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U.S. POSTAL
SERVICE

Vulnerability to
Fluctuating Fuel
Prices Requires
Improved Tracking
and Monitoring of
Consumption
Information





Highlights of [GAO-07-244](#), a report to congressional requesters

U.S. POSTAL SERVICE

Vulnerability to Fluctuating Fuel Prices Requires Improved Tracking and Monitoring of Consumption Information

Why GAO Did This Study

The U.S. Postal Service (the Service) is dependent on fuel to support its mail delivery and transportation networks, as well as to heat and operate the over 34,000 postal facilities it occupies. The Service has been challenged by recent fuel price fluctuations, and the Postmaster General stated that gas prices were a primary reason for the proposed 2007 postal rate adjustment. Based on this challenge, you asked GAO to review (1) how the Service's fuel costs changed recently and the impact of these cost changes on the Service's financial and operating conditions, and (2) how the Service's actions to control fuel costs and mitigate risk compare to leading practices and federal requirements. GAO collected fuel cost and price information; interviewed Service fuel officials; and compared the Service's actions against leading practices and federal requirements.

What GAO Recommends

GAO recommends that the Postmaster General take actions to improve the Service's tracking and monitoring of transportation and facility-related fuel consumption data. GAO provided a draft of this report to the Service for its review and comment. The Service agreed with GAO's findings and recommendation and stated that it will take steps to improve its information systems that capture consumption data.

www.gao.gov/cgi-bin/getrpt?GAO-07-244.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Katherine Siggerud at (202) 512-2834 or siggerudk@gao.gov.

What GAO Found

The Service's transportation and facility fuel costs have grown in recent years as fuel prices, particularly for gasoline, diesel, and jet fuel have increased. For example, fuel cost growth for its vehicle fleet was due to rising prices rather than consumption. While fuel costs have directly pressured its financial condition, increasing compensation and benefits were the primary driver of the \$3.4 billion operating expense increase in fiscal year 2006. The Service absorbed fuel cost increases through cost-containment efforts and increased revenues from the January 2006 rate increase, allowing it to achieve net income for the year. Nevertheless, the Service remains vulnerable to fuel price fluctuations, due in part to its purchasing process, which involves buying fuel as needed, often at retail locations. The Service is challenged to control fuel costs due to its expanding delivery network and inability to use surcharges.

GAO found some of the Service's actions to control fuel costs to be generally consistent with procurement and consumption practices advocated by leading organizations and federal requirements for purchasing alternative fuel vehicles. However, GAO also identified areas where more actions could be taken (see table).

GAO Assessment of Service's Actions to Control Fuel Costs

Leading practices and federal requirements	GAO assessment of the Service's relevant actions
Aggregate purchases to leverage buying power and size	<i>Generally consistent:</i> Aggregated purchases for certain subsets of its fuel purchasing program have resulted in cost savings.
Enhance organizational structure	<i>Generally consistent:</i> Enhanced fuel management and leadership through commodity-specific experts and a new energy leadership position.
Use public/private partnerships	<i>Generally consistent:</i> Implemented contracts with private utility providers to install energy efficient projects aimed at gaining operational efficiencies. The Service's cost savings are deferred to finance the project's initial investment.
Track and monitor fuel data	<i>Inconsistent with leading practices:</i> Incomplete data for most of its transportation and facility fuel consumption.
Reduce reliance on petroleum-based fuels as required by federal law	<i>Limited progress:</i> Although the Service has over 40,000 alternative fuel capable vehicles, it continues to be unable to reduce its reliance on petroleum-based fuels due to higher costs and limited availability of alternative fuels.

Source: GAO.

Taking actions to address data inconsistencies will be important, even as the Service develops a new energy strategy. These inconsistencies will limit the Service's ability to understand consumption changes and impacts and where to target potential cost-saving opportunities. Furthermore, additional progress is needed in reducing reliance on petroleum-based fuels because of the more stringent federal fuel consumption requirements that were recently passed.

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Abbreviations

AFV	alternative fuel vehicle
BPA	Basic Pricing Agreement
CNG	compressed natural gas
COLA	cost-of-living adjustment
DESC	Defense Energy Support Center
DOD	Department of Defense
DOE	Department of Energy
E85	ethanol 85
EIA	Energy Information Administration
EMA	Equipment Maintenance Allowance
EPAct 1992	Energy Policy Act of 1992
EPAct 2005	Energy Policy Act of 2005
GSA	General Services Administration
OIG	Office of Inspector General
Service	U.S. Postal Service
SES	Shared Energy Savings
TAM	Transportation Asset Management

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United States Government Accountability Office
Washington, DC 20548

February 16, 2007

The Honorable Tom Davis
Ranking Member
Committee on Oversight and Government Reform
House of Representatives

The Honorable John M. McHugh
House of Representatives

The U.S. Postal Service (the Service) delivered over 213 billion pieces of mail to over 146 million delivery points in 2006.¹ Almost \$72 billion was spent in providing these and other postal services required as part of meeting its universal service mandate. The Service is one of the major users of fuel in the federal government, spending over \$2.3 billion on transportation and facility-related fuel in 2006.² Its vehicle fleet of over 216,000 vehicles is the largest civilian fleet and consumed over 123 million gallons of gasoline and diesel fuel. The Service also incurs fuel expenses as part of its mail delivery and transportation contracts with highway trucking companies and air carriers.³ Another area where the Service incurs fuel expenses is in heating and operating the over 34,000 facilities it occupies. The Service relies primarily on electricity, natural gas, and heating oil for these operations. The Service is also subject to certain federal energy conservation requirements as part of the Energy Policy Acts of 1992 and 2005. The Energy Policy Act of 1992 (EPAct 1992) required federal agencies to increase their purchase of alternative fuel vehicles (AFV), and the Energy Policy Act of 2005 (EPAct 2005) details requirements for federal fleets to use alternative fuels in these AFVs.⁴ EPAct 2005 also requires agencies, to the maximum extent practicable, to install meter systems at federal buildings to track energy consumption.

¹Year references are for the fiscal year unless otherwise noted.

²For the purposes of this review, we are categorizing electricity, natural gas, heating oil, propane, steam, coal, and wood as facility fuels.

³Entities who contract with the Service for the over-the-highway transportation and/or delivery of mail are referred to as highway contractors.

⁴Energy Policy Act of 1992: Pub. L. 102-486 and Energy Policy Act of 2005: Pub. L. 109-58.

Prices for fuels such as gasoline and diesel spiked in late 2005 due to Hurricanes Katrina and Rita, and gradually increased until September 2006 when prices began to fall. These fuel price fluctuations have greatly affected fuel costs for public and private organizations. Unlike its private-industry counterparts, however, the Service is unable to make offsetting surcharges for rising fuel prices as part of its postal rates and fees. The Service continues to identify fuel price fluctuations as one of its major challenges. The Postmaster General stated that gas prices were a primary reason for the proposed 2007 omnibus rate adjustment. Furthermore, the Service has recently stated that a 1-percent increase in fuel and natural gas costs would result in an, on average, \$48 million increase in expenses. Although the Service has taken actions to help address this challenge, it continues to state that rising fuel costs are a serious concern and that fuel cost increases are driving transportation cost increases, which cumulatively grew by about \$745 million over the last 2 years.

In recent years, we have reported and testified on the overall significant financial and operational challenges facing the Service. In 2001 we placed the Service's transformation and long-term outlook on our high-risk list, due in part to difficulties it had in controlling costs.⁵ The Service has made progress since that time by improving productivity, achieving record net incomes, and downsizing its workforce. Additional progress was also made when Congress enacted comprehensive postal reform legislation in December 2006, which provides a framework for modernizing the Service's rate-setting processes and addresses the Service's long-term financial obligations.⁶ Thus, in January 2007 we removed the Service's transformation and long-term outlook from our high-risk list.⁷ Major challenges continue to exist, however, that will require close monitoring in the future. These challenges include generating sufficient revenues as First-Class Mail volume declines and the changing mail mix provides less revenue contribution; controlling costs as compensation and benefit costs rise; and providing reliable data to assess performance.

⁵The high-risk list identifies federal programs or operations that are highly vulnerable to waste, fraud, abuse, and mismanagement or that require urgent attention to ensure that the government functions in the most economical, efficient, and effective manner possible. GAO, *U.S. Postal Service: Transformation Challenges Present Significant Risks*, [GAO-01-598T](#) (Washington, D.C.: Apr. 4, 2001) and GAO, *U.S. Postal Service: Financial Outlook and Transformation Challenges*, [GAO-01-733T](#) (Washington, D.C.: May 15, 2001).

⁶The Postal Accountability and Enhancement Act, P.L. 109-435.

⁷GAO, *High Risk Series: An Update*, [GAO-07-310](#) (Washington, D.C.: Jan. 2007).

Based on the challenges facing the Service, you asked us to review (1) how the Service's fuel costs changed recently and the impact of these cost changes on the Service's financial and operating conditions and (2) how the Service's actions to control fuel costs and mitigate risk compare to leading practices and federal requirements.

To describe changes in the Service's fuel costs and the impact of these changes, we collected data on the Service's transportation and facility-related fuel costs and cost-saving initiatives, as well as fuel price information from the Department of Energy's (DOE) Energy Information Administration (EIA). The Service was only able to provide cost data for most fuel categories for 2004, 2005, and 2006. We conducted reliability tests on this data and found it to be reliable for the purposes of our review. We also reviewed the Service's procedures for documenting, measuring, and reporting cost savings for its purchasing activities as well as the methodology for specific fuel-related initiatives. For the purposes of this engagement, the procedures, methodologies, and cost savings data appeared to be reasonable and contain appropriate levels of review. We also interviewed various Postal Service officials, including staff from the Transportation Asset Management (TAM) group which procures petroleum-based fuels; energy procurement group; vehicle operations and maintenance; and finance to gather information on how the Service has been impacted by rising fuel costs. To assess the effectiveness of the Service's actions to control fuel costs and mitigate risk, we compared these actions against practices advocated by leading organizations that could be applied to the Service's fuel-related activities. We reviewed information from a variety of sources including our past work on fuel use and consumption, as well as from reviews of the purchasing efforts at various federal agencies and private organizations that were recognized as acquisition leaders (IBM, ChevronTexaco, Bausch & Lomb, Delta Air Lines, and Dell). We also reviewed the Energy Policy Acts of 2005 and 1992, particularly the federal requirements and guidance pertaining to alternative fuel vehicles and facility energy management. We also interviewed federal officials whose operations focus on fuel use; an expert on purchasing volatile commodities; as well as various executives and contractors affiliated with the National Star Route Mail Contractors Association who represent roughly 17,000 small business men and women who contract with the Service for the over-the-highway transportation of the mail. Based on this and other information, we identified key practices related to (1) purchasing fuel—aggregating purchases to leverage buying power and size; enhancing organizational structure; utilizing public/private partnerships; and tracking and monitoring fuel information and (2) consuming fuel, including reducing reliance and use of petroleum-based

fuels. We also discussed planned actions with the Service's newly appointed Executive Director for Energy Initiatives. Appendix I contains a detailed discussion of our scope and methodology. We requested comments on a draft of this report from the Service, and its comments, which are reproduced in appendix II, are discussed later in this report. Our work was conducted from April 2006 to February 2007 in accordance with generally accepted government auditing standards.

Results in Brief

While recent fuel cost increases have put pressure on the Service's financial and operational condition, the Service overcame these increases and achieved a positive net income in 2006 from other cost efficiency and containment efforts, as well as increased revenues from the January 2006 rate increase. The Service's transportation and facility fuel costs grew by almost 26 percent last year. Despite some growth in consumption due to increasing delivery requirements, automation, and mail volumes, Postal Service officials stated that escalating fuel prices were the main driver behind the Service's fuel cost increases. For example, in 2006:

- Fuel consumption for the Service's internal fleet, which is one component of its fuel program, decreased by 5 percent over the previous year, while its related fuel costs increased by 19 percent.
- Prices spiked for the Service's main transportation fuels: gasoline, diesel, and jet fuel.

