

**REPORT OF THE
SELECT COMMITTEE TO REVIEW THE FINDINGS
AND RECOMMENDATIONS OF THE VIRGINIA
DEPARTMENT OF TRANSPORTATION CONCERNING**

**The Sufficiency and Distribution
of Funds in the Transportation
Trust Fund**

**TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA**



SENATE DOCUMENT NO. 49

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I. Introduction

This study was commissioned by the 1993 Session of the General Assembly through passage of Senate Joint Resolution No. 240 (SJR 240). This resolution established a seventeen member committee to review:

- The recommendations of the Virginia Department of Transportation (VDOT) (submitted pursuant to Senate Joint Resolution No. 188 of 1991) regarding the allocation of Transportation Trust Fund revenues;
- The sufficiency of private, federal, state, and local revenue sources to meet the long-term maintenance and construction needs of the Commonwealth's highway, public transportation, rail, port, and airport systems;
- The reports on vehicle cost responsibility (contained in Senate Document No. 26 of 1991 and Senate Document No. 30 of 1992); and
- The uses of and ways to ensure the integrity of the Transportation Trust Fund so that all revenues originally defined by law as part of the Transportation Trust Fund are used exclusively for transportation improvement purposes.

The following persons were appointed to the study committee as provided by SJR 240: Senator Hunter B. Andrews of Hampton; Delegate Robert B. Ball, Sr., of Henrico County; Senator Robert L. Calhoun of Alexandria; Delegate Whittington W. Clement of Danville; Senator Elmo G. Cross, Jr. of Hanover County; Delegate V. Earl Dickinson of Louisa County; Senator Joseph V. Gartlan, Jr., of Fairfax County; Delegate Raymond R. Guest, Jr. of Warren County; Delegate Franklin P. Hall of Richmond; Delegate George H. Heilig, Jr., of Norfolk; Senator Kevin G. Miller of Harrisonburg; Secretary of Transportation John G. Milliken; Commonwealth Transportation Commissioner Ray D. Pethtel; Delegate Linda T. Puller of Fairfax County; Delegate Harry R. Purkey of Virginia Beach; Delegate Marion Van Landingham of Alexandria; and Senator Charles L. Waddell of Loudoun County. Senator Andrews was elected chairman and Delegate Ball was elected vice chairman.

In the course of its work, the committee held nine meetings, four of which were public hearings. These hearings, held in Hampton, Herndon, Richmond, and Salem, were attended by over 300 people and addressed by 117 speakers. An additional eleven persons submitted written comments in lieu of speaking.

To assist the committee in its work, Senator Andrews appointed a thirteen member citizens Advisory Committee whose members represented a broad spectrum of transportation-related interests, concerns, and expertise. The members of this panel were Mr. E. Morgan Massey (subcommittee chairman), Mr. Joseph Alexander, Mr. Richard Beadles, Ms. Ellen Bozman, Mr. John Butt, Mr. Anthony Dowd, Mr. Stan Lanford, Mr. William Mohr, Ms. Katherine O'Neal, Ms. Kathleen Seefeldt, Mr. Robert Shinn, Mr. Charles Wampler, and Mr. Charles S. Yates. A summary of the advisory committee recommendations are included in this document.

In addition, a subcommittee was appointed by Senator Andrews from the membership of the full committee to consider suggestions to improve the efficiency of transportation operations. This group, chaired by Senator Martlan, consisted of Senator Calhoun, Delegate Dickinson, Delegate Heilig, Commissioner Pethtel, Delegate Purkey, and Senator Waddell. This subcommittee's report is included in this document.

II. Background

SJR 188 Recommendations:

In 1991, Senate Joint Resolution 188 (SJR 188) of the General Assembly mandated that the Virginia Department of Transportation study the formulae for allocating the Transportation Trust Fund (TTF) and determine whether there was a need for revision to maintain equity. The study used needs as the basis for allocation and defined equity to be allocations proportional to needs. The needs used in the study were derived from the latest 20 year plans developed by each of the agencies.

To evaluate the equity of allocations, transportation needs and revenue sources for all modes were identified. The following table presents the 1989 modal needs and the amount unfunded after all federal, state, local, and other funds were taken into account. It can be seen that a significant and continuing shortfall in funding exists for all transportation modes.

Modal Needs 1989-2009
(\$ Millions)

<u>Mode</u>	<u>Total Needs</u>	<u>Unfunded Needs</u>
Highways	\$37,136.0	\$18,914.6
Rail	168.3	156.7
Public Transportation	10,817.0	3,879.3
Aviation	2,846.2	543.3
Ports	<u>1,168.1</u>	<u>727.3</u>
Total	\$52,135.6	\$24,221.2

Modal Allocations

The modal share of the TTF was based on the concept that the state would fund whatever was left unfunded by federal, local and farebox sources. The specific share was determined by dividing these state-funded needs for each mode by the total of state-funded needs for all modes. Several other adjustments were made to provide for administrative funding of the Department of Rail and Public Transportation. Based on this methodology, the study recommended the following shares for each mode.

