

**JOINT LEGISLATIVE  
AUDIT AND REVIEW  
COMMISSION**

**THE  
VIRGINIA  
GENERAL  
ASSEMBLY**

**FOLLOW-UP REPORT  
ON THE VIRGINIA  
DEPARTMENT OF HIGHWAYS  
AND TRANSPORTATION**

A report in a series dealing with highway and  
transportation issues in Virginia.



**REPORT OF THE**  
**JOINT LEGISLATIVE AUDIT AND REVIEW COMMISSION**  
**ON**  
**THE VIRGINIA DEPARTMENT OF HIGHWAYS AND**  
**TRANSPORTATION**  
**TO**  
**THE GOVERNOR**  
**AND**  
**THE GENERAL ASSEMBLY OF VIRGINIA**



**HOUSE DOCUMENT NO. 34**

**COMMONWEALTH OF VIRGINIA**  
**RICHMOND**  
**1983**

**MEMBERS OF THE  
JOINT LEGISLATIVE AUDIT AND REVIEW COMMISSION**

Chairman

Senator Hunter B. Andrews

Vice Chairman

Delegate L. Cleaves Manning

Delegate Richard M. Bagley

Delegate Robert B. Ball, Sr.

Senator Herbert H. Bateman

Senator John C. Buchanan

Delegate Vincent F. Callahan, Jr.

Delegate Theodore V. Morrison, Jr.

Delegate Lacey E. Putney

Delegate Ford C. Quillen

Senator Edward E. Willey

Mr. Charles K. Tribble, Auditor of Public Accounts

Director

Ray D. Pethtel

**JLARC STAFF FOR THIS REPORT**

Philip A. Leone, Deputy Director

John M. Bennett

Walter L. Smiley, Jr.

Ronald L. Tillett

Glen S. Tittermary

Carolyn C. Tedholm, Intern

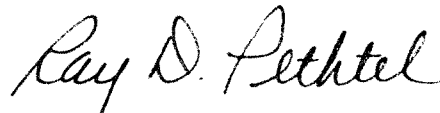
## PREFACE

This is the first of two follow-up reports scheduled by the Joint Legislative Audit and Review Commission (JLARC) on the Department of Highways and Transportation. House Bill 532, enacted by the 1982 General Assembly to raise additional revenues for highway construction and maintenance, called for the follow-up to ensure the efficient use of funds. Specifically, JLARC was directed to monitor the progress of the department in implementing recommendations contained in Senate Documents 6, 7, 8, and 14 of the 1982 Session. The Commission is to report its findings and recommendations to the Governor and General Assembly before the 1983 and 1984 legislative sessions.

On September 29, 1982 the department was asked to prepare a "status of action" statement on 75 recommendations resulting from three JLARC studies: (1) organization and administration of the department, (2) highway construction and maintenance, and (3) highway financing. A copy of this statement accompanies this report. The department's written response is the principal reference used in assessing the status of these recommendations. An extensive follow-up of department activities will be carried out during 1983. Putting many of the recommendations into effect will take time, and the perspective of an additional year will give the General Assembly a more accurate picture of what is being accomplished.

Thus far, the results are encouraging. Many of the recommendations have been acted upon. Some have resulted in substantial savings. During the course of the study JLARC found that the department might accrue a one-time savings of \$13 million through better use of its fleet equipment and removal of surplus items from its general supply inventory. Officials of the department estimate that the actual dollar savings during fiscal years 1982 and 1983 have been in excess of \$20 million.

On behalf of the Commission staff, I wish to acknowledge the help provided by the officials and staff of the Department of Highways and Transportation in preparing this follow-up report.



Ray D. Pethtel  
Director

January 6, 1983



---

## TABLE OF CONTENTS

---

<b>I. ORGANIZATION AND ADMINISTRATION</b>	<b>Page</b>
(Senate Document Number 7) . . . . .	1
<b>STRUCTURE AND STAFFING.</b> . . . .	1
Central Office Restructuring . . . . .	1
Construction Districts and Maintenance Areas . . . . .	3
Manpower and Training . . . . .	3
Inmate Labor . . . . .	4
<b>ADMINISTRATION</b> . . . . .	5
Budgeting . . . . .	5
Inventory Management . . . . .	6
Equipment Management and Use . . . . .	7
Equipment Maintenance . . . . .	8
Surplus Land . . . . .	9
Automated Data Processing . . . . .	11
<b>II. TRANSPORTATION NEEDS</b>	
(Senate Document Number 8) . . . . .	13
<b>HIGHWAY MAINTENANCE</b> . . . . .	13
Productivity . . . . .	13
Programming and Budgeting . . . . .	14
<b>CONSTRUCTION</b> . . . . .	16
Needs Assessment . . . . .	16
Allocations and Expenditures . . . . .	17
<b>PUBLIC TRANSIT</b> . . . . .	18
Organization . . . . .	18
Assessing Efficiency . . . . .	19
Financial Needs . . . . .	19
<b>III. HIGHWAY FINANCING</b>	
(Senate Document Number 14) . . . . .	21
Highway Revenues . . . . .	21
Forecasting Revenues . . . . .	22
Truck Weight Regulation . . . . .	23
<b>IV. EPILOG: FUTURE FOLLOW-UP</b> . . . . .	27
<b>V. APPENDIXES.</b> . . . .	29

---





## I. ORGANIZATION AND ADMINISTRATION

Much concern has been expressed by the General Assembly regarding the management and administration of the Department of Highways and Transportation (DHT). Questions are frequently asked about employee productivity, staffing levels, and program performance. In response to these concerns DHT has cut employment levels and taken steps to improve program administration.

---

*"Progress has been made...especially in restructuring DHT's central office and in improving equipment management and use."*

---

JLARC found, however, that a number of additional improvements were needed to provide a suitable framework for increased accountability and to make more efficient use of available resources. JLARC identified opportunities for cost savings totalling \$18.2 million and made more than fifty recommendations for improving department operations. Among these recommendations were reorganizing the department, improving budgeting procedures, and generally upgrading management controls. Progress has been made on many of these recommendations, especially in restructuring DHT's central office and in improving equipment management and use.

### STRUCTURE AND STAFFING

Senate Document Number 7 reviewed organizational structure and employment levels. The study found that the department's structure was fundamentally sound and reflected, in large measure, the sweeping revisions recommended by the Stone Commission in 1962. The study concluded that the department needed to make some structural adjustments in the central office, review the boundaries of the eight construction districts, and thoroughly assess the need for the 240 existing maintenance areas. Considerable progress has been made in each of these areas.

#### Central Office Restructuring

Modifications recommended for the central office structure included:

- creation of a deputy commissioner position to strengthen oversight of policy research, planning, programming, budgeting, public transportation, and administration functions;
- creation of a public transportation directorate to provide both visibility and an appropriate degree of participation in DHT decisionmaking;
- establishment of an appropriate internal audit program consistent with State policies and guidelines;
- changes in the reporting relationships of the environmental quality and public relations divisions; and
- consolidation of the programming and scheduling, secondary roads, and urban divisions into one division because of the decreasing workload of these divisions.

Most of these recommendations have been acted upon.

House Bill 978 of the 1982 Session directed the department to divide the position of deputy commissioner and chief engineer into two separate positions. In July, 1982 the department announced a major reorganization during which a deputy commissioner was appointed to oversee planning, programming, budgeting, public transportation and the Highway and Transportation Research Council. The chief engineer now supervises the construction and maintenance of highway systems and the work of the field offices. The deputy commissioner, the chief engineer, and the director of administration now report to the highway commissioner.

House Bill 364 established a directorate of public transportation in the department. A director was hired in October, 1982. The rail division, which was formerly located in the planning directorate, now reports to the new director of public transportation.

The State Internal Auditor has completed a survey of the DHT internal auditing needs. The department has indicated that it will establish an internal audit division before January 1983. This division will report administratively to the director of administration and functionally to the internal audit committee of the Highway and Transportation Commission. The internal audit committee will review internal audit reports and will participate in selecting audit topics and in reviewing implementation of audit recommendations.

The JLARC study recommended that the environmental quality division be transferred from the planning directorate to the engineering directorate to enhance coordination of preconstruction activities. It was further suggested that the public relations division report to the director of administration instead of to the highway commissioner. Assignment of the environmental quality division to the assistant chief

engineer occurred in July 1982. The public relations division was renamed the "information services division" and reports to the director of administration.

Consolidation of the programming and scheduling, secondary roads, and urban divisions has not occurred. The department believes that it cannot support this merger for three reasons. First, DHT believes that workload for these divisions will increase because of the gas tax increase granted by the 1982 General Assembly and the prospect of additional federal revenue. Second, localities would oppose a reduction in status of the urban and secondary roads divisions. Finally, DHT believes that its effectiveness in controlling project expenditures and ensuring program compliance would be impaired by a merger.

### Construction Districts and Maintenance Areas

Below the central office level, the department carries out the bulk of its construction and maintenance work through a network of eight construction districts, 44 residencies, and 240 maintenance areas. JLARC found that construction district boundaries had not been realigned since they were first created in 1923, and that DHT could cut costs by consolidating and eliminating some area headquarters.

Senate Joint Resolution 46 was adopted during the 1982 Session. This resolution directs the Highway and Transportation Commission to consider realigning construction districts to better reflect changes in travel patterns, population, and employment concentration. DHT has completed a study, and according to the department staff, four alignment options have been developed for the highway commission's review and consideration.

The JLARC report recommended that (1) the maintenance division thoroughly assess the need for existing maintenance areas, and (2) priorities be assigned to consolidating areas and eliminating time-keeper positions. A study of maintenance areas has been prepared by the maintenance division. Maintenance areas in Dickenson County have already been reduced from three to two through merger. According to the department, five additional areas have been designated for merger with other areas. The potential for further reductions is now under review as part of a JLARC study of the department's staffing environment.

### Manpower and Training

Since 1980 DHT has been steadily cutting its staff in response to reduced workloads. Despite these reductions, the JLARC study found that a lack of manpower planning is hindering an accurate determination of further staffing needs. Furthermore, the study concluded that with a smaller workforce greater attention had to be placed on assessing agency training needs to enhance employee productivity.

The 1982 Appropriations Act directed the department to prepare a manpower plan that was to identify the minimum number of employees necessary to staff programs funded by the Act, and was to include methods of expediting staff reductions to meet the minimum levels. JLARC was directed to monitor the department's efforts in preparing the manpower plan. The monitoring is a continuing process, and preliminary results are to be reported to the 1983 session of the General Assembly.

In response to the JLARC study, higher priority has been placed on the development of training programs. According to DHT, five training surveys covering administration, technical knowledge, and technical skills have been carried out during the past year. The results have been used to identify training needs and set training priorities. A training program is currently being developed for all equipment operators. In July 1982 a management training course was held for all district engineers and division administrators.

### Inmate Labor

The JLARC study reviewed the use of inmates for labor on highway maintenance activities. Inmates are assigned to gun gangs of five to ten inmates accompanied by an armed guard from the Department of Corrections (DOC) and two DHT employees. Inmates who are trustees are assigned to maintenance tasks without a DOC guard but with DHT supervision. JLARC found that DHT costs could be reduced by \$1 million if only one DHT employee were assigned to each inmate crew.

The department claims to have eliminated the truck driver from convict crews where possible. During the course of the fieldwork at 15 area headquarters in 1982, however, JLARC staff found seven instances in which two DHT employees (a foreman and an equipment operator) were still assigned to each crew of inmates. In eight cases, either one or two DHT employees were assigned, depending on the maintenance activity being performed. Two DHT employees are required for brush cutting by inmate crews, for example, as an equipment operator hauls away the cut brush while a foreman stays with the inmates. Consequently it appears that additional savings remain to be achieved.

JLARC also recommended better training for DHT employees assigned to supervise inmates. This training was intended to help DHT employees manage inmates and handle disciplinary problems. In conjunction with DOC, the department has developed a training program which includes firearm handling and target practice and classroom instruction in inmate supervision. DHT employees in five districts have completed the training program, and employees in the remaining districts will complete the training by December 1982.

## ADMINISTRATION

In examining the administration and operations of the department, JLARC found a need to improve and strengthen several administrative and management control procedures. Many of the recommendations, according to DHT, are being implemented. Actions reported by the department are summarized below for the following operational areas: budgeting, inventory management, equipment purchase and maintenance, surplus property management, and automated data processing.

### Budgeting

Since 1980, the department has made great strides in bringing its budgeting process into compliance with the State's program budgeting requirements. A separate budget division has been created to oversee the preparation and development of the program budget. The JLARC study found that (1) the Highway and Transportation Commission needed to participate more actively in budget development, (2) the capital budgeting function had to be brought into full compliance with the State's capital outlay policy, and (3) the department had to exercise better control over the expenditure of maintenance and construction funds.

*Commission Involvement.* Each of the commissioners interviewed during the course of the JLARC study either did not fully understand the department's maintenance budgeting process or believed that it was beyond his control. The Highway and Transportation Commission has responded to JLARC's recommendation that it give greater attention to the maintenance budget by creating a budget committee consisting of three commissioners. This committee is now responsible for overseeing the department's budget proposals, including the review of maintenance expenditure requests.

*Capital Budgeting.* Capital budgeting activities in DHT were found to be at variance with the State's normal budgeting process and not in total compliance with the State's capital budgeting policy. In addition, the DHT budget division had little to do with determining the department's capital outlay needs. A committee chaired by the director of operations distributed capital outlay funds among construction districts based on a review of their operational needs. JLARC recommended that the department assign all capital budget responsibilities to the budget division to ensure close coordination between the operating and capital budgets. The department has not acted upon this recommendation. However, the department has reported that it is now in total compliance with State capital outlay policies and procedures.

*Budget Controls.* The study found DHT to be out of compliance with provisions of the Appropriations Act. The department exceeded the authorized highway maintenance budget for 1978-1980 by \$59 million. JLARC recommended that the Department of Planning and Budget (DPB) and

the Department of Accounts (DOA) establish appropriate control procedures to ensure that future spending is consistent with the Appropriations Act. The General Assembly approved amendments to the 1982-1984 Appropriations Act strengthening legislative and executive control over highway construction and maintenance expenditures. New procedures have been put into effect by DPB and DOA to differentiate between construction and maintenance for highway work in progress.

