



Testimony

Before the Subcommittee on Financial and Contracting Oversight, Committee on Homeland Security and Governmental Affairs, U.S. Senate

For Release on Delivery
Expected at 2:30 p.m ET
Wednesday, July 23, 2014

INFORMATION MANAGEMENT

The National Technical Information Service's Dissemination of Technical Reports Needs Attention

Statement of Valerie C. Melvin, Director, Information Management and Technology Resources Issues

GAO Highlights

Highlights of [GAO-14-781T](#), a testimony before the Subcommittee on Financial and Contracting Oversight, Committee on Homeland Security and Governmental Affairs, U.S. Senate

Why GAO Did This Study

NTIS was established by statute in 1950 to collect scientific and technical research reports, maintain a bibliographic record and repository of these reports, and disseminate them to the public. In addition, it provides various information-based services to other federal agencies. NTIS charges fees for its products and services and is required by law to be financially self-sustaining to the greatest extent possible.

GAO was asked to provide a statement summarizing its November 2012 report in which it examined (1) NTIS's operations; (2) the age of and demand for reports added to its repository; and (3) the extent to which these reports are readily available from other public sources. In preparing this statement, GAO relied primarily on its previously published work as well as related updates on actions needed to reduce fragmentation, overlap, and duplication in the federal government.

What GAO Recommends

In its 2012 report, GAO suggested that Congress reassess the appropriateness and viability of the fee-based model under which NTIS operates to determine whether this model should be continued. While the Department of Commerce stated that it did not plan to propose any changes to NTIS's fee-based model, legislation recently introduced in Congress may provide a vehicle for reassessing this model.

View [GAO-14-781T](#). For more information, contact Valerie C. Melvin at (202) 512-6304 or melvinv@gao.gov.

July 23, 2014

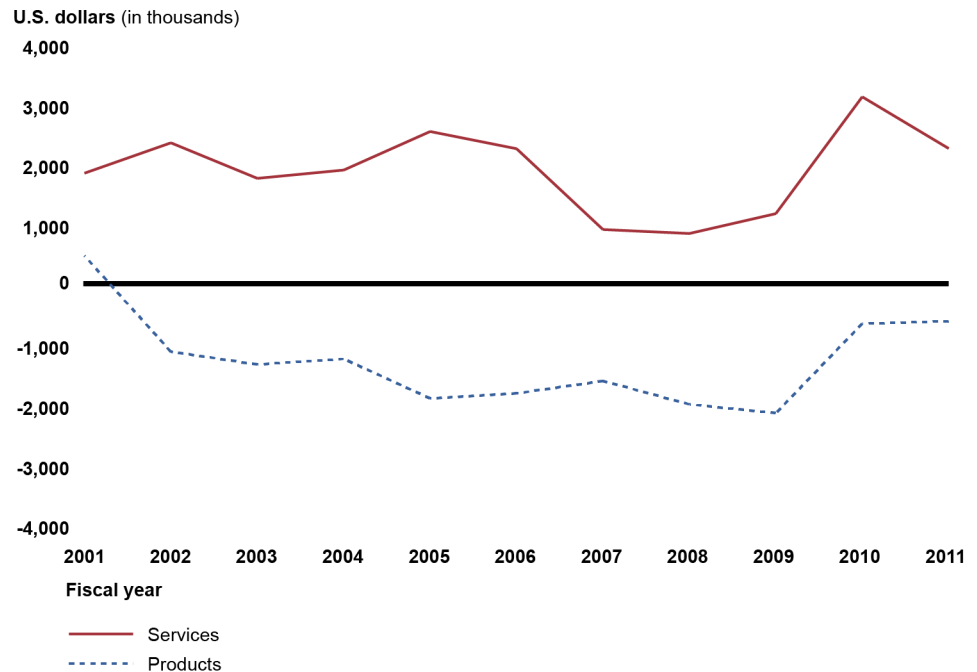
INFORMATION MANAGEMENT

The National Technical Information Service's Dissemination of Technical Reports Needs Attention

What GAO Found

The Department of Commerce's National Technical Information Service (NTIS) offers a variety of products and information-related services. Its products include a repository of scientific, technical, engineering, and business research reports, which it makes available individually as well as through subscriptions to its reports library. However, from fiscal year 2001 through 2011, costs for NTIS's products exceeded revenue for 10 of the 11 fiscal years, and the agency was financially sustained during this period by services it offered to other federal agencies, such as distribution and order fulfillment and various web-based services. (See figure.)

