July 31, 2008

Congressional Requesters


In October 2001, spores of the deadly bacterium anthrax were found in mail sent to members of the news media and congressional leaders. In all, 22 people were infected with anthrax and 5 people died, including 2 postal workers. The United States Postal Service (Service) took a variety of steps to protect people from biohazards in the mail. For example, the Service began contracting for the irradiation of mail to recipients at the Congress, the White House, and federal agencies with specific ZIP Codes (20201 through 20597) in the Washington, D.C., area (D.C. federal mail). The irradiation process uses either a high-energy electron beam or X-rays to penetrate pieces of mail (mailpieces) and kill harmful organisms, such as anthrax. The Service initially hired two contractors to irradiate the mail, one of which operated between November 2001 and April 2002. The other contractor has been irradiating mail since November 2001. In addition, the Service hired contractors to transport the mail for irradiation and to oversee the current irradiation contractor.


- the volume of mail irradiated and how the volume has changed,
- the cost of irradiating mail and how the cost has changed, and

---

1We use the term “agency” or “agencies” to refer to federal entities—including Congress and the White House—with specific ZIP Codes in the Washington, D.C., area.

2Mail to ZIP Code 20260—the U.S. Postal Service Headquarters—is no longer irradiated. It is processed in the same manner as all other nonirradiated mail.

• the extent to which irradiation delays mail deliveries and how these delivery delays have changed.

In addition, given continuing congressional interest, this report also provides information on the status of an irradiation facility in Washington, D.C.

To accomplish our work, we (1) analyzed relevant documentation on each of the four reporting objectives, as well as available data on the volumes, cost, and delivery delays associated with irradiating D.C. federal mail from November 2001 through April 2008; (2) interviewed Service officials and personnel of the current irradiation contractor and the contractor that oversees the Service’s irradiation contract; and (3) toured the Service’s mail preparation facility in Washington, D.C., and the contractor’s irradiation facility in New Jersey. We did not attempt to determine whether, or to what extent, the additional mail screening processes used by some federal agencies further delay mail to agency recipients because any such delays would not be attributable to the irradiation process.

To test the reliability of available data, we (1) compared, as applicable, available data from various sources to identify differences and possible errors between and within the data sets; (2) discussed identified differences and possible errors with appropriate Service and contractor personnel; and (3) obtained agreement from these personnel on our data analyses. When we did not have access to multiple data sources, we consulted with knowledgeable officials and provided our analysis for their corroboration. Finally, for data on the volume and costs of irradiating mail, we also obtained, evaluated, and discussed applicable data collection, entry, and control procedures with appropriate Service and contractor personnel.

While we determined that available data were sufficiently reliable for our reporting purposes, the data were incomplete because of the Service’s 4-year record retention policy and a change to its accounting system. For example, data on the volume of mail irradiated by one of two contractors the Service used from November 2001 through April 2002, as well as any delivery delays associated with these mail volumes, are no longer available. In addition, data on the costs of the Service’s supplies and staffing for fiscal years 2002 and 2003, as well as its contractor costs for transporting the mail to and from the two irradiation facilities it used in fiscal year 2002, are not available. Further, cost and payment information on certain other contractor costs, such as the cost (and the year or years of payment) associated with designing ventilating equipment for the Service’s mail preparation facility, monitoring air in the facility, and performing environmental sampling of irradiated mail containers, also was not available. Finally—even though they are generally available—we have chosen not to report data on contract costs by type of service rendered because doing so could adversely affect future procurements for these services.

We conducted this performance audit from March 2008 through June 2008 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 based on our audit objectives.
On July 23 and July 28, 2008, we briefed your staffs on the results of our work. This report formally conveys the information provided in those briefings (see enclosure). In summary, we found the following:

- According to available data, about 1.2 million containers of D.C. federal mail were irradiated from November 2001 through April 2008, and the volume of mail irradiated is declining. Nearly all of this mail volume was First-Class Mail packed in boxes weighing from about 15 to 20 pounds. The average number of mail containers irradiated monthly declined from about 23,700 in fiscal year 2002 to about 11,700 in fiscal year 2007. Data for October 2007 through April 2008 indicates a further decline to a monthly average of about 10,900 containers. The decline in the volume of mail irradiated is due to a number of factors, including overall decreases in mailings of First-Class Mail and agencies’ actions to bypass the irradiation process, such as by changing their mailing addresses (Zip Code) or using alternative sources of mail delivery—FedEx, for example.

