

# Delivery Fleet Strategies Audit Report

August 14, 2012

**Report Number CI-AR-12-006** 



## **Delivery Fleet Strategies**

Report Number CI-AR-12-006

#### **BACKGROUND:**

The U.S. Postal Service manages the world's largest civilian vehicle fleet of about 200,000 owned vehicles to primarily support mail delivery. This fleet includes about 185,000 light-duty delivery vehicles consisting of minivans and about 163,000 right-hand-drive vehicles, of which about 142,000 are known as long-life vehicles (LLVs). The expected service life of the LLVs is 24 years, and they are now between 18 and 25 years old. In 2011, the Postal Service delivered to about 151.5 million delivery points, 6 days a week. Our objective was to assess delivery fleet strategies that could be applicable to the Postal Service using industry comparative analysis.

#### WHAT THE OIG FOUND:

The Postal Service does not have a comprehensive fleet management strategy but has some elements of a strategy in place to operate, sustain, and renew its delivery fleet. In June 2011, management also developed a plan to purchase new vehicles; however, the Postal Service's continuing financial situation prevents the plan's implementation. A robust and centralized strategy ensures that opportunities to reduce costs, improve fleet effectiveness, improve safety, adequately plan for future needs, and maximize the return on investment are available to management.

After examining delivery fleet practices at organizations with a wide spectrum of fleet management expertise, we identified 32 best practices for consideration by the Postal Service. The best practices fall into three categories:

- Strategy.
- Asset optimization.
- Asset acquisition.

The U.S. Postal Service Office of Inspector General plans to conduct future work on vehicle replacement (type and technology considerations).

#### WHAT THE OIG RECOMMENDED:

We recommended that management develop and implement a comprehensive fleet management strategy that is managed from headquarters by a dedicated team of specialists whose primary focus is to use identified best practices for the management of the Postal Service's vehicle fleet. We also recommended that management establish an annual new vehicle replacement strategy, as part of a comprehensive fleet management strategy, to replace part of the fleet each year, spread out the expenditures over time, and ensure the overall operational functionality of the fleet.

Link to review the entire report



August 14, 2012

**MEMORANDUM FOR:** DEAN J. GRANHOLM

VICE PRESIDENT, DELIVERY AND POST OFFICE

**OPERATIONS** 

E-Signed by Michael A. Magalski
VERIFY authenticity with e-Sign

FROM: Michael A. Magalski

**Deputy Assistant Inspector General** 

for Support Operations

**SUBJECT:** Audit Report – Delivery Fleet Strategies

(Report Number CI-AR-12-006)

This report presents the results of our audit of Delivery Fleet Strategies (Project Number 12YG004Cl000).

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Michael L. Thompson, director, Planning, Innovation and Optimization or me at 703-248-2100.

Attachments

cc: Megan Brennan

Corporate Audit and Response Management

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#### Introduction

This report presents the results of our audit of Delivery Fleet Strategies (Project Number 12YG004Cl000). Our objective was to assess delivery fleet strategies that could be applicable to the U.S. Postal Service using industry comparative analysis. This self-initiated audit addresses strategic risk. See Appendix A for additional information about this audit.

The Postal Service manages the world's largest civilian vehicle fleet of about 200,000 owned vehicles to primarily support mail delivery. This fleet includes about 185,000 light duty delivery vehicles consisting of minivans and about 163,000 purpose-built right-hand-drive vehicles, of which about 142,000 are known as long-life vehicles (LLVs). The expected service life of the LLVs is 24 years, and they are now between 18 and 25 years old.

#### Conclusion

The Postal Service does not have a comprehensive fleet management strategy to operate, sustain, and renew its delivery fleet. However, it does have strategies in place for some elements of a comprehensive fleet management strategy, such as:

- Spare parts, provided by suppliers on a consignment basis.
- Tires, purchased using a contract with a national provider to leverage volume purchases.
- Maintenance and repairs, typically performed in-house with maintenance and repair service contracts for overflow work and rural locations.

Also, in June 2011, management developed a plan<sup>2</sup> to purchase new vehicles supported by broad analysis; however, the Postal Service's continuing financial situation prevents its implementation. A robust and centralized strategy ensures that opportunities to reduce costs, improve fleet effectiveness, improve safety, adequately plan for future needs, and maximize the return on investment<sup>3</sup> are available to management.

Based on the comparative analysis, 32 best practices were identified from direct competitors, utility organizations, other organizations with large fleets, and government fleets. See Chart 1, Chart 2, and Appendix B for additional information.