### Inventory Management

DHT spends millions of dollars each year to purchase supplies and materials. These supplies are distributed through stockrooms located in district and residency headquarters. The JLARC review of inventory management focused on two major areas: (1) stockroom procedures and management, and (2) purchasing and bidding policies.

*Stockroom Procedures and Management.* DHT was found to be overstocked by as much as \$5 million in supplies and materials. Improved use of existing computerized records would have aided the department in establishing appropriate stock levels. Several other recommendations were made for improving management of the stockrooms. Among these recommendations were:

- improving stockroom security;
- establishing an inventory for salvaged parts and road stock;
- improving training of stockroom employees; and
- improving the audit program for district and residency stockrooms.

The department reported in November 1982 that it had made progress in implementing each of these recommendations, and that it had established a desirable inventory level. According to purchasing division personnel, the inventory has been reduced by \$2 million. The purchasing division reports that it has developed and issued guidelines concerning stockroom security. In addition, an inventory of salvaged supplies has been established. Finally, the department has established a training program for stockroom employees, and has developed a more extensive audit program.

*Purchasing and Bidding Policies.* DHT has its own purchasing division, which is responsible for handling competitive bids for the purchase of supplies. JLARC found that some procedures needed revision, and that the assignment of purchasing tasks to buyers might make detection of improper activities difficult. Specifically, JLARC recommended that:

- local purchases be reviewed by the central office to ensure that competitive bidding policies are followed;

- the purchasing tasks performed by buyers be separated into two divisions to reduce the likelihood of improper activities;
- all vendors be registered in advance;
- all vendors sign a statement of non-collusion when making bids; and
- procedures for awarding tied bids be revised.

In its response to the recommendations, the department notes that it has implemented procedures for reviewing local purchases and has revised its method of awarding tied bids. On January 1, 1983, the purchasing division was reorganized, separating the purchasing functions performed by buyers.

The recommendation that all vendors be pre-registered has been rejected by DHT on the grounds that it might reduce the business done with minorities and small businesses. While this is a valid concern, the registration process could be structured so that it does not place small businesses at a disadvantage. The department might wish to reconsider this action. The recommendation that vendors sign a statement of non-collusion is being implemented. DHT reports that it intends to require a non-collusion statement on all procurement contracts and is currently working with legal counsel to formulate the required statement.

#### Equipment Management and Use

Fleet equipment consists of large motorized pieces of machinery. These units are expensive to purchase and have a life span that ranges from 8 to 12 years. Examples of fleet equipment include such items as dump trucks, pick-up trucks, motor graders, and dozers. In fiscal year 1980, DHT owned and operated more than 6,700 pieces of fleet equipment valued at over \$91 million.

---

*“Department officials estimate that the actual dollar savings during the past two years have been in excess of \$20 million.”*

---

The JLARC report found that during fiscal year 1980 underuse of DHT fleet equipment occurred in each of the construction districts and across many classes of equipment. Weaknesses in the equipment division's oversight procedures resulted in districts and residencies retaining idle and underused units. JLARC identified potential savings of \$9.4 million if DHT transferred underused equipment to fill various needs and removed surplus items from its inventory.

DHT reports that an equipment use policy was put into effect in fiscal year 1981. Since then, more than 700 pieces of equipment have been declared surplus at the residency and area levels. This reduction is the result of cutbacks in maintenance and construction activities as well as stepped-up reviews of use. For example, 85 to 90 tractor mowers were declared surplus in FY 1982 because residencies could not justify retention based on equipment use standards.

For fiscal years 1982 and 1983 the department purchased a total of approximately \$4.2 million worth of equipment. Trend data from the five previous fiscal years indicate that about \$12 million worth of equipment was then purchased annually. The department is therefore about \$10 million below this average for each of the last two fiscal years. Some of this reduction can be attributed to cutbacks in maintenance and construction activities and the lack of funds for acquiring equipment. Increased oversight by the central office and districts, however, has resulted in considerable savings to the department.

Savings have also resulted from new transfer procedures. Items of equipment are transferred from one district to meet various needs in another district. The annual cost of hired equipment by field units has been sharply reduced from approximately \$9 million to about \$2 million, primarily as a result of the increased emphasis on the use of State-owned equipment.

According to one equipment division manager, the utilization reviews are working smoothly and field personnel have been very cooperative. The department appears to have far exceeded the potential savings of \$9.4 million identified by JLARC staff. Department officials report that the actual dollar savings during the past two years have been in excess of \$20 million. It is clear from this preliminary assessment that DHT has improved its management and use of equipment.

#### Equipment Maintenance

The JLARC review of the DHT equipment maintenance program found two problems in existing equipment maintenance practices:

1. A standard policy was needed for carrying out preventive maintenance at the residency level. Weekly shutdowns for routine servicing did not result in improved equipment operation.
2. A procedure was needed to systematically identify equipment with a history of excessive repair costs.

Two recommendations were made to address these problems. Progress has been made on each.



*Preventive Maintenance.* Local residencies did not have guidelines for carrying out preventive maintenance activities. The result was a wide variation in preventive maintenance practices among residencies. Practices ranged from no preventive maintenance at all to essentially stopping all construction and maintenance work for one-half day a week to wash, lubricate, and inspect all vehicles.

In July 1982, DHT revised its preventive maintenance program and established guidelines for its implementation. A preliminary review of the revised DHT preventive maintenance program indicates that it meets the concerns and subsequent recommendations of the JLARC report.

In September 1982, when JLARC staff were in the field interviewing residency and area managers in connection with the DHT manpower study, weekly shutdowns for routine washing and lubricating still occurred in some residencies. However, managers in the equipment division have indicated that a recent meeting with field personnel has resolved the misunderstanding of the new preventive maintenance policy. According to equipment division managers, the central office will periodically review the preventive maintenance practices in field offices.

*Excessive Lifetime Repair Costs.* Lifetime costs include all expenditures for repair and upkeep from the time a unit enters the inventory. The JLARC report concluded that by using these data, DHT could establish normal or typical maintenance expenditure levels for various types and ages of equipment. Equipment that exceeded this "typical" expenditure level could then receive special management attention.

Officials of the equipment division have reported that an automated system to identify equipment with unusually high repair costs has been designed by the data processing division and will be operational in the near future. Specific concerns identified in the JLARC report have been addressed by the new system. Once the system is fully operational, a more thorough follow-up will be made.

### Surplus Land

DHT controls more than 336,000 acres of land -- more than any other State agency. Most of this land is devoted to right-of-way for the various highway systems.

The need for more effective review of DHT land holdings was first identified in the 1977 JLARC report Management of State-Owned Land In Virginia and again in the 1981 highway study. Since the 1981 report, the department has made progress in improving its management of land holdings. Surplus land has been identified and sold. The residue parcel listing has been updated and construction districts now have direct access to data files containing the residue parcel information.

Land on which correctional facilities are located has been declared surplus by the Highway Commission and authorization has been given by the Governor for several transfers.

*Identification of Surplus Land.* When JLARC conducted its review of land holdings in 1981, the identification and disposal of surplus land was a low priority for the DHT right-of-way division. Since then, the division has increased its overall effort, in both the central office and districts, to actively locate and aggressively dispose of surplus properties.

Each highway construction district has undertaken a review of local courthouse records to identify properties not listed on DHT records. A policy has been implemented to allow districts to review and approve appraisals of \$2,500 or less. Apparently this eliminates duplicate review by the districts and central office, and reduces the time involved in the appraisal process.

*Residue Parcel List.* Parcels identified through the district investigations are added to the department's residue parcel list. A residue parcel is the unused portion of land purchased for highway projects but located outside right-of-way boundaries. More than 1,000 acres are listed on DHT's residue parcel listing.

The department has implemented a new procedure for accessing residue parcel data files in the districts. The data processing division has designed a computer program that will allow district right-of-way engineers to access the data files directly by using the district terminals. This new policy appears to have enhanced the district's ability to actively monitor and dispose of residue parcels.

In fiscal year 1982, DHT disposed of 90 acres of land worth \$814,675. Land worth \$369,138 was disposed of the previous year. This represents a dollar increase of 121 percent. By this one measure of activity, DHT appears to have placed a high priority on the disposal of residue parcels.

*Parcels in the City of Richmond.* JLARC staff identified 12 parcels of land located in the City of Richmond that were not listed on the residue parcel report. In one case, a lot was being used as a private-pay parking area without DHT's knowledge. In another case four parcels of land, located near the J. Sargeant Reynolds Community College, were used by students for parking. No one was charged for the parking.

Shortly after JLARC identified the private-pay area, a lease was signed by the individual and DHT for use of the area as a parking lot. The department also contacted the City of Richmond and J. Sargeant Reynolds Community College and offered to sell them the four parcels they were using. The community college is awaiting completion of its expansion plan prior to purchasing any more land.

*Correctional Field Unit Land.* In the 1977 report on State land, JLARC identified nearly 1,800 acres of land which were owned by DHT but used for correctional field units. The 1981 JLARC report found that the same 1,800 acres were still owned by DHT. JLARC recommended that the department declare these parcels surplus and explore ways of conveying them to other state agencies.

As of March 1982, the department had declared as surplus 1,648 acres of land on which correctional field units are located. The Division of Engineering and Buildings has contacted the Department of Corrections to determine the feasibility of acquiring the properties. No conveyances have occurred to date because General Assembly approval is required for capital outlay expenditures. An acquisition plan is being prepared by the Department of Corrections.

#### Automated Data Processing

The JLARC study noted that the department had made major progress in developing automated information systems. But some systems seemed to have a constrained role and limited usefulness. JLARC recommended that the Department of Management Analysis and Systems Development conduct a comprehensive assessment of DHT data processing needs and examine the feasibility of a data base management system for organizing its data files and computer programs.

Both of these recommendations have been put into effect. A consultant has been hired to evaluate the existing data processing environment and to develop a comprehensive information systems plan for meeting the needs of the department. A data base manager will be hired in the near future.



## II. TRANSPORTATION NEEDS

Senate Document Number 8 reported on highway construction and maintenance, and on public transportation needs of the Commonwealth. A major conclusion of the study was that highway and transportation program management in the 1980s would require a systematic evaluation of needs and careful selection of priorities.

According to the report, the Commonwealth was faced with a myriad of complex transportation issues. For this reason, JLARC recommended that the Secretary of Transportation expedite the preparation of a statewide transportation plan spelling out the State's policies regarding highways and public transportation. House Joint Resolution 111 of the 1982 Session affirmed JLARC's finding. As a result, a draft statement of key policy questions to be included in the statewide transportation plan has been prepared by the Secretary of Transportation and transmitted to the 1983 General Assembly for review and comment.

The status of other recommendations resulting from this study are summarized below for highway maintenance, highway construction, and public transportation.

### HIGHWAY MAINTENANCE

Maintenance is a fast growing part of the highway budget. In 1970 maintenance costs were \$48 million; by fiscal year 1984 they are estimated to be \$290 million. In light of such growth, JLARC concluded that the department had to evaluate the need for highway maintenance more closely and seek more efficient ways to perform essential services. Recommendations were made to improve maintenance productivity and programming and budgeting. The department has reported progress on all of the recommendations.

#### Productivity

Significant differences were found in maintenance productivity between DHT residencies. Some of these differences were directly attributed to inefficient management practices and outdated technology. JLARC recommended the development of a comprehensive and systematic methods improvement program aimed at reducing costs and improving efficiency. It was estimated that such a program could lower maintenance costs by \$5 million annually. The department has not reported progress on this recommendation, however. A similar recommendation is

being made as part of JLARC's assessment of the department's staffing environment. The department has indicated concurrence with the thrust of that recommendation.

The Management Review and Audit Division (MRAD) has initiated a program to inspect maintenance residencies in-depth. As part of a residency review, maintenance field personnel are observed and interviewed. The inspection includes a review of maintenance methods and productivity as well as a number of other aspects of residency operations. While the review effort appears to be worthwhile, the focus of the MRAD review is not on particular maintenance activities and variations in the performance of those activities across the State. MRAD has visited two residencies to date. The objective of the division is to visit four or five residencies a year. The value of the maintenance review process would be enhanced by increasing the number of residencies to be visited each year and by using a systematic method for determining which residencies or maintenance activities to review.

The maintenance division needs to participate actively in the implementation of any methods improvement program. The division should work with data processing to devise a computer program which will sort out high and low productivity performances for key activities at area, county, and residency levels. The use of a computer program would enable MRAD or the maintenance division to target field visits. This practice would result in at least two benefits: (1) it would enable the divisions to focus on investigating the reasons for particularly low or high productivity performances, and (2) it would reduce the time needed for review. Techniques and technologies which are found to promote high productivity should be transferred to other residencies whenever feasible.

The maintenance division should also work with the Manpower Advisory Group to determine the best achievable productivity levels for field units. Productivity standards should be set at above-average levels to provide incentives for increased productivity and to help call attention to performance which needs improvement.

#### Programming and Budgeting

The General Assembly has endorsed placing a priority on maintenance spending to protect the existing highway investment and provide for acceptable levels of safety, comfort, and convenience. However, JLARC found that the methods used by DHT for assessing maintenance needs did not guarantee that the intent of the legislative priority was being met. Problems were noted in three areas: workload standards, pavement management, and bridge condition rating. JLARC also recommended that the department develop an annual maintenance program to identify alternative spending options and the implications for funding each option.

*Maintenance Standards.* Most routine maintenance work is based on standards which were developed in 1964. The JLARC study found that field staff commonly deviated from the budgets developed through use of these standards. As a result, the value and legitimacy of the maintenance standards as a budgeting or management tool was questionable. JLARC concluded that DHT should re-evaluate its policies regarding maintenance standards.

The department has reported that it continues to review workload standards annually and makes adjustments where necessary. It admits that standards are not always met by every field unit each year, but says standards are generally maintained over a period of years. To address the recommendation, DHT needs to develop methods for obtaining greater adherence to standards by field units. DHT's Manpower Advisory Group has indicated that a part of the department's long-term planning process will involve an updating of maintenance standards and the assignment of accountability for compliance with those standards. This effort should help the department meet the goal of the recommendation. In addition, however, the maintenance division needs to work with data processing to devise a computer program which generates exception reports. These reports would facilitate the review of field compliance with standards. Incentives to encourage compliance need to be developed.

