



September 29, 2008

SYLVESTER BLACK  
VICE PRESIDENT, WESTERN AREA OPERATIONS

SUBJECT: Audit Report – Vehicle Maintenance Facilities – Scheduled  
Maintenance Service in the Western Area  
(Report Number DR-AR-08-008)

This report presents the results of our self-initiated audit, Vehicle Maintenance Facilities (VMF) – Scheduled Maintenance Service in the Western Area (Project Number 08XG008DR000). The overall objectives were to assess whether the Western Area accomplished the required vehicle scheduled maintenance, and whether they integrated both VMFs and local commercial resources for optimum efficiency. Click [here](#) to go to Appendix A for additional information about this audit.

## **Conclusion**

The Western Area completed nearly all required scheduled preventive maintenance (SPM),<sup>1</sup> and was proactive in managing vehicle maintenance. However, management could further optimize VMF efficiency by more effectively using VMF and commercial resources. Better optimizing its resources could save the Western Area an estimated \$14 million over 10 years.

## **Scheduled Maintenance Performance**

Western Area VMF units and local commercial vendors (LCVs) completed 99 percent of the required SPMs during fiscal year (FY) 2007. Four VMF units completed all of the SPMs, while the other four VMF units ranged between 95 and 99 percent of the required SPMs. Management attributed the missing or past due SPMs to unforeseen personnel issues and the need to eliminate the backlog of SPMs from the previous year.

Without completing all required scheduled maintenance and repairs, the Postal Service's vulnerability to vehicle breakdowns could increase, creating mail delays and service problems. Further, the number of vehicle accidents could increase, which would raise costs and potentially affect the well-being of employees and

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<sup>1</sup> An SPM usually includes a preventive maintenance inspection and any repairs needed to maintain the vehicle or meet safety and reliability standards.

the public. Since the Postal Service does not plan to begin replacing its current fleet of Long Life Vehicles (vehicles that are more than 20 years old) until 2018, we believe it is critical that these vehicles receive SPMs in a timely manner. Click [here](#) to go to Appendix B for additional information about this topic.

We recommend the Vice President, Western Area Operations, direct district managers to:

1. Require vehicle maintenance facility officials to complete all required scheduled maintenance, and immediately conduct any missing or past due maintenance.

### Optimum Use of Resources

The Western Area did not always optimize its resources to ensure maintenance and repair funds were expended in the most efficient and cost effective manner. We found maintenance officials sometimes used LCVs for vehicle maintenance and repairs when using VMF resources would have been more efficient and economical. Likewise, VMF resources were sometimes used when LCVs would have been more efficient and economical. Additionally, VMF officials primarily used maintenance employees to shuttle vehicles between facilities for maintenance and repairs when more economical means existed.

The following factors contributed to these conditions. Although VMF units had a vehicle maintenance plan, it did not include provisions for all required SPM and repairs for all vehicles. Specifically, the vehicle maintenance plans did not fully consider:

- o The optimal combination of VMF resources and LCVs for performing scheduled maintenance and repairs.
- o The cost effectiveness of using LCVs instead of VMF resources to shuttle vehicles between facilities for maintenance and repairs.

In addition, the area Vehicle Maintenance Program Analyst position was not organizationally aligned to be conducive for the most effective management of the vehicle maintenance program.<sup>2</sup> Click [here](#) to go to Appendix C for additional information on optimum use of resources.

As a result, the Western Area expended more resources than necessary to complete vehicle maintenance and repairs. By optimizing its resources, the Western Area could potentially reduce operating costs about \$1.4 million annually. These efficiencies, when projected for the 23 VMFs in the Western

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<sup>2</sup> This issue requires action by Postal Service Headquarters and will be addressed in a national capping report.

Area, could save approximately \$14 million over a 10-year period. Click [here](#) to go to Appendix D for our detailed analysis of the monetary impact.

We recommend the Vice President, Western Area Operations, direct district managers to:

2. Work with vehicle maintenance facility officials to modify the annual vehicle maintenance plan to provide for all scheduled vehicle maintenance to better manage and improve efficiency. The plan should:
  - Maintain the most efficient combination of vehicle maintenance facility and commercial resources based on geographical location and costs.
  - Use the Postal Service’s national vehicle shuttle agreement or other local commercial shuttle services, when cost effective, for transporting vehicles to and from maintenance facilities.

### **Management’s Comments**

Western Area officials agreed with our findings and recommendations. Regarding recommendation 1, management directed district managers to immediately develop plans to complete all scheduled maintenance in arrears and maintain a current preventive maintenance status. For recommendation 2, they agreed to develop district action plans within 30 days to address scheduled maintenance issues.

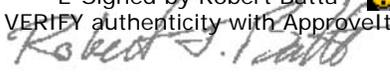
Management stated they could not commit to the actual dollar savings amounts specified in the audit report. However, in subsequent discussions, management agreed in principle with the potential monetary impact and with capturing savings through improved efficiencies as they implement the recommendations. We have included management’s comments in their entirety in [Appendix G](#).

### **Evaluation of Management’s Comments**

The U.S. Postal Service Office of Inspector General (OIG) considers management’s comments responsive to the recommendations and the corrective actions should resolve the issues identified in the report.