Net Earned Revenues and Net Costs for National Technical Information Service's Products and Services, Fiscal Years 2001–2011



Source: GAO analysis based on NTIS provided data. | GAO 14-781T

In addition, about 62 percent of the reports added to NTIS's repository between 1990 and 2011 were older—with publications dates in the year 2000 or earlier, while about 38 percent were published from 2001 to 2011. However, demand was greater for more recent reports—those published in 2001 or later.

Further, GAO estimated that 74 percent of the reports added to NTIS's collection from fiscal year 1990 through 2011 were available elsewhere, and 95 percent of these were available for free. This calls into question the viability and appropriateness of NTIS's fee-based model for disseminating the reports it collects.

Chairwoman McCaskill, Ranking Member Johnson, and Members of the Subcommittee:

Thank you for inviting me to testify at today's hearing on the Department of Commerce's National Technical Information Service (NTIS). As you know, NTIS was established to serve as a permanent repository and disseminator of scientific, technical, engineering, and business-related information. This information largely takes the form of research reports acquired from federal agencies and their contractors and grantees, as well as from other domestic and foreign sources. In addition, NTIS performs various fee-based information services for other federal agencies.

The legislation that established NTIS requires it to be financially self-sustaining to the fullest extent feasible. However, the increasing availability of the information that NTIS collects and disseminates—primarily through the Web—has called the service's basic statutory function into question.

At your request, my testimony today will summarize the results of a report that we issued in November 2012 on NTIS's operations, trends in the age of and demand for the information it collects, and the extent to which this information is readily available from other public sources.¹ To prepare this statement, we relied on our previously published work on NTIS; related updates on actions needed to reduce fragmentation, overlap, and duplication in the federal government; and a review of legislation pertaining to NTIS's role. All of the work supporting this testimony was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the performance 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.

Background

NTIS operates as 1 of 12 independent bureaus within the Commerce Department, with the mission of promoting the nation's economic growth

¹GAO, *Information Management: National Technical Information Service's Dissemination of Technical Reports Needs Congressional Attention*, [GAO-13-99](#) (Washington, D.C.: Nov. 19, 2012).

by providing access to information that stimulates information and discovery. It is led by a director, who is aided by two executives—a chief information officer and a chief financial officer. In addition, three operational offices are responsible for providing NTIS’s products (which include the reports it collects and disseminates) and services.²

NTIS receives oversight from the Deputy Secretary of Commerce, the Director of the National Institute of Standards and Technology, and an advisory board made up of a chairperson and four members appointed by the Secretary of Commerce.³ As of October 2012, NTIS was supported by 181 staff, including 103 NTIS employees and 78 contractors.

NTIS’s basic statutory function is to collect research reports, maintain a bibliographic record and permanent repository of these reports, and disseminate them to the public. Under statutory authority enacted in 1950,⁴ NTIS collects reports containing scientific, technical, and engineering information from both domestic and foreign sources in a repository and makes the information available to business and industry, state and local governments, other federal agencies, and the general public. While the statute does not define “scientific, technical, and engineering information,” the Secretary of Commerce has interpreted this to include “all types of information which have a more or less direct bearing on business and industry generally.”⁵ NTIS’s enabling legislation authorized it to charge fees for its reports and established a policy to recover all costs, as feasible, through the fees.⁶

The agency’s authority was revised by the National Technical Information Act of 1988,⁷ allowing it to enter into contracts, cooperative agreements,

²These are the Office of Federal Services, Office of Product Management and Acquisitions, and Office of Production Services.

³The NTIS Advisory Board was established by law (15 U.S.C. § 3704b(c)) in 1988 to review the general policies and operations of NTIS, including policies related to fees and charges for its products and services. Board members can include individuals who are both internal and external to the Department of Commerce.

⁴15 U.S.C. § 1152.

⁵In 1954, the Comptroller General found this to be a reasonable interpretation of the law’s use of the word “technical.” 34 Comp. Gen. 58 (1954).

⁶15 U.S.C. § 1153.

