

May 2009

U.S. POSTAL  
SERVICE

Intelligent Mail  
Benefits May Not Be  
Achieved if Key Risks  
Are Not Addressed



GAO

Accountability \* Integrity \* Reliability

Highlights of [GAO-09-599](#), a report to congressional requesters

## Why GAO Did This Study

Over 80 percent of the approximately 200 billion mail pieces processed and delivered by the U.S. Postal Service (USPS) last year was sent by commercial mailers that barcode, sort, or transport mail to get lower postage rates. Starting in May 2009, USPS will encourage these mailers to use new barcodes that have increased capabilities as part of Intelligent Mail, a new program. According to USPS, Intelligent Mail is the most complex change it has ever undertaken.

GAO was asked to describe (1) the Intelligent Mail program and the status of implementation efforts and (2) the key risks to implementing Intelligent Mail and how USPS is addressing these risks. GAO reviewed USPS and regulatory documents, public comments, and interviewed USPS officials, mailers, and mailer representatives involved in developing this program.

## What GAO Recommends

GAO recommends that the Postmaster General address the risks to successful implementation of Intelligent Mail by developing (1) a comprehensive Intelligent Mail strategy; (2) attributable cost and savings information; and (3) a plan that addresses how USPS will mitigate risks, including the implications of the impact of lower-than-anticipated customer adoption of Intelligent Mail. USPS agreed to recommendations one and three and has begun implementing them, but stated that it already has cost information.

View [GAO-09-599](#) or key components. For more information, contact Phillip Herr at (202) 512-2834 or [herrp@gao.gov](mailto:herrp@gao.gov).

## U.S. POSTAL SERVICE

### Intelligent Mail Benefits May Not Be Achieved if Key Risks Are Not Addressed

## What GAO Found

The Intelligent Mail program is a USPS effort to encourage commercial mailers to use standardized barcodes that will improve the ability to track mail. The program is centered on a new barcode that can uniquely identify a mail piece. While Intelligent Mail could provide benefits to both mailers and USPS, it will also require both to make significant changes to their processes and information systems. USPS expects to be prepared to begin implementation in May 2009. After that, USPS will phase in price incentives and other functions in November 2009 and will require mailers to use the new barcode by May 2011 to qualify for lower postage rates.

#### Example of a Mail Piece Containing an Intelligent Mail Barcode and Program Benefits

<p><b>Intended program benefits:</b></p> <ul style="list-style-type: none"> <li>• Increased efficiency and reduced costs</li> <li>• Reduced amount of undeliverable as addressed mail</li> <li>• Better service information</li> <li>• Price reductions and other benefits for mailers</li> </ul>	<p>6060 PRIMACY PKWY STE 201 MEMPHIS TN 38188 Address Change Service</p> <p style="text-align: center;"><b>Intelligent Mail barcode</b></p> <p style="text-align: center;">↓</p> <p style="text-align: center;">           John Doe          6449 Amberview CV          MEMPHIS TN 38141       </p> <p style="text-align: right; font-size: small;">FIRST-CLASS MAIL ALTO U.S. POSTAGE PAID NEW YORK, NY PERMIT NO. 1</p>
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Sources: U.S. Postal Service and GAO.

Successful implementation of Intelligent Mail faces two key risks—(1) USPS's management approach and (2) mailers may not choose to participate in the program—which if not addressed, could limit achieving Intelligent Mail benefits. USPS has taken some steps to address these risks, such as a phased approach. However, USPS has not followed some key program management practices to reduce risks, raising questions about whether USPS and mailers will be able to meet schedule and program objectives. For example, USPS

- lacks a comprehensive strategy, including all planned phases and the specific functions and systems to be implemented in each phase; goals and measures of success; and a risk mitigation plan to address the risks that could impact the Intelligent Mail program as a whole; and
- lacks information on costs and savings attributable to the Intelligent Mail program, including a baseline and mechanism to track and measure actual savings, which are needed to measure program performance.

The second risk is that program success is dependent on mailer participation, and it is uncertain whether pricing and other incentives will encourage mailers to participate to the extent anticipated. Some mailers have said they find the pricing incentives insufficient to recover their investment in the program. The Postal Regulatory Commission has also noted that uncertainty may lead mailers to delay adoption. Low mailer adoption could affect USPS's ability to report representative delivery service results, as required to comply with service performance reporting requirements, but USPS has not said how it would address this risk.

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### **Abbreviations**

OIG	U.S. Postal Service Office of the Inspector General
PRC	Postal Regulatory Commission
USPS	U.S. Postal Service

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United States Government Accountability Office  
Washington, DC 20548

May 6, 2009

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

The Honorable Danny K. Davis  
House of Representatives

Over 80 percent of the approximately 200 billion mail pieces processed and delivered by the U.S. Postal Service (USPS) last year was sent by commercial mailers that barcode, sort, or transport mail in exchange for lower postage rates.<sup>1</sup> Starting in May 2009, USPS will encourage these mailers to use new standardized Intelligent Mail barcodes which will make it easier to track and provide information about the mail's progress through the processing system. USPS says the Intelligent Mail program is the most complex program it has ever undertaken, involving changes to almost 30 different systems, and that it will benefit both commercial mailers and USPS.

To assist Congress in understanding USPS's Intelligent Mail program, you asked us to address (1) what the Intelligent Mail program is and the status of USPS's implementation efforts and (2) the key risks to implementing Intelligent Mail and how USPS addressed them.

To address these issues we (1) reviewed and analyzed USPS documents related to developing and implementing the Intelligent Mail program; (2) interviewed officials from USPS, the USPS Office of the Inspector General (OIG), the Postal Regulatory Commission (PRC), and commercial mailers—which included representatives from some companies that participated in the development of the Intelligent Mail program and commercial mailer associations that represented a majority of the mail sent; (3) visited USPS and commercial mailer facilities, including facilities

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<sup>1</sup>This concept, known as worksharing, generally involves mailers qualifying for reduced postage rates by performing certain activities such as preparing and barcoding mail so it can be sorted by USPS automated equipment. See GAO, *U.S. Postal Service: A Primer on Postal Worksharing*, [GAO-03-927](#) (Washington, D.C.: July 31, 2003).

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where mail is printed and sorted; (4) reviewed USPS's management approach based on practices and industry standards developed by leading organizations, such as the Software Engineering Institute and the Chief Information Officers Council,<sup>2</sup> to effectively manage major programs and minimize risks; and (5) analyzed comments submitted primarily by commercial mailers and mailer associations in response to USPS Federal Register notices. We conducted this performance audit from September 2008 to April 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. See appendix I for further information on our scope and methodology.

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## Background

The mailing industry includes businesses, organizations, and other parties that send and rely on mail to maintain contact with their customers. The industry also encompasses mail preparers, including printers and businesses that send or receive mail on behalf of a third party. Collectively, we refer to these two groups as commercial mailers, who in 2008 accounted for 86 percent of all mail processed by USPS. Although commercial mailers number in the millions, approximately 200 of the largest mailers account for around 30 percent of the total mail volume.

Since the 1970s, the use of barcodes and automation has increased efficiency in USPS mail processing operations. Commercial mailers have been encouraged to use barcodes through pricing incentives, allowing USPS to cut costs and increase efficiency in its mail processing operations. In particular, automated mail processing machines can sort mail with barcodes containing delivery information faster than mail sorted manually. Over the past three decades, the number and type of barcodes increased along with technology changes, and in 2003 USPS estimated that there were more than 30 different barcodes in use. These barcodes include the following:

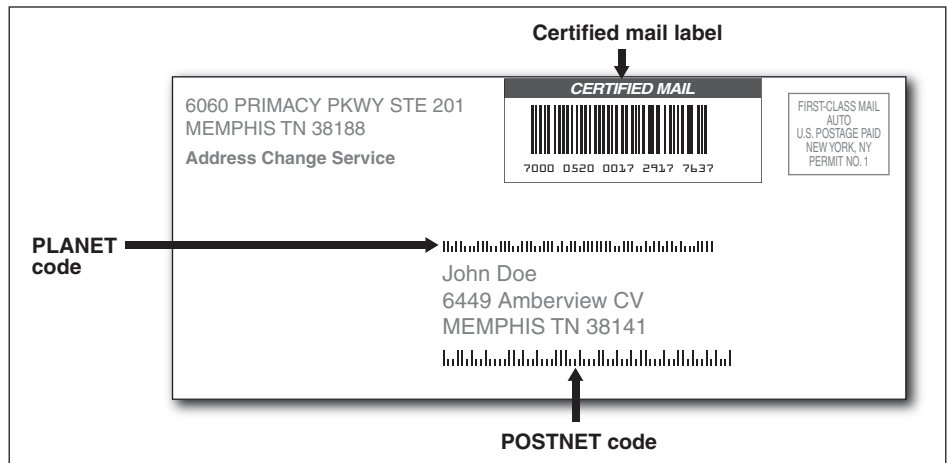
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<sup>2</sup>The Software Engineering Institute is a federally funded research and development center conducting software engineering research in acquisition, process improvement and performance measurement, security, and system interoperability and dependability. The Chief Information Officers Council works to improve federal agency practices related to the acquisition, modernization, use, sharing, and performance of Federal government information resources.