The OIG considers recommendation 2 significant, therefore, it requires OIG concurrence before closure. Consequently, the OIG requests written confirmation when management completes corrective actions. This recommendation should not be closed in the follow-up tracking system until the OIG provides written confirmation the recommendation can be closed. We will report \$14,251,384 of funds put to better use in our *Semiannual Report to Congress*.

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Rita Oliver, Director, Delivery, or me at (703) 248-2100.

E-Signed by Robert Batta   
VERIFY authenticity with ApproveIt  


Robert J. Batta  
Deputy Assistant Inspector General  
for Mission Operations

Attachments

- cc: Patrick R. Donahoe
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- Douglas H. Morrow
- Lawrence K. James
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- Kenneth S. McArthur
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## APPENDIX A: ADDITIONAL INFORMATION

### BACKGROUND

The Postal Service invested more than \$3 billion in vehicle assets for the purpose of transporting and delivering the mail. The vehicle inventory consists of 219,522 delivery, transport, and administrative vehicles. Delivery and collection vehicles (see the examples in Figure 1) account for 195,211 or about 89 percent of the total fleet. The Postal Service acquired the majority of these vehicles between 1987 and 1994 and planned to maintain them for 24 years. About 7,700 of these vehicles purchased in 1987 are approaching the end of their useful life. However, the Postal Service recently stated that capital constraints now dictate that many of these vehicles must stay in service until 2018 — 7 years more than the planned lifespan.

Figure 1  
Delivery and Collection Vehicles in VMFs for SPM



Source: Postal Service

Management established 190 main and 131 auxiliary VMFs to maintain these assets in a technically reliable, safe, clean, and neat condition for efficient mail transportation. Vehicle maintenance includes selecting and training maintenance technicians; providing garages, tools, and equipment; performing repairs; and monitoring and maintaining preventive maintenance standards. The geographic location of VMFs and auxiliary VMFs varies in each area as needed to support vehicle maintenance and reduce transportation costs. Auxiliary VMFs were established for situations where vehicle maintenance requirements exceed VMF resources or when shuttle time or geographical distances warrant the use of an auxiliary VMF.

Area officials are responsible for validating staffing requirements for vehicle-related positions and ensuring an adequate scheduled maintenance program. Vehicle maintenance managers have overall responsibility for oversight of all maintenance and repair services performed at VMF units, as well as any work contracted to commercial vendors. Although the VMF manager has overall responsibility for vehicle maintenance, vehicles are usually assigned to a Vehicle Post Office (VPO). VPOs can be post offices, branches, stations,

associated offices, or other delivery and support facilities. Post office officials at VPOs can also contract with LCVs for maintenance and repair services, but they are required to document the repairs and obtain the VMF manager’s approval for repairs and services costing more than \$250.

The Postal Service developed Handbook PO-701, *Fleet Management*, to assist operating personnel in maintaining the vehicle fleet in the most economical manner possible. The handbook requires a maintenance plan that provides for regular examination and service of Postal Service-owned vehicles. VMF managers must prepare a vehicle maintenance plan designating where and when each vehicle will receive scheduled maintenance. The handbook also emphasizes preventive or scheduled maintenance over reactive or unscheduled maintenance. (See [Appendix F](#), “Scheduled Maintenance Process,” for a flowchart.)

The Postal Service also established a Model Vehicle Maintenance Facility Performance Review Program. The review program is an integral part of VMF operations, and is a key tool for determining the efficiency of a unit at a given time for identifying areas that need corrective action. Districts must ensure that self-reviews are performed in all VMFs on a quarterly basis. A VMF must achieve a score of 85 or more to be certified. The area must certify or recertify each unit at least every 3 years.

The Postal Service uses the Vehicle Management Accounting System (VMAS) to code and track costs. VMAS is a computer-based support system designed to collect, process, store, present, and communicate vehicle maintenance data. The table below shows VMF expenses, including commercial vendors’ expenses, for FY 2007.

**Table 1. Maintenance Expenditures for FYs 2007 by Area**

Postal Service Area of Operation	VMF and Commercial Expenditures		
	Commercial Vendor Expenses in FY 2007	VMF Expenses in FY 2007	Total Expenses in FY 2007
Southeast	\$13,867,484	\$52,648,111	\$66,515,595
Great Lakes	15,152,866	46,536,525	61,689,391
Eastern	12,213,149	45,085,152	57,298,301
Western	10,382,055	45,808,493	56,190,548
Pacific	9,105,547	42,819,217	51,924,764
Northeast	10,821,346	37,860,317	48,681,663
New York Metro	12,433,942	36,814,803	49,248,745
Southwest	7,194,386	36,503,347	43,697,733
Capital Metro	7,643,667	32,808,458	40,452,125
<b>Total</b>	<b>\$98,814,442</b>	<b>\$376,884,423</b>	<b>\$475,698,865</b>

Source: Postal Service Category Management Center

## OBJECTIVES, SCOPE AND METHODOLOGY

The objectives of this audit were to assess whether the Western Area accomplished all required scheduled maintenance, and whether they integrated both VMFs and local commercial resources for optimum efficiency.