- The cost for irradiating D.C. federal mail exceeded $74.7 million from November 2001 through April 2008, based on available data. The vast majority of these costs, about $66.2 million (89 percent), was for contractors to transport and irradiate the mail and for the oversight contractor to manage and oversee the current irradiation contractor. The remaining costs, about $8.5 million (11 percent) were for the Service’s staff, supplies, and mail preparation facility, among other expenses. The Service paid at least $74.3 million of the approximately $74.7 million from its general operating fund—i.e., funds from the Service’s revenues. Annual costs for fiscal years 2004 through 2007—the period with more complete data—remained relatively constant, averaging about $12 million. Most costs are unaffected by declines in the volume of mail irradiated.

- Although the Service’s deliveries to agency mail rooms (and third-party agents hired to receive and handle an agency’s mail) were initially delayed up to 3

---

1 The Service uses two types of containers to irradiate mail—boxes, which primarily hold First-Class Mail, and stainless steel “totes,” which hold parcels. Data are not available on the number of individual mailpieces irradiated in containers since November 2001. In addition, data on the volume of mail containers irradiated by one of the two contractors the Service used from November 2001 through April 2002 are no longer available.

2 Data on the costs of the Service’s supplies and staffing for fiscal years 2002 and 2003, and its contractor costs for transporting the mail to and from the two irradiation facilities it used in fiscal year 2002, are not available. In addition, cost and payment information on certain other contractor costs, such as the cost (and year or years of payment) associated with designing ventilating equipment for the Service’s mail preparation facility, monitoring air in the facility, and performing environmental sampling of irradiated containers, also was not available. Data on all costs available are presented in current dollars, i.e., they have not been adjusted for inflation.

3 We excluded $388,000—the approximate cost of the biohazard detection system installed in the mail preparation facility—from the $74.7 million total because the Service paid for this system using appropriated funds.
months in the months immediately following the October 2001 anthrax incident, by late February 2002, the time frame for delivering irradiated mail had decreased to about 8 days. Currently, D.C. federal mail typically is delayed 2 to 3 days. Additional delays have been infrequent but have occurred because of factors such as repair and maintenance at the irradiation facility that affect entire trailer loads of mail, as well as packing errors and irradiation damage that affect individual boxes of mail. Available contractor data (June 29, 2003, through April 2008) indicate that 15 delivery delays—generally caused by repair and maintenance issues at the irradiation facility—affect trailer loads of mail. Ten of the 15 incidents lasted 1 day, while the remainder delayed trailer loads of mail up to 5 days. In addition, available data indicate that 271 boxes of the approximately 1.2 million mail containers irradiated were delayed because of packing errors at the Service’s mail preparation facility from November 2001 through April 2008—an annual average of 42 boxes. Such delays occur when a box of mail falls outside the prescribed weight range for irradiation and typically delay boxes of mail by 1 additional day. Finally, the high level of heat (up to 150 degrees Fahrenheit) generated by the irradiation process can scorch a box of mail and—depending on the severity of the scorching—damage (and possibly destroy) a portion of the mail inside. Based on available contractor data, 663 boxes of mail were damaged from November 2001 through April 2008—an average of about 102 boxes each year. Delays resulting from damage to individual mailpieces cannot be determined because the Service does not maintain data on (1) the number of mailpieces damaged by irradiation, (2) the time (i.e., delay) associated with delivering damaged mailpieces, or (3) the number of mailpieces so severely damaged they cannot be delivered.

- While Congress appropriated $7 million in 2005 for an irradiation facility in Washington, D.C., the Service has not yet used the funds but is exploring options that may provide an opportunity to use them. In January 2008, the Service decided to abandon its efforts to build an irradiation facility in Washington, D.C., because of cost and other considerations, deciding instead to continue contracting for these services. According to Service officials, the Service will decide how, or whether, to use the $7 million appropriation after the Service has (1) received and evaluated contractor offers on its solicitation for the continuation of irradiation services and (2) completed the solicitation process—a process that is expected to conclude in early 2009. According to Service officials, it is possible that contractors will propose irradiating mail at a facility in Washington, D.C. After evaluating the offers, the Service will make a final decision on how to proceed, including whether to request congressional approval to use the funds to help offset its ongoing costs for irradiating D.C. federal mail.

We provided the Service with a draft of the enclosure, and we have incorporated its technical comments, as appropriate.

We are sending copies of this report to the Postmaster General, appropriate congressional committees, and other interested parties. We also will make copies
available to others upon request. In addition, the report will be available at no charge on the GAO Web site at http://www.gao.gov.

If you or your staffs have any questions about this report, please contact me at (202) 512-2834 or herrp@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report were Kathleen Turner, Assistant Director; Tonnye Conner-White; Heather Frevert; and Joshua Ormond.

