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Supplementa	ary Notes						

Abstract

This study was initiated in response to a request to the Virginia Department of Transportation from the Virginia Manufactured Housing Association to permit the movement of 80-ft mobile homes on Virginia highways. Information concerning the movement of mobile homes in Virginia and other states is presented along with conclusions relative to allowing movement of 95-ft combined units (80-ft mobile home plus 15-ft tractor) in Virginia.

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MOVEMENT OF 95-FT MOBILE HOUSING UNITS IN VIRGINIA

by

Frank D. Shepard Research Scientist

and

Gwen S. Harris Research Scientist 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

July 1988 VTRC 89-R4

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# MOVEMENT OF 95-FT MOBILE HOUSING UNITS IN VIRGINIA

by

Frank D. Shepard and Gwen S. Harris

# INTRODUCTION

This study was initiated in response to a request to the Virginia Department of Transportation (VDOT) from the Virginia Manufactured Housing Association to permit the movement of 80-ft mobile homes on Virginia highways.

The Virginia Transportation Research Council was subsequently requested to investigate the feasibility of increasing the allowable length of mobile homes to 80 ft. An 80-ft mobile home plus a 15-ft tractor would have a length of 95 ft. Virginia presently allows 85 ft overall length pursuant to Section 5.050 and 5.090C of the Hauling Permit Manual. Correspondence relative to this request and study are included in the appendix.

This study presents information concerning the movement of mobile homes in Virginia. Also, information was obtained from other states, especially those states bordering Virginia.

# VIRGINIA REGULATIONS FOR HAULING PERMITS

#### General Information

The state requires a permit for a vehicle traveling on interstate or any other qualifying federal-aid highway if that vehicle weighs more than 80,000 lbs or is wider than 102 in. A permit is also required for any vehicle traveling on any other highway if it is wider than 96 in, is higher than 13 ft 6 in, and the vehicle trailer is longer than 40 ft. The state has set maximum vehicle limits at gross weight 115,000 lbs, 14 ft wide, 150 ft long. The height limit is dependent on vertical clearances. These overall dimensions are inclusive of the towing unit.

When reference is made to the length of a mobile home only, it will be designated as "MH," whereas the combined length of the mobile home and tractor will be designated as "MH/T."

### Movement Policy for Mobile Homes

The Virginia Department of Transportation's Hauling Permit Manual provides specific guidelines for the movement of mobile homes. These guidelines are based on the following facts: most mobile homes are longer

and wider than most vehicles, and mobile homes must be moved with care to insure that the internal structure remains intact and no damage is incurred.

# Types of Permits

Currently, two types of permits are issued for the movement of mobile homes: (1) the blanket permit and (2) the single trip permit. These permits may be secured from the permit office of the Maintenance Division of VDOT or at district or residency offices, depending on vehicle dimensions and routing.

A blanket permit may only be issued by the Permit and Truck Weight Manager at the VDOT. This permit is only issued when it is shown that it is a hardship for the applicant to secure a permit for each move. The permit is currently issued for one or two years. There is a stipulation that any violation of regulations is cause to have the permit immediately revoked. Blanket permits are usually issued to mobile home dealers and certified carriers.

Currently, two types of blanket permits are issued. The first allows the movement of mobile homes 12 ft wide by 85 ft long (MH/T) on all unrestricted state routes. The second allows for movement of 14 ft wide by 85 ft long MH/T along a designated route system. If at any time the mobile home leaves the designated route a single trip permit must be filed.

A single trip permit may be issued by the VDOT Maintenance Division, district office, or residency office. In instances in which the vehicle crosses two or more districts or is of large size, permits may be granted only by the Maintenance Division. Single trip permits for 14 ft wide by 91 ft MH/T are being issued and will be discussed later. The majority of all 14 ft wide mobile homes require a single trip permit because of routing. On rare occasions special consideration has been given to allow for the movement of 14 ft wide by 95 ft MH/T on a single trip permit. This special consideration has been given primarily to military personnel being transferred. The single trip permit allows for the movement of a mobile home within a two-week period (it expires 13 days from issuance) between the point of origin and the destination within Virginia.