⁷Pub. L. No. 100-519 (Oct. 24, 1988); 15 U.S.C. § 3704b.

joint ventures, and other transactions as necessary to conduct its business. Under this authority, the agency has also developed and provides a variety of information-related services. This act further declared NTIS's repository to be a permanent federal function that could not be transferred to the private sector without congressional approval.

The act was amended by the American Technology Preeminence Act of 1991, which

- required all costs associated with NTIS's acquisition, processing, storage, bibliographic control, and archiving to be recovered primarily by fees;
- required agencies to transfer to NTIS unclassified scientific, technical, and engineering information resulting from federally funded research and development; and
- provided that NTIS should produce and disseminate information in electronic format.⁸

In addition, the Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act of 1993⁹ established a revolving fund for paying all expenses incurred by NTIS and gave it the authority to use the fund without further appropriations action by Congress.

Long-Standing Concerns Regarding NTIS's Viability

Audit work that we conducted in 2000 and 2001 identified concerns about NTIS's financial sustainability. In this regard, we noted that, from fiscal year 1988 through fiscal year 1994, NTIS had shown excess revenue from the sale of its products and services in all years except one and generated cumulative net earned revenues of \$5.8 million. However, over the next 5-year period (fiscal year 1995 through fiscal year 1999), it had a cumulative net cost¹⁰ of about \$4.2 million.

In August 1999, the Secretary of Commerce proposed closing NTIS by September 30, 2000, believing that declining revenues would not be

⁸Pub. L. No. 102-245 (Feb. 14, 1992); 15 U.S.C. § 3704b-1.

⁹Pub. L. No. 102-395 (Oct. 6, 1992).

¹⁰Net costs are financial losses or gross costs that exceeded revenues.

sufficient to recover all of the agency's operating costs. The Secretary attributed the decline, in part, to other agencies making their research results freely and publicly available on the Web. He also proposed transferring NTIS's research report archives to the Library of Congress and requiring federal agencies to give the public free online access to new research reports.

In June 2000, we reported that although NTIS could remain solvent for a few years because Commerce and NTIS officials had acted to reduce costs, the agency's solvency beyond fiscal year 2003 was in doubt, based on our forecast of its revenue and costs.¹¹ Accordingly, we suggested that Congress consider whether NTIS (or another agency) was needed to serve as a permanent repository for and disseminator of research reports.

We again reported on NTIS's operations in May 2001,¹² noting that, according to NTIS's Deputy Director, the agency had significantly reduced its costs after our June 2000 report and had shown net revenues of \$2.2 million for fiscal year 2000. Moreover, the Deputy Director had projected net earned revenue of \$1.5 million for fiscal year 2001.

We further reported that the agency was providing a variety of fee-based services to other agencies, and while demand for electronic products was on the rise, research reports and other scientific, technical, and engineering information maintained by NTIS were increasingly available through agency websites and other public sources—often at no cost. Thus, we suggested that Congress look at how this information was defined; whether there was a need for a central repository of this information; and, if a central repository was maintained, whether all information should be retained permanently and what business model should be used to manage it. The Secretary of Commerce agreed with our assessment and raised the question of whether there was a need for a central repository in view of the increasing availability of newer publications. However, NTIS continued to operate as this repository.

¹¹GAO, *Information Policy: NTIS' Financial Position Provides an Opportunity to Reassess Its Mission*, [GAO/GGD-00-147](#) (Washington, D.C.: June 30, 2000).

¹²GAO, *Information Management: Dissemination of Technical Reports*, [GAO-01-490](#) (Washington, D.C.: May 18, 2001).

NTIS Offers a Variety of Products and Services in Carrying Out Its Operations, but Its Dissemination of Technical Reports Continues to Need Attention

Our most recent reporting on NTIS, in November 2012, continued to highlight the need for attention to NTIS's basic statutory role of disseminating technical reports and the fee-based model upon which it operates.¹³ In particular, while the agency was carrying out a variety of mission-related functions, it was being financially sustained primarily by information-related services it offered to other federal agencies. Further, we noted that additions to NTIS's repository since 1990 had mostly included older reports, but the demand was greater for more recent reports. More significantly, we found that most of the reports added to NTIS's repository since 1990 were freely available from other websites.