Phillip R. Herr  
Director, Physical Infrastructure Issues

Enclosure
List of Congressional Requesters

The Honorable Richard J. Durbin
Chairman
The Honorable Sam Brownback
Ranking Member
Subcommittee on Financial Services and General Government
Committee on Appropriations
United States Senate

The Honorable Jose E. Serrano
Chairman
The Honorable Ralph Regula
Ranking Member
Subcommittee on Financial Services and General Government
Committee on Appropriations
House of Representatives

Briefing to the House and Senate Appropriations Committees
July 2008
Contents

• Introduction (Slides 3 to 4)
• Objectives (Slide 5)
• Scope and Methodology (Slides 6 to 9)
• Summary (Slides 10 to 11)
• Background (Slides 12 to 20)
• Objective 1: Volumes of Mail Irradiated (Slides 21 to 24)
• Objective 2: Cost of Irradiating Mail (Slides 25 to 28)
• Objective 3: Delays in Delivering Irradiated Mail (Slides 29 to 37)
• Objective 4: Status of an Irradiation Facility in Washington, D.C. (Slides 38 to 41)
Introduction

- In October 2001, spores of the deadly bacterium anthrax were found in mail sent to members of the news media and congressional leaders. Two contaminated letters were sent to senators, one of which resulted in 30 congressional employees being exposed. In all, 22 people were infected with anthrax, and 5 people died, including 2 postal workers. This event was the first of its kind in the United States and, consequently, resulted in a lengthy, multi-agency federal response.
Introduction (cont'd)

- The United States Postal Service (Service) took a variety of steps to protect people from biohazards in the mail.

- For example, the Service began contracting for the irradiation of mail to recipients at Congress, the White House,1 and federal agencies with specific ZIP Codes (20201 through 20597) in the Washington, D.C., area (D.C. federal mail).2

- The Service initially hired two contractors to irradiate the mail, one of which operated between November 2001 and April 2002. The other contractor has been irradiating mail since November 2001. In addition, the Service hired contractors to transport the mail and to oversee the current irradiation contractor.

- The irradiation process uses either a high-energy electron beam or X-rays to penetrate pieces of mail (mailpieces) and kill harmful organisms, such as anthrax. Mailpieces are irradiated in two types of containers—boxes which primarily hold First-Class Mail, and stainless steel “totes” which hold packages (parcels).

- In addition, although other mail is not irradiated, the Service installed biohazard detection equipment at each of its 272 processing and distribution centers nationwide to identify anthrax in the U.S. mailstream.

---

1We use the term “agency” or “agencies” to refer to federal entities, including Congress and the White House, with specific ZIP Codes in the Washington, D.C., area.

2Mail to ZIP Code 20260—the U.S. Postal Service Headquarters—is no longer irradiated. It is processed in the same manner as all other nonirradiated mail.
Objectives

- Pursuant to Senate Report 110-129, dated July 13, 2007, this briefing provides information on the status of the Service’s program for irradiating D.C. federal mail since November 2001. Specifically, as directed by the Congress, this briefing describes
  - the volume of mail irradiated and how the volume has changed,
  - the cost of irradiating mail and how the cost has changed, and
  - the extent to which irradiation delays mail deliveries and how these delivery delays have changed.

- Given continuing congressional interest, this briefing also provides information on the status of an irradiation facility in Washington, D.C.

---

Scope and Methodology

To accomplish our work, we

- analyzed relevant documentation and available data on the volumes, cost, and delivery delays associated with irradiating D.C. federal mail from November 2001 through April 2008;
- interviewed Service officials, as well as personnel of (1) the current irradiation contractor and (2) the contractor that oversees the Service’s irradiation contract; and
- toured the Service’s mail preparation facility in Washington, D.C., and the contractor’s irradiation facility in New Jersey.

- We did not attempt to determine whether, or to what extent, the additional mail screening processes used by some federal agencies further delay mail to agency recipients because any such delays would not be attributable to the irradiation process.
Incomplete information limits full reporting:

- Data on the volume of mail irradiated by one of two contractors the Service used from November 2001 through April 2002, as well as any delivery delays associated with these mail volumes, are no longer available.

- Data on the costs of the Service’s supplies and staffing for fiscal year (FY) 2002 and FY 2003 and its contractor costs for transporting the mail to and from the two irradiation facilities it used in FY 2002 are not available. In addition, cost and/or payment information on certain other contractor costs, such as the cost (and the year or years of payment) associated with designing ventilating equipment for the Service’s mail preparation facility, monitoring air in the facility, and performing environmental sampling of irradiated containers, also was not available.

Other reporting limitations:

- We have chosen not to report data on contract costs, by type of service rendered, because doing so could adversely affect future procurements for these services.