# Requirements for the Movement of Mobile Homes

- Speed limit is 45 mph unless otherwise specified within the permit.
- Red or flourescent orange flags must be placed on all four corners of the vehicle. The flag must be 18 in square and in good condition.
- Flagmen, when necessary, must wear a red jacket or vest and be equipped with a red flag and/or paddle reading "STOP" in white letters.

- o All vehicle headlights and other steady burning exterior lights shall be turned on, including those of the escort vehicle(s).
- "WIDE LOAD" signs shall be posted on the front and rear of the vehicle. The signs shall have black lettering on a yellow background, mounted at least 18 in above the roadway. Signs must be neat, clean, mounted securely, and visible from straight ahead or behind and to 45 degrees either side thereof.
- o For the movement of mobile homes, the minimum length of the towing vehicle or tractor shall be ten ft long, measured from the front bumper to the center of the connecting hitch. The vehicle must have dual wheels on the drive axle. It must have the following ratings for respective widths: 10 ft wide, 3/4 ton truck; 12 ft wide, 1 1/2 ton truck; 14 ft wide, 2 ton truck. No farm tractor may be used to tow a mobile home on the highways of this state.
- o One amber flashing light shall be located on top of the towing vehicle, and another shall be located on the upper rear of the vehicle.
- A front escort is required for travel on all two lane roads and three lane roads when the vehicle exceeds 10 ft wide by 85 ft (MH/T). A rear escort is necessary when road alignment is not sufficient for proper vision. The use of a rear escort is at the discretion of the permittee unless otherwise stated on the permit. The escort vehicle must display a "WIDE LOAD" or "OVERSIZE LOAD" sign that is visible to approaching motorists. The vehicles must maintain constant communication at all times by two-way radio. One amber flashing light must be located on top of the escort vehicle. The escort driver must be certified if the width of the load is in excess of 12 ft but not greater than 14 ft (refer to the Virginia Department of Highway's "Virginia Escort Driver's Manual" for specifics).
- o Traffic shall not be delayed for more than ten minutes.
- o The driver must stop at all inspection stations and present his permit.
- The permittee is responsible for all horizontal and vertical clearances along each proposed route.

## MOVEMENTS OF MOBILE HOMES IN VIRGINIA

In an effort to determine what the state of Virginia is allowing for the movement of mobile homes, especially in the longer loads, a survey of permits issued for 1987 was performed.

Table 1 shows the number of permits issued for various lengths for the months of January, March, May, July, September, and November. Permits were issued for 1167 MH/T measuring 14 ft by 91 ft; another 64 were issued

for 14 ft by 90 ft MH/T. All of the 14 ft by 95 ft MH/T permits were issued to military personnel. Also, 504 permits were issued for loads plus tractor with lengths longer than 91 ft (these are shown in Table 2).

Table 1						
Single	Trip	Permits	for	Virginia		
•	•	(1987)		-		

Month

Length MH/T	<u>Jan.</u>	March	May	<u>July</u>	<u>Sept.</u>	Nov.	<u>Total</u>	%	
14' x 95' 14' x 91' 14' x 90' 13'11" x 90'	2 85 11 2	2 162 23 0	2 196 18 2	225	0 255 5 7	0 187 7 3	6 1,167 64 14	10.5 93.3 5.1 1.1	

Table 2 Percent Trips for Loads & Tractor Longer Than 91 Feet

Lengths	91'-100'	100'-125'	125'-150'	150' +
Percent	30	51	18	1

The majority of the loads over 91 ft were steel beams, trusses, utility poles, tanks, etc. Table 3 shows the origin-destination for the 14 ft by 91 ft MH/T single trip permits.

