

October 2003

ELECTRONIC GOVERNMENT

Potential Exists for Enhancing Collaboration on Four Initiatives



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Highlights of [GAO-04-6](#), a report to the Committee on Government Reform and the Subcommittee on Technology, Information Policy, Intergovernmental Relations and the Census, House of Representatives

Why GAO Did This Study

In accordance with the President's management agenda, the Office of Management and Budget has sponsored initiatives to promote expansion of electronic government—the use of information technology, particularly Web-based Internet applications, to enhance government services. Each initiative demands a high degree of collaboration among organizations. For four of these initiatives, GAO was asked to determine, among other things, their implementation progress and the extent of collaboration among agencies and other parties involved.

What GAO Recommends

To enhance the effectiveness of their efforts at collaboration and help achieve the initiatives' goals, GAO is making recommendations to the managing partners of the four initiatives that address the specific collaboration issues revealed by the review.

In commenting on a draft of this report, all four agencies generally agreed with our discussion of the collaboration challenges facing e-government initiatives. In addition, each of the agencies provided additional information about collaboration activities associated with their initiatives as well as technical comments, which have been incorporated into the final report where appropriate.

www.gao.gov/cgi-bin/getrpt?GAO-04-6.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Linda Koontz at (202) 512-6240 or koontzl@gao.gov.

What GAO Found

All four of the e-government initiatives that GAO reviewed have made progress in meeting the objectives and milestones of their early phases (the four initiatives, their goals, and the agencies that act as their managing partners are shown in the table). Two of the initiatives have established Web portals—www.geodata.gov for the Geospatial One-Stop initiative and www.BusinessLaw.gov for the Business Gateway. The projects face additional challenging tasks, such as e-Payroll's objective of establishing governmentwide payroll processing standards and Geospatial One-Stop's goal of compiling a comprehensive inventory of geospatial data holdings.

All four initiatives have taken steps to promote collaboration with their partner agencies, but none has been fully effective in involving all important stakeholders. For example, for the e-Payroll initiative, the Office of Personnel Management has taken steps to promote close collaboration with its four designated e-Payroll providers, but has not addressed the concerns of a key stakeholder that will be required to make changes to its payroll processes and policies. For Geospatial One-Stop, Interior has established a board of directors with broad representation, but has not taken steps to ensure that key stakeholders at the state and local levels are involved in the initiative. For the Integrated Acquisition Environment initiative, the General Services Administration is using a variety of tools to promote collaboration, but has not involved partner agencies' chief financial officers. Finally, for the Business Gateway, the Small Business Administration has not taken key steps to facilitate effective collaboration with its partners and stakeholders, such as establishing a collaborative decision-making process and reaching formal agreements on partner roles and responsibilities. All four initiatives have faced short time frames to accomplish their major tasks, so that competing priorities have sometimes hindered full collaboration. However, without effective collaboration on the tasks that remain to be completed, these initiatives may be at risk of not fully achieving their objectives or the broader goals of the President's management agenda.

Four e-Government Initiatives Reviewed

Initiative	Goal	Managing partner
e-Payroll	Standardize payroll operations across all federal agencies	Office of Personnel Management
Geospatial One-Stop	Coordinate the collection and maintenance of geospatial data ^a	Department of the Interior
Integrated Acquisition Environment	Improve federal agencies' acquisition of goods and services	General Services Administration
Business Gateway	Reduce the paperwork burden on small businesses and help them find, understand, and comply with federal, state, and local laws and regulations	Small Business Administration

Source: GAO.

^a Geospatial data are all data associated with geographic locations.

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Abbreviations

CFO	Chief Financial Officer
CIO	Chief Information Officer
DFAS	Defense Finance and Accounting Service
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
GIS	geographic information systems
GPEA	Government Paperwork Elimination Act
GSA	General Services Administration
IRS	Internal Revenue Service
IT	information technology
OMB	Office of Management and Budget
OPM	Office of Personnel Management
SBA	Small Business Administration
VA	Department of Veterans Affairs

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United States General Accounting Office
Washington, D.C. 20548

October 10, 2003

The Honorable Tom Davis
Chairman, Committee on Government Reform
House of Representatives

The Honorable Adam H. Putnam
Chairman, Subcommittee on Technology,
Information Policy, Intergovernmental Relations and the Census
Committee on Government Reform
House of Representatives

The term “electronic government” (or e-government) refers to the use of information technology (IT), particularly Web-based Internet applications, to enhance the access to and delivery of government information and service to citizens, to business partners, to employees, and among agencies at all levels of government. The President has identified the expansion of e-government as one of the five priorities of his management agenda; accordingly, the Office of Management and Budget (OMB) has sponsored 25 initiatives to implement this agenda. This report specifically reviews the challenge of achieving effective interorganizational collaboration within 4 of these 25 OMB-sponsored initiatives:

- *e-Payroll*, an initiative to standardize payroll operations across all federal agencies;
- *Geospatial One-Stop*, an initiative to help coordinate the collection and maintenance of geospatial data across all levels of government;¹
- *Integrated Acquisition Environment*, an initiative to create electronic tools to improve federal agencies’ acquisition of goods and services; and
- *Business Gateway*, an initiative to reduce the paperwork burden on small businesses and help them find, understand, and comply with federal, state, and local laws and regulations.