---

4In its technical comments on a draft of this briefing, the Service stated it could not provide all data on volumes, costs, and delays due to (1) its 4-year record retention policy and (2) a change in its accounting system.
Available Data Were Sufficiently Reliable for Our Reporting Purposes

We tested available data to ensure that they were sufficient for our reporting purposes:

- We compared, as applicable, available data from various sources to identify differences and possible errors between and within the data sets, discussed identified differences and possible errors with appropriate Service and contractor personnel, and obtained agreement from these personnel on our data analyses.

- When we did not have access to multiple data sources, we consulted with knowledgeable officials and provided our analysis for their corroboration.

- For data on the volume and costs of irradiating mail, we also obtained, evaluated, and discussed applicable data collection, entry, and control procedures with appropriate Service and contractor personnel.
Scope and Methodology

Performed Work in Accordance with Applicable Standards

- We provided the Service with a draft of these slides and incorporated its technical comments, as appropriate.

- We conducted this performance audit from March 2008 through June 2008 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 based on our audit objectives.
Summary

- About 1.2 million containers of D.C. federal mail were irradiated from November 2001 through April 30, 2008, and the annual volume of mail irradiated is declining.

- The cost for irradiating D.C. federal mail exceeded $74.7 million from November 2001 through April 30, 2008. Annual costs from FY 2004 through FY 2007—the period with more complete data—remained relatively constant, averaging about $12 million.

---

5Data on the volume and cost of mail irradiated since November 2001 are incomplete for the reasons just discussed.
6All costs are in current dollars, i.e., they have not been adjusted for inflation.
Summary (cont’d)

- While the Service initially experienced prolonged delays in delivering irradiated D.C. federal mail, the current delay is typically 2 to 3 days. Additional delays have been infrequent, but have occurred because of factors such as repair and maintenance at the irradiation facility, which affect entire trailer loads of mail, and packing errors and irradiation damage, which affect individual boxes of mail.

- While Congress appropriated $7 million in FY 2005 for an irradiation facility in Washington, D.C., the Service has not yet used the funds, but is exploring options that may provide an opportunity to use the funds.
Background

Introduction of Anthrax into the U.S. Mailstream

- Anthrax is an acute infectious disease that is caused by the *Bacillus anthracis* bacterium, which is commonly found in soils and forms spores (like seeds). Human anthrax infections are rare in the United States. However, if anthrax spores enter the body, they can produce local swelling and tissue death.

- After anthrax was discovered in the U.S. mailstream, delivery of D.C. federal mail was suspended and mail was stored while the Service and a wide range of federal authorities deliberated on the appropriate response.
Background

The Volume of Stored D.C. Federal Mail (Backlogged Mail) in the Service’s Possession Immediately following the Anthrax Incident Was Substantial.\(^7\)

\(^7\)According to Service officials, there were numerous instances in which agencies, or agents for an agency, returned very large volumes of mail to the Service for irradiation many months later and, in one case, about 18 months after the October 2001 anthrax incident. Because these volumes were not part of the initial backlog of mail, they are not depicted in the figure above.
Background

Decision to Irradiate D.C. Federal Mail

- Once government authorities determined that irradiation was the best option for treating (sanitizing) the mail, they developed irradiation protocols and the Service contracted with companies to transport and irradiate the mail.

- The irradiation process sterilizes objects, such as mail, by passing them through either a high-energy electron beam or X-ray, both of which penetrate deeply into an object and kill harmful organisms, such as anthrax.

- With the exception of the Service’s headquarters in Washington, D.C., ZIP Code 20260—all First-Class Mail and Priority Mail to addresses with ZIP Codes between 20201 and 20597 are currently irradiated.8

8Initially all D.C. federal mail was irradiated. Over time, however, a decision was made to focus on First-Class Mail and Priority Mail because of the increased risk these classes of mail pose. Additional classes of mail are irradiated for the Senate and the White House.
## Background

The Anthrax Incident Led to Changes in How D.C. Federal Mail Is Processed

<table>
<thead>
<tr>
<th>Pre-anthrax (before October 22, 2001)</th>
<th>Months immediately following the anthrax incident</th>
<th>Post-anthrax (current process)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• D.C. federal mail processed at the Brentwood Processing and Distribution Center.(^a)</td>
<td>• Delivery of D.C. federal mail suspended and mail stored by the Service for later delivery.</td>
<td>• All D.C. federal mail delivered to a mail transfer center in Maryland where postal employees sort the mail according to whether it is supposed to be irradiated.</td>
</tr>
<tr>
<td>• Irradiation of D.C. federal mail begins (November 2001).</td>
<td>• Irradiated D.C. federal mail packaged for irradiation over a period of about 2 months.</td>
<td>If yes: (Primarily applies to First-Class Mail within a specific range of ZIP Codes.)</td>
</tr>
<tr>
<td>• Backlogged mail is also irradiated over a period of about 2 months.</td>
<td></td>
<td>• Contractor delivers mail to be irradiated to the Service’s mail preparation facility where it is packaged for irradiation.(^b)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Contractor transfers the packaged mail to the irradiation facility in New Jersey.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Contractor returns the irradiated mail to the Service’s mail preparation facility for aeration (24 hours).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The Service transfers irradiated mail to its delivery facility for delivery to agency mail rooms.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If no: (Applies to most D.C. federal mail that is not First-Class Mail, such as Standard Mail [i.e., business mailings] and Periodical Mail. Also applies to ZIP Code 20000 and federal mail outside the specific range of ZIP Codes.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Transfer center moves this mail to the Service’s delivery facility where it is processed for delivery to agency mail rooms.</td>
</tr>
</tbody>
</table>