To accomplish the objectives, we randomly selected and reviewed vehicle service files from eight of the 23 VMFs in the Western Area. We documented the scheduled maintenance and number of SPMs required and completed. We also reviewed the [REDACTED] to analyze vehicles in “maintenance in arrears” status. We also obtained and reviewed [REDACTED] data on the complement of vehicle maintenance technicians.

We obtained a random sample of eight of the Western Area VMFs from all districts<sup>3</sup> and reviewed VMAS data for scheduled maintenance services for FY 2007. (See [Appendix E](#).) We identified the number of Preventive Maintenance Inspections (PMIs)<sup>4</sup> to be performed at each VMF, the VPOs where the vehicles were located, and the VPOs’ distance from the VMFs. We also documented the number of vehicle maintenance technicians assigned to each VMF unit.

We identified each VMF and LCVs expenditures for scheduled maintenance. Using the VMAS vehicle work order history, we analyzed the average time to perform a SPM for the eight<sup>5</sup> VMF units reviewed in our sample.

We developed an optimization model that used the above operational data to establish a baseline, standards, key characteristics, shuttle usage and cost. Using this data, we established an optimum operating efficiency for each VMF. Click [here](#) to go to Appendix D, “Calculation of Cost Savings,” for the model and assumptions we used to compute monetary benefits.

We conducted this performance audit from November 2007 through September 2008 in accordance with generally accepted government auditing standards and included tests of internal controls that we considered necessary under the circumstances. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. We relied on data from VMAS and [REDACTED]. We did not audit these systems, but performed a limited review of data integrity to support our

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<sup>3</sup> The Sioux Falls and Billings Districts were excluded from our sample because these VMFs only utilize LCVs to perform work and have no VMF maintenance technicians.

<sup>4</sup> A PMI is that portion of required scheduled maintenance a vehicle must receive to determine if mechanical and safety systems are functioning properly.

<sup>5</sup> The random sample was reduced from 10 to eight because we excluded the Anchorage VMF due to their unique geographical challenges, and the Kansas City VMF because of the difficulty in verifying SPMs because of multiple vehicle transfers.

reliance on the data. We discussed our observations and conclusions with management officials on July 3, 2008, and included their comments where appropriate.

**PRIOR AUDIT COVERAGE**

As shown in the table below, the U.S. Postal Service Office of Inspector General (OIG) issued four reports related to our objectives.

<b>Report Title</b>	<b>Report Number</b>	<b>Final Report Date</b>	<b>Monetary Impact</b>
<i>Vehicle Maintenance Facilities – Scheduled Maintenance Service in the Southeast Area</i>	DR-AR-08-007	September 16, 2008	\$27,620,773
<i>Vehicle Maintenance Facilities – Scheduled Maintenance Service in the Southwest Area</i>	DR-AR-08-006	August 14, 2008	\$34,522,159
<i>Maintenance and Repair Payments to Commercial Vendors Using Postal Service Form 8230, Authorization for Payment</i>	DR-MA-07-005	September 21, 2007	\$1,571,517
<i>Management of Delivery Vehicle Utilization</i>	DR-AR-06-005	June 14, 2006	\$22,796,487

The previous 2008 audits, like this one of the Western Area, are part of a series of audits on this topic. Like these audits, the Western Area did not complete SPMs on all vehicles, and did not always integrate both VMF and LCV resources for optimum efficiency. Management agreed with our findings, recommendations, and monetary impact.

The 2007 audit concluded that using the Postal Service (PS) Form 8230,

Authorization for Payment, process to pay commercial vendors for maintenance and repair services was not cost effective and did not include controls to reconcile payments and ensure repair costs were reasonable. Management agreed with our findings, recommendations, and monetary impact.

The 2006 audit concluded the Postal Service officials have made significant strides in reducing costs associated with delivery vehicle expenditures over the previous 3 years. However, delivery management officials could further improve the use of vehicles that support delivery operations. Additionally, delivery officials did not monitor the reasonableness of payments or the need for contracts with employees for use of their personal vehicles. Management agreed with our findings, recommendations, and monetary impact.

**APPENDIX B: SCHEDULED MAINTENANCE PERFORMANCE**

The Western Area vehicle maintenance process consistently ensured that nearly all vehicles received their required scheduled maintenance during FY 2007. Four units completed all of their SPMs while the other four VMF units ranged between 95 and 99 percent of the required SPMs. (See Table 2.) Management attributed the missing or past due SPMs to unforeseen personnel issues and the need to eliminate the backlog of SPMs from the previous year.