The Service remains highly vulnerable to fuel price fluctuations, due in part to its fuel purchasing process, which involves buying fuel as it is needed, often at retail locations. The Service is challenged by the need to meet its universal service requirements—which include the provision of prompt, reliable mail delivery to a nationwide network that grows by nearly 2 million deliveries each year—and its inability to use fuel surcharges. Fuel cost growth has been responsible for the majority of the Service's recent cost increases in transportation and heating and operating its facilities. Rising fuel prices have also pressured compensation and benefit expenses because union contracts include cost-of-living adjustments (COLA) based on an index that is partially tied to changes in fuel prices.⁸ In 2006, although the Service reported alleviating some fuel

⁸The COLAs used as part of the Service's union contracts are based on changes in the Consumer Price Index that contains a fuel component.

cost pressures through fuel-related initiatives that saved and/or avoided \$71 million in fuel costs, these were not enough to offset fuel-related cost increases that exceeded budgeted amounts. The Service had to make budget adjustments and use reserve funding to cover these cost increases. These cost pressures mirrored those for the Service's overall operating condition. Although the Service was able to achieve cost savings of nearly \$185 million in non-fuel related operational efficiencies, its total operating expenses cumulatively grew by nearly \$3.4 billion from 2005 and exceeded budgeted targets. Rising transportation costs accounted for roughly 18 percent of the operating expense increase—largely due to rising fuel costs—while compensation and benefit growth accounted for nearly 70 percent of this increase. Growing revenues from the 2006 rate increase were able to offset this cost growth, however, and allow the Service to achieve net income from operations of \$900 million.

The Service has taken actions to improve fuel cost and risk management, and while some of these actions have been generally consistent with leading practices, we also identified areas where more actions could be taken to (1) identify further cost-savings opportunities through improved tracking and monitoring and (2) meet updated federal requirements regarding reduced consumption of petroleum-based fuels. The Service's actions generally appear consistent with leading practices in the following areas:

- *Aggregating purchases to leverage buying power and size:* The Service has leveraged its purchasing volume in certain areas to secure discounts, lower prices, and improve service. Specific efforts include its Voyager card purchasing program, bulk contracting program, and consolidating fuel purchases through the Department of Defense (DOD).
- *Enhancing organizational structure:* The Service established commodity (fuel) specific experts and an Executive Director for Energy Initiatives, whose responsibilities include creating and implementing a plan that will outline the Service's future fuel strategy. This plan is expected to be completed in mid-2007.
- *Using public/private partnerships:* The Service has implemented multiple Shared Energy Savings (SES) contracts whereby private entities provide initial funding for energy efficient projects at Postal-owned facilities and the Service reimburses these costs using the energy savings derived from the project. Although these contracts defer cost savings for the Service, the Service reports that these projects have resulted in increased energy and fuel efficiency.

The plan being developed by the Executive Director for Energy Initiatives may provide an opportunity to extend some of these efforts into other types of fuel or with other stakeholders. Issues remain, however, related to tracking and monitoring fuel consumption data and reducing reliance on petroleum-based fuels that may hinder the Service's ability to achieve cost savings and/or meet federal requirements (see table 1).

Table 1: Issues Remain in the Areas of Tracking and Monitoring and Reducing Reliance and Use of Petroleum-Based Fuels

Leading practices/legal requirements	Issues
Tracking and monitoring fuel cost and consumption data	<i>Inconsistent with leading practices:</i> The Service has incomplete information for most of its transportation and facility fuel consumption. For example, the Service does not know how much fuel is being consumed in the majority of its facilities, for fuel used to service nearly 55,000 rural routes, or through most of its air transportation contracts. The Service currently has metering systems at only a few of its over 34,000 occupied facilities.
Reducing reliance and use of petroleum-based fuels as required by federal law	<i>Limited progress:</i> Although the Service's new vehicle acquisitions have complied with EPAct 1992, it has been unable to reduce reliance on petroleum-based fuels as the majority of its vehicles continue to operate on petroleum-based fuels.

Source: GAO analysis of Postal Service information.

Although the Service tracks fuel consumption through its Voyager card and holiday air fuel programs (which account for about 35 percent of its annual transportation-related fuel expenses), it has incomplete access to fuel consumption information and there are limited mechanisms or systems in place to help it monitor fuel usage.⁹ The lack of fuel consumption information limits the Service's understanding of the extent to which consumption is changing, how consumption has affected overall fuel costs, and potential cost-saving opportunities. The Service stated its inability to reduce reliance on petroleum-based fuels and operate its vehicles on alternative fuels is largely due to financial and operational limitations associated with using alternative fuels, such as these fuels being generally more expensive, less efficient, and less accessible compared to traditional petroleum-based fuels. These limitations have made it difficult for the Service to make progress in this area and may make it challenging for the Service to comply with the more stringent 2005 EPAct consumption requirements. A Postal engineering director stated that the Service has discussed these limitations with the DOE, automobile, and fuel industry officials, but progress has been difficult to achieve. The

⁹During the peak holiday season, the Service contracts separately for fuel needed for its air transportation network.

Executive Director for Energy Initiatives stated that the strategic plan would focus on improving fuel consumption data tracking and monitoring, as well as identify strategies to begin addressing the Service's challenges related to EPOA 2005 and the financial and operational limitations associated with the Service's use of alternative fuels.

We recommend that the Service take actions to improve its tracking and monitoring of fuel consumption data. Taking actions to address the lack of consumption data will be important, even as the Service is developing a new energy strategy. We provided a draft of this report to the Service for its review and comment. The Service agreed with our findings and recommendation and stated that it will take steps to improve its information systems that capture consumption data.

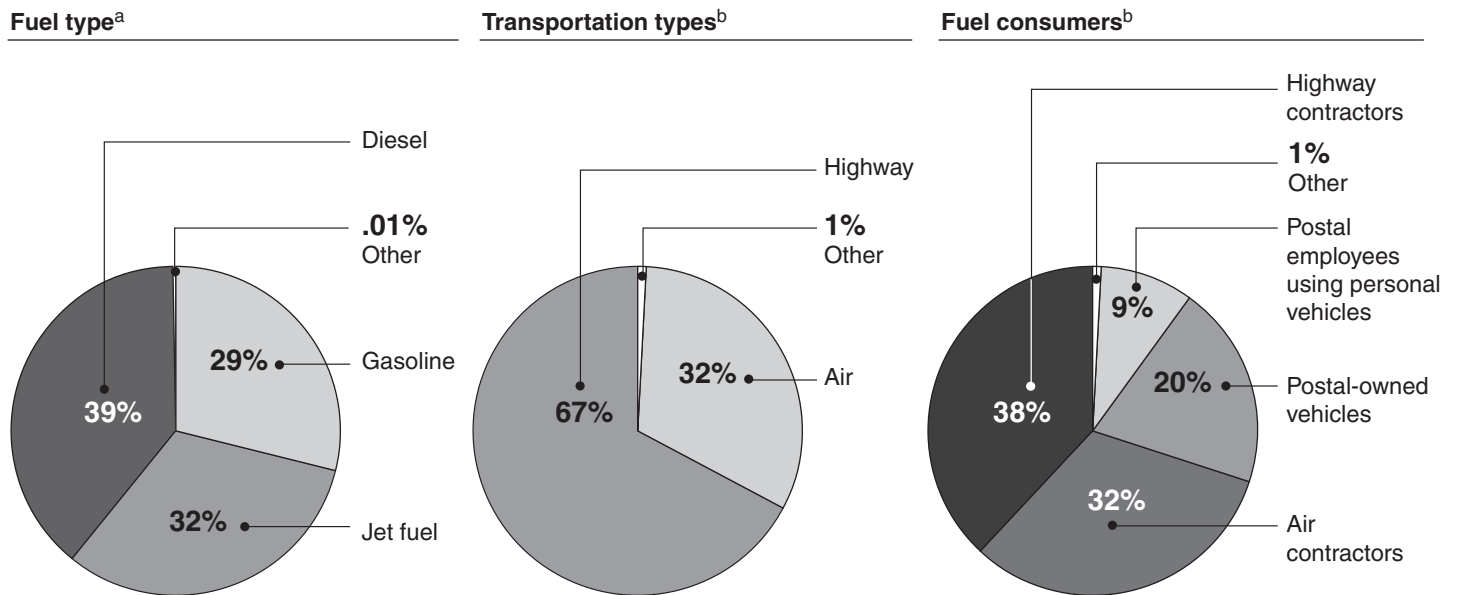
Background

The Postal Service is an independent establishment of the executive branch mandated by the Postal Reorganization Act of 1970 to provide postal services to the nation. The Service's customers are provided, regardless of where they live, with postal services that include mail delivery at no charge and access to postal retail services. The act also required the Service to be self-supporting from postal revenues and attempted to eliminate legislative, budgetary, and financial policies that were inconsistent with efficient modern management and business practices. Providing the postal services required by the Postal Reorganization Act requires a significant transportation and facility network. To support this network, the Service spent approximately \$2.3 billion on fuel in 2006.

Components of the Service's Transportation Fuel Expense

The majority of the Service's fuel costs—over \$1.7 billion—was used for transportation-related fuel. Figure 1 summarizes key operating statistics for the Service's transportation network.

Figure 1: Summary of Postal Service Transportation Fuel Expense in 2006



Source: The Postal Service.

^aOther includes alternative fuels such as biodiesel, compressed natural gas (CNG), ethanol, electricity, and liquefied petroleum gas.

^bOther includes rail and water transportation.

As shown in figure 1, the Service relies heavily on highway and air transportation; diesel, gasoline, and jet fuel, all of which are petroleum-based fuels; and contractors to provide transportation-related services.

Highway Transportation

The Service uses its own vehicle fleet as well as other personal and contractor-owned vehicles to carry out highway mail delivery and transportation services. Information on these methods is provided below.

The Postal-Owned Vehicle Fleet

Key operating statistics for the Service's owned fleet are provided in figure 2:

Figure 2: Key Operating Statistics of the Postal-Owned Vehicle Fleet



- Consists of over 216,000 vehicles, mostly trucks and vans, accounting for a third of the entire federal fleet
- Travels over 1.2 billion miles each year
- Requires significant amount of fuel—over 123 million gallons—which is 35 percent of federal fleet fuel consumption
- Relies primarily on gasoline and diesel, which account for 87 percent and 11 percent of the Postal-owned fleet's fuel consumption, respectively
- Uses small amounts of alternative fuels such as biodiesel, compressed natural gas, ethanol, liquefied petroleum gas, and electricity

Source: GAO analysis of Postal Service and General Services Administration (GSA) data.

Postal-owned vehicles are typically fueled in one of three ways: (1) at a retail fuel station using a Postal Service-issued purchasing card, (2) at a Postal facility using an on-site bulk-fuel tank, and (3) at a Postal facility using a supplier's fuel truck.

1. **Retail Fuel for the Postal-Owned Fleet:** The majority of Postal-owned mail delivery vehicles are fueled primarily at retail fueling stations nationwide. Purchases are made using a Postal-issued purchasing card—the Voyager card. Under this program, which is administered through GSA, a purchase card is assigned to a designated Postal Service vehicle and can be used at over 200,000 retail locations throughout the United States. The benefits to using this card, which will be discussed later, include qualifying for rebates and volume discounts.

Figure 3: Summary Information on Retail Fuel for the Postal-Owned Fleet



Source: The Postal Service.

- In 2006, the Service spent approximately 71 percent (\$247 million) of its transportation fuel spending for the Postal-owned fleet on retail fuel purchases.
- Fuel for fleet vehicles without access to bulk fuel storage capabilities is purchased from retail locations using a Voyager purchasing card. These purchases also qualify for discounts and rebates through the Voyager program.

2. Bulk Fuel for the Postal-Owned Fleet: Postal facilities with fuel storage tanks can provide on-site fuel for Postal-owned vehicles. Fuel for these tanks is typically purchased through agreements with the Department of Defense's Energy Support Center (DESC). Under these agreements, DESC aggregates the Service's fuel requirements with other federal agencies and then solicits offers from private fuel suppliers. After a contract is reached between the Service (via DESC) and the private fuel supplier, the fuel supplier is responsible for delivering fuel to the Postal fuel tanks.

The Service also utilizes a limited amount of specialized bulk fuel contracts and agreements. In typically smaller, more remote locations where DESC fuel is not available and a fueling tank is located on-site at a Postal facility, the Service enters into Basic Pricing Agreements (BPA). The Service enters into a BPA with a fuel supplier to provide fuel for the on-site Postal tank. The Service spent nearly \$800,000 in BPAs in 2006. Postal contracts are another specialized fueling method, which are used primarily during peak seasons when demand for postal services increases beyond normal operating capacities. The Service spent nearly \$1.6 million on these contracts in 2006.

Figure 4: Summary Information on Bulk Fuel for the Postal-Owned Fleet



Source: The Postal Service.

- In 2006, the Service spent approximately 20 percent (nearly \$68 million) of its transportation fuel spending for the Postal-owned fleet on bulk fuel purchases.
- The Service purchases the vast majority of its bulk fuel through contracts negotiated by DESC. DESC aggregates federal government purchases, using economies of scale to achieve cost savings.

3. Mobile Refueling for the Service's Fleet: Mobile refueling is a method of fuel procurement used to refuel the Service's internal fleet vehicles during non-delivery hours and is used primarily in the Southeastern United States. Mobile refueling occurs on-site at Postal Service facilities, where its delivery vehicles are filled from mobile bulk tanks by contractors. A Voyager fuel card is used for these transactions. This is the most expensive refueling option primarily because of the additional service requirements.