Source: GAO.

\(^a\)The Brentwood facility was renamed the Joseph Curseen Jr. and Thomas Morris Jr. Processing and Distribution Center, in memory of the two Brentwood employees who died of inhalation anthrax.

\(^b\)The mail preparation facility also receives a small portion of mail, including misdirected mail, from the Service’s delivery facility.
Background

Overview of the Current Irradiation Process

- Mail arrives at the Service’s mail preparation facility where postal employees combine mailpieces and parcels into containers.9 First-Class Mail and Priority Mail are combined in boxes, while parcels are combined in totes. As shown below, totes are large stainless steel containers that can hold up to 500 pounds of parcels.

9The Service operates a biohazard detection system at the facility to detect anthrax.
Background

Overview of the Current Irradiation Process (cont'd)

- Postal employees load boxes and totes onto a trailer used solely for transporting mail to the irradiation facility, currently in New Jersey.
  - Typically, one trailer load of mail is sent for irradiation each day.

- The contractor transports the trailer to the irradiation facility, usually arriving in the early evening.
  - Facility employees verify that the correct number of mail containers arrived, unload the trailer, and begin the irradiation process.
Background

Overview of the Current Irradiation Process (cont'd)

Illustration: Boxes of mail moving through the irradiation facility

Source: United States Postal Service.
Overview of the Current Irradiation Process (cont'd)

- Boxes of mail are irradiated shortly after receipt using electron-beam technology, which takes several hours to complete. The boxes are typically available for pickup the following morning.

- Totes containing parcels are irradiated later using X-ray technology, which requires more time. Totes are typically returned to the Service 2 days after arriving at the facility.

- The contractor picks up the irradiated mail and transports it to the Service’s mail preparation facility, where the mail is unloaded and “aired out” for 24 hours to dissipate fumes.
Overview of the Current Irradiation Process (cont'd)

- The mail is then transferred to the Service's delivery facility, where it is processed and (in most cases) delivered to either (1) an agency’s mail room or (2) a third-party agent the agency hired to receive and handle an agency’s mail.10

- Finally, some federal agencies, including the White House and the Pentagon, take additional steps—including screening and environmental sampling—to ensure the safety of their mail.

  - Such activities may further delay mail delivery to the intended recipient and are beyond the control of the Service.

10Some agencies use couriers to pick-up their mail from the Service.
Objective 1: Volumes

Summary: Volumes of D.C. Federal Mail Irradiated, November 2001 through April 2008

• About 1.2 million containers of D.C. federal mail were irradiated from November 2001 through April 30, 2008,11 and the annual volume of mail irradiated is declining.

11Data are not available for the number of individual mailpieces irradiated since November 2001. In addition, data on the volume of mail irradiated by one of two contractors the Service used from November 2001 through April 2002 are no longer available.
Objective 1: Volumes

Volume of Mail Containers Irradiated from FY 2002 through FY 2007

- Available data indicate that the volume of mail containers irradiated was greatest in FY 2002, when the backlogged mail was irradiated. Volumes have since declined substantially.

![Graph showing number of mail containers irradiated from FY 2002 to FY 2007. The graph shows a decline in the number of containers irradiated over time.](image)

*Does not include data for mail irradiated by one of two contractors used between November 2001 and April 2002 for which data are no longer available.

Source: GAO analysis of United States Postal Service contractor data.
Objective 1: Volumes

Volumes of Mail Irradiated Declined Substantially from FY 2002 through FY 2007

- According to data from the Service’s contractor, which has been irradiating D.C. federal mail since November 2001, it had irradiated about 1.2 million containers of mail as of April 30, 2008.
  - Nearly all of the mail volume (99.8 percent) was irradiated in boxes.
- Available data indicate that the average number of containers irradiated monthly declined from about 23,700 in FY 2002 to about 11,700 in FY 2007.
  - Data for the first 7 months of FY 2008 indicate a further decline in the volume—down to about 10,900 containers per month.
Objective 1: Volumes

Reasons for the Decline in the Volume of Mail Irradiated

- The continuing decline in the volume of mail irradiated is due to a number of factors, including:
  
  - Overall the volume of First-Class Mail sent annually has decreased, partly because of the increased use of e-mail.
  
