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REPORT TO THE HOUSE COMMITTEE ON POST OFFICE AND CIVIL SERVICE

BY THE COMPTROLLER GENERAL OF THE UNITED STATES



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Use Of Commercial Facilities For The Maintenance Of Postal Vehicles

U.S. Postal Service

The Chairman, House Committee on Post Office and Civil Service, asked GAO to determine whether the Postal Service has a policy of using commercial facilities for the maintenance of its vehicles and, if so, the cost benefit of such a policy.

GAO found that (1) Service policy provides for the use of commercial maintenance if it costs less than maintenance at the Service's Vehicle Maintenance Facilities, (2) commercial maintenance is generally cheaper than similar maintenance performed at the Service's facilities, and (3) factors other than cost, however, may influence where vehicles are maintained.

GGD-76-30

DEC. 23, 1975

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COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

C-114874

The Honorable David N. Henderson
Chairman, Committee on Post Office
and Civil Service
House of Representatives

REF 02

Dear Mr. Chairman:

In response to the Committee's request, we have looked into whether the Postal Service has a policy under which vehicles are sent to local facilities for repair rather than to the Service's centralized Vehicle Maintenance Facilities.

As instructed by your office, we did not ask the Postal Service to comment on this report.

Sincerely yours

Comptroller General
of the United States

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ABBREVIATIONS

GAO	General Accounting Office
NPO	Nonpersonnel office (a small, outlying post office)
VMF	Vehicle Maintenance Facility

COMPTROLLER GENERAL'S REPORT
TO THE COMMITTEE ON POST OFFICE
AND CIVIL SERVICE
HOUSE OF REPRESENTATIVES

USE OF COMMERCIAL FACILITIES
FOR THE MAINTENANCE OF
POSTAL VEHICLES
U.S. Postal Service

D I G E S T

1
The purpose of the Postal Service's maintenance program is to keep Service vehicles available for maximum mail transportation as economically as possible. 50

GAO sought to determine

--whether the Service had a policy of sending vehicles to local facilities for repair rather than to the Service's centralized Vehicle Maintenance Facilities and

--the difference in cost between local and Service facilities for identical repairs or maintenance.

GAO restricted its work to the Service's Eastern Region. During fiscal year 1974, about \$20 million was charged to vehicle maintenance in this region, including about \$1.2 million for commercial maintenance.

GAO concluded that:

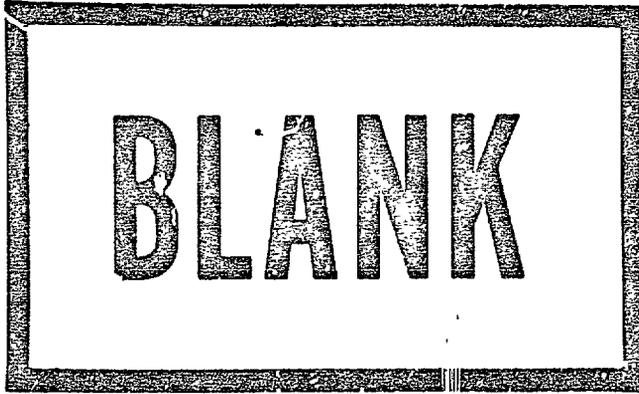
--The Service has a policy that maintenance will be performed by commercial facilities if the costs involved are expected to be less than the cost of having the work done within the Service. GAO believes this policy is sound.

--Commercial maintenance and repair generally costs less than that performed at the Service's facilities. Greater use of commercial facilities was suggested in an earlier GAO report.

--Factors other than cost, however, may influence where vehicle maintenance will be performed.

As instructed by the Committee Chairman's office, the Service has not been asked to comment on this report.

GGD-76-30



CHAPTER 1

INTRODUCTION

The Chairman, House Committee on Post Office and Civil Service, asked us to determine whether the Postal Service has a policy or practice of sending vehicles to local facilities for repair rather than to the Service's centralized Vehicle Maintenance Facilities (VMFs) and, if so, the cost implications of such a policy. As agreed, the review was restricted to the Eastern Region, one of five postal regions.

The Eastern Region's field operations are controlled by 10 districts. The districts are divided into 42 Sectional Center Management Areas and include 42 Sectional Center Facilities for processing mail to the surrounding areas. Forty-three VMFs are responsible for maintaining the approximately 18,600 Service-owned vehicles in the region. During postal fiscal year 1974, about \$20 million was charged to vehicle maintenance in the region, including about \$1.2 million for commercial maintenance.