> Table 3 Origin-Destination for 14' x 91' MH/T Single Trip Permits (1987)

<u>Origin</u>	Destination	<u>% of 14' x 91' Single Trip Permits</u>
State line	State line	25%
State line	In state	22%
In state	State line	29%
In state	In state	24%

Tables 1 and 2 show that single trip permits were issued frequently for 14 ft by 91 ft MH/T as well as for loads longer than 91 ft. Discussion with the permit section of the Maintenance Division revealed no particular difficulty in maneuvering on the majority of the roadways over which the 14 ft by 91 ft MH/T were routed. Also, no significant increase in accidents or problems resulting from the 91-ft length were reported.

# MOVEMENT OF MOBILE HOMES IN VARIOUS CITIES

# Alexandria

The Alexandria traffic department felt that it would be possible to move a 14 ft by 95 ft MH/T through the city. Significant routing would be involved to allow for cornering movements and extra escorts might be required.

# Arlington County

Currently, 14 ft by 91 ft MH/T are allowed on a case-by-case basis, dependant upon routing. Extra length may pose problems, and preliminary routing will be even more critical, and a county police escort will be necessary. Currently, Arlington County does not receive as many requests for the movement of mobile homes through the county as for the movement of modular housing. Because of the low number of requests for the movement of mobile homes, the extra length will not pose any major problems for the county.

# Fairfax

The movement of mobile homes through Fairfax will be little problem because there is no place to put a mobile home within the city limits, and there have been very few requests for the movement of mobile homes. Should a request for 14 ft by 95 ft MH/T be made, the movement will require routing. A police escort will also be necessary.

# Martinsville

Currently, the city of Martinsville has a route set up through the city on which it is known that a 91-ft MH/T can successfully maneuver. The increase to 95-ft MH/T may present a problem because of a lack of available open space to allow turning. A police escort is required for 91-ft mobile homes, and additional escorts may be necessary if the increase in length is approved. The additional length will require more straight routing, and it will be necessary to reevaluate the existing routing scheme.

#### Richmond

The allowance of a 95-ft MH/T within the Richmond city limits will depend on specific routing and road geometrics due to the fact that the greatest area of concern is with the turning movements. Currently, there are very few requests for the movement of 91-ft MH/T, and it is felt that requests for the movement of 95-ft MH/T will be even fewer. The 95-ft MH/T will be treated like the 91-ft MH/T in that it will be considered on a case-by-case basis with specific routing. It is foreseeable that even more restrictions as to time of day, etc. will be necessary.

#### Roanoke

The movement of the 95-ft MH/T will be considered on a case-by-case basis. Major routing will be required on local streets because of the vehicles' length and lack of maneuverability. The additional length will cause the movement to be more time consuming and may require additional escorts and tighter restrictions on the times at which the move may be made.

The consensus of the cities polled is that should the request for the additional length be granted, routing will be important in making it possible to move these larger vehicles through the cities. The requests will be studied on a case-by-case basis, and in many cases additional requirements will be placed on the movers. Currently, growth trends and the number of requests for the movement of mobile homes show that the number of mobile homes that will be placed within the city limits is decreasing with time and that most units are already being placed outside the city limits.

#### MOVEMENT OF MOBILE HOMES IN THE TIDEWATER AREA

Currently, in the Tidewater area 14 ft by 95 ft MH/T are being allowed. This is mainly because of an increase in the number of military personnel who bring in this size mobile home from other areas.

Norfolk has issued a total of seven annual permits to dealers and licensed carriers for the movement of this size home. There have been no reported mishaps due to the increased size and all moves have reportedly gone smoothly. The areas in which these homes have been moved tend to be large mobile home parks with access to major roads that can support a vehicle of this size.

Portsmouth and Chesapeake both feel that routing plays a large role in the movement of oversize vehicles. Currently, they see no problem with the 95-ft MH/T as long as sufficient routing is considered before the move, and the vehicle stays on the larger roads.