  - Some federal agencies in Washington, D.C., have changed their mailing address (ZIP Code), thereby by-passing the irradiation process.
  
  - Some federal agencies use alternative sources of mail delivery (e.g., FedEx, UPS, etc.) to by-pass the Service’s irradiation process.
Objective 2: Cost

Summary: Cost of Irradiating D.C. Federal Mail, November 2001 through April 2008

- The cost for irradiating D.C. federal mail exceeded $74.7 million from November 2001 through April 30, 2008.¹² Annual costs from FY 2004 through FY 2007—the period with more complete data—remained relatively constant, averaging about $12 million.¹³

¹²Data on the costs of the Service’s supplies and staffing for FY 2002 and FY 2003 and its contractor costs for transporting the mail to and from the two irradiation facilities it used in FY 2002 are not available. In addition, cost and/or payment information on certain other contractor costs, such as the cost (and year or years of payment) associated with designing ventilating equipment for the Service’s mail preparation facility, monitoring air in the facility, and performing environmental sampling of irradiated containers, also was not available.

¹³All costs are in current dollars, i.e., they have not been adjusted for inflation.
Objective 2: Cost

Available Data on the Cost of Irradiating D.C. Federal Mail, November 2001 through April 30, 2008

According to available data, costs exceeded $74.7 million.

- 89 percent of these costs, or about $66.2 million, were for contractors to transport and irradiate the mail, and for the oversight contractor to manage and oversee the current irradiation contractor.

- 11 percent, or about $8.5 million, were for the Service’s staff, supplies, and mail preparation facility, among other expenses.

- Most costs are unaffected by declines in the volume of mail irradiated.

- The Service paid at least $74.3 million of the approximately $74.7 million from its general operating fund—i.e., funds from the Service’s revenues.\(^\text{14}\)

\(^{14}\)We excluded $388,000—the approximate cost of the biohazard detection system installed in the mail preparation facility—from the $74.7 million total because the Service paid for this system using appropriated funds. As noted previously, all costs are in current dollars.
Objective 2: Cost

Available Data on the Cost of Irradiating D.C. Federal Mail, November 2001 through April 30, 2008 (cont'd)

Data on the cost of the Service's supplies and staffing for FY 2002 and FY 2003 and its contractor costs for transporting the mail to and from the two irradiation facilities it used in FY 2002 are not available. In addition, cost and/or payment information on certain other contractor costs, such as the cost (and year or years of payment) associated with designing ventilating equipment for the Service's mail preparation facility, monitoring air in the facility, and performing environmental sampling of irradiated containers, also was not available. All costs are in current dollars.

We have chosen not to report data on contract costs by type of service rendered because doing so could affect future procurements for these services.
Objective 2: Cost

Available Data on the Annual Cost of Irradiating D.C. Federal Mail, FY 2004 to FY 2007

- The Service’s annual cost for irradiating D.C. federal mail have remained relatively constant, ranging from a low of about $11.6 million in FY 2004 to a high of about $12.3 million in FY 2006, based on available data.\(^\text{15}\)
  - Average annual costs were about $12 million during the 4-year period.
  - Costs for contracted services averaged about $10.3 million annually, while the Service’s other costs averaged about $1.7 million annually.

\(^\text{15}\) We focused on FY 2004 through FY 2007 because, as discussed previously, data for this period are more complete.
Objective 3: Delays

Summary: Delays in Delivering Irradiated D.C. Federal Mail, November 2001 through April 2008

- While the Service initially experienced prolonged delays in delivering irradiated D.C. federal mail, the current delay is typically 2 to 3 days. Additional delays have been infrequent, but have occurred because of factors such as repair and maintenance at the irradiation facility, which affect entire trailer loads of mail, and packing errors and irradiation damage, which affect individual boxes of mail.
Objective 3: Delays

Mail Deliveries Were Delayed Up to 3 Months Immediately following the Anthrax Incident.

- There were prolonged delays in delivering D.C. federal mail to agency mail rooms (and to agents hired to receive and handle an agency’s mail) in the months immediately following the October 2001 anthrax incident.
  - The Service’s deliveries were delayed up to 3 months initially, partly because it took about 2 months to irradiate the backlogged mail.\(^{16}\)
  - By late February 2002, according to an advisory from the U.S. General Services Administration,\(^{17}\) the time frame for delivering irradiated mail had decreased to about 8 days from the point of mailing to delivery.