- POSTNET, which contains delivery information that enables automated sorting of the mail to the carrier’s route level. Mailers receive a postage discount when they print POSTNET barcodes on their mail.
- PLANET, which is a barcode that contains identification numbers to enable tracking mail in USPS’s mail processing system but contains less information than the Intelligent Mail barcode.
- Certified mail service, which provides mailers notification when mail arrives at its destination.

The use of numerous barcodes has led to some drawbacks, such as a cluttered mail piece (see fig. 1). Additionally, whenever USPS adds or upgrades its mail processing equipment, it has to ensure that the equipment remains compatible with each of the relevant barcodes.

**Figure 1: Example of Different Barcodes on a Letter**



Sources: U.S. Postal Service and GAO.

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## Intelligent Mail Program Seeks to Provide Better Mail Tracking Information and Begins Phased Transition in May 2009

Through Intelligent Mail, USPS plans to use standardized barcodes to track mail and thus provide USPS and mailers with more information. This information is important to USPS's efforts to improve efficiency and reduce costs. In addition, it could provide mailers with the status of mail as it moves through USPS's mail processing system, improving predictability of delivery, as well as providing information on whether some mail—such as bill payments and movie returns—has been sent. Although both USPS and mailers could benefit from the program, implementing the program will require both parties to make considerable changes to their systems and processes. USPS is completing its development of the Intelligent Mail program and plans to implement the program in phases, with the first phase starting in May 2009 and an additional phase planned for November 2009.

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## Intelligent Mail Seeks to Provide More Information through the Use of Standardized Barcodes

The overall concept of Intelligent Mail is to provide better information and improve efficiency by using standardized barcodes to continuously track the mail as it passes through USPS's mail processing system. The program has been led by USPS with input and involvement from the mailing industry. The Intelligent Mail concept was articulated in a 2001 report by the Mailing Industry Task Force, which was led by chief executives of 11 mailing industry companies and USPS's Deputy Postmaster General. This task force noted that Intelligent Mail would help ensure that mail processing is responsive to customer needs. Since then, USPS has been involved with developing and planning the Intelligent Mail program. For a timeline of the significant events in the development of the Intelligent Mail program, see appendix II.

Beginning in May 2009, mailers who choose to participate in Intelligent Mail have two options that offer different incentives based on the level of effort required for mailers to comply:<sup>3</sup>

- *Basic Service.* Requires mailers to apply an Intelligent Mail barcode and populate the relevant fields, but not include unique numbers in the barcode. Mailers who implement Basic Service will receive a postage discount for using a barcode (as they would using a POSTNET barcode)

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<sup>3</sup>A third nonautomation option is also available for mailers that do not qualify for automation discounts. Mailers using this option will print Intelligent Mail barcodes on their mail pieces, but their mail will not receive discounts or any of the increased automation that is part of Intelligent Mail.

but will not receive the postage discount or other benefits associated with Full Service.

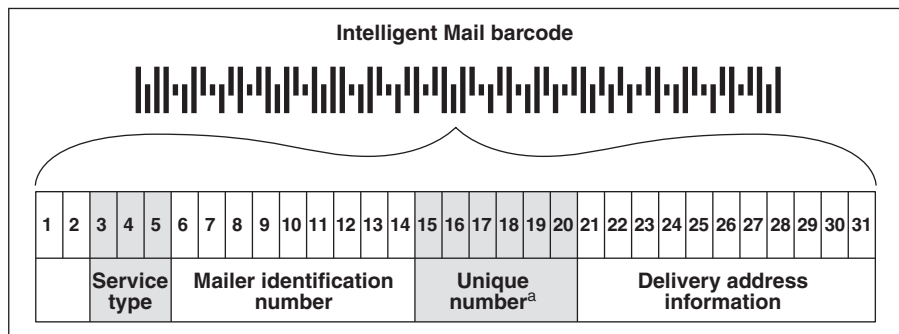
- *Full Service.* Requires mailers to populate and apply a barcode, but unlike Basic Service, the barcode must contain a number that is unique to the particular mail piece. Full Service mailers must also uniquely barcode any trays or containers they use to package mail and submit electronic documentation of their mailings. USPS provides pricing discounts and other incentives for mailers implementing Full Service because it requires mailers to make more changes and results in the greatest benefit for USPS.

The Intelligent Mail program is centered on the Intelligent Mail barcode, a standardized barcode that is information-rich and expands the ability to track individual mail pieces (see fig. 2). This barcode is capable of containing the same information as the current POSTNET and PLANET barcodes combined, in addition to other data, which eliminates the need for multiple barcodes on the same mail piece. The new barcode contains

- a mailer identification number, assigned by USPS, which enables USPS to identify the sender of the mail piece, and
- a unique number, generated by the mailer, which enables USPS to track the same mail piece as it travels through its processing system.

Since 2006, USPS has permitted mailers to use the Intelligent Mail barcode which enabled mailers to test their ability to print the barcode to conform to USPS standards. In fiscal year 2008, USPS estimated that over 580 mailers had begun using the barcode.

**Figure 2: Example of an Intelligent Mail Barcode, Including Its Information Fields**



Sources: U.S. Postal Service and GAO.

<sup>a</sup>The unique number is either six digits (as shown in the shaded area) or nine digits, depending on the mail volume of the mailer. Mailers using Basic Service do not have to provide a unique number.

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## Intelligent Mail Is Expected to Benefit USPS and Mailers by Providing Enhanced Information and Mail Tracking

USPS has identified several ways it expects the implementation of Intelligent Mail to benefit USPS and mailers:

*Improve efficiency, reduce costs, and improve timeliness of delivery.* USPS says it will be able to use information from Intelligent Mail to improve its processing system. For example, USPS expects it will be able to better identify and diagnose problems, such as systemic bottlenecks that result in costly manual sorting and delivery delays. Also, USPS plans to use Intelligent Mail to create efficiencies by streamlining and automating the process it uses to accept mail from commercial mailers, which is currently time- and labor-intensive.

- *Reduce the amount of mail that must be forwarded, which can involve extra handling by USPS and delays in delivery.* As an incentive to adopt Full Service Intelligent Mail, USPS will provide free notification when intended recipients have moved and filed a change-of-address with USPS, a service mailers previously paid for. This feature, known as Address Correction Service, could help USPS meet its goal of reducing the amount of mail that cannot be delivered as addressed. In exchange for this free service, USPS requires mailers to update their mailing lists in order to avoid paying additional fees.
- *Provide better service to mailers.* Through Intelligent Mail, USPS plans to provide better service to mailers through real-time feedback. For example, as another incentive to adopt Full Service Intelligent Mail, USPS will provide mailers information on when their mail entered USPS's system, known as Start the Clock. This information, which was not previously offered by USPS, is helpful because it enables USPS to respond to mailer inquiries on missing or delayed mail. Also, since Intelligent Mail will be uniquely identified, USPS will have the ability to isolate and give special handling to a specific mail piece, which creates an opportunity for USPS to offer mailers new products and services.
- *Service performance measurement capability.* Intelligent Mail will allow USPS to gather more comprehensive and detailed service performance information and measure it against established performance standards, which will help keep USPS accountable to its stakeholders. The 2006 Postal Accountability and Enhancement Act required USPS to develop a system to measure service performance and report to PRC.<sup>4</sup> The service

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<sup>4</sup>Pub. L. No. 109-435, §§ 204, 301, 120 Stat. 3211-3212, 3218-3219 (2006) (codified at 39 U.S.C. §§ 3652, 3691).

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performance measurement system proposed by USPS to meet this requirement relies on data from Intelligent Mail.

- *Financial incentives.* USPS is also offering a financial incentive to mailers. Specifically, those who adopt Full Service Intelligent Mail will receive a postage discount, in addition to other worksharing discounts. Mailers who use Full Service will receive a three-tenths of 1 cent discount for each First-Class Mail piece they send, while Standard Mail and periodicals<sup>5</sup> will receive a discount of one-tenth of 1 cent for each piece.<sup>6</sup>

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## Implementation of Intelligent Mail Involves Many Changes for Mailers and USPS

According to USPS, Intelligent Mail is the most complex project it has undertaken. It also indicated that preparing for and implementing Intelligent Mail will involve considerable changes for both mailers and USPS, including significant changes to information and software systems used by both mailers and USPS.<sup>7</sup> The overall commercial mail process using Intelligent Mail, including how it impacts mailer and USPS operations, is shown in figure 3.