#### MOVEMENT OF MOBILE HOMES IN U.S.

In an effort to get a feel for the movement of mobile homes within the United States, a survey of the 50 states was performed using the J. J. Keller and Associates, Inc. Vehicle Sizes and Weights Manual: Limitations, Oversize, and Overweight Mobile Homes (1987 ed.). This survey showed that the states of Illinois, Indiana, Iowa, Kentucky, Massachusettes, Michigan, Mississippi, Missouri, Montana, Nebraska, and North Carolina are currently allowing 95-ft MH/T on a single trip basis. Virginia and West Virginia are currently allowing 91-ft MH/T on a single trip permit. Ninety feet is the longest combined length allowed regularly in South Dakota and Tennessee. Alabama, California, Connecticut, Oregon, South Carolina, Washington, and Wisconsin regularly allow an 85-ft MH/T. A number of states did not state a specific maximum length allowed, rather choosing to make the decision on a case-by-case basis. This survey showed trends of additional requirements for movement of the longer loads. In most cases the towing vehicle was required to have a specific tonage, dual wheels on the rear axle, and be 15 ft in length. Both front and rear escorts were required on secondary roads and most primary roads, dependant on the number of lanes and the lane width. Most moves are considered on a case-by-case basis, and routing plays the largest role in the allowance for the vehicle movement.

# THE MOVEMENT OF 95-FT MH/T IN STATES SURROUNDING VIRGINIA

#### Kentucky

Kentucky requires no special permit to move a mobile home if the overall length does not exceed 60 ft and the width does not exceed 8 ft. If these dimensions are exceeded, a permit is required. Kentucky issues two types of permits for the movement of mobile homes: single trip and annual permit.

Single trip permits are valid for ten days and require the following information: overall length, overall width, license number of towing vehicle, make of towing vehicle, point of origin, desired routes, and point of destination. The towing vehicle must be at least a 1 1/2 ton tractor with dual rear wheels and be licensed for at least 22,000 lbs. Vehicles that require a single trip permit are those larger than 12 ft wide and 60 ft long. The length of the mobile home is limited to 80 ft with the overall length of tractor and mobile home restricted to 95 ft.

Annual permits are issued to dealers and manufacturers located within Kentucky and to properly certified licensed motor carriers. The tractor plus mobile home is limited to 85 ft in length and 12 ft in width. The towing vehicle must be registered for a gross weight of not less than 22,000 lbs and be a 1 1/2 ton tractor with dual wheels on the rear.

Kentucky reports no major trouble with the 95-ft MH/T. This length has been successfully routed in Kentucky over many different road types.

#### Maryland

According to the Code of Maryland, the Department of Transportation defines a vehicle of "excessive size" to be 16 ft or more in height and 100 ft or more in length. The length of 95-ft MH/T is within this limit and has been allowed within the state of Maryland for a number of years. Maryland has very few special requirements for mobile homes; they are basically treated as an oversize vehicle. There is no set maximum width, height, or length for oversize vehicles in Maryland. Specific requests are judged by the issuing officer.

There are four types of permits for the movement of oversize and overweight vehicles: (1) a blanket hauling permit, (2) a book permit (issued in books of ten), (3) a special hauling permit, and (4) a special vehicle permit. Each of these different permits is issued by the Maryland State Highway Hauling Permit Section. The blanket hauling permit is issued for a single oversize vehicle whose dimensions may not exceed 75 ft in length, 12 ft in width, and 14 ft in height. The gross vehicle weight may not exceed 40 tons. This permit may be valid for a period of thirty days to one year. A person may move a vehicle for which the permit has been issued on any highway under the jurisdiction of the administration without reporting the move.

The book permit is used for movement of a qualified vehicle over the designated route listed on the permit. This permit is issued to vehicles no larger than 85 ft in length, 13 ft in width, 15 ft in height, and with a gross weight of 45 tons. Before any movements can be made using one of the permits in the book, the permit section must be advised as to when and where the move will occur, and permission by the section must be granted.

The special hauling permit allows for the movement of a vehicle whose overall dimensions exceed 85 ft in length, 15 ft 6 in. in height, 13 ft 11 in. in width, and whose gross weight exceeds 45 tons. This permit allows the vehicle to make a single one-way trip over the route designated on the permit. Before the permit is issued the Maryland State Police inspect a vehicle and load of similar characteristics.