Each of these initiatives demands a high degree of interorganizational collaboration. Both e-Payroll and Integrated Acquisition Environment need to work with a broad array of federal agencies. Geospatial One-Stop

¹Geospatial data are any data associated with a geographic location.

depends on broad state and local government participation, and the Business Gateway aims to serve the small business community.

As agreed with your office, our objectives were to review four OMB-sponsored e-government initiatives and determine (1) the progress that has been made to date in implementing the selected initiatives, (2) the major factors that can affect successful collaboration on e-government initiatives, and (3) the extent to which federal agencies and other entities have been collaborating on the selected initiatives. To assess the progress of the initiatives and the extent to which agencies were collaborating on them, we reviewed capital asset plans, communications strategies, and other project documentation; conducted interviews with project officials; and assessed electronic services made available to customers to date. We identified key practices affecting collaboration on e-government initiatives through a review of government, academic, and private sector literature on interorganizational collaboration. Details on our objectives, scope, and methodology are provided in appendix I. Our work was conducted from December 2002 to September 2003 in accordance with generally accepted government auditing standards.

Results in Brief

The four e-government initiatives we reviewed have made progress in meeting the objectives and milestones of their early phases. For example, Web portals were established for two of the initiatives—www.geodata.gov for the Geospatial One-Stop initiative and www.BusinessLaw.gov for the Business Gateway. In addition, the Integrated Acquisition Environment initiative established an online capability that federal customers can use to access a variety of available interagency contracts. To continue building on these early achievements, the projects need to successfully address additional challenging tasks, such as those associated with e-Payroll's objective of establishing governmentwide payroll processing standards or Geospatial One-Stop's goal of compiling a comprehensive inventory of geospatial data holdings. In July 2003, OMB refocused one initiative, the Business Gateway, which had been making slow progress on its previous objectives. OMB tied the project's objectives and milestones more closely to the Small Business Paperwork Relief Act's² goal of reducing the burden of federal paperwork on small businesses.

²Small Business Paperwork Relief Act of 2002 (P.L. 107-198).

Based on a review of government, private sector, and academic research, we identified five key broad practices that were found to have a significant impact on collaboration across disparate organizations:

- *Establishing a collaborative management structure* that provides for shared leadership and involvement at all levels and defines roles and responsibilities so that each participating organization is accountable for the initiative's success.
- *Maintaining collaborative relationships* among participants within a climate of trust and respect, including mechanisms for feedback and debate, based on formal agreements that document a shared vision for the project.
- *Contributing resources equitably* among all participants to reinforce the shared commitment to achieving common objectives.
- *Facilitating communication and outreach* that provide complete and timely information for all stakeholders to promote trust and reinforce commitment to achieving common objectives.
- *Adopting a common set of standards* for use by all project partners to provide a basis upon which otherwise independent entities can agree to share or integrate data or services.

While the four initiatives we reviewed have all taken steps to promote collaboration with their partner agencies, none of the initiatives has been fully effective in adopting these practices to fully involve important stakeholders. For example, for the e-Payroll initiative, the Office of Personnel Management (OPM) has taken steps to promote close collaboration with its four designated e-Payroll providers, but it has not addressed the concerns of one of the key stakeholders that will be required to make changes to its payroll processes and policies. For Geospatial One-Stop, although Interior has established a board of directors with broad representation, it has not taken steps to ensure that a large number of the potential stakeholders at the state and local levels are involved in the initiative. For the Integrated Acquisition Environment initiative, the General Services Administration (GSA) is using a variety of tools to promote collaboration, but it has not involved partner agencies' chief financial officers. Finally, for the Business Gateway, the Small Business Administration (SBA) has not taken key steps to facilitate effective collaboration with its partners and stakeholders, such as establishing a

collaborative decision-making process and reaching formal agreements on partner roles and responsibilities. All four initiatives have faced short time frames to accomplish their major tasks, and they generally have not fully adopted these collaboration practices because of other competing priorities. However, without effective collaboration on the tasks that remain to be completed, these initiatives may be at risk of not fully achieving their objectives or the broader goals of the President's management agenda.

We are making recommendations to the managing partner agencies for each of the four e-government initiatives to enhance the effectiveness of collaboration as a tool to use in achieving their objectives.

We received written comments on a draft of this report from the Director of OPM; Interior's Assistant Secretary, Policy, Management and Budget; and SBA's Program Executive Officer for e-Government. We also received oral comments from the Administrator of GSA. All four agencies generally agreed with our discussion of the collaboration challenges facing e-government initiatives. In addition, each of the agencies provided additional or updated information about collaboration activities associated with their initiatives, as well as technical comments, which have been incorporated into the final report where appropriate.

Background

In the context of electronic government, collaboration can be defined as a mutually beneficial and well-defined relationship entered into by two or more organizations to achieve common goals. It is an in-depth, managed relationship that brings together separate and distinct organizations into a new structure. Recent management reform efforts within the federal government have focused on collaboration as a way to reduce duplication and integrate federal provision of services to the public. Collaboration is a key theme of the President's management agenda, published in 2002, which aims at making the federal government more focused on citizens and results.