VMFs are situated so that some of the larger Sectional Center Facilities are served by more than one VMF. Other VMFs have responsibility for vehicles located at several Sectional Center Facilities. Generally, VMFs are located near large Sectional Center Facilities and are under the jurisdiction of the Sectional Center Facility postmaster/manager. The VMF manager has overall maintenance responsibility for the vehicles at the Sectional Center Facility complex as well as the vehicles located at perimeter postal installations (non-personnel offices (NPOs)).

SCOPE OF REVIEW

We reviewed the Service's vehicle maintenance operations and cost reports for fiscal year 1974 and the first half of 1975. We interviewed Service headquarters and Eastern Region officials responsible for postal fleet operations, VMF managers, and other postal employees responsible for vehicle maintenance and operations.

Our review was conducted at 9 VMFs responsible for the maintenance and repair of about 3,600 vehicles. The locations of and numbers of vehicles assigned to these VMFs are included in exhibit ..

CHAPTER 2

COMMERCIAL FACILITIES CAN BE AND ARE USED

The Service's maintenance policy provides for the use of commercial facilities for the repair and maintenance of postal vehicles if the cost involved is expected to be less than the total cost of having the work done by a VMF. We believe this is a sound policy.

Differences in operating conditions and management approaches have affected the amount of commercial maintenance used by the Service. At the 9 VMFs reviewed, we found that commercial facilities performed an average of 10 percent of the maintenance by dollar value; however, at individual VMFs the average ranged from less than 4 percent to more than 30 percent.

MAINTENANCE POLICY

The objective of the Service's maintenance program is to keep Service vehicles available for maximum mail transportation as economically as possible. This is achieved by performing preventive maintenance and repair with the least possible interruption in the regular use of the vehicles. Service guidance for VMFs states that scheduled maintenance will be done by commercial facilities

"* * * if the costs involved are reasonably anticipated to be less than the total costs of undertaking the work within the Government. In such cases, the costs of both Government and commercial operations must be fairly computed and complete."

Service policy provides that the following factors are to be carefully considered in determining if it is in the Service's best interest to have scheduled maintenance performed commercially:

- Cost of shuttling the vehicle to a VMF.
- Availability and cost of commercial service.
- VMF workload.
- Interference with vehicle utilization. (Can the vehicle be serviced during a nonuse period to avoid interference with Service operations?)

Under the terms of the National Labor Agreement, VMF employees are guaranteed a 40-hour workweek. Therefore, a VMF manager may be faced with additional costs if he utilizes commercial maintenance while his employees are being under-utilized. In addition, Service officials said the Service has an understanding with union officials that maintenance on vehicles in close proximity to the VMF will be maintained by the VMF, if possible.

MAINTENANCE PRACTICES

The Service has utilized commercial facilities for some of its maintenance needs for many years. In January 1974, in an attempt to conserve fuel, the Service instructed regions to (1) perform maintenance on perimeter postal installation vehicles in the local area and (2) shuttle vehicles to a VMF only for emergency service. National guidelines were furnished to all districts and Sectional Center Facility managers together with some regional amplification.

Because allegations were received that VMFs were using the above guidelines to justify using commercial facilities without regard to cost, headquarters informed all regions in July 1974 that prior energy guidelines were not

"* * * intended to encourage contract use for maintenance repair where good management practices would indicate that the total cost and quality of the repair work could be improved through conducting the repair action in our own vehicle maintenance facilities."

The vehicle maintenance costs during fiscal year 1974 and the first 6 months of fiscal year 1975 of the nine VMFs we reviewed are shown below.

<u>VMF</u>	<u>VMF maintenance</u>	<u>Commercial maintenance</u>	<u>Total</u>	<u>Commercial cost as percent of total</u>
	(thousands)			
King of Prussia, PA	\$ 601.5	\$ 98.6	\$ 700.1	14.1
Lakewood, NJ	264.8	25.5	290.3	8.8
Wilmington, DE	538.2	47.9	586.1	8.2
Harrisburg, PA	543.5	94.3	637.8	14.8
Lancaster, PA	245.4	10.2	255.6	4.0
Roanoke, VA	262.0	124.6	386.6	32.2
Merrifield, VA	1,300.1	48.5	1,348.6	3.6
Annapolis, MD	228.6	21.0	249.6	8.4
Silver Spring, MD	704.9	37.2	742.1	5.0
Total	\$4,689.0	\$507.8	\$5,196.8	9.8

As shown, the extent of commercial maintenance varied widely among the VMFs, ranging from 3.6 to 32.2 percent of total maintenance. The main reasons for this variance were:

- Some VMF managers, having large areas of responsibility, established geographic boundaries (based on shuttle cost and VMF capacity) which were used as a basis for determining whether work should have been performed at the VMF or commercially. Other VMFs, due to their small geographic areas of responsibility, provided total service to all NPO-assigned vehicles, except for such minor repair work as replacing light bulbs and answering road calls. The VMFs we reviewed supported from 7 to 44 NPOs ranging in distance from about 3 to 240 miles from the VMF.
- NPOs which had 15 or more assigned vehicles were authorized a Vehicle Operation Maintenance Assistant. Some assistants did minor repairs, such as replacing light bulbs, which were normally done by a commercial establishment.