**Table 2. Scheduled Preventive Maintenance Performed in FY 2007**

<b>VMF Location</b>	<b>Required in FY 2007</b>	<b>Performed</b>	<b>Percentage Performed</b>
Boise	1,144	1,144	100
Colorado Springs	1,344	1,336	99
Denver	7,481	7,372	99
Des Moines	2,195	2,080	95
Phoenix	7,257	7,257	100
Portland	3,640	3,640	100
Salt Lake City	3,226	3,119	97
Wichita	1,388	1,388	100
Kansas City <sup>6</sup>	Not Verified	Not Verified	N/A
<b>Total/Average</b>	<b>27,675</b>	<b>27,336</b>	<b>99</b>

Source: VMAS and OIG optimization model

Tracking and Monitoring. Though we determined the sampled VMFs performed nearly all of their SPMs, the process of verifying scheduled maintenance performed proved difficult.<sup>7</sup> One VMF was initially included in our sample, but later excluded, because we were unable to substantiate the number of required and performed scheduled maintenances during 2007. This was in part because of multiple vehicle transfers, and the way scheduled maintenances are tracked for VMFs nationwide. Specifically, the maintenance process tracks the status of vehicles in arrears<sup>8</sup> rather than SPMs performed. Vehicles in arrears is an indication of vehicles with scheduled maintenances not completed, however, any adjustment to the SPM schedule has the impact of removing all vehicles in arrears.

Without completing all required scheduled maintenance and repairs, the Postal Service’s vulnerability to vehicle breakdowns may increase, creating mail delays and service problems. Further, the number of vehicle accidents could increase, which would raise costs and affect the well-being of employees and the public.

<sup>6</sup> We excluded this VMF from our sample because of the difficulty and time involved in verifying the number of SPMs performed because of multiple vehicle transfers. We have no reason to believe the exclusion alters the Western Area percentage of maintenance performed.

<sup>7</sup> The issue of more easily tracking and monitoring scheduled maintenance requires action by Postal Service Headquarters and will be addressed in a national capping report on scheduled maintenance.

<sup>8</sup> The “vehicles in arrears” status is a performance measure for VMFs.

Since the Postal Service does not plan to begin replacing its current fleet of Long Life Vehicles (vehicles that are more than 20 years old) until 2018, we believe it is critical that these vehicles receive the required maintenance.

**APPENDIX C: OPTIMUM USE OF RESOURCES**

The Western Area did not always optimize its resources to ensure that maintenance and repair funds were expended in the most efficient and cost effective manner. We found maintenance officials sometimes used LCVs for vehicle maintenance and repairs when using VMF resources would have been more efficient and economical. Likewise, VMF resources were sometimes used when LCVs would have been more efficient and economical. Additionally, VMF officials primarily used maintenance employees to shuttle vehicles between facilities for maintenance and repairs when more economical means existed.

Two factors contributed to these conditions.

- o Optimum Use of VMF and Commercial Resources. The vehicle maintenance plan did not consider an optimum combination of both VMF and commercial resources.<sup>9</sup> Generally, it is more cost effective<sup>10</sup> for the VMF to perform SPMs on VPO vehicles stationed within 50 miles of the VMF. However, a LCV should perform SPMs on vehicles when the VPO is more than 50 miles from the nearest VMF. We determined that 554 SPMs should have been performed at the other site - either the VMF or the commercial facility. (See Table 3.)

**Table 3. VMF and Local Commercial Vendor Resources**

VMF Location	FY 2007 SPMs Performed by		Total SPMs Performed	Site SPMs Were Performed		Total SPMs That Could Have Been More Optimally Performed by Either VMF or Local Vendors
	VMF	Local Vendors		VMF	Local Vendors	
Boise	803	341	1,144	29	0	29
Colorado Springs	1,004	332	1,336	138	0	138
Denver	6,107	1,265	7,372	9	100	109
Des Moines	1,656	424	2,080	95	20	115
Phoenix	6,601	656	7,257	0	0	0
Portland	3,561	79	3,640	0	11	11
Salt Lake City	2,806	313	3,119	4	113	117
Wichita	963	425	1,388	35	0	35
<b>Total</b>	<b>23,501</b>	<b>3,835</b>	<b>27,336</b>	<b>310</b>	<b>244</b>	<b>554</b>

Source: VMAS data and OIG optimization model.

<sup>9</sup> The VMAS does not track the number of SPMs accomplished. The OIG's efficiency and optimization model estimated the number completed by analyzing all work orders assigned to code 22 (scheduled maintenance), and with some adjustment, considered all work over 2 hours as a SPM.

<sup>10</sup> Cost effectiveness is based on the overhead costs to transport vehicles between the VMF and the VPO, vehicle maintenance technician or other VMF personnel to shuttle the vehicle and the vehicle.

- Vehicle Shuttling. In most cases, we found that the Postal Service’s national vehicle shuttle agreement or local commercial shuttling services were more cost effective than using VMF maintenance technicians. The Western Area used more than 19,038 workhours for vehicle maintenance technicians to shuttle vehicles rather than perform maintenance. The shuttle hours related to SPMs were equivalent to about 11 vehicle maintenance technician positions at a cost of \$819,396.<sup>11</sup> (See Table 4.)