One of the key provisions of the management agenda is the expansion of electronic government. To implement this provision, OMB identified and is working on projects that address the issue of multiple federal agencies performing similar tasks that could be consolidated through e-government processes and technology. Specifically, OMB established a team, known as the E-Government Task Force, that analyzed the federal bureaucracy and identified areas of significant overlap and redundancy in how federal

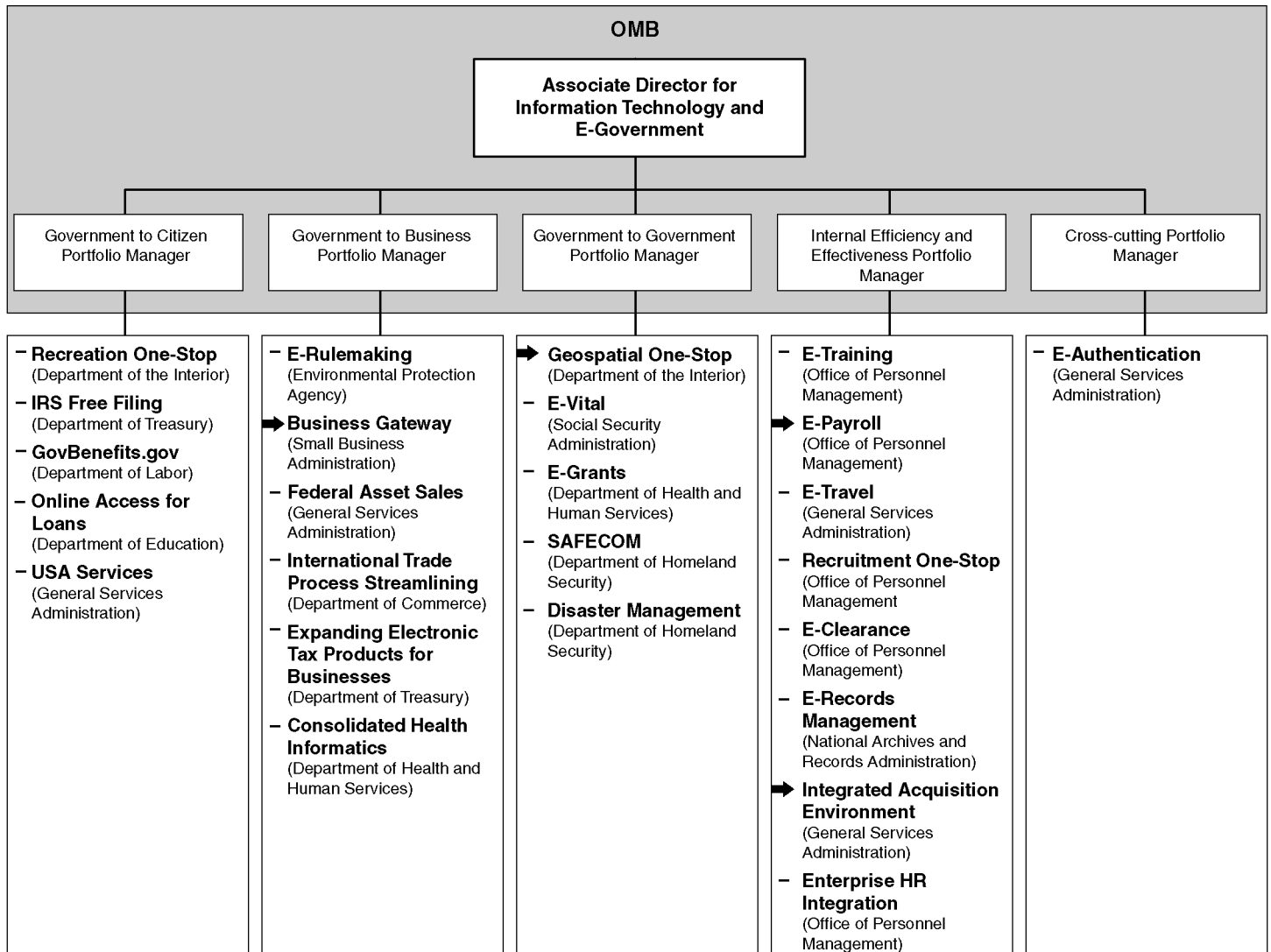
agencies provide services to the public. The task force found that multiple agencies were conducting redundant operations within 30 major functions and business lines in the executive branch. Further, each line of business was being performed by an average of 19 agencies, and each agency was involved in an average of 17 business lines. To address these redundancies, the task force evaluated potential projects, focusing on collaborative opportunities to integrate IT operations and simplify processes within lines of business across agencies and around citizen needs. As a result of this assessment, the task force identified a set of 25 high-profile initiatives³ to lead the federal government's drive toward e-government transformation and enhanced service delivery through collaboration.

As the lead agency overseeing the management of these initiatives, OMB developed a strategy for expanding electronic government, which it published in February 2002.⁴ In its strategy, OMB established a portfolio management structure to help oversee and guide the selected initiatives and facilitate a collaborative working environment for each of them. This structure includes five portfolios, each with a designated portfolio manager reporting directly to OMB's Associate Director for IT and E-Government. The five portfolios are "government to citizen," "government to business," "government to government," "internal efficiency and effectiveness," and "cross-cutting." Each of the 25 initiatives is assigned to one of these portfolios, according to the type of results the initiative is intended to provide. Further, for each initiative, OMB designated a specific agency to be the initiative's "managing partner," responsible for leading the initiative, and assigned other federal agencies as "partners" in carrying out the initiative. Figure 1 provides an overview of the e-government management structure established by OMB.

