULATIONS AND LAWS ON SCHOOL BUS SPEED LIMITS

State:
Person & Title Responding:
Address:
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Phone No:()
 Does your state have a <u>statute</u> that specifically regulates school bus speeds? Yes No
If yes, what are the provisions of it?
Statute/code citation
 Does your state have <u>administrative regulations</u> limiting school bus speeds? Yes No
If yes, what are the details of those regulations?
Chapter, title, section

	nool Bus Survey ge 2	State
8.	school buses from using the	w or administrative regulation prohibiting interstate highways or any other Yes No
	If yes, what are the detail	s of the laws or regulations?
		· · · · · · · · · · · · · · · · · · ·
	Statute/code/chapter & sect	ion
•	Does your state require a c speeds? Yes N	ontrol device (governor) for school bus
		0
	If yes, at what speed is th	o e device set?
5.		
i.		e device set?
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Virginia Transportation Research Council P.O. Box 3817, University Station Charlottesville, Virginia 22903

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APPENDIX D

Survey of Superintendents of Public Schools and Private School Administrators on School Bus Speed Limits

PUPIL TRANSPORTATION SURVEY

Administrator Questionnaire

January 1989

On the rural interstate highway system in Virginia, the maximum speed limit for school buses is 45 mph, but the maximum speed limit for trucks and other buses is 55 mph and that for passenger cars is 65 mph. On the urban interstate highways the speed limit for school buses is 45 mph and on other roads the maximum speed limit for school buses is 35 mph; however, school buses neither loading nor unloading passengers between the points of origin and destination have a maximum speed limit of 45 mph. We are interested in the impact these limits have on school bus safety. Please help us by filling out this questionnaire as completely as possible. YOUR ANSWERS WILL BE HELD IN STRICTEST CONFIDENCE.

Name School Division 1. On the rural interstate system the maximum speed limit for passenger cars is 65 mph. The corresponding maximum speed limit for trucks is 55 mph, and the limit for school buses is 45 mph. What do you feel should be the maximum speed limit for school buses on the rural interstate system? (circle one) 35 40 45 50 55 60 65 Why do you feel this way? 2. On urban interstates and other primary roads that have a 55 mph speed limit for passenger cars, what do you feel the maximum speed limit should be for school buses? (circle one)

35 40 45 50 55

Why do you feel this way?

3. Do you feel the maximum speed limit for school buses should be different on regular routes than on special activity or field trips?

yes ____ no ____

Why do you feel this way?

The next three questions deal with the planning of regular school bus routes to and from school in the morning and afternoon.

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4. Please describe briefly how regular school bus routes are selected in your division. (If there is a written policy, please enclose a copy.)

5. How many school buses use the interstate on regular routes?

6. In your division, is it possible to schedule school bus regular morning and afternoon routes on roads other than interstate highways? (check one)

yes ____ no ____

If yes, what alternative highways would you use? If no, please state why this cannot be accomplished and proceed to question 8. 7. If you have a choice between routing a regular school bus on an interstate highway or a primary highway, how do you make this choice?

The next three questions concern the planning of routes for special activity or field trips.

 Please describe briefly how bus routes for special activity trips are selected in your division. (If there is a written policy, please enclose a copy).

9. In your division, would it be possible to route school buses on special activity trips on roads other than interstate highways? (check one)

.

yes _____ no ____

If yes, what alternative highways would you use? If no, please state why this cannot be accomplished and proceed to question 11.

10. If you have a choice between routing a special activity or field trip school bus on an interstate highway or a primary highway, how do you make this choice? 11. Would you support a prohibition of the use of school buses on interstate highways during regular morning and afternoon routes? (check one)

yes ____ no ____

Why do you feel this way?

12. Would you support a prohibition of the use of school buses on interstate highways during special activity trips? (check one)

.

yes ____ no ____

Why do you feel this way?

13. Please provide the following information (or an estimate, if necessary) concerning special activity trips (field trips, sporting events) taken in your division during the school year 1987/1988.

	Approved Yellow School Buses	Non-yellow Buses	Charter/ Rental Vehicles	Other Vehicl¢
The total number of special activity trips (field trips, sporting events, etc.) taken in 1987/88.				
The average number of pupils transported on such trips.		<u> </u>		
The average number of miles traveled on such trips.				

-	Approved Yellow School Buses	Non-yellow Buses	Charter/ Rental Vehicles	Other Vehicles
On such trips, the total mileage traveled on the interstate roads that now have a speed limit of 65 mph (for cars).	<u></u>			
On such trips, the total mileage traveled on the interstate roads that still have a speed limit of 55 mph (for cars).				
On such trips, the total mileage traveled on non-interstate routes with a 55 mph speed limit.				
14. In your division, who is in charge of control accidents involving school buses?	ollecting o	data on traf	fic	

Name

Address

Phone No. ()

Thank you for the time and effort you have taken to respond to these questions. Without your help, we would not be able to determine the impact that speed limit changes may have on school bus safety. Please put your response in the enclosed postage paid envelope and return it to us.

