United States Government Accountability Office

GAO

Report to Congressional Requesters

July 2009

U.S. POSTAL SERVICE

Mail Delivery Efficiency Has Improved, but Additional Actions Needed to Achieve Further Gains

GAO-09-696

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GAO Accountability • Integrity • Reliability

Highlights

Highlights of GAO-09-696, a report to congressional requesters

Why GAO Did This Study

The U.S. Postal Service (USPS) is facing significant financial problems as mail volume is declining, 4.5 percent in fiscal year 2008 and 11 percent projected for fiscal year 2009. USPS lost $2.8 billion in fiscal year 2008 and projects a $6.4 billion loss in fiscal year 2009 (possibly more if it cannot cut an ambitious $5.9 billion in costs). As one way to cut costs, USPS is trying to improve the efficiency of mail delivery, which generates close to one-third of USPS's $78 billion in expenses.

Recognizing the sizeable impact of delivery on USPS's finances and operations, you requested a GAO review. This report addresses (1) how USPS monitors delivery efficiency; (2) characteristics of delivery units that affect their efficiency; and (3) the status and results of USPS's actions to improve delivery efficiency, in particular USPS's Flats Sequencing System (FSS). To address these objectives, GAO interviewed stakeholders and USPS officials, reviewed delivery documentation, conducted fieldwork, and analyzed delivery data.

What GAO Recommends

GAO recommends that the Postmaster General establish cost-saving targets and track results for each of the major USPS initiatives to improve delivery efficiency. In commenting on a draft of this report, USPS generally agreed with GAO's findings. However, USPS did not agree to fully implement GAO's recommendation for all major USPS delivery initiatives.

View GAO-09-696 or key components.
For more information, contact Phillip Herr at (202) 512-2834 or herrp@gao.gov.

What GAO Found

USPS delivery managers have written guidance and information systems to help them monitor delivery efficiency—determining whether units and carriers are using the best work practices. These tools help set carrier and unit expectations and evaluate performance. Specifically, written guidance provides a monitoring framework and information systems track different metrics, such as deliveries and overtime, used for evaluation. However, there is no single measure of delivery efficiency, and managers use various metrics (e.g., carrier office and street efficiency indicators) to measure effectiveness.

Through visits, interviews, and analysis of city delivery operations, GAO found efficiency varies by delivery unit, and certain factors affect a unit's efficiency. These factors can include the experience, training, and local knowledge of a delivery manager; timing of mail received from the processing plant; availability of qualified carriers; unit size or location; and how recently routes were adjusted. In the less efficient delivery units (as determined by USPS's rankings), USPS was taking actions to alleviate some issues, including replacing managers, allocating additional resources, and providing training.

Although USPS has taken actions to improve delivery efficiency, the agency has limited information to measure the results. These actions include:

- Flat Sequencing System—this cornerstone effort is a $1.5 billion investment in equipment for sorting flat mail (e.g., large envelopes, catalogs, circulars, and magazines) into the correct sequence for delivery;
- Adjusting City Carrier Routes—aligning carrier routes to match changing workload, including using technology to set an optimal route structure;
- City Delivery Pivoting Opportunity Model—a scheduling tool that helps delivery managers deal with daily unstaffed routes by aligning available staff and resources with delivery needs; and
- Others—such as managing its delivery vehicle fleet and utilizing a tool to manage growth in the number of addresses in a cost-effective way.

These actions, combined with recent mail volume declines, have helped USPS eliminate nearly 10 million delivery workhours while absorbing 2.7 million additional deliveries between fiscal years 2006 and 2008. USPS expects to eliminate 37 million delivery workhours in fiscal year 2009 (saving approximately $1.4 billion) compared to the previous year. The future savings, however, may be limited by USPS's lack of specific cost-saving targets and results for most of these actions (USPS officials report it is too difficult to isolate the results of actions). Without such information, USPS is unable to assess the contribution and performance of each action and focus on those with the greatest savings potential. Also, while we are encouraged by USPS's efforts to coordinate with employees, their unions, and mailers to promote more efficient delivery, continued focus will be needed to help address ongoing challenges related to declining volumes, technical issues (e.g., FSS failed a key engineering test), and financial and operational issues (e.g., the impact of these actions on postal stakeholders and future USPS investment decisions, particularly if delivery frequency is reduced to 5 days a week).

Contents

Abbreviations

CDPOM	City Delivery Pivoting Opportunity Model
COR	Carrier Optimal Routing
DOIS	Delivery Operations Information System
DPS	Delivery Point Sequence
FSS	Flats Sequencing System
GPS	Global Positioning System
IARAP	Interim Alternate Route Adjustment Process
MIARAP	Modified Interim Alternate Route Adjustment Process
NALC	National Association of Letter Carriers
NDCBU	Neighborhood Delivery Collection Box Unit
NRLCA	National Rural Letter Carriers' Association
OEI	Office Efficiency Indicator
OIG	Office of Inspector General
PRC	Postal Regulatory Commission
SEI	Street Efficiency Indicator
USPS	U.S. Postal Service

GAO
Accountability * Integrity * Reliability

United States Government Accountability Office
Washington, DC 20548

July 15, 2009

The Honorable Thomas R. Carper
Chairman
The Honorable John McCain
Ranking Member
Subcommittee on Federal Financial Management,
Government Information, Federal Services, and
International Security
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable Stephen F. Lynch
Chairman
The Honorable Jason Chaffetz
Ranking Member
Subcommittee on Federal Workforce, Postal Service,
and the District of Columbia
Committee on Oversight and Government Reform
House of Representatives

The Honorable Danny Davis
House of Representatives

The U.S. Postal Service (USPS) is facing significant financial problems because mail volume is declining significantly—by 9.5 billion pieces, or 4.5 percent, in fiscal year 2008[1] and a projected 22.7 billion pieces, or 11 percent in 2009. As a result, USPS lost $2.8 billion in 2008 and expects to lose over $6 billion in 2009, although this number could be higher if USPS does not achieve its ambitious cost-cutting goal of $5.9 billion—or over two-and-a-half times more than it reported cutting in 2008. We have

[1]Unless otherwise noted, year references are for fiscal year.

recently testified on multiple occasions regarding USPS's escalating financial problems.[2]

A key portion of USPS's cost reduction efforts are linked to delivering mail more efficiently—which USPS defines as using the best work practices and least amount of time. Mail delivery is USPS's largest cost segment and generated close to one-third of its nearly $78 billion in total expenses in 2008. That year, over 350,000 full- and part-time mail carriers accounted for approximately 45 percent of USPS's salary and benefit expenses. Delivery is labor intensive and includes carriers manually sorting certain mail into the sequence that it will be delivered, and delivering mail to and collecting it from most of the nation's 149 million residential and business addresses 6 days a week.[3] Moreover, this delivery network is growing by more than 1 million addresses each year, resulting in additional personnel, fuel, and vehicle costs. Declines in volumes, however, have put additional pressure on USPS's ability to contain its costs because USPS has high overhead costs that are hard to reduce the in short term when volumes decline. The Postal Regulatory Commission (PRC) recently testified that only half of USPS's delivery costs vary with volume. As such, when volumes decline, mail delivery costs are harder to reduce compared to other USPS costs that vary more with mail volume. USPS has recently testified that it cannot afford to continue delivering mail 6 days a week and has requested that Congress eliminate the long-standing appropriation provision mandating 6-day delivery so USPS can shift to 5-day delivery.

USPS has taken steps to deliver mail more efficiently, including adjusting delivery routes to reflect declining volumes and investing in more efficient mail-sorting technologies. Specifically, USPS has approved $1.5 billion to acquire and deploy 100 machines—called the Flats Sequencing System (FSS)—that will automatically sort flats (e.g., large envelopes, catalogs, circulars, and magazines) and sequence them in the exact order of carrier

[2]GAO, *U.S. Postal Service: Network Rightsizing Needed to Help Keep USPS Financially Viable*, GAO-09-674T (Washington, D.C.: May 20, 2009); *U.S. Postal Service: Escalating Financial Problems Require Major Cost Reductions to Limit Losses*, GAO-09-475T (Washington, D.C.: Mar. 25, 2009); *U.S. Postal Service: Deteriorating Postal Finances Require Aggressive Actions to Reduce Costs*, GAO-09-332T (Washington, D.C.: Jan. 28, 2009).

[3]Some postal customers pick up their mail from the local delivery unit instead of waiting for USPS to deliver it.

delivery (USPS currently has equipment that does this for letter mail).[4] This investment is expected to reduce the time carriers would otherwise spend manually sorting mail in the office—a labor-intensive and costly activity—and enable them to spend more time delivering mail. USPS has begun deploying FSS machines and expects the first phase to be completed by October 2010.

Because of concerns about USPS's financial condition, you asked us to report on USPS's delivery efficiency, recognizing the sizeable impact of delivery on USPS's finances and operations. This report addresses (1) how USPS monitors delivery efficiency; (2) characteristics of delivery units that affect their efficiency; and (3) the status and results of USPS's actions to improve delivery efficiency, in particular FSS. We also briefly discuss USPS's proposal to reduce delivery to 5 days each week.

To address these objectives, we reviewed USPS documentation and interviewed USPS headquarters officials on issues related to USPS's delivery operations, monitoring processes, efficiency initiatives, and problems, as well as FSS implementation. We analyzed a broad range of delivery performance data to determine the extent to which (1) variation existed in efficiency across delivery units, (2) meaningful trends existed within these data, and (3) route adjustments were performed and whether savings were achieved. We assessed the reliability of the data used in our analysis of delivery efficiency and found it sufficiently reliable for our purposes. We focused our work primarily on city delivery, rather than rural delivery, because city delivery accounts for 75 percent of delivery operations' salary and benefit cost. To gain a better understanding of delivery, we visited 2 area offices, 7 district offices, and 21 delivery units, which encompassed 7 states plus Washington, D.C., providing geographic dispersion.[5] As part of this analysis and USPS delivery performance indicators, we selected:

[4]In this report, we use the term "delivery sequenced" when referring to flats and letters that have been automatically sequenced in the exact order of carrier delivery.

[5]A delivery unit can be a post office, station, branch, or annex that has mail delivery functions. A district office, of which there are 74 nationwide, is an administrative field unit that oversees most operational and support functions for delivery units in a defined geographic area and reports to one of nine USPS area offices. A figure illustrating the geographic coverage of the nine area offices is provided in app. III. The states visited included: Florida, Georgia, Illinois, Indiana, Maryland, South Carolina, and Virginia.

- the highest, middle, and lowest performing areas;
- the highest and lowest performing districts within each area; and
- the highest and lowest performing delivery units within each district.

We consulted with USPS to ensure that the delivery units we selected had a sufficient number of city carrier routes to do meaningful fieldwork, and made adjustments based on this information and other travel considerations. We interviewed USPS officials at each location who managed delivery operations to obtain insights into the performance, monitoring, and management of delivery units as well as their views on the effectiveness of major delivery efficiency initiatives which USPS identified. In addition to these locations, we visited the first USPS mail processing facility to install an FSS machine and two delivery units that receive FSS delivery sequenced flats. We interviewed responsible USPS mail processing and delivery officials regarding FSS operations and its impact on delivery efficiency. To obtain stakeholder views regarding USPS's efforts to improve delivery efficiency, we interviewed officials from PRC, National Association of Letter Carriers (NALC), National Rural Letter Carriers' Association (NRLCA), and major mailers—who have collaborated with USPS on technical matters associated with FSS implementation, such as rules for preparing flat mail that will be sorted on FSS machines.

We conducted this performance audit from July 2008 to July 2009, in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. Appendix I contains a detailed discussion of our scope and methodology. We requested comments on a draft of this report from USPS, and its comments, which are reproduced in appendix II, are discussed later in this report.

Background

Providing mail delivery service is central to USPS's mission and role in providing postal services to "bind the nation together through the personal, educational, literary, and business correspondence of the

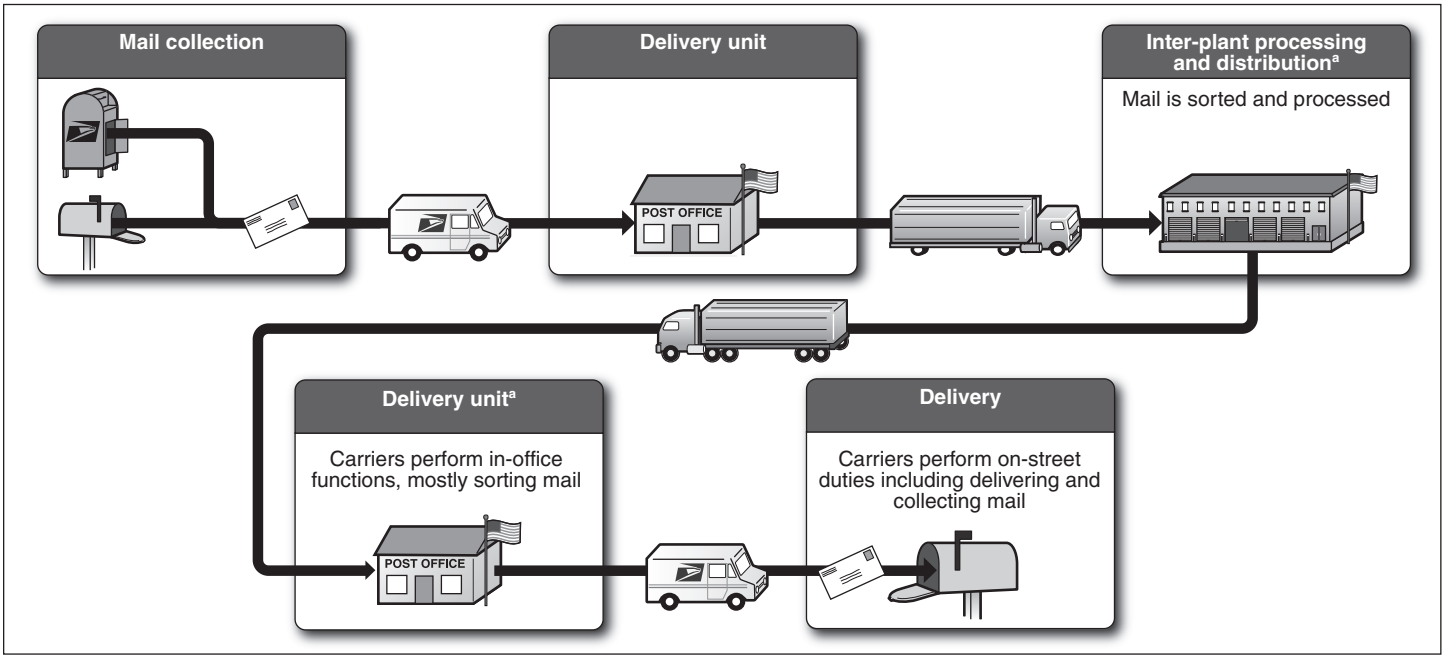
people."[6] USPS is required by law to provide prompt, reliable, and efficient services to, as nearly as practicable, the entire U.S. population.[7] USPS is further required to maintain an efficient mail collection system. Provisions in USPS appropriations mandate 6-day-a-week delivery and certain levels of rural mail delivery.[8] USPS establishes delivery service within this framework and manages the associated facilities, transportation, and employee network. Figure 1 illustrates some of the key steps in the flow of mail from collection to delivery.