³The E-Government Task Force originally selected 23 initiatives in September 2001. A 24th, e-Payroll, was then added by the President's Management Council. In 2002, a decision was made to separate one initiative into two individual projects, resulting in the current count of 25 projects.

⁴Office of Management and Budget, *E-Government Strategy* (Washington, D.C.: Feb. 27, 2002).

Figure 1: OMB Management Structure for e-Government Initiatives



Sources: GAO and OMB.

Note: Initiatives marked by arrows are those reviewed in this report.

Successful implementation of the 25 cross-agency e-government initiatives—resulting in reductions in redundancies and overlap of federal programs and services—requires effective collaboration. Recognizing that collaboration is challenging, the President’s budget for fiscal year 2004 highlighted the continuing need to establish a collaborative framework for

cross-agency e-government initiatives. In November 2002, we reported that despite the importance placed on collaboration in OMB's e-government strategy, less than half of the initial business cases for the OMB-sponsored initiatives addressed a strategy for successfully collaborating with other government and nongovernment entities.⁵ Based on these results, we recommended that the OMB Director ensure that managing partners of the 25 initiatives work with partner agencies to develop and document their collaborative strategies.

E-Government Initiatives Have Made Progress in Their Initial Stages

All four of the e-government initiatives that we reviewed have met milestones for the early phases of their planned activities. For example, Web portals were established for two of the initiatives—www.geodata.gov for the Geospatial One-Stop initiative and www.BusinessLaw.gov for the Business Gateway. In addition, the Integrated Acquisition Environment initiative established an online capability that federal customers can use to access a variety of available interagency contracts. However, while the projects are continuing to make progress, some of the tasks they face are increasingly challenging, such as e-Payroll's objective of establishing governmentwide payroll processing standards or Geospatial One-Stop's goal of compiling a comprehensive inventory of geospatial data holdings. In July 2003, OMB refocused one initiative, the Business Gateway, which had been making slow progress on its previous objectives. OMB tied the project's objectives and milestones more closely to the Small Business Paperwork Relief Act's goal of reducing the burden of federal paperwork on small businesses.

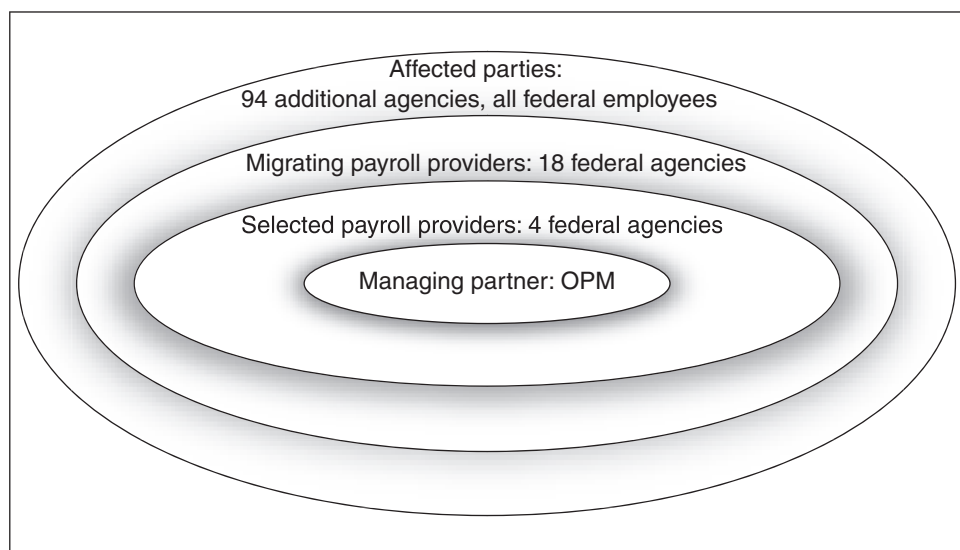
e-Payroll

The goal of the e-Payroll initiative is to substantially improve federal payroll operations by standardizing them across all agencies, integrating them with other human resource functions, and making them easy to use and cost-effective. To achieve this goal, plans are to consolidate the operations of 22 existing federal payroll system providers; simplify and standardize federal payroll policies and procedures; and better integrate payroll, human resources, and finance functions across federal agencies. OPM, the managing partner for e-Payroll, chose four agencies to be

⁵U.S. General Accounting Office, *Electronic Government: Selection and Implementation of the Office of Management and Budget's 24 Initiatives*, GAO-03-229 (Washington, D.C.: Nov. 22, 2002).

providers of payroll services to all 116 executive branch agencies. The four selected providers are GSA and the Departments of Defense, Interior, and Agriculture. The initiative is divided into two major phases: (1) migrating each of the 18 nonselected payroll system providers to one of the four selected providers by September 2004 and (2) defining an enterprise architecture consistent with the Federal Enterprise Architecture model and identifying technology solutions to replace legacy systems. Figure 2 shows the partners and affected parties for the e-Payroll initiative.

Figure 2: Partners and Affected Parties for the e-Payroll Initiative



Source: GAO.

