



Office of Program Policy Analysis And Government Accountability

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Director

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REVIEW OF STATE VEHICLE MAINTENANCE

REPORT

ABSTRACT

- The state could potentially save an estimated \$800,000 to \$2.4 million annually by implementing a centralized vehicle maintenance system. Currently, the state pays an estimated \$8 million annually to private garages for passenger vehicle maintenance. A centralized maintenance system can provide volume discounts and help prevent paying for unnecessary repair work.
- Extended warranties for state agency vehicles may not be cost-effective.

PURPOSE OF REVIEW

The Joint Legislative Auditing Committee requested that our Office review the methods state agencies use to manage their vehicle fleets. In this report, we assess ways the state could save money when using private garages for vehicle maintenance services.

Related reports in this series deal with how employees use state vehicles, the methods Florida uses to acquire vehicles, the state's data system for tracking vehicle usage, and the use of personal vehicles by state employees.

BACKGROUND

The state owns about 18,000 passenger vehicles that employees use to perform their jobs. These include law enforcement pursuit vehicles as well as cars, utility vehicles, vans, and pickup trucks that transport supplies and personnel. The state's vehicle fleet operates on a decentralized basis, with individual agencies responsible for operating and maintaining their own vehicles. Most agencies own less than 200 passenger vehicles. However, 11 agencies own between 300 and 3,700 passenger vehicles.

Agencies use both in-house and private garages to maintain their vehicles. Fifteen agencies operate in-house garages. These garages perform a range of services; some provide only routine maintenance (e.g., oil changes and minor repairs) while others perform comprehensive repairs (e.g., rebuilding engines). These in-house garages typically work on only those vehicles owned by their agency. However, two garages (in Tallahassee and Gainesville) serve vehicles owned by multiple agencies.

Agencies have varying practices for using private garages for maintenance services. Some agencies use private garages for almost all vehicle maintenance. Other agencies only use private garages for work that is covered under manufacturer warranty or for those repairs that their in-house facilities do not perform. Several agencies have contracted with selected garages for

maintenance services; employees are directed to use these facilities when vehicles need repairs. In other agencies, staff select garages on their own for repair work. Agency staff told us that they typically select private garages based on price, past experience, and convenience.

Agencies spend an estimated \$14 million annually to maintain their passenger vehicle fleets. An estimated \$8 million of this cost is incurred at private garages.

FINDINGS

The state is paying more than necessary for some maintenance services.

The state is not maximizing possible volume discounts and is incurring unnecessary administrative costs for vehicle maintenance services. This occurs because each agency is

making separate arrangements for private garage repair services and the state is not receiving volume discounts based on its fleet size.¹ The state also incurs unnecessary administrative costs because agencies duplicate each others' work in selecting and negotiating with private garages.

Exhibit 1 shows that the state pays more than necessary for some repair services. Ten state agencies told us the prices they pay for certain repair services in different Florida cities.² As seen in the exhibit, the prices they reported vary widely. For example, agencies reported prices in Tampa between \$37 and \$148 for routine transmission service and from \$11 to \$32 for oil changes.³ Although there may be some variations in these prices due to different types of vehicles or varying timeframes, this does not account for price variations of this magnitude. The large differences between the high and low prices indicates that some agencies are paying more than necessary for vehicle maintenance services.

**Exhibit 1
Agencies Pay Varying Prices for Routine Maintenance Services**

P r i c e s f o r R o u t i n e S e r v i c e								
City	O I L C H A N G E		T U N E - U P		B R A K E W O R K		T R A N S M I S S I O N S E R V I C E	
	Low	High	Low	High	Low	High	Low	High
Tallahassee	\$13	\$28	\$30	\$80	\$65	\$144	\$37	\$68
Jacksonville	13	33	39	90	65	219	38	93
Tampa	11	32	40	78	49	188	37	148
Miami	15	37	32	80	74	270	37	90
Routine Maintenance =	Oil, filter, lube, and fluid check.		Change spark plugs, check spark plug wires, and check and adjust points and timing (if necessary).		Replace front disk pads with semi-metallic pads and turn rotors.		Change fluid, pan gasket, and filter and road test.	