*Pavement Management.* A pavement management system was recommended to improve the department's ability to evaluate current roadway conditions, distribute funds, and predict more accurately the resources needed to maintain pavements. Significant progress has been reported on this recommendation. A pavement management system for the interstate system will be operational in early 1983, for the primary system in July 1983, and for the secondary system in March 1984.

*Bridge Condition Rating.* At the time of the JLARC review, bridge maintenance funds were budgeted and allocated to residencies on the basis of a field review, which incorporated professional judgments, field requests, and public complaints. Officials of the department indicated that inconsistent field ratings and reports were a problem which limited the usefulness of determining bridge maintenance needs. The JLARC study determined that a systematic approach was needed to set statewide priorities for bridge maintenance replacement.

A training program has been developed to emphasize the importance of uniformity and continuity in bridge condition ratings. In March 1982, a training course was held for the district engineers for maintenance, the district bridge engineers, and all bridge safety inspectors. Data produced under the new uniform rating system will be used to set priorities for bridge maintenance and reconstruction.

*Maintenance Program.* The JLARC study recommended that the department prepare an annual maintenance program to provide the necessary level of accountability for spending. This recommendation was

intended to provide the General Assembly with information about levels of spending for highway maintenance and the probable implications of these spending levels.

The program was to identify the minimum funding necessary for a maintenance program to protect the highway investment and provide for reasonable levels of safety and comfort to the traveling public. The program was also to recommend other options above the minimum funding level which could provide higher levels of comfort and convenience, and other maintenance enhancements.

Item 649.3 of the 1982-1984 Appropriation Act directed DHT to prepare such a maintenance program. The department will present a draft version of the program to the 1983 General Assembly. The final program will be used in determining maintenance expenditure requests for the 1984-86 biennial budget.

## CONSTRUCTION

The demand for highway construction spending will continue to increase over the next several biennia. The combined costs of these projects are in the billions of dollars. But if earlier projections prove accurate, funding for construction projects will be reduced over the next six years. To address this problem, JLARC's study concluded that the construction program would require systematic evaluation of needs and careful selection of priorities. In addition, for priorities to be met, construction expenditures would have to be brought in line with allocations.

### Needs Assessment

In a 1980 study of needs, DHT projected total "present day" needs of \$6.7 billion. That assessment concluded, however, that realistic assumptions about future revenues would not permit funding of all of these needs. Despite this conclusion, DHT provided no means of establishing priorities among the projects listed in the study. Setting such priorities would provide alternatives for legislative review.

As a result, the JLARC study of construction needs priorities suggested several actions to improve the DHT construction needs assessment process. The recommendation had four parts:

- All future needs assessments done by DHT should reflect the immediacy of the funding requirement.
- An analytic framework should be developed for establishing priorities among highway construction needs and presenting several levels of spending as alternatives in the biennial programs budget.



- DHT should expedite the completion of the highway improvement program, which identifies high priority spending objectives for construction.
- The Highway and Transportation Commission should formally review and approve the highway improvement program.

DHT reports in its November 1982 response that these recommendations have been largely implemented. It is the belief of the department that the recently approved six-year improvement program meets the requirements of the recommendations.

According to DHT, the six-year improvement program will be updated annually on the basis of the statewide transportation planning process. The planning process includes setting priorities for transportation needs. DHT reports that it now has in place a specific framework for setting these priorities. This framework includes nine factors, among which are the volume of traffic, functional classification, geometrics, route continuity, costs and benefits, and accident rates. With this process the department believes that it can develop alternative programs based on anticipated alternative funding levels.

DHT also notes in its response that the six-year improvement program has been completed. According to the department, the program "clearly reflects priorities on a project-by-project basis within each construction district." The program reflects the actual revenues anticipated for the period through 1988. The program was approved by the Highway and Transportation Commission on July 15, 1982.

### Allocations and Expenditures

In the interim report, Organization and Administration of the Department of Highways and Transportation, JLARC reported that a desirable relationship between allocations and expenditures was lacking. This problem was especially serious for the urban system, where allocations exceeded expenditures by \$206 million between 1967 and 1981. Primary system allocations exceeded expenditures by \$59 million, and secondary allocations exceeded expenditures by \$39 million.

These large allocations balances resulted from a lack of a clear statutory relationship between allocations and expenditures. In response to this problem, the 1982 General Assembly passed two pieces of legislation. House Bill 565 defines allocations as a commitment to expend funds available in each fiscal year. The bill also requires DHT to report when expenditures are not in line with allocations. The 1982 Appropriations Act requires the department to develop a plan for addressing the imbalances in expenditures and allocations identified by JLARC.

DHT reports that its six-year improvement program will bring the excessive urban allocations balance in line with those of the other systems by bringing to construction many of the urban projects which have accumulated large balances. The department also believes that the six-year plan will establish appropriate on-going balances for all systems by ensuring that funds are obligated. Finally, DHT reports that several new reporting mechanisms have been established. The six-year plan shows the expected schedule for beginning construction on each project. Also, a quarterly report will be made to the Secretary of Transportation on why previously programmed funds were not obligated as planned.

The department has prepared a formal response to the plan for reducing urban allocations imbalances. This plan is to be reported to the committees of the General Assembly prior to the 1983 session.

## PUBLIC TRANSPORTATION

Public transportation has emerged as an important public policy issue at the State level. The JLARC study reviewed the State's public transportation role and the financial status of Virginia's 15 local public-transit systems. Three major problems were identified in current public transportation management and financing:

1. Little attention was given to public transportation policies and programs by the Highway and Transportation Commission, and the public transportation division within DHT was not functioning as the General Assembly intended.
2. Efficiency studies of local transit operators were not being carried out by the public transportation division.
3. All 15 public transit systems operated at a loss during fiscal year 1980. This problem might get worse if proposed federal aid cutbacks for transit are made.

The JLARC report made recommendations addressing these problems. Progress has been made in all three areas.

### Organization

A clear focus for public transportation programs was needed at the State level to enhance the visibility and status of public transportation programs within DHT. JLARC recommended that (1) the Highway and Transportation Commission establish a standing committee to oversee the public transportation planning and coordinating roles assigned to that body and (2) the General Assembly consider upgrading the public transportation division to directorate status.

Two legislative actions during the 1982 Session put these recommendations into effect. House Bill 317 established a public transportation committee of the Highway and Transportation Commission and designated the urban at-large member to chair the committee. A public transportation committee was organized in March, 1982. The chairperson has been active in reviewing DHT transit activities and has made a number of inspection trips to local transit operations.

House Bill 364 provided for a directorate of public transportation in DHT. A new head for the directorate was hired in October, 1982. The new directorate reports to the deputy commissioner.

### Assessing Efficiency

Legislation clearly gave the responsibility for evaluating transit needs and operating efficiency to the public transportation division of DHT. The JLARC report found that although the division conducted some studies, the usefulness of the information was limited because of a lack of uniform reporting. In addition, there was little information on the operating efficiency of individual systems. JLARC recommended that the division (1) develop a uniform financial and operating format, (2) conduct efficiency surveys of local transit systems, and (3) prepare a biennial report on public transportation in Virginia which includes results of the efficiency studies and a state-wide assessment of public transportation needs. All of these recommendations are now being acted upon by the department.

### Financial Needs

The JLARC study reported that the most critical issue for public transportation today is meeting the cost of providing services. The 15 transit systems operating in Virginia could lose more than \$15 million annually in federal assistance. However, current State policy prohibits the use of General Funds for transit operating subsidies. In order to address the changing financial environment created by proposed shifts in federal policy, the study concluded that the General Assembly may wish to review legislative funding options through creation of a special joint subcommittee.

House Joint Resolution 34 enacted by the 1982 General Assembly called for a joint subcommittee to study the financial needs of public transit, ride sharing programs, and other mass transportation activities. The DHT public transportation division has been providing staff assistance to the subcommittee. The department has also hired a consultant to look at the financing of public transit and ride sharing programs. Information produced by this study will be provided to the subcommittee, which plans to report its findings and recommendations to the 1984 General Assembly. In addition, the Joint Legislative Audit and Review Commission has asked its staff to examine the equity of public transportation funding to localities.



### III. HIGHWAY FINANCING

Senate Document Number 14 focused on four principal issues: (1) the prospects for maintaining a stable and sufficient flow of highway revenues into the 1980's; (2) the need to develop a reliable and accurate method of forecasting highway revenues; (3) the necessity of improving operations in the State's truck weight enforcement program; and (4) tax equity.

The report concluded that without an infusion of new funds, Virginia's construction program would end by the mid-1980's. The analysis of trend data showed that inflation in construction and maintenance costs, the aging of Virginia's highways, and declining fuel consumption would continue to produce increasing highway needs and decreasing revenues. The report presented several legislative options for dealing with highway tax sufficiency over the next three biennia and referenced a study of tax equity to address specific taxes by vehicle class.

The financing report also noted that recent methods used to forecast highway revenues had not produced results within accepted standards of accuracy. Because accurate forecasts are a critical prerequisite to careful planning of the State's highway program, recommendations were made to strengthen forecasting practices.

Finally, the report identified several instances in which existing policies or practices resulted in effective tax exemptions to certain highway users. Key among these were the operations of Virginia's truck weight enforcement program. Analysis showed that at least \$3 million more could be produced by strictly enforcing existing statutes and eliminating undesirable practices.

#### Highway Revenues

In 1981, independent assessment of revenues and expenditures caused JLARC staff to conclude that existing highway taxes would not produce sufficient revenues to maintain a balanced maintenance and construction program past the early 1980's. Inflation in maintenance and construction costs, increasing truck traffic over the State's highways, and the aging of Virginia's roads are likely to require substantial increases in maintenance spending. Declining fuel consumption and stagnant vehicle sales are also likely to result in decreasing highway revenues.

The report provided several financing options for the General Assembly's consideration. Each option was based on a combination of: (1) efficiency savings identified in JLARC's review of DHT administra-

tion; (2) adjustments in several fees-for-service and vehicle licensing charges to cover collection costs; (3) changes in truck weight enforcement practices; (4) increases in the road tax and in weight-graduated vehicle registration charges to address tax equity concerns; and (5) increases in motor fuel taxes, by either cents-per-gallon or variable taxes.

The General Assembly's actions focused on two areas: increases in all fees-for-services, and increases in two key user charges: the weight-graduated vehicle registration schedule and motor fuel taxes.

*Fee-For-Service Increases.* A comparison of fee revenues to service costs showed that several services provided by the Division of Motor Vehicles and the State Corporation Commission were not being covered fully by existing fees. As a result, other highway taxes meant for construction and maintenance were subsidizing service costs. This subsidy was estimated to total \$6.3 million for FY 1981. The comparison showed that an additional \$18.9 million was being diverted to cover the collection costs of key highway taxes. About \$16 million of this amount was used to cover vehicle licensing costs.

In House Bill 532, the General Assembly elected to increase fees-for-service to eliminate this subsidy. The General Assembly also decided to increase vehicle licensing charges by five dollars per vehicle, to cover collection costs. A comparison of existing and revised fees is shown in Table 1.

*User Charge Increases.* The General Assembly's deliberations on increases in motor fuel taxes, vehicle licensing fees, and the road tax indicated a desire to ensure an adequate flow of highway revenue to the State, and to spread the tax burden fairly among different classes of vehicles. To this end, the General Assembly enacted a three percent excise tax on oil companies. The General Assembly also increased weight-graduated registration fees for trucks, and extended the weight registration limit to 80,000 pounds (Table 2).

*Additional Revenues Produced.* The current revenue projections for the 1982-84 biennium show that House Bill 532 will produce additional highway revenues of \$248.1 million for the biennium. About \$119.8 million will be produced in FY 1983 and \$128.4 will be produced in FY 1984.

#### Forecasting Highway Revenues

JLARC reviewed the highway revenue forecasting process in the financing report. The study found that official projections had overestimated actual revenues, resulting in revenue shortfalls for the past two years. Moreover, the official estimates did not rely on a technically sound forecasting method. JLARC recommended that the Secretary of Transportation oversee the development of a reliable and accurate forecast method, updating forecasts annually, and disseminating forecasts to members of the General Assembly.

---

Table 1

---

FEE-FOR-SERVICE INCREASES ENACTED BY HB 532

<u>Fee-For-Service</u>	<u>Previous Charge</u>	<u>New Charge</u>	<u>Year of Last Revision</u>
Title Registration			
- Original	\$ 7.00	\$10.00	1974
- Transfer	7.00	10.00	1974
- Repossession	7.00	10.00	1974
- Duplicate	2.00	5.00	Prior to 1950
- Supplemental Lien	5.00	6.00	1965
- Salvage	5.00	6.00	1980
Reinstatement	\$25.00	\$30.00	1973
Dealer Licenses			
- Dealer	\$50.00	\$60.00	1977
- Salesman	5.00	6.00	1977
- Supplemental location	15.00	20.00	1977
Bad Check Fee	\$10.00/10%	\$25.00/10%	1976
Driver Improvement Clinic	\$20.00	\$30.00	1975
<u>Fee-For-Service</u>	<u>Current Charge</u>	<u>New Charge</u>	<u>Year of Last Revision</u>
SCC Motor Carrier Permits	\$ 4.00	\$10.00	1981

---

During the past few months, steps have been taken in response to the recommendation. The Secretary of Transportation has assigned the responsibility for revenue forecasting to the Division of Motor Vehicles (DMV). DMV has hired a senior economist to forecast its revenue collections. In addition, the DMV economist coordinates the forecasts for the entire Highway and Construction Fund by compiling the DHT revenue forecasts for federal funds and fees and the SCC revenue forecast for the Road Tax. Efforts to develop a technically sound method for forecasting revenues and to initiate an appropriate reporting format are under way.

#### Truck Weight Regulation

DHT and the Virginia State Police have been actively involved in truck weight enforcement for 44 years. Today, the program is operated through 14 permanent weighing stations and nine mobile weighing units. DHT is responsible for operation of all scales and the State Police are responsible for enforcement.