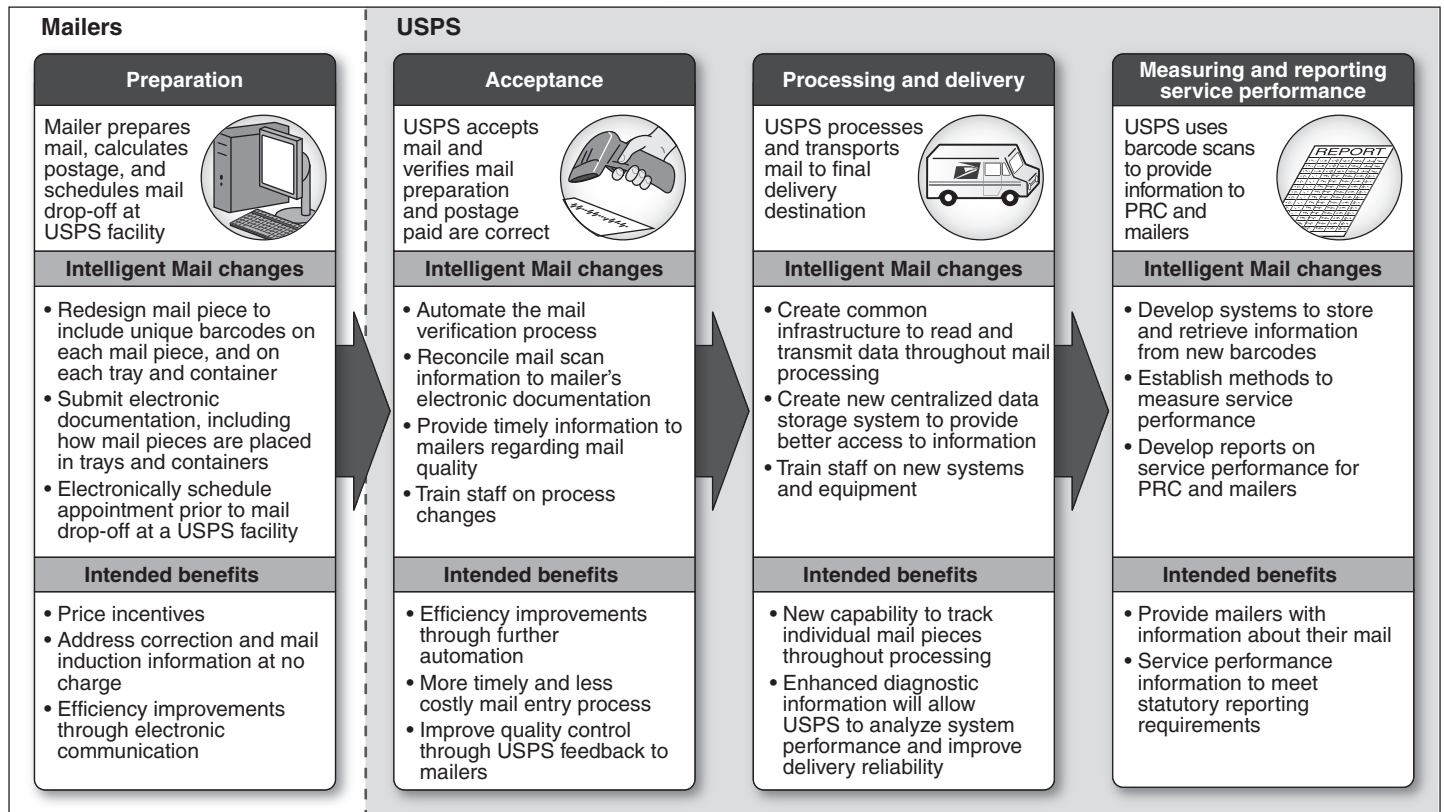
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<sup>5</sup>The four main mail classes that commercial mailers send include (1) First-Class Mail, which includes bills, account statements, payments, and business correspondence; (2) Standard Mail, which is primarily advertising mail such as flyers, circulars, and solicitations; (3) periodicals, which include mailed newspapers and magazines; and (4) package services, which is primarily merchandise and large quantities of printed material.

<sup>6</sup>This discount amounts to a \$3.00 discount for every 1,000 pieces of First-Class Mail and a \$1.00 discount for every 1,000 pieces of Standard Mail.

<sup>7</sup>GAO has an ongoing review that will separately report on USPS's information technology management of the Intelligent Mail program, including its systems, policies, procedures, and practices.

**Figure 3: Selected Mail Operations Involved with Full Service Intelligent Mail**



Sources: U.S. Postal Service and GAO.

## Mailers

Intelligent Mail requires significant changes to the way mailers prepare and submit their mail. Mailers using Intelligent Mail will need to redesign their mail pieces by populating and applying the new barcode. Full Service mailers will also need to ensure that their barcodes contain a unique tracking number. This means that each mail piece a mailer sends within a 45-day period must have a number imbedded in its barcode that is different from every other piece of mail that the mailer sends within that time frame. Full Service mailers must also apply unique barcodes to mail trays and containers, and document which mail pieces are contained in which tray and container. These changes may result in significant process changes for mailers and may require new software or staff training.

Mailers participating in Full Service Intelligent Mail must also make changes to their information systems in order to submit documentation electronically to USPS. The electronic documentation must contain

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information on all of the Intelligent Mail barcodes used on the mail pieces, trays, and containers; how the mail pieces, trays, and containers fit together; and the identity of the mailer. While some mailers currently submit electronic documentation, many currently submit this information in hard copy format. Mailers must also provide advance notification of their mail drop-off to a postal facility by sending an electronic appointment and will need to ensure that their software systems are able to communicate effectively with USPS's systems. This may involve purchasing or upgrading software or hardware. Mailers will also need to train their staff on how to use the new software and how to communicate with USPS electronically.

## USPS

Intelligent Mail involves changes to USPS's operations. For instance, USPS's current process for mail acceptance and verification is costly, time-consuming, and labor-intensive. Mail acceptance and verification involves mailers bringing mail to a postal facility, USPS accepting it and verifying that it has been prepared according to postal standards, and USPS verifying that the postage has been accurately calculated. Currently, this process involves a postal official physically sampling a portion of the mail to make sure it meets standards and is eligible for the prices claimed in the mailer's documentation. With Intelligent Mail, USPS plans to be able to scan mail pieces, trays, and containers, and reconcile the information to the documentation that the mailer has sent electronically. USPS envisions that, by using Intelligent Mail, it can eventually automate the verification process and reduce its reliance on manual tests of the mail, making it easier for mailers to hand mail off, thus saving both USPS and mailers time and the related costs. Furthermore, USPS has completed changes to software for its mail processing equipment so it is capable of scanning the new barcodes. USPS officials said they completed these upgrades as they were performing other, routine software upgrades for this equipment.

In addition, USPS is changing its information technology systems. As mailers start using Intelligent Mail, USPS expects to process scans from millions of mail pieces containing new barcodes on a daily basis. USPS is developing the information technology infrastructure to scan and track individual mail pieces as they travel through its processing system. First, USPS is developing a new Intelligent Mail information technology system to process, manage, and store data from scanned barcodes. USPS has acquired hardware and is using contractors to develop software for this system. Second, USPS is integrating this new system with existing USPS systems to share data, which requires changes to almost 30 different systems and 59 different connections between these systems. An example of one of the existing USPS systems that must be integrated with the new

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Intelligent Mail system is PostalOne!, a main communications interface between USPS and mailers. Upgrades to PostalOne! include a better user interface design for mailers, electronic documentation acceptance capabilities, and more options for mailers to access Intelligent Mail tracking information.

USPS plans to use barcode scan information to measure its service performance and report the results to PRC. However, USPS will need to establish report content and format standards that comply with PRC reporting requirements. In order to report service performance to PRC, USPS will need to develop a strategy to aggregate information from mail pieces that will be representative of all mail. USPS will also need to develop standards for information that it will provide to mailers regarding their own mail.