\(^{16}\)According to Service officials, prolonged delivery delays also occurred well after the point when all of the backlogged mail had been irradiated and delivered. Specifically, according to the officials, there were numerous instances in which agencies, or agents for an agency, returned very large volumes of D.C. federal mail to the Service for irradiation many months later and, in one case, about 18 months after the October 2001 anthrax incident. The agencies/agents had held the mail, rather than providing it to the intended mail recipients.

\(^{17}\)The General Services Administration is required to provide assistance to federal agencies on records management, including the processing of mail.
Objective 3: Delays

Current Delays Are Typically 2 to 3 Days,\(^{18}\) Depending on whether the Mail Is Irradiated in Boxes (2 Days) or Totes (3 Days).

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mail arrives at the Service’s mail preparation facility in Washington, D.C.</td>
<td>Mail leaves the irradiation facility</td>
<td>Mail is moved to the Service’s delivery facility</td>
<td>Mail is ready for pickup or delivery</td>
</tr>
<tr>
<td>The Service prepares mail for irradiation</td>
<td>Mail arrives at the Service’s mail preparation facility and is aired out for 24 hours</td>
<td>Final processing</td>
<td></td>
</tr>
<tr>
<td>Mail leaves the mail preparation facility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mail arrives at the irradiation facility and is irradiated in New Jersey</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: GAO.

\(^{18}\)Because the vast majority of D.C. federal mail is irradiated in boxes, this figure is intended to depict the typical timeline for delivering this mail. As discussed previously, parcels irradiated in totes typically are delayed 1 additional day.
Factors that Can Cause Additional Delivery Delays

- While a 2- to 3-day delay in the delivery of irradiated mail is currently typical, numerous factors can cause additional delivery delays. Some of these factors can delay an entire trailer load of mail (boxes and totes), including
  - repair and maintenance at the irradiation facility,
  - power outages at the irradiation facility, and
  - inclement weather (which can affect the transportation of the mail).19
- Other factors, such as packing errors and damages caused by irradiation, can delay individual boxes of mail.20

19 Isolated events, unrelated to the irradiation process, can also disrupt the processing of D.C. federal mail. For example, according to the current contractor’s records, from June 29, 2003, through April 30, 2008, the Service held up two shipments of mail to the irradiation facility due to the possibility of biohazards, such as anthrax, in the mail. We did not include these delays in our analysis because the cause of the delays was unrelated to the irradiation process.
20 According to Service officials, the X-ray technology used to irradiate totes eliminates the possibility of delays due to either packing errors or damages to the contents of parcels.
Objective 3: Delays

Additional Delivery Delays Have Been Infrequent\(^\text{21}\)

- Available contractor data (June 29, 2003, through April 30, 2008), indicate that 15 delivery delays have affected trailer loads of mail. Nearly one-half of these delays occurred in FY 2003. The 15 delays generally resulted from repair and maintenance issues at the irradiation facility.
  - Ten of 15 incidents lasted 1 day.
  - The remaining incidents lasted longer, delaying trailer loads of mail up to 5 days.

\(^{21}\)According to Service officials, additional delays have been infrequent, in part, because the Service adjusts its schedule and staff to ensure on-time delivery of D.C. federal mail whenever the mail is received from the irradiation facility less than 6 hours late.
Objective 3: Delays

Additional Delivery Delays Have Been Infrequent (cont'd)

- **Packing errors:** According to Service officials, boxes under 14.9 pounds and over 20 pounds cannot be properly irradiated. Instead, these boxes must be returned to the Service, repackaged, and then returned for irradiation.

  - Available data indicate that 271 boxes out of approximately 1.2 million containers were delayed because of packing errors from November 2001 through April 30, 2008—an annual average of 42 boxes.

  - Returning boxes for repackaging typically delays mail by 1 additional day.

22Boxes weighing under 14.9 pounds would receive an excessively high dose of irradiation, while boxes weighing over 20 pounds would not receive the minimum required dose.
Objective 3: Delays

Additional Delivery Delays Can Occur because of Damage Caused by the Irradiation Process

The high level of heat (up to 150° F) can scorch a box of mail and, depending on the severity of the scorching, damage (and, possibly, destroy) a portion of the mail inside. Scorching most often occurs in dry winter months when humidity levels are low and paper is dryer.

Source: GAO.
Objective 3: Delays

Scorched Boxes Create the Possibility of Additional Delivery Delays for Any Mailpieces within the Boxes that Are Burnt.