**Table 4. Vehicle Maintenance Technician Hours Used for Shuttling**

VMF Location	Number of Vehicle Maintenance Technicians Assigned	Estimated Scheduled Maintenance Hours Available	Total Shuttle Hours Used in FY 2007	Percentage of Direct Maintenance Hours Used for Shuttling	Shuttle Hours Used by Maintenance Employees	Equivalent Maintenance Technician Positions	Cost of Shuttle Hours Used by Maintenance Technicians
Boise	5	7,016	999	14	908	.52	\$39,080
Col. Springs	10	14,032	2,745	20	1,400	.80	60,256
Denver	58	81,386	15,807	19	7,101	4.05	305,627
Des Moines	13	18,242	3,384	19	1,583	.90	68,132
Phoenix <sup>12</sup>	52	72,966	7,182	10	2,017	1.15	86,812
Portland	29	40,693	6,307	15	3,006	1.71	129,378
Salt Lake City	29	40,693	8,159	20	2,481	1.41	106,782
Wichita	8	11,226	832	7	542	.31	23,328
<b>Total/Averages</b>	<b>204</b>	<b>286,254</b>	<b>45,415</b>	<b>16</b>	<b>19,038</b>	<b>11</b>	<b>\$819,396</b>

Source: VMAS and OIG Optimization Model

We also found the Western Area VMF managers and Vehicle Maintenance Program Analysts (VMPA) to be proactive in managing vehicle maintenance and receptive to the intent of the OIG review and recommendations. During our briefings on the audit’s findings, several concerns were discussed.

- The Western Area VMPA, who is responsible for working directly with VMF officials to manage the vehicle maintenance program, is not organizationally aligned to be conducive to effective management of vehicle maintenance. Specifically, the VMPA is aligned under the Area Manager of Maintenance Operations, who is responsible for the area’s mail processing plant, but who has no direct line of authority to district vehicle maintenance functions or individual VMF operations.
- VMFs may not always be able to find effective shuttle alternatives and management raised the possibility of union concerns.

<sup>11</sup> This estimate of equivalent technician positions applies only to the hours used for shuttling. It does not relate to any actual reductions in this report.

<sup>12</sup> The VMF was proactive in finding a local commercial vendor for shuttling vehicles for SPMs using a flat labor rate charge and no mileage charge.

- The quality of maintenances performed by LCVs is often not at the same level of the VMF, and there is not usually time and staff available to monitor commercial vendor work.
- New Postal Service policies restricting the ability of filling existing vacancies caused by attrition and a reduction or elimination of overtime could compromise the VMF's ability to capture cost savings.
- Finally, management expressed the unique challenges the Western Area sometimes faced because of the large and diverse geographical area they cover.

The OIG acknowledges the issues and concerns management raised and the challenges faced by the Postal Service that affect VMF operations. Notwithstanding these concerns and challenges, in our opinion, opportunities exist to become more efficient and potentially save money. Specifically, the Western Area could lower overall VMF operating costs by \$1.4 million annually. These efficiencies, when projected for the 23 VMFs in the Western Area over a 10-year period, could save an estimated \$14,251,384. (See [Appendix D](#).)

**APPENDIX D: OIG CALCULATION OF COST SAVINGS**

The OIG identified \$14,251,384 in funds put to better use over the next 10 years for the Western Area’s 23 VMFs.<sup>13</sup>

<b>VMF Location</b>	<b>Average Annual Savings</b>	<b>Estimated Savings Over 10 Years</b>
Boise	\$13,707	\$137,074
Colorado Springs	75,792	757,919
Denver	152,313	1,523,130
Des Moines	64,909	649,087
Phoenix	12,912	129,120
Portland	38,435	384,353
Salt Lake City	90,250	902,504
Wichita	47,373	473,726
<b>Totals</b>	<b>\$495,691</b>	<b>\$4,956,913</b>
<b>Projected Potential Savings Over 23 VMFs in Western Area</b>		<b>\$14,251,384</b>

Source: OIG Optimization Model

We calculated the savings based on the following methodology.

- Each VMF has a list of VPOs for which it is responsible for vehicle maintenance. Each VPO has a number of Postal Service vehicles that require regular SPM. The number of SPMs that a vehicle requires is determined at the beginning of the year based on the demands that the assigned route places on the vehicle. All SPMs for a given year must be performed on each vehicle; however, the VMF may delegate some of this workload to commercial vendors that are near the VPOs. We refer to this contract labor as LCVs.
- The purpose of this audit was to determine the optimal use of VMFs and LCVs to perform SPMs. We took into consideration the mechanic labor costs and all relevant shuttling costs. As with the SPMs, VMFs may contract out shuttling. The Postal Service has a national vehicle shuttle agreement; the OIG used that rate in the analysis. However, VMFs can use a less expensive local shuttle contractor if one can be identified.

<sup>13</sup> At a 95 percent confidence level, the OIG estimates the 10-year savings amount to range between \$7.1 and \$21.3 million. We used the midpoint estimate of \$14.25 million in our statistical projection.