[6]39 U.S.C. §101.

[7]39 U.S.C. §§101 and 403. USPS is to provide a maximum degree of effective and regular postal services to rural areas, communities, and small towns where post offices are not self-sustaining.

[8]For example, see Financial Services and General Government Appropriations Act, 2009, Pub. L. No. 111-8, div. D, title V (Mar. 11, 2009). The provision states that "6-day delivery and rural delivery of mail shall continue at not less than the 1983 level." Appropriations are a small part of USPS's total budget—$109 million in 2008 for Free Mail for the Blind, Absentee Voting, and other adjustments and reconciliations.

Figure 1: Overview of Mail Flow



Source: GAO analysis of USPS operations.

[a]A significant portion of mail is deposited by mailers directly at delivery units or processing and distribution facilities.

The efficiency and cost of delivery operations depicted in figure 1 depend on a variety of factors, including the following:

- *Mail volume and type.* The amount of mail and type (e.g., letters versus packages), including the extent to which mail is compatible with USPS's automation equipment or needs to be manually sorted by carriers prior to being taken to the street for delivery.

- *The type of carrier route.* Most customers receive their mail via one of three different types of carrier routes: city, rural, or contract carrier. Carriers in each type of route have their own roles, responsibilities, and compensation systems. For example, most city and rural carriers are USPS employees but members of different unions, while contract carriers are not USPS employees, but can perform delivery services as part of their

contractual agreement with USPS.[9] Table 1 illustrates how the type of carrier route can affect delivery costs.

Table 1: Cost and Delivery Information for City, Rural, and Contract Delivery Routes, 2008

Type of route	Salary and benefits (billions)	Number of routes	Possible deliveries (millions)	Average deliveries per route	Number of carriers	Average annual national cost per address (estimate)[a]
City delivery	$17.4	161,648	87.3	540	Career[b]: 211,661 Noncareer[c]: 14,758	$209
Rural delivery	5.9	76,575	39.1	511	Career: 68,900 Noncareer: 58,072	161
Contract delivery	0.3[d]	7,889[e]	2.6	330	n/a	115
Total	**$23.6**	**246,122**	**129.0[f]**	**524**	**n/a**	**n/a**

Source: USPS.

Note: n/a stands for not applicable.

[a]According to USPS, these data are updated annually based in part on a 1995 cost-of-delivery study.

[b]Career employees include full-time city and rural carriers and certain part-time city carriers.

[c]Noncareer employees include certain transitional city carriers and supplemental/substitute rural carriers.

[d]These costs represent the entire contractual rate, and may involve costs for transportation services provided as part of these contracts. According to USPS officials, most of these routes strictly provide delivery service, but the remaining routes incorporate other mail transportation services such as trucking mail from one USPS facility to another (deliveries are made to addresses along the line of travel).

[e]This number represents the number of contract delivery routes on which delivery service is provided for at least one address.

[f]There are about 129 million addresses served by letter carriers. Another 20 million addresses are provided delivery as part of USPS Post Office box service (for a total of 149 million addresses). These deliveries are made by USPS clerks.

- *The number, location, and mode of delivery.* The number of addresses on a particular route; the distance between addresses; the geographic location of the route (e.g., the downtown of a major metropolitan area versus a small town); and the mode of delivery (e.g., mail delivered to a curbline mailbox, a mail slot in a door, or a clusterbox[10] at the end of the

[9]The compensation systems for city and rural carriers are collectively bargained between USPS and its associated unions—the NALC represents city carriers, and the NRLCA represents rural carriers. Generally speaking, city carriers are compensated on an hourly basis, while rural carriers are salaried employees. Compensation for contract carriers is established via the contract posted by USPS.

[10]USPS defines a clusterbox as a centralized unit of individually locked compartments for the delivery of mail.

street). For example, on city carrier routes, the current annual cost for door delivery is $354, curbline delivery is $225, and centralized delivery[11] is $161.

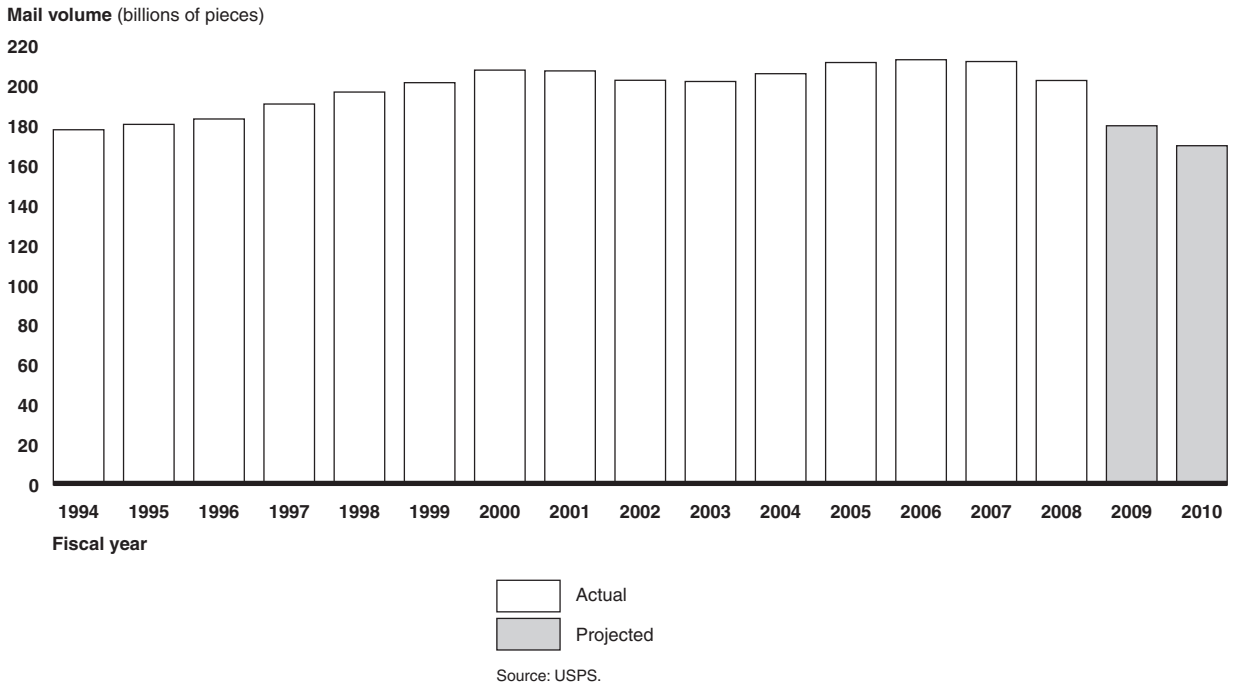
- *Transportation*. The length of a carrier route, the need for a vehicle, and vehicle costs (e.g., for fuel and maintenance).

- *Other factors*. Weather conditions, terrain, sick leave usage, and carrier turnover.

Declining volume reduces USPS's revenue, but it does not necessarily reduce costs commensurately. Many of the costs associated with its delivery network are fixed, and these fixed costs are difficult to reduce as volumes decline. USPS incurs facility, equipment, transportation, and personnel costs associated with providing mail delivery to over 149 million addresses 6 days a week, regardless if 20 or 1 piece(s) of mail needs to be delivered to a particular address. Mail volumes have declined over the last 2 years and USPS is projecting even lower volumes in 2009 and 2010 (see fig. 2). Even so, USPS's delivery network increases by more than 1 million addresses each year. This trend poses a challenge to reducing delivery costs because as the network expands, so do some of USPS's overhead costs.

[11]Centralized delivery is defined as delivery and collection services to a number of businesses or residences from a centrally located delivery point or place, such as a group of mailboxes at an apartment building.

Figure 2: Total Mail Volume, by Year

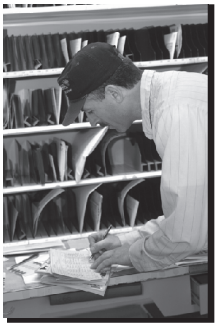


Source: USPS.

One of USPS's core strengths is what is referred to as "the last mile" of mail delivery—that is, its carrier delivery network reaches millions of business and residential addresses 6 days a week. Carriers perform a variety of activities each workday to support this delivery network, some of which are illustrated in figure 3.

Figure 3: Selected USPS Carrier Activities

Manually sorting mail.



Filling out paperwork.

Scanning mail before leaving the delivery unit.

Taking mail to the delivery vehicle.

Loading delivery vehicle.

Delivering parcels.

Loading a mailbox.

Unloading a collection box.

These activities are divided between the office and the street. During office time each morning, carriers organize their mail for delivery. First, carriers manually sequence unsorted letter and flat mail into delivery order by inserting each piece into the pigeonhole in their case[12] that corresponds to the address on the route. The sorted mail is removed from the case, bundled for delivery, and placed into trays. Carriers then pick up and organize their parcels and accountable mail (e.g., Certified Mail and Registered Mail) for delivery. Carriers also conduct safety inspections of their postal vehicles. During street time, carriers load mail into their

[12]A piece of equipment that contains address separations into which carriers sort letters and flats.

vehicles and proceed to their routes. Carriers then deliver and collect mail, traversing their routes by foot, vehicle, or a combination of both. They also perform various other tasks such as scanning mail with Delivery Confirmation, obtaining signed receipts for Registered Mail, and picking up parcels. After traversing their routes, carriers return to their delivery units and complete various administrative duties such as depositing collected mail, handing in receipts and money collected, and sorting mail for the next day.

USPS Has a Variety of Tools for Monitoring Delivery Efficiency

USPS headquarters and field officials noted that monitoring delivery efficiency—that is, determining the extent that mail is delivered using best work practices in the least amount of time—is a complex endeavor. They have a variety of tools and systems to help them monitor delivery efficiency. These include written guidance, as well as information systems that capture various delivery-related operational data (see table 2).

Table 2: Tools and Systems for USPS Delivery Managers to Use in Monitoring Delivery Efficiency

Written guidance
Policy Handbooks
• M-38, Management of Rural Delivery Services (Rural Carriers)
• M-39, Management of Delivery Services (City Carriers)
• M-41, City Delivery Carriers Duties and Responsibilities
• Postal Operations Manual 603, Rural Carrier Duties and Responsibilities
Operating Procedures
• Morning Standard Operating Procedures
• Rural Delivery Standard Operating Procedures
Collective Bargaining Agreements
• 2006-2010 Agreement between the U.S. Postal Service and the National Rural Letter Carriers' Association and other related documents.
• 2006-2011 National Agreement between the National Association of Letter Carriers and the U.S. Postal Service and other related documents
Information systems and associated operating data
• Flash System: Tracks system-wide delivery operational and budgetary information.
• Delivery Operations Information System: A national database system which contains delivery information for 97 percent of city delivery routes (almost 8,600 delivery units) that is used by postal managers to manage delivery operations. This database incorporates the Managed Service Point system that collects information from carriers as they scan bar-coded labels placed at various points throughout their route.
• Rural System: Tracks performance information on rural delivery routes.
• My Post Office: A tool used to track and report on the number and resolution of delivery-related issues raised primarily by small local businesses and residents.
• Business Service Network System: Tracks customer information including complaints and problems for large mailers.
• Mail History Tracking System: Provides information on local letter mail-processing operations and helps identify problems with the sequencing of this mail before delivery.
• Miscellaneous Service Systems: USPS systems for monitoring delivery performance measurement for Express Mail and some single-piece and bulk First-Class Mail, a Priority Mail, Package Services, and International Mail; may provide data on areas experiencing poor delivery performance.

Source: USPS.

[a]The External First-Class Measurement System, administered by a contractor, measures when test mail pieces are deposited in collection boxes and received at various addresses.

The tools—the written guidance and operational data—assist delivery managers in conducting effective monitoring by helping them in setting carriers' expectations and evaluating their performance (compared to those expectations). The expectations can include how much time carriers should need to prepare the mail for delivery and when carriers should depart for and return from their respective routes. The tools provide the policies, processes, and data that are used to evaluate the delivery efficiency of a particular carrier or delivery unit. The data provide managers with information on a variety of factors such as mail volumes, addresses, or amounts of mail that need to be manually sorted. Managers

supplement these data with other information as appropriate, such as whether any carriers called in sick, or if weather conditions or road construction are likely to affect delivery.