Of the 22 executive branch agencies that currently operate payroll systems, 6 also provide payroll services to other agencies. The four providers selected by OPM—GSA, Defense’s Defense Finance and Accounting Service, Interior’s National Business Center, and Agriculture’s National Finance Center—handle more than 70 percent of all federal civilian payroll processing and accommodating more than 190 different pay plans. According to OPM, many of the 22 current providers use custom-built systems that have been in operation for many years and need to be replaced. Two of the largest providers needing system replacement estimated the costs of implementing new systems at \$46 to \$600 million per system. Conversely, OPM estimates that consolidating current federal payroll systems would yield savings of approximately \$1.1 billion over the

next 10 years. These savings would result from reducing operating costs, eliminating duplicative systems investments, and simplifying payroll processing.

According to OPM project management documents, major phase one objectives of the initiative include (1) defining governance for the initiative, (2) standardizing payroll policies, (3) establishing an e-Payroll enterprise architecture, and (4) overseeing consolidation of agency payroll operations. The first major project deliverable—establishing governance—was completed in June 2002, as scheduled. The providers have been selected and a migration schedule established for nonselected agencies. However, the other actions have been delayed. Standardization of policies, originally scheduled for completion in June 2002, is currently ongoing. The enterprise architecture planning task and the initial phase of agency consolidations were both scheduled to begin in October 2002 but were not initiated until January 2003. According to the project manager, these schedule deviations have not led to a significant delay in the overall progress of the initiative toward the goal of consolidating the 22 payroll providers to 4 by September 2004. However, migrating the operations of the 18 nonselected providers to the selected providers, which began in February 2003, could pose new challenges, because previously unidentified discrepancies among agency policies may come to light.

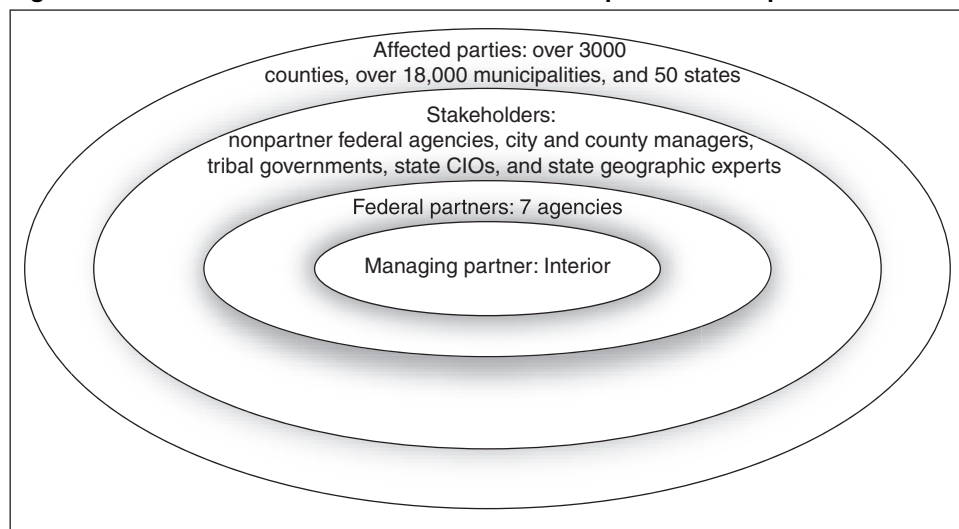
Geospatial One-Stop

Geospatial One-Stop is intended to promote coordination of geospatial data collection and maintenance across all levels of government. Geospatial data—data associated with a geographic location—can be analyzed and displayed through geographic information systems (GIS) to aid decision makers at all levels of government. For example, the Department of Health and Human Services uses GIS technology to analyze data on population and topography (including roads, streams, and land elevation) in order to track the spread of environmental contamination through a community. Using the power of GIS to coordinate and integrate disparate kinds of geospatial data can lead to better-informed decisions about public investments in infrastructure and services—including national security, law enforcement, health care, and the environment—as well as a more effective and timely response in emergency situations. The specific objectives of the Geospatial One-Stop initiative include (1) deploying an Internet portal for one-stop access to geospatial data; (2) developing a set of data standards for seven types of geospatial data; (3) creating an inventory of federal data holdings; and (4) encouraging greater coordination among federal, state,

and local agencies about existing and planned geospatial data collection projects.

The Department of the Interior is the managing partner agency for the initiative. Other federal partners include the Departments of Agriculture, Commerce, Defense, Homeland Security, and Transportation; the Environmental Protection Agency; and the National Aeronautics and Space Administration. Stakeholders include nonpartner federal agencies, the International City/County Management Association, the Intertribal GIS Council, the National Association of State Chief Information Officers, the National States Geographic Information Council, the National Association of Counties, the National League of Cities, and the Western Governors Association. Figure 3 shows the partners and affected parties for the initiative.

Figure 3: Partners and Affected Parties for the Geospatial One-Stop Initiative



Source: GAO.

The Geospatial One-Stop initiative has made progress toward achieving its four objectives. In June 2003, the first publicly available version of the Internet portal was made available online at www.geodata.gov. The portal is intended to serve as a single access point for users seeking links to geospatial data that were previously online but not as easily accessible. The portal was originally scheduled to go online in 2004, based on work being

performed by the Open GIS Consortium.⁶ However, OMB accelerated this schedule by requiring that the portal be operational by May 2003. In order to have a portal operational within this time frame, the board agreed to turn near-term work over to ESRI, Inc., which developed the portal based on modifications to an existing portal it had built for Interior's Bureau of Land Management.⁷ Project officials now plan to make use of the Open GIS Consortium's development work to enhance www.geodata.gov in 2004.