Modal Allocation from TTF

<u>Mode</u>	<u>Current TTF Allocation</u>	<u>Needs Share</u>	<u>Recommended TTF Allocation</u>
Highways	85.0%	78.53%	78.66%
Rail	0.0	0.45	*
Public Transportation	8.4	15.45	15.77 **
Aviation	2.4	2.25	2.25
Ports	<u>4.2</u>	<u>3.32</u>	<u>3.32</u>
Total	100.0%	100.00%	100.00%

* SJR 188 recommended funding from General Funds.

** Current public transit grant and Department of Rail and Public Transportation funding is recommended to be eliminated from the HMOF.

Conformity With Federal Law

Among the recommendations of the study were several directed at conforming the Virginia law with the federal Intermodal Surface Transportation Efficiency Act of December 1991 (ISTEA). This federal-aid legislation established new program categories and requirements for the receipt of federal funds. Based on the recommendations of the SJR 188 study, the 1993 Appropriation Act contained provisions to conform Virginia law with federal requirements. They will expire, unless renewed, on June 30, 1994. SB 30, as introduced, proposes to change the expiration date to June 30, 1995.

Highway Administrative Classes and Geographic Allocations

The distribution of needs changed in the Commonwealth in the several years since the last needs study. This resulted in recommendations for changes in the formulae for highway administrative classes and geographic allocations.

The study noted that if the administrative system share were to be based on needs, the legislative compromise that produced 40% for the primary and 30% each for secondary and urban systems would be changed to 42%, 33% and 25% respectively.

The study found that the models that had been developed on the earlier set of needs no longer fit the new data. The study therefore recommended that the allocation formula for primary highways which are made to VDOT's nine construction districts be changed to reflect the new weights as follows:

Primary Allocation Formula		
<u>Current Factors</u>	<u>Current Weights</u>	<u>Recommended Weights</u>
VMT	70%	96%
Lane Miles	25%	0%
Need Adjustment	5%	4%

The allocation formulae for the paved secondary system was also found to be inequitable and the following weights for the same factors were suggested to determine the allocations to the counties.

Secondary Allocation Formula		
<u>Current Factors</u>	<u>Current Weights</u>	<u>Recommended Weights</u>
Population	80%	88%
Area	20%	12%

The study recommended no changes to the urban system formula. Urban funds would continue to be allocated to cities based on population.

The study recommended a change in the traffic threshold for eligibility of paving roads with funds from the unpaved road fund. Allocations for unpaved secondary roads are made to the counties based on the county's share of the total unpaved state miles eligible for funding. Currently, to be eligible for funding, an unpaved road must carry 50 or more vehicles per day. The study recommended a change in the threshold to 100 or more vehicles a day. If that change were made, the unpaved road fund would be 1.5% of the highway portion of the TTF rather than 5.67%, based on relative needs share.

A supplemental bridge program of about one percent of the TTF was recommended and the study furthermore suggested that an inter-city rail and freight rail program be established and funded from the corporate taxes paid by the railroads into the general fund.

The Vehicle Cost Responsibility Study (SJR 121) and Its Continuation (SJR 238):

The SJR 240 resolution required that the Select Committee consider the findings of the recent vehicle cost responsibility studies. SJR 121 required the Virginia Department of Transportation to "...review the cost responsibility of vehicle classes using the highways, roads, and streets of the Commonwealth and make recommendations to the 1991 General Assembly on the need for modifications to the current mix of revenues from the vehicle classes."

The methodological approach was based on following key assumptions:

- The highway system is basically user financed.
- Vehicles should be charged in relation to the costs they occasion.

Methodology

Cost assignment followed a "cost-occasioning" approach in which costs attributed to vehicle types were those necessitated by some size or weight requirement of the vehicle. For example, a heavier vehicle requires

greater pavement strength, or a wider vehicle requires greater pavement width. The difference in the vehicle weight or size thus necessitates additional costs.

Costs were allocated differently for pavement construction, bridge construction, and maintenance of the system. Therefore, the costs were grouped according to the method of allocation.

- The uniform pavement method, developed in the 1982 Federal cost allocation study, determined the cost associated with required pavement width and strength for each vehicle class.
- Bridge costs were estimated by determining the costs required to construct bridges for each successive increase in bridge strength for each vehicle class.
- Administrative and general maintenance costs were assigned to vehicle classes according to the amount of travel.

SJR 121 Findings

Passenger vehicles pay more in taxes and fees than the costs they cause to the transportation system and all truck and bus classes pay less in taxes and fees than they generate in costs.

The revenue to cost ratios are as follows:

Passenger vehicles	1.06
Buses	.30
Light Trucks	.70
Single Trucks	.85
Combinations	.93

A second study was requested in 1992 to evaluate an alternative methodology and to determine whether equity could be obtained by changing the user fees. The results of SJR 238 confirmed the conclusions reached in SJR 121.