When evaluating delivery efficiency, these managers stated that while they use many efficiency indicators (such as those included in table 3), there is no single, clear-cut measure of delivery efficiency across all postal units. They also noted that

- the systems supporting these metrics allow for data to be analyzed in many different ways (e.g., the systems allow for data to be tracked at the national, area, district, delivery unit, route, and carrier level, and over specific periods of time) and
- some indicators track factors external to the delivery unit that can affect a carrier's delivery efficiency. For example, the metric used to calculate "Delivery Point Sequence (DPS) Percentages" tracks the percentage of letter mail that has been sorted into delivery sequence using automated equipment. This percentage can directly impact the amount of time carriers spend in the office, because the higher the DPS percentage, the less time carriers will need in the office to manually sequence their letter mail into delivery order.

Table 3: Key Delivery Metrics USPS Uses to Monitor Delivery Efficiency

Metric	Description
Deliveries per hour	The number of addresses delivered for each workhour used.
Total cased[a] volumes	The volume of mail that needs to be manually cased by carriers.
Delivery Point Sequence (DPS) percentages	In the delivery units that receive DPS letters, this is calculated by dividing DPS letters by total letter volumes (DPS letters + cased letters) multiplied by 100.
City carrier workhours	The number of workhours used by city carriers.
City deliveries per route	The number of addresses delivered to on a particular city delivery route.
City delivery percentage to standard	This metric compares city carrier office performance to "standard" rates.[b]
City delivery—Office Efficiency Indicator (OEI)	A calculation of cumulative deliveries divided over the total carrier office workhours.
City delivery—Street Efficiency Indicator (SEI)	A calculation of cumulative deliveries divided by the total carrier street workhours.
City carrier overtime	The number of overtime workhours used by city carriers.
City carrier penalty overtime	The number of penalty overtime workhours used by city carriers. Penalty overtime workhours are paid at a rate of twice the base hourly straight time rate for overtime work.
Carriers back by 1700	The number of city carriers who arrive back into the office from their route by 1700 (i.e., 5:00 p.m.).

Metric	Description
Rural carrier workhours	The number of workhours used by rural carriers.
Rural carrier overtime	The number of overtime workhours used by rural carriers.
Rural percentage to standard	A calculation of the number of workhours used by rural carriers divided by the expected contractual number of rural carriers.

Source: USPS.

[a]Casing is the manually sorting mail into delivery order.

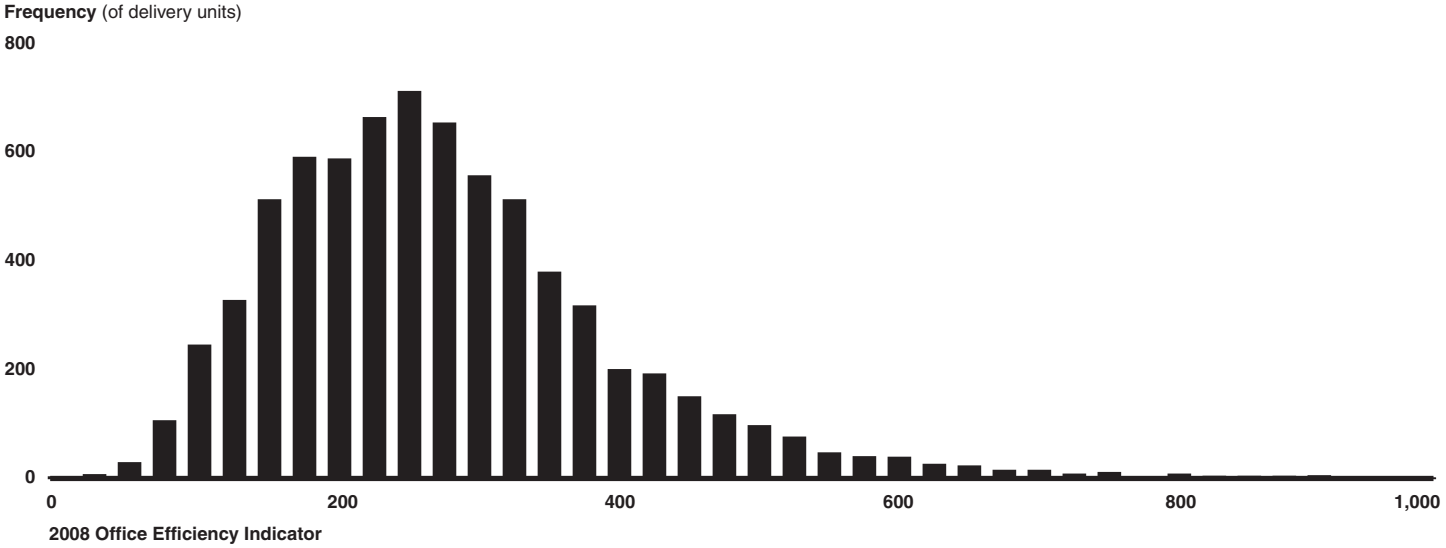
[b]The established standards specify, among other things, that city carriers are to manually case 8 flats or 18 letters per minute.

These officials stated there are major differences in how efficiency is monitored, depending on whether routes are being served by city or rural carriers. According to USPS officials, due to the nature of city routes (they account for the majority of delivery workhours and costs and city carriers' compensation is based on an "hourly" system), far more data are collected and analyzed for city routes compared to rural routes. For example, USPS has implemented the Delivery Operations Information System (DOIS) national database, which collects significant amounts of delivery-related data, to assist city delivery unit supervisors in (1) managing office activities, (2) planning street activities, and (3) tracking and monitoring delivery performance. DOIS receives constant data feeds from various systems including the Managed Service Point program, which collects information from city carriers as they scan bar-coded labels placed at various points throughout their route (e.g., on mailboxes). This system provides USPS a tool for monitoring the consistency of delivery time, and, in doing so, can help hold carriers accountable for their performance: if a carrier's scans differ significantly from the norm or are otherwise divergent (e.g., a point was not scanned), the delivery manager is to review these instances with the carrier.

Differences in Management and Operations Result in Varying Degrees of Efficiency throughout USPS's Delivery Network

Using USPS's delivery metrics and rankings and the results of our own analysis of USPS's delivery operations, we found that the efficiency of USPS's delivery units varied. For example, figure 4 shows the distribution of Office Efficiency Indicator (OEI) across selected delivery units. OEI measures the number of addresses a delivery unit handles per hour of office time—units with higher OEI scores handle more addresses per office workhour than those with lower OEI scores (thus, other things being equal, higher values indicate more efficient use of carrier office time). As can be seen in figure 4, there is considerable variation in the indicator across delivery units, with many offices showing a considerably lower value of OEI than the average score of 286.[13]

Figure 4: Office Efficiency Indicator for Select City Delivery Units, 2008



Source: GAO analysis of USPS data.

Note: Data cover approximately 7,300 city delivery unit finance numbers that are tracked in DOIS. The Office Efficiency Indicator is a calculation of the cumulative possible deliveries divided by the total office workhours.

Furthermore, during our site visits and interviews with USPS delivery officials in headquarters, areas, districts, and local delivery units and our

[13]According to USPS, this variation is expected due to varying levels of volumes and other characteristics that differ from office to office, and OEI is an indicator that can be used to measure an entity against itself and not another entity.

analysis of city delivery operations, we found that certain factors can affect the efficiency of a particular delivery unit, including the following:

- *Delivery manager quality, experience, and local knowledge.* Delivery officials stated that delivery managers who are not familiar with the local unit's office and street operations and either do not effectively use or are not trained to use tools such as DOIS for monitoring delivery efficiency will struggle to achieve efficient operations. These problems appeared in most of the lower-ranked units we visited, where the delivery managers had generally held that position in that particular unit for less than 1 year. In certain delivery units, these managers were not familiar with the intricacies of local delivery operations and had not yet conducted comprehensive street observations of carriers. Furthermore, officials from the NALC and NRLCA emphasized that delivery managers' knowledge of the policies and procedures of their respective carriers can help to facilitate efficient operations within that delivery unit.

- *Mail processing activities.* These officials stated that the extent to which delivery units receive mail dispatched from the processing plant in a timely and consistent manner—including a higher percentage of DPS letters—can promote more efficient operations. For example, receiving mail at the early segment of the dispatch from the processing plant can increase a delivery unit's efficiency. Conversely, officials at lower-performing delivery units, whose units were near the end of the dispatch queue, told us that any delays earlier in the queue would mean their mail would arrive late. Delays could ripple throughout the affected delivery units as carriers waited in their units for mail to arrive and could not start their respective routes. These sentiments were echoed by officials at the NALC and NRLCA, who stated that having carriers wait at certain delivery units (sometimes as long as a couple of hours) for their mail to arrive from the processing plant is detrimental to carrier efficiency.

- *Carrier and other support staff.* These officials stated that the extent to which they have an appropriate complement of experienced carriers and support staff also can affect the efficiency of delivery operations. In particular, officials at the lowest-performing delivery unit we visited indicated that frequent carrier turnover (e.g., where carriers can "bid-out" and transfer to other delivery units for reasons such as their route was located in a "bad neighborhood" or the delivery unit lacked parking for their personal vehicle) was a significant problem requiring considerable resources to train new carriers. Furthermore, officials at other delivery units stated that other problems such as not having enough clerks to

perform key mail preparation tasks, experiencing attendance-related issues, and having many carriers placed on work restrictions[14] also could negatively affect a unit's efficiency.

- *Size of the delivery unit.* These officials stated that achieving delivery efficiency is much more difficult in larger urban delivery units than in smaller suburban units. They stated that delivery managers in these urban units typically have larger carrier staffs and higher mail volumes, traffic congestion, and more frequent address changes to contend with. In performing our own analysis of USPS delivery data, we found that mail volume in a unit was correlated with measures of efficiency and workload. In particular, we found that in units with higher volume, the OEI tended to be lower. Similarly, in those units, overtime levels tended to be higher. It appears, therefore, that managing workload and improving efficiency is more difficult in units with larger mail volumes.

- *Route structure.* These officials stated that the inability of certain delivery units to align their city carrier route structure with changing mail volumes would cause inefficiencies in their delivery operations.[15] These officials indicated that some units were unable to make route adjustments for reasons such as poor delivery data; the time-consuming and costly nature of the route adjustment process (covered in greater detail later in this report); or ineffective relationships with the local NALC representatives. For example, in most higher-ranked units we visited, city carrier routes had been adjusted within the last calendar year (when mail volume was declining), while in other lower-ranked units, officials stated that some city carrier routes had not been adjusted in over 10 years.

- *Delivery unit location.* These officials also stated that other factors including geography, local climate, transportation network, and roads also can affect delivery efficiency. For example, officials noted that delivery units located in areas that regularly receive substantial snowfall or experience major road construction can have more difficulty achieving efficiencies than areas that are not facing such challenges.

[14]These work restrictions can result from carriers who qualify for limited and light duty assignments. We are currently conducting a review of USPS's accommodation of injured workers in limited duty and rehabilitation assignments and plan to issue a report on this topic later this year.

[15]According to USPS officials, the annual method for measuring and adjusting rural carrier routes helps provide a more efficient route structure.

According to USPS officials, it is difficult to compare efficiency across delivery units because units vary so much in terms of size, location, weather, and other factors. Moreover, the officials said variation is to be expected when dealing with a delivery network the size and scope of USPS's. They stated, and we observed during our site visits, that delivery managers in the field (e.g., at the area, district, and delivery unit levels) are very familiar with those factors. This familiarity provides them useful insight into efficiency across units and aids them in determining the courses of actions for less-efficient units. Specifically, in all of the lower-ranked units we visited, USPS had begun taking actions to increase delivery efficiency. These actions included having delivery managers follow unit-specific checklists, bringing in managers from other parts of the country to train or replace the managers of lower-ranked units, having district and area officials provide support, and conducting training. For example:

- One of the districts we visited had replaced the entire management team at certain low-performing units and assigned district delivery managers to these units for months to guide and train the new management teams. District officials reported that this additional effort was starting to increase the efficiency of these units, including significant improvements in street efficiency and workhours used. District officials stated that at one low-performing unit that was running 300 to 400 hours over projected amounts each month, the efforts of the district delivery manager and new management team over a 9-month span resulted in the delivery unit operating at about 100 to 150 hours below projected amounts.

- In low-performing delivery units in another district, new delivery managers from other parts of the country were brought in to replace poor-performing managers, and the district provided DOIS refresher training to the delivery supervisors in these units. According to officials in this district and the lowest-performing unit in that district, these actions have increased managers' use of and confidence in DOIS, which is facilitating more efficient delivery.

Our analysis of USPS delivery data and observations at delivery units we visited were consistent with results of work performed by the USPS Office of Inspector General (OIG). A report in February 2009[16] found

[16]U.S. Postal Service OIG, Management Advisory – Management of City Letter Carriers' Street Performance, report number DR-MA-09-001 (Arlington, Va., Feb. 23, 2009).

inconsistencies in the use of some of these delivery tools and that supervisors were not monitoring street performance in accordance with USPS policies, for example:

- USPS policies on the number of DOIS reports supervisors must review daily were inconsistent.
- Supervisors did not always discuss performance issues with carriers, conduct street observations, or take corrective action when misconduct occurred.
- Increases in the number of routes and the size of the geographical area covered reduced supervisors' ability to provide effective "real-time" monitoring through street observations.

The OIG made a corresponding recommendation, and USPS delivery managers in headquarters stated they are taking actions to address it.

