# JOINT LEGISLATIVE AUDIT AND REVIEW COMMISSION

THE VIRGINIA GENERAL ASSEMBLY

## MANAGEMENT AND USE OF STATE-OWNED MOTOR VEHICLES

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> Director Ray D. Pethtel

> > STAFF OF THE JLARC FOR THIS REPORT Mark S. Fleming, Project Director Glen S. Tittermary



During fiscal 1978, State employees used passenger vehicles to travel almost 96 million miles – greater than the distance from the earth to the sun – at a cost of \$13.4 million (Table 1). Over half of this travel occurred in employee-owned vehicles at State expense. The remaining mileage involved more than 2,600 general purpose passenger vehicles owned by the State (Table 2).

#### Table 1

#### PASSENGER VEHICLE TRAVEL FY 1978

Source	Mileage	Cost
Privately Owned Cars Central Garage VPI & SU UVA Other Agencies	50,850,714 41,004,851 2,753,692 877,948 _297,000	\$ 7,079,228 5,832,000 340,694 131,692 NA
Total	95,784,205	\$13,383,614

Although passenger vehicles are an important and necessary management resource for many State agencies, JLARC found that between 201 and 327 motor pool vehicle assignments may have been uneconomical and not justified on the basis of operators' duties. This underutilization results in unnecessary costs to agencies and the Central Garage Motor Pool. Development of more appropriate criteria for vehicle assignment and use, and more active management by the fleet manager and agency transportation officers, are needed to promote efficient utilization of vehicles. Potential cost savings from improved utilization range from approximately \$436,000 to almost \$1.5 million.



Table 2

#### GENERAL PURPOSE PASSENGER VEHICLES OWNED BY THE COMMONWEALTH

Location	Number of Vehicles
Central Garage Motor Pool Assigned to Agencies Trip Pool	2,165 288
	2,453
Virginia Polytechnic Institute and State University University of Virginia Other Agencies	99 64 18
Total	2,634

The JLARC review also indicates a need for greater control of commuting in State-owned vehicles. Employees accumulated two and one-half million miles in commuting during fiscal 1978, but only one agency charges employees for their commuting. In addition, some commuting does not appear to be job-related. A clearly defined policy should be developed to limit commuting to essential purposes, and employees should be charged for the commuting use of State vehicles. Establishing commuting charges could save State agencies between \$196,000 and \$409,000 annually.

In addition to findings and recommendations about vehicle assignment and commuting, the report also addresses financial management, vehicle records, the role of the fleet manager, and general administration.

### Assignment and General Use (pp. 9-17)

State policy establishes 18,000 miles as the minimum annual mileage for permanently assigned vehicles. However, sixty percent of all permanently assigned vehicles did not meet this standard in fiscal 1978. More importantly, 465 cars (24% of the assigned fleet) cost more per mile to operate than the current rate for reimbursing employees who use private vehicles on State business. JLARC projects that at least 201, and perhaps as many as 327, of these uneconomical vehicles were not otherwise justified on the basis of special operator duties.

*Recommendation (1).* As the State's management organization for motor vehicles, the Car Pool Committee should develop a two step process for assigning and reviewing vehicles.

- Compare actual use with a new minimum mileage criterion for permanently assigned vehicles. The present 18,000 mile standard may be unnecessarily high. The new criterion should be based on an analysis of the actual cost of operation. Vehicles falling below this "break-even" point (now 12,857 miles) should normally be considered uneconomic because they result in extra costs to the Commonwealth.
- Review each uneconomic vehicle to determine whether special needs require that the vehicle be assigned to an individual. Primary consideration should be given to those employees whose duties are related to public safety and life threatening situations.

By developing a two step process, the committee can better establish priorities for the assignment of vehicles to promote maximum economy.

Recommendation (2). The Car Pool Committee should require that vehicle operators maintain a log of all trips and mileage. Daily logs would provide the committee, fleet manager, and transportation officers with comprehensive data on the use of vehicles, the number of business and nonbusiness miles, the number of passengers, and the purposes for which vehicles are used. Log books would also provide a record of commuting use for tax purposes or for levying charges.

### Commuting (pp. 18-21)

Some State employees are permitted to drive State-owned vehicles between their homes and offices. However, Central Garage policy does not clearly define the circumstances under which such use is allowed. Some commuting does not appear to be related to the employees' duties and is of questionable justification.

Recommendation (3). The Car Pool Committee should clarify its policy regarding employee commuting in State cars. The committee should also define permissable use of vehicles by employees en route between home and work. Policies on commuting and improper use should be widely disseminated.

Recommendation (4). Employees who regularly commute between their homes and offices in State-owned vehicles should be charged for their commuting mileage. Establishing a commuting charge, as is presently authorized by the Appropriations Act, would have two effects. First, the charge would emphasize that State-owned vehicles are to be used for official business even though some employees are permitted to take cars home at night. Second, the charge would eliminate the need to report the value of commuting as income for federal and State tax purposes and would bring State practice into compliance with existing tax law.

*Recommendation (5).* The Car Pool Committee should reaffirm the requirement that agencies notify employees in writing if commuting is authorized. Authorization should be re-certified annually. Copies of all authorization letters should be submitted to the fleet manager.

Table 3 summarizes the estimated savings that could be achieved through improved assignment and use of vehicles, and charges for commuting.

Table 3			
POTENTIAL COST	Γ SAVINGS		
Action	Low	High	
<ul> <li>Reassign or not replace uneconomic vehicles not otherwise justified</li> </ul>	\$435,800	\$ 816,400	
<ul> <li>Reassign or not replace uneconomic vehicles of questionable justification</li> </ul>	71,900	655,200	
Sub-Total: Savings from improved utilization	\$507,700	\$1,471,600	
<ul> <li>Establish commuting charges</li> </ul>	<u>196,100</u>	<u>_409,400</u>	
Grand Total	\$703,800	\$ <u>1,881,000</u>	
			-

### Financial Management (pp. 31-39)

Financial management of the Central Garage Motor Pool needs to be strengthened. Cash management in particular should be improved. Central Garage has not used funds from the sale of surplus vehicles to finance pool operations. As a result, the surplus property account has accumulated an unnecessary cash balance of \$1.5 million.

Recommendation (6). The \$1.5 million balance in the Central Garage surplus property account should be returned to the general fund. In future years, surplus property receipts should be considered as a source of revenue when setting agency rental rates for pool cars.

Recommendation (7). Procedures used to account for depreciation should be brought into line with generally accepted practices. The concept of vehicle depreciation should be divorced from the concept of replacement revenue on financial statements. The present practice of showing depreciation cost in excess of original cost should be discontinued.

*Recommendation (8).* The Auditor of Public Accounts should conduct a special audit of the Central Garage Motor Pool to establish the actual financial condition of the fund. In addition, the Comptroller should review Central Garage accounting procedures and prescribe modern methods for reporting depreciation.

Recommendation (9). Monthly reports of accounts-receivable should be prepared for the fleet manager. The manager should contact agencies whose accounts are overdue to ensure prompt payment. Agencies should not be permitted to accumulate large unpaid accounts.

*Recommendation (10)*. A working capital fund should be established to finance the Central Garage Motor Pool. Creation of a working capital fund would bring the Central Garage into line with similar support activities of State government.

### Fleet Manager and Transportation Officers (pp. 24-27)

The Central Garage fleet manager and the transportation officers at each State agency are key individuals in managing State-owned vehicles. However, little attention has been paid to the role of these individuals. As a result, the fleet manager and many transportation officers lack the authority to promote efficient utilization of vehicles.

*Recommendation (11).* The Car Pool Committee should vest the fleet manager with full authority to review, recall, and reassign unneeded or uneconomical vehicles. The manager should base the review on the utilization policies and criteria established by the committee The committee would define appropriate uses; the manager would enforce committee policy. *Recommendation (12).* The fleet manager should be given greater authority over motor pool operations. Specifically, the fleet manager should:

- be given scheduling authority for the two shops that deal exclusively with motor pool cars;
- be designated as the *primary* contact for all questions about motor pool operations, including maintenance;
- be given full authority and appropriate resources to establish procedures and record systems necessary for efficient management of the motor pool; and
- be provided with complete, accurate financial information on a timely basis.

*Recommendation (13).* The Car Pool Committee should encourage agencies to carry out periodic reviews of their assigned vehicles. The duties of transportation officers should be better delineated. Transportation officers in each agency should hold positions which provide them sufficient authority to assign, review, and reassign agency vehicles. The fleet manager should conduct periodic meetings of all transportation officers to brief them on changes in the operation of the motor pool.

*Recommendation (14).* A manual should be developed for use by transportation officers. The manual should include all applicable laws, orders, and regulations. The manual should be prepared in a loose leaf format so that changes in policies and procedures can be readily made.

### Vehicle Records (pp. 52-54)

There is a need for comprehensive, accurate information on the number of passenger vehicles owned or used by State agencies. Neither the Car Pool Committee nor the Division of Motor Vehicles has complete information on the number and location of vehicles owned or used by the Commonwealth. A comprehensive vehicle inventory should be developed to improve oversight of this costly resource.

Recommendation (15). The Car Pool Committee and the fleet manager should work with the Division of Motor Vehicles to develop more accurate and accessible information on Stateowned vehicles. The committee should use this information to establish a comprehensive inventory of agency passenger vehicles. The inventory should include: motor pool cars on permanent assignment to each agency, vehicles owned by each agency, and any loaned or donated vehicles.

Recommendation (16). The accuracy of DMV records could be improved by providing all agencies with instructions on transferring license plates from one vehicle to another. All such changes should be reported to DMV and the Central Garage in a timely fashion. Instructions for transferring license plates on State vehicles should also be included in the transportation officer's manual.

*Recommendation (17).* The Car Pool Committee should maintain information on all vehicles loaned or donated to agencies. Agencies should be required to report these vehicles to the fleet manager.

### General Administration (pp. 39-48, 53)

Daily operations of the Central Garage Motor Pool are hampered by a lack of clearly defined policies, limited authority to ensure that essential maintenance is performed, and inadequate maintenance records. In addition, Central Garage lacks the data needed to allow the Car Pool Committee to exercise effective oversight of vehicles acquired directly by agencies.

*Recommendation (18).* Clearly defined policies should be published in a revised manual of Central Garage regulations. By publishing more explicit policies on assignment, utilization, commuting, and improper use of Central Garage vehicles, the Car Pool Committee will provide agencies and employees with information that will promote more uniform, economic, and consistent use of vehicles.

*Recommendation (19).* The fleet manager should establish a maintenance schedule for each vehicle. Maintenance schedules should be provided in advance to vehicle operators and Department of Highways and Transportation shops to allow them to accommodate their schedules.

Central Garage should loan vehicles to operators when needed. To the extent possible, maintenance should be scheduled to coincide with the semi-annual State inspection.

*Recommendation (20).* Maintenance cards kept in each vehicle should provide comprehensive service information for both routine maintenance and major repairs. A duplicate card should be maintained by the fleet manager for use in evaluating vehicle performance and in locating specific maintenance records.

*Recommendation (21).* Central Garage should regularly verify its vehicle inventory.

Recommendation (22). To ensure that the fleet manager has accurate information on the number of vehicles needed by agencies, all requests for new vehicle assignments should be submitted to the fleet manager prior to each meeting of the Car Pool Committee. Requests not approved by the committee should be reconsidered at a subsequent meeting only if resubmitted by the agency.

*Recommendation (23).* The Car Pool Committee should clearly define the conditions under which an agency may purchase a vehicle rather than obtain one from the Central Garage Motor Pool.

*Recommendation (24).* The CP-15 form should be revised and better used in reviewing agency needs for vehicles. Three actions should be taken. First, agencies should be required to provide full justification for all vehicles requested, including replacements. Second, the request form should be revised to provide information on vehicles actually purchased by agencies. Third, following the development and implementation of these procedures, the fleet manager and committee should review all passenger vehicles presently owned by agencies to determine if they should remain outside of the Central Garage Motor Pool.



# Table of Contents

I.	INTRODUCTION 1
	Scope of JLARC Review1Legislative Provisions2State-Owned Passenger Vehicles3Passenger Vehicle Mileage and Cost6Conclusion8
II.	UTILIZATION OF CENTRAL GARAGE MOTOR POOL VEHICLES
	Vehicle Use9Utilization Control24Improving Vehicle Utilization and Control28
III.	CENTRAL GARAGE MANAGEMENT 31
	Financial Management.31Operations Management39Promoting Effective Management.48
IV.	AGENCY-OWNED VEHICLES
	Agency Vehicles52University Motor Pools56Improving Oversight of Agency-Owned Vehicles58
	APPENDICES

# Preface

The Joint Legislative Audit and Review Commission has a statutory responsibility to carry out operational and performance reviews of State agencies and programs. One of the specific duties contained in Section 30-58.1, Code of Virginia, is a charge,"study on a continuing basis the operations, practices and duties of State agencies, as they relate to efficiency in the utilization of space, personnel, equipment and facilities". Accordingly, this report focuses on an important equipment resource in State government -- passenger cars.

Transporting State employees on public business is an expensive undertaking. During fiscal year 1978, State employees traveled more than 96 million miles at a cost to the State of \$13.4 million. Although half of this travel took place in privately owned cars, about 45 million miles were accumulated using 2,634 State-owned cars.

A key finding of this study is that between 201 and 327 State-owned cars are not economically used. Given the costs involved and the potential savings available through efficient management practices it is important that: (1) utilization be reviewed on a continuing basis; (2) appropriate criteria be adopted to govern the assignment of State cars; and, (3) aggressive management practices be adopted to keep the automobile fleet properly maintained. Potential cost savings to the State from improved utilization alone could be as great as \$1.5 million annually.

As part of its statutory responsibility, the Commission is mandated to make recommendations on ways in which agencies may operate more economically and efficiently, and ways in which agencies can provide better services. Recommendations designed to improve the management and use of State cars were adopted by the Commission on July 9, 1979 and are listed in the report summary. At the direction of the Commission, the recommendations have been transmitted to the State's Car Pool Committee and appropriate executive officials for review and consideration.

On behalf of the Commission staff I wish to acknowledge the cooperation and assistance provided during the course of this study by the Fleet Manager of the Central Garage Motor Pool, by members of the Car Pool Committee, by employees of the Department of Highways and Transportation, and by othe transportation officers of the 20 State agencies visited during the course of this review.

Ray D. Pethtal

Ray D. Pethtel Director

August 1, 1979

# I. Introduction

Passenger vehicles are an important and necessary management resource for many State agencies. During fiscal 1978, State employees used passenger vehicles to travel almost 96 million miles--greater than the distance from the earth to the sun--at a cost of \$13.4 million. Over half of this travel occurred in employeeowned vehicles at State expense. The remaining mileage involved more than 2,600 general purpose passenger vehicles owned by the State.