Figure 5: Summary Information on Mobile Refueling for the Postal-Owned Fleet



Source: The Postal Service.

- In 2006, the Service spent approximately 9 percent (\$32 million) of its transportation fuel spending for the Postal-owned fleet on mobile refueling.
- According to the Service, mobile refueling is used as a contingency service during natural disasters (especially hurricanes in the Southeastern U.S.).
- Although it is the most expensive refueling option, the Service reports that it is able to reduce some labor costs since the vehicles are refueled by a contractor during non-delivery hours.

Table 2 summarizes fuel expenses for the Postal-owned fleet.

Table 2: Retail Fuel is the Largest Transportation Fuel Expense for Postal-Owned Vehicles

(Dollars in millions)

Method	Description	Amount spent in 2006
Retail fuel	Fleet vehicles without access to bulk fuel storage capabilities use fuel purchased from retail locations using a Voyager purchasing card.	\$247.4
Bulk fuel	The Service purchases some of its fuel in bulk through the Defense Energy Support Center (DESC). DESC aggregates federal government purchases, using economies of scale to achieve cost savings. The Service also uses Basic Pricing Agreements in areas where DESC fuel is not available and Postal contracts for short-term fuel needs.	67.8
Mobile refueling	A fuel provider is contracted to bring fuel to a Postal location and fill all the vehicles during non-work hours.	32.2
Total		\$347.4

Source: GAO analysis of the Service's data.

Postal Employees Using Personal Vehicles

The Service stated that the majority of its nearly 126,600 rural mail carriers use their own personal vehicles to carry out their postal responsibilities. Because these carriers do not operate Postal-owned vehicles, they are not eligible to use the Voyager fuel card for refueling (the Voyager card system is used for the over 20,000 Postal-owned vehicles operated by rural mail carriers). The rural mail carriers not in the Voyager program purchase fuel for their vehicles at retail fueling locations and then are reimbursed as part of the contractually agreed upon Equipment Maintenance Allowance (EMA). In addition to fuel, the EMA also includes certain vehicle maintenance and repair costs. The most recent EMA was set at \$0.52 per mile for routes over 40 miles long (routes under 40 miles are paid a higher EMA per mile). In 2006, the Service spent nearly \$163 million in fuel on these rural routes.

Contracted Vehicle Fleet

The Service also utilizes contracted vehicle fleet services to carry out some of its surface transportation needs. These contractors range from major trucking companies that provide mail transportation between the Service's larger facilities to smaller box contractors who provide home mail delivery in rural areas. As shown in table 3, the Service spent \$648 million through (1) retail fuel, (2) quarterly adjustments for fuel purchases for its contracted vehicle fleet, and (3) bulk fuel in 2006.

Table 3: Summary of Fuel Expenses for the Contracted Vehicle Fleet

(Dollars in millions)

Method	Description of users	Amount spent in 2006
Retail fuel	Contractors whose personal vehicles are dedicated to Postal transportation but do not have access to bulk fuel storage capabilities.	\$326.8
Quarterly adjustments and manual	Contractors who use their own personal vehicles, but do not qualify for the retail fuel/Voyager program.	207.9
Bulk fuel	Contractors that maintain fuel storage tanks and, through agreements with the Postal Service, use these tanks to fulfill contractual obligations.	113.3
Total		\$648.0

Source: GAO analysis of Postal Service data.

The following is additional information on each of the contracted vehicle fleet categories:

- **Retail Fuel for the Contracted Vehicle Fleet:** Retail fuel purchased for the contracted vehicle fleet is bought in the same manner as retail fuel for the Postal-owned fleet using the Voyager fuel purchasing card. Again, like the Postal-owned fleet, Voyager fuel cards are assigned to individual vehicles and can be used at over 200,000 retail locations throughout the United States. The Service has aimed to increase the number of highway contractors using the Voyager fuel card to purchase retail fuel, as the Service can secure rebates and discounts with a great number of Voyager card transactions.
- **Quarterly Adjustments for the Contracted Vehicle Fleet:** The Service utilizes quarterly adjustments for highway contractors who do not qualify for the Voyager card program. Contractors may not qualify for the program due to reasons such as an inability to reasonably estimate the annual gallons used during a contract or that personal vehicles are used instead of Postal-owned vehicles. According to Postal Service officials, since these personal vehicles are not dedicated to Postal transportation, there is no reliable way to separate out the gallons used for Postal-related work versus the gallons used for personal travel. Under this adjustment system, gallon projections are negotiated between the Service and the individual contractor. The contractor is responsible for the initial fuel payment that he/she makes at the fuel pump. The Service then reimburses the contractor for these fuel costs based on an indexing system that adjusts for changes in fuel prices on a quarterly basis using a Department of Energy fuel index. Compensation rates are set at the beginning of the quarter and readjusted every 3 months based on the average price of fuel at the beginning and the end of the quarter. Highway contractors have

raised concerns about the 3-month lag between adjustments and have stated that they would prefer a monthly adjustment. The Service is considering converting to a monthly DOE fuel indexing system to more accurately reflect actual fuel prices.

- **Bulk Fuel for the Contracted Vehicle Fleet:** Under the Service’s contracted bulk fuel purchasing program, the Service acts as a contract administrator between fuel suppliers and highway contractors who qualify (e.g., they are required to provide and maintain their own bulk fuel storage tanks). The Service combines the volume of its contractor bulk purchases and solicits and awards agreements with fuel suppliers. Fuel suppliers directly bill the highway contractors for the fuel, and the Service subsequently reimburses the highway contractors for the fuel used in fulfilling their obligations with the Service. In 2006 there were 83 locations nationwide where contractor bulk fuel tanks are located, with Texas, Michigan, and California having the most sites—8, 6, and 6 respectively.

Contracted Air Transportation

The Service relies solely on contractors for its air transportation services, and as part of those contracts, estimated that it spent over \$551 million on fuel in 2006. The majority of this annual cost is for jet fuel, which is included in the contracts and adjusted monthly according to changes in the Producer Price Index.

Table 4: Summary of Fuel Expenses for Contracted Air Transportation

(Dollars in millions)

Method	Amount spent in 2006
FedEx	\$434.7
Commercial airlines ^a	71.3
International airlines	33.6
Holiday fuel ^b	11.6
Total	\$551.2

Source: GAO analysis of Postal Service data.

^aThis includes fuel used in the transportation and delivery of mail throughout the continental United States and to and from Hawaii and Alaska.

^bHoliday fuel is jet fuel used during the peak holiday season, which is contracted for separately by the Service.

Rail and Water Transportation

The Service also had limited fuel spending, about \$14 million, on rail and water transportation.

Table 5: Summary of Fuel Expenses for Other Transportation Methods

(Dollars in millions)

Method	Amount spent in 2006
Rail	\$12.7
Domestic water	1.1
International water	0.2
Total	\$14.0

Source: GAO analysis of Postal Service data.

As illustrated in the examples above, the Service uses a variety of fuel procurement methods for transportation fuels. According to Service officials, they select procurement methods depending on various factors such as price, availability, supply, and location. A Service official stated that the various fuel procurement methods in order of cost-effectiveness are:

1. Bulk fuel purchased through DESC is the least expensive method because of DESC's ability to aggregate purchases, and the fuel is purchased without any taxes included.
2. Bulk fuel purchased for the highway contract routes because it is bought wholesale.
3. Voyager retail purchases because of the associated volume discounts, rebates, and state excise tax exemptions.
4. Fuel purchased as part of the rural carrier Equipment Maintenance Allowance because it is tied to a contractually-agreed upon a mileage reimbursement.
5. Mobile refueling, which tends to be \$0.30 to \$0.40 more expensive per gallon than fuel bought at a retail station due to additional costs associated with having the fuel delivered to Postal facilities.

Components of the Service's Facility Fuel Expense

The remaining portion of the Service's \$2.3 billion fuel costs—about \$610 million—was used to heat and operate the over 34,000 facilities it occupies nationwide. While the majority of this expense was for electricity, other fuels such as natural gas, heating oil, and propane also were used (see table 6).¹⁰

Table 6: Summary of Fuel Expenses for the Postal-Owned and Leased Facilities

(Dollars in millions)

Method	Amount spent in 2006
Electricity	\$512.0
Natural gas	81.0
Heating oil	10.0
Propane and steam	7.0
Total	\$610.0

Source: GAO analysis of Postal Service data.

Postal Service officials stated that most of its 34,000 facilities it occupies are post offices under 2,500 square feet, and that the majority of its energy use is in its larger processing plants. Additional information on the Service's efforts to control facility-related fuel cost is provided in the following section.

Rising Fuel Costs Have Pressured the Service's Financial Condition, but Have Not Prevented Positive Financial Results

While recent fuel cost increases have pressured the Service's financial condition, the Service was able to overcome these increases and achieve net income from operations. Rising fuel prices—particularly for gasoline, diesel, jet fuel, and natural gas—have been the primary driver of the Service's recent transportation and facility fuel costs increases. The Service remains highly vulnerable to fuel price fluctuations, due in part to its fuel purchasing process, which involves buying fuel as it is needed, typically at retail locations. The Service is challenged by the need to meet its universal service requirements and its inability to use fuel surcharges. Rising transportation costs accounted for roughly 18 percent of the operating expense increase in 2006—largely due to rising fuel costs—while compensation and benefit growth accounted for 68 percent of this

¹⁰Heating oil for facilities is a petroleum-based fuel similar to standard diesel used in surface transportation.

increase. Growth in compensation and benefit costs was also tied to fuel costs, which are included in the calculation of cost-of-living adjustments contained in union contracts. The Service was able to absorb these cost pressures through cost containment efforts inside and outside of the fuel program, as well as from increased revenues from the January 2006 rate increase, allowing it to achieve a positive net income from operations.

The Service’s Fuel Costs Have Risen

Over the last 2 years, the Service has experienced a significant escalation in its fuel costs (see table 7).¹¹

Table 7: Recent Growth in Fuel Costs Dominated by Transportation Fuel

(Dollars in millions)

	2004	2005	Percentage growth (04-05)	2006	Percentage growth (05-06)
Transportation fuel	\$1,004.8	\$1,322.4	31.6%	\$1,723.3	30.3%
Facility fuel	519.1	537.4	3.5%	610.0	13.5%
Total	\$1,523.9	\$1,859.8	22.0%	\$2,333.3	25.5%

Source: GAO analysis of Postal Service data.

Transportation Fuel Costs Rose Due to Increasing Prices, but Related Cost Savings Helped Offset These Increases

Fuel costs for each of the Service’s transportation areas have continued to increase over the last 2 years (see table 8). Highway and air transportation costs continue to be responsible for the majority of this increase.

¹¹Service officials stated that complete data on transportation fuel costs prior to 2004 is not available.