<sup>1</sup> The Postal Service's mail hauling fleet also includes truck tractors, spotters, trailers, cargo vans, and mixed delivery and collection vehicles totaling about 15,100 vehicles and does not include contractor vehicles.

<sup>&</sup>lt;sup>2</sup> Light Delivery Vehicle Preliminary Business Case, dated June 23, 2011.

<sup>&</sup>lt;sup>3</sup> A performance measure used to evaluate the efficiency of an investment, calculated by dividing the benefit of the investment by the cost of the investment.

It is important to acknowledge that all organizations have customized fleet management strategies to fit their business models and strategic goals. However, two important conclusions can be drawn from the comparative analysis:

- Best in class companies have a comprehensive, forward-looking fleet management strategy that is managed by a headquarters team of specialists. The fleet management strategic plan is in writing, formally adopted, and reviewed periodically by experienced professionals with backgrounds in maintenance, engineering, supply chain logistics, procurement, and sustainability. At a minimum, these fleet management strategic plans address:
  - Capital expenditures.
  - Fuel and tire management.
  - o Spare parts management.
  - o Maintenance.
  - Financing and budgeting.
  - Sustainability.
- An annual new vehicle replacement strategy to spread out the expenditures evenly over time, ensure functional viability, and the overall health of the fleet in the collective lifecycle of the fleet. A percentage replacement strategy will stabilize acquisition and maintenance costs and allow for valuable relationships with suppliers. When suppliers can expect annual business, (a steady flow of revenue is highly valued) the customer has an advantage in terms of negotiating cost and timeframe requirements, and quality.

Management has the challenges of cost and the right-hand-drive requirement for delivery vehicles to renew their delivery vehicle fleet, so the Postal Service can continue to fulfill its mission. The cost of an entire new delivery vehicle fleet is estimated to be more than \$5 billion, and right-hand-drive<sup>4</sup> delivery vehicles are currently not available.

The U.S. Postal Service Office of Inspector General (OIG) plans to conduct future work on vehicle replacement (type and technology considerations).

#### Recommendations

We recommend the vice president, Delivery and Post Office Operations:

 Implement a comprehensive fleet management strategy that is managed by headquarters using a dedicated team of specialists whose primary focus is to use identified best practices for the management of the Postal Service's vehicle fleet.

<sup>&</sup>lt;sup>4</sup> Vehicles are usually manufactured in left-hand-drive and right-hand-drive configurations, referring to the placement of the driver seat and controls within the vehicle.

2. Establish an annual new vehicle replacement strategy, as part of a comprehensive fleet management strategy, to replace part of the fleet each year, spread out the expenditures over time, and ensure the overall operational functionality of the fleet.

## **Management's Comments**

Management disagreed with our first finding and recommendation stating that the Postal Service has recently undergone an organization wide restructuring. The Postal Service's fleet strategy is not contained in one department but is a cooperative venture between various departments.

Management partially agreed with our second recommendation, excluding any references to the first recommendation about a comprehensive fleet management strategy. Management stated they will incorporate the idea of yearly replacement of portions of the fleet rather than a massive purchase prior to the next significant vehicle purchase with a target implementation date of September 2016. See Appendix C for management's comments, in their entirety.

## **Evaluation of Management's Comments**

The OIG does not consider management's comments responsive to the first finding and recommendation in the report, but does not plan to pursue it through the formal audit resolution process. Although management believes the current restructuring caused fleet strategy to be a cooperative venture between departments, the OIG maintains that establishing a comprehensive fleet management strategy, managed by a dedicated headquarters team of specialists, would align the Postal Service's practices with the best in class practices of direct competitors, utility organizations, government fleets, and other organizations with large fleets. The OIG considers management's comments responsive to the second recommendation in the report.

The OIG considers all the recommendations significant, and therefore requires OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. These recommendations should not be closed in the Postal Service's follow-up tracking system until the OIG provides written confirmation that the recommendations can be closed.

## Appendix A: Additional Information

## Background

The Postal Service's basic function is to provide postal services to bind the nation together through the correspondence of the people. It is also charged with selecting modes of transportation that give the highest consideration to the prompt and economical delivery of all mail.<sup>5</sup> In 2011, the Postal Service delivered to about 151.5 million delivery points, 6 days a week. On average, the number of delivery points has steadily grown at a rate of .7 percent in the last 5 years, or 1.1 million new delivery points per year.