We believe maintenance policy should be general in nature to give VMF managers the flexibility to meet varying local operating conditions.

CHAPTER 3

COMMERCIAL MAINTENANCE GENERALLY COSTS

LESS THAN VMF MAINTENANCE

Our examination of commercial maintenance and identical VMF maintenance showed that commercial maintenance is generally more economical.

As previously mentioned, VMFs are supposed to compute and compare the estimated costs of having a repair job performed in-house and commercially before deciding where the work will be done. We found that formal cost analyses were not made and that no documentation was available which supported the decisions as to where maintenance would be performed. VMF officials stated that, although not documented, cost-benefit analyses were made. They said a combination of past experience, present working conditions, and managerial judgment indicates to them the most economical means of repairing vehicles.

OUR COST ANALYSIS

To compare the costs of commercial and VMF maintenance, we identified commercial maintenance which was identical to that performed at a VMF and computed the respective costs. As shown in exhibit B, commercial maintenance was generally more economical than VMF maintenance. However, factors other than cost, such as availability of commercial maintenance and degree of utilization of the VMF, had a bearing on whether maintenance was done commercially or at a VMF. (See ch. 2.)

When maintenance is performed by a VMF, the work order shows the charges for parts, labor, overhead, and shuttle-time when applicable. Work orders for commercial maintenance show the vendor's charges for parts and labor, which include overhead and profit. Our comparisons were based on the information available from the respective work orders.

Each cost element is discussed below.

Parts

A detailed comparison of VMF and commercial repair part prices is shown in exhibit C. As indicated, VMF-procured parts are, on the average, 55 percent cheaper. However, some of the price differences can be attributed to the fact that the commercial prices include overhead and profit while the VMF costs do not.

Labor

Direct labor cost is a product of the time required to complete the maintenance and the current wage rate. According to VMF personnel, most commercial labor charges are based on flat-rate standards which, in turn, are based on average work times for various repairs. In contrast, VMFs charge the actual time recorded by the mechanic in performing the work. A comparison of time charges for some of the work orders included in our commercial/VMF comparison is shown in exhibit D. As can be seen, the VMF mechanic generally takes as long or longer to complete a given job than the commercial mechanic.

We compared the labor charges at six selected VMFs with commercial labor charges incurred by NPOs. The commercial charges are those of a mechanic, as quoted in the Vehicle Repair and Maintenance Agreement entered into annually between local facilities and NPOs. The VMF rates represent a 6-month average of the work order hourly rate charged by the VMFs and include base pay and fringe benefits.

Comparison of VMF and Commercial
Average Hourly Charges for Mechanics

<u>VMF</u>	<u>VMF mechanics</u>	<u>Commercial mechanics</u>
King of Prussia	\$8.32	\$ 6.65
Lakewood	7.95	7.70
Wilmington	8.95	8.75
Harrisburg	8.43	7.50
Lancaster	8.93	10.13
Roanoke	3.53	6.83

Shuttletime

In some cases, before a vehicle can be maintained it must be brought in from its assigned location to the VMF or local commercial facility. When a VMF mechanic or garage-man transports the vehicle to and from its assigned location, the time involved is considered shuttletime. The cost of the shuttle represents the salary cost of the individual transporting the vehicle. Because vehicles are sometimes transported long distances, shuttling may be the largest single cost element associated with maintenance. (See exhibit E.) The range of round trip shuttle costs for NPO-assigned vehicles at six of the selected VMFs follows.

<u>VMF</u>	<u>Percent of VMF's vehicles assigned to NPOs</u>	<u>Range in miles to NPO (one way)</u>	<u>Range of shuttle cost</u>
King of Prussia	93	3- 36	\$3.47-\$ 24.96
Lakewood	70	4- 17	3.45- 15.90
Wilmington	42	5-110	5.94- 72.50
Harrisburg	53	3- 72	4.43- 49.74
Lancaster	35	5- 18	5.98- 22.33
Roanoke	67	7-210	8.35- 125.39

Shuttletime is not accounted for when NPO personnel transport vehicles. Vehicles commercially maintained are usually assigned close to the local facility. According to NPO personnel, transporting a vehicle to and from the local facility and preparing and processing the required paperwork takes about half an hour.