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### USPS Has an Aggressive Development Schedule to Implement Intelligent Mail in May 2009 and Plans to Add to the Program in a Future Release

USPS has said it will be ready to implement Intelligent Mail as planned in May 2009. To meet this date, USPS has been engaged in an aggressive program development schedule since June 2008 that involved defining program requirements and designing, building and testing systems and interfaces.<sup>8</sup> According to USPS, it began defining the requirements of the project in July 2008, designing the systems in October 2008, and started building the systems in November 2008. USPS tested the systems both internally and with mailers from February through April 2009. A limited number of mailers have been involved in testing and integrating their systems with USPS's systems. Despite this aggressive schedule, a senior postal official told us that USPS discovered that it could not implement all of the desired functions of the system by May 2009, as originally planned. Further, he said that additional functions may be added in future phases that will be determined at a later date.

The general timeline for Intelligent Mail implementation is as follows:

- *May 11, 2009.* USPS plans to internally implement the first phase of Intelligent Mail and expects to have the systems in place to provide Full Service functions, including Address Correction Service and electronic documentation.

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<sup>8</sup>For a more complete Intelligent Mail timeline, see appendix II.

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- *May 18, 2009 and beyond.* Mailers will begin testing their systems' ability to access and electronically transmit documentation to USPS's system and will be ready to fully implement upon completing the tests, which should take about 6 to 8 weeks according to a senior USPS official.
  - *November 29, 2009.* USPS plans to implement the second phase of Intelligent Mail and expects to begin offering price incentives for Full Service. USPS also plans to add other program functions, although it had not finalized these plans when we met with USPS officials in early April.
  - *May 2011.* The use of POSTNET and PLANET barcodes will be phased out and mailers seeking reduced automation postage rates will be required to use Intelligent Mail barcodes.

Mailers will have approximately 6 months from May through November 2009 to test their systems and begin implementation before the price incentives go into effect. USPS has estimated that by November 2009, enough mailers will be participating in Full Service Intelligent Mail so that it will account for 54 percent of First-Class automation letters and 63 percent of Standard Mail Commercial and Nonprofit automation letters. In fiscal year 2008, these types of automation letters accounted for approximately 100 billion mail pieces.

As mailers complete testing and begin generating mail with Intelligent Mail barcodes, USPS has said it is taking steps to ensure that the mail acceptance process goes smoothly for mailers presenting mail at USPS facilities. For example, USPS plans to conduct customized training for both mailers and USPS employees at facilities where mailers will present mail barcoded with Intelligent Mail barcodes. This training will be conducted in the weeks before mailers plan to implement Intelligent Mail. USPS officials also noted that they will offer training at a national-level postal forum in May 2009 and will offer materials that mailers can use to train their staffs.

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## The Intelligent Mail Program May Not Achieve All of Its Intended Benefits if Key Risks Are Not Addressed

Implementation of the Intelligent Mail program faces two key risks. First, USPS's approach to developing and managing the program has not followed certain key program management practices to reduce risks and mailers have raised questions about whether USPS and mailers will be able to meet schedule and program objectives. Second, USPS has said that Intelligent Mail success is dependent on mailer participation in the Full Service option, but it is uncertain whether pricing and other incentives will encourage mailers to participate to the extent anticipated. If these risks are not addressed, they could limit USPS's ability to fully achieve the program's benefits.

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## Intelligent Mail Implementation May Be at Risk Due to USPS's Development and Management Approach

USPS's management approach to developing the Intelligent Mail program has lacked critical program management elements that are considered best practices. The lack of these elements may increase the program's risk and raise questions about whether USPS will be able to meet deadlines or program objectives. Specific elements of an effective management approach that USPS lacks include

- a comprehensive strategic plan;
- information about program costs, including its anticipated savings or cost reductions; and
- a risk mitigation plan.

In developing a large and complex effort such as the Intelligent Mail program, these key elements are particularly important, and USPS could benefit from best practices used by leading organizations. Best practices are tried and proven methods, processes, techniques, and activities that organizations define and use to minimize risks and maximize chances for success. Experience has shown that organizations that adopt and effectively implement best practices can reduce the risks associated with implementing projects, including information technology projects, to acceptable levels. For example, we have previously reported that using best practices related to information technology acquisitions can result in better outcomes—including cost savings, improved service and product quality, and ultimately, a better return on investment.<sup>9</sup> Such practices have been identified by leading organizations such as the Software Engineering

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<sup>9</sup>GAO, *Financial Management Systems: Additional Efforts Needed to Address Key Causes of Modernization Failures*, [GAO-06-184](#) (Washington, D.C.: Mar. 15, 2006).

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Institute, the Chief Information Officers Council, and in our prior work analyzing best practices in industry and government.

Effective program management involves establishing and maintaining plans defining project scope and activities, including a budget and schedules, key deliverables, and milestones for key deliverables. An effective risk management process identifies potential problems before they occur, so that risk-handling activities may be planned and invoked as needed across the life of the product and project to mitigate adverse impacts on achieving objectives. Key activities include identifying and analyzing risks, assigning resources, developing risk mitigation plans and milestones for key mitigation deliverables, briefing senior-level managers on high priority risks, and tracking risks to closure.

In a separate review begun in March 2009, we are assessing the cost, schedule, and performance status of the Intelligent Mail program and whether the Postal Service has the capabilities to successfully acquire and manage this program. To effectively manage major information technology programs, organizations should use sound acquisition and management processes to minimize risks and thereby maximize chances for success. Such processes include project and acquisition planning, requirements development and management, risk management, project monitoring and control. Our work has shown that such processes are significant factors in successful systems acquisitions and development programs, and they improve the likelihood of meeting cost and schedule estimates as well as performance expectations.

### USPS Lacks Critical Program Management and Risk Mitigation Elements

USPS lacks an up-to-date comprehensive Intelligent Mail strategic plan to facilitate program management and accountability. A comprehensive plan or strategy can provide a program's overall vision and goals, including detailed milestones and measures of success which provide meaningful guidance for planning and measuring progress. Such plans can also establish deadlines for achieving objectives and assigning responsibility for program implementation. USPS published an Intelligent Mail Corporate Plan in 2003, which described its overall vision for Intelligent Mail and three specific strategies for achieving this vision. USPS said that it would periodically update this plan; however, USPS has not provided periodic updates, despite making major changes to the Intelligent Mail program. For example, USPS has announced two implementation phases for Intelligent Mail—May 2009 and November 2009—but USPS is still defining key requirements for the November phase and possible future phases. Also, it is not clear when certain functions and the associated systems, such as automated mail verification, will be implemented. In other areas,

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USPS has developed comprehensive strategic plans that were periodically updated and that provided an overview of the major phases and activities that would be completed in each phase. For years, dating back to the 1990s, USPS developed and periodically updated its Corporate Automation Plan that identified its vision, goals, expected savings, and actions planned for each phase to achieve a completely barcoded and fully automated mail processing system. Similarly, USPS developed and updated its Corporate Flats Strategy that detailed the decision points and activities planned for the three major phases related to improving flat mail processing.

USPS also lacks program cost information associated with Intelligent Mail, including a baseline and mechanism to track and measure actual savings. Having reliable cost estimates is critical to support management decisions about budget development, resource requirements, and allocation, as well as to measure performance. According to USPS, one of the key benefits of the Intelligent Mail program is to reduce operating costs, which are primarily workhour costs, by increasing the use of mail information to improve the efficiency of its automated mail processing operations. A senior USPS official told us that attributing efficiencies and costs savings directly to the Intelligent Mail program would be difficult because USPS is initiating numerous programs to reduce costs and would be unable to isolate and attribute cost savings only to the Intelligent Mail program. We recognize the difficulty of directly attributing costs, but USPS could measure how Intelligent Mail implementation affects two processes—mail acceptance and verification. As we mentioned earlier, USPS envisions that, by using Intelligent Mail, it can eventually automate its acceptance and verification processes and reduce its reliance on manual tests of the mail, making it easier for mailers to hand mail off, thus saving both USPS and mailers time and the related costs. Since these processes are directly affected by the implementation of Intelligent Mail, their associated costs and savings could be identified and attributed to the Intelligent Mail program. By tracking these costs, USPS could measure how the Intelligent Mail program actually reduces operating costs in these areas.

Finally, USPS lacks a program-level risk mitigation plan—a plan that identifies and addresses potential weaknesses before they adversely affect the Intelligent Mail program. According to USPS officials, the Intelligent Mail program is the most complex effort initiated in USPS history and its successful implementation is important to the future of USPS. However, the program is vulnerable to several areas of risk that USPS has not addressed. For example, USPS has said that Intelligent Mail success is dependent on mailer participation in the Full Service option, but it has not stated how it would address the impact of lower than anticipated mailer

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## Mailers Had Concerns about USPS's Development of the Intelligent Mail Program

participation. USPS has developed a process to identify and address technical risks related to, for example, integrating the Intelligent Mail system with existing USPS systems, but it has not developed a more strategic-level risk mitigation plan that discusses how it will address the key risk areas that could impact the program as a whole, such as lower-than-anticipated mailer participation, resource limitations or schedule delays.