PLEASE RETURN TO:

Mr. Jack Jernigan Research Scientist Virginia Transportation Research Council P.O. Box 3817, University Station Charlottesville, Virginia 22903

APPENDIX E

Survey of School Bus Drivers on

School Bus Speed Limits -

PUPIL TRANSPORTATION SURVEY

Bus Driver Questionnaire

January 1989

On the rural interstate highway system in Virginia, the maximum speed limit for school buses is 45 mph, but the maximum speed limit for trucks and other buses is 55 mph and that for passenger cars is 65 mph. On the urban interstate highways the speed limit for school buses is 45 mph and on other roads the maximum speed limit for school buses is 35 mph; however, school buses neither loading nor unloading passengers between the points of origin and destination have a maximum speed limit of 45 mph. We are interested in the impact these limits have on school bus safety. Please help us by filling out this questionnaire as completely as possible. <u>YOUR ANSWERS WILL</u> BE HELD IN STRICTEST CONFIDENCE.

1.	Do you	currently	drive	а	regular	route	to	and	from	school?
	(check	one)								

yes _____ no ____

2. Do you feel that school buses can safely travel at 45 mph

ON RURAL INTERSTATE ROADS?	yes	no
ON URBAN INTERSTATE ROADS?	yes	no
ON PRIMARY ROADS?	yes	no
ON SECONDARY ROADS?	yes	no

3. Do you feel that school buses can safely travel at 55 mph

ON	RURAL INTERSTATE	ROADS?	yes	no
ON	URBAN INTERSTATE	ROADS?	yes	no
ON	PRIMARY ROADS?		yes	no
ON	SECONDARY ROADS?		ves	no

.

4. Do you feel that school buses can adequately go up hills at 45 mph?

yes ____ no ____

5. Do you feel that school buses can adequately go up hills at 55 mph?

yes _____ no ____

6. All school buses in Virginia are originally equipped with governors to limit the speed at which the bus can travel. What is the top speed that your bus can travel when the governor is in working order? (circle one)

35 40 45 50 55 60 65

- 7. As mentioned previously, on the rural interstate system, the maximum speed limit for passenger cars is 65 mph. The corresponding maximum speed limit for trucks is 55 mph, and the limit for school buses is 45 mph. What do you feel the maximum speed limit should be for school buses on the rural interstate system? (circle one)
 - 35 40 45 50 55 60 65

Why do you feel this way?

8. On urban interstates and other primary roads that have a 55 mph speed limit for passenger cars, what do you feel the maximum speed limit should be for school buses? (circle one)

35 40 45 50 55

Why do you feel this way?

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9. Do you feel the maximum speed limit for school buses should be different on regular routes than on special activity or field trips?

•

yes no
do you feel this way?
· · · · · · · · · · · · · · · · · · ·
In your division, would it be possible to schedule school bus regular morning and afternoon routes on roads other than interstate highways? (check one)
yes no
If yes, what alternative highways would you use? If no, please state why this cannot be accomplished.
-
In your division, would it be posible to schedule school bus special activity trips on roads other than interstate highways?
yes no
If yes, what alternative highways would you use? If no, please state why this cannot be accomplished.
What factors do you feel should be considered in determining whether or not school buses should use interstate highways? Why?

13. Would you support a prohibition of the use of school buses on interstate highways during regular morning and afternoon routes? (check one)

yes ____ no ____

Why do you feel this way?

14. During the 1987/1988 school year, did you drive a school bus on special activity trips, such as field trips or sporting events? (check one)

yes _____ 'no _____ (if no, skip to question 16)

15. Please provide the following information (or an estimate, if necessary) concerning the special activity trips (field trips, sporting events) for which you drove a school bus during the 1987/1988 school year.

The total number of special activity trips (field trips, sporting events, etc.) for which you drove in 1987/88.

The average number of pupils transported on such trips.

The average number of miles traveled on such trips.

On such trips, the total mileage traveled on the interstate roads that now have a speed limit of 65 mph (for cars).

On such trips, the total mileage traveled on the interstate roads that still have a speed limit of 55 mph (for cars).

On such trips, the total mileage traveled on other non-interstate routes with a 55 mph speed limit.

16. Would you support a prohibition of the use of school buses on interstate highways during special activity trips? (check one)

yes no . Why do you feel this way? Thank you for the time and effort you have taken to respond to these questions. Without your help, we would not be able to determine the impact that speed limit changes may have on school bus safety. Please put your response in the enclosed postage paid envelope and return it to us. If you do not object to being contacted for further discussion of these issues, please complete the following: Name ______ School Division _____ Address _____ Phone No. () PLEASE RETURN TO: Mr. Jack Jernigan Research Scientist Virginia Transportation Research Council

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P. O. Box 3817, University Station Charlottesville, Virginia 22903