The Postal Service manages the world's largest civilian vehicle fleet of about 200,000 vehicles to primarily support mail delivery. 6 This fleet includes about 185,000 light duty delivery vehicles consisting of minivans and about 163,000 purpose-built right-hand-drive vehicles, of which about 142,000 are known as LLVs. The expected service life of the LLVs is 24 years, and they are now between 18 and 25 years old.<sup>7</sup>

The Government Accountability Office (GAO)<sup>8</sup> and the OIG<sup>9</sup> in 2011 and 2010 respectively reviewed:

- The Postal Service's approach to address its delivery fleet needs.
- Vehicle funding options for the Postal Service.
- The Postal Service's vehicle replacement strategy.

The GAO and the OIG determined that without the capital resources to purchase a new vehicle fleet, management's approach is to sustain delivery fleet operations through continued maintenance, by using a 'fix as fails' strategy. 10 In addition, the costs to maintain the fleet were increasing and even exceeded replacement costs as vehicle maintenance costs intensified.

In June 2011, management developed a plan<sup>11</sup> to purchase new vehicles supported by broad analysis; however, the Postal Service's continuing financial situation prevents the plan's implementation. This plan anticipated the replacement of LLVs with high maintenance costs and end of life minivans and for providing right-hand-drive vehicles to rural mail carriers over a 5-year period, from 2012 through 2016. The plan, in the long term, anticipated replacing the remaining LLVs over 7 years, beginning in 2017.

<sup>6</sup> The Postal Service's mail hauling fleet also includes truck tractors, spotters, trailers, cargo vans, and mixed delivery and collection vehicles totaling about 15,100 vehicles.

<sup>&</sup>lt;sup>5</sup> Title 39 U.S.C. § 101(a) and (f).

<sup>&</sup>lt;sup>7</sup> The percentages of vehicles from ages 18 to 24 years old are evenly spread at 13 to 14 percent each year, and 5.3 percent of vehicles are 25 years old.

GAO-11-386, United States Postal Service, Strategy Needed to Address Aging Delivery Fleet, May 2011.

<sup>&</sup>lt;sup>9</sup> OIG, Audit Report–Delivery Vehicle Replacement Strategy (Report Number DA-AR-10-005, dated June 16, 2010). <sup>10</sup> 'Fix as fails' refers to a strategy whereby vehicles are fixed as they experience failure as a short-term means of ensuring that the delivery vehicles remain operational.

Light Delivery Vehicle Preliminary Business Case, dated June 23, 2011.

The Postal Service does not have a comprehensive fleet strategy to operate, sustain, and renew its delivery fleet, unlike other large fleet owners noted in our comparative analysis. However, management does have strategies for elements of a comprehensive fleet management strategy. For instance:

- Spare parts, provided by suppliers on a consignment basis.
- Tires, purchased using a contract with a national provider to leverage volume purchases.
- Maintenance and repairs, typically performed in-house with maintenance and repair service contracts for overflow work and rural locations.

## Objective, Scope, and Methodology

Our objective was to assess delivery fleet strategies that could be applicable to the Postal Service using industry comparative analysis. To accomplish our objective, we engaged a contractor to conduct best practices using research and comparative analysis based on its extensive expertise. Specifically, we sought to understand how other organizations:

- Strategically manage their fleets, including key components of fleet management strategies.
- Employ replacement strategies for future fleet replacement and new vehicle acquisition.
- Optimize the life of their fleet assets.

We interviewed 16 senior-level individuals at 12 organizations from selected industries. An OIG auditor was present during each interview, except for interviews with large parcel delivery companies.<sup>12</sup>

The 12 organizations included direct competitors, utility organizations, organizations with large fleets, and government fleets. Direct competitors were selected, because they perform similar tasks as the Postal Service does and might face some of the same challenges and constraints as the Postal Service does, such as making deliveries and starting and stopping frequently. Utility organizations were selected, because they have 'customer-facing' vehicle fleets where safety and brand are of critical importance; they might have attributes in their fleet management strategies that portray the importance their fleets play in their overall brands. Organizations with large fleets were selected, because they manage very large fleets with multiple types of vehicles. Government organizations were selected, because they face similar budget and legal constraints as the Postal Service does and often use customized vehicles.

Large parcel delivery companies requested to have their names redacted from any resulting report and were not

comfortable answering trade questions in the presence of Postal Service employees.