Table 8: Transportation Fuel Breakdown between 2004 and 2006

(Dollars in millions)

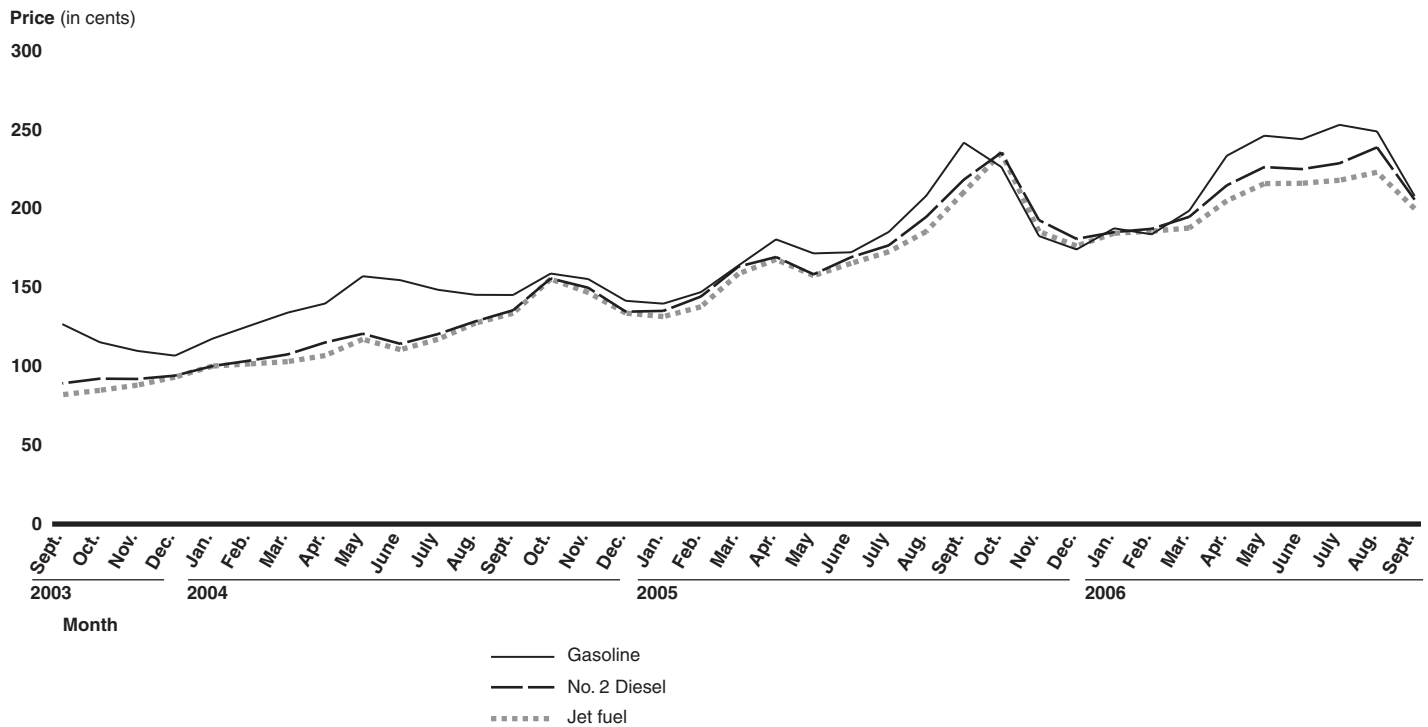
Fuel Expense	2004	2005	Percentage change (04-05)	2006	Percentage change (05-06)
Highway Transportation Fuel	\$704.4	\$909.4	29%	\$1,158.2	27%
Domestic Air Transportation Fuel	257.2	363.9	41%	517.6	42%
International Air Fuel	32.2	36.1	12%	33.6	-7%
Rail Transportation Fuel	2.4	11.9	396%	12.7	6%
Water Transportation Fuel	0.9	1.1	22%	1.3	19%
Total	\$996.9	\$1,322.4	33%	1,723.3	30%

Source: GAO analysis of Postal Service data.

Note: Totals may not add due to rounding.

While some of the fuel cost increase can be attributed to volume and delivery point increases, Postal officials stated that rising fuel prices were the primary driver behind this cost increase. Postal Service transportation relies heavily on diesel, gasoline, and jet fuel, and over the course of the last 3 years, prices for these fuel types have generally increased (see fig. 6).

Figure 6: Recent Price History: Retail Gasoline, Diesel, and Jet Fuel Prices

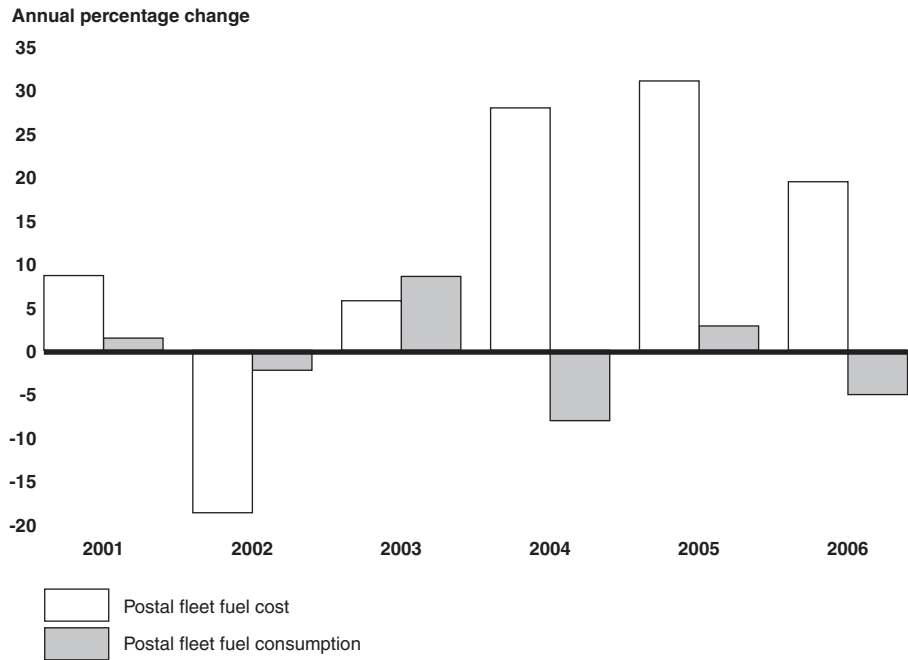


Source: Department of Energy, Energy Information Administration (EIA).

Note: Prices noted here are refiner petroleum product prices sold to end users. 'Gasoline' above refers to the EIA category 'U.S. Total Gasoline Retail Sales by All Refiner and Gas Plant Operators (cents per gallon).' 'No. 2 Diesel' above refers to the EIA category 'U.S. No. 2 Diesel Sales by All Refiner and Gas Plant Operators (cents per gallon).' 'Jet Fuel' above refers to the EIA category 'U.S. Kerosene-Type Jet Fuel Retail Sales by All Refiner and Gas Plant Operators (cents per gallon).'

Analysis of the Postal-owned fleet's fuel cost and consumption history contained in GSA's annual Federal Fleet reports confirms that price increases, rather than consumption, drove fuel cost increases. As shown in figure 7, fuel costs for the Postal-owned vehicle fleet increased 19 percent from 2005 to 2006, while consumption decreased by 5 percent.

Figure 7: Postal Fleet Fuel Costs Have Grown Faster than Fuel Consumption



Source: GAO analysis of GSA's Federal Fleet Report.

The Service has cost reduction, savings, and avoidance programs in place that have helped it offset these rising fuel costs.¹² Some of these programs, such as the Voyager program, have been in place for a few years, but others have developed more recently. Descriptions of some of the Service's cost-savings initiatives are provided below:

- *Tax exemption and recoupment:* Fuel purchased by Service employees for Postal-owned vehicles at retail fueling stations is exempt from state taxes where allowed by law. Largely through the Voyager card program, which began in 2000, the Service has been able to more effectively apply its exemption from paying the taxes at the pump and recoup tax payments where taxes either were inadvertently paid or the tax exemption was not allowable at the pump according to the applicable state law.

¹²The Service's description of cost reduction, cost savings, and cost avoidance are provided in appendix III. For the purposes of this report, we have categorized all of these programs as cost-savings initiatives.

-
- *Highway contractor bulk fuel:* Savings are derived in one of two ways: (1) the savings achieved when getting a contractor into the bulk fuel program—having them purchase fuel in bulk is less expensive for the Service compared to purchasing it at retail; and (2) the costs that are avoided when the Service finds that a highway contractor uses fewer gallons than what is listed in its contractual agreement—the Service does not pay for the gallons that are not used, and thus avoids that fuel cost.¹³
 - *Highway contractor retail:* Savings are achieved in one of two ways, the first of which is through a contract adjustment that occurs when the Service brings highway contractors into the Voyager card program. Under the previous system, these contractors claimed gallons as part of their fuel expense line. The Service claims the gallons that they are no longer paying for as part of this line item as savings. The second cost containment strategy is similar to that for the highway contractor bulk fuel program, in that the Service claims cost avoidance when highway contractors using the Voyager card use fewer gallons than what was originally estimated in their contractual agreement.
 - *Voyager rebates and discounts:* The Service is able to achieve cost reductions in two ways for its Postal-owned vehicle fleet fuel purchases made using the Voyager card. First, the Service is able to qualify for rebates from the GSA portfolio of government-sponsored credit cards through the use of the Voyager card. These rebates are based on the volume of fuel purchases and the promptness of the Service's repayment. Second, the Service is able to secure discounts with participating retailers due to the large amounts of fuel that are needed for use by the Postal fleet.
 - *Holiday fuel savings:* During the peak holiday season, the Service contracts separately for the fuel needed for its dedicated air network. In doing so, the Service consolidates fuel volumes to gain a lower price. The savings amount reflects the price difference.

¹³When establishing a highway contract, the Service and the contractor estimate the maximum number of gallons that can be used to serve the route.

The table below shows that the Service reported transportation-fuel related savings of over \$53 million in 2006, with the majority of these savings achieved through the tax exemption and recoupment efforts.¹⁴

Table 9: Postal Service Transportation Fuel-Related Cost Savings between 2000 and 2006

(Dollars in millions)

Fiscal year	Tax exemptions/recoupment	Highway contractor bulk fuel savings	Highway contractor retail fuel savings	Voyager rebates & discounts	Holiday fuel savings	Other ^a	Total
2000	\$0.17	n/a	n/a	n/a	n/a	n/a	\$0.17
2001	8.62	n/a	n/a	\$0.29	n/a	n/a	8.92
2002	11.39	n/a	n/a	0.61	n/a	n/a	12.00
2003	13.72	\$1.11	n/a	1.06	\$4.10	n/a	19.99
2004	20.62	3.21	n/a	1.60	0.63	n/a	26.05
2005	22.84	12.88	\$9.17	3.51	0.55	n/a	48.95
2006	\$27.77	\$9.92	\$8.48	\$4.97	\$1.09	\$1.04	\$53.27

Source: GAO analysis of Postal Service data.

Notes: n/a represents not applicable and totals may not add due to rounding.

^aOther includes savings derived from Department of Energy Crude Oil and Mobile Refueling Reverse Auction efforts.

Facility Fuel Costs Have Risen, but Cost-Savings Targets Have Been Met

The Service's facility-related fuel costs have also increased recently. Spending on these fuels—which include electricity, natural gas, heating oil, propane, and steam—increased each of the last 2 years (see table 10).

¹⁴The Service's Supply Management organization has policies and procedures in place for calculating and verifying cost-savings figures. After being reviewed by internal Supply Chain Management officials, these figures are submitted to the Controller's office within Finance for a final review for reasonableness and acceptance. We reviewed these policies, as well as the methodologies for specific fuel-related initiatives, and found them to be reasonable for the purposes of this engagement.

Table 10: Facility Fuel Spending Increased Since 2004

(Dollars in millions)

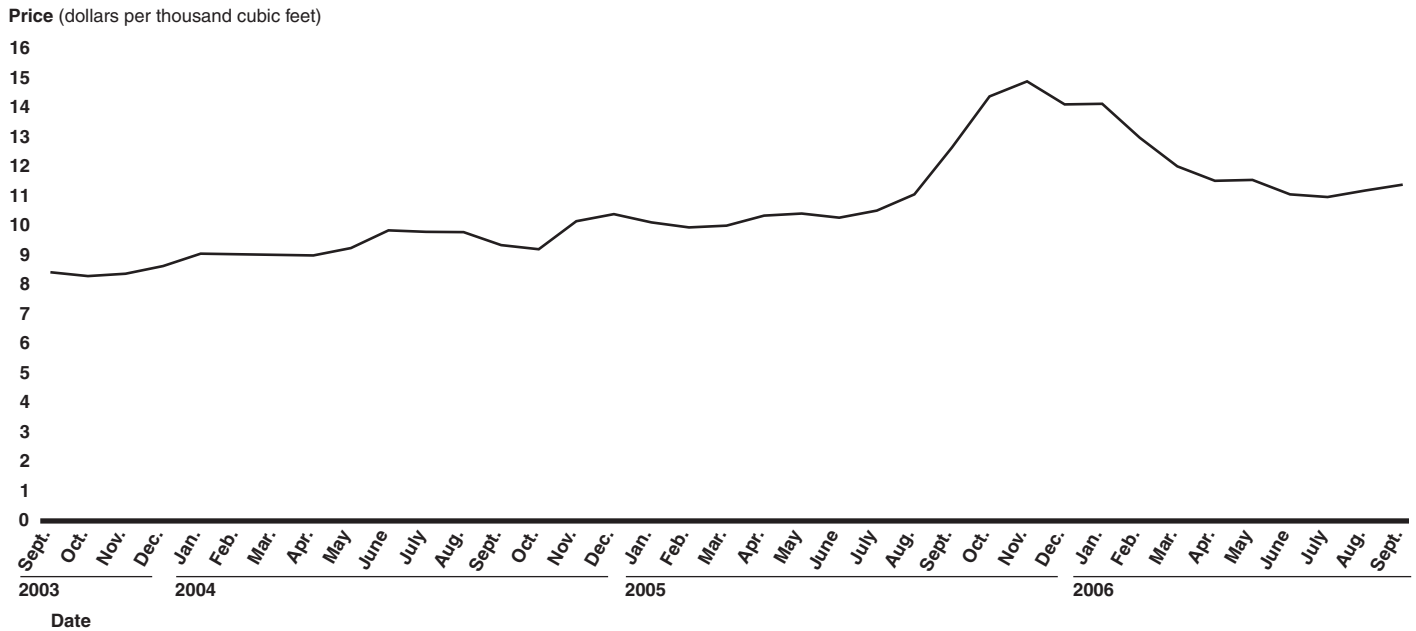
	2004	2005	Percentage change (04-05)	2006	Percentage change (05-06)
Electricity	\$441.0	\$453.0	3%	\$512.0	13%
Natural gas	58.6	65.6	12%	81.0	24%
Heating oil	7.9	9.2	16%	10.0	9%
Other	6.1	6.8	11%	7.0	3%
Total	\$513.6	\$534.6	4%	\$610.0	14%

Source: The Postal Service.