- We developed the optimization model to find a least-cost solution based on performing all required SPMs. We used the VMFs' FY 2007 operational data. Any SPMs not currently performed by VMFs were considered to be completed by LCVs.<sup>14</sup> We restricted the scope of this audit to maintenance technicians' time spent performing scheduled maintenance and shuttling activities. This analysis draws no conclusions regarding the time dedicated to other activities or how maintenance technicians used the remainder of their time.
- We optimized the VMFs' scheduled maintenance and shuttling time for each of the next 10 years, assuming that the Postal Service would reduce the labor contingent by 3.8 percent per year, the historical Western Area attrition rate.<sup>15</sup> This optimization gives the least-cost solution and specifies how the SPMs at each VPO should be distributed between the VMFs and the LCVs. The model shows which shuttling jobs should be performed by both the VMFs and by contractors. The model analyzes all costs and hours (for SPMs at VMFs, SPMs at LCVs, VMF shuttling, and contract shuttling). The model also shows the total SPMs currently performed by the VMF and local vendors to the total amount that could be more optimally performed by VMFs and LCVs.
- In these optimizations, we assumed that each VMF would operate at a standard efficiency. We used the sampled eight VMFs' average time per SPM as a standard for the time it takes to complete an SPM in that area. If a particular VMF performed better than this standard, we assumed that the VMF maintained its current efficiency.
- VMAS does not track the number of SPMs accomplished for each vehicle. The OIG's efficiency and optimization model estimated the number of SPMs completed by analyzing all work orders assigned to code 22 (scheduled maintenance) and considered all work lasting at least 2 hours<sup>16</sup> as an SPM. We explained the process to VMF managers and then confirmed/adjusted the number of SPMs required and completed.
- We identified cost savings if the VMF was not efficiently using its shuttling time. We compared the VMF's total shuttling time to the aggregate time that should be needed to perform all of the VMF's shuttling, assuming that two vehicles were transported on each trip. The cost of any excess time was time that could have

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<sup>14</sup> We obtained the current number of SPMs performed by VMFs and LCVs from VMAS databases located at the

██████████. Because a VMF may not perform all its required SPMs, we assumed a LCV would perform the remaining SPMs. In addition, in some cases, a VMF performed more SPMs than required at a VPO. We credited the VMFs with these additional SPMs and determined a comparable solution by reassigning these SPMs to the closest location with a shortfall. We accomplished this in part by assuming that the baseline case kept the scheduled maintenance hours and shuttling hours constant at current levels.

<sup>15</sup> The historical attrition rate for Western Area maintenance technicians was determined by averaging the past 7 years (2001 - 2007) of data obtained from the WebEIS.

<sup>16</sup> We used 2 hours because of the Postal Service's requirement for a "Type A" and "Type B" maintenance inspection prior to any repair work. These inspections require between 1.5 and 2.5 hours.

been saved, although the actual amount of time that could be saved was likely to be higher because the VMFs probably did not perform all of their own shuttling.

- For our model, we reviewed the average overtime hours per week the VMFs used during the first 6 months of FY 2008 determined from the Enterprise Data Warehouse system. The number of hours of straight time worked for each mechanic per year is 1,754.<sup>17</sup>
- Based on the above analyses, assumptions, and constraints, we estimated that the Western Area could increase overall VMF efficiency and reduce costs by using local commercial resources for shuttling and SPM requirements when appropriate. This increased efficiency, when projected over the Western Area's universe of 23 VMFs, will reduce costs by approximately \$1.4 million annually, or over \$14 million over a 10-year period.

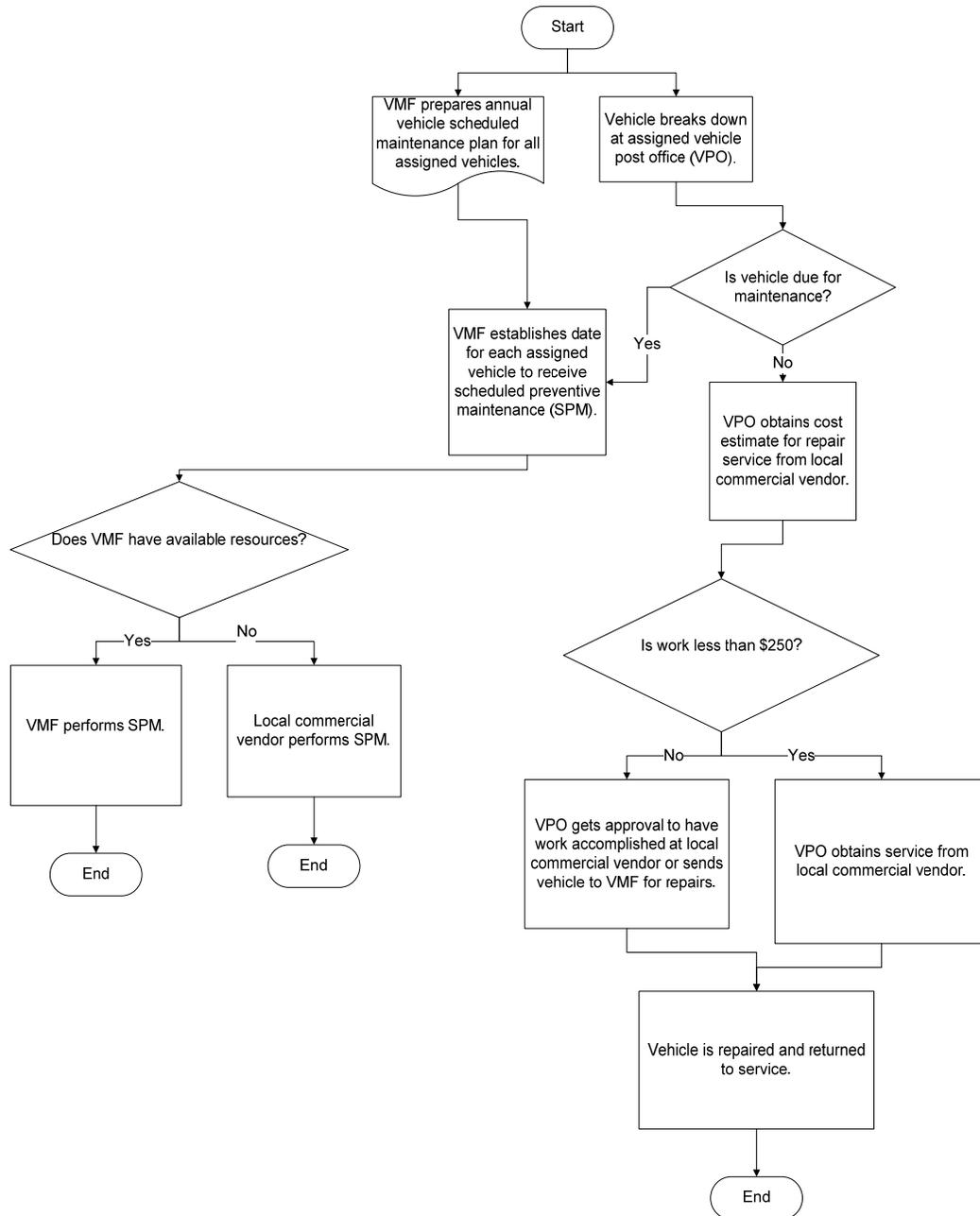
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<sup>17</sup> Source: Finance Memorandum dated March 6, 2006, "Workhour Rates for Fiscal Years 2005 - 2007."