Regarding the second objective—data standards development—project officials developed draft versions of each of the planned standards on schedule in 2003. In most cases the drafts are simplified version of older standards developed by and for federal agency use. The draft standards were provided for informal public review and comment on the Geospatial One-Stop Web site. By the end of September 2003, project officials had submitted these drafts to the American National Standards Institute, where formal public review will be conducted and the standards will be finalized. Project officials expect the standards to be approved in 2004.

Progress in developing an inventory of federal geospatial data holdings—Geospatial One-Stop's third objective—has been limited. OMB Circular A-11 required that by the end of February 2003, agencies make accessible and searchable for posting on the Internet metadata⁸ about all data sets with a replacement cost exceeding \$1 million. Potential users of geospatial data sets need metadata to determine whether the data are useful for their purposes and to be aware of any special stipulations about processing and interpreting the data. An initial inventory of 256,000 existing federal data sets was assembled and made available through the Geospatial One-Stop portal when it was implemented in June 2003, and the Geospatial One-Stop Web site provides an online tool to assist agencies in documenting their geospatial metadata. However, the extent to which agencies have met requirements for submitting metadata is unknown. According to the

⁶The Open GIS Consortium, Inc., is an international industry group of 258 companies, government agencies, and universities that develop open systems specifications for processing geospatial information.

⁷The Bureau of Land Management's portal, www.geocommunicator.gov, was developed using commercial off-the-shelf software provided by the Environmental Systems Research Institute, Inc. (ESRI).

⁸Metadata are information describing the content, quality, condition, and other characteristics of data, such as when they were collected or the coordinate system they are based on.

project's metadata coordinator, agencies may not be aware of their responsibilities for posting metadata about their geospatial submissions. To address this issue, the project team is planning to take steps to improve communication with federal agencies to help ensure that they understand their responsibilities for making geospatial data publicly accessible.

To encourage greater coordination among federal, state, and local agencies about existing and planned geospatial data collection projects (the initiative's fourth objective), an intergovernmental board of directors was established. The purpose of the board is to help ensure collaboration among potential stakeholders from all government sectors. In addition, a Geospatial One-Stop Web site (www.geo-one-stop.gov) was created to provide information about the project, its progress, and its benefits; the project's management staff and executive director provide briefings across the country to facilitate coordination with states and localities; and an outreach coordinator was appointed to further communication and coordination among partners and stakeholders.

Integrated Acquisition Environment

The overall goal of the Integrated Acquisition Environment initiative is to create a secure suite of electronic tools to facilitate cost-effective acquisition of goods and services by federal agencies, while eliminating inefficiencies in the current acquisition process. To meet this goal, plans are to (1) consolidate common acquisition functions through a shared services environment; (2) leverage existing acquisition capabilities within agencies to create a simpler, common, integrated business process for buyers and sellers that promotes competition, transparency, and integrity; and (3) develop cross-agency standards to eliminate duplication of effort and redundancy of data. GSA is the managing partner agency. In addition, 31 other federal agencies are considered participating partners in the initiative. Figure 4 shows the partners and affected parties for this initiative.

Figure 4: Partners and Affected Parties for the Integrated Acquisition Environment Initiative



Source: GAO.

Regarding its first objective of consolidating common acquisition functions through a shared services environment, the project was generally on schedule at the time of our review, although several interim milestones were completed later than scheduled. An example of one of the tasks within this objective is the development of “eMarketplace,” an online capability intended to provide federal customers a single access point to interagency contracts and electronic catalogs for goods and services. In July 2002 an initial operational directory structure for interagency contracts was completed, and in May 2003 the directory was made available online for agencies to populate with their contract data. The development of the directory structure had been scheduled for December 2002, but it was delayed because the approval process required to make changes to federal acquisition regulations was lengthier than had been anticipated.

Overall there have been no significant deviations from the planned schedule for tasks within the second objective, leveraging existing agency acquisition capabilities to create a common, integrated business process for buyers and sellers. For example, the Integrated Acquisition Environment’s Business Partner Network, based on the Department of Defense’s Central Contractor Registration system, is intended to provide a single point of registration, validation, and access for grantees, federal entities, and companies seeking to do business with the federal government. Since March 2002, the project team has been working to develop this network to serve as a single source for vendor data for the

government, to integrate data with other vendor-based systems in the government, and to establish a process for verifying vendor information with third parties, such as vendors' Taxpayer Identification Numbers with the Internal Revenue Service. In February 2003, as scheduled, the Business Partner Network completed the development of an online system that allows contractors to enter their representations and certification information once for use on all government contracts. Previously, vendors were required to submit representations and certification individually for each large purchase contract award.

Initial work addressing the project's third objective—developing cross-agency standards to eliminate duplication of effort and redundancy of data—was also on schedule at the time of our review. The standards to be developed under this objective include data elements, business definitions, interfaces, and agency roles and responsibilities regarding government acquisition data. These standards are expected to serve as a foundation for redesigning the current inefficient process of government-to-government transactions by streamlining ordering, billing, and collection and improving reconciliation of intragovernmental transactions. Since March 2002, the project team has been working on the first task of the standards development process—developing a map of current acquisition practices and defining future acquisition processes. According to project managers, the project team completed this task by the end of September 2003.