The special vehicle permit is issued in special cases and is good only for single one-way trips over designated routes. This permit may or may not allow for continuous movement of a special vehicle. A complete description of the vehicle and an explanation of the purpose for traveling the highways is needed before the permit is issued.

One specific request that applies to mobile homes is that two escort vehicles, one in front and one in the rear, be used when transporting manufactured housing.

#### North Carolina

After a one-year study in which 95-ft MH/T were issued single trip permits on a trial basis, the Department of Transportation has approved the movement of these homes. In this study accident data was monitored and movements were visually observed. The study has shown no significant increase in accidents or unusual occurances resulting from the increased length. Annual and single trip permits may be issued by the State Road Maintenance Engineer and under limited conditions by the division and district engineers.

On written request annual permits will be issued for MH/T up to 91 ft long and up to 12 ft wide if a 15-ft towing unit is employed. For vehicles over 10 ft wide, an escort vehicle is required on all two lane highways from that area north and west of I-85 from the South Carolina line to Greensboro and west of US 29 from Greensboro to the Virginia line. Annual permits for 14 ft wide mobile homes may be issued to contract carriers, dealers, and manufacturers provided designated routes are followed and the combination length does not exceed 91 ft when a 15-ft towing unit is employed. Movement of mobile homes in excess of 10 ft in width requires special permits over restricted routes and secondary roads. A single trip permit may be issued for a 10-day period for a mobile home 14 ft wide and not more than 80 ft long with an overall length of 95 ft provided that a 15-ft towing unit is employed. The permit must show designated route(s) and is subject to route approval.

For mobile home units up to 12 ft wide, the towing unit has to be rated at not less than 1 1/2 tons with dual rear wheels. For mobile home units over 12 ft but not more than 14 ft wide, the towing unit has to be rated at not less than 2 tons and have a 4-speed transmission. In both cases the mobile home has to be equipped with adequate brakes controlled from the towing unit.

# Tennessee

Tennessee has some special conditions for the movement of manufactured houses or portable modular units, but generally the same rules concerning oversize dimensions are followed. In cases where both overwidth and overlength regulations are in conflict, the more stringent regulations shall be applied.

There are two basic types of permits issued in the state of Tennessee: (1) special permits and (2) annual permits. Charges for special permits are based on the dimensions of the vehicle involved, whereas annual permits have a flat fee. Special permits are required for moving manufactured houses exceeding 8 ft in width or 60 ft in length. The permittee must notify the Department in advance and obtain a special permit even if an annual permit has been obtained. Tennessee is allowing 80-ft MH plus tractor regularly and will allow movements in excess of 120 ft on a case-by-case basis.

#### West Virginia

A mobile home or house trailer and towing vehicle whose overall dimensions do not exceed the statutory limits of 55 ft long (60 ft on designated highways), 8 ft wide (8 ft 6 in on designated highways), and 13 ft 6 in high may be operated over West Virginia highways without a special permit.

A permit to move a mobile home larger than the legal dimensions must be obtained from the Vehicular Permit Section of the West Virginia Department of Highways. The maximum limits allowed on mobile home permits are as follows: length 91 ft (MH/T, 76-ft mobile home), width 14 ft, and height 13 ft 6 in.

The movement of 14 ft wide mobile homes is restricted to 24 ft wide pavement on two lane or multiple lane highways with a minimum total clear roadway width of 34 ft or other routes as designated by the Permit Section. Travel is permitted over those routes designated in the permit.

### Summary of Movement in Surrounding States

All surrounding states, except West Virginia, allow 80-ft MH (95-ft MH/T) on a regular basis. All the states currently allow 76-ft MH (91-ft MH/T) on a varying basis from single trip to annual. These states have had very little trouble with the movement of these larger mobile homes.

#### SUMMARY

## State of Virginia

The state currently allows the movement of 14 ft by 85 ft MH/T on a blanket permit along designated routes. Off the designated route, single trip permits are also issued for 14 ft by 85 ft MH/T. Also, a significant number of single trip permits have been issued for loads 14 ft by 91 ft MH/T, as well as loads in the 100-ft to 150-ft range. This indicates that long loads are being transported on selected highways, and based on the comments from various Department personnel, no significant increase in accidents or difficulty in manuevering was reported.