The revenue-to-cost ratios found in SJR 121 continued to represent the relative payments for use of the roads with respect to costs generated by the vehicle classes.

Preliminary modeling using a pavement deterioration methodology to allocate rehabilitation costs indicated results not dissimilar to those found in SJR 121 using a designed-based allocation method.

Passenger vehicles overpaid from a cost responsibility perspective; truck and bus classes underpaid.

The study also found that equity could be accomplished with tax increases such as those reflected in SB 895, introduced in the 1991 Session of the General Assembly.

REVENUE TO COST RATIO		
<u>VEHICLE CLASS</u>	<u>SJR 121</u>	<u>SB 895</u>
Passenger Vehicle	1.06	1.03
Busses	0.30	0.30
Light Trucks	0.77	0.96
Single Unit Trucks	0.85	0.98
Combination Vehicles	0.93	0.96

The study also addressed the question of what a tax increase would do to the trucking industry and concluded:

- Virginia is positioned in the middle of surrounding states with respect to taxes on the industry.
- Analysis of the relative tax burden indicated that SB 895 would likely not affect where truck companies based their fleets.

Changes Required To Conform with ISTEA:

Since the National Highway System (NHS) superseded the interstate as the system of national significance, the NHS will be treated the same as the interstate.

Congestion Mitigation and Air Quality (CMAQ) funds were to be allocated among non-attainment areas by the same formula that is employed by the federal government for apportionment to the states. The formula is based on population and severity of non-attainment and the match is derived from the mode and/or system receiving funding.

The Surface Transportation Program (STP) is allocated as set-out in federal law:

- 10% of the funds are set-aside for a statewide safety program,
- 10% of the funds are set-aside to provide for a statewide enhancement program,
- 50% of STP is allocated by population to a) areas with greater than 200,000 population and b) the rest of the state, and
- 30% of the funds flow through the state formulae to the primary, secondary and urban systems consistent with existing state legislative mandates.

Equity funds should be allocated following federal requirements regarding that portion that should be apportioned based on population, with the balance apportioned at the discretion of the Commonwealth Transportation Board.

By federal law, most highway funds can be used for either highway or public transportation purposes. To ensure that flexibility in Virginia, the Appropriation Act provides that any local governing body can request the Commonwealth Transportation Board (CTB) to allocate secondary or urban highway funds for public transportation capital project purposes consistent with §33.1-46.1, which currently limits such power to local governments that are members of a transportation district. The Board is also authorized to allocate NHS, STP and primary funds to transit.

III. Issues

In the course of its deliberations, many issues were brought before the Select Committee. An important source of these suggestions, criticisms, and comments was the series of four public hearings held in Hampton, Herndon, Richmond, and Salem. With the exception of some speakers from rural areas, representatives of all the Commonwealth's geographic regions and virtually all transportation modes agree on the need for additional financial support of Virginia's transportation programs. Spokesmen for rural Virginia were apprehensive that any changes in the present system of transportation program financing would leave them worse-off than they are now. Rural interest advocates were particularly opposed to the change in the size of the unpaved road fund or in the fifty-vehicle-per-day paving eligibility criterion for unpaved roads.

Speakers representing urban and suburban regions were nearly unanimous in endorsing greater emphasis on mass transit and non-highway transportation programs. In Northern Virginia, there was considerable support for increased funding of both highway and non-highway programs. Though urban and suburban areas tended to favor greater reliance on the "population" or "vehicle-miles traveled" components of the allocation formula, this sentiment was not shared by spokesmen for many mass transit interests. They felt that giving increased weight to "vehicle-miles traveled" would have the unintended and undesirable effect of encouraging continued use of single-occupant motor vehicles by commuters. Mass transit representatives advocated use of the HMOF to cover maintenance and operating costs of (i) both highways and public transit systems and the administrative overhead of (ii) both VDOT and the Department of Rail and Public Transportation.

Just as each region seemed to feel that the present system underfunds its needs and overfunds other regions' programs, so too, each non-highway transportation mode seemed to believe that the present system underfunds its needs. Port and aviation representatives, in particular, argued that any reduction in their share of TTF revenues would seriously undermine even their present programs and significantly jeopardize Virginia's continued economic development.

Although many-- but certainly not all---speakers seemed reluctantly to agree on a need for additional revenues to support transportation programs generally, there was considerably less consensus on how these additional revenues should be raised. While there was some support for an increase in

the motor fuels tax, this support was grudging and often highly conditional. Most speakers willing to advocate such a tax increase were quick to tie their support to "equity" in distribution of the resulting revenues. The frequently made suggestion that heavy trucks pay an increased share of transportation "user fees" was not endorsed by trucking industry spokesmen.

Revenue Outlook:

The Select Committee was told that transportation revenue growth will continue to lag transportation needs. Actual growth of 4.7% in state transportation revenues in FY 1993 lagged both the growth in general fund revenues and overall growth in the economy. Expected growth in state transportation revenues in fiscal years 1995 and 1996 will continue to lag growth in general fund revenues and is expected to be only three to four percent.