Improved management of State vehicles began almost 30 years ago with establishment of a central motor pool and regulations governing its use. In 1964, an inter-agency committee was formed to provide policy direction. Appointment of a fleet manager in 1971 and use of automated records further enhanced opportunities for management oversight.

In contrast to these advances, however, some important aspects relating to vehicle utilization have been neglected. Use of passenger vehicles has not been subjected to timely, systematic review and analysis. The policies and practices of some agencies conflict with executive orders, car pool regulations, and legislation. Management oversight and accountability for pool operations are weakened by incomplete definition of responsibilities. Many Stateowned vehicles are uneconomically utilized and some reimbursed travel in privately-owned vehicles appears to be unnecessary.

#### Scope of JLARC Review

The principal focus of this report is on the use of State-owned passenger vehicles in the conduct of State business. Specially equipped law enforcement vehicles are excluded from the analysis.

The objectives of the review are to evaluate:

- the extent to which permanently assigned vehicles are used in an effective and economical manner;
- agency efforts to identify, analyze, and address passenger vehicle transportation needs; and
- the appropriateness of fiscal and management procedures.

Central Garage Motor Pool. The Department of Highways and Transportation (DHT) has operated a Central Garage Motor Pool since 1948. As of December 1978, the motor pool contained 2,453 automobiles. Most of these cars are on permanent assignment as shown in Table 2. Central Garage also has a trip pool consisting of 288 cars located in Richmond.

Since 1964, the Central Garage Motor Pool has been administered under the direction of a Car Pool Committee appointed by the Governor (Figure 1). The committee membership consists of: the Commissioner of the Department of Highways and Transportation (Chairman); the Secretary of Administration and Finance; the Director of the Department of Planning and Budget; the Commissioner of the Division of Motor Vehicles; the Commissioner of the State Health Department; and the President of the College of William and Mary.

#### Figure 1

ORGANIZATION FOR STATE-OWNED VEHICLE MANAGEMENT



Source: JLARC.

A full time manager is responsible for coordination of fleet operations and reports to both the Car Pool Committee and to the head of the DHT Equipment Division. The fleet manager reviews agency requests for vehicle assignments, makes recommendations to the Car Pool Committee, and reviews fleet operating costs.

Each State agency has a transportation officer who is the liaison between the agency and the motor pool. In general, transportation officers are responsible for reviewing agency travel needs, requesting vehicles, and monitoring the use of assigned vehicles. Most transportation officers have authority to transfer vehicles among agency personnel.

### Table 2

### STATE AGENCIES, DEPARTMENTS, AND INSTITUTIONS WITH PERMANENTLY ASSIGNED POOL VEHICLES AS OF DECEMBER 1978

Agency	Cars	Agency C	ars
Highways and Transportation Agriculture and Consumer Services Corrections Division of Motor Vehicles Alcoholic Beverage Control Board	577 176 165 141 115	George Mason University Norfolk State College Mary Washington College Clinch Valley College Criminal Justice Services	9 8 8 8 7
Mental Health and Mental Retardation Community Colleges Labor and Industry Conservation and Economic Development Welfare	85 74 70 63 55	Rehabilitative School Authority Fire Services Training Jamestown-Yorktown Foundation Associated Research Campus Blue Ridge Hospital	5 5 4 3
Health Commission for the Visually Handicapped State Water Control Board State Corporation Commission State Police	50 43 33 26 24	Virginia School for the Deaf and Blind Virginia School at Hampton State Crime Commission Christopher Newport College Rehabilitative Center for the Blind	3 3 3 3 3
Virginia Institute of Marine Science Marine Resources Commission Virginia Employment Commission Transportation Safety Longwood College	21 21 20 20 19	Virginia Port Authority Industrial Development Capitol Police Virginia Treatment Center for Children Richard Bland College	3 2 2 2
Housing and Community Development Radford College Virginia State College Old Dominion University Rehabilitative Services	18 18 17 17 17	Virginia Museum State Library Office of the Attorney General Board of Elections Computer Services	2 2 1 1
General Services Taxation College of William and Mary Emergency and Energy Services James Madison University	17 16 16 15 14	Division of Justice and Crime Preventio Virginia Science Museum Secretary of Commerce and Resources Intergovernmental Affairs Public Tele-Communications Council	n 1 1 1 1
Commerce and Resources Game and Inland Fisheries Virginia Commonwealth University Virginia Military Institute Board of Pharmacy	13 13 12 11 11	Council of Higher Education Educational Loan Authority Soil and Water Conservation State Apple Commission Governor's Manpower Service Council	1111
Air Pollution Control Board Woodrow Wilson Rehabilitation Center	11 10	Temporary Assignments	15

Total 2,165

Source: Central Garage.

The Central Garage fleet is financed through user charges. All charges are deposited into a special fund which is composed of two accounts. One account is used for receipt and expenditure of operating revenue. During fiscal 1978, \$5.8 million was deposited in this account and \$5.5 million was spent. A second account is used for receipts from the sale of surplus vehicles. Surplus sales earned \$297,000 in fiscal 1978. The surplus vehicle account balance was \$1.5 million as of April 30, 1979.

Other Motor Pools. The University of Virginia (UVA) and the Virginia Polytechnic Institute and State University (VPI&SU) also operate motor pools. The UVA motor pool contains 64 general purpose passenger vehicles, 19 of which are permanently assigned. The VPI&SU motor pool contains 99 general purpose cars, with 15 on permanent assignment. Unassigned cars in both pools are available for daily use by university employees.

#### Passenger Vehicle Mileage and Cost.

General purpose transportation cost \$13.4 million in fiscal 1978. Mileage and costs for each category of vehicle use are shown in Table 3.

#### Table 3

#### PASSENGER VEHICLE TRAVEL FY 1978

Source	Mileage	Cost
Privately Owned Cars Central Garage Motor Pool VPI&SU UVA Other Agencies	50,850,714 41,004,851 2,753,692 877,948 297,000	\$ 7,079,228 5,832,000 340,694 131,692 NA
Total	95,784,205	\$13,383,614

Source: Central Garage, Department of Accounts, UVA, VPI&SU, and various agencies.

Passenger vehicle travel by State employees has been characterized by three trends in recent years: an overall reduction in total mileage; increasing utilization of State-owned vehicles compared to private vehicles; and increasing costs. *Mileage*. Between 1968 and 1973 travel in privately owned cars increased 15 percent (Figure 2). Private vehicle use peaked at 91.7 million miles in 1973. Between 1973 and 1978, mileage in privately owned vehicles decreased to 50.8 million miles as the result of executive orders and directives to reduce energy consumption by State agencies. This substantial reduction was partially offset by increased travel in State vehicles.

#### Figure 2

## TRAVEL IN STATE-OWNED AND PRIVATE VEHICLES 1968-1978



MILLIONS OF MILES

Source: JLARC.

Travel in State-owned vehicles has increased steadily since 1968. From 1968 to 1973, the mileage driven in State vehicles increased 48 percent, more than three times the rate for private vehicles. The increase between 1973 and 1978 was 32 percent, bringing travel in State cars up to 44.8 million miles.

*Costs*. In 1968, the total cost of using passenger vehicles for State business was \$7.2 million. The average cost per mile that year was seven cents. By 1973, the average cost per mile was ten cents and total costs had increased to \$12.6 million.

Even though there was a 24 percent reduction in miles driven between 1973 and 1978, costs still rose six percent. The average cost per mile increased to 14 cents in 1978. c

#### Figure 3



# CENTRAL GARAGE FLEET GROWTH 1965-1978



Passenger vehicle costs have increased for several reasons. Inflation, particularly price increases for fuel, has contributed to the higher cost per mile. But, total costs have also risen because of growth in the number of cars in the fleet.

Since 1965, the Central Garage Motor Pool has grown by 43 percent (Figure 3). Most of the growth resulted from the purchase of additional vehicles which were assigned to agencies and individuals. The trip pool has remained relatively constant in size, and has actually declined as a proportion of the entire pool.

#### CONCLUSION

Passenger vehicle travel is a substantial activity in most State agencies and is a costly public resource. The annual cost of \$13.4 million is equivalent to the expense of computer operations of all State agencies in Richmond. Although total mileage has decreased in recent years, the analysis of vehicle use in Chapter II indicates numerous opportunities remain for greater economy by controlling the growth of the State fleet, encouraging more efficient use of existing vehicles, and providing systematic review and evaluation of operations.

# II. Utilization of Central Garage Motor Pool Vehicles

The Central Garage Motor Pool is responsible for more than 90 percent of the State's general purpose passenger vehicles. Use of these vehicles is governed by two policies. The first stipulates that vehicles can be permanently assigned to State employees based on an anticipated annual use of 18,000 miles. The second policy restricts the use of vehicles to official State business.

Practice, however, conflicts with policy. Sixty percent of the assigned fleet did not meet the established mileage criterion in fiscal 1978. In addition, one vehicle in five was not used economically. Uneconomic use of State-owned vehicles costs the Commonwealth about \$500,000 per year.

Central Garage vehicles are not always used exclusively for official business. Approximately one-third of all assigned cars are also used for commuting by State employees at an estimated annual cost of more than \$300,000. Employees are not charged for commuting.

#### VEHICLE USE

JLARC used three measures to assess the use of permanently assigned vehicles. The first measure looked at general utilization in terms of the number of vehicles which meet the Central Garage standard of 18,000 miles or more per year. This measure is the broadest of the three.

The second is a measure of economic utilization. This measure identifies the number of permanently assigned vehicles which are not economically used. A vehicle is considered to be uneconomical to the State when it is more expensive to operate per mile than the cost of reimbursing an employee for the use of a private vehicle.

The third measure considers the justification of each assignment. Although some vehicles are uneconomical, their assignment can be justified on the basis of the operators' work duties. However, uneconomic vehicle assignments not otherwise justified on the basis of work duties should be considered for reassignment.

#### General Utilization

Motor pool regulations stipulate that assigned vehicles should be driven at least 18,000 miles annually. To encourage agency compliance, Central Garage has established a rate structure which imposes higher per mile operating costs for vehicles which do not meet the standard.



Source: Compiled from Central Garage records.

Fifty-nine percent of the assigned vehicles did not meet the Central Garage mileage criterion during fiscal 1978 (Figure 4). A total of 1,153 cars were driven less than 18,000 miles and 792. cars exceeded the standard. The average car was driven 17,146 miles annually, including commuting. Annual mileage for individual vehicles ranged from a low of 1,338 to a high of 102,294 miles.

The actual use of State vehicles in Virginia is more in line with other states' criteria than with the Central Garage standard. Maryland, for example, uses 10,000 miles as its standard. Tennessee assigns cars to employees who travel 12,000 miles or more annually. North Carolina's criterion is 14,400 miles.

The Central Garage criterion may be unrealistically high. Strict enforcement of this standard would have resulted in the recall of more than half of the vehicles assigned in fiscal 1978. In practice, however, no agency has been required to meet the 18,000 mile standard in order to retain assigned vehicles.

#### Economic Utilization

Economic utilization is a more meaningful measure of vehicle use than the 18,000 mile criterion. This measure compares the cost of operating permanently assigned State cars with the cost of reimbursing employees who use their own cars. During fiscal 1978, operating costs of 465 vehicles exceeded the reimbursement payments that would have been required if private vehicles had been used (Figure 5). These vehicles can be considered uneconomical. The development of an economic utilization measure is described in the following paragraphs.



#### UNECONOMIC UTILIZATION OF CENTRAL GARAGE VEHICLES FY 1978



Source: Compiled from Central Garage records.

Relationship Between Mileage and Cost. As the number of miles travelled increases, State cars become more economical. Agencies are charged 13 cents per mile for use of assigned vehicles. The charge is divided into three components: seven cents for operations; five cents for vehicle replacement; and one cent for fleet expansion. Vehicles driven less than 18,000 miles annually are assessed a minimum replacement charge of \$900 (18,000 miles X \$.05 = \$900).

The point at which the cost of using a State-owned vehicle equals the cost of a privately owned vehicle is 12,857 miles per

year (at current reimbursement rates). This "breakeven" mileage is calculated based on current car pool charges, using the equation:

(\$.05 per mile x 18,000 miles); \$.08 = rate per mile for operation of State-owned vehicle; and \$.15 = rate per mile for private vehicle.

Thus, a State employee could use a private automobile to travel 12,857 miles annually at a cost to the State of \$1,928 or a Central Garage vehicle could travel the same distance in a year at the same cost. However, if only 9,000 miles were travelled, the private car would cost just \$1,350 compared to \$1,620 for a State car. The high cost of the State car results from the \$900 minimum replacement charge.

The relationship of the breakeven mileage factor to the reimbursement rate for private vehicles is shown in Figure 6. The per mile charge for permanently assigned pool cars increases from 13 cents for those driven 18,000 miles or more annually, to 15 cents for vehicles driven 12,857 miles per year. Vehicles within this interval are marginally economical. That is, cost per mile to an agency exceeds the nominal rate of 13 cents, but is still less than the private vehicle reimbursement rate. However, the per mile charge increases sharply when mileage falls below 12,857. Cars used less than 5,000 miles each year are excessively expensive, ranging up to 75 cents for each mile.

Figure 6



#### COST PER MILE FOR CENTRAL GARAGE FLEET

Source: Compiled from Central Garage records.

Vehicle Economy. Based on the breakeven cost analysis, 465 permanently assigned vehicles in the fleet were found to be uneconomical, 688 vehicles were marginally economical, and 792 vehicles were economical. Uneconomical vehicles accounted for 24 percent of the permanently assigned fleet.

The following example, based on actual use at one agency, illustrates how savings can be achieved through increased attention to the relative costs of using State and privately owned vehicles.

Two employees in one State agency were selected for comparison. Employee A used an assigned State vehicle to travel 5,096 miles during a year. Employee B used a privately-owned vehicle to travel 35,452 miles. Actual costs to the agency for the two vehicles are shown on the left. Lower costs could have been achieved by assigning the State vehicle to the high mileage driver as shown on the right.

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ACTUAL COST	LOWER COST
Employee A	Employee A
(State vehicle)	(private vehicle)
5,096 miles at \$.08  per mile = \$ 408 Minimum replacement charge = 900 \$1,308	5,096 miles at \$.15 per mile = \$ 764
Employee B	Employee B
(private vehicle)	(State vehicle)
35,452 miles at	35,452 miles at
\$.15 per mile = <u>\$5,318</u>	\$.13 per mile =\$4,609
Total travel	Total travel
cost = <u>\$6,626</u>	cost = <u>\$5,373</u>

Cost Savings: \$1,253

In the preceding example, the agency would have saved \$1,253 through better car assignments. The JLARC analysis of vehicle mileage indicates that State agencies could save as much as \$94,000 annually if all employees using low mileage pool cars were required to use their own cars and be reimbursed by the State (Appendix 1).