Table 2

## WEIGHT-GRADUATED TRUCK REGISTRATION SCHEDULE

Gross Weight (lbs)	Previous Schedule		As Enacted By HB 532	
	Private	For Rent/Hire	Private	For Rent/Hire
10,001 - 11,000	\$ 1.30	\$ 1.30	\$ 2.60	\$ 4.75
11,001 - 12,000	1.40	1.40	2.80	4.90
12,001 - 13,000	1.50	1.50	3.00	5.15
13,001 - 14,000	1.60	1.60	3.20	5.40
14,001 - 15,000	1.70	1.70	3.40	5.65
15,001 - 16,000	1.80	1.80	3.60	5.90
16,001 - 17,000	2.00	2.00	4.00	6.15
17,001 - 18,000	2.20	2.20	4.40	6.40
18,001 - 19,000	2.40	3.85	4.80	7.50
19,001 - 20,000	2.60	4.15	5.20	7.70
20,001 - 21,000	2.80	4.50	5.60	7.90
21,001 - 22,000	3.00	4.70	6.00	8.10
22,001 - 23,000	3.20	5.10	6.40	8.30
23,001 - 24,000	3.40	5.40	6.80	8.50
24,001 - 25,000	3.60	5.75	6.90	8.70
25,001 - 26,000	3.80	6.10	6.95	8.90
26,001 - 27,000	4.00	6.40	7.00	9.10
27,001 - 28,000	4.20	6.70	7.05	9.30
28,001 - 29,000	4.40	7.05	7.10	9.50
29,000 - 40,000	4.50	7.20	7.20	9.70
40,001 - 45,000	5.00	8.00	7.30	9.90
45,001 - 50,000	6.00	9.60	7.50	10.00
50,001 - 55,000	7.50	10.65	8.00	12.00
55,001 - 76,000	9.00	12.00	10.00	14.00
76,001 - 80,000	- -	- -	12.00	15.00

In the 1981 JLARC report, Highway Financing In Virginia, several weaknesses were found in the truck weight program:

- Bypassing of permanent weigh stations was a serious problem.
- Enforcement efforts were hampered by outdated mobile weighing instruments.
- Offloading was rarely used in Virginia even though it was found to be an effective deterrent to overweight operations in other states.

JLARC staff made specific recommendations addressing these concerns.



*Bypassing.* Bypassing occurs when a truck avoids a weigh station by taking an alternate route. One method of limiting bypassing is to patrol major bypass routes and either send the truck to a permanent scale or use mobile weighing equipment.

JLARC staff rode with several mobile weigh parties. One mobile unit was equipped with portable light-weight scales which were carried in the State Police car. Other mobile weigh parties used loadometer equipment, which required the use of a separate vehicle to transport. The use of light-weight portable scales would permit trucks to be weighed more quickly, and would eliminate the need for a separate vehicle and technician.

DHT has programmed the acquisition of 80 light-weight portable scales for its mobile unit operations. Once DHT has acquired and equipped all its mobile units with these scales they will have complied with the JLARC recommendation.

*Offloading.* The study found that offloading was an effective deterrent in other States when it was implemented consistently. Both Maryland and North Carolina use offloading as a deterrent to overweight violators. JLARC recommended that the State Police and DHT develop and adopt a policy to implement current statutes on offloading overweight trucks.

The department, however, feels that establishing such a policy would create a number of problems: (1) inadequate storage for cargo, (2) inadequate parking facilities, and (3) a question of responsibility for offloaded cargo.

*Organizational Changes.* The truck weight enforcement program is currently undergoing organizational changes. The staff of the Department of State Police is being expanded by the transfer of some Division of Motor Vehicle personnel into the State Police. This expansion is intended to facilitate increased patrolling of bypasses around weigh stations. However, no change is proposed for DHT's role in the program, which consists primarily of providing all weighing personnel, scheduling, and operational supervision.



#### IV. EPILOG: FUTURE FOLLOW-UP

The Department of Highways and Transportation (DHT) has made substantial headway in implementing the recommendations contained in Senate Documents 7, 8, and 14 of the 1982 legislative session. Specific actions taken by the department in putting these recommendations into effect are summarized in the DHT "status of action" statement, which is included in the Appendixes to this report.

---

*"The Department of Highways and Transportation has made substantial headway in implementing the recommendations contained in Senate Documents 7, 8, and 14 of the 1982 legislative session."*

---

Consistent with the follow-up provision of House Bill 532, JLARC will continue to monitor the progress of the department in implementing recommendations. An extensive follow-up report of department activities will be carried out during 1983. The Commission will report its findings and recommendations to the Governor and General Assembly before the 1984 legislative session.



## **V. APPENDIXES**

- Status of Action Statement of the  
Department of Highways and Transportation
- Response of the Department of Highways  
and Transportation

HAROLD C. KING, COMMISSIONER  
EUGENE M. BANE, GRUNDY, *BRISTOL DISTRICT*  
T. GEORGE VAUGHAN, JR., GALAX, *SALEM DISTRICT*  
WILLIAM R. WATKINS, SOUTH BOSTON, *LYNCHBURG DISTRICT*  
WILLIAM F. MOHR, RICHMOND, *RICHMOND DISTRICT*  
RICHARD G. BRYDGES, VIRGINIA BEACH, *SUFFOLK DISTRICT*  
H. R. HUMPHREYS, JR., WEEMS, *FREDERICKSBURG DISTRICT*  
JOSEPH M. GUIFFRE, ALEXANDRIA, *CULPEPER DISTRICT*  
ROBERT W. SMALLEY, BERRYVILLE, *STAUNTON DISTRICT*  
T. EUGENE SMITH, MCLEAN, *AT LARGE-URBAN*  
ROBERT A. QUICKE, BLACKSTONE, *AT LARGE-RURAL*



## COMMONWEALTH of VIRGINIA

### DEPARTMENT OF HIGHWAYS & TRANSPORTATION

1221 EAST BROAD STREET  
RICHMOND, 23219

LEO E. BUSSEY, III  
DEPUTY COMMISSIONER  
J. M. WRAY, JR.  
CHIEF ENGINEER  
J. T. WARREN  
DIRECTOR OF ADMINISTRATION  
OSCAR K. MABRY  
DIRECTOR OF PLANNING  
H. W. WORRALL  
DIRECTOR OF FINANCE  
JACK HODGE  
ASSISTANT CHIEF ENGINEER  
IN REPLY PLEASE REFER TO

November 5, 1982

Mr. Ray D. Pethtel, Director  
Joint Legislative Audit  
and Review Commission  
Suite 1100  
910 Capitol Street  
Richmond, Virginia 23219

NOV 5 1982

Dear Ray:

In your letter of September 29, 1982, you requested that Virginia Department of Highways and Transportation provide a "status of action" statement on those recommendations in Senate Documents 7, 8, and 14 that are specifically directed toward the Department. To assist in this effort, a list of the respective recommendations was attached.

We have completed the formulation of the "status of action" statements for each of the recommendations specified and have attached a composite of the responses for your review.

If I can be of further assistance, please advise.

Sincerely,

A handwritten signature in cursive script that reads "Harold C. King".

Harold C. King, Commissioner

Attachment

Senate Document No. 7

ORGANIZATION AND ADMINISTRATION OF THE  
DEPARTMENT OF HIGHWAYS AND TRANSPORTATION

Role of the Commission

Senate Document No. 7 - Recommendation No. 3:

*"The Highway and Transportation Commission should establish a standing committee to oversee the public transportation planning and coordinating roles assigned to that body."*

Status:

In response to this recommendation, the Commissioner established a Commission Public Transportation Committee on March 18, 1982, and charged the Committee with overseeing the public transportation planning and coordinating activities assigned to the Commission. The members of the Committee are - Mr. T. E. Smith, Chairman, Urban Member at Large; Mr. R. G. Brydges, Suffolk District Member; and Mr. W. F. Mohr, Richmond District Member. Mr. Smith has become very involved in reviewing the Department's transit-related activities and has made a number of inspection trips to transit authorities with Mr. M. D. Kidd, Public Transportation Coordinator.

Construction Needs Assessment Planning and Programming

Senate Document No. 7 - Recommendation No. 4:

*"DHT should improve its construction needs assessment process by taking the following actions:*

- a. All future needs assessments done by the Department should reflect the immediacy of the funding requirement. Projects which are not anticipated to require construction funds within the six-year planning cycle used for the Commonwealth's program budget shall be clearly identified and distinguished from projects which could be moved to the construction phase within six years."*

Status:

The statewide transportation planning process which embodies the federal urban transportation planning process, including the Department's small urban area planning and public transportation planning plus rural highway needs assessment and bridge sufficiency ratings, identifies and prioritizes transportation needs. The needs identified by this process are the basis of the annual update of the Commission's Six-Year Improvement Program.



- b. *"An analytic framework should be developed for establishing priorities among highway construction needs and presenting several levels of spending as alternatives in the biennial program budget. The analytic framework should include but not be limited to the following factors: federal aid availability, traffic volume and congestion, safety, structural deterioration, and functional limitations of the existing facility and local government endorsement."*

Status:

The Department currently employs in its highway needs assessment processes a method of prioritizing recommended improvements which considers physical characteristics of the roadway, traffic volumes, congestion, safety, and roadway function. The nine factors employed in the prioritization procedure are described as follows:

- (1) Existing Volume/Service Volume - Road capability to handle existing traffic at an acceptable level of service (measures existing level of congestion).
- (2) Future Volume/Service Volume - Road capability to handle future traffic at acceptable level of service (measures forecast level of congestion).
- (3) Geometrics - Are the horizontal and vertical alignment of the roadway acceptable regardless of traffic volumes?
- (4) Functional Classification - Greater emphasis is placed on roadways with a higher function.
- (5) Existing Vehicles Per Day - Existing traffic volume.
- (6) Future Vehicles Per Day - Forecast traffic volume.
- (7) Route Continuity - Is the proposed project a missing link on the Interstate System, the State Arterial System, or a part of a major facility, such as a bypass or two-lane segment between two four-lane segments, that needs to be completed for route continuity.
- (8) Cost/Future VMT - Cost of recommended improvement divided by future vehicle miles of travel (measures cost versus benefit).
- (9) Accident Rate - Those sections of roadway having a significant number of accidents and an accident rate greater than the statewide system average accident rate are given greater emphasis.

With the aforementioned procedures and the backlog of unfunded highway needs, the Department has the capability of developing a program or several alternative programs based upon anticipated alternative levels of funding.

NOTE: Local input into the Program is solicited through the Preallocation and Allocation Hearing Process.

Senate Document No. 7 - Recommendation No. 4:

- c. *"DHT should expedite the completion of the highway improvement program which identifies high priority spending objectives for construction during subsequent four to six-year period. The program should be completed and made available to the General Assembly for distribution and review in the 1982 Session. The program should include provisions for annually updating and adjusting the program to report on progress and fulfilling program objectives and to accommodate the General Assembly action or other changes to existing conditions."*

Status:

The Department, in 1981, developed a Six-Year Critical Improvement Program and held meetings in each of the eight construction districts with members of the General Assembly to discuss the program and funding necessary for its implementation.

Subsequent to the 1982 Session, the Department has revised the critical improvement program to reflect the anticipated revenue over the program period FY 83 through FY 88.

It is the Department's intention to annually update the Six-Year Improvement Program through the process reflected on the flow diagram shown in Appendix A.

The Six-Year Improvement Program clearly reflects priorities on a project-by-project basis within each construction district. The program is developed in accordance with projected revenues and the allocation of funds pursuant to the statute and the Appropriations Act.

The program is designed to accommodate annual updates and adjustments, and its implementation progress is closely monitored by the management of the Department and the Secretary of Transportation.

Senate Document No. 7 - Recommendation No. 4: (Continued)

- d. *"The Highway and Transportation Commission should formally review and approve the highway improvement program as well as annual updates and keep apprised of the progress made by the Department in meeting the program objectives."*

Status:

The Six-Year Improvement Program was developed in concert with members of the Highway and Transportation Commission and was approved by the Commission on July 15, 1982.

The progress in the implementation of the program is being monitored by the Department and will be reported to the members of the Commission in early 1983.

Senate Document No. 7 - Recommendation No. 5:

*"DHT should re-evaluate its policies regarding the workload standards used in budgeting for routine maintenance. Either closer adherence to the standards by field managers should be required, or the value of maintaining and updating the standards should be reconsidered."*

Status:

The workload standards are reviewed each year and appropriate adjustments made. Since the standards are an average of the amount of work and effort required over a period of years to obtain the desired level of maintenance, it is only natural that variations in a single year's data will be found. Over a period of years, however, the average amount of work and productivity is in agreement with the standard.

The Department is not considering abandoning the system at this time since it provides a good budgeting tool and control at the field level.

Senate Document No. 7 - Recommendation No. 6:

*"DHT staff should develop an annual maintenance program to provide the necessary level of accountability for spending. The program should identify a 'minimum funding level necessary for maintenance which constitutes a program to protect the highway investment and provide for reasonable levels of safety and comfort to the travelling public.' The plan should also identify 'other spending levels above the minimum program which are recommended to provide for higher levels of comfort, convenience, and other maintenance enhancements.' The intent of this recommendation is to provide the General Assembly with alternatives for funding highway maintenance and the implications of each spending level."*

*"The Highway and Transportation Commission should review and approve the maintenance program and provide opportunity for review by and consultation with appropriate legislative committees. A draft version of the program should be developed by January 1983 and a status report provided to the General Assembly. The approved program should then be available for incorporation into the budget development cycle for the 1984-86 biennium."*

Status:

The Department is currently developing a Maintenance Program which identifies alternative levels of funding and anticipates meeting the deadline specified by the General Assembly.