Source: Office of Program Policy Analysis and Government Accountability analysis of vehicle maintenance prices reported by ten state agencies.

¹ The only state contracts for vehicle maintenance are for purchasing tires and a few contracts for parts and supplies that would be used by state garages.

² We asked state agencies for information on the range of prices they paid for specified maintenance services. We selected ten agencies for our analysis that own over 300 vehicles and have vehicles located in one or more of the nine locations for which we were requesting price information. Due to limited data availability, agency responses included prices for fiscal years 1994-95, 1995-96, or 1996-97. In most cases, the agencies' data were based on their review of invoices. However, in some cases agencies could not locate invoices and provided estimates based on vendor price quotes. We requested verification of prices that seemed unusually high.

³ We could not determine the average amount paid by agencies for these services because the state's Equipment Maintenance Information System (EMIS) only requires agencies to record the total monthly amount spent on maintenance for each vehicle, not the amount paid for each maintenance service. The limitations of EMIS are addressed in Report No. 96-02, issued July 29, 1996.

Other entities with large fleets use centralized maintenance systems to obtain volume discounts and prevent unnecessary repairs.

Many government agencies in other states and private corporations that have large vehicle fleets have reduced their costs by using centralized maintenance programs. To assess these programs, we contacted other states, the federal government, private companies that manage large vehicle fleets, and reviewed professional literature. We assessed three alternatives that could improve Florida's fleet management practices. These are (1) contracting with a garage network for maintenance services at discount prices; (2) contracting with a private firm to monitor repair work (called managed maintenance); and (3) creating a state unit to contract with vendors and monitor maintenance services.

Garage Network. Several private fleet management companies have developed networks of private garages that provide maintenance services at discounted prices. Corporations and governments that contract with these companies may take vehicles to any garage in the network for repair services. For example, one network we contacted has 3,000 member garages throughout Florida.

Garage networks can cut maintenance costs because member garages charge agreed-upon discounted prices for service. The member garages agree to provide these discounts because of the business volume they receive from participating vehicle fleets.

As shown in Exhibit 2, prices quoted by two garage networks operating in Florida were significantly lower than those reported by some agencies. Fleet management company representatives told us that their network prices will not always be the lowest in an area, but that overall costs using the networks should average out lower than costs outside the network. Garage networks can also cut administrative costs because agencies do not need to establish individual agreements with private garages. The networks also provide consolidated monthly billings that

detail all repair services provided during the month, which can reduce accounting costs. The monthly billing information can be provided in a format capable of being loaded into a fleet management computer system, and thus provide data on the frequency and costs of maintenance work. Currently, each agency receives separate bills from each garage.

Garage networks are used by several large corporate fleets we contacted and by the state of Maryland. These users told us that they have realized significant cost savings from the networks' price discounts. The fees charged for using the networks are negotiable. Companies that establish garage networks may receive a fee from member garages based on the volume of business received from the contract rather than directly charging a user fee. Private fleet management companies quoted us fees ranging from zero to \$2.50 per vehicle per month for using their garage networks.

**Exhibit 2
Network Prices Are Lower Than Those Reported by Agencies for Some Maintenance Services**

	Tallahassee Prices Reported by Agencies	Garage Network Prices
Oil Change	\$13 to \$ 28	\$17 to \$19
Tune-Up	\$30 to \$ 80	\$39 to \$56
Brake Work	\$65 to \$144	\$93
Transmission Service	\$37 to \$ 68	\$41 to \$65

¹ Network prices are in effect statewide.

Source: Office of Program Policy Analysis and Government Accountability analysis of information provided by ten state agencies and two fleet management companies.