**APPENDIX E: SELECTED DISTRICTS AND  
VEHICLE MAINTENANCE FACILITIES**

<b>District</b>	<b>VMF</b>
Spokane	Boise
Colorado/Wyoming	Colorado Springs
	Denver
Hawkeye	Des Moines
Arizona	Phoenix
Portland	Portland
Salt Lake City	Salt Lake City
Central Plains	Wichita

**APPENDIX F: SCHEDULED MAINTENANCE PROCESS**<sup>18</sup>



<sup>18</sup> Source: Postal Service Handbook PO-701, *Fleet Management*, March 1991.

## APPENDIX G: MANAGEMENT'S COMMENTS

SYLVESTER BLACK  
VICE PRESIDENT, WESTERN AREA OPERATIONS



September 17, 2008

LUCINE WILLIS  
DIRECTOR, AUDIT OPERATIONS

SUBJECT: Response to Draft Audit Report – Vehicle Maintenance Facilities  
Scheduled Maintenance Service in the Western Area  
(Report Number DR-AR-08-DRAFT)

We have reviewed the above-referenced report, including the two recommendations to complete all required scheduled maintenances, and maintain the most efficient combination of VMF service and commercial support based on geographical location, cost, and staffing.

We are in agreement that opportunities exist to improve efficiencies and determine a better balance between contracting and VMF work. Bringing the fleet to a non-delinquent status is in the best interest of the organization, our employees, and the public.

We will commit to capturing savings through improved efficiencies, though we cannot commit to the dollar amounts specified in the audit.

We are in concurrence with the recommendations and will take the necessary steps to address those recommendations as follows:

**Recommendation #1:** The Vice President, Western Area Operations, direct District Managers to require vehicle maintenance facility officials to complete any missing or past due maintenance.

**Response:** We concur that maintaining a current status of all scheduled vehicle maintenance preserves USPS assets, reduces costs, and increases employee and public safety while minimizing USPS liability. Western Area has 837 scheduled maintenances in arrears as of September 15, 2008. We have added 1,603 vehicles to the fleet with no additional staffing. We also have 50 VMF vacancies, based on Headquarters authorized VMF staffing from 2003. Due to the present financial situation and the subsequent hiring freeze, we have not filled those vacancies. Western Area is awaiting the completion of a Headquarters staffing matrix, currently under development. A workload-based standardized staffing matrix is much needed and has been requested by the Areas for many years. This matrix will indicate the correct number of employees needed to service the fleet, based on fleet numbers and vehicle type. Our low number of scheduled maintenances in arrears indicates the efficiencies achieved by VMF personnel, given the added vehicle inventory and vacant positions.

**Course of Action:** The Vice President, Western Area, will direct all District Managers to require VMF officials to immediately develop a plan for completion of all scheduled maintenances in arrears, including how they plan to maintain a current preventative maintenance status. Area and District Finance Managers will ensure that sufficient funding is provided to accomplish a non-delinquent status through the use of vehicle maintenance employees and contracting, where necessary, and following the contracting provisions of the APWU National Agreement.

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**Recommendation #2:** The Vice President, Western Area Operations, direct District Managers to work with vehicle maintenance facility officials to modify the annual vehicle maintenance plan to provide for all scheduled vehicle maintenance to better manage and improve efficiency. The plan should:

- Maintain the most efficient combination of vehicle maintenance facility and commercial resources based on geographical location and costs.