USPS Actions Have Improved Delivery Efficiency, but Lack of Performance Information and Implementation Challenges May Limit Future Savings

USPS has implemented a broad range of actions to improve delivery efficiency. These include billion dollar automation investments such as FSS, processes to expedite the adjustment of city carrier routes to respond to declining mail volumes, information systems that will support adjusting routes on a daily and long-term basis, and other programs to efficiently deal with new addresses and USPS delivery vehicles. These actions, along with other actions to address declining mail volumes, have helped USPS generate efficiencies in the delivery network, and USPS is relying on these actions to generate additional savings in the future. These future savings, however, may be limited by USPS's lack of performance information and implementation challenges for each of these actions.

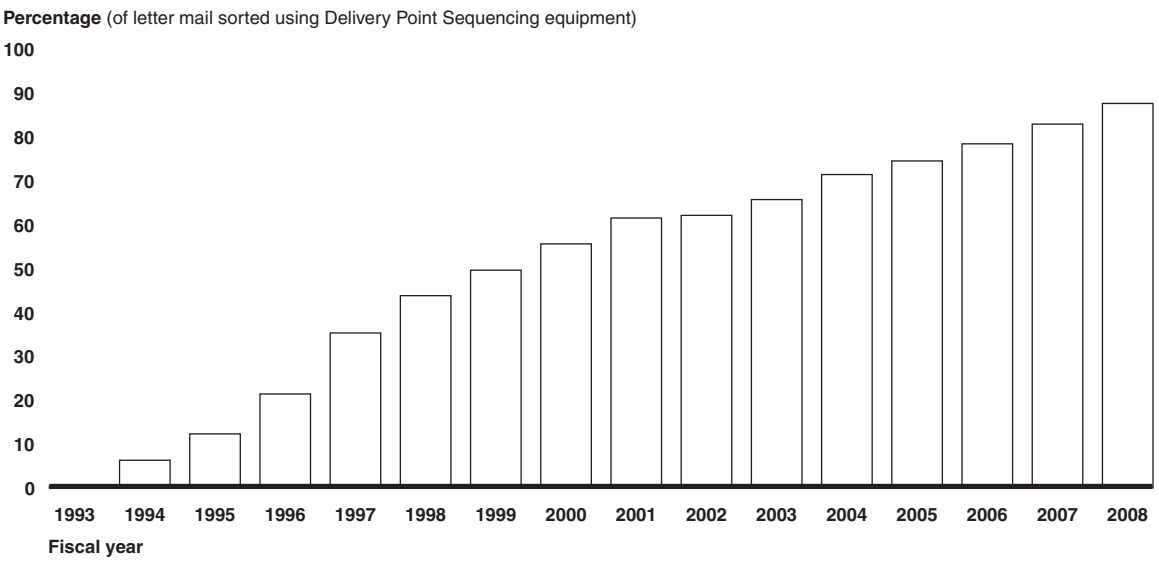
Individual Actions May Continue Generating Efficiencies and Savings, although They May Be Limited by Implementation Challenges

Flat Sequencing System

Description: USPS's FSS is the cornerstone of its efforts to improve delivery efficiency. FSS machines delivery sequence flat mail (mainly large

envelopes, catalogs, circulars, and magazines). FSS is based on the success USPS has achieved deploying DPS equipment, which delivery sequences letter mail, thus avoiding timely and costly manual sorting. USPS began implementing DPS on its carrier routes in 1993, and reports annual cost avoidance of about $5 billion through this effort. DPS percentages have continued to rise over the years. Figure 5 shows that for city delivery routes, about 90 percent of letters are delivery sequenced. Like DPS, the percentage of carrier routes that receive delivery sequenced letters have grown. At the end of 2008, 99 percent of all city delivery routes and 86.5 percent of all rural routes received delivery sequenced letter mail.

Figure 5: Delivery Sequenced Letter Mail Volume Trends for City Delivery

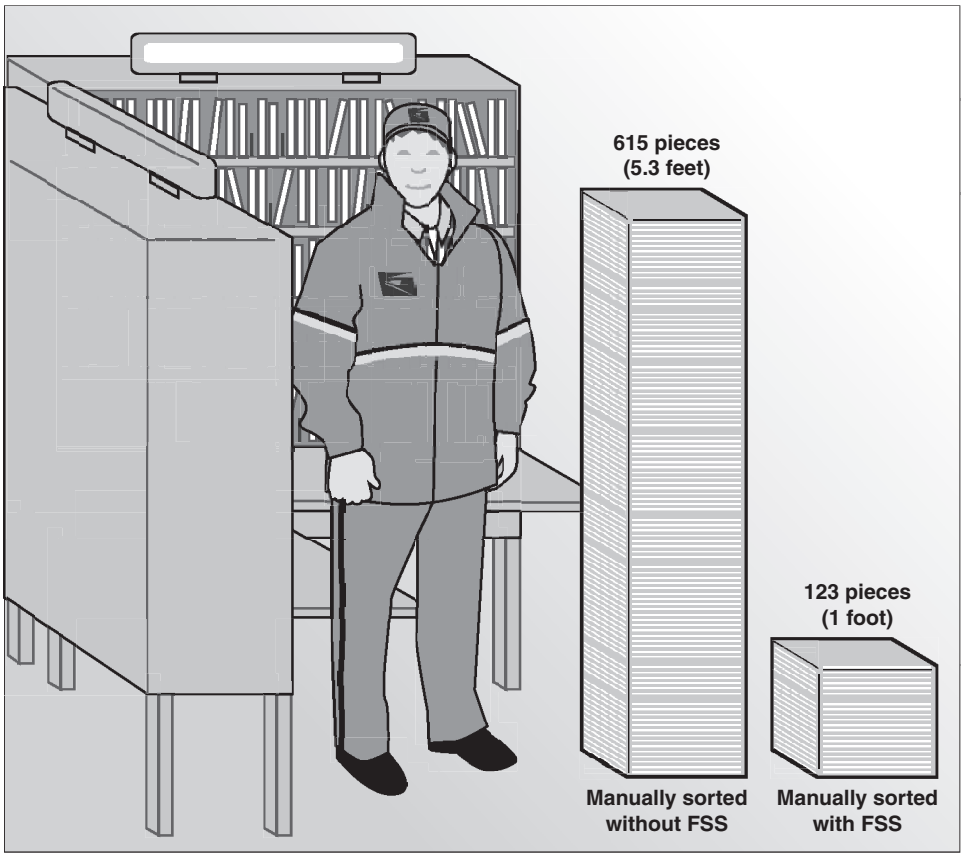


Source: USPS.

Prior to FSS, approximately 80 percent of all flat mail (46.6 billion pieces in 2008) was manually sorted into delivery order by carriers in the delivery unit. USPS has found that replacing manual mail processing with automation is the largest factor in improving operational efficiency and service performance. USPS expects FSS to increase in-office productivities by eliminating inefficiencies associated with the manual sorting of flat mail by carriers. Figure 6 illustrates that on an average route, a city carrier would manually sort nearly 500 less flat mail pieces each day once FSS automation is implemented. Thus, in addition to reducing the amount of flat mail that carriers would need to manually sort each morning, FSS would sort flat mail more quickly and accurately, and improve the consistency and timeliness of delivery. Based on lessons

learned from DPS (it has taken USPS 15 years to achieve a DPS percentage of about 90 percent for letter mail), USPS expects it will take less time for FSS to achieve high percentages (i.e., about 80 percent) of delivery sequence flats than occurred with letters.

Figure 6: Differences in Average Daily Flat Mail Volumes That Will Need to be Manually Sorted on City Carrier Routes Receiving FSS Mail



Source: GAO graphic based on USPS data.

Note: On FSS routes, city carriers, on average, will be manually sorting nearly 500 less flat mail pieces (the equivalent of 4 feet of flat mail) each day.

Because carriers will have less mail to manually sort, they will have more available time to deliver mail. According to USPS, this will create opportunities to consolidate or realign delivery routes, thereby reducing the need for carriers, carrier workhours, and overtime. These cumulative changes could then also reduce the need for delivery vehicles and facility space. Since a vehicle is assigned to most carrier routes, if certain routes

were consolidated, fewer delivery vehicles and less fuel would be needed. With less mail to sort manually, carriers would also need less casing equipment and facility space. USPS officials also noted that route adjustments may change the time customers receive their mail and collection service (i.e., they may receive mail earlier or later in the day).

Status: USPS has been planning and testing FSS for years and has recently begun deploying these machines. In December 2006, USPS committed $1.5 billion to test and purchase FSS machines, and prepare mail processing facilities for these machines. These efforts have included renovating and expanding plants and equipment to house and operate future FSS machines (each machine has a large footprint and is expected to need approximately 30,000 square feet). USPS also has taken extensive action to prepare delivery units to receive FSS mail—including working with delivery units that will receive FSS mail to ensure that they are certified according to USPS standard operating procedures and collecting data to assist delivery unit managers effectively inspect and adjust FSS-impacted carrier routes. USPS has coordinated its FSS efforts with carriers and their bargaining units and modified work rules and practices to incorporate FSS mail. In particular, agreements with the NALC and NRCLA have been signed to develop appropriate work rules and route inspection and adjustment procedures. In addition, USPS has taken steps to keep all stakeholders informed about FSS, such as posting material to a new FSS Web page,[17] and making public presentations.

Currently, USPS is in Phase I of FSS deployment (see table 4 for an FSS timeline). Three FSS machines are operating in the Processing and Distribution Center in Dulles, Virginia, and, as of the end of June 2009, are processing flat mail for 17 delivery units and 571 carrier routes in Northern Virginia.[18] The final FSS machine slated for Dulles is currently being tested and installed. Installations in the next three FSS sites (Columbus – three machines, Phoenix – five machines, and Kansas City – two machines) will continue in a limited capacity due to an unsuccessful first article test[19] from December 2008 (see table 4).

[17]See http://ribbs.usps.gov/index.cfm?page=flat.

[18]For maintenance training, two FSS machines are being installed at USPS's National Center for Employee Development in Norman, Okla.

[19]The First Article Test is the installation and evaluation of the first production unit to determine whether it conforms to all contract requirements for acceptance.

Table 4: Key FSS Developments

Date	Action
Oct. 2003	Contract awarded for development of FSS prototype machine.
Apr. 2006	Testing of FSS prototype machine in Indianapolis, Ind.
Dec. 2006	Board of Governors approved purchase of 100 machines for Phase I to be installed at USPS facilities throughout the country (areas with high flat mail volumes) that will cover 1,300 delivery zones.[a]
Sept. 2007	FSS preproduction machine installed at Dulles Processing and Distribution Center.
Dec. 2007	FSS preproduction machine begins live mail testing.
Feb. 2008	FSS preproduction machine fully operational—live mail is being processed.
Apr. 2008	Following declining mail volumes, number of delivery zones covered in Phase I increased to 1,800.
May 2008	First production FSS machine was installed in Dulles, Va.
Dec. 2008	First-article acceptance test on production FSS machine in Dulles, Va, was unsuccessful due to issues with throughput and system reliability. Actions are being taken to alleviate these issues and schedule another test.
Feb. 2009	Two FSS machines are processing flat mail in Dulles, Va.—the preproduction machine and the first production machine. Because of volume declines (7.2 billion flats since 2006), USPS increased the number of zones expected to support FSS to 1,993 and is reconsidering where the 100 FSS machines are to be deployed.
June 2009	Three production FSS machines are processing flat mail in Dulles, Va. The first phase of the first article retesting was completed, with the second phase scheduled for August 2009.
Oct. 2010	One hundred FSS machines for Phase I to be fully deployed.

Source: USPS.

[a]A delivery zone is a small geographic area represented by the five digits of a ZIP Code, and each zone contains a number of carrier routes.

Throughout this process, USPS has actively worked with members of the mailing industry to facilitate FSS implementation. Business mailers are the key source of flat mail and play a major role in preparing, transporting, and addressing flats. Incorporating FSS requirements into mailer's operations may require them to make significant investments in equipment and transportation so that their mail preparation activities are compatible with FSS. During a forum we hosted with mailer representatives in fall of 2008 and in more recent conversations, these representatives stated that USPS has done a good job of communicating and coordinating with them regarding FSS developments and challenges. Specifically, they recognized the following efforts:

- A joint USPS-mailer workgroup developed a communications plan to keep mailers and others informed of FSS developments.
- A joint USPS-mailer workgroup established rules for where the address must be placed on flat mail.

- A joint USPS-mailer workgroup is developing new methods for bundling flat mail.

- USPS has implemented processes for communicating FSS developments, which include the use of multiple channels such as USPS publications, the newly created FSS Web page, and presentations to mailers.

- USPS management has taken actions to respond to flat mail volume declines by, among other things, reconsidering where the 100 FSS machines are to be deployed.

Reported performance/opportunities for additional efficiencies: USPS has set financial and operational targets for FSS implementation and deployment. As part of the FSS's project justification, USPS estimated annual cost savings and productivity improvements.[20] These savings levels were predicated on USPS meeting the various operational targets; for example, each day FSS machines are expected to operate for 17 hours and delivery sequence over 280,000 flat mail pieces.