During the program's development over the past 2 years, many mailers expressed their concerns regarding these risks in comments to the Federal Register, PRC, and in industry newsletters. In January 2008, USPS published the Intelligent Mail Advance Notice of Proposed Rulemaking in the Federal Register, which proposed implementing the Intelligent Mail program in January 2009.<sup>10</sup> In April 2008, USPS publicized a revised Intelligent Mail Federal Register notice which pushed back the implementation date to May 2009 and proposed incentives for Full Service participants.<sup>11</sup> Based on our review of the more than 460 comments submitted to USPS in response to these notices, the concerns cited by mailers included the following:

- USPS communication efforts were insufficient, and mailers had difficulty obtaining program information, including—until recently<sup>12</sup>—the expected Full Service discount, which prevented mailers from determining their return on investment;
- mailer participation in Intelligent Mail will likely be affected by mailers who may not be able to use Intelligent Mail barcodes due to the technological challenge of printing the barcodes and storing all of the electronic information;
- USPS had not provided finalized information technology requirements, which impeded some company's efforts to budget for or develop the necessary software; and

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<sup>10</sup>73 Fed. Reg. 1158 (Jan. 7, 2008).

<sup>11</sup>73 Fed. Reg. 23393 (April 30, 2008).

<sup>12</sup>USPS gave notice of the Intelligent Mail discounts on February 10, 2009, in its notice of market-dominant price adjustments posted on the PRC Web site at [http://www.prc.gov/Docs/62/62203/Notice\\_Consolidated.pdf](http://www.prc.gov/Docs/62/62203/Notice_Consolidated.pdf).

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USPS Actions Address Some  
Implementation Concerns, but  
Others Remain

- USPS and mailers may not be ready for implementation given USPS's short-time period in which to simultaneously design, develop, test, and implement the Intelligent Mail program.

In August 2008, USPS announced its Intelligent Mail Final Rule which finalized the May 2009 implementation date and allowed mailers to use POSTNET barcodes until May 2011.<sup>13</sup> According to a major industry newsletter published in August 2008, mailers remained concerned with USPS's approach. They said they were unable to make the return on investment and justify the expense without a substantial price differential or, for some, the benefit of free Address Correction Service with less restrictive time limits.

USPS has taken some steps to address readiness and mailer concerns regarding its management and its preparedness to implement the program. It delayed implementation of the program from January 2009 to May 2009. USPS has said it will also attempt to address mailer concerns about management of the program by reaching out to them. In this regard, USPS officials said they plan to mitigate implementation risks by working with each mailer to customize its transition from using POSTNET barcodes to Intelligent Mail barcodes. In addition, USPS also has undertaken a variety of communication efforts to provide mailers with updated program and technical information. For example, it established four different workgroups as part of its Mailers' Technical Advisory Committee.<sup>14</sup> Each of these workgroups, comprised of mailing industry representatives and USPS officials, seeks to resolve a specific issue and offer recommendations to USPS. USPS also has developed educational and training programs, such as the Intelligent Mail University, a 1-day comprehensive course. In addition, USPS has provided information through its traditional channels of communications, such as through its Postal Customer Council organization,<sup>15</sup> at conferences, and on its Web site.

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<sup>13</sup>73 Fed. Reg. 49333 (Aug. 21, 2008).

<sup>14</sup>The Mailers Technical Advisory Committee is a venue for USPS to share information with mailers and receive advice and recommendations from workgroups established by the group's leadership, which is comprised of USPS and mailing industry officials.

<sup>15</sup>The Postal Customer Council program is a national program comprised of more than two hundred local-level councils that provide mailers with a forum for exchanging ideas for improved mail service and discussing new and existing USPS products, programs, regulations, and procedures.

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Taken together, some of these USPS efforts could be considered best practices associated with effective program management; however, the lack of other critical program management elements may expose the project to unnecessary risk that it will not achieve its schedule and performance objectives. In addition to these risks, other factors also add to the program's risk, as follows:

- The Intelligent Mail program is highly complex and involves multiple system integrations implemented concurrently in a short timeframe with limited testing before implementation, which could make the program susceptible to errors or unanticipated problems.
- The program continues to evolve as USPS defines requirements for Phase 2.
- Program implementation may require considerable time with USPS working directly with individual mailers to integrate their respective systems. For example, it might require up to 8 weeks for a mailer to gain approval from USPS to submit electronic documentation, during which the mailer and USPS work together to resolve any technical issues, according to a senior USPS official.

Last fall we interviewed representatives from nine companies involved in the mailing industry that participated in the development of the Intelligent Mail program. We also talked to representatives from six commercial mailer trade associations who collectively represent most of the mail sent. Some of these mailers expressed frustrations with USPS's approach because, they said, it appeared to lack planning and consistency, making it difficult for them to make their needed changes. Some mailers cited the lack of an overall plan with dates, which caused difficulty with their internal planning and resource assignment. Without such a plan, it appeared that USPS was simultaneously making decisions and implementing the program. For example, USPS announced it would provide free Address Correction Service to Full Service participants, and then subsequently announced a time limit for mailers to use information and implement address changes. Mailers said that the time limitation made it practically impossible to utilize the service. Other mailers said that, even though Intelligent Mail required substantial software changes and development, USPS continued to make changes to program technical requirements and specifications, making it difficult for them to respond in time for the planned implementation date.

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## Financial Incentives May Not Be Sufficient to Encourage Mailers to Participate in Full Service

Another risk to the success of the Intelligent Mail program is that mailers may not choose to participate in Intelligent Mail. Based on our interviews and review of other industry and USPS documentation, the Intelligent Mail Full Service option's pricing and other incentives may not be sufficient to convince some mailers to participate. USPS officials have told us that the success of Intelligent Mail is dependent upon mailers participating in the Full Service option. Thus, if mailers decline to participate, the program has a reduced chance of succeeding.

Some mailers have said that the program's pricing and benefits are not enough to provide sufficient incentives or even to recover their investments. For example, a mailer association said its members had hoped for a larger discount than USPS announced, considering the large investments some companies had made in preparing for the Intelligent Mail program. A mailer told us that in order for the company to recover its costs, the discount would have to be one-half of 1 cent per mail piece, or much higher than the announced price incentives. Costs for mailers preparing for Full Service vary largely depending on the size of the mailer. For example, some large mailers said they invested millions of dollars to update and purchase hardware and software, while some smaller mailers expected to invest tens of thousands of dollars.

Some mailers also expressed their concern about USPS's delay in offering the price incentives. USPS delayed the effective date of the price incentives from May 2009 to November 2009. Although USPS said it did so because it does not want to punish mailers who do not adopt Full Service immediately, some mailers who were planning on implementing Intelligent Mail in May viewed this 6-month delay as problematic because of the increased time to recover their implementation costs. Finally, some mailers expressed concerns about the duration of the discount after USPS announced it intends to offer the price incentives on a temporary basis. According to USPS, these price incentives are not expected to become a permanent part of its pricing schedule, meaning the incentives would likely be phased out. USPS and mailers view the financial incentives differently. According to USPS, the price incentives are one of several benefits to encourage mailers to participate in Full Service, while many mailers view the financial incentives as the main benefit of Intelligent Mail. In addition to concerns about financial incentives, mailers find Intelligent Mail complex. USPS requires mailers to greatly change the way they prepare and submit their mail in order to participate in Full Service and mailers say these changes may discourage them from adopting it. A mailing industry consultant wrote in a mailing association's newsletter in March 2009 that mailers should just sit back and wait until the "dust and

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dollars” settle before participating in Full Service because the benefits provided by Intelligent Mail are not worth the required effort or investment.

Other Intelligent Mail benefits offered by USPS may not appeal to some mailers based on their various business needs and, thus, may not motivate them to participate. For example, magazine mailers told us they may benefit from receiving free Address Correction Service—a service which provides information to mailers when recipients move. Periodical mailers, including magazines, are currently required by USPS to use Address Correction Service and must pay \$.25 each time they are notified of an address change. By adopting Full Service, these mailers would receive, at no additional cost, a service they are currently paying for. However, a newspaper association representative said that none of the Intelligent Mail incentives will benefit small newspaper publishers who enter newspapers at local postal delivery facilities, thus bypassing USPS mail processing where the Intelligent Mail program information is generated. Additionally, some mailers viewed the time frame to incorporate updated address information into subsequent mailings as too short. For example, under Address Correction Service, the mailers have 30 days to update new address information without risk of financial penalty, but one mailer told us more time is needed because its mailings are sometimes prepared weeks in advance. If mailers do not update the information within the required timeframe, mailers might incur additional mailing costs from penalties assessed by USPS.