13 'Customer-facing' refers to any technology, product, or service that the customer of a business deals with directly.

While no single organization is considered 'world class' in all aspects of fleet management strategy, each of the 12 organizations provided elements of excellence. See Chart 1 and Chart 2 for a list of organizations studied and their fleet characteristics. Also, see Appendix B for best practices identified.

Chart 1: Organizations Studied<sup>14</sup>

Company	Fleet Size (About)	Rationale for Selection
Parcel Delivery Company	80,000-100,000	<ul><li>Direct competitor.</li><li>Uses vehicles to make deliveries.</li></ul>
Parcel Delivery Company	80,000-100,000	<ul><li>Direct competitor.</li><li>Uses vehicles to make deliveries.</li></ul>
Parcel Delivery Company	500-1,000	<ul><li>Direct competitor.</li><li>Uses vehicles to make deliveries.</li></ul>
PepsiCo PEPSICO	70,000	<ul> <li>Food &amp; beverage business.</li> <li>Maintains a large fleet of different vehicle types including tractor trailer trucks, delivery trucks, step vans, pickup trucks, and sedans.</li> </ul>
AT&T	70,000	<ul> <li>Utility organization.</li> <li>In 2008 made a 10-year commitment to spend \$565 million to deploy 15,000 alternative fuel vehicles.</li> </ul>
Verizon verizon	39,000	<ul> <li>Utility organization.</li> </ul>
Swiss Post Swiss Post	20,000	<ul> <li>Postal organization.</li> <li>Has a strong focus on sustainability and total cost of ownership.</li> </ul>
Australia Post () Post	10,500	<ul> <li>Postal organization.</li> <li>Manages a fleet of different vehicle types including motorcycles, step vans, and class eight trucks.</li> </ul>
Canada Post CANADA POSTES CANADA	8,000	<ul> <li>Postal organization.</li> <li>Only other organization with right – hand -drive LLVs.</li> </ul>
NYPD <u>NYPD</u>	8,000	<ul> <li>Local government.</li> <li>Decreased fuel consumption by 611,000 gallons in 2009 through use of hybrid applications.</li> </ul>
City of Portland, OR	2,900	<ul> <li>Government organization.</li> <li>Ranked #1 Fleet in North America by Government Fleet magazine for 2011.<sup>17</sup></li> </ul>
City of Durham, NC  Source: OIG Root Practices Comparative	1,500	<ul> <li>Government organization.</li> <li>Named one of the '100 Best Fleets' by Government Fleet magazine.</li> </ul>

Source: OIG - Best Practices Comparative Analysis.

Grouped by similar organizations and size of fleet.

15 http://www.att.com/gen/press-room?pid=22297&cdvn=news&newsarticleid=33757

16 http://www.nyc.gov/html/nypd/html/administration/support\_services\_dir.shtml

17 http://www.portlandonline.com/omf/index.cfm?c=33493

18 http://www.government-fleet.com/News/Story/2011/05/2011-Government-Fleet-100-Best-Fleets-Announced.aspx?prestitial=1

**Chart 2: High-Level Fleet Characteristics Snapshot** 

Primary Vehicle Type	Average Age of Fleet	Degree of Customization	Replacement Cycles
Package Cars	About 9.5 years	Limited	Annual
Delivery Trucks	About 9 years	Limited	Annual
Delivery Trucks and Vans	8.5 years	Limited	Annual
Vans and Small Trucks	13.5 years	Reliance on Up- fitters <sup>19</sup>	Annual
Step-vans and LLVs	8.5 years	About 25% are right- hand-drive	Annual: Growing fleet to 12,500 by 2015
Delivery Vans	7 years	Limited	Annual
Pickup/Delivery Trucks	5 years	Limited	Annual
Delivery Vans and Motorcycles	4-5 years	Limited to Tractor Trailers	Quarterly (4 times per year)
Sedans, Vans, and SUVs	3-4 years	Limited	Annual
Sedans and Solid waste trucks	N/A	Moderate - Fire Engines and Street cleaners	Annual
Sedans and Solid waste trucks	N/A	Moderate - Fire Engines and street cleaners	Annual
Light Trucks and Vans	8.7 years	Limited	Annual

Note: N/A means not applicable.

Source: OIG - Best Practices Comparative Analysis.

We conducted this performance audit from October 2011 through August 2012 in accordance with generally accepted government auditing standards and included such tests of internal controls, as 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 objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. We discussed our observations and conclusions with management on June 14, 2012, and included their comments where appropriate.