USPS has been tracking the results and performance of the current FSS machines in the Dulles facility. Delivery managers in headquarters and the Capital Metro Area—which has responsibility for the Dulles facility—have reported positive benefits. They noted in delivery units that have received FSS-delivery-sequenced flats for 2009, workhours are down compared with the same period in 2008, and carriers have been able to get to the street earlier in the day and handle more deliveries. Although these officials recognize that lower mail volumes factor into some of these savings, they noted that FSS helped USPS more effectively manage this decrease in workload. For example, in the Reston, Virginia, Delivery Annex, FSS implementation has resulted in

- eliminating nine full-time routes and two rotating carrier positions, and adding two auxiliary routes;[21]

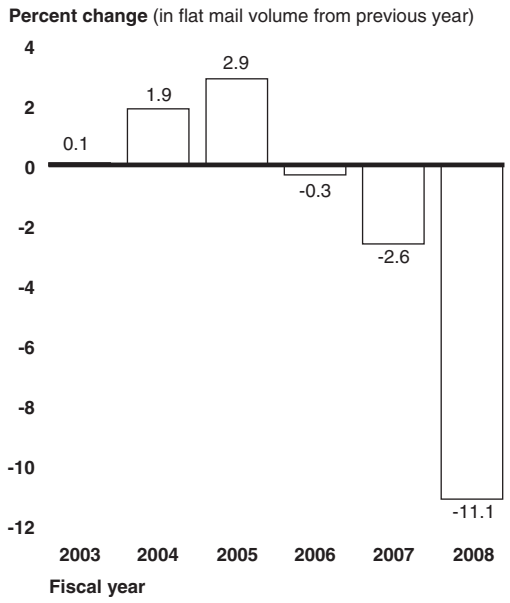
[20]Specific cost savings figures for FSS are considered proprietary by USPS, and are therefore not included in this report.

[21]An auxiliary route is a carrier route that is regularly scheduled for completion in less than 8 hours and is not up for bid to become a full-time route.

- reducing seven full-time regular positions and one transitional position from city carrier employment rolls;
- reducing one full-time regular clerk position;
- reallocating seven vehicles from city routes to rural routes; and
- removing 56 pieces of casing equipment, freeing up space in the annex for other purposes.

Challenges: Several challenges threaten USPS's ability to meet its FSS deployment milestones and cost-saving targets. The most pressing challenge is declining flat volumes, which have required USPS to re-evaluate its deployment plans (see fig. 7).

Figure 7: Annual Percent Change in Volume of Domestic Flat Mail, 2003–2008



Source: GAO analysis of USPS data.

USPS has reported flat volumes have declined by 7.2 billion pieces since 2006 (a 13 percent reduction), and USPS is projecting 2009 volumes to be the lowest in nearly 15 years. Taking these developments into account, USPS has already begun refocusing its FSS deployment through the following actions:

- *Expanding the geographic reach of certain FSS machines*. Previously, USPS estimated that the 100 FSS machines deployed as part of Phase I would serve 1,300 delivery zones. With flat volume declines and the need for the FSS machines to sort enough flats for USPS to gain appropriate return on its FSS investment, USPS increased the number of delivery zones to 1,993. In making these changes, USPS understands that other factors will affect USPS's operations based on revised deployment, such as transportation times to and from mail processing facilities to delivery units in the added zones, as well as FSS's ability to handle additional delivery zones.[22]

- *Adjusting deployment locations*. Because of significant flat volume declines, USPS is performing additional analyses to prevent over deployment of FSS machines and is developing an FSS Redirection Plan. Originally, each mail processing facility designated as an FSS site was slated to receive two to five FSS machines. USPS is also considering deploying fewer machines in certain sites (and in some cases, deploying single machines) and adding alternative FSS sites to optimize deployment.

Aside from these volume concerns, other challenges exist that will affect FSS deployment. In December 2008, the first FSS production machine did not pass its first article test at the Dulles facility; this key engineering test was originally scheduled for November 2008, but was pushed back due to machine performance issues. Although USPS has taken actions to coordinate with the manufacturer to resolve these issues, as of June 2009, FSS has not yet been passed this engineering test. Considering that the FSS contract schedule required that five FSS machines be operational at this time, nationwide deployment has been delayed and revised. These delays could hinder USPS's ability to fully realize efficiencies under FSS, particularly as the PRC recently testified that it took nearly a decade for DPS efficiencies to be fully realized.[23] USPS is taking actions to minimize the effects of this delay, including having the manufacturer continue installation of FSS machines at the initial deployment sites and

[22]For example, it is estimated that each day it will take FSS operators 17 minutes to update the machine for each additional delivery zone. Thus, as the number of delivery zones expands, so too will the amount of time needed daily to adjust the FSS machines to handle each new zone.

[23]Statement of John Waller, Director of Office of Accountability and Compliance, on behalf of the Postal Regulatory Commission, Before the U.S. House of Representatives Subcommittee on Federal Workforce, Postal Service, and the District of Columbia, Committee on Oversight and Government Reform, May 20, 2009.

accelerating the installation schedule. Also, the USPS OIG has reported on the flats volume and FSS engineering challenges facing USPS. The OIG has issued multiple reports on the status of FSS, including a December 2008 report that outlined the risks associated with these challenges.[24]

FSS is also going to have a noticeable impact on its carriers, postal customers, and mailers, as USPS will need to make operational adjustments to effectively achieve savings. In terms of the carriers, they will need to adjust to a change in their office and street times, as well as route adjustments based on FSS operations, which may result in changes in the number or deployment of full- and part-time carriers. Furthermore, customers may also be impacted by FSS operations in that due to more efficient sorting, their flat mail should be delivered in a timelier, more consistent manner. However, the potential route adjustments may impact the time customers receive their mail delivery and collection service each day (i.e., earlier or later). Furthermore, while mailers expressed optimism that the FSS program would reduce USPS costs, they also noted that challenges remain. For example, they noted USPS's deteriorating financial condition could impact its ability to acquire the capital funds needed to purchase newly developed equipment that will support FSS operations. Specifically, they stated that USPS equipment to handle flat mail bundles will be essential for them to prepare flat mail in a cost-effective manner. These mailers also stated that uncertainty remains regarding the pricing of FSS mail—as FSS reduces costs for USPS, postal rates for flat mail will need to be lower than they would have been if FSS had not been implemented for mailers to benefit from FSS.

Considering the impact that FSS is projected to have on postal stakeholders, including employees, mailers, and the public, communicating with these parties regarding the status of FSS is crucial. USPS has already taken actions, including establishing a Communications Plan to notify stakeholders of FSS developments; working with mailers as part of the Mailers Technical Advisory Committee; and coordinating with

[24]USPS OIG, Audit Report-Flats Sequencing System Contractual Remedies, July 1, 2009, report number CA-AR-09-006; USPS OIG, Audit Report-Flats Sequencing System: Program Status, December 23, 2008, report number DA-AR-09-001; USPS OIG, Management Advisory-Management of Contract Changes – Flats Sequencing System, December 1, 2008, report number CA-MA-09-002; USPS OIG, Audit Report – Flats Sequencing System: Production First Article Testing Readiness and Quality, June 4, 2008, report number DA-AR-08-006.

employees, the NALC, and the NRLCA, to find ways incorporate FSS into carrier operations.

City Carrier Route Inspections, Adjustments, and Carrier Optimal Routing

Description[25]: City carrier routes—which may include time spent in the delivery unit preparing mail for delivery (e.g., office time) and then time spent delivering mail (e.g., street time)—are set to take as close to 8 hours of daily work as possible, which USPS considers an efficient route. This determination is based on multiple factors, including mail volumes and types, number of deliveries, and travel times. If either USPS or a carrier identifies a significant change in one or more of these variables (for example, if mail volumes and the number of deliveries increase), these parties have collectively bargained agreements that provide procedures to have the route inspected to determine if the route needs to be adjusted to fit an 8-hour workday.

Historically, USPS and the NALC have had three agreed-upon processes for adjusting city carrier routes:

- ***Formal Route Inspection*** is management initiated and involves observing a carrier's office and street activities for 1 or more days, counting and recording the mail that the carrier handled, and recording the time the carrier uses for each activity. A formal inspection is conducted on every carrier route within the delivery zone.
- ***Minor Route Adjustment*** is management initiated and involves using a carrier's office and street time data, number of addresses where mail is delivered, and latest route inspection data.
- ***Special Route Inspection*** is carrier or management initiated and conducted in the same manner as a formal route inspection, and may only involve one or more carrier routes. A special inspection may be required if the carrier is experiencing conditions such as excessive overtime, consistently leaving or returning to the office late, or significant change in number of deliveries.

USPS does not have strict policies on the timing and frequency of city carrier route inspections. Rather, delivery managers are to continually

[25]The system of route inspections and adjustments and Carrier Optimal Routing only pertains to city delivery carriers. As a comparison, rural carriers follow collectively bargained guidelines that require annual Mail Counts to determine the scope of each rural carrier's route for the upcoming year.

monitor routes to identify when route inspections and adjustments are needed. Consequently, the timing and frequency of city carrier route inspections and adjustments vary throughout the country. According to USPS's system for tracking route inspections and adjustments (the National Route Adjustment System), between 2006 and 2008, USPS conducted formal route inspections of 90,697 city carrier routes.[26] During these 3 years, the annual number of formal route inspections has fluctuated from a low of 17,633 inspections in 2007 to a high of 46,498 inspections in 2006.

In making route adjustment decisions—mainly determining how to restructure city carrier routes—USPS has developed the Carrier Optimal Routing (COR) system. COR is a computerized management tool that uses digital mapping, algorithms, and route inspection data to create efficient city carrier routes that are more compact and contiguous. Among COR's benefits are reduced vehicle-related expenses, minimized street time, and enhanced carrier safety through better lines of travel. Since COR's introduction in 2004, USPS headquarters has trained over 250 employees nationwide to develop COR's database, which is fundamental to its success. These employees were trained to collect detailed delivery and geographic data for the database including, among other things, street address ranges, street prefixes and suffixes, street names, directionals, one-way streets, traffic signs, and parking restrictions.

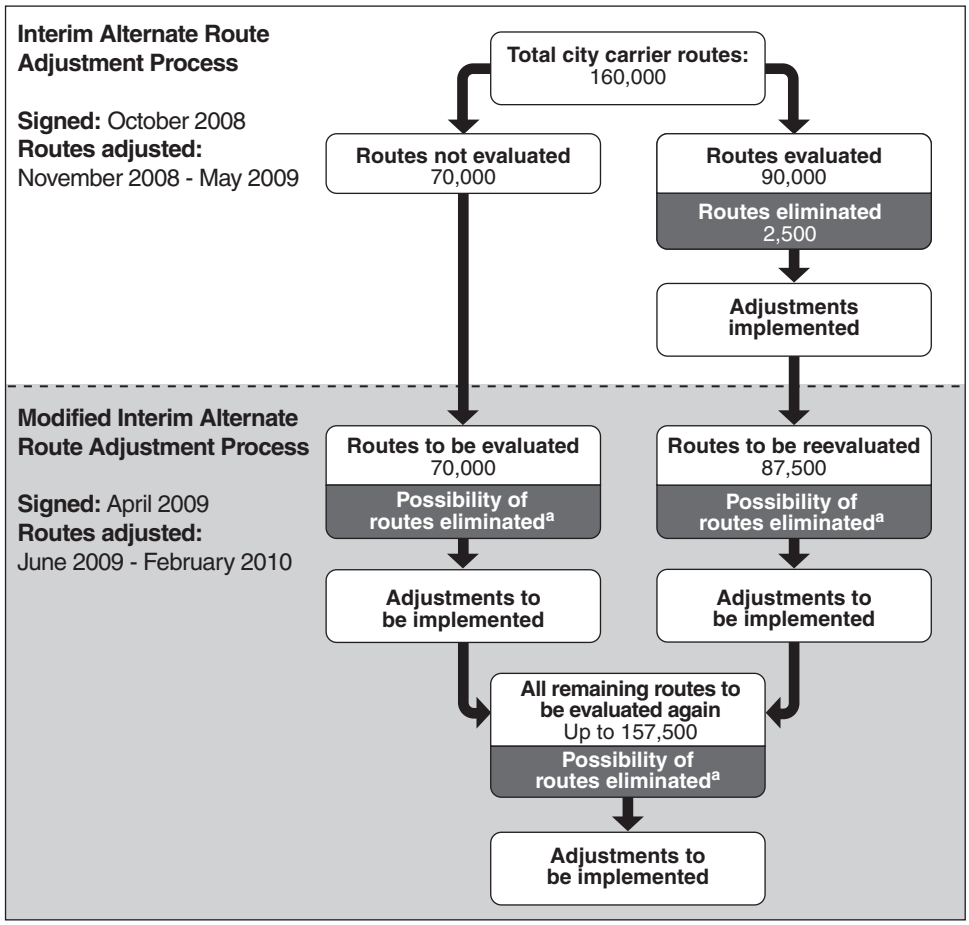
Status: Due to its increasing financial challenges brought on by the declines in mail volume, USPS delivery managers were concerned that certain city carrier routes were not aligned properly (that the expected workload on the routes from declining volumes did not necessitate 8 hours of work). USPS initiated conversations with the NALC to discuss options for conducting route inspections and adjusting routes. Both parties recognized the cost and time associated with the three aforementioned options limited the number of routes that could be inspected and adjusted; therefore, they agreed to make significant modifications to the process. In October 2008, USPS and the NALC reached a historic agreement on an Interim Alternate Route Adjustment Process (IARAP) aimed at enhancing USPS's ability to quickly respond to declining mail volumes and improve the efficiency of carrier operations. IARAP was developed to be expeditious, less contentious, data driven, and jointly administered. USPS and the NALC began evaluating routes using this process in October 2008.

[26]The same route may have been inspected more than once during this 3-year period.

Joint USPS and NALC route evaluation teams were established in each district to work with delivery unit managers and union representatives to evaluate and adjust routes. Through this effort, 90,000 routes were evaluated and adjustments were implemented between January and May 2009, with 2,500 routes being eliminated.

USPS and the NALC jointly evaluated IARAP between November 2008 and March 2009, and, because opportunities for improvement were identified, the process was modified. A Modified Interim Alternate Route Adjustment Process (MIARAP) was agreed to by both parties and signed in early April 2009, and included, among other things, a formal dispute resolution process (a diagram of both processes is illustrated in fig. 8).

Figure 8: Summary of the Interim and Modified Interim Alternate Route Adjustment Processes



Source: GAO analysis of USPS operations.