Senate Document No. 7 - Recommendation No. 7:

*"DHT should place a high priority on full implementation of a pavement management system for Virginia. The system should be able to provide analytically based data on the pavement condition on all of the highway systems by using appropriate sampling procedures. The preliminary information should be incorporated in the maintenance program described in Recommendation 6 for the 1983 status report to the General Assembly. The 1982-84 Appropriations Act should mandate that a complete assessment of highway condition be finished by the start of the 1984-86 biennial budget preparation cycle."*

Status:

The Department is currently developing a Pavement Management System. On the Interstate System, the acquisition of field data is complete and applicable computer programs are being developed. The Interstate System program should be operational by January 1, 1983. Field data is also being acquired for the Primary System; this program should be operational by July 1, 1983. Acquisition of field data for the Secondary System will begin in the spring of 1983 and extend to the fall of 1983. The Secondary System programs should be operational by March 1, 1984.

Senate Document No. 7 - Recommendation No. 8:

*"Greater emphasis should be placed on the bridge condition rating system by the Bridge Division. Data from the rating system should be used systematically by maintenance staff to set statewide priorities for bridge maintenance replacement."*

Status:

In order to re-emphasize the importance of uniformity and continuity in the Bridge condition ratings, the Department's Bridge Division developed and held a training program for all personnel associated with the Bridge Safety Inspection Program. The training program was held on March 30, 1982, and was attended by the District Engineer for Maintenance, the District Bridge Engineer, and all safety inspectors.

As soon as time has transpired to allow sufficient data to be collected, utilizing this more uniform rating system, the resulting reports will be used to prioritize the Department's maintenance and reconstruction programs.

Senate Document No. 7 - Recommendation No. 9:

*"The Department of Planning and Budget and the Department of Accounts should take immediate steps to establish separate control accounts for highway construction and maintenance in the 'highway work in progress' fund. Appropriation and allotment increases made to the work in progress fund should identify the amount of increase for maintenance and construction separately, and the specific legislative authorization for the increase."*

Status:

Procedures have been developed and implemented to separate highway work in progress between construction and maintenance. Current procedures will, in all probability, eliminate the necessity for any specific appropriations and/or allocations to support any construction in progress amounts in the future.

Senate Document No. 7 - Recommendation No. 10:

*"The General Assembly may wish to clarify its intent as to whether expenditures should be consistent with the allocation of construction funds under Code of Virginia, Section 33.1-23.1 and Section 33.1-23.4. Definition of the term 'allocation' to mean intent to expend allocated funds within a limited reasonable time (for example, consistent with DHT's four-year program) would provide the basis for greater legislative direction and establish a clear basis for accountability in the distribution of construction funds."*

Status:

The 1982 General Assembly enacted House Bill 565 which specifies -

"the term allocation shall mean a commitment to expend funds available for construction during each fiscal year. Funds which cannot be expended as allocated within each fiscal year shall be identified as part of future commitments and the reason for failure to spend allocations shall be specifically included in the annual construction program."

It is the Department's position that the Six-Year Improvement Program responds both to Recommendation 10 of Senate Document 7 and House Bill 565 to the extent that it specifically reflects project schedules, previous allocations, proposed future allocations, and the description of work to be undertaken during a given fiscal year.

Quarterly progress reports are prepared and forwarded to the Secretary of Transportation on the Six-Year Improvement Program. The Program is updated annually to extend the horizon year consistent with the state budget cycle and to reflect changes in the anticipated revenue and project schedules.

Senate Document No. 7 - Recommendation No. 11:

*"For purposes of addressing current imbalances between allocations and expenditures among highway systems, the General Assembly may wish to consider one of the following actions."*

(Note: Of the three proposed actions, the General Assembly chose the action shown below.)

- a. *"require DHT to prepare a plan for General Assembly consideration to address and amortize the existing imbalances within the statutory provisions."*

Status:

Paragraph 649.1 of the 1982 Appropriations Act requires -

"prior to January 1, 1983, that the Department of Highways and Transportation will develop and provide to the Senate Committee on Transportation and Finance and the House Committees on Roads and Internal Navigation, Appropriations and Finance a plan for addressing existing imbalances between allocations made under Section 33.1-23.1, Code of Virginia, and expenditures among highway systems."

Senate Document No. 7 - Recommendation No. 11: (Continued)

Status (Continued)

The Department has prepared the plan required by Paragraph 649.1 for consideration by the 1983 Session of the General Assembly.

Senate Document No. 7 - Recommendation No. 12:

*"The DHT budget division should place a priority on bringing the program budget into compliance with established format and content requirement. Both DHT management and the budget division should take steps to familiarize managers with the budget process."*

Status:

This portion of this recommendation relative to DHT placing a priority on bringing the program budget into compliance with established format and content requirement is in error. Correspondence dated November 23, 1981 and December 17, 1981 between Mr. Ray T. Sorrell, Deputy Director, Department of Planning and Budget and Mr. Ray Pethel, Director of JLARC, documents this fact.

Relative to DHT familiarizing managers with the budget process, the following actions have occurred:

- (1) On April 7, 1982, the DHT Budget Officer appeared before the Executive Committee to review the overall budgeting process as well as the 1982-83 budget.
- (2) On April 15, 1982, at a working session of the Highway and Transportation Commission, the DHT Budget Officer reviewed in detail the 1982-83 budget as well as an overview of the budget process.
- (3) On May 5, 1982, the DHT Budget Officer held a workshop with all Division Heads to review with them the overall budgeting process as well as the 1982-83 budget.
- (4) On May 11, 1982, the DHT Budget Officer appeared at the District Engineers' meeting and reviewed with them the budgeting process and the 1982-83 budget.
- (5) To further provide all managers of the DHT greater familiarization with the budget, a formal budget document was prepared and disseminated throughout the Department for Fiscal Year 1982-83. In addition, a formalized budget supplement was developed and forwarded to all managers which provided details concerning various budget elements which, hopefully, increased managerial awareness and familiarization with the budgetary process.

In addition to the above actions, numerous managers were involved in the development of the 1982-84 Program Proposal; and assignments have already been made for managers who will be involved in the 1984-86 Program Proposal. These involvements also lead to increased familiarization with the budget processes.

Senate Document No. 7 - Recommendation No. 13:

*"DHT should improve control and coordination over capital outlay by consolidating the capital budget function with the preparation of the operating budget. The capital budget responsibility should be assigned to the budget division with the existing capital outlay committee assigned an advisory role.*

*"The Department should fully comply with the capital outlay policies and procedures of the Department of Planning and Budget and the Division of Engineering and Buildings. All construction and renovation projects affecting office space, district offices, residencies, area headquarters, and correctional facilities should come under the State's capital outlay policy and procedures. Acquisition of land for such purposes should be reviewed by DEB. If the department wishes to be exempted, it should submit appropriate amendments for consideration."*

Status:

The Department is in total compliance with the policies and procedures of the Department of Planning and Budget and the Division of Engineering and Buildings with regard to the capital outlay process. For the 1982-84 biennium, all capital outlay projects were included in the capital portion of the Appropriations Act. For all old capital outlay projects which were on the books of the Department on June 30, 1982, authorization has been received from the Director of the Department of Planning and Budget to carry these projects forward in the capital portion of the Appropriations Act. The Budget Division has been working in conjunction with the Purchasing Division on the necessary forms preparation and approval processes from the Division of Engineering and the Department of Planning and Budget. The Budget Division, however, is not involved in actual capital outlay project selection or execution.

## Controls

Senate Document No. 7 - Recommendation No. 14:

*"The department should clarify the role of the maintenance division in controlling spending for ordinary maintenance at the residency level. Control would be improved by more systematic monitoring of expenditures against budgets with exception reporting of overexpenditures provided to field staff and the director of operations. Separating snow removal spending from other maintenance expenditures for monitoring purposes should be considered."*

### Status:

At the present time, the Maintenance Division monitors total expenditures by the Residencies on a semi-monthly basis and, in addition, monitors expenditures by activities on a monthly basis. Unusual discrepancies are called to the attention of the District Engineer or his Assistant by phone, memorandum, or a personal visit. Specific discrepancies continue to be monitored until the problem is corrected and, where appropriate, a written report is required.

The role of the Maintenance Division, District Office, and Residency Office in the control of expenditures is understood by all parties.

Senate Document No. 7 - Recommendation No. 15:

*"DHT should consider conducting a review of the expendable equipment inventory to identify means of monitoring the use of such equipment."*

### Status:

VDHT does not believe that any type of hourly usage record of expendable (non-rental) equipment should be maintained due to the large variability of usage experienced. However, as indicated below, VDHT does track the amount of non-rental equipment in order to safeguard its investment and to monitor expenditures for purchases.

VDHT has recently completed an inventory listing by district and by residency for use in each residency and district office. With this information, the district should be in a position to assure that a residency or district section does not have more expendable (non-rental) equipment than is required to perform the work and to insure that proper security of inventory is maintained.



Senate Document No. 7 - Recommendation No. 16:

*"DHT should establish desirable inventory levels for all classes of general supplies. These desired levels should be incorporated in the automated inventory information system and used as a guide by purchasing agents and field stock clerks in determining when to requisition and purchase additional stock. DHT should eliminate current overstocking by delaying additional purchasing until appropriate levels are reached."*

Status:

VDHT has established a desirable inventory level, and field engineers have been advised accordingly. Instructional Memorandum P-82-51 dated July 23, 1982, documents this effort.

Senate Document No. 7 - Recommendation No. 17:

*"DHT should review its policies governing local purchases. Policies on dollar limits and competitive pricing should either be enforced or amended."*

Status:

VDHT has complied with this recommendation to review local purchases. VDHT buyers are reviewing all local purchases to determine if they are made in accordance with policy and also determine whether or not items are bought frequently enough to justify being placed in stock.

Senate Document No. 7 - Recommendation No. 18:

*"Purchasing agents should review local purchase invoices on a sample basis to determine compliance with DHT policies and to determine whether particular items are purchased frequently enough to justify central purchasing. The sample should be statistically reliable but need not involve an extensive commitment of time on the part of central office staff."*

Status:

VDHT has also accepted this recommendation. The response relative to status is the same as that presented for Recommendation No. 17.

Senate Document No. 7 - Recommendation No. 19:

*"The purchasing division should conduct audits of every stockroom annually. When samples are used, a statistically reliable method of selecting the items for audit should be used. The sample should be weighted to account for the relative value of the class of stock to be audited.*

*"The audit reporting format should be revised to include more specific information on the size and dollar value of errors. Greater attention should also be given to reporting use of improper procedures or failures to comply with policies. The audit report should be provided to district and resident engineers in a more timely fashion.*

*"DHT should consider simplifying quarterly inventory corrections by removing the approval requirement before a correction is processed. Supervisory review should focus on the corrected inventory reports and on audit reports."*

Status:

VDHT's Purchasing Division has developed a statistically reliable methodology for selecting items for audit. The Central Warehouse and District stockrooms will be audited on an annual basis. The residency locations will be audited on a biannual basis. District Engineers, through the district accountant, will continue to be responsible for auditing the residency accounts on a quarterly basis. The Commissioner's letter of August 19, 1981, to Mr. P. A. Leone documents this effort.

Relative to the second paragraph of this recommendation, VDHT has revised the reporting format and is currently in compliance.

The recommendation in the third paragraph has been accepted by VDHT, and the changes were put into effect November 30, 1981.

Senate Document No. 7 - Recommendation No. 20:

*"The DHT purchasing division should develop a training program for stockroom employees. Particular attention should be given to procedures for conducting quarterly inventories and correcting errors in the inventory. The importance of retaining proper documentation should be stressed."*

Status:

VDHT is currently developing a training program for stockroom employees. This information will be made available to the district training officers and resident engineers. Auditors from the Purchasing Division will be fully versed in the training program and will review its conformity when making field audits. VDHT anticipates having this training program completed by January 1, 1983.

Senate Document No. 7 - Recommendation No. 21:

*"The purchasing division should require that all salvage parts be inventoried by the stock clerk and inventory records maintained. Salvage parts should be kept in controlled areas consistent with procedures for other parts and supplies."*

Status:

VDHT has accepted the recommendation that major salvage parts should be identified and recorded. The following instructions were issued to the District Engineers on November 30, 1981.

*"Good usable repair parts should be identified and made available whenever the need exists. We are suggesting that all salvage parts be identified and tagged showing the description of the item, as well as the type of equipment on which it will work. This information should be recorded and made available to the District Equipment Superintendents. He should maintain this information on file so if the part is needed anywhere in the district, he can arrange for the transfer. The salvage parts should be stored in a secure area separate from the purchasing inventory, or it should be in bins properly identified as not being in stock."*

Senate Document No. 7 - Recommendation No. 22:

*"Stockrooms should continue to be considered areas of controlled access. But DHT should improve compliance with limits on access. A bill of lading should be used to control shipment of parts and supplies from district to residency and area headquarters."*

Status:

Guidelines have been developed and issued to the districts concerning the security of stockrooms. Purchasing Division Instructional Memorandum P-82-30 dated July 1, 1982 documents this effort.

Senate Document No. 7 - Recommendation No. 23:

*"Salvaged road stock should be inventoried and records maintained on the amount and location of salvaged materials."*

Status:

The status of VDHT's efforts relative to this recommendation is the same as that presented in Recommendation No. 21 in the instructions to District Engineers dated November 30, 1981.

Senate Document No. 7 - Recommendation No. 24:

*"The equipment division should post information on procedures for issuing gasoline at self-service pumps. Pumps should be locked whenever feasible in the absence of DHT personnel. All storage tanks should be equipped with locks."*

Status:

VDHT's Equipment Division has forwarded to the Districts procedures for issuing gas at self-service pumps and locking fuel pumps and tanks.

Senate Document No. 7 - Recommendation No. 25:

*"Procurement procedures used by the purchasing division should be strengthened to reduce the possibility of fraudulent activity and to conform to accepted purchasing procedures."*

- a. *"The procurement function should be divided between two separate sections within the purchasing division. Buyers should not send, receive, open, or tabulate bids."*

Status:

The procurement function will be divided into separate sections effective January 1, 1983.

Senate Document No. 7 - Recommendation No. 25

- b. *"All vendors should register with the department before submitting bids on any contract. Disclosure of corporate affiliations should be required and vendors should update the registration as necessary."*

Status:

VDHT disagrees with this recommendation. Present policy does not require Virginia companies doing business with the Department to be registered or pre-qualified. Out-of-state companies are required to furnish a Bidder's Mailing List Application. Acceptance of this recommendation would contribute to a reduction in the amount of business that is done with minorities and small businesses.