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<sup>&</sup>lt;sup>19</sup> Up-fitters are third-parties that specialize in customizing vehicles.

# **Prior Audit Coverage**

Report Title	Report Number	Final Report Date	Monetary Impact	Report Results
United States Postal Service, Strategy Needed to Address Aging Delivery Fleet	GAO-11-386	5/17/2011	None	Many of the Postal Service's delivery vehicles are reaching the end of their expected 24-year operational lives. The Postal Service's delivery fleet is largely composed of custom-built, right-hand- drive vehicles designed to last for 24 years, including about 141,000 gasoline-powered vehicles 16 to 23 years old. The Postal Service's approach for addressing its delivery fleet needs is to maintain its current fleet until it determines how to address its longer-term needs.  GAO recommended that the Postal Service should develop a strategy for addressing its delivery fleet needs that considers the effects of likely operational changes, legislative fleet requirements, and other factors. The Postal Service agreed with GAO's recommendation.

Report Title	Report Number	Final Report Date	Monetary Impact	Report Results
Delivery Vehicle Replacement Strategy	DA-AR-10-005	6/16/2010	\$342,127,370	The Postal Service has successfully maintained its LLVs delivery fleet in safe, working condition for more than 20 years. They attribute this success to a robust preventive maintenance program, as well as a 'fix as fails' strategy that we found to be operationally viable and generally cost effective. However, analysis of delivery vehicle costs shows that this strategy would not be cost-effective for fleet vehicles the Postal Service will have to replace soon.  We recommended replacing maintenance intensive vehicles, re-emphasizing to vehicle maintenance and district managers the reinvestment threshold, and monitoring maintenance intensive delivery vehicles at the area level. Management agreed with our recommendations and will develop a (replacement) plan.

Report Title	Report Number	Final Report Date	Monetary Impact	Report Results
Vehicle Parts Program	DR-AR-10-008	9/24/2010	\$48,024,849	The Postal Service spends more than \$270 million on vehicle parts for repairing and maintaining its fleet of more than 211,000 vehicles. The Postal Service's vehicle parts purchasing process established in 1997 uses consignment suppliers. Although this process has provided the Postal Service with a reliable, more consistent means of acquiring and managing vehicle parts assets, the audit identified the Postal Service did not always pay the lowest price for vehicle parts and vehicle part assets were at risk in some locations. These conditions occurred, because of inadequate processes, unclear purchasing policies, and resource constraints, as well as insufficient internal controls to secure vehicle parts assets in some locations.  We recommended the Postal Service establish a process to analyze similar vehicle parts by form, fit, and function from the consignment suppliers to aid in negotiations with suppliers, and communicate consistent clear policy to vehicle maintenance facility personnel on purchasing vehicle parts from consignment suppliers and alternate sources to ensure the Postal Service pays the lowest price for vehicle parts. Management agreed with the findings and recommendations in the report.

## **Appendix B: Comparative Analysis Best Practices**

## **Best Practices**

The 32 fleet management best practices developed from the comparative analysis are identified as follows. The best practices are grouped according to:

- Strategy.
- Asset acquisition.
- Asset optimization.

## Strategy:

- Fuel Management.
  - Establish policies to maximize vehicle efficiency and minimize fuel consumption. Fuel consumption is highly impacted by two controllable factors: vehicle operators' driving habits and tire air pressure. Driving habits are believed to affect fuel costs by as much as 30 percent and tire inflation by up to 10 percent.
  - Set goals for reducing fuel consumption and vehicle emissions, and annually take specific actions to achieve these goals. Take annual steps to reach these goals, primarily by adopting alternative fuel vehicles, requiring vehicle manufacturers to improve fuel efficiency performance as part of new procurements, and measuring carbon emissions.

The Postal Service has primarily focused on eliminating excess transportation capacity and the exploration of alternative fuel vehicles as its fuel management strategy.20

- Tire Management.
  - Negotiate the base price of tires centrally through a national buying program, but enable regional fleet managers to maintain tires at the local level. Because vehicle geographic operating environments significantly influence costs, it is most cost effective for local fleet managers to negotiate service contracts with individual tire dealerships.
  - Establish policies and practices to maximize the useful life of tires. Periodically retread<sup>21</sup> tires to extend their serviceable lives. Also, analyze scrapped tires to measure tire efficiency and inform future tire management strategies.

The Postal Service's tire purchasing strategy is to use national providers and leverage volume purchases.