Note: Other includes propane, steam, coal, and wood.

While a Service facility official stated that consumption of utilities and heating fuel may have increased due to operational requirements such as new equipment and safety and security concerns, the official attributed most of the increase due to rising prices. In particular, the expenses for natural gas were responsible for the largest percentage growth. For example, figure 9 shows that the price for natural gas peaked in November 2005.

Figure 8: Recent Price History: Natural Gas Prices



Source: Department of Energy, EIA.

Note: Prices noted here refer to the price of Natural Gas Sold to Commercial Consumers in the United States.

To help offset these rising costs, the Service has reported achieving nearly \$18 million in costs savings in 2006 from various facility fuel-related initiatives.¹⁵ As shown in table 11, most of these cost savings were achieved in one of two ways: (1) SES Contracts—a type of public-private partnerships used to promote energy conservation and achieve cost savings that will be explained in more detail in the subsequent section—or (2) aggregated utility purchases. In select locations (e.g., within a specific local utility service area or within a particular state), the Service has achieved economies of scale and lower rates by aggregating electricity and natural gas purchases. Outside of these two main areas, the Service has achieved savings through other actions such as installing occupancy sensor light switches, which the Service reported saved over \$45,000 a year.

¹⁵The Service’s method for calculating and verifying facility-related cost-savings results is similar to that as described earlier for its transportation initiatives. For descriptions of cost reduction, cost savings, and cost avoidance, please see appendix III.

Table 11: Cost Savings Achieved for All Postal Service Facilities between 2004 and 2006

(Dollars in millions)

Fiscal year	SES contracts	Aggregated utility purchases	Other	Total
2004	\$13.10	\$8.69	\$3.42	\$25.22
2005	12.72	2.95	2.05	17.72
2006	2.42	14.40	0.92	17.73
Total	\$28.24	\$26.04	\$6.38	\$60.67

Source: GAO analysis of Postal Service data.

Note: Other includes savings from Internal Auditing, Tax Recoupment, and other efforts.

Table 12 shows that the Service’s facility-fuel related cost-savings targets have been met and exceeded each of the last 3 years. A Postal Service energy official stated that the targets decreased over that time due to sustained volatility in the electric and natural gas markets as well as declining opportunities within these deregulated markets.

Table 12: Cost-Saving Targets and Totals for Postal Service Facilities between 2004 and 2006

(Dollars in millions)

Fiscal year	Cost-savings target	Cost-savings total	Amount over target
2004	\$16.00	\$25.22	\$9.22
2005	12.10	17.72	5.62
2006	5.50	17.73	12.23
Total	\$33.60	\$60.67	\$27.07

Source: The Postal Service.

The Postal Service Is Vulnerable to Fuel Price Volatility

Recent fluctuations in transportation and facility fuel prices have revealed the Service’s vulnerability to fuel price volatility. The Service remains highly vulnerable to fuel price fluctuations, due in part to its fuel purchasing process. A fuel procurement official at the Service stated that price does not factor into a reduced consumption of fuel and provided the following example—if the Service needs 1 million gallons of fuel to meet its universal service requirements, it will need that amount regardless of whether the fuel price is \$2 a gallon or \$3 a gallon. Furthermore, the Service does not have fuel storage facilities available to purchase large quantities of fuel when the price is lower and hold them in reserve. The

Service is also vulnerable to rising fuel prices through the cost-of-living adjustment calculation used in its union contracts. These COLAs are based on changes in the Consumer Price Index which contain a fuel component. Another key component of its fuel program that increases vulnerability is that other businesses may use fuel surcharges to help offset rising fuel prices, but the Service can not. As such, the Service must absorb cost increases due to growing prices while meeting its universal service requirements.

Despite Rising Fuel-Related Transportation and Facility Costs, the Service Still Achieved Positive Financial Results

While fuel cost increases pressured overall fuel-related transportation and facility costs, the Service was able to still achieve positive financial results in 2006. Fuel expense is a key component for the following transportation and facility cost categories included in its monthly Financial and Operating Statements:

- **Transportation:** The fuel component of the Transportation category includes gasoline, diesel, and other transportation-related fuels used to support the air, rail, and water transportation networks, as well as a significant portion of its highway transportation needs. Fuel expenses accounted for nearly 21 percent of these Transportation expenses in 2006. The non-fuel component includes related contractual payments and terminal dues.
- **Vehicle Maintenance Services:** The fuel component includes some fuel purchased at retail locations. Fuel expenses accounted for about 50 percent of Vehicle Maintenance Services expenses in 2006. The non-fuel component is the expenses associated with maintaining Postal vehicles (e.g., oil changes, repairs, etc.)
- **Utilities and Heating Fuel:** The fuel component is the fuel used to heat and operate Postal facilities (e.g., electricity, natural gas, heating oil, etc.). Fuel expenses accounted for over 90 percent of Utility and Heating Fuel expenses in 2006. The non-fuel component is expenses for sewer services and trash removal.
- **Rural Carrier Equipment Maintenance Allowance (EMA):** The Service reimburses rural carriers outside of the Voyager program for fuel expenses as part of the EMA. Fuel expenses accounted for nearly 26 percent of the EMA in 2006. The vehicle equipment and maintenance expense are the non-fuel components of the EMA.

Table 13 shows that costs have continued to increase for the three major fuel-related line-items, all of which were over budget in 2006.

Table 13: Costs Have Increased and Recently Exceeded Budgeted Amounts in Key Fuel-Related Categories

(Dollars in millions)

Postal Cost Category	2004	2005	2006
Transportation			
Actual cost	\$4,969	\$5,437	\$6,045
Budgeted cost	5,121	5,272	5,773
Variance to budget	152	[165]	[272]
Vehicle Maintenance Services			
Actual cost	\$518	\$586	\$709
Budgeted cost	454	559	672
Variance to budget	[64]	[27]	[38]
Utilities and Heating Fuel			
Actual cost	\$562	\$585	\$671
Budgeted cost	532	590	614
Variance to budget	[30]	6	[57]
Rural Carrier EMA			
Actual cost	\$404	\$449	\$485
Budgeted cost	395	479	480
Variance to budget	[10]	30	[5]

Source: The Postal Service.

Note: Numbers surrounded by brackets indicate an unfavorable variance to budget, and numbers may not add due to rounding.

Rising fuel prices were the significant driver of the recent cost growth in these categories, and why the Service stated that it was unable to offset Transportation cost increases. In setting the budgets for 2006, the Service set aside funding in the event that fuel prices or other unplanned events had an adverse impact on Postal finances. As these officials were monitoring the impact of rising fuel costs throughout the year and seeing that costs for the fuel-related costs components were exceeding budgeted targets, the Service had to utilize these reserve funds and make budget adjustments nationwide.

Similar cost growth also occurred for the Service's overall operating expenses. The Service's operating expenses grew by \$3.4 billion in 2006, which was the third consecutive year of growth. While rising

transportation costs accounted for roughly 18 percent of the operating expense increase in 2006—largely due to rising fuel costs—compensation and benefit growth accounted for 68 percent of this increase (see table 14).

Table 14: Operating Expense Breakdown

(Dollars in billions)

Expense Category	2005 Expense	2006 Expense	Growth	Percentage of growth in total operating expenses
Compensation and benefits	\$53.9	\$56.3	\$2.3	68%
Transportation	5.4	6.0	0.6	18%
Other	8.9	9.4	0.4	13%
Total Operating Expense	\$68.3	\$71.7	\$3.4	

Source: GAO analysis of Postal Service data.

Note: Totals and percentages may not add due to rounding.

Postal officials attributed a portion of the increase in compensation and benefits to Cost-of-Living Adjustments (COLA) tied to increases in fuel costs. This expense growth, however, was (1) somewhat tempered by the Service’s ability to achieve productivity improvements throughout the year and (2) offset by the growth in revenues largely from the January 2006 rate increase. In addition to the \$71 million in costs avoided through the previously mentioned fuel-related initiatives, the Service reported avoiding over nearly \$185 million due to other cost savings and productivity improvement efforts, which included various operational efficiencies as well as automation and equipment enhancements. Operating revenue growth was the primary reason behind the Service’s financial success in 2006. These revenues grew by 4.0 percent (\$2.7 billion) largely due to the January 2006 rate increase. This increase followed operating revenue growth in the previous 2 years, largely due to growing mail volumes.

In each of the last 3 years, the Service was able to report net income from operations. In 2004 and 2005, the Service benefited from a transitory boost provided by 2003 pension reform legislation that changed its pension obligations. As table 15 shows, the Service achieved net incomes of \$3.1 billion and \$1.4 billion during that time. This past year was the first in which the Service was required to make annual escrow payments as part of the 2003 pension legislation. Although the Service’s net income was

\$900 million, the Service reported a \$2.1 billion overall deficiency after the \$3.0 billion escrow payment. The Service borrowed \$2.1 billion, in part to cover the required escrow payment. The Postal Accountability and Enhancement Act enacted in December 2006 repealed the escrow requirement and designated that funds would instead be allocated to prefund retiree health benefits.

Table 15: Postal Service Recent Financial Results

(Dollars in millions)

Accounts	2004	2005	2006
Total operating revenues	\$68,996	\$69,907	\$72,650
Total operating expenses	65,851	68,283	71,684
Income from operations	3,145	1,624	966
Other ^a	(80)	(179)	(66)
Net income (loss)	3,065	1,445	900
Escrow	n/a	n/a	(2,958)
Ending balance	n/a	n/a	(2,058)

Source: Postal Service financial statements.

Note: n/a represents not applicable because no escrow payment was required.

^aOther includes interest and investment income; interest expense and deferred retirement; and, other interest expense.

The Service's Actions to Improve Fuel Costs Are Generally Consistent With Leading Practices and Legal Requirements, but Issues Remain

The Service has taken actions in certain areas, such as implementing its Voyager fuel card program, bulk purchasing, and SES contracts, that have improved its fuel procurement and consumption, as well as its ability to manage fuel cost and risks. Some of these actions appear generally consistent with practices (1) advocated by leading organizations related to aggregating purchases, improving organizational structure, and utilizing public-private partnerships and (2) federal conservation requirements contained in EPOA. We also identified areas where more actions could be taken to identify further cost-saving opportunities and meet updated federal fuel consumption requirements related to reducing reliance on petroleum-based fuels. For example, the Service does not have information on the fuel consumed as part of its air transportation contracts or fuel consumed as part of heating and operating the majority of its over 34,000 occupied facilities. This lack of information is inconsistent with tracking and monitoring practices advocated by leading organizations in that it inhibits the Service's understanding of the extent to which consumption is changing, how consumption has impacted overall

fuel costs, and potential opportunities to reduce costs and/or consumption. Furthermore, financial and operational limitations related to alternative fuel usage may limit the Service's ability to reduce reliance on petroleum-based fuels as required by EAct 2005. Addressing these issues, as well as continuing to look for additional cost-saving and risk mitigation opportunities, will be important to assist the Service in managing its vulnerability to fuel price volatility.

Key Practices Applied by Leading Organizations and Applicable EAct Requirements

Based on information gathered from fuel officials at DOD, GSA, and DOE; discussions with an expert on purchasing price-volatile commodities; and our past work, we identified key practices advocated by leading organizations that can be applied to the Service's fuel-related activities. We also reviewed the federal energy conservation requirements applicable to the Service as part of EAct 1992 and 2005. We grouped these practices into two major areas: (1) procurement and (2) consumption.

Procurement-Related Practices

We have issued a number of reports discussing the actions that leading private-sector organizations have taken to improve their purchasing, and how some of these actions can be effective for federal agencies.¹⁶ We have also issued a framework for assessing the acquisition function at federal agencies.¹⁷ Many of these actions we reported on revolve around implementing a strategic approach to procurements—one that includes the following key practices/principles:

- Aggregating purchases to leverage buying power and size: Organizations should look for opportunities to aggregate purchases which would allow them to leverage buying power and size and may result in better prices, due to volume discounts, more stable prices, and improved service. In a 2003 report, we noted that leading private-sector organizations reported saving hundreds of millions of dollars due to leveraging their spending.