Growth prospects for transportation revenues are constrained by the types of revenue sources. About one-half of state transportation revenues come from motor fuels taxes on gallons consumed. Gasoline consumption will continue to be constrained by increased fuel efficiency. The other large proportion of state transportation funds (about 38%) comes from general sales taxes and sales taxes on motor vehicles. Over the long-run, it is not expected that transportation revenues will keep pace with overall economic growth. One reason is that Virginia, as well as the nation, is continuing to become a more service-oriented economy.

While federal funds only supply about a quarter of state highway dollars, they currently supply about half of all state highway construction funds. Federal funding is probably at its highest point because of Virginia's ability to maximize ISTEA equity funds. Over the long-term, the Federal deficit will probably constrain increases in federal grants. Therefore, construction dollars will have to increasingly come from state revenue sources.

Overview of Transportation Needs:

Highways. The list of documented 20-year highway needs has grown considerably. Highway needs increased from \$15 billion in 1984 (\$1982) to \$37 billion in 1989 (\$1988), with \$19 billion unfunded. Most of the \$37 billion in highway needs are the result of present or future congestion. No recommendations were made by SJR 188 to reduce this backlog of needs.

There has also been a relative shift in highway needs from secondary and urban systems needs to the majority of needs now being on the primary and interstate systems. In addition, construction needs increased in relative proportion from the rest of the state to the Northern Virginia region, reflecting the tremendous economic and population growth that took place there in the 1980's.

At the same time that construction needs are increasing, Virginia's highway systems are aging. As a result, maintenance demands are also increasing. More cars and trucks add stress to the system, increasing maintenance costs. Truck weight, axle load, and tire pressure increases in the late 1970s and early 1980s have increased roadway stress geometrically. Virginia's interstates were designed for much less truck traffic. Interstate 81 was designed for less than 10 percent truck traffic, but now carries an average of almost 30 percent truck traffic. Accelerated construction of new lane-miles since the 1986 Special Session has increased maintenance needs. In addition, new subdivision streets increase the need for additional maintenance.

As the highway system ages, more dollars will be spent on replacement and reconstruction of the existing system rather than on ordinary maintenance or new construction. Highway maintenance expenditures are increasing \$30-50 million per year. By 1996, the Highway Maintenance and Operating Fund (HMOF) will no longer have sufficient state revenues to fund maintenance needs.

Mass Transit. Capital and operating needs over the next 20 years are estimated at \$10.8 billion, 80% of which is for Northern Virginia, according to the Department of Transportation study ordered by Senate Joint Resolution 188 of the 1992 session. Existing revenue sources would finance about one-half of the total need. Twenty-year operating costs are projected to be \$7 billion and capital needs are estimated at \$3.8 billion.

Major components of the needs analysis are:

1. Extension of rail and bus service by the Washington Metropolitan Area Transit Authority (WMATA) along the Dulles Corridor, from Falls Church west to Dulles and from Dulles to Leesburg -- \$1.0 billion.
2. WMATA capital replacements and completion of the 103-mile regional metrorail system -- \$1.0 billion.

3. Extension of WMATA rail to Centreville -- \$0.3 billion.
4. Operating costs and capital investments of the Virginia Railway Express (VRE) -- \$0.6 billion.
5. Fifty percent expansions of the transit systems in Richmond, Hampton Roads and Charlottesville, bringing the total needs of these systems to \$1.7 billion.

The \$10.8 billion of mass transit need is 20.75% of total transportation needs over the next twenty years (1989 - 2009). On the basis of unfunded needs, mass transit's share is 15.45%. With administrative costs of the Department of Rail and Public Transportation included, the share of unfunded needs comes to 15.77%.

In addition to WMATA rail, and the VRE, local transportation systems in Virginia offer scheduled bus routes in 24 areas. Special programs that respond to customer needs on demand are provided in 17 areas. About 124 million riders used public transportation systems and services in 1992.

State assistance to mass transit in 1993-94 is about \$74 million. This amount represents about 15% of total mass transit revenues. Local and federal governments each contribute 30%, and fare box and advertising revenues represent 25%.

Total operating costs are estimated at \$270 million in the current fiscal year and capital costs are projected at \$231 million.

The State's mass transit assistance of \$74 million is made up of 8.4% of the Transportation Trust Fund (TTF) plus \$35 million from the Highway Maintenance and Operating Fund. This transfer would be eliminated under the DOT recommendation and the shortfall would be covered by increasing the share of the TTF to 15.77%.

The Code of Virginia requires that 73.5% of mass transit assistance be distributed according to each transit operation's pro rata share of total operating costs. A transit system whose operating costs are 10% of the total of all operating costs for all transit systems would receive 10% of the amount available.

The Code also requires that 25% of State assistance be distributed according to each transit operation's pro rata share of total capital needs each

year, and that 1.5% be retained for special projects as determined by the Commonwealth Transportation Board. The Code prohibits the use of State assistance for the costs of drivers and mechanics.