<sup>&</sup>lt;sup>20</sup> OIG, Fuel Management Consumption Strategies for Surface Network Operations (Report Number NL-AR-09-010, dated September 30, 2009).

Retreading is a process where a previously used tire is reconditioned and then placed back on the vehicle.

- Organizational Structure.
  - Establish a corporate fleet management strategy staff. Twelve of 12 organizations studied have a team dedicated to fleet management strategy at the corporate level.
  - Separate day-to-day operations from corporate fleet management strategy formulation. By separating these functions, day-to-day operations are executed more effectively and strategic fleet managers receive the time and resources necessary to make long-term strategic decisions in the best interest of the entire vehicle fleet and the organization.
  - Align fleet management strategy with the overall business strategy through strong collaboration. Examples of practices include assigning fleet management staff to liaise with business units and establishing recurring meetings between corporate strategy teams and fleet strategy managers to align on goals and objectives.
  - Promote transparency and effective communication between the corporate fleet strategy group and other levels of fleet management. Practices include consolidating data management systems to collect aggregated fleet data across all regions and conducting regularly recurring meetings between corporate and regional fleet managers to discuss fleet data, strategy, and operations.

Vehicle management is the responsibility of the vice president of Delivery and Post Office Operations. However, vehicle management is a fragmented structure, because area vice presidents supervise field offices.

#### Sustainability.

- Deploy green technology strategically. For example, use electric vehicles in urban areas, because electric vehicles are considered best suited for shorter routes because of battery limitations.
- Develop a culture of continuous learning by looking outside the organization and evaluating the sustainability strategies of industry peers. Because of the high cost of green technology, studying other organizations to learn from their successes and failures and observing what works best is a cost and resourceeffective way to learn more about green technology practices.
- Collaborate with suppliers to develop green technologies that are best suited for business operations. Work closely with manufacturers to develop green technologies that are tailored to the organizations' exact business needs.

The Postal Service expects to meet national sustainability requirements for reduced emissions<sup>22</sup> by investing in new, highly fuel-efficient gasoline-powered vehicles, instead of alternative fuel vehicles.

## Asset Acquisition:

- New Vehicle Acquisition.
  - Purchase a percentage of new vehicles annually. Twelve of 12 organizations studied purchase new vehicles annually to maintain and support supplier relations, stabilize maintenance costs, ensure the health of the overall fleet at all times, and avoid the future financial burden of replacing a large number of vehicles at once.
  - Balance the rate of vehicle retirement with the rate of new vehicle acquisition. This effort is to avoid major increases in the costs of vehicle maintenance and vehicle acquisition.
  - Build supplier relationships. Developing relationships can result in benefits of flexibility, increased quality, reliability, support, and cooperation, and occasional pricing discounts.
  - Use a multisourcing strategy to maximize leverage and reduce risk with suppliers.
  - Hold suppliers accountable for the quality and efficiency of production through designed controls. Seek special assurances from manufacturers regarding the quality and delivery of a new vehicle fleet that goes beyond the typical protections offered under new vehicle warranties.
  - Evaluate suppliers annually and meet individually with suppliers to share this assessment. Evaluate suppliers across a variety of price and cost-related metrics including vehicle acquisition costs, fuel economy, vehicle warranty, and service quality.
  - Consider the manufacturing capacity and geographical location of suppliers when allocating capital for new vehicle acquisition. Suppliers with shorter lead times and with close by manufacturing plants can save money and help avoid delays.
  - Standardize vehicles as much as possible to optimize acquisition and operations costs.

<sup>22</sup> The Energy Policy Act of 1992 provides that 75 percent of the Postal Service's vehicle acquisitions be alternative fuel vehicles, capable of operating on a fuel other than gasoline.

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GAO-11-386, United States Postal Service, Strategy Needed to Address Aging Delivery Fleet, May 2011.

Management developed a plan<sup>24</sup> to purchase new vehicles supported by broad analysis; however, the Postal Service's continuing financial situation prevents its implementation. This plan anticipated the replacement of LLVs with high maintenance costs and end of life minivans, and for providing right-hand-drive vehicles to rural mail carriers over a 5-year period, from 2012 through 2016. The plan, in the long term, anticipated replacing the remaining LLVs over 7 years, beginning in 2017.