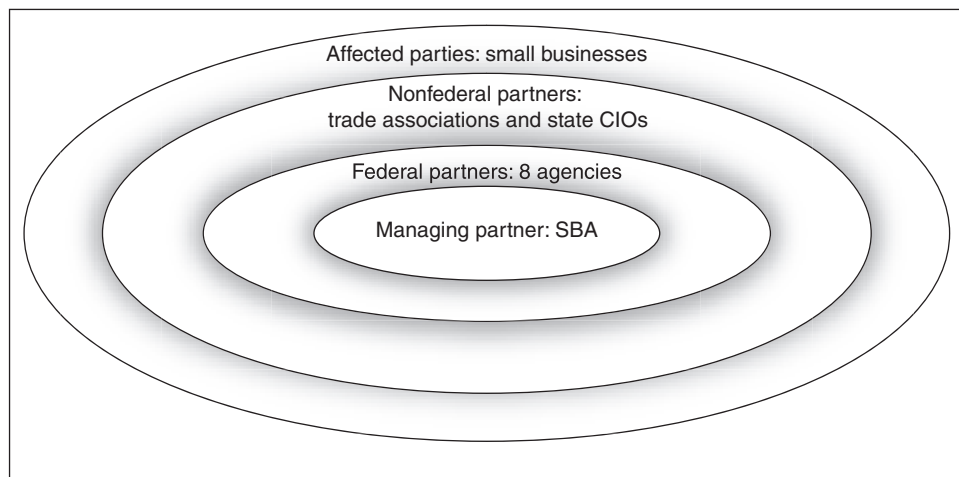
The implementation phase for the Integrated Acquisition Environment project is scheduled for completion by December 2004. While GSA had successfully completed several scheduled milestones at the time of our review, other major tasks lie ahead. These tasks include (1) ensuring that the online directory of contracts is populated and kept up to date, which will require all federal agencies to submit their data into the directory in a standardized format; (2) deploying commercial standards to facilitate interaction among shared acquisition systems, between shared systems and agency systems, and between shared systems and vendor systems; and (3) redesigning and deploying government-to-government transactions, which calls for standard procedures and common data elements to integrate disparate systems and processes across the federal government.

Business Gateway

The Business Gateway⁹ is a cross-agency, intergovernmental effort to create a Web services portal that reduces the burden on small businesses by making it easier for them to find, understand, and comply with governmental laws and regulations. It is intended to provide small businesses with one-stop access to information about federal, state, and local laws and regulations and how to comply with them. More specifically, the Business Gateway is intended to help businesses find information on laws and regulatory requirements, provide assistance through automated tools designed to help businesses understand their regulatory obligations, and transact business by supporting online permit applications and licensing tools. The initiative is focused on four functional areas—environmental protection, workplace health and safety, employment, and taxes—as well as several specific industries, including trucking and mining. SBA is the managing partner agency. Other federal partners include the Environmental Protection Agency; the Department of Labor and its component agency, the Occupational Safety and Health Administration; GSA; the Internal Revenue Service; and the Departments of Transportation, Energy, Interior, and Homeland Security. Nonfederal partners include trade associations and state chief information officers from Washington, Illinois, Georgia, Missouri, Iowa, and New Jersey. Figure 5 shows the partners and affected parties for this initiative.

⁹Until July 1, 2003, the Business Gateway project was known as Business Compliance One-Stop.

Figure 5: Partners and Affected Parties for the Business Gateway Initiative



Source: GAO.

The initiative was originally planned to be implemented in two separate phases. Phase one was to consist of implementing www.BusinessLaw.gov, a Web portal intended to serve as a single place for finding “plain English” legal guides and legal and regulatory information links from all 50 states and compliance assistance in 17 areas, such as workplace safety or environmental protection. This phase was completed when the portal became operational in December 2001. The second phase was to make the portal more interactive and broader in focus. More specifically, phase two objectives included (1) developing a navigation tool known as a “portal maximizer,” intended to enhance access to laws and regulations by helping users to quickly find relevant information from large amounts of data; (2) offering a range of automated compliance assistance tools for specific kinds of regulations, as well as a “profiler”¹⁰ to identify applicable tools; and (3) prototyping a transaction engine for integrated business registration, online licensing, and permitting.

Before the project was refocused in July 2003, SBA had made only limited progress toward achieving phase two objectives and was not on track to

¹⁰The profiler is intended to gather information about a user’s business and use the information to identify relevant compliance assistance tools and resources. The system uses a set of online, standardized questions to prompt users to provide information such as type of business, number of employees, location, and whether it is a new or existing business.

meet its planned 2003 milestones. A pilot version of the planned portal maximizer had been implemented, but only four of the planned automated compliance assistance tools had been developed.¹¹ Project plans called for up to 30 additional compliance assistance expert tools to be developed during the second phase of the project. The profiler was also behind schedule, with only mockups of the planned user interface developed. Work on three specialized portals for the trucking, food, and chemical industries was also behind schedule. The project manager attributed the incomplete progress to a funding shortfall within SBA for fiscal year 2003.