Rail. At the time of the VDOT needs analysis, rail needs were projected to be \$168.3 million, or thirty-two hundredths of a percent of total transportation needs, over the next 20 years. Unfunded needs were estimated at \$156.7 million, or forty-five hundredths of a percent.

The VDOT study recommended that general funds finance rail needs, suggesting that revenues from a special corporate tax paid by railroads be tied to the funding of rail needs.

In late fall, the Department of Rail and Public Transportation reported that rail needs had been understated. Using 1992 dollars, the department projected rail needs of \$2.3 billion, 94% of which is for high speed passenger service between Washington, D.C. and the North Carolina border and for new passenger service between Richmond, Bristol and the Hampton Roads area.

Unfunded needs were estimated to be \$2.2 billion, or 5.9% of total unfunded needs.

The Department currently has a State rail budget of \$1.5 million. Of this amount, \$1 million is used to help finance rail rehabilitation projects for eight short line railroads and \$500,000 is to provide rail access for new and expanding industries. A major study of expanding rail service in the Commonwealth is funded in the budget of the Secretary of Transportation.

Rail does not currently share in a fixed percentage of the Transportation Trust Fund. If rail needs are funded from the TTF, then the TTF share of one or more of the modes would need to be adjusted downward.

Aviation. Aviation needs are driven by air traffic congestion, air travel access needs, and competition among airport operators to attract airlines. Needs were developed using information from airport sponsors and Department of Aviation data related to existing facility capital and capacity needs, navigational and safety equipment needs, and the need for new general aviation and commercial airports.

Aviation needs are estimated to be \$2.8 billion through the year 2010, with \$0.5 billion unfunded. The bulk of the needs are at Washington National and Dulles airports, which are using internally generated funds to

support their capital improvement program. The other large single need is for a "Superport" somewhere in Southeastern Virginia, designed to handle intercontinental air traffic throughout the next century. Needs list includes an unfunded \$500 million for land acquisition and preliminary engineering. All other airport categories -- air carrier, reliever, and general aviation, about equally split the remaining \$475 million in needs.

Seaports. Needs for the Hampton Roads seaports are related to capacity, and to competition with other East Coast ports for shipping traffic. The port facility needs were based on an assessment by the Virginia Port Authority of market factors and future trends in U.S. and East Coast trade; the world container shipping industry; and competitor ports' strategies in terms of facilities, intermodal operations, perceived market strategies, and labor markets.

Container cargo through VPA facilities is forecast by VPA to increase from 2.8 to 4.1 percent per year through the year 2010. If accurate, this forecast means container throughput will exceed capacity before the end of the decade. Hampton Roads is currently the second largest seaport on the East Coast, after New York.

Seaport needs are estimated at \$1.2 billion through year 2010, with \$0.7 billion unfunded. A Norfolk International Terminal North expansion and a new terminal facility (location to be determined) are 60 percent of the seaports need list. Other seaport needs include navigation improvements in the Chesapeake Bay, improvements to Portsmouth Marine Terminal, Newport News Marine Terminal and the Inland Port. Most needs are designed to relieve expected capacity constraints and keep up with continued modernization of world shipping.

Hampton Roads seaports receive 4.2 percent of the Transportation Trust Fund or about \$18 million per year. This funding has been used for debt financing, as well as pay-as-you-go capital improvements. \$10.6 million of the Commonwealth Port Fund is used to service \$108 million in debt, that was issued in 1988 for capital improvements. State funding has been used to expand facilities at Norfolk International Terminals, improve existing facilities at Portsmouth and Newport News, and acquire state-of-the-art equipment, such as cranes.

IV. FINDINGS

Findings of the Full Committee:

Relatively minor changes to the current funding allocation method were recommended by the SJR 188 report. SJR 188 recommendations did not address many of the central problems confronting transportation in Virginia. Specifically the recommendations did not propose actions to deal with:

- Highway maintenance needs and other demands on the HMO Fund that will soon outstrip revenues available;
- Highway construction needs that will outstrip revenues available by a two-to-one margin;
- Alternatives to highway construction for congestion management;
- The large relative shift in needs to the primary and especially interstate systems;
- Funding that is currently not available for large expensive projects, including mass transit and bridge needs; and
- Revenue collections that do not keep pace with economic growth.

In addition, the SJR 188 study did not examine whether the current statutory shares of federal, state, and local government participation in transportation projects were still appropriate.

Highways. The Committee realizes that the unfunded highway needs are large and that the recommendations contained in SJR 188 do not address these unfunded needs. For this reason, a change in the formula distribution is not recommended until revenues are increased. In addition, cost responsibility changes are also not recommended until revenues are increased. In regards to conforming with federal law as contained in ISTEA, a continuation of the budget bill language is recommended for another two years.

Mass Transit. The committee questioned the formula for distributing mass transit assistance according to each transit operation's share of total

operating costs. It was suggested that this formula rewarded inefficiency and high costs.