#### Vehicle Retirement.

- Use a cost-benefit analysis that considers new technology and vehicle inefficiency when deciding which vehicles to retire. Compare current vehicles to new vehicles available in the market. In some cases, organizations retire vehicles well before their expected lifecycle, because vehicle technology has improved significantly and older vehicles have become obsolete.
- Make vehicle retirement decisions at the local level, and ensure that local mechanics and technicians inspect vehicles before making a final vehicle retirement decision. Although corporate fleet strategy managers set and communicate guidelines for vehicle retirement, local employees work closely with each vehicle over the course of its lifecycle, allowing them to understand the vehicle and its associated costs better than anyone else does.
- Vehicle age is a factor in vehicle retirement but should not be the single factor in vehicle retirement decisions. Age is best used as an indicator for when a vehicle should be closely evaluated and considered for retirement.

Without the capital resources to purchase a new vehicle fleet, the Postal Service must retain the current fleet and has employed a 'fix as fails' strategy as a short-term means of ensuring that its delivery vehicles remain operational.

## **Asset Optimization:**

- Preventative Maintenance.
  - Perform preventative maintenance in-house for older vehicles to maintain control and optimize costs (in cases where organizations already conduct in-house maintenance). Some organizations choose to outsource the maintenance of newer vehicles, because they require less complicated maintenance and servicing, and they save their experienced technicians for more complicated and expensive work.

<sup>&</sup>lt;sup>24</sup> Light Delivery Vehicle Preliminary Business Case, dated June 23, 2011.

- Implement controls to achieve compliance with strategy and fleet management policies. For example, use the fuel delivery system to facilitate compliance with preventative maintenance schedules by preventing refueling.
- Ensure high quality technicians are used to conduct in-house maintenance.
   Vehicles are becoming even more technologically sophisticated and the technician skill set requirements are increasingly specialized. Consequently, organizations are placing a greater importance on attracting and retaining high-quality maintenance professionals.
- Consider the number of vehicles within any geographic area when evaluating the decision to outsource maintenance (versus performing it in-house). It can be more cost effective to perform maintenance in-house when there are a large number of vehicles within a geographic area.
- Prioritize maintenance and repair based on the operational necessity of the vehicle.

The Postal Service has a maintenance program<sup>25</sup> that uses Postal Service's vehicle maintenance facilities (VMFs) and local commercial repair resources. The VMF staffs are trained maintenance technicians that are Postal Service employees. The Postal Service provides the tools and parts for performing repairs and monitoring and maintaining preventive maintenance standards.

The geographic locations of VMFs vary according to the need to support vehicle maintenance and reduce transportation costs. VMF managers have overall responsibility for oversight of all maintenance and repair services performed at VMF units and any work contracted to commercial suppliers.

- Spare Parts Management.
  - Stock locally the most commonly used parts.
  - Use an automated inventory system to streamline maintenance and repair operations. Electronic ordering and expensing systems save costs and optimize spare parts management by eliminating paper, expediting the spare parts ordering process, and enabling fleet managers to more easily track and control spare parts usage.
  - Install a system of checks and balances to ensure quality parts are being purchased. Collaboration between Procurement and Engineering can ensure that organizations receive the highest quality parts at the best prices.

<sup>&</sup>lt;sup>25</sup> OIG, Audit Report–*Vehicle Maintenance Facilities* – *Scheduled Maintenance Service in the Western Area* (Report Number DR-AR-08-008, dated September 29, 2008).

The Postal Service spends more than \$270 million annually for parts to repair and maintain its vehicles. Management established in 1997 a vehicle spare parts consignment process with parts suppliers. This process has provided the Postal Service with a reliable, more consistent means of acquiring and managing vehicle parts.<sup>26</sup>

## Operations.

- Rotate vehicles between urban and rural delivery routes to extend vehicle lifecycles. These environments affect the rate at which vehicles age in different ways. For example, a vehicle that is used exclusively in an urban setting will travel fewer miles; however, it may have more wear due to the frequency of stops and the harsher driving conditions. Whereas, a vehicle used in a rural setting will likely travel more miles but be in better condition due to a more favorable driving environment.
- Assign drivers to the same vehicle whenever possible to increase vehicle conservation. Organizations have found that drivers are more inclined to take better care of a vehicle if they operate the same one every day.

The Postal Service provides instructions<sup>27</sup> to review all routes of travel to ensure best possible routing as part of its annual vehicle utilization survey, and to ensure the established route of travel is followed. It also provides for vehicle assignments based on the following criteria:<sup>28</sup>

- Service required for functional vehicles.
- Potential reduction of driver hours.
- Potential increase in vehicle utilization.
- Cost of vehicle operations.