[a]Depending on the results of the route evaluations, a segment of these routes could be eliminated.

Under MIARAP, all 157,500 city carrier routes are to be evaluated. Starting in June 2009, the 70,000 routes that were not evaluated under IARAP are to be evaluated and the remaining 87,500 routes that were evaluated under IARAP are to be re-evaluated. By the end of June 2009, MIRAP had eliminated an additional 1,800 routes. Starting in the fall of 2009, all routes will be re-evaluated using the latest mail volume data and adjusted if necessary.

USPS also has taken actions to keep stakeholders such as its employees, unions, mailing industry, and customers informed of these developments. These actions include listing the potential routes to be included in the

IARAP adjustments on its Web site, having address updates available for the mailers at the end of each month, and establishing policies and procedures for notifying customers if they will be affected by these changes.

As these route adjustment developments have taken place, so too has COR implementation. Currently, COR is focused on delivery zones (1) where FSS will be deployed and/or (2) that contain 10 or more city carrier routes. As of March 2009, the COR database is complete for 2,904 (47.5 percent) delivery zones, and 3,216 (52.5 percent) remain to be completed. Of the FSS delivery zones, the COR database is completed for 1,318 (81.5 percent); 299 (18.5 percent) remain to be completed. According to USPS, about 45 of its 74 district offices used COR to perform route adjustments during IARAP. USPS attributed this low percentage to the very time-consuming and technical nature of making route adjustments using COR. USPS and the NALC have since agreed that the route evaluation team will jointly use COR, where it is available, to optimize and adjust routes under MIARAP. USPS also plans to establish a network of COR subject matter experts. Each area office is to identify 4 COR users to become subject matter experts (36 nationwide). Headquarters will train these employees and keep them updated on the latest COR developments. The COR subject matter experts are to train, assist, and update others within their respective area offices.

Reported performance/potential opportunity for additional efficiencies: USPS stated that significant savings should be derived after inspecting and adjusting routes based on the agreements with the NALC. According to USPS, these efforts could result in annualized savings of nearly $1 billion, and result in more consistent delivery service; increased employee satisfaction; and reduced facility space needs, miles driven, and fuel use. Some of the expected savings will be achieved in 2009, but the majority of the savings will not be realized until 2010.

The goal of COR is to create an optimal routing scheme that would reduce workhours, vehicle mileage, fuel, and energy costs; and improve carrier safety and service. According to USPS delivery officials, 811 city carrier zones (13.3 percent of all city delivery zones) and over 16,000 routes (about 10 percent of all city carrier routes) have been adjusted using COR. USPS stated that COR will continue to be a significant part of its delivery strategy for 2009 and 2010.

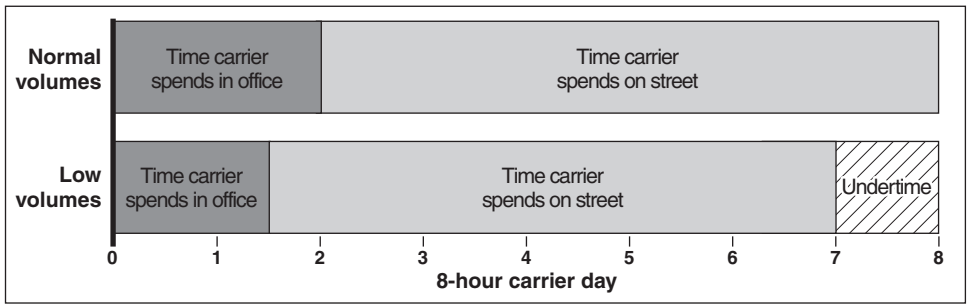
Challenges: Challenges remain regarding route inspections and adjustments, as well as the use of COR when doing so. USPS will be

challenged to effectively implement and monitor the vast numbers of route inspections and adjustments made as part of its agreements with the NALC. Achieving savings will require major efforts from not only USPS, the carriers, and the NALC, but also from mailers who will need to update their address lists with the route adjustments. In terms of COR, USPS area and district officials cited shortages in COR-trained personnel to input route and volume data and perform the route adjustments. Area officials we spoke to said that the timeline mandated by headquarters to fully implement COR for all delivery units was not sufficient given the amount of time it takes to collect and input the data, and many units still do not have complete data inputted into COR. As USPS continues to expand the reach of its route adjustment process, it will need to keep stakeholders informed of these developments, particularly as these changes result in different delivery times for customers and modifications to mailer operations.

The City Delivery Pivoting Opportunity Model (CDPOM)

Description: CDPOM is a scheduling tool that local delivery managers can use to align available staffing and resources with delivery needs. As we mentioned previously, each carrier route is established so that on an average day, the expected workload will approximate 8 total hours of office and street time. CDPOM helps city delivery managers make daily adjustments (called pivots) to deal with daily unstaffed routes. This may involve transitioning other carriers who (1) may not have enough volume to support 8 hours of work on their own routes (i.e., the concept of "undertime" which is illustrated in fig. 9) or (2) may have volumes that support 8 hours of work on their own routes, but will work overtime to assist on the unstaffed routes. Delivery managers stated that in many instances it is more cost effective to incur overtime in these instances rather than incur the costs associated with bringing in a substitute carrier for the day.

Figure 9: Hypothetical Example of City Carrier "Undertime"



Source: GAO analysis of USPS operations.

Note: The above chart shows how undertime may arise due to lower-than-expected mail volumes. This example assumes a normal 8-hour workday and that other factors on the route such as number of deliveries and mileage traveled (everything except for mail volume) remain constant.

Historical and projected volume and workhour data from DOIS is fed into CDPOM, which in turn provides output on the expected workload and workhours needed that day for each carrier route in a particular delivery unit. Local delivery managers use the output from CDPOM, along with other data such as the number of available employees, weather, and accountable mail volume[27] to determine the extent to which pivoting is needed a particular day. The supervisor discusses potential pivoting opportunities with the potentially impacted carriers and then sets the route schedule and pivoting plan for the day. CDPOM then tracks how closely delivery units are able to take full advantage of pivoting opportunities.

Status: Pivoting began primarily as a "seasonal" tool to manage vacant routes, such as during summer, when carriers often take vacation and mail volume is lower than other times of the year. However, as overall mail volumes have dropped in the past 2 years, delivery units have significantly expanded the use of pivoting from a seasonal to a daily management tool.

Reported performance/potential opportunity for additional efficiencies: According to USPS delivery managers, the use of CDPOM has resulted in more efficient delivery operations. USPS reported that organization-wide use of CDPOM has contributed to significant gains in the number of

[27]Accountable mail includes Express Mail, Certified Mail, and Registered Mail, and refers to mail that requires the signature of the addressee (or addressee agent) upon receipt to provide proof of delivery or indemnification for loss or damage.

deliveries per route and reductions in overtime hours. Specifically, in 2008, USPS reported that CDPOM helped increase the number of deliveries per hour by over 4 percent (to nearly 63 deliveries per hour) while reducing city carrier overtime hours by more than 25 percent. Although USPS expects continued efficiency gains from the use of CDPOM, no performance targets or savings have been reported for 2009. It is important to note, however, that fewer pivoting opportunities may be available in the future based on the vast number of potential route adjustments, particularly if volumes continue to decline or trend back up.

Challenges: Despite its success, the program still faces some challenges. During our site visits, we found that employee acceptance of pivoting varied across delivery units. According to NALC officials, carriers would generally rather not pivot since they feel a sense of ownership of their particular routes. USPS delivery managers we met with indicated some resistance in delivery units where carriers were used to working overtime and said it can be difficult to pivot carriers onto unstaffed routes when the projected undertime on their route is only slightly less than 8 hours for that day. While it is possible to capture 30 or 45 minutes of undertime from carriers, it is much more challenging to capture 15 minutes or less.

Delivery Point Growth Management Program

Description: Growth in USPS's delivery network presents another important challenge to improving efficiency of carrier delivery operations. As noted, although overall mail volume has been decreasing, USPS's delivery network grows by more than 1 million addresses each year. USPS uses a Growth Management Tool to provide delivery managers with (1) procedures for contacting local developers to plan for growth and (2) standardized guidance for determining an appropriate route type and delivery mode when establishing delivery for new addresses. The Growth Management Tool identifies key criteria for making decisions, such as considering low-cost means of delivery. As stated earlier, delivery costs vary with the type of carrier route (city, rural, or contract) and delivery mode.

Status: USPS has increased the number of lower-cost delivery routes and modes as it has taken on more addresses. Table 5 shows how USPS managed the net increase of 12.6 million new delivery points between 2000 and 2008 by adding only 1,633 routes. USPS made a concerted effort to promote the use of rural and highway contract routes (which, as described earlier, are less costly than city routes), while also promoting the use of more efficient delivery modes, like centralized delivery, wherein mail is delivered to a limited number of locations rather than to every business and residence.

Table 5: Changes in Carrier Delivery Routes and Modes, 2000–2008

	Change from 2000 to 2008	Other information
Summary		
Routes[a] (net)	1,633	See below.
Delivery points[b] (net)	12.6 million	See below.
City		
Routes (net)	-6,876	This decline was primarily due to a reduction in the number of foot and park and loop routes.
Delivery points (net)	3.9 million	USPS reduced over 1 million costly door deliveries, while adding 5.2 million curbline, centralized, and Neighborhood Delivery Collection Box Unit (NDCBU) deliveries[b]
Rural		
Routes (net)	7,589	Most of this increase was comprised of additional curbline and dismount routes.
Delivery points (net)	8.1 million	Half of these were curbline deliveries, and the use of centralized and NDCBU deliveries increased by over 63 percent.
Contract delivery		
Routes (net)	920	Similar to rural routes, most of this increase was attributable to increasing numbers of curbline and dismount routes.
Delivery points (net)	0.6 million	Most new deliveries are to curbline mailboxes, but the use of centralized delivery more than tripled.

Source: GAO analysis of USPS data.

Note: Numbers may not add due to rounding.

[a]USPS has four main carrier delivery route categories: (1) foot routes (4 percent of carrier routes in 2008) limited to city carriers—for this type of route, the carrier walks to deliver mail and does not drive a vehicle; (2) park and loop routes (34 percent) when a letter carrier parks the vehicle and walks out and back over one or more streets, delivering mail away from and looping back to the vehicle; (3) curbline routes (49 percent) when a letter carrier (walking or in a vehicle) delivers to customer mailboxes at the curb; and (4) dismount routes (12 percent) when a letter carrier leaves a vehicle for one or more deliveries and then returns to move the vehicle to the next address.

[b]USPS has four main modes of carrier delivery: (1) other (30 percent of addresses in 2008), which are primarily door deliveries; (2) curbline (41 percent); (3) centralized (16 percent); and (4) NDCBU (13 percent), which are centralized units of more than eight individually locked compartments that receive mail.

Recent developments may impact the manner in which USPS manages growth in the future. Members of Congress have raised concerns about USPS's use of outsourcing, which includes contract delivery service, and we have reported that USPS did not have a comprehensive mechanism for measuring results or actual savings of these actions.[28] Without cost-savings data, USPS managers, stakeholders, and Congress cannot assess the value

[28]GAO, *U.S. Postal Service: Data Needed to Assess the Effectiveness of Outsourcing*, GAO-08-787 (Washington, D.C.: July 24, 2008).

and risk of outsourcing. Furthermore, tied to the joint USPS/NALC Interim Alternative Route Adjustment Process, these parties entered into a Memorandum of Understanding on the Assignment of City Delivery in October 2008 that limits USPS's use of contract delivery service by stating that, absent a boundary agreement between the rural and city letter carrier unions, all new growth will go to city routes unless such growth would create inefficiencies.

Reported performance/opportunities for additional efficiencies: USPS has not reported on past or projected savings and has not established performance targets.

Challenges: USPS will continue to be challenged by customers and employees in promoting these lower-cost forms of delivery. For example, centralized delivery is often unpopular with residents in new residential developments, and developers may be unwilling or unable to work with the local postmasters to utilize centralized delivery. Furthermore, USPS efforts to advocate lower-cost forms of delivery may need to incorporate the changes related to the use of contract delivery service and the requirement that new delivery points adjacent to existing city routes will be served by city carriers. USPS delivery managers in headquarters stated they are in the process of revising the Growth Management Tool to account for these new factors.

Manage Vehicle Fleet

Description: USPS owns and operates about 198,000 vehicles that support USPS's delivery and collection operations. To improve delivery efficiency, USPS is taking actions to reduce, reallocate, and install Global Positioning Systems (GPS) in its delivery fleet. Specifically, USPS is taking the following actions:

- *Reallocating vehicles to rural routes*. USPS is reallocating USPS-owned vehicles used on city carrier routes to rural routes pursuant to an agreement with the NRLCA. USPS officials have stated that in certain geographic areas, it is more cost effective for USPS to own these vehicles than to reimburse rural carriers for the use of their private vehicles. USPS is coordinating these efforts with IARAP and MIARAP, as they may result in excess vehicles due to the elimination of motorized city delivery routes.

- *Reducing delivery vehicle fleet*. USPS is attempting to reduce its delivery vehicle fleet through such actions as its route reduction and optimization strategies and its Growth Management Program. This includes attempting to increase the number of foot delivery routes, particularly for routes that are adjacent to USPS delivery units.

- *Testing use of GPS*. USPS is testing the use of GPS in USPS-owned delivery vehicles. These systems collect information on miles traveled, deviations from routes, idle time (with the engine on or off), and numbers of stops or park points, thereby providing delivery managers with a "breadcrumb trail of vehicle activity."

  Status: In 2008, USPS purchased over 1,350 delivery vehicles to replace vehicles used on existing city delivery routes and redeployed the older vehicles to selected rural routes. USPS also installed GPSs (each unit costs about $250) in 500 delivery vehicles in Chicago as a pilot program. Due to the positive response associated with these systems, they are being deployed in the Albuquerque, New Mexico, and Northern Virginia districts.