In summary, uneconomical vehicles used for internal pools, field work, or administration cannot be justified unless the operator is required to respond to emergencies in which life and property are endangered or there are clearly exceptional circumstances associated with the assignment.

Based on the survey results, up to 126 uneconomical vehicle assignments are questionable. That is, the operators' duties did not indicate a clear requirement for a vehicle, but did show a need that could potentially justify an assignment. These vehicle assignments require further analysis to determine if they are essential to the operators' jobs.

Justified Assignments. Approximately 138 uneconomical vehicles in the permanently assigned fleet appear to be justified by the operators' duties. This projection is based on survey responses shown in Table 4. In many cases, the vehicles were assigned to persons who were responsible for responding to emergencies, and their vehicles contained special equipment such as two-way radios, fire fighting apparatus, and testing instruments.

The importance of a permanently assigned vehicle in responding to emergencies is demonstrated by the following examples drawn from the JLARC operators survey.

The electrical engineer for Tidewater highway tunnels and drawbridges is assigned a station wagon which is used to carry equipment and is equipped with a two-way radio. Although the vehicle was driven only 12,318 miles during fiscal 1978, it is necessary for responding to emergencies. Failure to respond promptly with the necessary equipment could endanger public safety.

A correctional institution superintendent is assigned a sedan which is equipped with a two-way radio. The vehicle was driven 11,722 miles in fiscal 1978. Having access to a radio equipped vehicle at all hours minimizes the superintendent's time in responding to emergency situations at the institution.

In each instance, the vehicle provides the employee with the means for responding to emergencies in which life and property are endangered. Two of the uneconomic vehicles shown in Table 4 were justified by the need for a car to transport persons housed at State institutions. For example, Blue Ridge Hospital used a station wagon to transport patients, many of whom suffered from tuberculosis or other communicable diseases. Similarly, Bon Air Learning Center used a station wagon for transporting children in its custody. In both cases use of a private vehicle may not be appropriate.

The Car Pool Committee needs to develop specific criteria, applicable to all agencies, governing use and assignment of vehicles. Use of more relevant criteria would have two important benefits.

First, the application of improved criteria could help curb the need to expand the fleet. Since July 1976, 200 vehicles have been added to the fleet at a cost of \$869,000. One hundred twenty-nine requests for new assignments were pending in March, 1979. Based on past levels of uneconomical use, 119 of these requests may be valid and could have been met without the recent expenditure of \$383,000 for 75 additional vehicles.

Second, agencies could reduce transportation costs by reassigning unjustified and questionable vehicles. If Central Garage met all 119 requests through reassignment of unjustified vehicles, the fleet would still contain approximately 82 excess automobiles. Reassigning these vehicles to persons now driving their own vehicles extensively (18,000 miles annually) could result in substantial annual savings (Table 5).

#### Table 5

#### ESTIMATED ANNUAL SAVINGS FROM REASSIGNING VEHICLES

<u>Status</u>	<u>No.</u>	Reassigning State Car	Substituting Private Vehicle	Total <u>Savings</u>
Unjustified	82	\$16,280	\$29,520	\$45,800
Questionable	126	26,540	45,360	71,900
				\$117,700

Source: Compiled by JLARC staff.

#### Commuting

The use of State vehicles to travel from home to work has a significant impact on costs of fleet operations. In many cases, vehicles are economical only because operators accumulate substantial mileage driving between home and office. Overall, employee commuting from home to office accounted for about 2.5 million miles of travel in fiscal 1978. The estimated cost of commuting was \$302,000.

Although 60 percent of permanently assigned vehicles are driven to operators' homes at night, only half of these vehicles were defined by JLARC as being used to commute from home to office. The disparity occurs because many operators do not work out of an office. Others have offices in their homes. For example, many field representatives in the Department of Taxation, the Department of Welfare, and the Alcoholic Beverage Control Board do not regularly report to an agency office before going to the field.

Impact of Commuting. Commuting mileage can be so extensive that vehicles which appear to be economical in terms of total mileage become uneconomical when commuting is separated from business usage. In some cases, commuting accounts for more than 50 percent of total mileage (Table 6). Based on the Operators Survey, JLARC projects that deleting commuting use from total mileage would add 78 vehicles to the 465 uneconomic vehicles previously identified making a total of 543 uneconomic cars.

#### Table 6

#### COMPARISON OF TOTAL MILEAGE TO BUSINESS MILEAGE FOR SELECTED OPERATORS FY 1978

Individual <u>Case</u>	Average Monthly Total Mileage	Average Monthly Commuting Mileage	Percent of Commuting Mileage
1	1,783	1,464	82%
2	1,995	1,560	78
3	1,795	1,000	56
4	1,164	360	31
5	1,960	1,080	55
6	1,813	920	51
7	1,300	400	31
8	1,441	520	36
9	1,323	368	28

Source: JLARC Operators Survey.

Statewide, an estimated 660 employees regularly used their assigned vehicles to commute between home and office. The average round-trip distance was approximately 13 miles, or 265 miles per month. Over all commuting accounted for about six percent of total mileage. However, the amount of commuting for individual agencies ranged from none at all to as much as 15 percent of total mileage.

Some agencies limit commuting more effectively than others. Consequently, their costs are lower. However, other agencies may pay more than is necessary for transportation because of excessive commuting.

Purpose of Commuting. Car Pool regulations state that regularly assigned vehicles should not be driven home unless the duties of the employee warrant such use. In some instances, however, employee job duties do not seem to require that a vehicle be used for commuting. For example,

> A vehicle assigned to an agency administrator was driven 6,858 miles during ten months of fiscal 1978. Although the operator indicated that the car was used to make frequent visits to institutions around the State, most mileage (82%) was personal commuting. The cost for this individual's home to office travel was \$1,064 for the ten month period.

A vehicle assigned to a hearing officer was driven 21,751 miles in fiscal 1978. The operator's duties were primarily administrative. The operator averaged only one field trip per week. Estimated commuting mileage was 11,040, or 51% of total miles driven. The cost of this commuting was \$1,435.

This vehicle was considered economical only because of the extensive home to office travel. When commuting mileage is excluded, net business mileage drops below the 12,857 breakeven mileage. If the employee had used a private vehicle, the cost of business travel would have been \$1,600 instead of the \$2,800 paid for both business and commuting use in fiscal 1978.

The Virginia Community College System (VCCS) exhibited the highest level of commuting. VCCS was the only agency where over half of the assigned vehicles in the sample were used for commuting. Moreover, commuting constituted a larger proportion of total mileage at VCCS than at any of the other agencies visited.

#### Case Study--Virginia Community College System

VCCS assigns vehicles to college presidents, provosts of multi-campus colleges, and many departmental administrators. These individuals are allowed to take the cars home at night. There are thirty-seven vehicles in this category. VCCS justification for commuting is that presidents, provosts and administrators represent the system after normal working hours and they may be required to respond to emergencies at all hours.

The estimated cost for VCCS commuting was \$33,600 during fiscal 1978.

In some instances, reported commuting mileage exceeded business use. Four college presidents were in this category:

<i>a</i>	Total	Commuting	Percent of
Case	Mileage	<u>Mileage</u>	Total Mileage
1	26,670	13,920	52%
2	13,718	7,560	55
3	6,690	3,840	57
4	9,830	5,760	59

Source: JLARC Operators Survey.

Mileage data for fiscal 1979 (below) show that one of the four vehicles assigned to departmental administrators in Richmond (Case Number 1) is used more for commuting than business. Case Number 4 is used largely as an internal pool vehicle. However, the assigned operator reported that he accumulated 35% of the total mileage. In addition, he regularly commuted 26 miles round trip. Thus, the operator's average use was approximately 600 miles per month, of which an estimated 85 percent was for commuting.

	Average Monthly	Average Monthly	Percent of
Case	<u>Mileage</u>	Commuting Mileage	Monthly Average
1	660	520	79%
2	835	320	38
3	1,116	500	45
4	1,733	520	30

Source: Central Garage and JLARC Operators Survey.

Commuting Policy. Central Garage policy provides State agencies considerable discretion in deciding whether or not commuting between home and office should be allowed. The policy does not identify the circumstances under which employees should be allowed to commute but does require formal notice of approval.

> Regularly assigned vehicles should not be driven home unless the duties of the employee warrant such use. If this be the case, then a letter should be written to the employee. . . setting forth the justification that permits said employee the privilege and responsibility of driving a vehicle to and from work. A copy of this letter of justification should be sent to the Central Garage Car Pool fleet manager for his records.

Seventeen of the 20 agencies visited by JLARC staff allow commuting. Only five notify employees in writing of the conditions under which vehicles may be driven home at night. These are: the Department of Agriculture and Consumer Services, the Alcoholic Beverage Control Board, the Department of Labor and Industry, Old Dominion University and the Department of Welfare. Old Dominion University is the only agency which was found to have submitted a notification letter to the fleet manager.

Charging for Commuting. Since 1972 the General Assembly has authorized State agencies to charge employees for commuting in State-owned vehicles. One agency does so. Old Dominion University charges two employees who are allowed to take vehicles home regularly. Charges are assessed on the basis of one round trip for each of 250 working days. No allowance is made for days when the vehicles are not used for commuting.

The failure to implement a system of charges for commuting may place State agencies and employees in violation of federal and State tax laws. The Internal Revenue Service defines personal use of an assigned State vehicle as employee compensation. Tax Court decisions have indicated that personal use of ten percent or more should be reported.

Projections based on the JLARC Operators Survey indicate that as many as 480 operators accumulated ten percent or more of their vehicle mileage in commuting. Moreover, the requirement that an employee have a vehicle in order to respond to emergencies on a 24 hour basis does not alter the need to report the value of commuting. As far as can be determined, State agencies do not report the value of personal commuting as taxable income.

#### Reported Abuse of Vehicles

Although abuse of State-owned vehicles for personal, nonofficial purposes is not widespread, some employees do use their vehicles for unauthorized purposes. Instances of flagrant abuse appear to be limited.

JLARC staff reviewed complaints received by Central Garage during fiscal 1978. Fourteen complaints were received and investigated by the fleet manager. Most involved improper vehicle operation such as reckless driving or speeding. Several reports concerned inappropriate use. For example,

#### Case l

A State vehicle was reported parked outside a "beer joint". Upon investigation, it was learned that the operator had stopped to allow another employee to purchase beer and cigarettes. A verbal and written reprimand was given to the operator.

#### Case 2

A State vehicle was observed travelling at a high rate of speed and passing on a double yellow line. The occupants were throwing beer cans out of the windows. The operator of this vehicle was given a reprimand, and will not be allowed to use State vehicles in the future.

Of the 14 reported complaints, eight incidents resulted in disciplinary action, either verbal or written reprimands. There was no action on six complaints. One complaint was not specific and could not be followed up. No action was taken in five instances because allegations could not be substantiated.

JLARC staff made a spot check of improper use by systematically searching the parking lots of three major shopping centers in the Richmond area on a weekend afternoon during a major shopping period. This method was selected because it was unobtrusive and a State vehicle at a shopping center on Saturday would not likely be on official business. No State vehicles were observed.

However, a number of potential instances of abuse were reported to JLARC during this review. For example,

A trip pool vehicle was seen being used to haul firewood to an employee's home;

A sedan was used to deliver a dog to a local veterinarian during the late morning of a work day;

A station wagon was observed parked at a Saturday morning foot race at a local park; and

A sedan was seen at a local shopping center at 9:00 p.m. on a weekday evening.

JLARC staff also reviewed accident files for fiscal 1978 to determine if any accidents were the result of improper use. Three accidents were the direct result of employees operating vehicles while under the influence of alcohol. In each of these cases, the vehicles were being used late at night, apparently not on State business. Each operator was assessed the standard \$2.50 fine by the Accident Prevention Committee. One was also made to pay ten percent of the cost of repair and was convicted of reckless driving and driving while intoxicated. A fourth accident involved an employee who was not authorized to use the State vehicle. The employee was dismissed.

All transportation officers interviewed by JLARC staff indicated that their agencies adhere to the policy that State vehicles be used only for official business. However, only four agencies, Alcoholic Beverage Control, Transportation Safety, Highways and Transportation, and Old Dominion University were found to provide any further definition of this policy. For example, when the ABC Board notifies employees that they are authorized to use a State vehicle, the employees are also reminded that

. . . vehicles should not be used for weekend, evening, or other personal use . . .

Agency policy on use of a vehicle when travelling between home and office or home and the field is inconsistent, particularly in regard to stopping for personal purposes between the work site and home. All transportation officers said that driving out of one's way to run errands was improper. They differed about stopping en route. Some transportation officers accepted the practice as inevitable while others said such use was forbidden. Penalties for conducting personal business in State cars ranged from a warning to a two week suspension without pay.

The Car Pool Committee needs to provide more explicit definition of what constitutes improper use. Such policy should be widely disseminated and understandable to State employees as well as the general public.

#### UTILIZATION CONTROL

Steps to bring about more efficient utilization of Stateowned vehicles requires clearly defined policies, improved knowledge of agency transportation needs, and systematic application of management controls. The integrated efforts of the Car Pool Committee, agency transportation officers, and fleet manager are required. As noted in the previous section, the Car Pool Committee should establish specific policies, applicable Statewide, to govern the assignment and use of cars.

Agency transportation officers should begin to assess their agency's transportation needs, using Statewide policies as the basis for their review and recommendations to the Car Pool Committee. In addition, the Central Garage fleet manager should conduct an ongoing review of agency vehicle utilization to ensure the most economical and efficient use of vehicles.

#### Agency Reviews of Transportation Needs

Effective utilization of vehicles requires the cooperation of the agencies. For this reason, the Governor's executive order requires each agency to appoint a transportation officer to serve as liaison to the Car Pool Committee and fleet manager. However, little attention has been given to the role of the transportation officer. Review and knowledge of transportation needs range from clearly inadequate at some agencies, to very thorough at others. Some transportation officers are unsure of their duties and would like more guidance and direction from the Car Pool Committee and fleet manager.

Role of the Transportation Officer. Lack of attention to developing the role of the transportation officer has led to widely varying applications of the position among agencies. Some transportation officers exercise much less control than do others. For example:

> The transportation officer of the Virginia Community College System (VCCS) is the director of purchasing for the system. He described his role as transportation officer as largely administrative, preparing reports, maintaining records and coordinating with the various community colleges. The transportation officer does not regularly review or assign vehicles. The VCCS chancellor makes all assignments. The transportation officer provides information to the chancellor but does not make recommendations on requests.