Managed Maintenance Including Garage Network. A second alternative is to contract with a fleet management company to monitor work performed on state vehicles. These companies provide this service together with garage networks. In these systems, employees who drive vehicles are given a toll-free telephone number to call if their vehicle needs service. Company technicians instruct drivers where to take vehicles for service, generally to a network garage or to a dealer if the problem is likely covered by a manufacturer warranty. The garage diagnoses the vehicle's

problem and calls the company to receive an assessment of whether the proposed repair is necessary. The technicians use computerized data on each vehicle's maintenance history to help determine whether service is necessary and/or covered under warranty. Fleet management companies consolidate invoices from network garages and reject invoices that were not determined to be necessary. The fleet management companies charge negotiable fees for their services. We were quoted fees ranging up to \$5.50 per vehicle per month. One state we contacted (Louisiana) was receiving managed maintenance services at no charge.

Managed maintenance programs are frequently used by large corporate fleets and state governments. For example, Eastman Kodak, A.T.& T., Airborne Express, and E.I. DuPont DeNemours and Company use managed maintenance programs. Additionally, at least two states (New York and Louisiana) use managed maintenance services purchased from fleet management companies. Corporate and state users told us that managed maintenance programs have helped save them money because of network discounts and because the programs help avoid paying for unneeded repair work or work that would be covered by warranty.

Adopting a managed maintenance program would likely save money in Florida because many agencies do not have strong systems for monitoring vehicle repair work. For example, of the ten agencies with large fleets that are primarily maintained at private garages, repair work in nine is generally approved by the vehicle driver, the driver's supervisor, or administrative support staff. These staff do not receive training to make these judgments and thus probably do not have the expertise needed to avoid unnecessary repairs. Only one of these ten agencies has a centralized system to monitor vehicle repairs.

The Department of the Lottery uses trained staff to evaluate vehicle maintenance requests and determine whether the work is needed or would be covered under warranty. A Department official told us that this system has helped to control maintenance costs. The Department requires screening and approval of all vehicle repairs over \$100. This screening has detected proposals of

unnecessary work, such as a garage proposing to replace brake rotors that could be turned, and has identified instances in which the work proposed would be covered under warranty.

Another benefit of managed maintenance is the potential to obtain refunds from manufacturers for defects not covered by warranty. Maintenance management companies track the maintenance trends of the fleets they administer and can identify patterns of vehicle problems that may be the result of manufacturing defects. Manufacturers may provide refunds for this work if these patterns can be documented. Two corporations we contacted that use managed maintenance indicated that they recover over \$100,000 annually from manufacturers because of this process. Florida has more vehicles than do these corporations and could likely receive similar refunds if repairs on state-owned vehicles were tracked.

State Managed Maintenance Including Garage Network. A third option is for the state to set up its own garage network and establish a unit to monitor vehicle repair services. South Carolina has established its own network of private garages and operates a managed maintenance program. The state funds this program through a mark-up on network garage services. The program is optional for agencies.

A state-administered managed maintenance system would have similar benefits to using a privately-administered program, including volume discounts, monitoring to avoid unnecessary repair work, and obtaining manufacturer refunds for vehicle defects. South Carolina reports that it receives larger discounts from private garages because it avoids paying the profit premium charged by private fleet management firms.

However, establishing a state-run program in Florida would require creating a new governmental unit. South Carolina's program uses eight full-time positions and is not currently recovering its operating costs. In addition, the state would be establishing a program to provide services that can already be obtained in the private sector.

Exhibit 3 summarizes the advantages and disadvantages of the three centralized methods of providing vehicle maintenance services.

Exhibit 3
The Advantages and Disadvantages of
Three Centralized Methods of Vehicle Maintenance

A D V A N T A G E S

D I S A D V A N T A G E S

Garage Network

- | | |
|--|---|
| <ul style="list-style-type: none"> ■ Cost savings through discount prices for repair work ■ Administrative cost savings in vendor selection and consolidated billing ■ Better data on vehicle maintenance costs and frequency | <ul style="list-style-type: none"> ■ Possible user fee ■ Agencies have less flexibility in choosing garages ■ Network garages may not be available in all areas; agencies may still have to contract for some services |
|--|---|