  Reported performance/opportunities for additional efficiencies: Although USPS estimated that reallocating USPS-owned delivery vehicles will save about $1.3 million each year, a USPS Vehicle Operations Manager stated that no actual cost savings have been achieved to date, but that intangible benefits related to carrier safety and retention have been realized. USPS did not report cost-saving information or targets for the efforts focused on reducing the delivery fleet or installing the GPSs.

  Challenges: The extent that USPS will achieve these savings will depend on its ability to overcome certain challenges related to improving its vehicle fleet. For example, many of the delivery vehicles being transferred to rural carriers are older vehicles that may require additional maintenance and incur related costs. Furthermore, successfully implementing these actions will require cooperation between USPS, the carriers, and NALC representatives because of the potential impact on carrier operations (e.g., changing from vehicle to foot routes or using the GPSs).

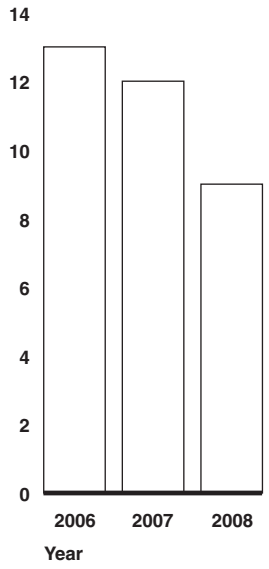
USPS's Actions Have Collectively Helped Improve Delivery Efficiency, but Lack of Performance Targets and Results May Hinder Future Savings

The actions USPS has taken to improve delivery efficiency, along with reductions in workload from declining mail volumes, have led to savings in regular and overtime workhours and their related costs. For its rural and city delivery operations between 2006 and 2008, USPS reported reducing nearly 10 million workhours while absorbing 2.7 million additional addresses. These reductions were the result of city and rural carriers needing fewer workhours to complete their routes and USPS being able to pivot or adjust the carrier routes to capture the undertime associated with increased DPS percentages and declines in mail volume. USPS also

reported reducing its complement by 10,000 full-time city carriers through attrition.

Specific to city delivery operations, USPS reported saving over 17 million city delivery workhours (nearly $680 million) in 2008 while absorbing an additional 1 million addresses and cutting overtime hours and overtime costs each by about 29 percent. As figure 10 shows, overtime workhours as a percentage of total workhours have been reduced during this time for city delivery units tracked by DOIS—a trend likely related to the drop in mail volumes during these years.

Figure 10: Mean Overtime Workhours as a Percentage of Total Workhours, by Year, for Selected City Delivery Units

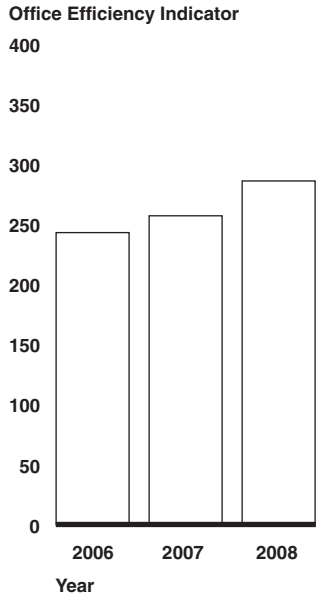


Source: GAO analysis of USPS data.

Note: Data cover approximately 7,300 city delivery unit finance numbers that are tracked in DOIS.

USPS has also achieved a steady increase in the efficiency of its delivery operations in the office as measured by USPS's OEI since 2006 (see fig. 11).

Figure 11: Mean Office Efficiency Indicator Performance, by Year, for Selected City Delivery Units



Source: GAO analysis of USPS data.

Note: Data cover approximately 7,300 city delivery unit finance numbers that are tracked in DOIS. The Office Efficiency Indicator is a calculation of cumulative deliveries divided over the total office workhours. USPS prefers to track a measure of aggregate OEI, but the trend over the last few years is the same.

Currently, USPS is projecting for 2009 that its delivery operations will eliminate about 37 million workhours (reducing costs by approximately $1.4 billion[29]) compared to 2008. Specifically, USPS is projecting a 27.9 million workhour reduction ($1.1 billion in savings) from city delivery operations and an 8.8 million workhour reduction ($285 million in savings) from rural delivery operations. These savings are predicated on reducing the number of city carrier workhours through attrition and the nonrenewal of transition workforce. USPS has made progress in achieving this goal, as it has already reported saving almost 26 million city and rural delivery workhours between October 2008 and mid-May 2009, compared with the same period last year.

[29]According to USPS delivery officials, these estimates are based on workhour rates that can vary throughout the year.

USPS, however, has not identified specific cost-saving targets and results for many of the aforementioned delivery efficiency actions, including IARAP, MIARAP, CDPOM, delivery point growth management, or vehicle fleet management. USPS headquarters delivery officials stated they do not have specific cost-saving targets or results for many of their initiatives because it is difficult to isolate the impact of one initiative from the influence of other factors that can affect delivery, many of which occur outside the purview of delivery managers (e.g., declining mail volumes, staffing changes, and delays in receiving mail from the processing plant). Although we recognize that isolating the impact of an initiative from other factors can be difficult, we note that USPS has done so in other areas. For example, USPS has estimated annual cost savings and productivity improvements for FSS. However, without targets in place against which to measure performance, USPS has no way to assess and report on the progress of its major delivery initiatives, determine whether changes should be made, and hold managers accountable for achieving targets. As a result, USPS lacks a key management tool for tracking the savings associated with each initiative.

We have previously reported on the importance of cost-saving targets and their benefits for selected USPS operations.[30] Furthermore, provisions in the Postal Accountability and Enhancement Act required USPS to, among other things, track cost savings and benefits for its network realignment actions and establish goals for delivery service performance.[31] Developing and implementing performance targets and results can help inform stakeholders such as USPS senior management, local delivery managers, employees, unions, mailers, customers, and Congress, about the effectiveness of these actions, as well as help postal managers allocate increasingly scarce resources as efficiently and effectively as possible.

USPS Has Proposed Moving to 5-Day-a-Week Delivery

USPS has proposed moving to 5-day delivery to help it address its financial problems. By way of background, in January, the Postmaster General asked Congress to eliminate the long standing appropriation provision

[30]GAO, *U.S. Postal Service: Intelligent Mail Benefits May Not Be Achieved if Key Risks Are Not Addressed*, GAO-09-599 (Washington, D.C.: May 6, 2009), and *U.S. Postal Service: Mail Processing Realignment Efforts Under Way Need Better Integration and Explanation*, GAO-07-717 (Washington, D.C.: June 21, 2007).

[31]Sections 301 and 302 of the Postal Accountability and Enhancement Act (Pub. L. No. 109-435), enacted on December 20, 2006.

mandating 6-day delivery. He stated that if 6-day-a-week delivery became unaffordable, it could become necessary to temporarily reduce mail delivery to only 5 days a week. In May 2009, USPS testified that it can no longer afford the costs of 6-day delivery and advocated the move to 5-day delivery. Specifically, USPS testified that it is proposing to eliminate delivery on Saturday because delivery volume is generally lighter on Saturdays and that most business, professional, and government offices operate on a traditional 5-day week from Monday through Friday. USPS stated that it is studying this proposal and engaging with customers to understand their needs and concerns, recognizing that reducing the frequency of delivery would have an impact on service.

This study is an opportunity to begin identifying and addressing some of the challenges that would be associated with such a major change. For example, in 2008, USPS estimated that eliminating delivery on Saturday would save $3.5 billion annually, assuming that this reduction would have no effect on mail volume. Also in 2008, a PRC study estimated that USPS could annually save $1.9 billion by reducing delivery to 5 days, based on some different assumptions, such as assuming that this reduction would lead to a 2 percent volume decline.[32] This year, PRC testified that because changing to 5-day delivery would result in a nationwide change of service, USPS would be required to bring it before the PRC, which then would conduct a review, solicit public input, and issue an advisory opinion on the proposed change.[33]

To date, there are divergent views on the merits of 5-day delivery. For example, the Association of Postal Commerce (a national group of businesses and organizations using the mail) recently testified that USPS will not be able to remain financially self-sustaining for much longer under its current model unless it is given freedom to make changes in this and other areas. This association explained that "desperate times call for desperate measures and the time has come to match delivery days to mail volume" even though many of its members have business plans that depend on 6-day delivery. In contrast, the Mailers Council (a group of

[32]PRC, *Report on Universal Postal Service and the Postal Monopoly* (Washington, D.C., Dec. 19, 2008).

[33]When USPS determines that there should be a change in the nature of postal services which will generally affect service on a nationwide or substantially nationwide basis, it is required to submit a proposal to the PRC that requests an advisory opinion on that change within a reasonable time period prior to the change. PRC is required to hold a hearing on the proposal before issuing its written opinion. 39 U.S.C. § 3661.

mailers that collectively generate 70 percent of mail volume) testified that it opposed 5-day delivery on the basis that USPS has not explained how it would be implemented. Postal labor union officials have also opposed 5-day delivery. For example, the President of the NALC expressed strong opposition to 5-day delivery, stating that "This is not the time to undercut public and mailer respect for, and reliance on, the Postal Service by reducing service drastically and counterproductively to 5 days a week." He explained that "The nation's mailers have diverse needs and business is conducted 6 days a week in America. In general they want 6-day delivery – need 6-day delivery – and expect 6-day delivery." At a May 2009 hearing, USPS announced that it has a new study under way regarding 5-day delivery, which USPS expects to release in the summer of 2009.

Conclusions

USPS is facing a number of financial challenges as mail volumes have declined significantly. As such, USPS has stated that actions to increase efficiency will become increasingly important throughout its entire network, particularly in the delivery area. USPS has worked with its mailers, employees, and unions to take significant actions aimed at promoting more efficient delivery operations. These actions resulted in almost $765 million dollars in reported savings from workhour reductions between 2006 and 2008, with more potentially on the horizon. Achieving future progress, however, may be difficult. Uncertainties remain, for example, if volumes continue to fall, will USPS be able to continue cutting delivery-related costs without severely reducing the quality of delivery service? Or, if volumes rise, will USPS be able to absorb the additional volumes without incurring significant additional costs? We are encouraged by the efforts USPS has taken with its carrier employees and their unions to promote more efficient delivery operations. The lack of specific performance measures for some of these actions, however, limits USPS's understanding of which specific initiatives achieve the greatest savings or the extent to which others may not have achieved intended results—information that is particularly important in a time of financial constraints and limited resources.

Recommendations

We recommend that the Postmaster General establish cost-saving targets and track results for each of the major USPS initiatives to improve delivery efficiency.

Agency Comments and Our Evaluation

The U.S. Postal Service provided written comments on a draft of this report in a letter from the Acting Senior Vice President, Delivery Operations, dated June 18, 2009. These comments are reproduced in appendix II, and our evaluation of them is summarized below. USPS also provided technical comments, which we incorporated where appropriate.

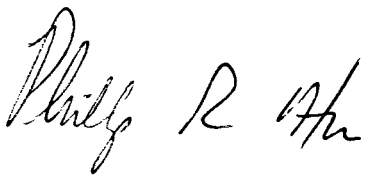
USPS generally agrees with our assessment of mail delivery operations and reiterated the challenges it faces in an environment of declining volumes and expanding delivery network. USPS stated it has taken actions to improve delivery efficiency, and realizes that in spite of these accomplishments, further efficiencies are both needed and achievable. USPS did not agree, however, to fully implement our recommendation for establishing and tracking cost-saving targets for its major delivery initiatives. Specifically, USPS stated it adheres to our recommendation for its major capital investment initiatives (e.g., FSS), all of which go through a rigorous process to establish an expected return on investment. For other major delivery initiatives, such as the Interim Alternative Route Adjustment Process, City Delivery Pivoting Opportunity Model, and Delivery Point Growth Management which deal with a particular work practice or address an unforeseen situation such as the current severe economic recession, USPS does not set formal cost-saving targets and does not measure specific cost savings. USPS stated that for these initiatives, (1) management does expect that results will be achieved, (2) expected savings for these and major initiatives are built into the operating budget, and (3) steps are taken to measure success in other ways such as tool usage and number of employees trained.

We recognize that USPS has already established cost saving targets for its major delivery initiatives that are also significant capital investments, such as FSS. Our recommendation, however, extends the establishment of cost-savings targets to all major delivery initiatives. In making our recommendation, we did not envision that establishing cost-savings targets for its major delivery initiatives would require a highly formalized process, such as the one used for USPS's capital investment initiatives. We are neither prescribing nor suggesting how USPS should establish cost-savings targets for its major delivery initiatives. USPS can use either an existing process or develop a new one for establishing these cost-savings targets. Once established, these targets will provide USPS with benchmarks to evaluate the performance of major delivery initiatives, assist managers in understanding which initiatives achieved the greatest savings or the extent to which other initiatives may not have achieved intended results, and hold managers accountable for achieving these targets. While we recognize the value of USPS measuring the success of its

initiatives in other ways, due to its escalating financial problems, USPS will increasingly need to identify opportunities to aggressively cut costs and improve efficiency in the delivery area.

As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution of it until 14 days from the date of this letter. At that time, we will send copies of this report to the Postmaster General and other interested parties. In addition, this report will be available at no charge on GAO's Web site at http://www.gao.gov.

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



Phillip Herr
Director, Physical Infrastructure Issues

Appendix I: Objective, Scope, and Methodology

This report addresses (1) how the U.S. Postal Service (USPS) monitors delivery efficiency; (2) characteristics of delivery units that affect their efficiency; and (3) the status and results of USPS's actions to improve delivery efficiency, in particular, USPS's Flats Sequencing System (FSS).