The concensus of opinion from cities around the state is that no problem is anticipated with the movement of 95-ft MH/T as long as sufficient attention is paid to routing. The Tidewater area has allowed 14 ft by 95 ft MH/T movements, primarily because of military transfers.

#### Movement Around the Nation

Movement of oversize vehicles throughout the US varies, lengths up to 95 ft (MH/T) are allowed. States that do not specify a maximum length consider each move on a case-by-case basis. Again, routing plays a large role in allowing the movement of long loads.

#### States Surrounding Virginia

All states surrounding Virginia allow 14 ft by 95 ft MH/T, except West Virginia. No significant problems have arisen with these movements. A one-year study of 95-ft MH/T in North Carolina showed no significant increase in accidents or unusual occurrences resulting from the increased length.

#### CONCLUSIONS

There have been numerous movements of 91-ft MH/T (76-ft MH + 15-ft tractor) in the state with no significant increase in accidents or difficulty in manuevering. Discussion with personnel from the state and cities indicate that 95-ft MH/T could be moved; however, special attention has to be focused on routing and possible police escorts.

All states surrounding Virginia, except West Virginia, are allowing 95-ft MH/T, and a study in North Carolina revealed no increase in accidents or unusual occurrences.

Based on this information, consideration should be given to allowing the movement of 95-ft MH/T in Virginia (80-ft MH + 15-ft tractor), an increase of 10 feet over the present 85 feet. It is important, however, that special attention be paid to routing. Although small, the increase in length could cause problems because of geometrics or incumberances (signs, mailboxes, utility poles, etc.) and this may lead to reevaluation of the designated system.

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# APPENDIX

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8505 Mayland Drive, Richmond, Virginia 23229 • 804-747-0810

December 22, 1987

Bob Ketner Department of Highways & Transportation 1221 East Broad Street Richmond, Va. • 23219

Dear Bob,

Thank you very much for your consideration about shipments of 14 wide mobile homes on Highway 33 west of Harrisonburg, Virginia.

The reason I am writing today is to request your help in another matter. I am getting more and more requests from manufacturers and dealers alike concerning the shipment of 80 foot homes.

Apparently, from my understanding all bordering states currently allow such shipments and in fact West Virginia has just approved an overall length of 90 feet.

As we have discussed in the past the length of homes appear not to present the problems that width does. I would very much appreciate you and your office giving serious consideration to permitting, under normal conditions, 80 foot homes throughout Virginia.

Ron Dun'lap Executive Director

RWD/dah

cc: Jeff Sledge Sam Falwell

ALT - F.Y. I. ESC 4-22

Mr. E. S. Coleman, Jr. - 899 Traffic Engineering Division

E 21 1987

# TRAFTIC Lissing ......

April 20, 1987

Hauling Permit Manual Requested Amendment Virginia Manufactured Housing Association

What will your study Consulo J. 4/20

Mr. Ron Dunlap Executive Director Virginia Manufactured Housing Association 8505 Mayland Drive Richmond, VA 23229

Dear Ron:

Please excuse my belated response to your letter of December 22, 1987, requesting amendment of Virginia's Hauling Permit Manual to increase the overall length restriction on manufactured house sections from 85 feet to 90 feet.

I have discussed the above with Mr. C. O. Leigh who has advised that formal disposition of your request must be decided by the Transportation Board Permit Committee. Further, it is noted that any substantive amendment to the Manual must be acted on in accordance with the Administrative Process Act.

Prior to the Board/Public Hearing/Board presentations, it is required that a Transportaton Safety Study be conducted to provide subjective data upon which the Department's Engineers can provide counsel.

To facilitate the above, I am asking for the assistance of our Traffic Engineer, Mr. A. L. Thomas, Jr., in evaluating the operating characteristics of your proposed 90-foot vehicle/load model.

. . ... . . . . . . .

Mr. Thomas' staff will be contacting you direct for information essential to the described study.