Managed Maintenance Including Garage Network

- | | |
|---|--|
| <ul style="list-style-type: none"> ■ Cost savings through discount prices for repair work ■ Administrative cost savings in vendor selection and consolidated billing ■ Better data on vehicle maintenance costs and frequency ■ Monitoring helps prevent unneeded repair work ■ Monitoring helps ensure manufacturer warranties are used ■ May obtain refunds for manufacturing defects not covered by warranty | <ul style="list-style-type: none"> ■ Possible user fee ■ Agencies have less flexibility in choosing garages ■ Network garages may not be available in all areas; agencies may still have to contract for some services ■ Drivers must call in advance for assessment of whether maintenance services are necessary |
|---|--|

State Managed Maintenance Including Garage Network

- | | |
|---|--|
| <ul style="list-style-type: none"> ■ Cost savings through discount prices for repair work ■ Administrative cost savings in vendor selection and consolidated billing ■ Better data on vehicle maintenance costs and frequency ■ Monitoring helps prevent unneeded repair work ■ Monitoring helps ensure manufacturer warranties are used ■ May obtain refunds for manufacturing defects not covered by warranty ■ May obtain greater discounts than with managed maintenance provided by a private company | <ul style="list-style-type: none"> ■ Fee system may not recover operating costs ■ Agencies have less flexibility in choosing garages ■ Network garages may not be available in all areas; agencies may still have to contract for some services ■ Drivers must call in advance for assessment of whether maintenance services are necessary ■ Would require adding state staff positions ■ Competition with private sector |
|---|--|

Source: Office of Program Policy Analysis and Government Accountability analysis of information obtained from state and private corporation fleets, professional literature, and fleet management companies.

Cost savings from a centralized vehicle maintenance system are likely to be significant.

A more centralized system for purchasing maintenance services from private garages has the potential to reduce state costs. A Maryland official estimated that the state had saved 35% on its private garage costs by contracting with a garage network. An Eastman Kodak official estimated that the company had experienced a 50% drop in vehicle maintenance costs after implementing a managed maintenance program. In the absence of summary data on prices agencies currently pay for repair services the potential savings of these options cannot be precisely determined. However, if Florida achieved a savings of 10% to 30% on its current maintenance costs from private garages (estimated at \$8 million annually), the state could save between \$800,000 and \$2.4 million annually.

Agencies are divided about changing the current maintenance system.

Agency representatives expressed mixed opinions about using a garage network and/or a managed maintenance program. Some representatives support these options and think they would save time or money. Others are concerned that these programs would make it inconvenient to obtain needed vehicle repairs. These representatives are primarily concerned that the networks would not have enough garages to meet agency needs or would be not be in convenient locations. However, we noted that one network has over 3,000 locations in Florida, and network officials said that they could add new locations if needed to meet the state's needs. Consequently, we believe that networks could generally address many agencies' concerns.

OBSERVATIONS

The state should continue to use in-house garages for some maintenance services.

The state should continue to provide some vehicle maintenance services with in-house garages. Many agency garages perform functions other than maintaining passenger vehicles, such as repairing heavy equipment or training inmates. For example, Department of Transportation garages are located in maintenance yards where staff pick up heavy equipment, mowers, and chain saws for their daily work. Having garages on-site enables mechanics to quickly repair broken equipment and reduces delays in sending out work crews or responding to emergencies. Similarly, the Department of Corrections has garages at some of its institutions that are used to help meet the state's goal of employing and training inmates.

Retaining these facilities appears to be appropriate because it would be difficult to obtain these services from private garages. It also appears to be appropriate to provide some passenger vehicle maintenance at these garages. The garages are convenient to employees in remote locations and using the garages for passenger vehicles helps agencies maximize use of existing infrastructure. The garages generally send out complex repair jobs on passenger vehicles rather than investing in the training and equipment to perform these jobs in-house. There is also some need for state garages that maintain passenger vehicles in areas with large concentrations of state vehicles. For example, the Department of Management Services operates a garage in Tallahassee that provides a convenient way to maintain the state's motor pool.

An agency's decision to operate a garage should include assessing the availability, convenience, costs, and benefits of in-house services and services provided by the private sector. These factors may change over time and should be continually assessed. We noted that the Department of Transportation is considering closing several of its garages because it is privatizing some of its road maintenance services.