NTIS Offers a Variety of Fee-Based Products and Services, but Is Primarily Sustained by Its Service Offerings

In our 2012 report, we identified the types of products offered by NTIS as part of its basic statutory function to collect and disseminate technical information:

- *Technical reports:* NTIS maintains a searchable repository containing bibliographic records on over 2.5 million scientific, technical, engineering, and business research reports. Of these, the agency noted that approximately 700,000 reports had been digitized, with the remainder in physical form, such as paper or microfilm. Access to the reports was provided both through the direct sale of individual reports and by subscription to NTIS's National Technical Reports Library. Prices for individual reports and subscriptions varied. For example, an electronic copy of a report from the National Aeronautics and Space Administration (NASA) Marshall Space Flight Center, *NASA Robotics for Space Exploration*, could be purchased for \$15, and a customized CD for this report could be purchased for \$30.
- *Clearinghouse:* NTIS disseminates publications—either electronically or in print—on a variety of topics on behalf of other agencies. According to NTIS, these agencies request that NTIS distribute the publications in print or electronically. Examples include the Food and Drug Administration Code Manual and the Bureau of Labor Statistics Standard Occupational Classification Manual.

¹³[GAO-13-99](#).

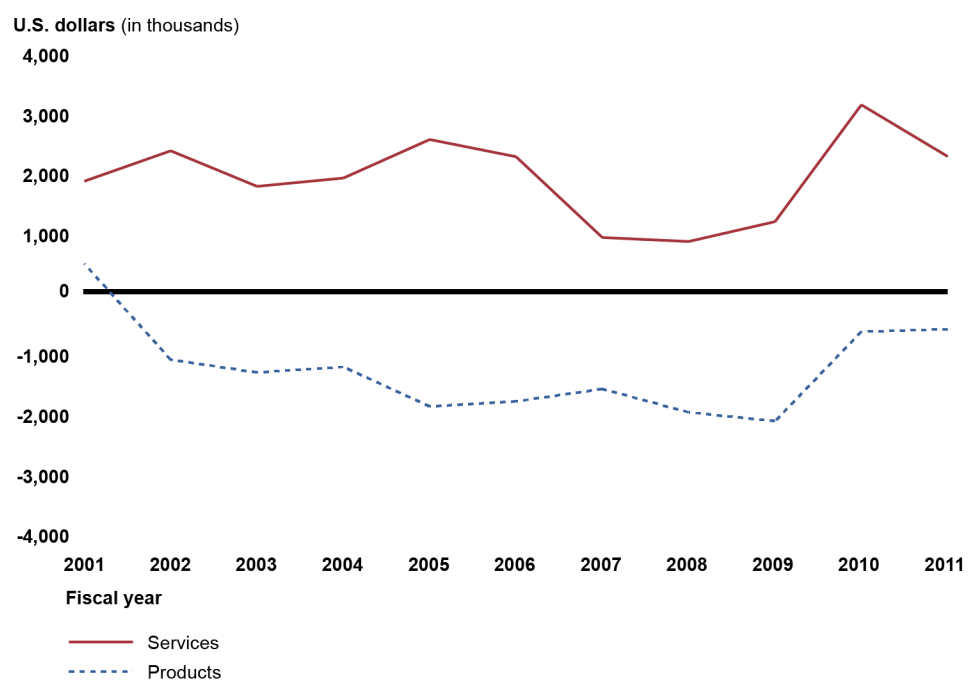
-
- *Publishing*: NTIS also provides access to information collected from federal agencies under the terms of memoranda of understanding or interagency agreements. In some cases, NTIS repackages the information with additional features. According to NTIS, agencies initiate the request for these services. Examples include the Drug Enforcement Administration database and Social Security Administration's Death Master File.

We also discussed the variety of fee-based services offered by NTIS to other federal agencies, which were less directly related to its basic statutory function. These information-related services included the following:

- *Distribution and order fulfillment services*: Through memoranda of understanding or interagency agreements, NTIS distributes large quantities of informational materials for federal agencies. For example, it has distributed health and nutrition educational brochures, posters, and similar products on behalf of the Department of Agriculture.
- *Web-based services and federal cloud computing*: NTIS offers website hosting and cloud computing services, among other computer-based services, to federal agencies.
- *Brokerage services*: NTIS provided billing and collection services on a reimbursable basis to agencies that charge for products and services but lack the infrastructure to do their own billing and collecting. Customers have included the National Agricultural Library and the National Library of Medicine.
- *E-training and knowledge management services*: These services include software solutions and other tools, offered in conjunction with joint venture partners, to support online training and related functions. Customers have included the Departments of Justice, the Interior, and the Treasury, among others.
- *Digitization and scanning services*: NTIS digitizes various types of documents, such as microfilm or microfiche and paper forms, to assist agencies in complying with federal standards for ensuring access for people with disabilities. It also offers storage and distribution for documents it digitizes. As of May 2012, the agency said it had six primary clients for its digitization and scanning services, including the Social Security Administration and the Department of Justice.