To minimize overall repair costs and avoid disruption of services, Postal Service policy<sup>28</sup> calls for the assignment of vehicles that are nearing replacement due to age, mileage, or high maintenance costs to locations closer to the VMF or a designated maintenance provider, and when practicable, deployment of vehicles to less-demanding assignments.

<sup>28</sup> Postal Service, Handbook PO-701, 221 Vehicle Assignment.

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<sup>&</sup>lt;sup>26</sup> OIG, Audit Report–Vehicle Parts Program (Report Number DR-AR-10-008, dated September 24, 2010).

<sup>&</sup>lt;sup>27</sup> Postal Service, Handbook PO-701, *213 Routes of Travel*.

## **Appendix C: Management's Comments**

DEAN J. GRANHOLM VICE PRESIDENT DELIVERY AND POST OFFICE OPERATIONS



August 8, 2012

Lucine M. Willis Director, OIG Audit Operations 1735 North Lynn Street Arlington, VA 22209-2020

SUBJECT: Draft Audit Report – Delivery Fleet Strategies (Report Number CI-AR-12-Draft)

Thank you for the opportunity to review and comment on this subject draft audit report.

The objective of this audit was to assess delivery fleet strategies that could be applicable to the Postal Service using industry comparable analysis. The Office of Inspector General (OIG) contracted with a company to interview 16 senior-level individuals at 12 organizations from selected industries. From these interviews a list of best practices were identified and offered to the U.S. Postal Service (USPS) in this audit followed by a summary of activities the USPS was doing under each practice.

Many of the best practices identified are either existing practices in the USPS or had been until the Postal Service consciously decided to end them. Some practices identified we feel have merit and will be considered for inclusion in future strategy development.

We disagree with the OIG finding that the USPS does not have a comprehensive fleet management strategy to operate, sustain, and renew its delivery fleet, but has only some elements of a strategy. The strategy is not contained in one department as suggested by this audit, rather through a cooperative venture between Delivery and Post Office Operations, Engineering, Sustainability, and Supply Management.

The OIG correctly points out that the Postal Service manages the world's largest civilian vehicle fleet of about 200,000 vehicles to primarily support mail delivery. They also acknowledge that management developed a plan to purchase new vehicles supported by broad analysis, however its continuing financial situation prevents the plan's implementation.

475 L'ENFANT PLAZA SW ROOM 7017 WASHINGTON, DC 20260-7017 202-268-6500 FAX: 202-268-3331 This has moved Postal management to develop an alternative strategy coined as a "fix as fails strategy" that is intended to enable the postponement of purchasing new vehicles until financial status improves. The Postal Service understands the short term risks associated with this strategy. However, considering the recent default on payments and the current cash shortage situation, it determines this to be the best strategy at this time in order to meet our universal service obligations.

Following is the response to your recommendations to the Vice President, Delivery and Post Office Operations.

#### Recommendation 1

We recommend that the Vice President, Delivery and Post Office Operations:

 Implement a comprehensive fleet management strategy that is managed by headquarters using a dedicated team of specialist whose primary focus is to use identified best practices for the management of the Postal Service's vehicle fleet.

#### Response:

Delivery Operations does not agree with this recommendation. The Postal Service has recently undergone an organization wide re-structuring that was carefully planned and recommended by two world renowned management consultant companies (Boston Consulting Group and McKinsey Company) in reaction to our continual volume and revenue declines and prospective for the future. This restructuring, for better or worse, has caused major shifting of resources and reduced staffs in every facet of the USPS. Our response has been to downsize functions and shift responsibilities in order to reduce operating cost. The recommendation to dedicate a team is estimated to potentially add cost through a silo organization.

#### Recommendation 2

Establish an annual new vehicle replacement strategy, as part of a comprehensive fleet management strategy, to replace part of the fleet each year, spread out the expenditures over time, and ensure the overall operations functionality of the fleet.

#### Response:

We agree in part with this recommendation. Agreeing in full would suggest we do not have a comprehensive fleet management strategy and we objected to this earlier, however, we do agree to relook at our existing fleet replacement strategy and incorporate the notion of yearly replacement of portions of the fleet rather than a massive purchase strategy.

This will be performed prior to the next significant vehicle purchase. In addition, that result may be responsible considering our financial conditions at that time.

Dean J. Granholi

c: Elizabeth A. Schaefer Philip F. Knoll, Jr.