¹⁶GAO, *U.S. Postal Service: Purchasing Changes Seem Promising, but Ombudsman Revisions and Continued Oversight Are Needed*, [GAO-06-190](#) (Washington, D.C.: Dec. 15, 2005); *Best Practices: Using Spend Analysis to Help Agencies Take a More Strategic Approach to Procurement*, [GAO-04-870](#) (Washington, D.C.: Sept. 16, 2004); *Postal Service: Progress in Implementing Supply Chain Management Initiatives*, [GAO-04-540](#) (Washington, D.C.: May 17, 2004); *Best Practices: Improved Knowledge of DOD Service Contracts Could Reveal Significant Savings*, [GAO-03-661](#) (Washington, D.C.: June 9, 2003); and *Best Practices: Taking a Strategic Approach Could Improve DOD's Acquisition of Services*, [GAO-02-230](#) (Washington, D.C.: Jan. 18, 2002).

¹⁷GAO, *Framework for Assessing the Acquisition Function at Federal Agencies*, [GAO-05-218G](#) (Washington, D.C.: Sept. 2005).

Furthermore, vehicle fleet and facility energy managers from the General Services Administration and fuel procurement specialists at DESC stated that aggregating purchases has resulted in better prices and service from fuel and energy suppliers.

- Enhancing organizational structure: We reported that leading companies found it necessary to change their business processes, organizational structure, and employee roles and responsibilities to effectively manage and coordinate their purchases. Leading organizations provide clear and strong leadership through such mechanisms as establishing goals and prioritizing initiatives that will enhance accountability for performance. We have also reported on the importance of establishing commodity-specific managers. Considering the fluctuations of fuel and utility prices, it is important to have officials who are consistently monitoring and tracking the market changes for these goods to make informed purchasing decisions.
- Use public/private partnerships: We have reported that leading organizations have found that more cooperative business relationships with suppliers have improved their ability to respond to changing business conditions and have led to lower costs. Over 20 years ago, federal government agencies were encouraged to utilize an alternative source of funding investments aimed at promoting energy-efficient projects. Under these projects, a private contractor would identify, design, install, and finance energy conservation measures in federal buildings in exchange for a share of the resultant energy cost savings that would be paid back to the contractor over a set period of time. These alternative funding mechanisms take advantage of public/private partnerships to provide incentives for cost savings and reduce energy consumption. These contracts have been advocated by the President and the Department of Energy as an effective energy conservation measure, and EPCA 2005 recently extended the authority for these financing mechanisms through 2016.
- Tracking and monitoring: A key principle applied by leading companies is obtaining improved knowledge on what is being spent by an organization. This knowledge is gained through the implementation of processes and systems to collect, maintain, and analyze data. This data would provide the organization the ability to track and monitor performance over time as well as to identify cost saving opportunities. We have reported on how leading private-sector companies have focused on gaining knowledge about how much is being spent for what goods and services, who are the buyers, and who are the suppliers, thereby identifying opportunities to leverage buying, save money, and improve performance, and how these

principles can apply to federal entities. A key benefit derived from tracking and monitoring is gaining an understanding of an organization's fuel consumption: what types of fuel are being consumed, how much, how these fuels are used (i.e., for transportation or facilities), and when they are needed (i.e., throughout the year or seasonally), etc. EPOact 2005 contained specific provisions aimed at improving the tracking and monitoring of energy usage at federal facilities. Agencies are to begin taking actions to implement electric metering systems throughout their facilities, with the goal of having this technology in all federal buildings by October 1, 2012.

Consumption-Related Federal Requirements and Guidance

The federal government, through legal requirements contained in EPOact 1992 and 2005 and other guidance, continues to promote actions aimed at reducing federal fuel consumption. EPOact 1992 and 2005 established federal energy conservation efforts that target, among other things, the need for federal agencies to take steps to reduce reliance on and use of petroleum-based fuels. Key provisions in EPOact 1992 were aimed at reducing the nation's dependence on foreign oil by promoting alternative fuel vehicles (AFV) in the federal government's various vehicle fleets and fuel diversification. EPOact 1992 required federal agencies, including the Service, to increase their AFV purchases when buying new vehicles and EPOact 2005 details requirements for alternative fuels to be used in these vehicles.

EPOact 2005 also sought to set conservation goals for all federal agencies, including the Postal Service. Provisions within EPOact related to facility energy consumption include:

- Federal agencies are to reduce their annual energy consumption by 2 percent per year from 2006 to 2015, based on the baseline year of 2003, resulting in an overall energy reduction of 20 percent by 2015;
- New federal buildings must be designed to achieve energy consumption levels that exceed industry or international standards by at least 30 percent, provided the standards would be life-cycle cost-effective for the facility.

In addition to these legal requirements, other federal guidance exists to reduce fuel consumption. For example, in January 2007, President Bush issued Executive Order 13423 to strengthen federal agencies' environmental, energy, and transportation management. Major provisions of this order included:

-
- Vehicles: Use certain hybrid vehicles when commercially available at a reasonable cost.
 - Petroleum conservation: Reduce total petroleum consumption in vehicle fleets by 2 percent annually through 2015.
 - Alternative fuel use: Increase alternative fuel consumption by 10 percent annually.
 - Energy efficiency: Improve energy efficiency by 30 percent by 2015.

Although the Service is not subject to the executive order, this federal policy provides guidance on goals and practices that could be replicated to improve transportation and facility energy efficiency. DOE has also provided guidance aimed at improving vehicle fleet fuel efficiency and, in general, reducing petroleum-based fuel consumption. Some examples of these practices include:

- observing posted speed limits;
- removing excess weight from the vehicle;
- avoiding excessive idling;
- keeping tires properly inflated; and
- performing regularly-scheduled preventative maintenance.

We also reported in 2003 that the use of bypass filters in conjunction with traditional oil filters are another option to improve vehicle fleet efficiency by substantially reducing the number of oil changes for certain federal agencies, including the Service.¹⁸

¹⁸GAO, *Environmental Protection: Information on the Purchase, Use, and Disposal of Engine Lubricating Oil*, [GAO-03-340](#) (Washington, D.C.: Jan. 2, 2003).

**Many of the Service's
Actions Are Generally
Consistent with Leading
Practices and Selected
EPA Act Requirements, but
Issues Remain**

We assessed the Service's actions to control fuel costs and mitigate fuel cost risk against these leading practices and EPA Act requirements. The Service's actions generally appear to be consistent with the leading practices for aggregating purchases, organizational change, and utilizing public-private partnerships. Furthermore, the Service has generally complied with the legal provisions contained in EPA Act 1992 regarding the purchase of alternative fuel-capable vehicles. Issues remain, however, related to tracking and monitoring fuel consumption data and reducing reliance on petroleum-based fuels that may hinder the Service's ability to achieve cost savings and/or meet updated federal requirements contained in EPA Act 2005.

**Aggregating Purchases Are
Consistent with Leading
Practices**

The Service's actions related to aggregating its purchases and leveraging its buying power appear consistent with practices advocated by leading organizations. As table 16 illustrates, the Service has implemented multiple actions aimed at aggregating fuel purchases, both internal and external to the Postal Service.

Table 16: The Service Is Aggregating Purchases in a Variety of Ways

Postal Service action	How the Service is aggregating purchases and/or leveraging buying power
Transportation – Postal-owned fleet	
Voyager card	The Service has consolidated most retail transactions for Postal-owned vehicles onto the Voyager purchasing card. The Service is able to leverage fuel purchasing volume to secure discounts with participating retailers and qualify for rebates from the use of the card.
Group purchasing	The Service continues to take advantage of the DESC fuel program that aggregates selected federal fuel requirements to achieve price discounts. According to a DESC official, this effort has led to a better response and price from the fuel industry due to larger volume purchases and consolidating purchases into a single procurement effort (when compared to multiple smaller purchases from various agencies).
Transportation – Highway contractors	
Voyager card	The Service has extended the Voyager card program to selected highway contractors with dedicated vehicles for the transportation of mail. Similar to that for the Postal-owned fleet, the Service is able to leverage fuel purchasing volume and qualify for rebates from the use of the card.
Bulk purchasing	The Service leverages the combined volume of the fuel needed by contractors who maintain fuel storage tanks. The Service stated that it is able to achieve savings of \$0.15 on average per gallon for every gallon purchased by contractors. The Service reported almost \$9.8 million in cost savings in 2006.
Transportation – Air contracts	
Holiday fuel	During the peak 2-week holiday season, the Service has contracted separately for the fuel needed for the dedicated air network and to leverage fuel needs during this period to obtain cost savings. The Service reported cumulative savings of over \$6 million since 2002.
Facilities	
Electricity contracts	The Service aggregated requirements in 7 states and the District of Columbia for the supply of electricity generation. The Service reported cumulative savings of \$14.4 million from these actions in 2006.

Source: GAO analysis of Postal Service data.

Organizational Structure Appears Consistent with Leading Practices

The changes that the Service has made to its organizational structure appear consistent with leading practices because it reorganized to include commodity (fuel) specific experts and established a leadership position to develop and coordinate the implementation of the Service’s energy strategies. In 2002, the Service created its fuel purchasing organization as part of its efforts to incorporate Supply Chain Management principles. A 2001 report by the Service’s Office of Inspector General (OIG) recommended that the Service reexamine its fuel management systems.¹⁹ A

¹⁹U.S. Postal Service, Office of Inspector General, *Bulk Fuel Purchase Plan*, TR-AR-01-004 (Arlington, VA: July 27, 2001).

consultant-produced Fuel Management Business Plan study completed in response to the OIG audit recommended the Service centralize its procurement and management of fuels. The Service thus created the Transportation Asset Management group, which is dedicated to managing and conducting the Service's transportation-related fuel purchasing activity—for both the Service and its transportation contractors—as well as for heating oil. Although heating oil is used in facility operations, since it is a petroleum-based fuel the Service included it in the Transportation Asset Management group. During 2001, a procurement team focused on the utilities was also created. The Office Products and Utilities Category Management Center was developed to manage utility procurement for Postal facilities throughout the United States. The main energy sources this group is responsible for are electricity, natural gas, water, and steam. This group also manages all of the Service's SES contracts with private contractors.

The Service's recent organizational changes related to its energy management also appear consistent with leading practices related to enhancing leadership and establishing an organizational strategy. In July 2006, the Service appointed an Executive Director for Energy Initiatives. The current Executive Director stated that her responsibilities will include:

- Developing and managing the Service's energy management strategy. The Executive Director anticipates completing the Service's energy management strategic plan by mid-2007, which is expected to focus on three key areas: (1) fuel purchasing using supply management, (2) fuel demand for the Service's facilities and its transportation networks, and (3) risk management.
- Serving as the Service's primary point of contact for all other government agencies—federal, state, and local—and the private sector regarding the Service's fuel and energy usage. The relationships built between the Service, other government agencies, and private-sector organizations are designed to keep the Service apprised of any opportunities or leading practices that exist to reduce overall energy consumption.

Public-Private Partnerships Appear Generally Consistent with Leading Practices

The Service's continued utilization of public-private partnerships through Shared Energy Savings contracts appear consistent with some elements of leading practices and with federal policies in this area. These contracts are an alternative source of funding for energy-efficient investments. Under these contracts, a private entity (typically an energy company) would fund

the initial installation of an energy savings project at a Postal facility. Energy officials at the Service stated that it has advocated the use of these contracts since 1992 as an effective alternative financing method and energy conservation program, and that these projects are an investment aimed at reducing consumption. The savings achieved as a result of these projects would initially be used to pay back the private entity for the installation costs—typically over a 10-year period. According to the Service, savings could accrue (1) at the end of this pay back period, (2) when the outstanding balance is paid prior to the contract’s expiration by the Service using funding from other areas, or (3) during the payback period as consumption is being reduced, actual energy prices exceed the forecasted prices. Table 17 summarizes the Service’s SES contract program, while table 18 shows that many 2006 SES projects are occurring at sites in the Pacific and Southeast areas.

Table 17: Shared Energy Savings Project Summary

Description	2003	2004	2005	2006
Number of projects	15	28	39	15
Contract value (in millions of dollars)	\$47.6	\$61.9	\$72.7	\$38.1
Cost savings (in millions of dollars) ^a	\$5.4	\$5.1	\$5.7	\$2.2
Energy savings (in millions of kWh)	32.1	39.0	43.6	27.2

Source: The Postal Service.

^aEnergy dollar savings, which reflect the cost reductions that remain net of any required contractor payments.

Table 18: Active Shared Energy Savings Projects by Postal Service Area in 2006

(Dollars in millions)

Area	Number of contracts/ task orders	Number of sites	Value
Pacific	8	112	\$20.6
Western	1	2	1.3
New York Metro	1	1	0.5
Southeast	2	174	6.3
Capital Metro	3	3	9.4
Total	15	292	\$38.1

Source: The Postal Service.