The transportation officer function at VCCS is largely a recordkeeping function with little control over the use of vehicles. Actual control is vested in the chancellor. However, in such a large and diverse system, this approach may not provide adequate control because of competing demands for the agency head's time.

The Alcoholic Beverage Control (ABC) Board is an example of a stronger approach to the transportation officer function.

The transportation officer of the ABC Board maintains all vehicle records and makes reports to Central Garage. He describes the position as partly problem solving and says it involves a small portion of each day. He reviews vehicle use monthly. The transportation officer does not assign vehicles. This is done by the board chairman. However, the transportation officer does provide relevant information and makes recommendations to the chairman.

The ABC Board transportation officer is able to exercise some control over assignments through recommendations to the chairman. Recommendations are usually followed.

The transportation officer of the Department of Highways and Transportation (DHT) exercises substantial authority for vehicles assigned to the department.

> DHT has established an internal car pool committee to establish policy and control use of motor vehicles. However, the transportation officer, who serves as a member of and secretary to the committee, has authority over vehicles between committee meetings. He handles all paperwork, maintains records and reviews requests for vehicles. The transportation officer makes recommendations to the committee and can reassign vehicles within DHT.

Although authority is shared with a departmental committee, the transportation officer is in a position to exercise full control over DHT vehicles. The DHT committee was created to ensure that vehicle needs of the large, diverse department would be adequately considered. However, the existence of the committee does not appear to limit the transportation officer's day-to-day control of vehicle use.

Other agencies, such as the Department of Corrections, State Water Control Board, and the Department of Agriculture and Consumer Services also appear to have transportation officers who can and do exercise full authority for vehicles. Agency heads serve as transportation officers in some smaller agencies. In these cases, the duties are often not considered to be significant because of the small number of vehicles assigned to these agencies.

Reviews of Vehicle Utilization. The value of the agency transportation officer is largely dependent on periodic reviews of agency vehicle needs and utilization. However, most of the transportation officers interviewed do not regularly review vehicle use. Only seven of the 20 case study agencies were found to have established a regular review process. For example,

> Transportation officers of the Alcoholic Beverage Control Board, State Water Control Board and State Department of Health review use monthly;

The Department of Highways and Transportation and the Department of Mental Health and Mental Retardation transportation officers review use quarterly; and

The Department of Labor and Industry and the Jamestown Foundation transportation officers review use semi-annually.

The monthly reviews are the most comprehensive. The Alcoholic Beverage Control Board prepares data for each assigned vehicle. The transportation officer reviews this information monthly. The Health Department's review process is not fully implemented, but will eventually provide data on both total mileage and amount of commuting for each vehicle. When the system is implemented, Health Department officials will be able to distinguish between business and non-business use.

The development of improved criteria for vehicle assignment, as well as increased control over commuting, will depend heavily on the adequacy of agency review. At present, however, many transportation officers do not conduct the kinds of systematic reviews necessary to improve utilization control.

Use of Vehicle Logs. The most detailed information on vehicle use is collected by the State Water Control Board (SWCB). SWCB requires vehicle logs. Each person using a vehicle must fill out a log sheet that shows mileage, destination, and purpose for each trip. The transportation officer reviews vehicle logs each month and is able to develop data on vehicle needs for each SWCB region and program. The use of vehicle logs, such as the ones developed by SWCB or other states (see Appendix 3), would also provide valuable information on the nature of vehicle utilization.

#### Fleet Manager Review

The fleet manager can also improve control of vehicle use. Adequate oversight of fleet operations requires the fleet manager to: (1) evaluate requests for new assignments; (2) establish priorities for vehicles that may be available; and (3) identify uneconomical or unneeded vehicles.

A top priority of the manager's review should be vehicles which cost more to operate per mile than the reimbursement rate for use of privately owned cars. Under the current rate structure, this would include vehicles which are operated less than 12,857 miles per year. The review should focus particularly on those assignments which appear to be both uneconomical and unjustified.

Currently, the manager may question the use of any vehicle, but only the Car Pool Committee can actually recall or reassign a vehicle. Forty vehicles were driven less than 6,000 miles during fiscal 1978. None were recalled. Minutes of the Car Pool Committee indicate that only one recall has been considered.

> The Virginia School for the Deaf and Blind (VSDB) in Staunton is assigned a 1974 Vega sedan. The vehicle was assigned when new and has been driven only 5,000 miles in five years. Fiscal 1978 mileage was 1,338. VSDB officials state that the Vega is used by the school's infirmary staff for emergency transportation of students and is thus necessary despite the low mileage.

The Car Pool Committee discussed this vehicle at two meetings in 1977. The committee suggested to VSDB that alternate transportation be investigated and the committee also advised the Secretary of Education about the car. The committee did not recall the vehicle and it remains assigned to VSDB where it continues to be underutilized.

VSDB use of this vehicle is clearly subject to question. The car is not specially equipped. Its value in critical situations is questionable. Moreover, the local area has good emergency service since five ambulances serve the city. It would appear that the vehicle is classified for emergency use simply because it is assigned to the infirmary.

The committee's unwillingness to recall even the least utilized vehicle is clear indication of the weakness of Central Garage utilization review. It appears that once a vehicle is assigned to an agency, it will not be removed unless the agency determines on its own that the vehicle is no longer needed. To make the review process meaningful, the Car Pool Committee should provide the fleet manager with authority to recall and reassign vehicles based on criteria established by the committee.

#### Transportation Officers

Agency transportation officers are critical to effective vehicle utilization. They provide the detailed knowledge of agency operations necessary to ensure that vehicles are utilized to maximum efficiency. However, the role of the transportation officer has not been clearly defined. Some transportation officers have substantial authority over agency vehicle management. Others simply handle paperwork.

No training is provided to transportation officers. In most cases, on the job experience is the only training. Many transportation officers are uncertain about their duties and have expressed a desire for additional guidance from the Car Pool Committee and fleet manager.

Recommendation (1). The Car Pool Committee should encourage agencies to carry out periodic reviews of their assigned vehicles. The duties of transportation officers should be better delineated. Transportation officers in each agency should hold positions which provide them sufficient authority to assign, review, and reassign agency vehicles. The fleet manager should conduct periodic meetings of all transportation officers to brief them on changes in the operation of the motor pool.

Recommendation (2). A manual should be developed for transportation officers. The manual should include all applicable laws, orders, and regulations. The manual should be prepared in a loose leaf format so that changes in policies and procedures can be readily made.

#### Fleet Manager

The Central Garage fleet manager is the only full-time professional position responsible for the entire fleet. The manager's authority is limited. Full authority is vested in the five member Car Pool Committee which meets only a few times a year.

Recommendation. The Car Pool Committee should vest the fleet manager with full authority to review, recall, and reassign unneeded or uneconomical vehicles. The manager should base the review on the utilization policies and criteria established by the committee. The committee should define appropriate uses. The manager should enforce committee policy.

## III. Central Garage Management

Daily operations of the Central Garage are carried out by the Equipment Division of the Department of Highways and Transportation (DHT). The fleet manager reports to the head of the division. Most Central Garage financial, maintenance, and recordkeeping activities are performed by division personnel.

There are a number of ways in which Central Garage management can be strengthened. More timely use of all available revenue would provide needed funding at the lowest cost to user agencies. Maintenance procedures could be made more systematic to ensure that all vehicles receive necessary service. Reorganization of operations records would enhance their usefulness. In addition, the fleet manager's control of operations could be increased to provide greater accountability for the motor pool.

#### FINANCIAL MANAGEMENT

The Central Garage Motor Pool is financed through a self-sustaining revolving fund which operates much like a private business. Central Garage provides vehicles to State agencies and charges a rate sufficient to cover the cost of operations. Unlike private businesses, however, governmental revolving funds are not supposed to accumulate significant surpluses.

In Virginia, revolving funds are usually known as working capital funds. Working capital funds are used to finance centralized telephone, computer, and printing services, as well as the distribution of foodstuffs and cleaning supplies. The Central Garage fund does not have the same legal status as a working capital fund. Rather, the motor pool is an internal DHT account although it is similar in every way to a working capital fund.

Sound financial management is needed to ensure that this type of financial operation does not incur excessive surpluses or losses. The Central Garage Motor Pool fund would benefit from more accurate statements of operating costs, improved cash management, and timely collection of accounts receivable. In addition, the Central Garage fund should be formally established as a working capital fund to bring about greater uniformity in the State chart of accounts.

#### Financial Condition

According to financial statements for fiscal 1978, the Central Garage fund had retained earnings of almost \$6.7 million (Figure 9). Total liabilities were \$222,000 compared to a cash balance of almost \$2.8 million. Billings to agencies exceeded stated operating costs by about \$553,000. The motor pool has accumulated an excessively large cash balance in recent years because billings to agencies have been more than needed to cover costs. However, the exact financial condition of the motor pool is unclear because depreciation costs have not been treated in accordance with generally accepted principles of governmental accounting.

Revenue Accounts. The Central Garage fund maintains two revenue accounts. All mileage and miscellaneous revenues are deposited in an operating account, from which all expenditures for motor pool operations are made. A surplus property account receives all proceeds from the sale of surplus vehicles. Surplus property funds are transferred to the operating account when needed to meet the costs of operations.

In recent years, however, the Central Garage has operated without using surplus property funds. All expenses have been paid out of operating revenues or by reducing the cash balance of the operating account. As a result, the Central Garage surplus property account has grown steadily (Table 7). The account balance was slightly greater than \$1.5 million in April, 1979.

#### Table 7

#### CENTRAL GARAGE SURPLUS PROPERTY ACCOUNT

Fiscal Year	Beginning Balance	Receipts	Expenditures	Ending <u>Balance</u>
1979	\$1,271,060	\$268,850 <sup>a</sup>	\$0 <sup>a</sup>	\$1,539,910 <sup>a</sup>
1978	958,443	312,617	0	1,271,060
1977	564,937	393,506	0	958,443
1976	244,677	320,260	0	564,937

<sup>a</sup>Through April 30, 1979.

Source: Department of Accounts.

A balance of this magnitude creates an unnecessary drain on the general fund. This is because agencies are now supporting all operations through user charges, despite the fact that surplus property revenues are intended to offset some operating costs. As a result, agencies are being charged excessively high rates for vehicle use.

### Figure 9

#### CENTRAL GARAGE MOTOR POOL FINANCIAL STATEMENTS FY 1978

ng na ang na	BALANCE SHEET	<u>n na na</u>	
	ASSETS		
	Current Assets		
	Cash Accounts Receivable		\$2,791,025 683,479
	Fixed Acceste		000,470
	Motor Equipment Less: Accumulated Depreciation	\$9,767,201 4,606,271	5,160,930
	Office & Shop Equipment Less: Accumulated Depreciation	30,378 17,722	12,656
	TOTAL ASSETS		\$8,648,090
	LIABILITIES & RETAINED EARNINGS Current Liabilities Accounts Pavable	\$ 221,966	
	Total Liabilities		\$ 221,966
	Contributions from Agency & General Fund Retained Earnings		1,738,139 6,687,985
	TOTAL LIABILITIES & RETAINED EARNINGS	· · .	\$8,648,090
	Operating Revenue		
	Billings to agencies and institutions Sale of motor vehicles Other receipts	\$5,831,972 296,725 16,261	
	Total Operating Revenue		\$6,144,958
	Less: Costs of services rendered		
	Salaries General repairs	\$ 159,544,11 369.06	
	Motor vehicle repairs	1,127,183.02	
	Electrical expenses	421.53 2.675.66	
	l ravel Communications	814.10	
	Towel service	514.40	
	Other contractual services Office supplies	2,543.83	
	Gasoline	1,358,345.22	
	Oil & grease	18,624.10	
	Wearing apparel	369.60	
	Other material & supplies	3,332.46	
	Insurance	276,033.04	
	Depreciation motor vehicle	2,548,383.50	
	Depreciation office & shop Miscellandous expenses	2,427.46 (15.00)	
	Total Cost of Services Rendered		\$5.591,725
	Excess of Operating Revenue Over Costs		\$ 553,233
	ANALYSIS OF CHANGES IN RETAINED EARNI	NGS	
	Balance, July 1, 1977		\$4,543,724
	Add: Excess of net receipts over costs Gain on sale of motor vehicles		903,233 443,920
			1
	Adjustment for motor vehicle depreciation		1,141,100
	Adjustment for motor vehicle depreciation Miscellaneous adjustments		1,141,100

Source: Adapted from Central Garage Financial Statements.

Accumulation of large cash surpluses, even if they are held to meet future costs, is not always sound financial policy. Generally, current revenues should support current operations. To achieve this goal, the Car Pool Committee and the fleet manager should estimate costs and revenues, including surplus property receipts, for each fiscal year. Rates should be set based on these estimates. In this way, the need to accumulate surplus funds as a hedge against future costs would be eliminated. The current balance of the surplus property account (\$1.5 million) could be returned to the general fund with no adverse effect on Central Garage operations.

Depreciation. The accuracy of Central Garage financial statements is adversely affected by procedures used to account for vehicle depreciation. Depreciation is an element of expense resulting from the use of long-lived assets. It is conventionally measured by allocating the expected net cost of using the asset (original cost less estimated salvage value) over its estimated useful life. Modern accounting practice provides several methods for showing depreciation expense including the straight-line method and the units-of-output method (Figure 10). Central Garage uses none of these however.

Central Garage depreciates vehicles on the basis of revenue collected to purchase replacement vehicles. This is a charge of five cents per mile for "depreciation". The amount of "depreciation revenue" earned by each vehicle is recorded as its depreciation expense. The following example shows how this system can result in excessive depreciation.

> A sedan was purchased in 1971 for \$2,800 and placed in service that year. The original cost was fully depreciated by June 1976. The vehicle continued in service until 1979 and Central Garage continued to record depreciation. The total depreciation expense for this vehicle was \$4,988.

No valid depreciation expense was actually incurred for this vehicle after it was fully depreciated. None should have been recorded. However, Central Garage continued to show such costs on its statement of operations. Thus, costs were overstated for those years. At any time, some vehicles are always fully depreciated. Therefore, Central Garage financial statements always overstate depreciation costs.