Extended warranties may not be cost-effective.

The Department of Management Services (DMS), which administers the state term contracts that agencies use to buy new vehicles, has encouraged agencies to purchase extended warranties for certain types of vehicles. These warranties cover maintenance costs for components such as transmissions that may occur after the original manufacturer's warranties expire. These warranties cost between \$425 and \$2,600, depending on the type of vehicle.

It is questionable whether these extended warranties are cost-effective. Most of the private corporations and other states we contacted that operate large fleets do not buy extended warranties and do not consider them to be a good investment. DMS is considering mandating that agencies buy extended warranties for some vehicles when more data is available because these warranties may allow the state to keep vehicles longer and help agencies identify and reduce long-term maintenance costs. However, DMS has not been able to perform a cost-analysis of this option because it currently lacks sufficient data on actual maintenance costs. State agencies are not required to input detailed information on their costs for different types of maintenance services into the state's Equipment Management Information System (EMIS). The cost-effectiveness of requiring this type of information is unknown. However, the Department is planning to revise or replace EMIS. The Department should consider requiring better maintenance data as part of this change.

CONCLUSIONS AND RECOMMENDATIONS

Agency purchases of vehicle maintenance services are fragmented and the need for these repairs is not always well monitored. As a result, Florida has likely paid more than necessary to maintain its vehicle fleet.

Private corporations and some states use garage networks that provide volume discounts for vehicle maintenance and managed maintenance systems to monitor and control repair services. Adopting

these systems would likely result in lower costs for maintenance services, lower administrative costs, and better control of maintenance costs. These services are available from a variety of private fleet management firms and could be obtained through competitive bid, or could be provided by a unit of state government created for this purpose.

The state obtains benefits from in-house garages that would be difficult to obtain in the private sector. However, the factors that led an agency to establish a garage may change over time and should be periodically assessed to ensure that in-house vehicle maintenance remains in the best interest of the state.

Purchasing extended warranties for the state's large vehicle fleet is of questionable cost-effectiveness. The Department of Management Services has considered making extended warranties mandatory for some vehicles, but currently lacks the data to analyze the costs and benefits of this decision.

Accordingly, we recommend that:

- The State Council on Competitive Government pursue contracting with a private fleet management company to provide a garage network that agencies could use to obtain discounted prices for vehicle maintenance services, and a managed maintenance program on a pilot basis that agencies could use to oversee vehicle maintenance. The bid process for providing these services should be open to any state agency that would like to establish a state vehicle maintenance unit.
- Agencies that operate garages periodically examine their garages (at least every three years) to determine if they are still needed and to determine the types of work they should perform.
- The Department of Management Services conduct the planned study of the cost-effectiveness of extended warranties before mandating their purchase. This type of study will require collecting data on the costs of maintenance services that are covered by extended warranties.

AGENCY RESPONSE

The Secretary of the Department of Management Services, in his written response, stated that the Department is planning to establish agreements with private sector specialty shops for services such as oil changes, brake work, and tune ups. He stated that although these agreements are not managed and monitored garage networks, they should simplify agency procurement of these services and result in reduced administrative and maintenance costs. The payment method under these agreements will be the new state procurement card expected to be available in spring 1997. He stated that DMS is also working on a preventive maintenance service agreement to provide on-site services, including oil changes, for vehicles, heavy trucks, and heavy equipment in the Jacksonville, Tampa, Orlando, and Miami areas.

The Secretary agreed that the need for agency operated garages should be reexamined on a periodic basis.

Finally, the Secretary stated that any future decision to mandate the purchase of extended warranties will be supported by a cost effectiveness study.

This project was conducted in accordance with applicable evaluation standards. Copies of this report may be obtained by telephone (904/488-1023 or 800-531-2477), by FAX (904/487-3804), in person (Claude Pepper Building, Room 312, 111 W. Madison St.), or by mail (OPPAGA Report Production, P.O. Box 1735, Tallahassee, FL 32302).

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