Some of the Service’s SES projects have been nominated for DOE’s Federal Energy Efficiency Awards, and DOE has recognized that benefits

have been derived from the Service's contracts. Our past work on similar energy savings contracts for other federal agencies reaffirmed that these types of contracts can offer various benefits including energy savings and more reliable equipment, but noted attention is needed when evaluating the contracts expected cost savings.²⁰ We also noted that financing energy savings projects through these alternative funding mechanisms may be more expensive than up-front funding and that the performance of these third-party participants should be carefully monitored and verified.²¹

Inconsistencies Remain in the Service's Tracking and Monitoring of Fuel Information

The Service's limited tracking and monitoring of fuel consumption information for the majority of its fuel spending is inconsistent with leading practices (see table 19). This lack of information results in the Service not having the necessary fuel information to gain a complete understanding of the extent to which consumption is changing, how consumption has impacted overall fuel costs, and identify potential opportunities to reduce consumption. On the transportation side, the Service has no mechanisms or systems in place to monitor fuel usage, except for fuel purchases through its Voyager and holiday jet fuel programs (these purchases combined account for about 35 percent of its annual transportation-related fuel expenses). For example, the Service does not have consumption information for its nearly 55,000 delivery routes served by its rural carriers who use their own personal vehicles. The Service stated that it estimates fuel usage in some of these instances. Furthermore, the air transportation contracts pose greater difficulties in this area because fuel purchases are tied to a contract measure such as cubic feet or pounds of cargo. These measures are needed to estimate fuel consumption for the Postal-related cargo because these flights may not be dedicated to Postal Service transportation. The Service also does not centrally track the amount of fuel used to heat and operate its nationwide facility network. For example, the Service currently has metering equipment at only 25 of its over 34,000 facilities. The Service tracks and monitors the costs that are paid for its electricity, natural gas, and heating oil, but does not track consumption amounts.

²⁰GAO, *Energy Savings: Performance Contracts Offer Benefits, but Vigilance Is Needed to Protect Government Interests*, [GAO-05-340](#) (Washington, D.C.: June 22, 2005).

²¹GAO, *Capital Financing: Partnerships and Energy Savings Performance Contracts Raise Budgeting and Monitoring Concerns*, [GAO-05-55](#) (Washington, D.C., Dec. 16, 2004).

Table 19: Progress Is Needed in Tracking and Monitoring Fuel Consumption

Postal Service program	Consistent with leading practices		Inconsistent with leading practices	
	Description	Percentage of program fuel spending (est.)	Description	Percentage of program fuel spending (est.)
Postal-owned fleet	Voyager card program provides significant amounts of transactional data such as cost, location, fuel type, timing, quantity, and taxes.	80%	No consumption data for Postal-owned bulk fuel purchases.	20%
Postal employees using personal vehicles	None available.	0%	No consumption data.	100%
Highway contractors	Highway contractors under the Voyager card program.	50%	No consumption data for highway contractors using bulk fuel or quarterly adjustments.	50%
Air contracts	Holiday air program.	2%	Outside of the holiday air program, no consumption data.	98%
Other transportation	None available.	0%	No consumption data for rail or water transportation.	100%
Facilities	The Service has installed 25 electric metering systems.	n/a	Little consumption data available.	n/a

Source: GAO analysis of Postal Service data.

Note: n/a represents not available.

The Service has shown that in areas where it tracks and monitors fuel information, positive results can be achieved. For example, the Service has been able to increase its tracking and monitoring through the use of the Voyager program and holiday jet fuel on the transportation side. The Voyager program’s ability to gather, track, and monitor data has resulted in direct fuel cost savings for the Service. The card provides significant amounts of transactional data such as cost, location, fuel type, timing, and quantity that is fed into two information systems—the eFleet program for the Postal-owned fleet and the eFuel system for the highway contractor fleet. According to Service officials, these systems require the monthly reconciliation of all purchases and programs designed to monitor potential fraud and abuse. These mechanisms contribute to cost savings and avoidance. Furthermore, data collected from these systems has been used by the Service to increase the accuracy of data for highway contractor fuel consumption. Improved data tracking and monitoring for the Service’s holiday jet fuel has resulted in improved and more accurate contracting and reported costs savings.

On the facility side, the SES program requires specific tracking and monitoring of the overall performance (costs, savings, and changes in consumption) from these contracts. Furthermore, utility companies in the Pacific and New York areas have provided the Service metering equipment to track its fuel usage at designated Postal Service facilities. As discussed earlier, the Service has set annual facility fuel-related cost-saving targets that have allowed the Service to monitor and evaluate the performance of these initiatives.

Considering the positive results associated with the tracking and monitoring under the Voyager card and SES programs, similar efforts could be beneficial in obtaining additional fuel-related cost saving opportunities. For example, a GSA building official stated that its efforts to track consumption data showed that nearly 60 of its owned or leased facilities accounted for almost half of its energy costs. GSA was able to target these facilities for their energy efficiency investments. The upcoming EAct metering systems installation requirements provide an opportunity for the Service to make additional progress in tracking and monitoring its facility fuel consumption. The Executive Director for Energy Initiatives stated that financial and operational considerations need to be made due to the composition of the Service's facility network—34,000 facilities nationwide, many of which are less than 2,500 square feet.²² The Executive Director stated that the Service has some fuel information that provides guidance on which facilities are key candidates for energy efficiency investments. Specifically, the Service has identified 543 of its largest consuming facilities and is performing further reviews of these facilities. The Executive Director acknowledged, however, that improvements to the Service's fuel information are needed and will be included as part of the Service's upcoming energy strategy. More complete fuel cost and consumption information at its facilities would allow the Service to gain a better understanding of where investments could be made to reduce costs and improve fuel efficiency.

The Service Has Been Unable to Reduce Reliance on Petroleum-Based Fuels

Although the Service has purchased thousands of AFVs to comply with provisions of EAct 1992 aimed at reducing reliance on petroleum-based fuels, financial and operational limitations have hindered the Service's ability to use alternative fuels in these vehicles. The Service has increased

²²EAct 2005 contains a process for agencies to seek waivers to the metering requirements, and DOE has established the criteria for doing so.

its AFV fleet by nearly 20 percent from 2000 and currently possesses one of the largest alternative-fuel capable fleets in the federal government with nearly 40,000 AFVs. The majority of these vehicles are capable of operating on ethanol or compressed natural gas (CNG), and also include some that operate on electricity and liquefied petroleum gas. Most of the Service's AFVs, however, do not operate using alternative fuels, but primarily use gasoline and diesel fuel. Alternative fuels accounted for roughly 1.5 percent of the total fuel consumed by the Service's internal fleet in 2006.

Financial and operational limitations associated with higher fuel and vehicle prices, lower fuel efficiencies, and an insufficient nationwide alternative fueling infrastructure have limited the Service's use of alternative fuels. Postal Service officials stated these issues made operating its fleet on alternative fuels cost prohibitive. For example these officials stated that:

- The Service found that the cost for a gallon of ethanol 85 (E85) is typically 17 percent more expensive than gasoline, is 26 percent less efficient, and may result in higher maintenance costs because it is corrosive.
- There is a limited supply of AFVs available for purchase by the Service, and those that are available to the Service that meet the EPA's requirements contain larger engines than generally needed for delivery operations. As such, these unnecessarily large engines lower fuel efficiency when using gasoline or alternative fuels, and reduce the Service's miles per gallon.
- The limited nationwide alternative fuel infrastructure has hindered some of its previous alternative fuel efforts. For example, the Service converted some of its vehicles to operate on CNG in the early 1990s. While this was successful in the short term, manufacturers that the Service worked with to produce the CNG vehicles went out of business or simply stopped producing the vehicles, and many fueling stations that had provided CNG stopped selling it, leading to a shortage in the fuel. Furthermore, even where alternative fuel pumps are available, their distance from a Postal Service facility may be too great to justify the costs to refuel at that pump. Service officials stated that only 0.6 percent of service stations across the country offer alternative fuels.

Our past work, as well as officials from DOE and GSA have raised similar financial and operational limitations. We recently issued a report on the challenges associated with using alternative fuels, including that the

nationwide alternative fuel infrastructure is poor to nonexistent throughout most of the country.²³ For example, we reported that there are a limited number of E85 fueling stations nationwide (mostly concentrated in the upper Midwest), and that E85 cannot use the same infrastructure as gasoline because it is more corrosive. As of January 2007, the DOE Website indicates that only 1,003 E85 stations are located throughout the country. Recent studies conducted by DOE have found similar decreased fuel efficiency and increased cost results for ethanol.²⁴ DOE is currently in the process of finalizing guidance on a waiver to EPA's Act for federal fleets based on factors that may include alternative fuel price and travel distance.

A Service engineering director stated that discussions with DOE, automobile, fuel industry officials, and the Service about these financial and operational limitations have taken place, but progress has been difficult to achieve. This official stated that the Service's demand for AFVs and alternative fuels is not large enough to result in significant changes to the availability and price of AFVs or to the nationwide alternative fuel infrastructure. We are continuing to look at issues surrounding the nationwide alternative fuel infrastructure and plan on issuing a report in the middle of 2007.

Service officials also noted that they continue to look at alternative fuel vehicles and other options to improve vehicle fuel efficiency. For example, the Service has recently focused testing on hybrid vehicles. These officials noted, however, that while the mail delivery tests using hybrid vehicles are going very well and are conducive to the stop-and-go driving of mail delivery routes, hybrid vehicles are not considered AFVs and are ineligible for EPA's Act 2005 credit because they are powered primarily by standard gasoline. Nevertheless, the use of hybrids is consistent with the President's recent executive order requiring federal agencies to cut their energy consumption by, among other actions, using hybrid cars. Officials also noted that the Service takes other actions to increase fuel efficiency, such as having regularly scheduled vehicle maintenance (oil changes, tire pressure checks, etc.) that is consistent with the specifications of the

²³GAO, *Department of Energy: Key Challenges Remain for Developing and Deploying Advanced Energy Technologies to Meet Future Needs*, GAO-07-106 (Washington, D.C.: Dec. 20, 2006).

²⁴DOE, *Clean Cities Alternative Fuel Price Report - June 2006* (Washington, D.C.: June 2006).

vehicle manufacturer. Another fuel efficiency option noted by a vehicle operations official is that most of the larger vehicles in the Service's fleet were installed with bypass filters to minimize the intervals between oil replacements. However, he stated that using bypass filters on the smaller, delivery vehicles would not be cost-effective due to more expensive installation costs.

Conclusion

Although the Service has taken some actions to mitigate fuel risk and contain costs that are generally consistent with practices advocated by leading organizations, it continues to be vulnerable to fuel price fluctuations and challenged to meet the more stringent 2005 EPA Act requirements. The Service recognizes these challenges and is in the process of developing a strategic plan to guide future actions in this area. Immediate action is needed, however, to address deficiencies related to insufficient consumption data in some transportation and facility areas. Without sufficient consumption data, the Service will have difficulty understanding fuel consumption changes and identifying opportunities for additional cost savings.

Recommendation for Executive Action

We recommend that the Postmaster General take actions to improve tracking and monitoring of transportation and facility-related fuel consumption data. Taking immediate actions to address the lack of consumption data will be important, even as the Service is developing a new energy strategy.

Agency Comments and Our Evaluation

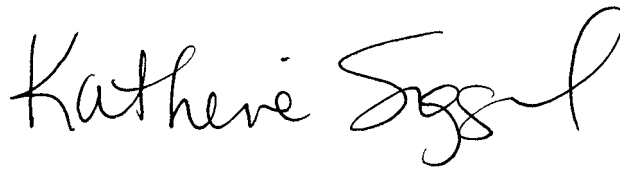
We provided a draft of this report to the Service for its review and comment. The Service provided its comments in a letter from the Senior Vice President, Operations, dated January 19, 2007. These comments are summarized below and included in appendix II. The Service agreed with our findings and recommendation, and stated that it has started the process to improve the information systems needed to capture fuel consumption information. In its comments, the Service stated that it plans to increase the number of Postal-owned vehicles used by rural carriers. These efforts should increase the Service's ability to track and monitor fuel usage due to the use of Voyager cards in Postal-owned vehicles. The Service also stated that it will be challenged by the EPA Act 2005 requirements. For example, the Service commented on the limited availability of alternative fuel, and in particular, the increased cost and decreased efficiency associated with E85. We recognized these issues in our report and we are currently conducting additional work on alternative

fuel infrastructure issues that is scheduled to be completed in mid-2007. The Service also commented on the financial challenges associated with the EPOct 2005 advanced metering requirement. It stated that many of its facilities are less than 10,000 square feet and requiring meters at all locations would not provide a reasonable return on investment. EPOct 2005 established a process for agencies to seek waivers to the metering requirements, DOE has established criteria for doing so, and the Service has indicated that it may seek waivers for certain facilities.