Senate Document No. 7 - Recommendation No. 25: (Continued)

- c. *"All bidders should be required to sign a statement that the bid is being made without any collusion."*

Status:

VDHT management is currently considering this recommendation.

Senate Document No. 7 - Recommendation No. 25:

- d. *"The procedure for awarding contracts when bids are tied should be revised. The department should consider referring identical bids to the Attorney General for review, as does the Division of Purchase and Supply."*

Status:

VDHT has changed the procedure for awarding contracts. Copies of tie bids are being forwarded to the Attorney General's office.

Senate Document No. 7 - Recommendation No. 26:

*"The department should review its preventive maintenance policies and guidelines. A clear policy on preventive maintenance should be developed and communicated to the residencies, and the equipment division should ensure that it is consistently carried out. Weekly shutdowns for preventive maintenance should be discontinued."*

Status:

VDHT's Equipment Division has responded to this recommendation relative to preventive maintenance policies and guidelines by issuing Instructional Memorandum ED-82-1 dated July 9, 1982.

Senate Document No. 7 - Recommendation No. 27:

*"DHT should improve on the existing equipment information system by developing lifetime cost profiles for each age group of all major equipment classes. These profiles should be used as budget and management guide. DHT should also consider a separate budget activity for equipment maintenance."*

Status:

The Department presently uses manually computed exception reporting based on the annual operating statements and life to date cost data. When this system is computerized, the annual operating cost report for fuel, labor, and parts and supplies will reduce cost per hour by Districts, by Division, year, model, and geographic location to determine the exception units or categories and provides information for corrective action and effective management decisions.

The use of life to date cost data provides a cost profile of equipment classes. This evaluation of equipment maintenance and operations is of primary importance during the last several years of equipment life. Any major repair cost will continue to receive management review at the District and Central Office as applicable when there is any question.

The Department in past years has prepared an estimate of expenditures by Districts covering all Equipment Division decision operations. Maintenance of rental equipment is charged to a maintenance activity code. The Division's annual expenditures will fluctuate based on equipment usage and repairs to rental and nonrental equipment and workload placed on the Department by other agencies to provide services.

The Department believes that exception reporting is preferable to lifetime cost profiles for each major piece of equipment as it accomplishes the same results with less effort.

Senate Document No. 7 - Recommendation No. 28:

*"The right-of-way division should complete its residue parcel listing and place a higher priority on disposing of large or valuable parcels. Random inspections of residue parcels should be conducted by district right-of-way staff to guard against improper use of DHT property. State agencies located near residue parcels should be notified and provided an opportunity to acquire such property."*

Status:

VDHT's Right of Way Division is directing its efforts towards resolution of the issues associated with this recommendation.

Progress has been attained in areas concerning the identification and disposal of surplus land, residue parcel listing, and the exchange of properties with the Department of Corrections.

Senate Document No. 7 - Recommendation No. 29:

*"DHT should specifically monitor construction engineering. A summary report should be prepared which identifies projects that have construction engineering costs approaching ten percent of the project's value. Based on this information, the construction division should reassess staffing for these projects in order to minimize additional construction engineering costs."*

Status:

VDHT's Construction Division prepares a precise report monthly on construction engineering costs on individual projects under construction. This report is distributed to the Districts as well as monitored by the Division. Construction engineering costs which appears to be essentially out of line are reviewed for the purpose of defining the nature of the extensive overrun. Further, a composite average cost is generated each month, based on this information, showing the average construction costs on all projects (total construction engineering costs experienced versus project construction payout). This is developed on a districtwide basis.

The practicality of reassigning inspectors to hold to a 10 percent level is unrealistic since the construction engineering on a project is inversely proportional to the size of a project. Therefore, it is perfectly normal to experience construction engineering costs on a project that is in excess of or less than 10 percent.

Senate Document No. 7 - Recommendation No. 30:

*"Current dollar limits for approval of work orders by the construction engineer and chief engineer should be retained."*

Status:

VDHT has increased the District's authority to approve work orders from \$25,000 to \$50,000. The process of authority of the Central Office and of upper management remains the same.

## Information Processing

### Senate Document No. 7 - Recommendation No. 31:

*"Steps should be taken to review and modernize DHT's present data processing system with the objective of providing the department's managers with information that is accurate, up-to-date, and meaningful. The Department of Management Analysis and Systems Development should conduct a comprehensive assessment of DHT data processing, looking specifically at information needs, timing of reports, data accuracy, level of detail in reports, and improved use of exception reports. Such assessments should be conducted every two to three years."*

#### Status:

VDHT, in cooperation with MASD, has selected a consultant to evaluate the existing data processing environment and to develop a comprehensive Information Systems Plan for meeting the needs of VDHT. The contractual agreement will specifically address management and administrative information needs and appears to be in direct compliance with this recommendation.

### Senate Document No. 7 - Recommendation No. 32:

*"DHT should explore with MASD the feasibility of a data base management system for organizing its data files and computer programs. A staff position of data base manager should be considered in order to facilitate the integration of the department's computer systems and program. Every effort should be used to recruit a person who is educated and trained in the computer sciences."*

#### Status:

For some time, VDHT has been aware of the data base management concept and the potential benefit that could be derived from its use. In-house small scale experimentation with the concept has proven quite successful. In the past, however, VDHT has not had the necessary hardware/software support at its Central Office location to develop a major application or convert existing application to data base. Data base training has been initiated for VDHT systems development staff.

On October 16, 1982, VDHT attained access to the Computer Center at 2300 West Broad Street. It is also anticipated that the Information System Plan to be developed, as noted in Recommendation 31, by a consultant, will also have influence in VDHT's migration into the data base management area. The need for a data base manager is recognized by VDHT. The issue of this individual's organization placement will be a part of the Information Systems Plan. This individual will be selected in FY 1982-83.

## Organization Structure and Communication

Senate Document No. 7 - Recommendation No. 33:

*"The existing central office structure should be revised in the following ways to provide an improved framework for more efficient and effective management.*

- a. *"Establish a deputy commissioner position distinct from the chief engineer position to oversee policy research, planning, programming, budgeting, and administrative functions. The chief engineer should oversee operations and engineering, including district and residency operations. This will require a change in statutes."*

### Status:

House Bill 978 directed the Department to create separate positions of Deputy Commissioner and Chief Engineer. Effective July 1, 1982, Mr. Leo E. Busser, III was appointed Deputy Commissioner to oversee planning, programming, fiscal/budgeting, public transportation, and to act in all matters for the Commissioner in his absence. Mr. J. M. Wray, Jr. was appointed Chief Engineer to oversee such functions as operations and engineering, along with Districts and Residencies.

Senate Document No. 7 - Recommendation No. 33:

- b. *"Create a policy research and statistics team in the management services division to conduct policy studies at the request of the commissioner and deputy commissioner. The divisions' responsibilities should also include value engineering, methods improvement, and engineering research."*

### Status:

The Management Review and Audit Division (formerly Management Services) has recently acquired two Management Engineers for policy analysis and statistics work. This addition will provide policy research and statistical analysis as required by the Commissioner and Deputy Commissioner. The Department does not agree with the concept of developing a team solely for this purpose.

Emphasis on value engineering and methods improvement will be increased. Engineering Research, however, is now properly delegated to the Research Council at Charlottesville.



Senate Document No. 7 - Recommendation No. 33: (Continued)

- c. *"Establish an internal audit unit which reports to the highway commissioner. All financial and internal audit-related reports should be transmitted to the Highway and Transportation Commission. The commission should actively participate in selecting topics and endorsing recommendations."*

Status:

In response to JLARC recommendation, the Department requested the State Internal Auditor to perform a survey of VDHT internal auditing. This survey was completed August 31, 1982, and the Department is now in the process of implementing the resulting recommendations. Specifically, the Department will establish an Internal Audit Division on or before January 1, 1983, reporting administratively to the Director of Administration and functionally to the Internal Audit Committee of the Highway and Transportation Commission.

The Internal Audit Division's reports will be transmitted to the Highway Commissioner, the Highway and Transportation Commission, and its Internal Audit Committee. The Internal Audit Committee's authority has included, and will continue to include, selecting topics and endorsing recommendations.

Senate Document No. 7 - Recommendation No. 33: (Continued)

- d. *"Clarify the reporting relationship between the rail division and the Secretary of Transportation. Rail policy matters should be reviewed by the secretary prior to department review. In addition, expansion of the division's scope of activities should be considered."*

Status:

The reporting relationship between the Rail Transportation Division and the Secretary of Transportation has been clarified. At the direction of the Secretary, this Division will no longer report to him on rail policy matters. This action, however, conflicts with this Recommendation in that rail policy matters should be reviewed by the Secretary prior to Department review. However, consistency within the Department and among Divisions is achieved.

The Rail Transportation Division's scope of activities has been expanded by virtue of the recent assignment of the rail/highway grade crossing program (formerly in the Right of Way Division).

Senate Document No. 7 - Recommendation No. 33: (Continued)

- e. *"Change the reporting relationship of the environmental quality division to the director of engineering to facilitate the coordination of the preconstruction process."*

Status:

The position of Director of Engineering has been reclassified and now known as the Assistant Chief Engineer. The Environmental Quality Division's reporting relationship has also been changed. This Division now reports to the Assistant Chief Engineer. These changes were implemented July 1, 1982 and enables the Department to be in compliance with this recommendation.

Senate Document No. 7 - Recommendation No. 33: (Continued)

- f. *"Consolidate the programming and scheduling, secondary roads, and urban divisions into one division because of the decreasing workload of the three divisions. Staff reductions could be realized."*

Status:

As a result of this recommendation, the Department has eliminated the position of the Director of Program Management and transferred the reporting responsibilities of the Programming and Scheduling, Secondary Roads, and Urban Divisions to the Director of Planning.

The functions of these divisions have been decentralized to the extent possible; and commensurate staff reductions have been made in the three divisions. Currently, the Programming and Scheduling Division has twenty-two personnel, with the Urban and Secondary Roads Divisions having eight and seven, respectively.

The decreasing workload identified by JLARC as the basis for this recommendation for the merger of the divisions has been altered by the gas tax increase granted by the 1982 session of the General Assembly and the very real prospect that additional Federal revenue will become available. While the functions of the divisions are not entirely programmatic, additional revenue will have a significant impact upon the workload.

It is further pertinent that the Urban and Secondary Roads Divisions are recognized by the municipalities and counties as advocates of these respective programs. Any reduction of the status of the divisions within the Department would be opposed by their respective constituencies.

Finally, many of the management strategies employed to control project expenditures and insure program adherence have fallen to the three divisions in question. In this regard, division status is essential to their effectiveness in dealing within and outside of the Department.

It is for these reasons that the Department cannot support the merger of the three divisions.

Senate Document No. 7 - Recommendation No. 33: (Continued)

- g. *"Change the reporting relationship of the public relations division to the director of administration."*

Status:

Effective July 1, 1982, the former Public Relations Division was renamed as part of a number of organizational changes directed by the Commissioner. The division is currently known as the Information Services Division and reports directly to the Commissioner.

Senate Document No. 7 - Recommendation No. 34:

*"The organizational relationship of the public transportation division should be reconsidered. A directorate for public transportation could be established under the new deputy commissioner as well as a commission subcommittee on public transportation."*

Status:

House Bill No. 364 provided for a Directorate of Public Transportation in VDHT. Effective October 16, 1982, this position was filled by Mrs. Sally H. Cooper. The reporting relationship of the Public Transportation Division is to this new Director.

Senate Document No. 7 - Recommendation No. 35:

*"Before creating a ninth district, the department should review boundaries of the existing eight districts and make necessary adjustments. Adjustments should be made to reduce workload disparity and to achieve operating efficiencies through consolidation of facilities. A separate Northern Virginia construction district should be considered. This should be accomplished by realigning the eight existing districts without adding a ninth district."*

Status:

Senate Joint Resolution No. 46 mandated the VDHT to examine the number and alignment of the construction districts to better serve the Virginia Highway and Transportation needs.

In order to comply with SJR No. 46 and this Recommendation, a study was initiated to address the above noted issues. This study was completed in October 1982.

Senate Document No. 7 - Recommendation No. 36:

*"The maintenance division should thoroughly assess the need for existing area headquarters. Criteria such as workload and travel time should be consistently applied during the review. Priority should be placed on consolidating areas and on eliminating timekeeper positions."*

Status:

VDHT's Maintenance Division has completed a study of "Maintenance Areas". This study was submitted to the Chief Engineer; and, as a result, six areas were designated to be combined with other areas. In Dickenson County, the areas have been reduced from three to two. In other locations, the reductions will be made through attrition of personnel.

Senate Document No. 7 - Recommendation No. 37:

*"With the projected increases in maintenance spending, central office control over maintenance activities should be strengthened. The monitoring and controlling roles of the equipment and maintenance divisions should be clarified so they can effectively carry out these roles."*

Status:

The maintenance function is a decentralized operation which the Department believes is proper. The current level of control by the Maintenance and Equipment Divisions is adequate considering our policy of decentralization.

At the present time, the Maintenance Division monitors total expenditures by the Residencies semi-monthly and, in addition, monitors expenditures by activities monthly. Unusual discrepancies are brought to the attention of the District Engineer. Specific discrepancies continue to be monitored until the problem is corrected. The monitoring process may entail field visits by the Maintenance Division and/or written reports by the District and Resident Engineers.

The Equipment Division monitors monthly reports on equipment usage, breakdowns, repair costs, etc., and follows a similar procedure to that followed by the Maintenance Division in correcting problems.

Senate Document No. 7 - Recommendation No. 38:

*"Although the dual reporting structure is viable for district preconstruction sections, the roles and responsibilities of the central office division and the district should be better defined. Procedures for resolving conflict between division and district staff should be developed, and responsibility for ensuring compliance with design standards on minimum- and no-plan projects should be specified."*

Status:

The Assistant Chief Engineer, in collaboration with the Management Review and Audit Division, Division Administrators, and District Engineers, is currently studying the preconstruction divisions to determine where the functions should be performed - field or central office. The responsibilities of the Division Administrators and District Engineers, and the accountability of each, will be identified in areas where a duality now exists.