Central Garage also overstates the amount of gain on depreciation when vehicles are sold. Gain on depreciation is the difference between the estimated salvage value (depreciated value) of an asset and its actual disposal price. If the above sedan had sold for \$300 and its salvage value had been estimated at \$200, the gain on depreciation would be \$100. Central Garage, however, defines
## Figure 10

## DEPRECIATION OF VEHICLES

A 1979 Dodge Diplomat is purchased for \$5,100. The car can be sold at the end of its useful like for \$780. The net value to be depreciated is \$4,320:

Original	purchase p	rice		\$5,100
Less:	Expected	salvage	value	780

Net value to be depreciated \$4,320

There are two standard methods by which the vehicle may be depreciated.

Straight-Line Method

The straight-line method allocates the cost of use uniformly over time. Central Garage estimates the current useful life of a car to be 4 years, though some cars may remain in use longer.

> ■ <u>\$4,320</u> = \$1,080 per year <u>4 yrs</u> Net value Years of useful life

The vehicle is depreciated \$1,080 per year, for four years, on the following schedule:

Year	Depreciation Expense	Accumulated Depreciation	Book Value
First	\$1,080	\$1,080	\$5,100
Second	1,080	2,160	4,020
Third	1,080	3,240	2,940
Fourth	1,080	4,320	780
Fifth	0	4,320	780
	\$4,320		

#### Units-of-Output Method

The units of output method allocates the cost of use over the expected output of the vehicles; i.e., miles of use. Central Garage estimates that a car will be driven 80,000 miles in its useful life, though some may be driven longer.

Net value	38	4,320	*	\$,054	per	mile
Estimated units of output (miles)		80,000 miles				

The vehicle is depreciated \$.054 per mile, for 80,000 miles, on the following schedule:

Year	Annual Mileage	Total Mileage	Depreciation Expense	Accumulated Depreciation	Book Value
First Second Third Fourth Fifth Sixth	10,500 17,000 8,000 25,000 19,500 3,500	10,500 27,500 35,500 60,500 80,000 83,500	\$ 567 918 432 1,350 1,053 0	\$ 567 1,485 1,917 3,267 4,320 4,320	\$5,100 4,533 3,615 3,183 1,833 780 780
			\$4,320		

gain on depreciation as the difference between original cost and total "depreciation revenue". Central Garage recorded a \$2,188 gain in depreciation for the sedan in the example.

The Auditor of Public Accounts (APA) took exception to Central Garage depreciation practices in the 1976 audit of the motor pool. The APA recommended that maximum depreciation not exceed the book value of vehicles less salvage value. Since the average return on surplus vehicles was 15 percent, the auditor recommended 85 percent of original cost be the maximum depreciation. The Auditor also recommended that replacement revenue earned by fully depreciated vehicles be shown in the retained earnings rather than as reserve for depreciation.

Central Garage management responded by simply adjusting the reserve for depreciation on the balance sheet to 85 percent of total vehicle inventory and adding the excess to its retained earnings. However, depreciation is still based on replacement revenue and, as a result, operating costs continue to be overstated.

Modern accounting procedures are needed to accurately reflect the cost of vehicle depreciation. The units-of-output method shown in Figure 10 would be appropriate for measuring motor vehicle depreciation. For example, each year when new vehicles are purchased, a per mile depreciation rate could be calculated for each model. The rate should be based on expected service mileage. No depreciation expense should be recorded for vehicles which remain in service beyond their anticipated service life.

Fully depreciated vehicles could continue to earn replacement revenue. However, replacement revenue would be distinct and wholly separate from depreciation expense. Replacement revenue would be based on the *anticipated costs* of vehicles to be purchased. Depreciation expenses would be based on *actual purchase costs*.

Because Central Garage financial statements are based on an erroneous concept of depreciation, an exact statement of financial condition cannot be made. It would be helpful to have the Auditor of Public Accounts conduct a special audit of the Central Garage Motor Pool to ascertain its actual financial condition. In addition, the Comptroller should review Central Garage accounting procedures and prescribe modern depreciation methods for future use.

## Pricing and Billing

Central Garage pricing and billing need to be improved. Rates charged for use of pool cars are not based on accurate projections of costs. In addition, accounts receivable are not always collected in a timely manner. Rate Structure. Central Garage levies separate charges to meet the costs of general operation and vehicle purchases. Agencies pay for vehicles based on the mileage driven. Beginning in fiscal 1977, agencies have been charged 13 cents per mile for each vehicle used. This mileage charge is divided into three categories:

- operating revenue (7¢ per mile): to meet the cost of vehicle operation, including salaries, rent, maintenance, fuel, and supplies;
- replacement revenue (5¢ per mile): to provide funds for purchasing replacement vehicles; and
- capital addition revenue (l¢ per mile): to provide funds for purchasing additional vehicles.

Operating Revenue. Not all Central Garage operating costs are charged to vehicle users. For example, DHT does not charge Central Garage for the cost of data processing services. Nor is any rental charge assessed for use of one DHT shop which is used almost exclusively for motor pool cars. Failure to charge all appropriate expenses to Central Garage understates operating costs. DHT should charge the motor pool a realistic proportion of all related costs. In this way, the user charge for Central Garage vehicles will more accurately reflect actual costs of operation as required by law and executive order.

Replacement Revenue. The replacement charge for pool vehicles appears to have been too high in recent years. The unnecessarily high charge has contributed significantly to the growth in Central Garage excess funds. The replacement charge has been five cents per mile since the beginning of fiscal 1977. At this rate more revenue was collected during fiscal 1977 and 1978 than was needed to purchase replacement vehicles (Table 8). In fiscal 1977 almost three quarters of a million dollars more was collected than needed to purchase replacement vehicles.

#### Table 8

## REPLACEMENT REVENUE COMPARED TO COST OF VEHICLES

<u>Fiscal Year</u>	Replacement Revenue	Cost of Replacement Vehicles	<u>Gain (Loss)</u>
1979	\$2,590,242 <sup>a</sup>	\$2,732,128	(\$141,886)
1978	2,548,383	2,307,439	240,944
1977	2,500,366	1,784,124	716,242

<sup>a</sup>Projected through June 30, 1979.

Source: Central Garage and Department of Highways and Transportation.

In fiscal 1979, however, the cost of new cars was higher than the replacement revenue. Thus, it would appear that while the replacement charge may have been higher than necessary in earlier years, the charge is currently too low and may need to be raised to meet the increasing cost of new cars.

Central Garage should review the amount of replacement revenue needed each year to reduce the difference between replacement revenue and actual costs. Excess funds should not be accumulated in anticipation of higher costs. Rather, all costs should be passed along to users as replacement vehicles are purchased.

Capital Additions Revenue. The one cent capital addition charge for purchasing additional vehicles appears to be questionable in light of the widespread underutilization of existing vehicles. The charge was initiated in July 1977. Approximately \$814,000 has been collected since that time. During fiscal years 1977 and 1978, \$480,000 was spent to purchase 125 vehicles in addition to cars purchased to replace existing vehicles. Seventy-five additional vehicles were purchased during fiscal 1979 at a cost of approximately \$383,000.

The analysis of vehicle usage in Chapter II indicates considerable opportunities for improved use of existing vehicles. More effective control over the use of underutilized vehicles may eliminate much of the need to purchase additional vehicles. If, after reassigning underutilized vehicles, additions to the fleet are still needed, the cost of additional vehicles could be recovered through a surcharge. The surcharge should be of limited duration and be imposed only by specific direction of the Car Pool Committee.

Accounts Receivable. Central Garage lacks ad equate procedures to ensure that accounts are paid in a timely manner. The motor pool had almost \$675,000 in accounts receivable as of February 28, 1979 (Table 9). Most accounts were current, but a substantial proportion

#### Table 9

## CENTRAL GARAGE ACCOUNTS RECEIVABLE February 28, 1979

	Amount	Percent of Total
Current	\$411,459	61 %
30 days	72,147	10
60 days	39,874	6
90 days	25,560	4
120 or more	120,491	
Total	\$674,531	100%

Source: Central Garage.

(19%) were more than 120 days past due. Ninety percent was due from the Department of Corrections. This account has been collected. However, the accumulation of this balance resulted from the lack of an effective means for reporting overdue accounts.

Central Garage does not regularly age accounts receivable. Rather copies of invoices are maintained by month as a subsidiary ledger and the total accounts receivable are posted to the general ledger. This procedure does not appear to have been effective in alerting Central Garage to the existence of a large overdue account balance.

Equally important, however, is the fact that the fleet manager does not receive reports of accounts receivable and overdue accounts. Most financial records and transactions are handled by the DHT Equipment Division. Without adequate exception reporting to the fleet manager, it is difficult for the manager to provide assistance in collecting overdue accounts.

#### Fund Structure

The Central Garage Motor Pool should be financed as a working capital fund in order to be consistent with Commonwealth accounting practices for similar activities. There is no difference between the financial structure of the motor pool and the structure of working capital funds, such as those for the central warehouse supplies or computer services. Good accounting practice requires that similar activities be accounted for in like manner.

The 1976 JLARC report, "Working Capital Funds in Virginia", listed two criteria that should be used in determining whether a working capital fund is an appropriate method for financing a government activity: 1) services are centralized in a single agency which serves other agencies; and 2) the level of services can be identified in measurable units.

Central Garage meets both criteria. Although working capital funds are used to finance motor pools in most other states, no fund has been established for Virginia's motor pool. Creation of a working capital fund could be readily accomplished as a bookkeeping transaction by the comptroller.

#### **OPERATIONS MANAGEMENT**

Fleet operations include vehicle maintenance and repair, records management, and purchase and disposal of vehicles. Although vehicles are considered dependable by operators, operations management could be strengthened and made more systematic. These changes would enhance the overall efficiency of the motor pool. However, central to upgrading operations management is the need to provide the fleet manager with sufficient authority over fleet operations.

#### Maintenance

Respondents to the JLARC operators survey indicate that most Central Garage vehicles provide dependable transportation, and that repair service is generally available when needed. However, routine maintenance is not always performed in a timely fashion, and the Central Garage lacks adequate records of maintenance work performed on individual vehicles. In addition, some DHT service facilities can be difficult to locate.

Routine Service. The fleet manager does not have sufficient authority to ensure that vehicles are maintained as required. Motor pool regulations specify that all permanently assigned vehicles are to be returned to a DHT shop for routine maintenance every 4,000 miles.

However, Central Garage personnel contend that operators do not always bring vehicles in for routine maintenance. A spot check of 20 cars at the DHT equipment depot found two cars that had been driven up to 12,000 miles without an oil change or other service.

A more agressive approach toward routine service would be desirable. The fleet manager should monitor vehicle use and schedule maintenance as needed. The fleet manager should notify operators of maintenance schedules and ensure that vehicles are brought into DHT shops on time.

Scheduling is an established approach to maintenance. The federal General Services Administration (GSA) notifies operators when vehicles are overdue for service. Operators are required to inform the GSA when the service has been accomplished. Scheduling also improves shop management. By establishing maintenance schedules, the fleet manager could provide DHT shops with some idea of their anticipated passenger vehicle workload each month.

Many operators and transportation officers complained of difficulty in getting to and from the equipment depot in Richmond when taking cars in for maintenance. There were also complaints about leaving vehicles to be serviced and not having transportation. To facilitate maintenance, Central Garage could make cars available to employees who must have use of a vehicle. This is now done at three DHT district shops, each of which has two loan vehicles available. Shuttle service could be provided to transport operators between the Richmond depot and their agencies.

Repairs. Vehicle operators and agency transportation officers generally rated repairs made by DHT shops as good (Figure 11). Responses to the JLARC operators survey show that approximately 85 percent of operators who had experienced mechanical problems were able to obtain timely service from DHT shops. An equal proportion of operators rated their vehicles as dependable.

Figure 11 MOTOR VEHICLE OPERATORS SURVEY SELECTED MAINTENANCE OUESTIONS Did this vehicle provide you with dependable transportation? Yes (85%) (15%) No If you had mechanical problems with this vehicle, were you able to have them corrected in a satisfactory manner? Yes (77%) (16%) No Problems (7%) No Did you obtain fuel from Department of Highways and Transportation (DHT) facilities? All of the time (52%)Most of the time (38%)9%) Some of the time Not at all (1%) If you did not obtain fuel from DHT facilities all or most of the time, please indicate which of the following statements applied to your situation. My agency had its own fuel ( 8%) Occasionally DHT facilities were not open when I needed fuel ( 2%) Sometimes I could not find DHT facilities (1%) DHT facilities were not always conveniently located (1%) Not applicable (88%) Did you obtain maintenance from Department of Highways and Transportation (DHT) facilities? All of the time (89%)( 9%) Most of the time Some of the time 2%) Not at all ( 0%) If you did not obtain maintenance from DHT facilities all or most of the time, please indicate which of the following statements applied to your situation. My agency was authorized to repair Central Garage vehicles ( 2%) Repair service took too long at DHT facilities (1%) Commercial stations did better work ( 0%) Sometimes I could not find DHT facilities ( 0%) DHT facilities were not always conveniently located ( 1%) (96%) Not applicable

Source: JLARC Operator Survey.

Of the vehicle components listed in Table 10, engines were most frequently in need of repair. Although some operators reported in survey responses that faulty engine performance was the result of poor maintenance by DHT, some vehicle models appear to have faulty engines more often than others.

#### Table 10

## CENTRAL GARAGE VEHICLE PROBLEMS

Equipment	<u>Never a Problem</u>	Occasional Problem	Constant Problem
Lights	84%	15%	1 %
Tires	59	37	4
Brakes	66	29	5
Steering	73	24	3
Engine	38	44	18
AC/Heating	56	37	7

Source: JLARC Operator Survey.

For example, 30 percent of the operators driving AMC models cited engines as a "constant problem". Only eight percent of operators driving Chrysler models experienced such problems. Correspondingly, half of the persons using Chryslers had no engine problems, but only one-fourth of the AMC models were cited as trouble free. Thus, it would appear that at least part of the engine problems experienced resulted from specific models which held up poorly under fleet use, rather than poor performance by DHT mechanics.

Maintenance Records. Maintenance and repair of Central Garage vehicles might be improved if more complete service information for each vehicle were available to the fleet manager and DHT mechanics. The routine service card kept in each vehicle provides little information. No major repairs are shown. Therefore, any mechanic working on a vehicle has little information on the vehicle's history of past service or possible chronic problems with the car.

Work orders kept by the fleet manager are not very useful in developing a service history because they are filed only by date. As a result, a service history for a particular vehicle can be replicated only if the dates of previous service are known.