Although we recognize that these financial and operational challenges exist, the Service has an opportunity to build on its positive efforts and make additional progress in meeting these requirements. For example, the Service reported installing metering systems at only 25 of its 34,000 facilities, and the Service could extend this practice to other facilities. Service officials stated that they have identified 543 of the Service's largest energy consuming facilities, and the information gathered from analyzing these facilities may lead to practices that can also be applied to smaller facilities. Furthermore, the recent attention from the Administration and Congress on alternative fuel and energy conservation issues may provide an impetus for addressing some of these limitations that have hindered the Service's progress. The Service stated in its comments that it would be pleased to contribute to a national strategic plan for meeting the EPOct alternative fuel consumption requirement.

We are sending copies of this report to the Chairman of the House Committee on Oversight and Government Reform; the Chairman and Ranking Member of the House Subcommittee on the Federal Workforce, Postal Service, and the District of Columbia; the Chairman and Ranking Member of the Senate Committee on Homeland Security and Governmental Affairs; the Chairman and Ranking Member of the Senate Subcommittee on Federal Financial Management, Government Information, Federal Services, and International Security; the Postmaster General; and other interested parties. We also will provide copies to others on request. In addition, the report will be available at no charge on the GAO Web site at <http://www.gao.gov>.

If you or your staff have any questions regarding this report, please contact me at siggerudk@gao.gov or by telephone at (202) 512-2834. Contact points for our Office of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff that made key contributions to this report are listed in appendix IV.

A handwritten signature in black ink that reads "Katherine Siggerud". The signature is written in a cursive style with a large, looped initial 'K' and a long, sweeping tail for the 'S'.

Katherine Siggerud
Director, Physical Infrastructure Issues

Appendix I: Objectives, Scope, and Methodology

For this report, our objectives were to review (1) how the Service's fuel costs changed recently and the impact of these cost changes on the Service's financial and operating conditions and (2) how the Service's actions to control fuel costs and mitigate risk compare to leading practices and federal requirements.

To describe how the U.S. Postal Service's (the Service) fuel costs changed recently and what has been the impact of these cost changes on the Service's financial and operating conditions, we first defined what would be included as fuels. For our analysis, we established the following two categories:

1. Transportation-related fuel, which included fuel used for highway, air, rail, and water transportation. The types of fuel included in this category were gasoline, diesel, jet fuel, biodiesel, ethanol, compressed natural gas, liquefied petroleum gas, and electricity.
2. Facility-related fuels, which included fuel used to heat and operate Postal Service facilities. The types of fuel included electricity, natural gas, heating oil, propane, steam, coal, and wood. In regards to including electricity as a type of fuel, we felt it was necessary because it was used both in transportation and facility heating and operations.

We also analyzed trends in fuel prices from information available from the Energy Information Administration's Web site, as well as through other Department of Energy (DOE) sources consistent with guidance from DOE officials. We also collected data on the following areas:

- Fuel cost data from the Service regarding its various fuel types, purchasing methods, and transportation methods. Due to data system issues from an organizational change in 2003, the Service was only able to provide this data for most areas for 2004, 2005, and 2006. The Service stated that it needed to estimate fuel costs for multiple purchasing methods because that data is not available to them. For example, the Service had to estimate fuel costs for air transportation contracts.
- Transportation and facility-fuel cost-saving initiatives. Although the Service has specific definitions for its strategies to reduce, avoid, or save costs (which are explained in Appendix III), for the purposes of this review, we considered them all cost-saving initiatives.
- Statistics from GSA's Federal Fleet Report.

- Specific information on its internal vehicle fleet from standardized vehicle operations reports as well as its Shared Energy Savings projects from detailed presentations.
- Other financial and operating data from various Postal Service financial reports including its audited year-end Annual Reports and Comprehensive Statements, monthly Financial and Operating Statements, Quarterly Reports, and Integrated Financial Plan.

We assessed the reliability of the fuel cost and savings data provided by the Service for inconsistencies and missing values. In those cases where we found discrepancies, we worked with the Service to address the problems. We determined that the data were sufficiently reliable for our review. We also reviewed the Service's procedures for documenting, measuring, and reporting cost savings for its purchasing activities as well as the methodology for specific fuel-related initiatives. For the purposes of this engagement, the procedures and methodologies appeared to be reasonable and contain appropriate levels of review.

We also interviewed various Service officials, including staff from the Transportation Asset Management group who procure petroleum-based fuels; the Office Products and Utilities Category Management Center who procure most facility-related fuels; Vehicle Operations; Vehicle Maintenance at Merrifield, VA; Engineering at Merrifield, VA; Environmental and Energy Management; and finance department to gather information on how the Service has been impacted by rising fuel costs.

To assess the effectiveness of the Service's actions to control fuel costs and mitigate risk, we compared these actions against practices advocated by leading organizations that could be applied to the Service's fuel-related activities. We reviewed information from a variety of sources. These included our past work on fuel use and consumption and procurement leading practices, which included reviewing the purchasing efforts at various federal agencies (Departments of Defense, Veterans Affairs, Health and Human Services, Agriculture, Justice, and Transportation, and the U.S. Postal Service) as well as leading private organizations that were recognized for their acquisition services (IBM, ChevronTexaco, Bausch & Lomb, Delta Air Lines, and Dell). We also reviewed the Energy Policy Acts of 2005 and 1992, particularly the federal requirements and guidance pertaining to alternative fuel vehicles and facility energy management.¹ We

¹Energy Policy Act of 1992: Pub. L. 102-486 and Energy Policy Act of 2005: Pub. L. 109-58.

also interviewed officials from Department of Defense's Defense Energy Support Center, General Services Administration, and Department of Energy whose operations focus on fuel use; a procurement expert affiliated with the Center for Strategic Supply Research who published a report on fuel procurement practices; various executives and contractors affiliated with the National Star Route Mail Contractors Association; as well as Postal Service officials. We also conducted a review of current literature on these topics. Based on this information, we identified key practices that focused on purchasing and consumption activities. The purchasing-related leading practices we identified were aggregating purchases to leverage buying power and size; enhancing organizational structure; utilizing public/private partnerships; and tracking and monitoring fuel information. The consumption-related leading practices we identified were reducing reliance and use of petroleum-based fuels and conserving energy use in facilities.

We also discussed opportunities for further actions consistent with leading practices with the Service's newly appointed Executive Director for Energy Initiatives. Our work was conducted from April 2006 to February 2007 in accordance with generally accepted government auditing standards.

Appendix II: Comments from the U.S. Postal Service

WILLIAM P. GALLIGAN
SENIOR VICE PRESIDENT
OPERATIONS



January 19, 2007

Ms. Katherine A. Siggerud
Director, Physical Infrastructure Issues
United States Government Accountability Office
Washington, DC 20548-0001

Dear Ms. Siggerud:

Thank you for providing the United States Postal Service the opportunity to review and comment on the draft report, [U.S. Postal Service: Vulnerability to Fluctuating Fuel Prices Requires Improved Tracking and Monitoring of Consumption Information](#) (GAO-07-0244).

The findings and recommendation of the draft report are reflective of the high level of communication and cooperation between the Government Accountability Office (GAO) and the Postal Service. The GAO reached similar conclusions to those we have identified, including the need for better information regarding fuel consumption. The draft report also highlights the impact of the recent fluctuations in fuel costs on our financial results.

We agree with the recommendation for better tracking and monitoring of transportation and facility-related fuel consumption data and we have started the process to improve our information systems to capture these critical numbers.

One finding referenced in the draft report involves the lack of fuel usage data for our 75,000 rural routes. Rural carriers typically use their own vehicles to deliver mail and are reimbursed according to the contractually agreed upon Equipment Maintenance Allowance (EMA) based on the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W). The EMA also includes maintenance and replacement vehicle costs. Over 20,000 postal-owned vehicles are now used by rural carriers for which fuel usage is fully documented. By 2008, that number will exceed 25,000 vehicles with a commitment to place an additional 15,000 postal-owned vehicles on rural routes by 2013.

The Energy Policy Act (EPAct) of 1992 required federal agencies to increase the number of alternative fuel vehicles (AFVs) purchased. In the spirit of the Act, we acquired a fleet of over 37,000 AFVs. However, the aggressive alternative fuel consumption requirement of the EPAct of 2005 imposes significant challenges. As you are aware, alternate fuel has very limited availability (less than 0.6 percent of all fueling stations). The dominant alternative fuel, ethanol 85 (E85), is more costly and is less efficient. A national strategic plan—to which we would be pleased to contribute—needs to be developed to address this requirement.

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- 2 -

An additional finding indicates that only a small number of our 34,000 facilities have advanced metering systems. That total includes approximately 20,000 facilities which are less than 10,000 square feet. The majority of energy use comes from a few hundred of our larger processing and distribution facilities. The EPAct of 2005 requirement for advanced metering systems could help us better realize energy cost savings at these larger locations, but requiring them on all locations would not provide a reasonable return on investment.

If you or your staff wishes to discuss any of these comments further, I am available at your convenience.

Sincerely,


William P. Galligan

Appendix III: U.S. Postal Service Definitions

The Service's purchasing organization, Supply Management, has specific procedures for documenting and evaluating the actions it takes to improve its financial condition. These procedures include actions that are taken to achieve cost savings, cost avoidance, or cost reductions. The following represent the definitions and methodology behind these three cost categories used by the Service.

Cost Savings: Identifiable and measurable reduction in expenditures or costs that is the result of planned and deliberate supply chain management actions that return quantifiable dollar savings to the Service's bottom line. Cost savings are the difference between baseline spend (historical, current market price or initial suppliers bid) accounted for in a prior or current year budget and actual spend achieved through planned and deliberate supply chain management actions for the same or comparable supplies, equipment, services, facilities or other supply chain activities. Cost savings are only recorded in the first year of supply chain management impact. After the budget has been adjusted to reflect the cost savings, all subsequent years of supply chain management impact related to these efforts are counted towards cost avoidance (see the definition for cost avoidance below.)

Examples of cost savings include the following:

- Example A: A purchase cost reduction achieved over a historical or previously paid cost for the same products or services.
- Example B: An actual staffing or headcount reduction, which reduces planned or actual budgets, the result of outsourcing an administrative or business function. (Note: Actual savings must be evident in the functional area budget).
- Example C: An ownership cost reduction resulting from the elimination of expenses associated with receiving, holding, and/or distributing inventory.

Savings related solely to general market trends, supplier price changes, or reduced expenditures do not qualify as supply chain management impact. Although these savings may have a bottom line benefit that is identifiable and measurable, they do not result from the planned and deliberate action or substantial involvement of supply management organizational area enabling or leading the supply chain management initiatives.

Cost Reductions: Cost reductions are identifiable and measurable cost savings that are the result of a planned and deliberate supply chain

management action that returns measurable savings to the Service's bottom line. However, instead of reducing the bottom line, the Service has determined that these savings can be retained by the internal client/program office and reinvested to enhance related or new program initiatives.

Cost Avoidance: Identifiable and measurable elimination of a new cost that would have otherwise occurred except for planned and deliberate supply chain management action. In all cases, cost avoidance results where a contractual obligation on the part of the Service has not yet been made. Cost avoidance is the difference between the average quoted, relevant market price or other acceptable industry pricing benchmark or baseline and the price paid, which could be more or less than the initial proposed price. The relevant market price is the price the Service would expect to pay in the absence of planned and deliberate supply chain management action. Cost avoidance captures the value of those initiatives that reduce the need for an expense or capital expenditure, which unless the supply chain management action were taken, would have resulted in a higher expense or capital cost to the Service. Examples of cost avoidance include:

- Example A: A price reduction for a unique or first time purchase, as well as for a purchase for which there is inadequate price history.
- Example B: A total cost of ownership analysis supporting the reuse of excess property and supplies versus purchasing new.
- Example C: A published supplier price increase that is negated or lowered through a particular supply chain management technique.

Cost avoidance does not qualify as cost savings because the avoided cost is a "new" cost and, by definition, not included in prior year spend (or prior or current year budgets) and the avoidance has no direct dollar-for-dollar impact on the bottom line. Supply chain management impact is still created, however, because the cost avoidance minimizes or eliminates the negative impact on current or future year spend.

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

Katherine Siggerud (202) 512-2834

Acknowledgments

In addition to the individual named above, Teresa Anderson, Joshua Bartzen, Kathy Gilhooly, Brandon Haller, Carol Henn, Daniel Paepke, Emily Rachman, and Karla Springer made key contributions to this report.

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