Overhead

VMF costs which are not directly charged to a vehicle are included in overhead and are listed as a separate amount on the work orders. Overhead at the VMFs includes supervisory and administrative salaries, nonproductive labor costs, rent, equipment depreciation, etc. Overhead costs are distributed among the vehicle work orders as a percentage of direct cost--the cost for labor and parts. The overhead rate at the nine selected VMFs ranged from 61 to 110 percent of direct cost. In contrast, a commercial establishment's overhead and profit are built into its charges for parts and labor.

Some reasons why overhead rates varied among the VMFs were:

1. Administrative salaries ranged from 43 to 80 percent of the total overhead costs. The VMF staffs at Wilmington and Lancaster included dispatchers who supported the Sectional Center Facility operation. In contrast, the Sectional Center Facility at Roanoke did not require a dispatcher because delivery routes were permanently identified with selected vehicles.
2. Overhead rates decrease when the cost of parts increases. The different VMF procurement and supply practices affect the total direct VMF part costs. Therefore, if part costs are higher than they need to be, the overhead rate will be lower.

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3. Most VMFs lease or rent facilities and/or parking space and include this cost in overhead. Since the Roanoke VMF was Government-owned, however, it was not charged for rent or depreciation.

In summary, overhead rates alone do not necessarily indicate the degree of VMF efficiency because several cost elements included in overhead cannot be controlled by management.

- - - -

In a recent report entitled "Ways of Increasing Productivity in the Maintenance of Commercial Type Vehicles" (LCD-75-421, June 24, 1975), we recommended several alternatives to the Service for improving its maintenance activities-- including a suggestion for greater use of commercial facilities for minor repairs. The Postmaster General informed us of the actions being taken to increase vehicle maintenance efficiency. However, it is too early to determine the impact these actions will have on VMF operations.

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CHAPTER 4

CONCLUSIONS

The Service has a policy that maintenance will be done by commercial facilities if the costs involved are expected to be less than the total cost of having the work done within the Service.

Commercial maintenance and repair generally costs less than identical work performed at VMFs. However, considerations such as the availability of commercial services and VMF workload can influence the selection of the repair facility.

Ideally, before each selection is made, the pros and cons of each alternative should be studied. A study for each and every maintenance task, however, is not practicable. Under the circumstances, the best way to insure wise facility selection is to have Service management periodically review maintenance practices.

Given the large number and wide distribution of vehicles, it is unlikely that commercial repair facilities can be used exclusively. As noted previously, however, in June 1975 we pointed out to the Service the potential savings that could be derived from using commercial vehicle repair and maintenance more frequently. It was too early at the time of this review to determine the impact of actions taken by the Service in response to our suggestion.

NUMBER OF VEHICLES ASSIGNED TO SELECTED VMFs
IN THE EASTERN REGION FOR MAINTENANCE AND REPAIR

<u>VMF</u>	<u>VMF vehicles</u>	<u>Nonpersonnel office vehicles</u>	<u>Total</u>
Continental Facility, King of Prussia, PA	18	464	482
Lakewood, NJ	41	171	212
Wilmington, DE	198	156	354
Harrisburg, PA	215	255	470
Lancaster, PA	91	54	145
Roanoke, VA	148	346	494
Merrifield, VA	221	172	993
Annapolis, MD	50	109	159
Silver Spring, MD	<u>112</u>	<u>197</u>	<u>309</u>
Total	<u>1,694</u>	<u>1,924</u>	<u>3,618</u>