Lack of accessible service histories can lead to unnecessary and costly service. A more informative maintenance card should be developed. The card should show all service information. In this way, both mechanics and the fleet manager will have the information necessary for effective maintenance. Facilities Directory. Operators responding to the JLARC survey indicate they obtain fuel and service from DHT shops most of the time. The regular use of DHT shops is important because fuel at State facilities is less expensive than that at private service stations. To facilitate use of State facilities, each vehicle is equipped with a directory of fuel and repair facilities. Although the directory is highly detailed, it can sometimes be difficult to locate DHT facilities. For example,

> The manual indicates that the Newington Area Headquarters is located on Route 617, off Interstate 95. The shop is actually located on Route 877 and the entrance cannot be seen from Route 617. The map gives no indication that the operator must turn off 617 onto 877, or how far the shop is from the interstate.

Directions to the Salem District Shop, one of eight facilities where gasoline can be obtained 24 hours a day, show only how to reach the shop from in town Salem. No directions from Interstate 81, a major transportation corridor, are given.

Accurate directions are needed to enable vehicle operators, especially those driving trip pool cars, who may not be familiar with an area to locate and make use of DHT facilities. The ability to obtain fuel at DHT shops will be more important as gasoline supplies at commercial stations become scarce.

Control of Fuel. Control over the distribution of fuel at some DHT facilities is weak, particularly at smaller shops. In one instance, JLARC staff obtained fuel without ever seeing a DHT employee, even though the pumps were readily accessible. No employee responded to the attendant call bell and there did not appear to be any method to prevent unauthorized persons from obtaining fuel. In addition, none of the fuel tickets at this shop were signed by vehicle operators.

Effective control requires that an operator sign for fuel issued to certify that amounts are correct. The Auditor of Public Accounts cited this as a problem in 1976 for vehicles serviced in the Richmond area.

DHT now requires operators to sign for fuel when issued by an attendant, but no such requirement appears to be in force where shops are self service. Instructions for filling out fuel tickets should be posted prominently near the fuel pumps at all self-service facilities. The instructions should require that tickets be signed by the vehicle operator.

#### Central Garage Records

In addition to records of vehicle service and repair, Central Garage also collects information on the number and location of vehicles, demand for vehicles, and vehicle use and cost. This information is organized into three sets of records: a vehicle inventory, agency requests for additional vehicle assignments, and operations data.

Vehicle Inventory. The Central Garage vehicle inventory appears to be well designed. Each vehicle in service has a card in a Kardex file showing purchase price, annual mileage, operator assignments, and various vehicle identification data. It is possible to identify any Central Garage vehicle through its inventory card.

Information on vehicle inventory cards is not a lways correct, however. Five percent of the JLARC operator surveys were returned with the name of the operator changed. This means that over 100 current listings may be incorrect. Agencies apparently do not always notify Central Garage when operators are changed. Central Garage should periodically require agencies to verify each vehicle, operator, and location.

Assignment Requests. Requests for new vehicle assignments which are not approved by the Car Pool Committee are carried over from year to year. No re-verification is required. Therefore, it is not possible to determine exactly how many requests are valid at a given time. Consequently, priorities can be established only after the fleet manager contacts agencies to determine if vehicles are still needed.

A more systematic approach would be to require agencies to submit new requests on a quarterly or semi-annual basis to the Car Pool Committee. The fleet manager could evaluate the requests and make recommendations to the committee. Agencies whose requests are not approved could be notified and invited to resubmit their requests. This would provide the Car Pool Committee and fleet manager with accurate, up-to-date information on the demand for permanently assigned vehicles.

Vehicle Operations. Operations data for Central Garage vehicles are maintained by the Department of Highways and Transportation Data Processing Division. Each month the fleet manager is provided with computer printouts which show:

- monthly and year-to-date mileage and revenue for vehicles assigned to each agency;
- •year-to-date operating costs for each vehicle; and
- a summary of year-to-date mileage revenue and operating costs for vehicles.

These data appear to be adequate for monitoring agency vehicle operations and vehicle performance.

However, operations data are not organized to systematically identify vehicles which are chronically underutilized. Although the fleet manager reviews operations monthly, failure to specifically identify and document underutilization of individual vehicles can limit the manager's ability to promote more efficient vehicle use.

#### Vehicle Purchase and Disposal

Acquisition and disposal processes for Central Garage vehicles appear to be well developed. JLARC staff briefly reviewed purchasing and disposal procedures. No irregularities or departures from established procedures in the purchase of 1979 model automobiles were found.

Purchasing. All State vehicles are purchased by the DHT Purchasing Division on the basis of sealed, competitive bids. Any dealer may submit bids. In addition, manufacturers' representatives are given the opportunity to comment on proposed specifications at a pre-bid conference.

If a manufacturer feels that its vehicles are excluded by the proposed specifications and is able to provide a comparable vehicle, DHT will alter the proposed specifications. After the pre-bid conference, however, the specifications cannot be altered. When the lowest bidder has been determined, DHT makes a final approval and awards the contract to the low bidder.

JLARC staff contacted five of the six automobile dealers who bid on the 1979 purchase contract. Most of these dealers have dealt with DHT for a number of years. All said that DHT was fair. One dealer did express concern that DHT was not consistent in its handling of the 1979 purchase contract. However, the Assistant Attorney General assigned to DHT found no indication that the agency had departed from its established procedures.

The timing of the bidding process appears to result in substantial savings. DHT begins the purchase process after fleet prices have been given to dealers by the manufacturers, usually in the late fall. These fleet prices are based on actual production costs and are, therefore, usually lower than retail prices, which are based on predicted production costs.

Selection of Vehicles. Prior to 1974, the State purchased only full sized sedans and station wagons. The Central Garage purchased large numbers of compact vehicles in 1974, 1975 and 1976 in order to reduce operating costs. Most vehicles purchased in 1977 and 1978 were standard sized. No compacts are being purchased in 1979. This decision was based on the large number of complaints received about two particular compact models and on their perceived poor performance over a number of years.

Central Garage analyzed operating costs for several types of vehicles. Data from this analysis seem to indicate that compacts provide savings and reduce gas consumption per mile (Table 11). As shown in Table 11, the cost per mile of standard size cars exceeded that of compacts during the first, second and third year of operation.

#### Table 11

## COMPARATIVE OPERATIONS OF STANDARD AND COMPACT VEHICLES

	Cost Per Mile					
Vehicle Size	<u>lst Year</u>	2nd Year	3rd Year			
Standard Compact	3.9¢ 3.3¢	5.2¢ 4.4¢	5.8¢ 5.5¢			
	Mile	Miles Per Gallon				
Standard Compact	13.8 17.5	13.1 16.3	13.2 16.6			

Source: Central Garage.

Despite the complaints from some operators about lack of cargo and passenger space, small cars are more cost and fuel efficient. With tightened supplies and higher costs for gasoline, Central Garage should continue to purchase some compact cars each year. The proportion of compact purchases will depend on the passenger and cargo space needs of the user agencies.

To ensure that the fleet contains an appropriate mix of vehicle sizes, Central Garage should develop information on the specific types of vehicles needed by agencies. Daily logs indicating the purpose of travel, the number of passengers, kind of equipment to be carried, and any special travel requirements would assist in determining the types of vehicles needed. Currently, no such information exists.

Disposal. All vehicles owned by State agencies are disposed of by the Surplus Property Section of the Division of Purchases and Supply. Central Garage vehicles are sold at public auction. Revenues generated from the sale of Central Garage vehicles have generally exceeded anticipated prices. In one recent auction, 31 vehicles were sold for amounts greater than anticipated. Five vehicles sold for the anticipated price. Twenty-four sold for less. The average anticipated price was \$595 per vehicle. The average price received was \$629, yielding \$2,040 in revenues in excess of the anticipated prices for all the vehicles sold.

## Role of the Fleet Manager

Responsibility for Central Garage operations is spread throughout the DHT Equipment Division. As a result, the fleet manager has no direct authority over pool operations. The manager has no control over such important functions as financial management, maintenance, record keeping, and vehicle purchase and disposal (Figure 12). Moreover, the fleet manager has supervisory authority for only one of the 26 DHT employees who are directly responsible for pool operations.

## Figure 12

	CAR POOL COMMITTEE	FLEET MANAGER	EQUIPMENT DIVISION	DHT PURCHASING	PURCHASES SUPPLY	AGENCIES
POLICY	•					•
PURCHASE	•		•			
FINANCE	•		•			•
ASSIGNMENT						
MAINTENANCE			•			
UTILIZATION REVIEW		•				•
DISPOSAL			•		•	
RECORDS			•			
LIAISON		•				

# MOTOR VEHICLE MANAGEMENT FUNCTIONS

Source: JLARC.

The present arrangement not only limits the manager's effectiveness, but also reduces accountability for the operation of the motor pool. Among the problems created by the fleet manager's limited role are the following:

• The manager receives quarterly financial statements from the Equipment Division accountant, but no reports on the status of accounts receivable are provided. As a result, the manager is unable to systematically ensure that accounts are paid. The manager's responsibility to serve as liaison to user agencies would provide ample opportunity to follow up on overdue accounts if necessary financial data were available.

- The manager has little direct involvement and responsibility for vehicle maintenance. The manager has no authority to schedule work or to establish procedures for the two shops which are devoted full time to Central Garage vehicles. Maintenance inquiries are directed up the Equipment Division chain of command to the district equipment superintendent and to the equipment supervisor in Richmond.
- •The fleet manager has only limited authority and space to assemble necessary management records. Central Garage uses recordkeeping systems established by the Equipment Division. Records of work orders for pool cars, for example, are not organized so that service histories can be compiled. Instead, these records, like work orders for all Equipment Division equipment, are filed chronologically and are not easily available for individual vehicles.
- The fleet manager is completely bypassed in the purchase and disposal of automobiles. These activities are handled exclusively by the DHT equipment engineer and equipment supervisor and the Division of Purchases and Supply in the Department of General Services.

Fragmentation limits effective management and accountability. Operational decisions that have significant cost implications can be made without the participation of the fleet manager. Moreover, no single official is fully accountable. The DHT equipment engineer is responsible for the division in which the motor pool is located, but is not accountable to the Car Pool Committee.

## PROMOTING EFFECTIVE MANAGEMENT

More effective motor pool management requires two basic actions. First, financial practices should be modernized and made more efficient. Second, the fleet manager should be given greater responsibility for coordinating maintenance schedules, determining the cost effectiveness of repairs, organizing vehicle records, and purchasing and disposing of vehicles.

#### Financial Management

Approximately \$1.5 million has been accumulated in the motor pool's surplus property account because these funds were not needed to meet the costs of operation. Financial reports do not accurately present financial condition because motor vehicles are not accurately depreciated. Rates charged for use of motor vehicles do not reflect total operating costs. Lack of effective management reporting has allowed overdue accounts to accumulate.

Recommendation (1). The \$1.5 million balance in the Central Garage surplus property account should be returned to the general fund. In future years, surplus property receipts should be considered as a source of revenue when setting agency rental rates for pool cars.

Recommendation (2). Procedures used to account for depreciation should be brought into line with generally accepted practice. The concept of vehicle depreciation should be divorced from the concept of replacement revenue on financial statements. The present practice of showing depreciation cost in excess of original cost should be discontinued.

Recommendation (3). The Auditor of Public Accounts should conduct a special audit of the Central Garage Motor Pool to establish the actual financial condition of the fund. In addition, the Comptroller should review Central Garage accounting procedures and prescribe modern methods for reporting depreciation.

Recommendation (4). Monthly reports of accountsreceivable should be prepared for the fleet manager. The manager should contact agencies whose accounts are overdue to ensure prompt payment. Agencies should not be permitted to accumulate large unpaid accounts.

Recommendation (5). A working capital fund should be established to finance the Central Garage Motor Pool. Creation of a working capital fund would bring the Central Garage into line with similar support activities of State government.

## Maintenance

Vehicle operators report that maintenance is generally available and Central Garage vehicles are dependable. However, some operators do not return cars for maintenance on a timely basis. Others cannot locate DHT facilities. Maintenance records are not readily available for pool cars. Recommendation (1). The fleet manager should establish a maintenance schedule for each vehicle. Maintenance schedules should be provided in advance to vehicle operators and DHT shops to allow them to accommodate their schedules. Central Garage should loan vehicles to operators when needed. To the extent possible, maintenance should be scheduled to coincide with the semi-annual State inspection.

Recommendation (2). Maintenance cards kept in each vehicle should provide comprehensive service information for both routine maintenance and major repairs. A duplicate card s hould be maintained by the fleet manager for use in evaluating vehicle performance and in locating specific maintenance records.

Recommendation (3). The DHT facilities directory should be checked to ensure that directions are accurate and clear. The directory should also include instructions on the use of DHT fuel pumps.

#### Records

Monthly cost and mileage reports appear to be well organized for review of vehicle utilization and performance. However, the vehicle inventory and vehicle request files can be made more useful. Approximately five percent of the vehicle inventory cards contain erroneous information.

Recommendation (1). The fleet manager should establish a suspense file for monitoring underutilized vehicles. If a vehicle is continually underutilized without adequate justification, the file will provide ready documentation for considering its  $\mathbf{r}$  ecall.

Recommendation (2). Central Garage should regularly verify its vehicle inventory.

Recommendation (3). To ensure that the fleet manager has accurate information on the number of vehicles needed by agencies, all requests for new vehicle assignments should be submitted to the fleet manager prior to each meeting of the Car Pool Committee. Requests not approved by the committee should be reconsidered at a subsequent meeting only if resubmitted by the agency.

#### Fleet Manager

The fleet manager's effectiveness is limited by fragmentation of responsibility for pool operations. The fleet manager cannot control vehicle costs because he does not control activities such as maintenance, finance, and purchase and disposal. In addition, accountability is reduced because no single official is responsible for the Central Garage.

*Recommendation (1).* The fleet manager should be given greater authority over motor pool operations. Specifically, the fleet manager should:

- be given scheduling authority for the two shops that deal exclusively with motor pool cars;
- be designated as the *primary* contact for all questions about motor pool operations, including maintenance;
- be given full authority and appropriate resources to establish procedures and record systems necessary for efficient management of the motor pool; and
- •be provided with complete, accurate financial information on a timely basis.

Recommendation (2). Professional fleet management should be promoted through membership in organizations such as the National Association of Fleet Administrators, and participation in training programs. The Car Pool Committee should encourage the fleet manager to join such organizations and obtain training in fleet management when available.

# IV. Agency-Owned Vehicles

State agencies own 181 general purpose passenger vehicles which are not part of the Central Garage Motor Pool. One hundred sixty-three of these vehicles are operated by motor pools at the University of Virginia and Virginia Polytechnic Institute and State University. The remaining 18 vehicles are owned by individual agencies. Agencies and institutions may acquire their own vehicles to meet special needs if authorized by the Car Pool Committee as specified in the Governor's executive order.