Mailers are facing other pressures that could affect their decisions to participate in Full Service, including a recession that has affected their businesses and additional postal requirements. Some mailers are reducing the amount of mail pieces sent out due to a worsening economy. For example, advertising mail in fiscal year 2008 was adversely affected by the economy—particularly credit card, mortgage, and home equity solicitations—as well as the continued shift from mail to electronic communication. Mailers also face other, additional USPS requirements unrelated to Intelligent Mail but which coincide with its implementation. These unrelated requirements may affect mailer participation in Full Service. Within the last year, USPS required mailers to simultaneously implement several programs, including changes to the standards for preparing some mail and the frequency that mailers must update their address information. A mailer, referring to Intelligent Mail and other new requirements, wrote in an association newsletter that USPS will permanently lose customers if it continues to make mailing more difficult and complex by creating new requirements and increasing prices. Thus,

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due to costs incurred to implement Intelligent Mail, the reduction in mail volume, and additional postal requirements, some mailers have questioned the value the Intelligent Mail program will add to their businesses.

USPS says that the incentives it is offering to encourage mailers to participate in the Full Service option are appropriate to get Full Service adoption started and recognize the investments mailers must make to implement Intelligent Mail. According to USPS, the value of Intelligent Mail lies in the enhanced value of the information it provides, and not only in any discount that may accompany its introduction. Furthermore, USPS said it could increase the incentive later if the adoption rate is too low. USPS also points out that, in addition to the financial discount, Full Service mailers will have access to Address Correction Service and Start the Clock information. A senior USPS official told us that the value of these other services should provide enough benefit for most mailers to justify the expense of implementing Intelligent Mail. However, according to a mailer association, many mailers placed a higher value on the discount, calling it the main incentive to participate in Full Service.

Without sufficient numbers of customers participating in Intelligent Mail, USPS may not realize several benefits of the program. Specifically, USPS may not realize the intended long-term benefit of discontinuing its existing, manual acceptance and verification process for mailers who use an automated one for Intelligent Mail. Similarly, USPS's ability to improve customer service by providing tracking information on individual mail pieces will be limited. With this improved tracking capability, USPS could identify problem areas in its processing and delivery of a mail piece, while mailers could determine the reasons behind the delivery of late mail, including an incorrect address or a plant delay. These services to customers, however, are only available through the Full Service option because mail pieces in Basic Service are not given unique tracking numbers. Further, it is not clear what Intelligent Mail information will be provided to Full Service customers and what price USPS may charge for this information.

Finally, USPS's ability to meet its statutory requirement<sup>16</sup> to measure and report on how well it is meeting its overall delivery performance standards could be hindered by low mailer adoption rates. The 2006 Postal Accountability and Enhancement Act required USPS to report on the

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<sup>16</sup>39 U.S.C. §§ 3652, 3691.

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speed and reliability of delivery for each market-dominant product.<sup>17</sup> According to PRC, the mail data USPS will use to measure its performance must be representative in order to produce meaningful results. However, USPS's measurement system only measures the performance of Full Service mail (and not Basic Service mail), which may result in a nonrepresentative sample. PRC views mailer adoption of Full Service Intelligent Mail as critical to producing accurate performance measures from data representative of a cross section of mail and notes that mailer uncertainty about Intelligent Mail requirements, implementation dates and discount rates may delay adoption. PRC has stated that it will monitor Intelligent Mail implementation to assure that accurate and representative data are obtained by requiring USPS to report quarterly on its Intelligent Mail implementation progress.

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## Conclusions

USPS is implementing a program to enable it to have much greater insight into the mail but preparations for Intelligent Mail require considerable work by both USPS and many of its commercial customers. The management approach USPS is taking has several key risks that have raised concerns about whether USPS will be able to implement the program on schedule and with all program functions in place. USPS does not have a comprehensive strategy that includes information about all the phases planned, the numerous functions and systems upgrades included, when they will be implemented, the program's goals, the baseline costs, and expected cost savings. Consequently, it will be difficult for USPS to measure Intelligent Mail's performance or to account for its results. Overall, at the program level, key risks include the uncertainty about whether mailers will find the incentives offered by USPS appealing enough to participate in the program, resource limitations, and schedule delays. Although USPS is aware of these risks, it has no plan for dealing with them should these potential problems materialize. As a result, the implementation efforts are at risk of taking longer and costing more and achievement of the program's intended benefits may be delayed.

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<sup>17</sup>Pub. L. No. 109-35, § 204, 120 Stat. 3211-3212 (2006) (codified at 39 U.S.C. § 3652). Market-dominant products primarily include First-Class Mail—domestic and international single-piece mail (e.g., bill payments and letters) and domestic bulk mail (e.g., bills and advertising); Standard Mail (mainly bulk advertising and direct mail solicitations); periodicals (mainly magazines and local newspapers); and some types of package services (primarily single-piece Parcel Post, Media Mail, library mail, and bound printed matter).

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## Recommendations for Executive Action

To help ensure that USPS addresses these risks to the successful implementation of Intelligent Mail, we recommend that the Postmaster General take the following three actions: (1) develop a comprehensive Intelligent Mail strategic plan that defines all planned phases and their associated functions and systems and includes program goals and measures of success; (2) develop cost and savings information for the activities that can be attributed to the Intelligent Mail program, including the baseline and metrics to be used to track cost savings achieved; and (3) develop a plan that addresses how USPS will mitigate program-level risks, including the implications of lower-than-anticipated customer adoption of the Full Service Intelligent Mail option, resource limitations, and schedule delays.

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## Agency Comments and Our Evaluation

The U.S. Postal Service provided written comments on a draft of this report in a letter from the Senior Vice President, Intelligent Mail and Address Quality dated April 27, 2009. These comments are reproduced in appendix III, and our evaluation of them is summarized below. Based on the comments provided, we made minor modifications to some portions of this report.

USPS agreed with our findings that it lacked an up-to-date comprehensive Intelligent Mail strategic plan and a program-level risk mitigation plan. It agreed to implement our first recommendation—to develop a comprehensive Intelligent Mail strategy, including all planned phases and the associated functions and systems, program goals, and measures of success—and our third recommendation—to develop a plan that addresses how it will mitigate risks, including the implication of lower-than-anticipated customer adoption of the Full Service Intelligent Mail option. USPS did not agree with our finding that it lacks program cost information, including an estimate of overall Intelligent Mail program costs and a capability to measure savings, and did not agree to fully implement our second recommendation, that it develop cost information.

USPS said it will implement our first recommendation by completing an update to its 2003 Intelligent Mail Corporate Plan within weeks. It said the update will detail (1) efforts completed, (2) implementation plans for its two planned phases, (3) items to be included for a possible third phase, (4) a vision of future upgrades, and (5) enabling features and capabilities on Intelligent Mail. This will facilitate improved program management and accountability. However, USPS did not commit to defining program goals and measures of success, which we believe are critical components of a comprehensive strategic or Corporate Plan.

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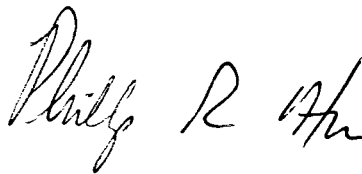
USPS did not agree to fully implement our second recommendation because it said that it has detailed program cost information and that costs are being closely managed and monitored. In addition, USPS generally disagreed with our finding that it should develop metrics to measure cost savings associated with its Intelligent Mail effort. USPS said that although the Intelligent Mail program would provide benefits that should reduce costs, as well as improve efficiency and service, it did not anticipate a specific cost or other benefit from its Intelligent Mail investment, in part because these costs or benefits could not be measured. USPS explained that there was no sound financial method to specifically attribute cost reductions to Intelligent Mail when it is also implementing other efforts to reduce costs. We recognize the difficulty of directly attributing costs to the Intelligent Mail program and agree with USPS that the activities associated with the acceptance and verification of commercial mail are most directly related to the Intelligent Mail program. USPS said that it already has a baseline and mechanism in place to track the cost and work hours associated with these activities. Although USPS did not provide us with this baseline, we agree that measuring and tracking the costs and savings associated with the acceptance and verification activities would be the most directly attributable performance indicator. We have modified our recommendation accordingly, as we continue to believe that cost and savings information is critical to provide USPS management with a means for measuring the outcome of its Intelligent Mail efforts. USPS could address our recommendation by including a discussion of its baseline and cost tracking mechanism in its Corporate Plan.