COMPARISON OF COST OF COMMERCIAL MAINTENANCE AND
OF VMF MAINTENANCE FOR THE SAME TYPE OF VEHICLE

VMF and description of maintenance task	Commercial cost	VMF cost		Shuttle (note a)
		Total	Maintenance	
Continental:				
Road service, start vehicles, test-charge system, replace regula- tor, and change battery	\$ 30.16	\$ 70.03	\$ 70.03	(b)
Recondition starter and replace water pump	c/92.55	118.54	94.63	\$23.91
Replace valve-cover gasket	5.74	17.88	9.91	7.97
Lakewood:				
Tow and install starter	46.85	62.37	62.37	(b)
Install starter and igni- tion switch	42.51	81.50	75.09	6.41
Repair master cylinder	42.45	81.61	68.80	12.81
Repair master cylinder	60.50	81.61	68.80	12.81
Tuneup	21.55	42.05	29.24	12.81
Wilmington:				
Replace voltage regulator	c/42.84	66.37	51.62	14.75
Replace heater core	c/51.14	71.21	56.46	14.75
Install muffler	c/12.01	32.51	17.76	14.75
Replace master cylinder	c/55.86	87.18	72.43	14.75
Repair starter	16.45	67.37	23.12	44.25
Replace heater core and hose	64.29	103.69	59.44	44.25
Replace battery	27.10	106.91	62.66	44.25
Harrisburg:				
Service car, tow, and replace battery	46.75	87.01	87.01	(b)
Lubrication and "A" inspection	11.69	100.92	59.23	41.69
Mount three tires, replace front brake lining and front drum	c/123.07	211.44	169.75	41.69
Replace regulator and alternator	c/84.22	92.16	50.47	41.69
Roanoke:				
Replace muffler	17.34	97.98	24.23	73.75
Replace door latch and heater core	c/56.36	155.86	82.11	73.75
Herrifield:				
Replace water pump	30.87	37.29	30.72	6.57
Replace universal joint	18.93	23.51	17.60	5.90

a/VMF round trip labor cost required to shuttle the NPO vehicle.
If NPO personnel perform this service, their labor cost is
not included as part of maintenance.

b/Included under maintenance costs because commercial road call
or tow was required.

c/Included cost of VMF parts furnished to the contractor.

COMPARISON OF SELECTED PART COSTS

<u>Part</u>	<u>Local facilities</u>	<u>VMF (note a)</u>	<u>Percentage VMF savings</u>
Voltage regulator	\$15.66	\$20.21	-29.0
Voltage regulator	26.00	12.71	50.1
Starter drive	9.36	7.59	18.9
Valve-cover gasket	1.37	.28	79.6
Starter	31.25	22.00	29.6
Mast. cylinder	29.95	15.47	48.3
Mast. cylinder	53.50	15.47	71.1
Spring legs (4)	7.38	1.68	77.2
Sole plate-starter	7.45	2.77	62.8
Oil filter	4.94	.57	88.5
Alternator	57.55	30.38	47.2
Muffler	11.34	2.77	75.6
Water pump	18.81	5.91	68.6
Universal joint	10.93	2.06	81.2

Average savings

55%

a/Average unit price paid by VMF.

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COMPARISON OF LABOR TIME CHARGED
BY COMMERCIAL FACILITIES AND BY VMFs

<u>Description of maintenance task</u>	<u>Time charge</u>	
	<u>Commercial</u>	<u>VMF</u>
	(hours)	
Continental:		
Test-charge system and replace regulator	1.00	1.00
Repair and replace starter and replace water pump	3.90	2.96
Replace valve-cover gasket	.50	.50
Lakewood:		
Install starter	.45	1.60
Install starter and ignition switch	.90	2.79
Repair master cylinder	1.00	1.60
Repair master cylinder	1.00	1.60
Tuneup	1.50	2.00
Wilmington:		
Repair starter	1.00	1.00
Replace heater core and hoses	2.30	1.90
Harrisburg:		
Replace regulator and alternator	1.00	1.50
Replace regulator and alternator	1.50	1.50
Roanoke:		
Replace muffler	1.00	1.40
Repair door latch and replace heater core	1.00	2.00
Merrifield:		
Replace water pump	1.50	1.00
Replace universal joint	1.00	.40

NINETY-THIRD CONGR.

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U.S. House of Representatives
 COMMITTEE ON POST OFFICE AND CIVIL SERVICE
 207 CANNON HOUSE OFFICE BUILDING
 Washington, D.C. 20515
 December 3, 1974

B-114874

The Honorable Elmer B. Staats
 Comptroller General
 General Accounting Office
 441 G Street
 Washington, D.C. 20548

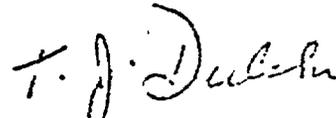
Dear Mr. Staats:

Recently, questions have been raised in the press about an alleged Postal Service policy under which vehicles are being sent to local garages for repair rather than to centralized Postal Service or other government motor vehicle facilities. The concern is that such a policy, if implemented nationwide, would be excessively costly.

I would appreciate it if the General Accounting Office would conduct an investigation which would, among other things:

1. Determine where such a policy or practice is in effect now, and
2. the cost benefits of sending vehicles to local garages versus the use of government owned facilities.

Sincerely,



THADDEUS J. DULSKI
 Chairman

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