The Car Pool Committee exercises insufficient oversight of agency-owned passenger vehicles. Comprehensive information on agency owned vehicles is not available. Moreover, the committee does not thoroughly review all requests by agencies to acquire vehicles. In some cases, agencies own vehicles which are used for general purpose transportation and do not appear to meet any special agency need.

## AGENCY VEHICLES

The Car Pool Committee is authorized to exempt agencies from the requirement to obtain passenger vehicles from the Central Garage. The Governor's executive order states that:

> All State-owned passenger type motor vehicles operated by any State agency shall be assigned to and maintained by the Central Garage Car Pool except those vehicles which have special equipment and performance requirements for police use, those vehicles acquired for use by any elective officer of the people of the Commonwealth, and such other *special category vehicles* as may from time to time be excepted by the Central Garage Car Pool Committee. (emphasis added)

However, the committee cannot effectively ensure compliance with this provision because essential information is not available. Moreover, the committee has not clearly defined what constitutes a special category vehicle.

#### Records of Agency Vehicles

No comprehensive, accurate inventory of passenger vehicles owned by State agencies exists. Because the Car Pool Committee has responsibility for all State vehicles, the Central Garage also maintains records on agency vehicles. However, Central Garage records are incomplete. In addition, Division of Motor Vehicles (DMV) registration data on State-owned vehicles are incorrect in many instances. JLARC staff was able to develop a list of passenger vehicles used by State agencies only after contacting agencies directly.

Authorization to Purchase Vehicles. The lack of adequate Central Garage records stems from the Car Pool Committee's limited oversight of agency vehicles. The committee does not thoroughly review all requests and has not developed the data base needed for effective review.

Committee review of agency vehicle purchases began in fiscal 1973. However, no inventory of agency-owned passenger vehicles was initiated at that time. Rather, the committee simply began reviewing requests beginning in that year. As a result, little or no control has been exercised over agency vehicles acquired prior to fiscal 1973.

Control over agency requests to purchase additional vehicles is also limited. Agencies request authority to purchase vehicles by submitting a form CP-15 to the Car Pool Committee. The request must indicate the type of vehicle desired and the justification for its acquisition. However, once a request has been approved, the Car Pool Committee exercises no further control. No follow-up information is collected. As a result, the committee cannot ensure that a vehicle continues to be used as explained in the application.

In addition, agency requests to replace existing vehicles appear to get little review from the committee. Once an agency has acquired a passenger vehicle, the only justification required for replacement is that the agency was previously authorized to have such a vehicle. Of 53 CP-15's for passenger vehicles submitted in fiscal 1978, 22 listed the need to replace a vehicle as the only justification. Fourteen requests offered no justification at all, but apparently involved replacement vehicles. None of these requests were refused by the Committee.

CP-15 forms are not organized to facilitate reviews on the basis of individual agencies. Instead, all forms are filed in a single folder in chronological order. As a result, it is difficult to use the information to establish the number of passenger vehicles owned by any given agency. Effective oversight of agencyowned vehicles is made difficult, if not impossible by this lack of information.

Loaned Vehicles. CP-15 forms are not available for all non-pool vehicles used by agencies. At least four colleges and universities operate passenger vehicles which are donated by auto dealers for use by the college presidents or for driver education classes. The Division of Purchases and Supply operates four automobiles donated by the federal government through the surplus property program. However, because CP-15 forms have not been filed with the fleet manager, no records of these vehicles are available to the Car Pool Committee.

Motor Vehicle Registrations. An important source of information on agency-owned vehicles is the registration data maintained by the Division of Motor Vehicles. However, vehicle registrations are of limited value because of the way they are organized and the failure of agencies to report changes in vehicle registration. JLARC staff contacted 37 agencies about their ownership of passenger vehicles. DMV records did not correspond to the records for 21 agencies.

At the outset of this review, JLARC staff attempted to obtain a listing of all vehicles registered to each State agency. DMV could not provide such an inventory from its computerized data because vehicles are often registered to an agency under various names. For example, the University of Virginia is listed under its full name as well as Univ. of Virginia, Univ. of Va. and U. Va.

The computer program requires each name to be specified in order to have a complete listing. However, DMV does not have all the names in use and, therefore, cannot effectively access its own data files. DMV did, however, provide JLARC with a listing in license number order of all vehicles registered to the Commonwealth of Virginia which carried public use "S" tags.

Even this listing did not show all passenger vehicles owned or used by State agencies. This is because not all vehicles have "S" tags. Some have "blind" (standard license) tags for use in law enforcement work or similar activities. Donated or loaned vehicles are not included unless these vehicles display public use tags. Many do not.

DMV records of vehicles licensed with "S" tags are also inaccurate in some cases. DMV personnel cite the failure of agencies to notify the division of changes in their vehicles as the reason for inaccuracies. Some agencies apparently transfer licenses from one vehicle to another without notifying DMV, a practice which is contrary to motor vehicle laws.

DMV records could be more helpful to the Car Pool Committee in overseeing agency-owned vehicles. Establishing procedures to ensure accuracy would provide the Car Pool Committee with information necessary to maintain complete inventory of agency vehicles.

## Use of Agency-Owned Vehicles

JLARC staff identified 18 agency-owned passenger vehicles used for general purpose transportation. These vehicles are owned by eight State agencies (Table 12) and are not part of the Central Garage Pool or the motor pools at the University of Virginia or Virginia Polytechnic Institute and State University. Several of the cars appear to be used no differently than Central Garage pool cars. For example,

> The Virginia Employment Commission (VEC) owns two sedans which are used by the commissioner and deputy commissioner for agency travel, commuting and errands. The automobiles are based in Richmond and are not specially equipped.

The Department of Military Affairs (DMA) owns a sedan which is used by the Adjutant General. Thevehicle has no special equipment and is licensed with "blind" tags. According to the department, the vehicle can be used for undercover surveillance work on college campuses and emergency response during periods of civil unrest.

## Table 12

## GENERAL PURPOSE PASSENGER VEHICLES OWNED BY STATE AGENCIES May, 1979

#### Agency

## No. of Vehicles

Division of Industrial Development	5
James Madison University	4 2
Virginia Employment Commission	2
Breaks Interstate Park Commission	1
Virginia Apple Commission	1
Department of Highways and Transportation	1
Department of Military Affairs	1
Total	18

#### lotal

Source: Compiled by JLARC.

Although the agencies were authorized by the Car Pool Committee to acquire and operate these automobiles, the purpose for their classification as special category vehicles is unclear. No justification was offered for the acquisition of the DMA vehicle when the request was made to the Car Pool Committee.

Three vehicles owned by James Madison University also appear to be used in much the same manner as pool cars. Two automobiles are used by maintenance supervisors. In addition, the home economics department uses a university owned sedan. Unlike the DMA and VEC vehicles, however, none of the passenger vehicles owned by

the university were authorized by the Car Pool Committee. At least one of these vehicles was acquired after the committee began reviewing agency requests in July 1972.

The Breaks Interstate Park Commission and the Department of Highways and Transportation each have one sedan which is used for general purpose travel. The DHT vehicle was purchased by the Elizabeth River Tunnel Commission in 1970, prior to the requirement for committee review. The Breaks vehicle is used for general transportation by the park director. No approval was requested for this vehicle. The park is an interstate agency operated by Virginia and Kentucky, and it is unclear whether it is exempted from car pool requirements.

Ten vehicles are owned by agencies for specific purposes for which pool cars may not be appropriate. For example, the Division of Industrial Development owns five Oldsmobile Delta 88's which are used in promoting Virginia as a location for new industry. Use of smaller, pool cars would not be as useful in escorting visiting industrialists and reviewing potential plant sites. In such activities, the Commonwealth may benefit from the use of a larger, better appointed automobile.

Several agency-owned vehicles are based outside of Virginia. The Virginia Port Authority has full time trade representatives in Chicago, Illinois, Louisville, Kentuc ky and Winston-Salem, North Carolina. Each office operates one vehicle. The Port Authority also operates one sedan in Sao Paulo, Brazil. In addition, the Virginia Apple Commission has a representative in Tennessee who operates an agency-owned vehicle.

The Car Pool Committee has authorized these agencies to purchase vehicles for use outside the State. However, no clearly defined policy on out-of-state vehicles has been established. Lack of a clear policy could result in inconsistent application of the informal precedents established by the Car Pool Committee.

## UNIVERSITY MOTOR POOLS

Passenger vehicles owned by Virginia Polytechnic Institute and State University (VPI&SU) and the University of Virginia (UVA) are organized into trip pools for use by university personnel. The VPI&SU pool consists of 99 automobiles; the UVA pool operates 64 general purpose passenger cars.

Policies and Procedures. VPI&SU has published policies and procedures for use of its pool cars in a small pamphlet that is available to university employees. The pamphlet addresses major policy matters such as who is authorized to use pool vehicles, operator responsibilities and insurance coverage. The brochure also describes procedures for obtaining a vehicle and regulations for vehicle operators.

The UVA pool does not have written policies and procedures. No regulation manual is published. A small decal affixed to the dashboard of each car lists certain requirements (e.g., calling State Police to investigate accidents), but the motor pool provides no other guidance. Some information about the UVA pool is contained in the university's travel regulations but only to the extent of informing employees that pool vehicles are available.

Much of the difference between the two motor pools results from the way they are organized and operated. The VPI&SU motor pool is under the direction of an experienced supervisor who has complete authority for all pool operations.

In contrast, the UVA pool is supervised by a transportation manager who is also responsible for the operation of the university's large bus system. The manager has no role in vehicle maintenance. The present manager had no experience as a fleet manager prior to assuming this position.

Permanent Assignments. The differences between the UVA and VPI&SU policies and procedures are illustrated by the approach the two schools take in making permanent assignments of vehicles. VPI&SU had 15 permanently assigned vehicles. VPI&SU policy is to assign vehicles to two groups of employees: buildings and grounds personnel who require special equipment, and Extension Division district agents who are located away from the VPI&SU campus.

Nineteen UVA passenger vehicles were permanently assigned. UVA personnel told JLARC staff that vehicles were assigned outside of Charlottesville, but a listing of assignments shows that ten vehicles were assigned in Charlottesville. Moreover, UVA had no formal application process for making permanent assignments. No systematic review of requests was conducted. Assignments were made by the transportation manager on the basis of verbal requests or general correspondence.

VPI&SU also lacks a formal application process for permanently assigning vehicles. However, permanently assigned vehicles are only issued for two months at a time and are posted to the assignment board in the same manner as trip cars. When Extension personnel return to Blacksburg for bi-monthly conferences, the old assignment invoices are closed out and new ones are issued.

Use of Private Vehicles. UVA and VPI&SU have established adequate procedures for controlling the use of privately-owned vehicles. These procedures are similar to those used by many other State agencies. State law provides for reimbursement at the rate of 15 cents per mile for use of a privately-owned vehicle if a State vehicle is not available. The rate is 13 cents per mile if a State car is available. Both UVA and VPI&SU require their employees to provide written verification from the motor pool that a State vehicle was unavailable. The verification must be attached to the request for reimbursement in order to obtain the higher rate.

#### IMPROVING OVERSIGHT OF AGENCY-OWNED VEHICLES

Improved oversight of agency vehicles by the Car Pool Committee is needed. Failure to restrict agencies' purchases of vehicles for passenger transportation to essential needs reduces the efficiency and cost savings gained from a central pool. The Car Pool Committee has not been aggressive in ensuring that only necessary vehicles are owned and used by State agencies.

#### Vehicle Records

No complete inventory of State-owned passenger vehicles is available. Existing data are often inaccurate. DMV listings are incomplete. Central Garage records are not useful in providing a central inventory of all vehicles.

Recommendation (1). The Car Pool Committee and the fleet manager should work with the Division of Motor Vehicles to develop more accurate and accessible information on State-owned vehicles. The committee should use this information to establish a comprehensive inventory of agency passenger vehicles. The Central Garage inventory should include: motor pool cars on permanent assignment to each agency, vehicles owned by each agency, and any loaned or donated vehicles.

Two listings should be prepared from the inventory. One listing should identify vehicles by agency and provide complete information about all vehicles used. Agency correspondence should also be included in this listing. The second should be organized to show Central Garage Motor Pool vehicles, agency-owned vehicles, and donated or loaned vehicles. This listing would serve as a control on the inventories of agency vehicles.

By comparing the two lists, Central Garage could readily ascertain the accuracy of its records. To keep these records up to date, the committee should require State agencies to submit an annual listing of all passenger vehicles in use, the person to whom they are assigned, and how they are used.

Recommendation (2). The accuracy of DMV records should be improved by providing all agencies with instructions on transferring public use or blind tags from one vehicle to another. All such changes should be reported to DMV and the Central Garage in a timely fashion. Instructions for transferring tags on State vehicles should also be included in the transportation officer's manual. Recommendation (3). The Car Pool Committee should maintain information on all vehicles loaned or donated to agencies. Agencies should be required to report these vehicles to the fleet manager.

## Vehicle Use

The Car Pool Committee has not exercised adequate oversight of the acquisition and use of agency-owned vehicles. Because the committee has not provided specific policies on many matters, some agencies have acquired their own vehicles when a Central Garage pool vehicle would have served just as well. Replacement vehicles are approved for acquisition with little or no review.

Recommendation (1). The Car Pool Committee should clearly define the conditions under which an agency may purchase a vehicle rather than obtain one from the Central Garage Motor Pool.

Recommendation (2). The CP-15 form should be revised and better used in reviewing agency needs for vehicles. Three actions should be taken. First, agencies should be required to provide full justification for all vehicles requested, including replacements. Second, the request form should be revised to provide information on vehicles actually purchased. Third, following the development and implementation of these procedures, the fleet manager and committee should review all passenger vehicles presently owned by agencies to determine if they should remain outside of the Central Garage Motor Pool.

Recommendation (3). The Car Pool Committee should establish a specific policy on the acquisition of vehicles for assignment outside the Commonwealth.

#### University Motor Pools

The motor pools operated by the University of Virginia and Virginia Polytechnic Institute and State University do not have formal applications or review processes for permanent assignments. The University of Virginia has not established clear policies for the use of pool vehicles. Control of university vehicles could be strengthened in two ways:

Recommendation (1). The University of Virginia should prepare a handbook of policies and procedures, and distribute it to all motor pool users.

Recommendation (2). The University of Virginia and VPI&SU should develop specific criteria for making permanent assignments, and require a formal application which justifies the need for the assignment.

# Appendices

	Page
Underutilized Vehicles for All Agencies	61
Categories of Vehicle Use	62
Log Book Examples	63
Technical Appendix	64
Agency Response	
JLARC policy provides that each State	

agency involved in an operational review be given the opportunity to comment on an exposure draft. This process is one part of an extensive data validation process.