USPS agreed to implement our third recommendation by exploring the risk analysis and potential mitigation required if mailer adoption rates fall significantly below expectation, either as a separate document or as a part of the Intelligent Mail Corporate Plan. In response to our finding that it did not have a risk mitigation plan, USPS said that, at a technical level, the Intelligent Mail program has an extremely detailed risk mitigation plan that outlines both the process to identify risks and approaches to mitigate these risks. However, USPS also acknowledges that the risk associated with low mailer adoption is a valid program-level concern. We believe that including a discussion of how USPS plans to address key risks in an updated Corporate Plan is appropriate. Our recommendation was not limited only to risks associated with mailer adoption, and we continue to believe that USPS should identify and address other risks at the program level, such as resource limitations or schedule delays, and also include them in its Corporate Plan.

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

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

A handwritten signature in black ink that reads "Phillip R. Herr". The signature is written in a cursive style with a large initial "P" and "H".

Phillip Herr  
Director, Physical Infrastructure Issues

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# Appendix I: Scope and Methodology

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This report addresses (1) what the Intelligent Mail program is and the status of the U.S. Postal Service's (USPS) implementation efforts and (2) the key risks to implementing Intelligent Mail and how USPS has addressed them.

To address the first objective, we obtained documentation from and interviewed USPS officials involved in developing and managing the Intelligent Mail program. Documented information from USPS included annual reports, comprehensive operating statements, relevant decision analysis reports, quarterly investment highlights, and Intelligent Mail federal register notices, technical guides, readiness plans, schedules, presentations, and training material. Documented information from the Postal Regulatory Commission (PRC) included USPS proposals and responses, PRC questions and rulings, and public comments. We also coordinated with the USPS Office of Inspector General (OIG), who was conducting at least two audits of the Intelligent Mail program at the same time as our review, and reviewed reports resulting from these audits, released in March 2009, in addition to other OIG reports. To determine key changes required for USPS and mailers to prepare for the Intelligent Mail program, we compared USPS current and proposed changes to mail acceptance, verification, and processing and toured USPS and mailer facilities, including a presort and printing facility.

To address the second objective—risks to implementing the Intelligent Mail program and how USPS addressed them—and to obtain the perspective of mailers, we interviewed representatives from 9 companies involved in the mailing industry who participated in the development of the Intelligent Mail program. We contacted these companies directly or through trade associations. We also talked to representatives from six commercial mailer trade associations who collectively represent most of the mail sent. For example, one association said its members, which consist of over 50 profit and nonprofit organizations and major mailing associations, generate 70 percent of all mail. Documented information included association newsletters, written minutes of meetings held with USPS and letters written by the associations to USPS or PRC officials. We attempted to interview mailers from small companies to obtain their perspective on the Intelligent Mail program, but we were told by the largest mailer association—representing both large and small and the greatest cross section of commercial mailers—that smaller companies were not as familiar with the Intelligent Mail program and, thus, were reluctant to talk to us. USPS officials told us that to comply with Intelligent Mail standards, many smaller companies would either rely on vendors, such as software vendors, to provide software updates that

included Intelligent Mail capabilities or pay larger mail preparation companies to prepare their mail.

We also obtained and reviewed information from the Mailer's Technical Advisory Committee, a venue for USPS to share information with mailers and receive advice and recommendations from workgroups established by the group's leadership, which is comprised of USPS and mailing industry officials. We reviewed documentation from the Mailer's Technical Advisory Committee, including written meeting minutes, and documentation of issues that workgroups have identified and are working on or have resolved and monitored weekly teleconferences held by individual workgroups. We attended a local meeting in Dallas, Texas of a Postal Customer Council, which is a national program comprised of over two hundred local-level councils that provide a forum for mailers to exchange ideas for improved mail service and discuss new and existing USPS products, programs, regulations, and procedures. At the Postal Customer Council, we participated in Intelligent Mail presentations given by USPS and observed presentations given by top USPS leadership. We also attended a presentation of USPS's Intelligent Mail University, a 1-day USPS training course in Washington, D.C. for mailers.

To identify risks associated with USPS's Intelligent Mail program management approach, we worked with GAO's Information Technology team which provided us analytical guidance in identifying relevant criteria. We used criteria based on the practices of leading organizations, such as the Software Engineering Institute and the Chief Information Officer's Council, to effectively manage major programs and minimize risks. In addition, we used criteria identified in the GAO Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Capital Program Costs ([GAO-09-3SP](#)). We compared selected criteria to information and documentation obtained from USPS to identify areas where USPS's management approach for Intelligent Mail did not match criteria for sound risk management.

In order to provide as broad a perspective as possible on mailer concerns with USPS's implementation of the Intelligent Mail program, we analyzed comments submitted in response to the January and April 2008 USPS Federal Register notices regarding Intelligent Mail, primarily by commercial mailers and mailer associations. Specifically, we reviewed two sets of mailer comments to two Federal Register notices: (1) the Implementation of New Standards for Intelligent Mail Barcodes, Advance Notice of Proposed Rulemaking (Advance Notice) in January 2008, 73 Fed. Reg. 1158 (Jan. 7, 2008) and (2) the Implementation of New Standards for

Intelligent Mail Barcodes, Notice of Proposed Rulemaking (Proposed Rule) in April 2008, 73 Fed. Reg. 23393 (Apr. 30, 2008). We took a different analytical approach with each set of comments. Due to the large number of comments USPS said it received in response to its Advance Notice (nearly 400 written comments) and the intended use of the results of the analysis, we determined the most appropriate method to analyze these comments was to verify and validate USPS's summary of these comments as published in the Proposed Rule. In the Proposed Rule, there were 16 statements made by USPS in summarizing the comments. We reviewed all of the original comments and found evidence of comments supporting each of the 16 statements. For the second Federal Register notice, the Proposed Rule, USPS said it received 67 sets of comments. We determined the most appropriate method to analyze these comments was to conduct a complete content analysis by reviewing and categorizing all 67 comments.

We conducted this performance audit from September 2008 to April 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: Significant Dates in the Intelligent Mail Program, 2001 to 2011

Date	Event
2001	A report issued by the Mailing Industry Task Force, led by chief executives from 11 industry-leading companies and the Deputy Postmaster General of USPS, recommended Intelligent Mail as a way to respond to customer's needs
January 2003	USPS established Intelligent Mail and Address Quality organization to identify and shepherd efforts to develop Intelligent Mail program
May 2003	USPS published Intelligent Mail Corporate Plan, which established the vision of the program
2004 2005	USPS finalized the format for the Intelligent Mail barcode
September 2006	USPS permitted mailers to begin using the Intelligent Mail barcode on letter mail
December 2006	Postal Accountability and Enhancement Act signed into law, requiring USPS to report on its service performance <sup>a</sup>
January 2007	USPS announced that Intelligent Mail program will be fully operational for all commercial mailers by 2009
July 2007	USPS published new specifications for the Intelligent Mail barcode
January 2008	In Federal Register Advance Notice of Proposed Rulemaking, USPS proposed to require mailers that get automation prices to use Intelligent Mail starting January 2009 <sup>b</sup>
April 2008	In Federal Register Proposed Rule, USPS revised standards and proposed that mailers will be eligible to use Intelligent Mail and receive incentives for using Full Service starting May 2009 <sup>c</sup>
July 2008	The USPS Board of Governors approved funding to create an infrastructure that will facilitate Intelligent Mail implementation
August 2008	In Federal Register Final Rule, USPS announced that it will allow POSTNET barcodes until May 2011 and that it will start offering Intelligent Mail Basic and Full Service in May 2009 <sup>d</sup>
February 2009	USPS announced price incentives for Intelligent Mail Full Service
May 2009	USPS will make Intelligent Mail available for mailers to start implementing and testing their systems
November 2009	Price incentives for Full Service mailers will go into effect and USPS plans to add other program functions
May 2011	All mailers who get price incentives for using barcodes will be required to use Intelligent Mail barcodes

Source: GAO analysis of U.S. Postal Service documents.

<sup>a</sup>Pub. L. No. 109-435, 120 Stat. 3198 (2006).

<sup>b</sup>73 Fed. Reg. 1158 (Jan. 7, 2008).

<sup>c</sup>73 Fed. Reg. 23393 (April 30, 2008).

<sup>d</sup>73 Fed. Reg. 49333 (Aug. 21, 2008).

# Appendix III: Comments from the U.S. Postal Service

THOMAS G. DAY  
SENIOR VICE PRESIDENT  
INTELLIGENT MAIL AND ADDRESS QUALITY



April 27, 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 with the opportunity to review and comment on the draft report titled U.S. Postal Service: Intelligent Mail Benefits May Not Be Achieved if Key Risks Are Not Addressed (GAO-09-599).