A staff presentation on the mass transit distribution formula recommended that the committee consider an alternative that treated each transit operator the same and which rewarded efficiency and service expansion.

The suggested formula would establish a base year operating cost for each transit operation and adjust that amount each year for inflation, changes in service, and efficiency. As a policy objective, the Commonwealth could then agree to finance a set percentage of operating costs, taking into account the ability of local governments to assist in the financing.

It was also recommended that the Commonwealth Transportation Board assume leadership for a more sophisticated process of determining and funding the capital needs of mass transit. It was suggested that a more in-depth process be undertaken to examine the capital outlay plans of each transit operation before the Board commits state funding.

Rail. Rail needs are underfunded with the existing sources of revenue currently being used. To even adequately fund the modest rail rehabilitation and rail access programs currently managed by the state, an additional \$2 million per year will be required. If an expanded program of inter-city passenger rail service is determined to be desirable, considerably more resources will be necessary.

Aviation. Without the addition of the "Superport", aviation needs can be met with projected collections from existing sources of revenue. The Committee recommends additional study of the need or timing for a "Superport" in southeast Virginia.

Seaports. Exports/imports are becoming an increasingly important part of Virginia's economy. While the ports are able to adequately cover their operating costs, state funding is the only revenue source available for capital or technological improvements to keep Virginia's seaports competitive. State Transportation Trust Fund revenues allocated to seaports will be able to meet less than half of the listed needs, given current trends. For this reason it is recommended that the existing share of TTF funding for ports is maintained.

Efficiency Subcommittee:

The subcommittee discussed a number of suggestions put before it that included:

- Combining the Highway Maintenance and Operating Fund and Transportation Trust Fund;
- Allowing localities to combine maintenance and construction allocations;
- Using more state force construction;
- Policies to reduce the highway construction backlog;
- Improving right-of-way acquisition;
- Allowing more local control of transportation decisions;
- Improving the exception process for design standards;
- Instituting a centralized multi-modal planning office;
- Assigning MPO representation to district rather than the central VDOT office.

The intent of the suggestion to combine the Highway Maintenance and Operating Fund (HMOF) and Transportation Trust Fund (TTF) into one fund is to require maintenance, operation and administrative uses of transportation funds to compete with new construction needs for funding priority. Although historically the Commonwealth's policy has been to fund maintenance first, thereby protecting its current investment, there is some question as to whether there are low-priority maintenance or operation functions that could be pared, eliminated or deferred in favor of new construction. Even with documented productivity improvements in VDOT's maintenance budget, increased outside oversight and competition for funding might create further productivity improvements within VDOT's maintenance budget. The subcommittee concluded that further study of this suggestion seems warranted.

Allowing localities to use maintenance funding for construction would provide localities the flexibility to decide their own transportation priorities.

Prior to 1985, localities were allowed to use maintenance payments for construction. However since repeal, additional COT 21 funds have been provided. This may justify a review of maintenance funding policy to cities. The subcommittee feels it is reasonable to explore further the issue of relaxing the requirements for use of city street maintenance funding.

The subcommittee considered the issue of whether providing a larger state force construction capability would be a more cost effective alternative for smaller construction jobs and also whether it would help avoid lengthy contract processes for smaller jobs. The subcommittee also discussed whether using a state force for smaller construction projects may better utilize VDOT staff on a year-round basis. By law, there is a contract cap size of \$300,000 for state force utilization. Additional study is necessary to determine whether state force construction is cheaper than private construction contractors. A study to compare costs on an equivalent basis is necessary to make this determination.

Three suggestions were put forward to the subcommittee to help reduce the highway construction backlog. First, find ways to speed up the construction process. Second, allow partial construction of expensive projects that would not initially complete the ultimately desired design but would result in earlier utilization. Third, assign design and engineering work in the Districts where the construction will take place.

Speed-up Construction Process. There are ways, such as design-build, to speed up the construction process. As defined in §11-37 of the Code of Virginia "design-build contract" means a contract between a public body and another party in which the party contracting with the public body agrees to both design and build the structure, roadway or other item specified. Structures such as bridges lend themselves to design-build better than roadways. However, current Virginia right-of-way, procurement and bidding laws inhibit the implementation of design-build techniques for VDOT. VDOT is currently studying the design-build concept for applicability to highway and bridge construction. Further study of techniques to speed the construction process is warranted.

Phased Construction. It has been VDOT's policy to use phased construction wherever possible. If the project receives federal funds, the Federal Highway Administration (FHWA) must also agree to phased construction. However, it is usually more expensive to use phased construction techniques, rather than building to final specifications at the outset. Phased construction can only be evaluated in terms of the economic benefits accruing to a project completed earlier than it would otherwise.

Local Design Work. VDOT is currently considering regionalizing its design activities into five locations. Under this reorganization, all Northern Virginia projects would be designed in its "Potomac Center for New Design" located in Fredericksburg. This reorganization is intended to make design activities more efficient. It is also intended that this will improve designers' local knowledge of transportation conditions.