## APPENDIX 1

# UNDERUTILIZED VEHICLES FOR ALL AGENCIES Fiscal 1978

Agency	No. Vehicles Under 12,857	Percent of Vehicles <u>Assigned</u>	Potential Savings
Highways and Transportation	80	15%	\$14,359
Corrections	46	29	8,907
Conservation and Economic Development	37	57	6,458
Division of Motor Vehicles	35	26	6,254
Alcoholic Beverage Control Board	24	22	6,153
Labor and Industry	23	36	5,132
Mental Health and Mental Retardation	16	20	5,027
Agriculture and Consumer Services	26	15	4,739
Community Colleges System	22	31	3,618
Virginia State College	9	64	2,945
Welfare	17	38	2,828
Virginia Commonwealth University	9	82	2,735
Clinch Valley College	6	86	2,492
Rehabilitative Services	7	29	2,248
General Services	5	42	1,792
Old Dominion University	8	47	1,575
William and Mary	3	50	1,539
Virginia School for the Deaf and Blind	3	100	1,523
Transportation Safety	6	32	1,340
Commission for the Visually Handicapped	10	26	1,240
Virginia Employment Commission	5	29	985
State Water Control Board	5	15	859
Blue Ridge Hospital	2	66	760
Board of Pharmacy	2	25	753
George Mason University	3	37	724
Jamestown-Yorktown Foundation	2	50	702
Computer Services	1	100	682
Intergovernmental Affairs	3	37	649
Rehabilitative School Authority	2	66	489
Health	5	7	481
Virginia Truck and Ornamentals Research	2	66	439
Mary Washington College	1	16	427
Virginia Military Institute	3	50	413
Council of Higher Education	1	100	381
Virginia Port Authority	3	100	348
Virginia Treatment Center for Children	1	50	324
Marine Resources Commission	3	15	315
State Corporation Commission	2	7	279
Emergency and Energy Services	3	21	264
Virginia Associated Research Campus	2	50	252
Game and Inland Fisheries	1	6	248
Commerce and Resources	2	25	237
Air Pollution Control Board	4	57	222
Board of Education	1	100	183
Virginia Science Museum	1	100	133
James Madison University Taxation Virginia Institute of Marine Science Virginia Museum of Fine Arts State Library	1 2 1 1	7 6 9 50 33	116 72 62 40 34
Division of Justice and Crime Prevention Christopher Newport College	1	$\frac{100}{\underline{33}}$	21 15
Total	465	44%	\$94,813

61

#### Appendix 2

## CATEGORIES OF VEHICLE USE (Prepared by JLARC from Information Gathered Through Vehicle User Survey)

## <u>Field Use</u>

Vehicles are used by persons who do not regularly work in a specific office or location. Such use requires constant travel, often (but not necessarily) over large areas. Field activity encompasses a variety of functions, including inspection/investigation, administration, service delivery, technical assistance, and auditing.

#### General Staff Use

Vehicles are organized into an internal agency pool or are used by persons other than the assigned operator.

## Administration

Vehicles are used by agency or institution heads and top management for travel related to management and direction of their agency or institution.

## Emergency Call

Vehicles are used to respond to emergencies in which public health or safety is endangered at any  $t\bar{1}$  me, day or night.

## 24 Hour Call

Vehicles are used to perform duties not involving public health or safety after normal working hours.

#### **Client Transportation**

Vehicles are used to transport inmates, patients, students or other persons who are served by or under the supervision of an agency or institution.

#### Public Information

Vehicles are used in the course of disseminating information or establishing and maintaining relations with the local community or constituent groups.

## Utility

Vehicles are used to run errands, such as purchasing or delivering supplies, messenger mail service, sample collection or other agency "housekeeping" uses\_

# Appendix 3

# LOG BOOK EXAMPLES

STATE WATER CONTROL BOARD - MOTOR VEHICLE LOG

Month of \_\_\_\_\_, 19\_\_\_\_

Central Garage or Fulton Pool No. \_\_\_\_\_\_License No. \_\_\_\_\_\_ (if a replacement for a permanently or temporarily assigned vehicle, note pool and license number of permanent ( ) or temporary ( ) vehicle here: \_\_\_\_\_

ASSIGNED TO:

Initials of Person	Date	Speedometer reading at start of day or trip	Points between which travel took place	Element	Speedometer reading at end of day or trip	Net miles traveled

DBFP-FM-MFOMS OPERATOR'S REI		MARYLAND FLEET OPERATIONS AND MANAGEMENT SYSTEM														
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ID NUMBER		MAKE OF VEHICLE	MODE	L YEA	R AGENCY	NAME	·		······		MFOMS C	ODE				
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AGENCY	VERIFICATION	SIGNATURE						т	ITLE				_		*****	-

Sources: Virginia State Water Control Board and State of Maryland.

## TECHNICAL APPENDIX (Available on Request)

JLARC policy requires an explanation of the research methodology employed in each study. A technical appendix was prepared for this report and is available on request from JLARC, 910 Capitol Street, Suite 1100, Richmond, Virginia 23219.

The technical appendix explains how vehicle use was analyzed, and how various vehicle cost projections were made. Explanations of sampling techniques and survey methodology are also included.

1. <u>Vehicle Use Analysis</u>. Mileage data for 2,218 Central Garage vehicles were analyzed. The analysis had two parts. The first part focused on whether annual mileage was below or above 18,000 miles. The second part was an analysis of the costs of underutilized vehicles and indicated that 465 vehicles were more costly per mile than the reimbursement rate for use of privately owned vehicles.

2. Operators Survey. JLARC surveyed 515 vehicle operators on use, commuting and vehicle performance. Three distinct groups of operators were surveyed: (1) a random sample of all operators; (2) those who drove less than 10,000 miles in FY 1978; and (3) those who drove more than 20,000 miles in FY 1978. The data from the random sample was used to make projections about the whole fleet. A copy of the survey instrument may be seen on page 65.

3. <u>Commuting Analysis</u>. The analysis of commuting in State cars was based on data gathered on the JLARC Operator Survey. Using the one way commuting distance provided by the operator, it was possible to compute annual mileage and costs for commuting use.

4. <u>Case Study Agencies</u>. The policies, procedures and vehicle use of 20 selected agencies were reviewed in detail. The 20 agencies were selected on the basis of three criteria: (1) levels of vehicle utilization; (2) functional area of State government; and (3) number of vehicles assigned. The JLARC staff interviewed the transportation officers of the 20 agencies and obtained policies, records and vehicle inventories from each.

5. <u>Trip Pool Operator Survey</u>. Selected users of the trip pool in Richmond were interviewed by telephone. The interview included questions on trip pool services and vehicle performance.

March 2, 1979

Dear State Employee:

The Joint Legislative Audit and Review Commission is assessing the utility and adequacy of State-owned passenger vehicles in meeting employee transportation needs. We are especially interested in obtaining data from people who have been assigned State cars on a permanent basis.

You are one of a small sample of State employees who will receive this questionnaire. Please take a few minutes to complete the questionnaire and return it to us now. It is important that each question be answered as completely as possible.

The survey covers the 1978 fiscal year, from July 1, 1977 to June 30, 1978. Your responses should reflect your experiences during that period. If other employees also used the vehicle, even though it was assigned to you, answer the questions only as they apply to you.

A pre-addressed, stamped envelope is enclosed for your convenience. Thank you very much for your assistance.

Sincerely,

Ray D. Sechtel

Ray D. Pethtel Director

RDP:ss Enclosures Records of the Central Garage Motor Pool indicate that the vehicle identified below was assigned to you during fiscal year 1978 (July 1, 1977 to June 30, 1978).

1a. Vehicle identification

Pool Number:

Year, Make, Model:

Operator:

Agency:

b. Please indicate which statement best describes your vehicle assignment during fiscal year 1978. (Check one only)

This vehicle was assigned to me for the entire period from July 1, 1977 to June 30, 1978. ( )

.I did not have this vehicle for the entire period; this vehicle was assigned to me from to \_\_\_\_\_\_\_\_(fill in dates) () (month, year) (month, year) .This vehicle was never assigned to me. ()

If the above vehicle was assigned to you, please answer all of the following questions.

If the above vehicle was not assigned to you, please indicate which, if any, vehicle was assigned to you and return this questionnaire unanswered.

2a. Were you the only person who operated this vehicle while it was assigned to you?

Yes () No ()

b. If you answered no,

.Who else operated this vehicle?

Please	estimate	the	percentage	of	operation	by	other
persons	i		%				

1

3. What was your job title when this vehicle was assigned to you?

-----

------

- 99
- 4. Please identify why your job duties required that you have a permanently assigned State vehicle and describe the different ways in which you used this vehicle.

.....

:

\_\_\_\_\_

5. Did you operate this vehicle in:

predominantly	urban	areas	
predominantly	rural	areas	
both			

- 6a. Did you usually use this vehicle to commute directly between your home and your office?
  - Yes () No ()
- b. If you answered yes, what was the approximate distance (one way) between your home and your office? miles
- c. If you answered no, which statement best describes your situation.

.My agency did not	permit	assigned	vehicles	to b	e
used for commutin	g.				

.I did not regularly commute	e directly to any office.
I spent most of my time in	the field and went
directly to the field from	my home. ()

.Someone else in my office usually used this vehicle for commuting.

.Other (specify)

7a. Were you ever required to reimburse your agency for use of this vehicle?

Yes () No ()

b. If you answered yes, please explain.

()

()

()

8a.	How would you rat	e the	performance	of	this	vehicle	with	regard
	to the following:							-

		Never a <u>Problem</u>	Occasional Problem	Constant Problem
	Lights Tires Brakes Steering Engine Air conditioning Other (specify)		( ) ( ) ( ) ( ) ( )	
b.	Please explain any c	onstant problems	you have noted.	

- 9a. Did this vehicle provide you with dependable transportation?
  - Yes () No ()
- b. If you answered no, please explain.

10a. If you had mechanical problems with this vehicle, were you able to have them corrected in a satisfactory manner?

4

Yes () No () No problems ()

b. If no, please explain.

5

- 11a. Was the size of this vehicle adequate to meet your transportation needs?
  - Yes () No ()

b. If no, please explain.

12a. Did you obtain fuel and maintenance from Department of Highways and Transportation (DHT) facilities?

	Fuel	<u>Maintenance</u>		
All of the time Most of the time Some of the time Not at all	( ) ( ) ( )	( ) ( ) ( )		

b. If you did not obtain fuel or maintenance from DHT facilities all or most of the time, please indicate which of the following statements applied to your situation.

.Fuel	(Check	ā S	many	as	apply)
and the second se			-		

.My	agency	had	its	own	fuel. (	)	ł
-							

.Uccasional	١IJ	/UHITa	cilities	were	not	
open when	I	needed	fuel.			()

.Sometimes	I	could	not	find	DHT	facilities.	(	)
------------	---	-------	-----	------	-----	-------------	---	---

```
.DHT facilities were not always conveniently located. ( )
```

.Other\_\_\_\_\_\_(specify)

()

(speci

.Maintenance (Check as many as apply)

.My agency was authorized to repair Central Garage vehicles.	(	)
.Repair service took too long at DHT facilities.	(	)
.Commercial stations did better work.	(	)
.Sometimes I could not find DHT facilities.	(	)
.DHT facilities were not always conveniently located.	(	)
.Other(specify)	(	)

HARDLD C, KING, COMMISSIONER LEDNARD H, HALL, SRISTOL, BRISTOL DISTRICT HEJRING G, FRALIN, ROANOKE, SALEM DISTRICT WILLIAM E, ANDERSON, DANVILLE, LYNCHRURG DISTRICT WILLIAM F, NOHR, RICHMOND, RICHMOND, DISTRICT WILLIAM T, ROOS, YORKTOWN, SUFFOLK DISTRICT WILLIAM T, ROBINSON, WEST POINT, FREDERICKSBURG DISTRICT WILLIAM B, WRENCH, SPRINGFIELD, CULPEPER DISTRICT ROBERT S, LANCES, STAUNTON, STALINTON DISTRICT T, RAY MASSELL, HI, CHESAPEAKE, AT LARGE-URBAY CHARLES S, MOOFER, JR, CREWS, AT LARGE-URBAY



# COMMONWEALTH of VIRGINIA

DEPARTMENT OF HIGHWAYS & TRANSPORTATION 1221 EAST BROAD STREET RICHMOND, 23219

July 10, 1979

- LEO E. BUSSER, II) DEPUTY COMMISSIONER & CHIEF ENGINEER
- LASHBY NEWBY DIRECTOR OF ADMINISTRATION
- J. M. WRAY, JR. DIRECTOR OF OPERATIONS
- H. R. PERKINSON, JR. DIRECTOR OF PROGRAM MANAGEMENT
- W. L. BRITTLE, JA. DIRECTOR OF ENGINEERING
- OSCAR K. MABRY DIRECTOR OF PLANNING

IN REPLY PLEASE REFER TO

Joint Legislative Audit and Review Commission Exposure Draft Report -"Use of State-Owned Motor Vehicles -July 3, 1979"

Mr. Ray D. Pethtel, Director Joint Legislative Audit and Review Commission 823 East Main Street, Suite 200 Richmond, Virginia 23219

Dear Mr. Pethtel:

The Joint Legislative Audit and Review Commission Exposure Draft of the report on "Use of State-Owned Motor Vehicles - July 3, 1979" has been reviewed by the Central Garage Car Pool Fleet Manager, and there appear to be no significant errors of fact. The few minor discrepancies which were found in the draft were pointed out to you and your staff in the meeting of July 5, 1979, and I presume will be corrected in the final report.

Copies of the Exposure Draft were sent to the members of the Car Pool Committee on July 6, and neither I nor the other members of the Committee have had the opportunity to review and discuss the findings in detail.

I am sure the Committee will give careful consideration to each of the items cited in the report. The Committee in the past has been concerned with many of the problems pointed out in the report and had begun gathering more detailed data on vehicle utilization to determine what additional controls may be needed. Action by the Committee has been deferred awaiting completion of your report so that we may have the benefit of your analysis, as well as our own.

The Central Garage Car Pool Committee will meet on August 22, and we appreciate your agreeing to provide the Committee with a detailed briefing of the report's findings and recommendations at that time. Subsequently, the Committee will advise the Joint Legislative Audit and Review Commission of the actions it intends to take in response to the recommendations.

Sincerely,

ere c Harold C. King, Chairman

Central Garage Car Pool Committee

CC: Mr. George M. Walters Members of Central Garage Car Pool Committee

TRANSPORTATION - AMERICA'S LIFELINES

## JOINT LEGISLATIVE AUDIT AND REVIEW COMMISSION

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