The GAO study of USPS Intelligent Mail® raises valid concerns about the program, but fails to acknowledge specific aspects of the project implementation that were provided to the audit team. Most glaring of these omissions is the conscious decision of USPS Management to implement Intelligent Mail® as a non-generative, infrastructure investment. This decision was in recognition of the inability to directly attribute and track cost reductions as the result of Intelligent Mail® implementation.

Among the key findings of the study are concerns about USPS development and management approach, risk mitigation plans and potential adoption rates on the part of mailers. In addition, at a higher level, concern was raised about the need for an updated strategic plan for Intelligent Mail®. This response will address each of these issues.

#### **Program Costs**

The study finds that USPS lacks "information about the overall program costs, including its anticipated savings." In fact, USPS provided GAO with very detailed information about the cost to implement Intelligent Mail®. The program has been implemented with very rigorous controls for both expense and capital investments. Specific proposals were developed for individual components of the program. Each proposal had defined requirements, deliverables and timelines; all of which were established at a fixed price. In addition, there is very strict control of cash-flow to insure that funds are only provided when necessary.

The fundamental disagreement with GAO Auditors has been in regard to the topic of anticipated savings. As was previously identified, this is the most glaring of the omissions in the study. USPS Management clearly determined this is a non-generative infrastructure investment. This decision was made after several months of debate and alternative approaches were considered for the Decision Analysis Report (DAR). While it is understood that Intelligent Mail® will provide benefits that should reduce costs, as well as improve efficiency and service, there is no sound financial method to specifically attribute these reductions to Intelligent Mail®.

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WASHINGTON DC 20260-4400  
202-268-6200  
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WWW.USPS.COM

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Intelligent Mail® will provide data and diagnostic information that should lead to improvement in customer service, delivery, distribution and transportation operations. However, given the myriad of programs being implemented in these operations, there is no valid financial method to attribute a portion of these savings to Intelligent Mail®. Given this lack of a "clear line of sight", there is no sound basis to either track or claim these reductions.

The one exception to this approach for cost reductions is the specific activity associated with the acceptance and verification of commercial mail. This activity takes place in Business Mail Entry Units and a select group of Post Offices. The cost and work hours associated with this activity are tracked separately from other operations. The implementation of Intelligent Mail® and associated efforts, such as Performance Based Verification (PBV), have anticipated cost reductions. Both a historical baseline and tracking mechanism are in place for these cost reductions.

**Program Management**

The study raises concerns about the program management approach adopted by USPS. In part, USPS Management acknowledges these issues. Given an extended timeframe for implementation many, if not most, of the recommendations from GAO would have been included in the Intelligent Mail® program management approach. However, given the compressed timeframe associated with a May 2009 implementation, a truncated program management was established.

The Program Management approach implemented by USPS provided for rigorous methods to ensure defined project scope and requirements are achieved. There are clearly defined deliverables that included cost and schedules, resource planning, as well as the tracking of key milestones. Here are several highlights of the Program Management approach currently employed by USPS:

1. Strong Business/IT senior executive sponsorship with easy escalation for decision making.
2. Clear governance, status and communications process.
3. Standardized weekly process for reporting status.
4. Weekly checkpoints with set agenda (program schedule, milestones, decisions, issues/risks, actions).
5. Progress on fact-based quantitative project management with delivery metrics.
6. Baseline milestones and dependency program plan, integrated project plan and business work plans.
7. Risk system of record provides tracking, and communication.
8. Embedded Program Management Office Model; cross-team coordination and resource-loaded project plans.
9. Scope change control; formalized governance, traceability and communication of change.

Although a truncated methodology, it has proven quite effective. Despite an extremely compressed schedule, the successful implementation of the Operating System environment on May 11 and the Test Environment for Mailers on May 18 demonstrates how well this effort has worked.

In retrospect, the program could have been implemented in two parts. In the first, with initial funding provided, all scope, requirements, specifications, deliverables, timelines and resource planning would have been determined. As a result of this initial effort, a second funding document and project plan would have been created for the actual implementation of Intelligent Mail®.

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More than likely, it would still have required a multi-phase release schedule. This approach would have delayed implementation until at least 2011. Alternatively, the first phase would have had to begun early in 2007. Given that this approach was not adopted in 2007 and USPS Management did not want to delay implementation into 2010, the decision was made to move forward with a somewhat truncated approach to program management. While not optimal, the actual results have proven it to be effective.

#### **Risk Mitigation**

The study raises concerns about risk mitigation. At a technical level, the Intelligent Mail® program has an extremely detailed risk mitigation plan. The plan outlines both the process to identify and approaches to mitigate these risks. Beyond a theory, this plan has been effectively implemented throughout the various phases of implementation. Given the actual performance of risk identification and mitigation throughout this program, it is puzzling as to why this issue is even raised at a technical level.

At an overall program level, Risk Mitigation has risen due to the issue of Mailer Adoption of Intelligent Mail®. Here is the question: Will Intelligent Mail® be successful if mailers do not choose to participate? This is a valid issue that can, in part, be addressed in an updated Strategic Plan for Intelligent Mail® which is currently being developed.

USPS has already announced that all mailers must convert to the Intelligent Mail® Basic format not later than May 2011 if they want to qualify for automation discounts. In addition, the POSTNET code and PLANET Code will "sunset" in May 2011. Therefore, by May 2011 the overwhelming majority of commercial mail will be in an Intelligent Mail® format. What remains to be seen is what percentage will be in a Full-Service format.

#### **Mailer Adoption**

USPS has three basic approaches by which to influence mailer adoption of Full-Service Intelligent Mail®: 1) Value to Customer; 2) Price Incentive; and 3) Mailing Requirements. USPS has actively employed both the first and second approach. The Price Incentive will be implemented in November 2009, with per piece incentives of three cents for First-Class Mail and one cent for Periodicals and Standard Mail. Should these price incentives and/or value to customers prove inadequate, USPS has the flexibility to revise its strategy using any or all of these three approaches referenced above.

What volume of Full-Service Intelligent Mail® adoption is necessary? To answer this question three outcomes must be considered:

- 1) Volume is necessary to provide valuable internal data and diagnostic reporting.
- 2) Volume/Points of entry is necessary to provide for representative service measurement.
- 3) Volume is necessary to reduce work hours in the acceptance and verification process.

In all three cases, USPS believes the combination of Value to Customer and Price Incentives will provide the volume necessary to achieve the desired outcomes. Perhaps the most difficult to assess is predicting the amount of volume that would be used to provide reasonable representation in service measurement. The challenge is not volume; it is entry points. The Service Measurement requirement, agreed upon with the Postal Regulatory Commission, is a District to District performance matrix that should be valid on a quarterly basis. There is already more than adequate Intelligent Mail® volume in the network to be statistically valid to a destination level. The greatest challenge is to get enough mailers to enter at each of the Districts to be statistically valid from origin. This is not driven by volume, instead it is the number of mailers who participate and where they are located.

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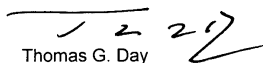
**Response to Recommendations**

The study provides for three recommendations to address risks:

- 1) Update Intelligent Mail Strategy;
  - 2) Program cost information and metrics to be used to track savings; and
  - 3) Plan to mitigate risks of lower than anticipated customer adoption.
- 1) USPS fully concurs with an updated version of the 2003 Intelligent Mail Corporate Plan. This effort is underway and will be completed in the next few weeks. This effort is based upon work completed as part of a 2007 update that remains in draft. The 2009 update will detail efforts completed; implementation plans for Release 1 (May 2009) and Release 2 (November 2009); possible items for inclusion in a Release 3 (date to be determined based upon both need and funds availability); vision of future upgrades; and enabling features/capabilities on Intelligent Mail®.
  - 2) As previously indicated, detailed program cost information already exists and is being closely managed and monitored. The metrics to track cost savings will be focused exclusively on reductions in the acceptance/verification activities. The baseline is already established and the tracking capability is in place.
  - 3) USPS will explore the risk analysis and potential mitigation required should mailer adoption rates fall significantly below expectation. This can be produced as a separate document or as an appendix to the Intelligent Mail Corporate Plan.

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

Sincerely,



Thomas G. Day

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# Appendix IV: GAO Contact and Staff Acknowledgments

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## GAO Contact

Phillip Herr, (202) 512-2834 or [herrp@gao.gov](mailto:herrp@gao.gov)

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## Staff Acknowledgments

In addition to the contact named above, Teresa Anderson, Lauren Calhoun, Wendy Dye, Brandon Haller, Emily Larson, Amy Rosewarne, and Travis Thomson made key contributions to this report.

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