As we noted, NTIS’s revenues were generated exclusively from its products and services, and all its revenues, expenses, and capital expenditures were deposited into and paid out of its revolving fund. We found that for fiscal year 2001 through fiscal year 2011, NTIS had net earned revenues from all its functions (products and services) for 8 of these 11 years. However, for 10 of these years, NTIS’s expenditures for its product lines exceeded revenues. Consequently, the overall financial performance of the agency during this time had been supported by revenues from its service offerings, which increased, on average, \$1.8 million during this period. Figure 1 shows the trends in reported net earned revenues (or net costs) for NTIS products and services from fiscal year 2001 through fiscal year 2011.

Figure 1: Net Earned Revenues and Net Costs for National Technical Information Service’s Products and Services, Fiscal Years 2001–2011



Source: GAO analysis based on NTIS provided data. | GAO 14-781T

The decline that we noted in revenue for its products called into question whether NTIS’s basic statutory function as a self-financing repository and disseminator of scientific and technical information was still viable. This was further illustrated by the fact that the services that were financially sustaining the agency were less directly related to this function.

NTIS has recognized this situation and has conducted analyses and identified actions to address the decline in revenue from its products. For example, the agency's strategic plan for 2011-2016 identified three initiatives to address declining product revenue, which include creating new and enhanced products and increasing the breadth and depth of its collection.

Reports Added to NTIS's Repository between 1990 and 2011 Were Mostly Older, but Demand for More Recent Reports Was Greater

Our study also found that, during the period from fiscal year 1990 through 2011, the majority of reports added to NTIS's repository were older; however, the demand for more recent reports was greater:

- From fiscal year 1990 through fiscal year 2011, most of the additions to NTIS's repository were reports published in the year 2000 or before. Specifically, about 62 percent of the documents added during this period—524,256 of the 841,502 documents added—had publication dates of 2000 or earlier, while about 38 percent were published from 2001 to 2011.
- From fiscal year 2000 through fiscal year 2011, NTIS distributed (i.e., sold) one or more copies of almost 50 percent of the reports added from fiscal year 1990 through 2011. Of these, approximately 78 percent were distributed by subscription.
- The agency distributed a higher percentage of more recently published reports. We estimated that between 96 and 100 percent of the reports published from 2001 through 2011 had been distributed, compared with 21 percent of reports published in 1989 or earlier.

It is worth noting that the more recent reports, for which there was greater demand, were also more likely to be freely available from other public sources (as discussed later in this statement).

Most Reports Added to NTIS's Collection Since 1990 Were Freely Available Elsewhere

Based on a sample of reports in NTIS's repository, we estimated that about 74 percent of those added from fiscal year 1990 through 2011 were readily available from other public websites. And of these, 95 percent were available for free. These included reports available from the issuing organization's website, the Government Printing Office's Federal Digital System website, and the federal government's official web portal, USA.gov, among other sources. Most often, these reports were readily located at another website through the search engine we used, <http://www.Google.com>.

In addition, reports with more recent publication dates were more likely to be available from other public sources than older ones. Approximately 87 percent of the reports published from 2009 to 2011 were available elsewhere, while 55 percent of those published in 1989 or earlier were.

We further found that, of the reports that were readily available from one of the sources we searched, about 61 percent had been distributed (sold) by NTIS. By contrast, of the reports that were not found to be readily available from one of the other sources, most, or about 82 percent had not been distributed by NTIS.

During our review, the Director of NTIS cited factors contributing to the greater availability of this information: (1) federal agencies are increasingly making information, including scientific, technical, and engineering information products, freely available on their websites; and (2) agencies are working with search engines to make their products more readily available to the public. Moreover, the NTIS strategic plan acknowledged that agencies' increasing use of the Internet to disseminate information to the public posed a challenge to NTIS's mandate as a self-financing repository and disseminator of technical information.