To gather information relevant to all three objectives, we interviewed USPS delivery managers at headquarters, 2 areas, 7 districts, and 21 delivery units, which encompassed 7 states plus Washington, D.C.[1]

To address the first objective, how USPS monitors efficiency, we also obtained documentation from various officials about their processes, operating procedures, information systems, and operating data for monitoring delivery efficiency. This included interviewing headquarters officials responsible for (1) the nationwide management of city delivery and rural delivery, (2) delivery-related information systems, and (3) customer complaint systems focused on the public, smaller mailers (My Post Office system), and larger mailers (the Business Service Network). We reviewed USPS internal policies and operating procedures; its manuals for managing city delivery (M-39, Management of Delivery Services) and rural delivery (M-38, Management of Rural Delivery Services); and the collectively bargained agreements between USPS and its rural carrier and city carrier unions (the 2006-2010 Agreement between the U.S. Postal Service and the National Rural Letter Carriers' Association and the 2006-2011 National Agreement between the U.S. Postal Service and the National Association of Letter Carriers). We also discussed USPS efforts to monitor delivery efficiency with officials from the USPS Office of Inspector General (OIG) and the Postal Regulatory Commission.

To address the second objective, identifying characteristics of delivery units that affect their efficiency, we conducted a multistep process to identify a range of higher- and lower-ranked units for site visits.

1. Delivery officials provided us with efficiency rankings of its nine area offices—which are the nine USPS geographic regions of the country—for the entire nation. These rankings were based on eight delivery-

[1]A delivery unit can be a post office, station, branch, or annex. A district office, of which there are 74 nationwide, is an administrative field unit that oversees most operational and support functions for delivery units in a defined geographic area and reports to one of nine USPS area offices. A figure illustrating the geographic coverage of the nine area offices is provided in app. III. In addition to visiting Washington, D.C., we also visited the following states: Florida, Georgia, Illinois, Indiana, Maryland, South Carolina, and Virginia.

related metrics that provide insight into the most and least efficient delivery organizational units. (Delivery officials stated that they primarily focus on monitoring delivery efficiency for the larger city delivery units because they account for the majority of USPS delivery costs,[2] and, in doing so, they rely significantly on the data provided in the Delivery Operations Information System (DOIS)).

2. From those nine areas, we identified the top-, middle-, and lowest-ranked areas.

3. Within those three areas, we then collected rankings on each of the districts. We identified the top- and bottom-ranked districts within each area, which narrowed our focus to six districts.

4. Within those six districts, we then collected rankings on each of the delivery units. We identified the top- and bottom-ranked delivery units within each of these six districts, which narrowed our focus to 12 delivery units for our potential site visits.

5. We then discussed these 12 delivery units with USPS and considered other factors, such as potential travel considerations and ratio of city routes to rural routes in the office, and made revisions as appropriate. For example, if the two top- (or bottom-) ranked offices were located close to one another and could easily be incorporated into our travel, we visited the extra unit(s) to gather additional information.

During these visits, we observed carrier operations and met with area, district, and delivery unit officials to discuss delivery operations.

We supplemented this information by collecting data on over 40 delivery-related metrics including workhours, volumes, office efficiency, and street efficiency for about 8,000 delivery units throughout the country (offices that have at least five city delivery routes) from various USPS delivery information systems, including the DOIS, Flash, Address Management System, and National Route Adjustment System. We examined different efficiency measures, how they varied across delivery units, and how they related to each other. We studied time trends for various delivery measures and factors that potentially drive those outcomes. We also

[2]We concentrated our analysis on city delivery rather than rural delivery because most of USPS's information on delivery efficiency is focused on city carrier operations and because city delivery accounts for nearly 75 percent of annual delivery salary and benefit expenses.

reviewed nationwide city and rural carrier information on workhours, salaries and benefit costs, overtime workhours and costs, penalty overtime workhours, and sick leave hours. We discussed the reliability of the data from these systems with delivery officials and found them sufficiently reliable for our review. In assessing the reliability of the data, we interviewed delivery officials how the data were collected, managed, quality tested, and corrected. We also spoke to delivery data specialists about potential issues with the data and how they should be resolved. Additionally, we conducted electronic tests for completeness and accuracy, and to detect potential outliers. A small number of outliers were excluded from some of the figures. We also examined data regarding the route adjustment process and reviewed USPS OIG work on delivery issues.

To address the third objective, determining the status of USPS's actions to improve delivery efficiency, including FSS, we conducted the following activities:

- In addition to the aforementioned delivery officials, we met with officials who managed and implemented the various initiatives, including the program manager for FSS. We discussed actions to improve efficiencies—including their reported savings, further savings opportunities, and challenges associated with these initiatives. We also discussed USPS actions with representatives from the National Association of Letter Carriers (NALC), who represent over 214,000 active city delivery letter carriers employed by USPS, and the National Rural Letter Carriers' Association (NRCLA), who represent nearly 90,000 full- and part-time rural carriers. In fall of 2008, we convened a roundtable of major mailers to discuss these initiatives, how they may impact their members, and future challenges, and then followed up with some of these mailer representatives again in June 2009.

- We viewed demonstrations of the City Delivery Pivoting Opportunity Model (CDPOM) and Carrier Optimal Routing (COR) programs at USPS headquarters. In addition to the above mentioned officials, we also visited and interviewed officials at a mail processing plant and delivery units that have or are preparing to implement FSS machines. Specifically, we visited the USPS Processing and Distribution Center in Dulles, Virginia, where the FSS preproduction machine was operating, and delivery units in Reston, Va., and Fairfax, Va., both of which received FSS-processed mail from Dulles. We also met with other mail processing and delivery unit managers to discuss the impact of FSS on their operations. This included officials in the Greater Indiana district who conducted the operational and performance test of the FSS prototype machine, as well officials in the

Central Florida district who were preparing their district for FSS Phase I deployment.

- We also collected and reviewed other data and documentation on these initiatives and other delivery-related information from such sources as USPS Annual Reports, Integrated Financial Plans, Comprehensive Statements, and Address Management System Delivery Statistics Reports.

We conducted this performance audit from July 2008 to July 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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

LINDA J. WELCH
A/VICE PRESIDENT
DELIVERY AND POST OFFICE OPERATIONS

UNITED STATES
POSTAL SERVICE

June 18, 2009

Mr. Phillip R. Herr
Director, Physical Infrastructure Issues
United States Government Accountability Office
Washington, DC 20548-0001

Dear Mr. Herr:

Thank you for providing the U.S. Postal Service (USPS) with the opportunity to review and comment on the draft report titled U.S. Postal Service: Mail Delivery Efficiency Has Improved, but Further Action Needed to Consolidate Gains (GAO-09-696).

The Postal Service is operating in a challenging business environment. The current economic climate impacts all aspects of our business and especially the labor intensive function of delivering mail to more than 129 million residential and business addresses. As noted in the draft report, Delivery is the largest cost segment within the USPS. At the end of 2008, over 350,000 full and part-time letter carriers were engaged in the delivery of mail to customers across the country. Although mail volume is declining by double digit figures compared to fiscal year (FY) 2008, our delivery network continues to expand. The Government Accountability Office (GAO) mentions in the draft report that during the period of 2006 through 2008, the USPS absorbed nearly 2.7 million addresses while reducing 10,000 career letter carriers. The management of the Postal Service is justifiably proud of these types of accomplishments and realizes that in spite of our significant accomplishments, further efficiencies are both needed and are achievable.

The Postal Service management generally agrees with the GAO's assessment of mail delivery operations. The GAO recommends in their draft report that the Postmaster General establish cost-saving targets and track results for each of the major USPS initiatives to improve delivery efficiency. For major investment initiatives such as the Flats Sequencing System (FSS) initiative referenced in the draft report, the USPS currently does what the GAO recommends. Prior to the Postal Service making a significant investment of capital in an initiative, a rigorous process is followed to ensure that the investment will meet established return on investment hurdle rates. We establish a baseline and then set specific targets for reducing workhours or other expenses. The rationale for a major investment as well as the financial assumptions and expected results are all clearly defined in the Decision Analysis Report that supports the investment. Once the initiative is fully deployed, the standard practice is to conduct a cost study to validate that the expected savings were achieved.

From time-to-time, the USPS launches an initiative to deal with a particular work practice or to address an unforeseen situation such as a current severe economic recession. The Interim Alternate Route Adjustment Process, City Delivery Pivoting Opportunity Model and Delivery Point Growth Management are examples of such initiatives. Although the target setting process is not as formalized for these initiatives, management does have an expectation of achieving results. These initiatives generally center upon tools or techniques for delivery managers to use in order to achieve cost savings. Often, it is a combination of various initiatives yielding different levels of results that enable the Postal Service to achieve workhour reductions.

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The common denominator for these types of initiatives and major initiatives such as FSS is that the expected savings are built into the operating budget. Performance against the approved budget provides a useful measurement of how effectively managers are managing the business. Additionally, while the Postal Service does not measure specific cost savings on every delivery initiative we undertake, we do and will continue to ensure that we measure the success of such programs in other ways such as the usage of the tool, number of employees trained, etc.

The USPS is in the process of finalizing the FY2010 operating budget. There is no question that we will need to continue to aggressively manage the business during these challenging times. I am confident that we will successfully navigate the Postal Service through the current economic crisis.

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

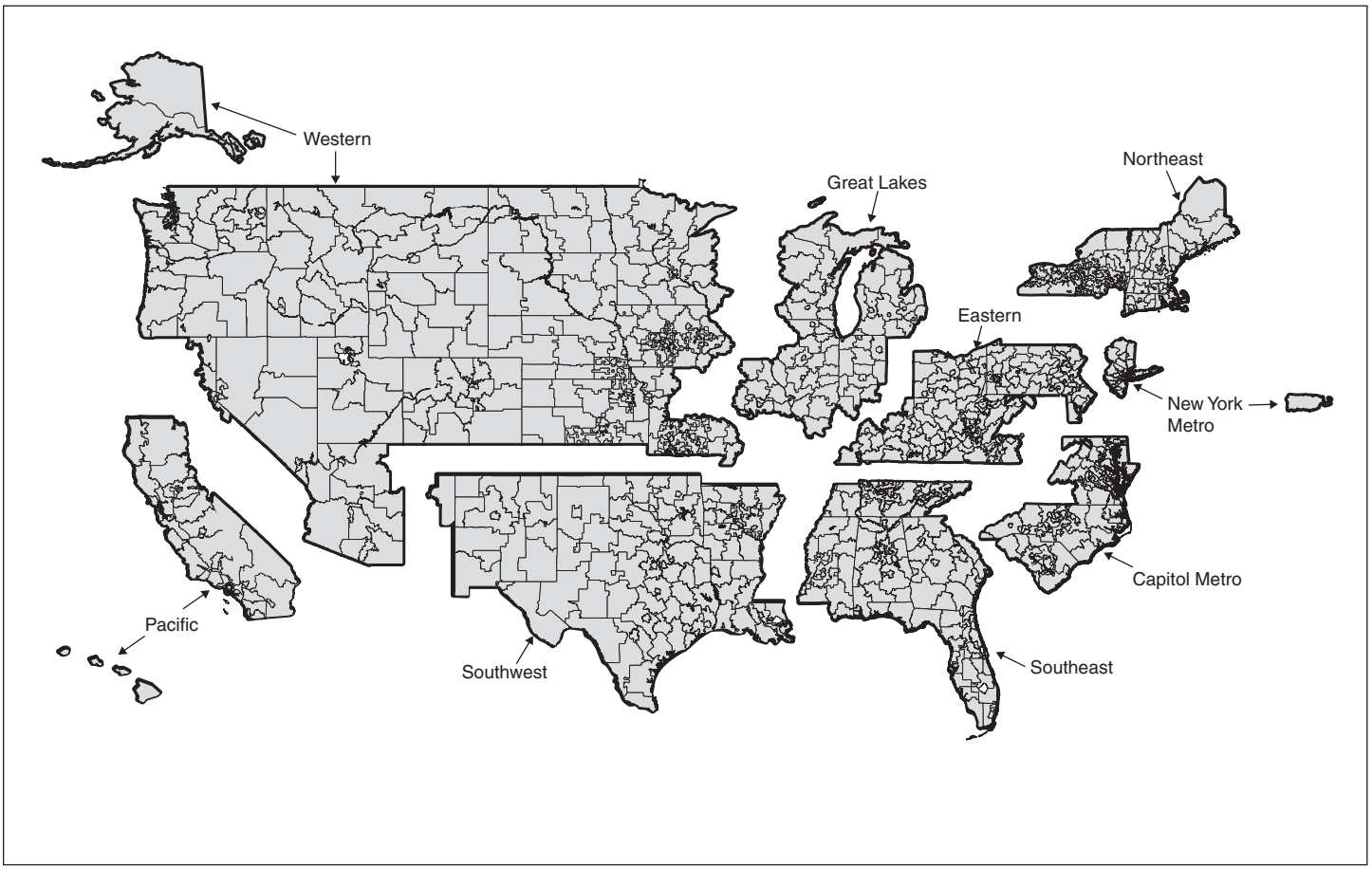
Sincerely,

Linda J. Welch

cc: Mr. Donahoe
Mr. Galligan

Appendix III: Geographic Coverage of USPS's Nine Area Offices

Figure 12: USPS's 9 Area Offices



Source: U.S. Postal Service.

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

Phillip Herr, (202) 512-2834 or herrp@gao.gov

Staff Acknowledgments

In addition to the individual named above, Gerald P. Barnes, Josh Bartzen, Jeremy Cluchey, Emily Larson, Summer Lingard, Kenneth E. John, Josh Ormond, Erin Roosa Cohen, Amy Rosewarne, Amy Abramowitz, and Patrick Dudley made key contributions to this report.

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