**Response:** We agree that the VMFs need to determine the best use of postal vehicle maintenance technicians and quality contractor service to maintain the fleet in a current scheduled maintenance status. District Manager, Vehicle Maintenance, and Managers, Vehicle Maintenance Facilities will review their maintenance operations to determine if there is a more efficient and cost-effective combination. Local VMF managers, with knowledge of their geographic areas and past experience with contractors, have the latitude to determine whether a vehicle should be serviced at the VMF or with a contractor. In some instances, local contractors were terminated due to unacceptable and untimely work, which jeopardizes the safety of our employees and the integrity of the vehicle. In those cases, we have had no option but to bring the vehicles into the VMF for service. Some contractor-serviced vehicles have been found to be in a deteriorated state. As mentioned in Recommendation 1, a workload-based staffing matrix determined by Headquarters Vehicle Operations is needed to assess the optimal ratio of vehicles per technician.

- Use the Postal Service's national vehicle shuttle agreement or other local commercial shuttle services, when cost-effective, for transporting vehicles to and from maintenance facilities.

**Response:** We agree to explore the feasibility of using the national vehicle shuttle contract or other local commercial shuttle services based on availability, cost, local resources, and Article 32 considerations of the National Agreement. Two VMFs are currently utilizing contract shuttle services. Western Area VMFs have 17 Garageman positions, which will be optimized to ensure that shuttle work is performed in the most cost-effective manner. Vehicle shuttle is often performed in conjunction with other activities, such as road tests, tag repairs, and road calls, which makes contractor shuttles less cost-effective.

**Course of Action:** District Managers will instruct District Manager, Vehicle Maintenance, and Managers, Vehicle Maintenance Facilities, to review the use of contractor scheduled maintenance work to become current on scheduled maintenance and explore the feasibility of vehicle shuttling. The use of vehicle maintenance employees and the use of contractors must be in compliance with all segments of the National Agreement and all Local Memorandums Of Understanding (LMOUs). In addition, the Western Area will instruct District Managers to review their vehicle maintenance operations to ensure that maintenance work, whether completed by contractors or by the VMF, is being performed in the most cost-effective manner.

We do not believe there is any Freedom of Information Act exempt information in the draft report or our response.

  
Sylvester Black

Attachment

SYLVESTER BLACK  
VICE PRESIDENT, WESTERN AREA OPERATIONS



September 18, 2008

DISTRICT MANAGERS

SUBJECT: OIG Audit Report – Scheduled Maintenance Service in the Western Area

A recent national audit of Vehicle Maintenance Facilities (VMF) during FY 2007, which included Western Area VMFs, concluded that Western Area VMFs did not complete scheduled preventative maintenance (PM) on all vehicles and did not always integrate both VMF and local commercial vendors for optimum use of available resources.

A sampling of 10 VMFs indicated that Western Area VMFs were performing high levels of scheduled preventative maintenance. PMs in arrears were due to a shortage of staff and a backlog from the previous year due to an additional 1,600 vehicles being added to the fleet. Presently, Western Area VMFs are 837 PMs in arrears (table attached).

Upon receipt of this directive, District Managers have 30 days to provide this office with an Action Plan, including an expected completion date, addressing the requirements annotated below:

1. Require vehicle maintenance facility officials to complete all required scheduled maintenances, and immediately conduct any missing or past due maintenances. The plan must include how VMFs intend to stay current. Sufficient staffing and funding needs to be provided to accomplish and maintain a non-delinquent status.
2. Work with vehicle maintenance facility officials to:
  - a. Maintain the most efficient combination of vehicle maintenance facility and commercial resources, based on geographical location, cost, and staffing. Review the maintenance operation to determine if there is a more efficient and cost effective means of completing the required scheduled maintenances.
  - b. Make optimal use of the Postal Service's national vehicle shuttle agreement or other local commercial shuttle services, when cost-effective, for transporting vehicles to and from maintenance facilities. All locations not presently using contract shuttle must explore the feasibility of using a contractor to perform vehicle shuttle.

For questions or concerns, contact Vehicle Maintenance Programs Analyst [REDACTED]

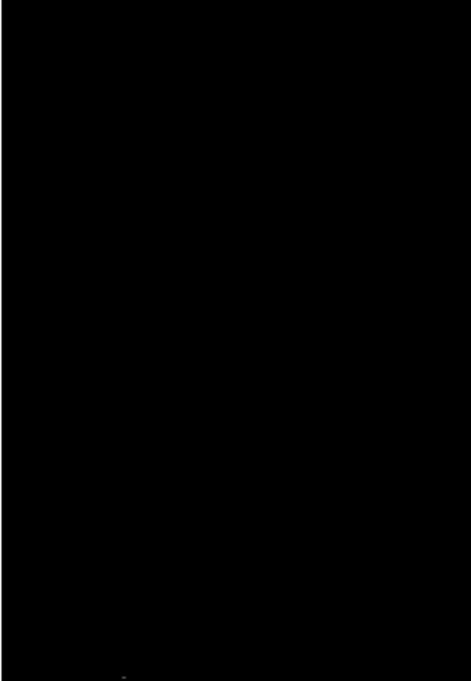
  
Sylvester Black

Attachment

cc: Gail M. Duba  
Leonard A. Henderson

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PREVENTATIVE MAINTENANCE IN ARREARS

District	VMF	PM in Arrears
		
Delinquent Total		837