The subcommittee questioned whether localities should have greater oversight and control of right-of-way acquisition. Some localities use a proffer system or may have greater knowledge of local real estate values. However, it was recognized that issues surrounding right-of-way acquisition were complex and not easily solved no matter what governmental entity is involved. With 30-50 percent of the cost of road construction involving right-of-way acquisition in some urban localities, it is worth studying whether more efficient methods of procuring right-of-way are attainable.

The subcommittee considered whether VDOT duplicates functions that can be performed by localities. In addition, the subcommittee considered whether VDOT should consider transferring functions that localities would like to take over. VDOT has indicated that it is possible for a locality to take over certain functions related to site plan reviews, or possibly other local road activities. However start-up and staffing costs generally preclude a locality from taking over the maintenance function of local roads. Local governments also need to concern themselves with the issue of sovereign immunity. Differences exist between the state and local government in terms of liability, especially when only a partial takeover of local roads is contemplated, such as signalization responsibility. Given the legal complexity, additional study of this issue is necessary.

The subcommittee considered whether a better process for reasonable adjustments to standard design criteria is necessary when there are special mitigating circumstances that would reduce costs without jeopardizing safety. Statewide geometric standards are established by VDOT based on vehicles per day. The Subdivision Street Requirements Manual also sets standards. Currently, VDOT field engineers have considerable discretionary authority in the application of standards. There is also an appeal process to the VDOT Commissioner to consider decisions of field engineers. Additional study is necessary to determine whether the existing administrative process provides a reasonable and timely review of decisions regarding special circumstances involving design standard.

The subcommittee considered the suggestion of combining the policy and planning functions of all the transportation agencies into one organization reporting directly to the Secretary of Transportation. While there was some sentiment that combining transportation planning functions into one agency would provide more effectiveness in multi-modal planning exercises, there is also a concern that each individual agency would continue to need its own planning and policy function. This could lead to another layer of government.

Further study should be undertaken to ensure that multi-modal planning efforts in Virginia are adequate. There does not seem to be an adequate process for determining which mode, additional highways or additional public transit, would be best to solve congestion needs in urban corridors. For example, a number of additional rail extensions have been proposed for Northern Virginia. However, there does not seem to have been any analysis of the cost/benefits of these rail extensions versus additional roadways.

The subcommittee considered the suggestion to assign state Metropolitan Planning Organization (MPO) representatives from the district office's rather than individuals from the central office in Richmond. This suggestion was intended to save travel costs and facilitate better informed individuals concerning local needs. With the enactment of ISTEA and the delegation of more money and responsibility at the local level in federal transportation policy, the local MPO decision process has taken on a greater importance. Additional study of this suggestion seems warranted.

Advisory Committee:

The 13-member citizens advisory committee concluded that the Commonwealth's short and long term transportation needs "are going to be enormous" and that such needs will "far outstrip available sources of revenue."

"Future increases in fuel taxes are, in our view, inevitable," the advisory committee stated in its final report.

The advisory committee pointed out that funds to sustain the Commonwealth's highway maintenance program soon will be insufficient, and that new construction would suffer as a result. "All elements of the Commonwealth's transportation resource network (mass transit, ports,

aviation and rail) have significant financial needs that must also be addressed, along with highways," the committee concluded.

The advisory committee did not arrive at a unanimous recommendation regarding a fuel tax increase; however, 11 members supported a 10 cent per gallon increase with 5 cents going to the Transportation Trust Fund; 2 cents for debt financing of major projects; and, 3 cents to localities for transportation purposes. This proposal had been offered initially by the Virginia Association of Public Transit Officials (VAPTO).

The advisory committee also was unable to reach unanimity on the issue of highway user cost responsibilities because of objections raised by a member representing the trucking industry.

The advisory committee unanimously recommended that:

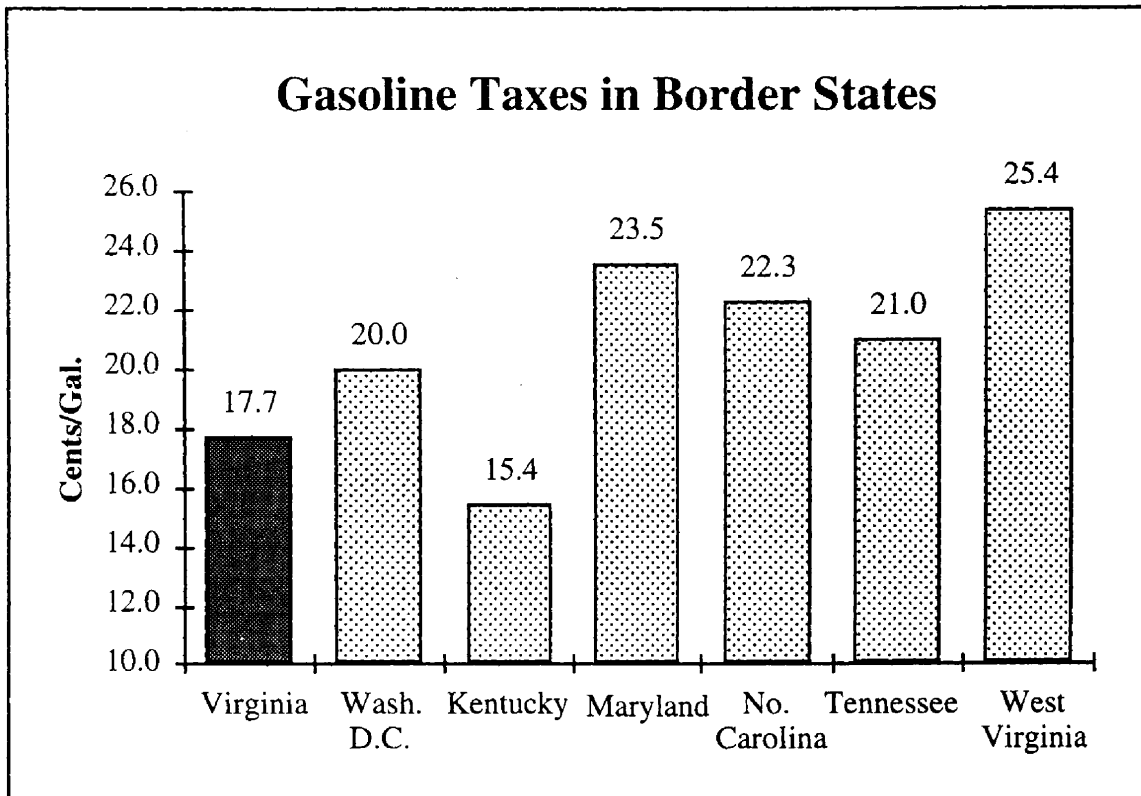
1. Administrative efficiency should be enhanced so more funds could be made available for maintenance and construction.
2. State law should be changed to conform with new Federal law.
3. Continuing efforts should be made to find additional revenues for transportation programs.

Alternatives:

- 1) Target Virginia's existing revenues more efficiently, to satisfy the greatest needs.
 - Current needs list assumes all needs are of equal weight. For example, roads projected for future congestion are given the same importance as currently congested roads.
 - An option would be to prioritize the needs list to determine where the most critical needs are, and adjust the allocation formulae accordingly.
 - A cost/benefit process could be used to determine which expenditures would move the most people and goods at the least cost.

- Consider an increased proportion of transportation dollars going to public transit in highly populated urban corridors if it can be proven cost effective in reducing congestion.
 - Consider providing better support for the state's freight rail network to help reduce truck traffic, and use that network for passenger rail if it can be proven cost-effective.
- 2) Integrate land-use policies with transportation planning.
- Employ land-use practices that avoid suburban sprawl and expensive collector transportation systems. For example, new multi-family housing development and commercial and office space might be limited to existing mass transit routes.
 - Arlington County has successfully coordinated land-use development that is integrated with transportation planning, giving them the highest ratio of public transit commuters in the D.C. metro area.
- 3) Make better use of existing transportation systems.
- Adopt policies and incentives to reduce single occupant and peak travel time vehicle use.
 - Expand use of HOV lanes or increase support for ridesharing and carpooling incentives.
 - Increase funding for technological improvements to existing transportation systems, such as better signalization, and traffic flow warning systems.
 - Where appropriate, use more innovative approaches than traditional bus service to provide geographic mobility needs.
- 4) Increase revenues.
- Each one cent increase in the motor fuels tax would generate about \$36 million per year.

- Virginia has a relatively low motor fuel tax in relation to its neighbors.



- One-percent increase in the motor vehicle sales and use tax would generate about \$86 million per year.
- Every one dollar increase in motor vehicle license fees would generate about \$5 million per year.
- Consider indexing Virginia's revenue base to keep pace with economic growth.
 - North Carolina and Kentucky administratively adjust their motor fuel tax rate on a yearly basis.
- Consider raising taxes and fees on trucks so that they pay their share of costs for maintaining roads.

- Build more toll roads or use existing excess toll road revenue to fund other projects.
- Consider giving regional and local governments more responsibility for funding the urban and secondary road systems and transit funding.
 - Increasing local match requirements would ensure that localities really need transportation improvements.
- Consider expanding privatized funding of special situation transportation improvements.
 - Examples include Dulles Greenway and WMATA negotiating with RF&P to build a METRO station on Potomac Yard.
 - Public/private funding partnerships

Future Activities of SJR 240:

Before proceeding with additional review, the SJR 240 Select Committee awaits further discussion with the new administration concerning their views on solving the transportation problems of the Commonwealth.

Respectfully submitted,

Hunter B. Andrews (Chairman)

Hunter B. Andrews

Robert B. Ball, Sr. (Vice-Chairman)

Robert B. Ball, Sr.

Robert L. Calhoun

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Unable to sign due to illness

Franklin P. Hall

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