Senate Document No. 7 - Recommendation No. 39:

*"While the authority currently exercised by resident engineers is adequate, job descriptions for resident engineers should specify their duties and decision-making authority. Resident engineers should be provided with copies of their job description and trained in the scope of their authority."*

Status:

VDHT considers the current job description of a Resident Engineer adequate. Any further clarification of the duties and decision-making authority of Resident Engineers will be addressed as part of the Chief Engineer's normal on-going review of field operations.

Senate Document No. 7 - Recommendation No. 40:

*"Staff meetings to disseminate information should be held before the public announcement of major department actions. District staff meetings should provide a primary channel for communicating between central office and residencies. District engineers should attend the monthly meetings of the Highway and Transportation Commission and meet subsequently with their staffs and resident engineers. In addition, department-wide meetings should be held at least semi-annually."*

Status:

Management recognizes the need to provide staff with information relative to major actions prior to public announcement. This may be accomplished through staff meetings or by telephone or through computer terminals, whichever is the most appropriate. The Department does not agree that District Engineers should attend each monthly meeting of the Highway and Transportation Commission. Both District and Resident Engineers, as well as Division Administrators, are made aware of the transactions of the Commission through the published minutes.

Historically, Departmentwide meetings have been held on a semi-annual basis. Under the current economic constraints, the Department believes that large meetings should be restricted to those with an identified positive benefit which will not only be administratively effective but cost-effective as well.

Senate Document No. 7 - Recommendation No. 41:

*"Representation of resident engineers and of field staff from regions outside the Richmond area on committees should be increased. For example, the departmental committees on resident engineer selection and equipment should include field staff."*

Status:

The Department basically agrees with this recommendation. For example, the Resident Engineer selection committee now has, as one of its members, a District Engineer. Also, an Equipment Committee created to study equipment utilization standards included one District Engineer and two Resident Engineers.

Staffing

Senate Document No. 7 - Recommendation No. 42:

*"Guidelines for identifying surplus positions should be developed. Each division should identify potentially surplus positions and their impact on workload. A series of options for further staff reductions should then be developed for each division."*

Status:

The Department has created a Manpower Advisory Group charged with the responsibility of developing a Manpower Planning System. Working with the divisions and districts, this group has designed a manpower planning system which will be computerized. It is anticipated that the System will be operational to the extent that it will include 80% of the Department's personnel by July 1983. The remaining 20% will be included as soon as possible. The Department agrees that an on-going manpower/human resource group is necessary and that the development of the Manpower Planning System will contribute to the effective identification of surplus positions and manpower requirements.

Senate Document No. 7 - Recommendation No. 43:

*"Because it is important to retain qualified personnel within funding constraints, the department should consider alternatives to full-time employment of surplus staff. Placing surplus staff on a shorter work week or using temporary layoffs should be considered."*

Status:

The status presented in Recommendation No. 42 is also applicable to this recommendation.

Senate Document No. 7 - Recommendation No. 44:

*"A department-wide manpower planning system should be established. All operational units should be required to participate in the system. The responsibility for operating the system should be assigned to the personnel division."*

Status:

The status presented in Recommendation No. 42 is also applicable to this recommendation.

Senate Document No. 7 - Recommendation No. 45:

*"The training section and the district trainers should survey the organization to determine priority areas where skills need to be improved. An appropriate skills program should then be developed."*

Status:

The Department has determined that skills training is the most needed in the equipment operator classification. This is an area of high turnover and includes approximately 4,000 employees. Survey forms, which address 52 skill areas are now being completed by the Department's field forces. The information resulting from this survey will provide an equipment operator skills inventory, which will identify training needs and lead to a training program to address such needs. When this is completed, a similar survey for foremen will be initiated.

Four other surveys, covering administrative, technical knowledge, and technical skills have been conducted since the subject JLARC report was published. The results have been used to identify and prioritize needs, and the Department has initiated some of the required training. Efforts in this area will continue.

Senate Document No. 7 - Recommendation No. 46:

*"All DHT managers should be required to participate in management training on a regular basis."*

Status:

Management training was conducted in July 1982 at Natural Bridge. All District Engineers and Division Administrators were required to attend. The Department anticipates that such training will be conducted periodically in the future.

Senate Document No. 7 - Recommendation No. 47:

*"DHT and the Department of Corrections should restructure the crews of inmates and agency employees with the goal of reducing costs. For example, one truck driver position on each crew could be replaced by a DHT foreman. Any alternative requiring additional DOC guards may require additional funding."*

Status:

Where possible, the Department has eliminated the truck drivers with convict crews. This is not always feasible, however, since the truck will, at times, be an integral part of the work operation and the operator will be needed.

Senate Document No. 7 - Recommendation No. 50:

*"Better training should be provided to DHT employees who supervise or accompany inmates. A modified version of the training course provided by DOC to new guards should be considered for the DHT employees."*

Status:

The Department of Corrections has cooperated with VDHT through the provision of instructions, development of a 30-minute documentation video tape, and conducting weapons familiarization and live firing on local firing ranges. The instructional materials were jointly reviewed and approved by representatives from both Departments before presentation to highway employees.

To date, five Districts have completed the training program consisting of one day of classroom instruction in Road Gang Supervision and one day of live firing. The remaining Districts are approximately 50% complete and expect to be finished before December 1982.

Conflict of Interest

Senate Document No. 7 - Recommendation No. 52:

*"To assist voluntary compliance with Virginia's Conflict of Interest Act, financial disclosure forms should be sent annually to all members of boards and commissions identified in Section 2.1-20.4 by the Secretary of the Commonwealth. The secretary maintains names and addresses of all appointees to these bodies. New appointees should be sent an informational packet on the conflict of interests law before they assume their duties."*

*"Because members of the highway commission are particularly vulnerable to the appearance of conflict of interest, the governor should require that new appointees be thoroughly briefed on Virginia's conflict of interests law. The deputy attorney general assigned to the department could perform this function."*

Status:

The Department is in compliance with that portion of this recommendation applicable to its realm of responsibility.



Senate Document No. 7 - Recommendation No. 53:

*"Commission members should be advised to disclose the specific location of all real estate and highway-related business contracts prior to their confirmation by the General Assembly.*

*"Commission members should also provide the public with notification of property holdings that might be affected by proposed highways during location and design public hearings. Staff presentations at commission meetings might identify the location of commission members' land holding in relation to proposed highway corridors. This process would ensure that the location would be made public before any commission action."*

Status:

Commission members are not required to disclose the specific location of all real estate and highway-related business contracts prior to their confirmation. They are required, however, to reveal any potential conflicts to the Commission prior to voting on any Department-related issue.

Senate Document No. 7 - Recommendation No. 58:

*"The commission should discontinue the practice of approving construction bids as part of a motion to approve several actions previously decided by mail or telephone ballot. Construction bids should be voted on one at a time, allowing time for the individual commission member to disclose information relative to the construction bid. This would also allow the member to abstain from voting on any particular construction contract without having to abstain from voting on the other items."*

Status:

The letter ballot used by the Commission to approve awards has been modified so that the members of the Commission may indicate for each contract whether he approves award, rejection, or abstains. In the event the member of the Commission abstains, he states in the subsequent public Commission Meeting the reason for abstention.

Senate Document No. 8

HIGHWAY CONSTRUCTION, MAINTENANCE  
AND TRANSIT NEEDS IN VIRGINIA

Senate Document No. 8 - Recommendation No. 2:

*"Workload standards used to develop routine maintenance budgets should be reviewed to ensure that they accurately reflect potential workload. The inventory of maintainable items now being developed can provide the basis for the review. Either closer adherence to the standards by field managers should be required or the value of maintaining and updating the standards should be reconsidered."*

Status:

Work standards are reviewed annually. The Department feels that such standards do reflect the average workload. As noted in the response to Recommendation No. 5, Senate Document No. 7, these standards are not met by every unit each year; however, the work standards are generally met over a period of years.

Senate Document No. 8 - Recommendation No. 3:

*"DHT should place a high priority on full implementation of a pavement management system for Virginia. Using appropriate sampling procedures, the system should be able to provide analytically based data on pavement condition on all of the highway systems. The preliminary information should be incorporated in the maintenance program described earlier for a 1983 status report to the General Assembly."*

Status:

The comments presented relative to status under Recommendation Nos. 6 and 7 of Senate Document No. 7 are applicable to this recommendation.

Senate Document No. 8 - Recommendation No. 4:

*"Greater emphasis should be placed on the bridge condition rating system by the Bridge Division. The Bridge Division should take the lead in developing a training program for bridge engineers to ensure that ratings are consistent. Data from the rating system should be used systematically by maintenance staff to set statewide priorities for bridge maintenance."*

Status:

The comments relative to status presented under Recommendation No. 8 of Senate Document No. 7 are also applicable to this recommendation.

Senate Document No. 8 - Recommendation No. 5:

*"The management services division should take the lead in developing a methods improvement program for DHT aimed at reducing costs and improving efficiency. The management services division, in conjunction with the maintenance engineer, should undertake a comprehensive review of the various methods used by residences to perform maintenance activities and the conditions under which methods can be transferred to improve productivity. When productivity improvements are feasible and appropriate, maintenance managers should ensure that they are fully implemented."*

Status:

The Department concurs with this recommendation, and it will be implemented with the limitations imposed by staffing constraints in the Management Review and Audit Division (formerly Management Services Division). Activities already underway include expansion of the Inspection-in-Depth Program to the maintenance area. Two studies (the Northern Virginia Division and the Dillwyn Residency) have been completed with resultant recommendations.

It is anticipated that the Management Review and Audit Division can act as a liaison to a certain degree with VDHT field units to insure that the state-of-the-art exists on a statewide basis.

In addition, two members of the Management Review and Audit Division staff are currently on special assignment to the Manpower Advisory Group. It is expected that the Manpower Planning System will lead to task analysis and standards validation, both of which should enhance productivity.

Senate Document No. 8 - Recommendation No. 8:

*"The General Assembly may wish to create a special joint committee to review State policies regarding public transportation. The committee should be directed to review the financial needs of public transit, ride-sharing programs, and other mass transportation activities in light of changing federal aid policies . . . . The public transportation division should take the lead role in providing the General Assembly with information, analysis, and options for consideration in policy development as provided for in law."*

Status:

House Joint Resolution No. 34 established a Joint Subcommittee to study the financial needs of public transit, ridesharing programs, and other mass transportation activities. Staff of the Public Transportation Division have met with the Joint Subcommittee and is providing information and analysis and options for consideration in policy development.

Furthermore, the Department is in the process of contracting with a consultant to perform a study of financing public transit, ridesharing and other transportation activities to assist in carrying out its mission as set forth in Section 33.1-390 of the Code. The Secretary of Transportation has advised the Joint Subcommittee that the information derived from the consultant's study will also be provided to the Subcommittee.

Senate Document No. 8 - Recommendation No. 9:

*"The public transportation engineer should take the lead in developing uniform financial and operating report formats which provide comparable information on all transit systems. As a part of a technical assistance program to local transit systems, the public transportation engineer should aggressively pursue identifying ways of reducing operating costs and evaluating transit services.*

*"Finally, the public transportation engineer should prepare a biennial report on public transportation in Virginia which includes the results of efficiency reviews carried out under statute as well as a detailed assessment of public transportation needs of the Commonwealth. This report should have wide distribution and be provided to the appropriate committees of the General Assembly."*

Status:

In regard to the first portion of this recommendation, VDHT is currently developing a program of work to address development and implementation of uniform financial and operating report formats which may be used to assess transit system effectiveness and efficiency. In order for this to be useful to VDHT, as well as local transit operations, special care is being taken to involve transit operators in development and conduct of this study. It is anticipated that this study will be completed and implemented in 1983. Coincidental to this effort, the Public Transportation Division is revising its statistical gathering system to provide more reporting on transit system operations.

In regard to the second portion of this recommendation, a biennial reporting on efficiency and effectiveness will be forthcoming after the previously discussed study effort is completed and its recommendations implemented.

Senate Document No. 14

## Highway Financing in Virginia

### Truck Weight Regulation

#### Senate Document No. 14 - Recommendation

*"With the intent of eliminating the van and driver now required for transportation of older scales, DHT should expedite the purchase and use of compact portable scales for the mobile weight units."*

#### Status:

The Department has programmed a total of eighty (80) replacement scales and after receiving Federal approval will proceed with the acquisition of these lighter weight units. It is anticipated that an additional fifty-five (55) units will be obtained in the near future.