Note: The coult should have inter 95 ft ( Ros Lonald)

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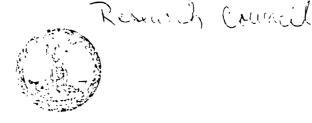
Mr. Ron Dunlap Page 2 April 20, 1987

Thank you for bringing the above matter to my attention.

Sincerely,

R. M. Ketner, III Permit and Truck Weight Manager

cc: Mr. David R. Gehr Mr. C. O. Leigh Mr. A. L. Thomas, Jr. Attn: Mr. E. S. Coleman, Jr. Mr. R. L. Fink Mr. L. G. Barnum Mr. T. L. Reekes



# COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION 1401 EAST BROAD STREET RICHMOND, 23219

May 1, 1987

A. L. THOMAS, JR. STATE TRAFFIC ENGINEER

Manufactured Housing Units

Memorandum

RAY D. PETHTEL

COMMISSIONER

To - Mr. Howard H. Newlon, Jr.

The Department of Transportation has received a request from the Virginia Manufactured Housing Association to increase the overall length restriction on a tractor truck, plus manufactured house section, from the present 85 feet to 90 feet. This would permit the movement of 80-foot long manufactured housing units.

By copy of the attached letter of April 20 from Mr. R. M. Ketner, III, this division was requested to evaluate the operating characteristics of the proposed 90-foot overall length vehicle/load combination. However, it appears the needed study should be similar to the study, "An Evaluation of the Movement of 14-Foot Wide Manufactured Housing Units in Virginia," conducted by the Council several years ago.

I, therefore, request that the Research Council perform the necessary study to evaluate the operating characteristics of the 90-foot long combination. Please contact:

Mr. Ron Dunlap, Executive Director Virginia Manufactured Housing Association 8505 Mayland Avenue Richmond, Virginia 23229 (804) 747–0810

We stand ready to assist you if needed.

A. L. Thomas, State Traffic Engineer

ESC:rlp Attachment cc: Mr. O. K. Mabry Mr. J. M. Wray, Jr. Mr. D. R. Gehr Mr. C. O. Leigh

MAY 7 1987

Va. Hwy. & Transp. Research Cours

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8505 Mayland Drive, Richmond, Virginia 23229 • 804-747-0810

June 11, 1987

Frank Shepherd Virginia Highway Research Council P.O. Box 3817 University Station Charlottesville, Va. 22903

Dear Mr. Shepherd,

After our recent phone conversation when you requested data concerning studies done by other states on the movement of 80 foot long mobile/manufactured homes, I contacted my colleagues in North Carolina, Maryland, and Pennsylvania and was told by each of them that in their states no surveys were conducted. As in Virginia, the other states only added an additional 4 foot length, and all felt it unnecessary to do a complete study on so small a change.

I hope that Virginia will take the lead of other states and seriously consider the additional <u>4 foot length</u> not to be a major issue.

If you need any other information, please do not hesitate to give me a call. The Virginia Manufactured Housing Association will be on call for whatever you may need to prepare for your report to the Department of Highways & Transporation.

Ron Dunlap Executive Director

RWD/dah



8505 Mayland Drive, Richmond, Virginia 23229 · 804-747-0810

July 8, 1987

Bob Ketner Department of Highways & Transportation 1221 East Broad St. Richmond, Va. 23219

Dear Bob,

Thank you very much for your consideration about shipments of 14 wide mobile homes on Highway 33 West of Harrisonburg, Virginia.

The reason I am writing today is to request your help in another matter. I am getting more and more requests from manufacturers and delaers alike concerning the shipment of 80 foot homes with an overall length of 95' or/96 feet.

Apparently, from my understanding all bordering states, except West Virginia, currently allow such shipments.

As we have discussed in the past, the length of homes appear not to present the problems that width does. I would very much appreciate you and your office giving serious consideration too permitting, under normal conditions, 80 foot homes throughout Virginia.

Ron Dunlap 0 Executive Director

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RWD/dah

cc: Jeff Sledge Sam Falwell