In our report, we concluded that the increasing availability—often at no cost—of the technical reports collected by NTIS from other public sources called into question the continuing viability of the fee-based model under which it operates. In our view, charging for information that is freely available elsewhere is a disservice to the public. Accordingly, we suggested that Congress consider examining the appropriateness and viability of the fee-based model to determine whether it should continue.

We have also continued to highlight this issue in our report and related updates on actions needed to reduce fragmentation, overlap, and duplication in the federal government. Specifically, in our 2013 report we noted that many of the reports in NTIS's collection overlap with similar information available from the issuing organizations or other sources for free, and that action was still needed to reevaluate the appropriateness and viability of the agency's fee-based model.¹⁴ In a subsequent update,

¹⁴GAO, *2013 Annual Report Actions Needed to Reduce Fragmentation, Overlap, and Duplication and Achieve Other Financial Benefits*, [GAO-13-279SP](#) (Washington, D.C.: Apr. 9, 2013).

we noted that Congress had not taken final action to reexamine the fee-based model for disseminating technical information, and that Commerce did not plan to propose any changes to the NTIS fee-based business model in the near term.¹⁵

Recent legislation intended to reassess the critical functions of NTIS that you, Chairwoman McCaskill, and Senator Coburn have introduced,¹⁶ as well as the version of the legislation introduced by Representatives Bridenstine and Cuellar,¹⁷ has the potential to address the issues we have identified. In addition, the 2014 Senate appropriations bill for the Departments of Commerce and Justice, and Science, and Related agencies contains a provision that would, among other things, prohibit NTIS from charging for any report or document generated by the legislative branch.¹⁸ These bills stand to serve as an important vehicle for Congress to reexamine the appropriateness and viability of NTIS's fee-based model.

In summary, changing practices for disseminating and accessing technical information produced by federal agencies, which have been driven in large part by the Internet, call into question the suitability or viability of NTIS's role as a self-financing collector and disseminator of such information. In light of this, a reconsideration of this role is warranted to determine whether NTIS's statutorily-defined functions are still necessary and, if so, to ensure that they are carried out in a way that best serves the public interest. The current legislation presents an opportunity for Congress to reconsider and modify this role, taking into account the public's interest in accessing technical, scientific, and engineering information produced by the federal government.

¹⁵See the update as part of GAO's "action tracker" at http://gao.gov/duplication/action_tracker/Dissemination_of_Technical_Research_Reports/action1.

¹⁶Let Me Google That For You Act, S. 2206, 113th Congress, 2nd Session (2014).

¹⁷H.R. 4382, 113th Congress, 2nd Session (2014).

¹⁸Commerce, Justice, Science, and Related Agencies Appropriations Act, 2015, S. 2437, Title I, § 108, 113th Congress, 2nd Session (2014).

Chairwoman McCaskill, Ranking Member Johnson, and Members of the Subcommittee, this concludes my statement. I would be pleased to respond to any questions you may have.

Contact and Staff Acknowledgments

If you have any questions about this statement, please contact Valerie C. Melvin at (202) 512-6304 or melvinv@gao.gov. Other key contributors to this statement include Neela Lakhmani (Assistant Director), Elena Epps, and Lee McCracken.

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.

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 website (<http://www.gao.gov>). Each weekday afternoon, GAO posts on its website newly released reports, testimony, and correspondence. To have GAO e-mail you a list of newly posted products, go to <http://www.gao.gov> and select "E-mail Updates."

Order by Phone

The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's website, <http://www.gao.gov/ordering.htm>.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

Connect with GAO

Connect with GAO on [Facebook](#), [Flickr](#), [Twitter](#), and [YouTube](#). Subscribe to our [RSS Feeds](#) or [E-mail Updates](#). Listen to our [Podcasts](#). Visit GAO on the web at www.gao.gov.

To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Website: <http://www.gao.gov/fraudnet/fraudnet.htm>

E-mail: fraudnet@gao.gov

Automated answering system: (800) 424-5454 or (202) 512-7470

Congressional Relations

Katherine Siggerud, Managing Director, siggerudk@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