#### Senate Document No. 14 - Recommendation

*"The Department of State Police and DHT should develop and adopt a policy for offloading that would provide a practical deterrent to overweight operations."*

#### Status:

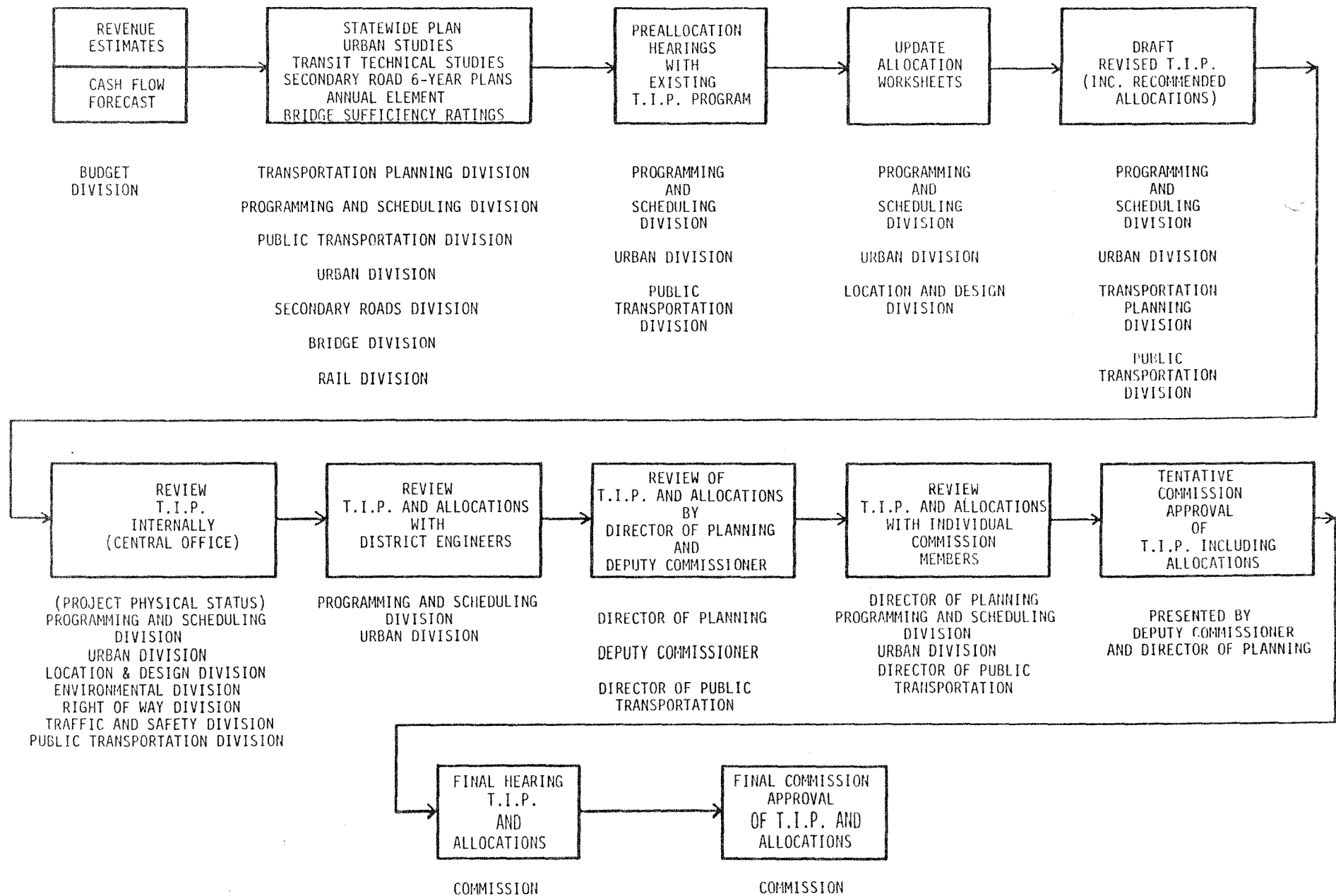
This recommendation has been discussed with the Department of State Police, and it is generally agreed that current statutory provisions for offloading at the discretion of the enforcement officer is adequate. To establish an offloading policy which institutes specific parameters would create a number of problems, such as adequate storage for cargo, inadequate parking facilities at the weigh stations and responsibility for offloaded cargo.

It is felt that liquidated damages are a sufficient deterrent when jointly administered with current offloading procedures.

## Appendix



# PROCESS FOR ANNUAL UPDATE OF TRANSPORTATION IMPROVEMENT PROGRAM



HAROLD C. KING, COMMISSIONER  
EUGENE M. BANE, GRUNDY, BRISTOL DISTRICT  
T. GEORGE VAUGHAN, JR., GALAXY, SALEM DISTRICT  
WILLIAM R. WATKINS, SOUTH BOSTON, LYNCHBURG DISTRICT  
WILLIAM F. MOHR, RICHMOND, RICHMOND DISTRICT  
RICHARD G. BRYDGES, VIRGINIA BEACH, SUFFOLK DISTRICT  
H. R. HUMPHREYS, JR., WEEMS, FREDERICKSBURG DISTRICT  
JOSEPH M. GUIFFRE, ALEXANDRIA, CULPEPER DISTRICT  
ROBERT W. SMALLEY, BERRYVILLE, STAUNTON DISTRICT  
T. EUGENE SMITH, MCLEAN, AT LARGE-URBAN  
ROBERT A. QUICKI, BLACKSTONE, AT LARGE-RURAL



## COMMONWEALTH of VIRGINIA

### DEPARTMENT OF HIGHWAYS & TRANSPORTATION

1221 EAST BROAD STREET  
RICHMOND, 23219

January 4, 1983

LEO E. BUSCH, JR.  
DEPUTY COMMISSIONER  
JOHN M. WRAKE, JR.  
CABLE ENGINEER  
J. T. WOODEN  
DIRECTOR OF PUBLIC RELATIONS  
GEORGE F. TAYLOR  
DIRECTOR OF HIGHWAYS  
HAROLD C. KING, JR.  
DIRECTOR OF TRAFFIC  
J. S. HODGE  
ASSISTANT CABLE ENGINEER  
SALLY H. COOPER  
DIRECTOR OF PUBLIC RELATIONS  
IN REPLY PLEASE REFER TO

Mr. Ray Pethtel, Director  
Joint Legislative Audit  
and Review Commission  
Suite 1100  
910 Capitol Street  
Richmond, Virginia 23219

Dear Ray:

I would like to provide you with the following comments after reviewing the Exposure Draft relative to the progress of the Department in implementing recommendations contained in Senate Documents 6, 7, 8, and 14 of the 1982 Session:

Page 3 - *"The department has indicated that it will establish an internal audit division before January, 1983."*

The Internal Audit Division has been established and has both administratively and physically been removed from the Management Review Division. We are proceeding with staffing in accordance with our agreement with the State Internal Auditor.

It is suggested in lieu of the statement that reads *"The internal audit committee will review the divisions audit reports and participate in selecting topics and making recommendations"* we change to read as follows: The Internal Audit Committee will review Internal Audit Reports and will participate in selecting audit topics and will review implementation of audit recommendations.

Page 3 - *"It was further suggested that the public relations division report to the director of administration instead of to the highway commissioner." Public Relations Division was renamed the Information Services Division. It continues to report to the Commissioner."*

I have issued instructions that the Information Services Division will report to the Director of Administration.

Page 6 - *"During the course of the field work at 15 area headquarters in 1982, however, JLARC staff found seven instances where two DHT employees (a foreman and an equipment operator were still assigned to each crew of inmates."*

Mr. Ray Pethtel  
Page 2  
January 4, 1983

In May of 1981, instructions were issued to the Field to use only foreman with the convict crew when operator was needed to assist in the operation. As the JLARC staff points out, there are operations where an operator is necessary in activities of a convict crew.

DHT will call to the Field's attention these instructions and also place the item on the agenda for the next District Engineers' staff meeting.

*Page 8 - "JLARC recommended that the department assign all capital budget responsibilities to the budget division to ensure close coordination between the operating and capital budgets. The department has not acted upon this recommendation. However, the department has reported that it is now in total compliance with State capital outlay policies and procedures."*

The Budget Division works in conjunction with the Purchasing Division on necessary form preparation and approved processes through both planning and budget and engineering and buildings. In addition, the Budget Division monitors capital outlay expenditures for compliance with the Appropriations Act and the Department's internal budgets. Thus, the Department is in compliance with the policies and procedures of the Department of Planning and Budget and the Division of Engineering and Buildings with regard to the capital outlay process. Capital outlay project selection and execution should remain as policy and operational decisions and not be a function of the Budget Division.

*Page 10 - "On January 1, 1983, the purchasing division is to be reorganized, separating the purchasing functions performed by buyers."*

A reorganization has been implemented.

*Page 10 - "The recommendation that all vendors be pre-registered has been rejected by DHT on the basis that it might reduce the business done with minorities and small businesses. While this is a valid concern, the registration process could be structured so that it does not place small businesses at a disadvantage. The department might wish to reconsider this action."*

The Department is unable to identify the advantages of pre-registration which justify its implementation.

*Page 11 - "In addition, the recommendation that vendors sign a statement of non-collusion has not been implemented. DHT reports only that it is still under review. JLARC believes this recommendation should be implemented to bring the procedures of the department in line with the requirements of the Governmental Frauds Act of 1980."*

The Department agrees with this recommendation. Construction contracts currently require a statement of non-collusion. The Department intends to require a non-collusion statement on all procurement contracts and is currently working with legal counsel to formulate the required statement.

Mr. Ray Pethtel  
Page 3  
January 4, 1985

Page 19 - "JLARC recommended the development of a comprehensive and systematic methods improvement program aimed at reducing costs and improving efficiency. . . . The department has not reported progress on this recommendation, however. . . . The department has indicated concurrence with the thrust of that recommendation."

DHT believes an informal program has been in effect for many years as evidenced by the improvements and innovations which have been made in methods, materials, and equipment. It is acknowledged that improvements in the Program should be formalized, and steps are being taken to do this.

Page 36 - "Offloading. The study found that offloading was an effective deterrent in other states when it was implemented consistently. Both Maryland and North Carolina use offloading as a deterrent to overweight violators. We recommended that the State Police and DHT develop and adopt a policy to implement current statutes on offloading overweight trucks.

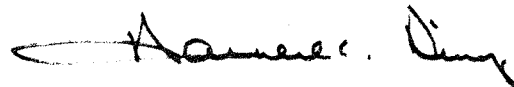
"The Department, however, feels that establishing such a policy would create a number of problems: (1) inadequate storage for cargo, (2) inadequate parking facilities, and (3) a question of responsibility for offloaded cargo."

Currently, the State Police can and do exercise the right to require offloading in situations where excessive violations have occurred. The Department of Highways believes that this current policy is both adequate and appropriate because of reasons outlined in our previous statements as indicated above.

I appreciate the opportunity to provide you with these additional comments.

My very best wishes to you for the coming year!

Sincerely,

A handwritten signature in black ink, appearing to read "Harold C. King", with a stylized flourish at the end.

Harold C. King, Commissioner

## **JOINT LEGISLATIVE AUDIT AND REVIEW COMMISSION**

### **Research Staff**

John M. Bennett  
L. Douglas Bush, Jr.  
Suzette Denslow  
Lynn L. Grebenstein  
Stephen W. Harms  
Gary T. Henry  
Clarence L. Jackson  
Kirk Jonas  
R. Jay Landis  
Sarah J. Larson  
Philip A. Leone  
John W. Long  
Joseph H. Maroon  
Barbara A. Newlin  
Ray D. Pethtel  
Cynthia Robinson  
Robert B. Rotz  
Mary H. Schneider  
Walter L. Smiley  
E. Kim Sneed  
Ronald L. Tillet  
Glen S. Tittermary  
Susan L. Urofsky  
Mark D. Willis  
William E. Wilson  
R. Shepherd Zeldin

### **Administrative Staff**

Deborah A. Armstrong  
Vivian L. Dorrough  
Sharon L. Harrison  
Joan M. Irby  
Betsy M. Jackson  
Patricia L. Jordan  
David W. Porter

### **Interns**

Florence R. Haines  
Carolyn C. Tedholm  
Geraldine A. Turner

## **RECENT REPORTS ISSUED BY THE JOINT LEGISLATIVE AUDIT AND REVIEW COMMISSION**

*The Virginia Community College System*, March 1975  
*Virginia Drug Abuse Control Program*, October 1975  
*Working Capital Funds in Virginia*, February 1976  
*Certain Financial and General Management Concerns, Virginia Institute of Marine Science*, July 1976  
*Water Resource Management in Virginia*, September 1976  
*Vocational Rehabilitation in Virginia*, November 1976  
*Management of State-Owned Land in Virginia*, April 1977  
*Marine Resource Management Programs in Virginia*, June 1977  
*Sunset, Zero-Base Budgeting, Evaluation*, September 1977  
*Use of State-Owned Aircraft*, October 1977  
*The Sunset Phenomenon*, December 1977  
*Zero-Base Budgeting?* December 1977  
*Long Term Care in Virginia*, March 1978  
*Medical Assistance Programs in Virginia: An Overview*, June 1978  
*Virginia Supplemental Retirement System*, October 1978  
*The Capital Outlay Process in Virginia*, October 1978  
*Camp Pendleton*, November 1978  
*Inpatient Care in Virginia*, January 1979  
*Outpatient Care in Virginia*, March 1979  
*Management and Use of State-Owned Vehicles*, July 1979  
*Certificate-of-Need in Virginia*, August 1979  
*Report to the General Assembly*, August 1979  
*Virginia Polytechnic Institute and State University Extension Division*, September 1979  
*Deinstitutionalization and Community Services*, September 1979  
*Special Study: Federal Funds*, December 1979  
*Homes for Adults in Virginia*, December 1979  
*Management and Use of Consultants by State Agencies*, May 1980  
*The General Relief Program in Virginia*, September 1980  
*Federal Funds in Virginia*, October 1980  
*Federal Funds: A Summary*, January 1981  
*Methodology for a Vehicle Cost Responsibility Study: An Interim Report*, January 1981  
*Organization and Administration of the Department of Highways and Transportation: An Interim Report*, January 1981  
*Title XX in Virginia*, January 1981  
*Organization and Administration of Social Services in Virginia*, April 1981  
*1981 Report to the General Assembly*  
*Highway and Transportation Programs in Virginia: A Summary Report*, November 1981  
*Organization and Administration of the Department of Highways and Transportation*, November 1981  
*Highway Construction, Maintenance, and Transit Needs in Virginia*, November 1981  
*Vehicle Cost Responsibility in Virginia*, November 1981  
*Highway Financing in Virginia*, November 1981  
*Publications and Public Relations of State Agencies in Virginia*, January 1982  
*Occupational and Professional Regulatory Boards in Virginia*, January 1982  
*The CETA Program Administered by Virginia's Balance-of-State Prime Sponsor*, May 1982  
*Working Capital Funds in Virginia*, June 1982  
*The Occupational and Professional Regulatory System in Virginia*, December 1982  
*Interim Report: Equity of Current Provisions for Allocating Highway Construction Funds in Virginia*, December 1982  
*Consolidation of Office Space in the Roanoke Area*, December 1982  
*Staffing and Manpower Planning in the Department of Highways and Transportation*, January 1983  
*Consolidation of Office Space in Northern Virginia*, January 1983  
*Interim Report: Local Mandates and Financial Resources*, January 1983  
*Interim Report: Organization of the Executive Branch*, January 1983  
*The Economic Potential and Management of Virginia's Seafood Industry*, January 1983  
*Follow-Up Report on the Virginia Department of Highways and Transportation*, January 1983



910 CAPITOL STREET — SUITE 1100 — RICHMOND, VIRGINIA 23219 — (804) 786-1258