*Personnel at the Service's two Mail Recovery Centers are authorized to open undeliverable mail, including mailpieces damaged by the irradiation process, to determine whether the mailpiece contains any information that could assist the Service in either (1) delivering the mailpiece or (2) returning the mailpiece to the sender.
Objective 3: Delays

Available Data Suggest that Delays due to Irradiation Damage Also Have Been Infrequent

- Based on available contractor data, 663 boxes of mail were damaged from November 2001 through April 30, 2008—an average of about 102 boxes each year.\textsuperscript{23}

- Delays resulting from damages to individual mailpieces cannot be determined because the Service does not maintain data on
  - the number of mailpieces damaged by irradiation,
  - the time (i.e., delay) associated with delivering damaged mailpieces, or
  - the number of mailpieces that are so severely damaged that they cannot be delivered.

\textsuperscript{23}Nearly all of these boxes were burnt. However, according to the current irradiation contractor, there have been one or two occasions when a box of mail was crushed by a malfunction of the conveyor belt used to move boxes of mail through the facility.
Objective 4: Facility Status

Summary: Status of an Irradiation Facility in Washington, D.C.

- While Congress appropriated $7 million in FY 2005 for an irradiation facility in Washington, D.C., the Service has not yet used the funds, but is exploring options that may provide an opportunity to use the funds.
Objective 4: Facility Status

The Service Has Not Spent the $7 Million Appropriated

- In FY 2005, Congress appropriated $507 million for the Service’s emergency preparations.24 (The appropriation was subsequently reduced to $503 million due to an across-the-board funding rescission.)
  - $7 million of this amount was designated “for the mail irradiation facility in Washington, D.C.”
- According to Service officials, the Service has not spent the $7 million appropriation. However, it has spent about $1.5 million of its funds (i.e., funds from the Service’s revenues) exploring the possibility of building an irradiation facility in Washington, D.C.
  - The funds were spent for (1) activities related to site identification and (2) environmental assessments.

---

The Service Expects to Make Its Decision on Using the Appropriation in Early 2009

- In January 2008, the Service decided to abandon its efforts to build an irradiation facility in Washington, D.C., because of cost and other considerations, deciding instead to continue contracting for these services.
- The Service plans to issue a solicitation for the continuation of irradiation services in September 2008.
- According to Service officials, the Service will decide on how, or whether, to use the $7 million appropriation after it has (1) received and evaluated contractor offers and (2) completed the solicitation process—a process that is expected to culminate in early 2009.
  - Postal officials believe that contractors who respond to the solicitation may provide (1) a means to irradiate mail in the Washington, D.C., area and, if so, (2) an opportunity to use the $7 million appropriation.
- According to Service officials, if the Service determines after exploring its options that it is not feasible to operate an irradiation facility in Washington, D.C., it will make a final decision on how to proceed, including whether to request congressional approval to use the funds to help offset its ongoing costs for irradiating D.C. federal mail.
Objective 4: Facility Status

Timeline of Actions Related to Irradiating Mail in Washington, D.C.

Three options were considered

Option 1
Build a facility and contract out the irradiation work.

Option 2
Purchase the assets of the current contractor and assume the lease for the irradiation facility.

Option 3
Continue contracting for the irradiation of D.C. federal mail.

2001
The Service begins considering the feasibility of constructing and/or owning its own irradiation facility.

FY 2005
Congress appropriated $7 million for a mail irradiation facility in Washington, D.C. This money remains unspent.

January 2008
The Service chooses option 3 and decides not to build its own irradiation facility in Washington, D.C.

September 2008
The Service plans to issue a solicitation for a new contract for irradiation services.

Early 2009
The Service expects to complete the solicitation process and decide on how, or whether, to use the $7 million appropriation.

Source: GAO analysis of United States Postal Service information.
GAO's Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's Web site (www.gao.gov). Each weekday, GAO posts newly released reports, testimony, and correspondence on its Web site. To have GAO e-mail you a list of newly posted products every afternoon, go to www.gao.gov and select “E-mail Updates.”

Order by Mail or Phone

The first copy of each printed report is free. Additional copies are $2 each. A check or money order should be made out to the Superintendent of Documents. GAO also accepts VISA and Mastercard. Orders for 100 or more copies mailed to a single address are discounted 25 percent. Orders should be sent to:

U.S. Government Accountability Office
441 G Street NW, Room LM
Washington, DC 20548

To order by Phone: Voice: (202) 512-6000
TDD: (202) 512-2537
Fax: (202) 512-6061

To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

E-mail: fraudnet@gao.gov
Automated answering system: (800) 424-5454 or (202) 512-7470

Congressional Relations

Ralph Dawn, Managing Director, dawnr@gao.gov, (202) 512-4400
U.S. Government Accountability Office, 441 G Street NW, Room 7125
Washington, DC 20548

Public Affairs

Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800
U.S. Government Accountability Office, 441 G Street NW, Room 7149
Washington, DC 20548