On July 1, 2003, OMB announced that it was refocusing the project to reduce the paperwork burden on small businesses. The decision was based on the findings of an interagency task force created by OMB in response to requirements of the Small Business Paperwork Relief Act of 2002. In its final report,¹² the task force stated that it believed the initiative showed promise as a means for achieving the purpose of the Small Business Paperwork Relief Act, since it was intended to ultimately provide small businesses a single point of entry for regulatory compliance information. The refocused project is now aimed at creating a gateway for compliance assistance and online transactions that would reduce the paperwork burden through integrated electronic forms. One of the stated goals of the planned gateway is to increase federal agencies' compliance with the Government Paperwork Elimination Act¹³ to at least 75 percent by September 2004. This was to be achieved by creating, with the help of GSA, a central online repository for federal forms and by consolidating information collections and forms with similar data elements. Another goal is to reduce redundant data and the overall number of federal forms by at least 10 percent.

According to several participating agency representatives, it is unclear how the change in the project's focus will affect implementation of the previously planned modules, such as the profiler and the compliance tools. At the time of our review, no decision had been made about what funding

¹¹The four tools that were implemented include (1) the Alien Employee Visa Classification eTool, (2) the Emergency Evacuation Procedures eTool, (3) the Auto Dismantler & Recycler Environmental Audit Advisor, and (4) the Motor Vehicle Waste Disposal Wells Advisor.

¹²Office of Management and Budget, *Final Report of the Small Business Paperwork Relief Task Force* (Washington, D.C.: June 27, 2003).

¹³Public Law 105-277, Div. C, tit. XVII.

or other resources would be made available to continue development efforts that had been previously under way as part of phase two of the project.

Key Practices Facilitate Interagency Collaboration

With the increasing focus on collaboration brought about by the move toward e-government, there has been a need to identify key characteristics that contribute to the success of cross-organizational collaborative e-government projects. Based on a review of government, private sector, and academic research and guidance,¹⁴ we identified five broad key practices that can have a significant impact on the effectiveness of collaboration across disparate organizations. These key collaboration practices could have a significant impact on whether the 25 OMB-sponsored e-government initiatives are successful. Taken as a whole, these factors can provide an interorganizational project team with the fundamentals for an effective collaborative process.

- *Establishing a collaborative management structure.* Building a collaborative management structure across participating organizations is an essential foundation for ensuring effective collaboration. According to the literature we reviewed, strong leadership is critical to the success of intergovernmental initiatives. Involvement by leaders from all levels is important for maintaining commitment and keeping a project on track. Defining a comprehensive structure of participants' roles and responsibilities is also a key factor. For example, according to a 1998 study by the Intergovernmental Advisory Board,¹⁵ a project to develop a nationwide law enforcement information system was successful due to the establishment of a policy board responsible for coordination and partnership within the law enforcement community. The board's members represented law enforcement organizations at all levels of government, and the board provided a structure and process to ensure a voice for each member of the partnership.

¹⁴Appendix II provides a complete list of the collaboration sources that we reviewed for our study.

¹⁵Intergovernmental Advisory Board (General Services Administration), *Foundations for Successful Intergovernmental Management: Federal, State and Local Government Experiences* (October 1998), 54–55.

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- *Maintaining collaborative relationships.* Once a collaborative management structure is in place, well-defined, equitable working relationships must be developed and take root in order to ensure effective ongoing collaboration. Researchers have found that all the partners in a collaborative undertaking need to share a common vision and work in a climate of trust and respect in order to elicit full participation. An important element of establishing effective collaborative relationships is to reach formal agreements with each partner organization on a clear purpose, expected outputs, and realistic performance measures. For example, in an intergovernmental project led by the state of Pennsylvania to enhance its vehicle emissions program, a broad coalition of stakeholder groups representing government, private businesses, and special interest groups were directly involved in selecting a strategy and designing the program. According to a GSA study of the project,¹⁶ the participants worked well together and endorsed the process primarily because all views were considered seriously and many suggestions were incorporated.
 - *Contributing resources equitably.* The responsibility for meeting a project's resource requirements needs to be equitably distributed among project participants. In order to facilitate a collaborative environment, each participating organization should contribute resources in the form of human capital or funding to demonstrate its commitment to the success of the project. In addition, formal processes to collect these resources from partner agencies—such as written agreements to document the resource contributions expected from each partner—are useful to support this practice. According to a study performed by the Amherst H. Wilder Foundation,¹⁷ a collaborative group needs to consider the resources of its members. Similarly, partner organizations must be prepared to devote substantial staff hours to the collaborative effort.
 - *Facilitating communication and outreach.* Another key element of effective collaboration is developing and implementing effective communication and outreach mechanisms. Tools that clearly communicate the project status and needs among all partners should be

¹⁶*Foundations for Successful Intergovernmental Management: Federal, State and Local Government Experiences*, 21–22.

¹⁷*Collaboration: What Makes It Work*, Amherst H. Wilder Foundation, second edition (2001), 27.

used continuously, targeting all partner organizations and their key decision makers. In addition, effective outreach mechanisms are important to keep other stakeholders informed who may not be actively involved in developing systems or business processes, and an outreach plan may be needed to specify tasks and mechanisms to help promote interest and participation in the project. For example, while working on a collaborative project to reduce highway fatalities, the Department of Transportation implemented a knowledge-sharing management portal to facilitate the exchange of information and ideas between the Federal Highway Administration and the states. This communication tool proved to be effective in ensuring widespread and frequent communication and was subsequently implemented in other transportation communities.¹⁸

- *Adopting a common set of standards.* Developing a common set of standards that are agreed to and used by all project partners is a key factor for effective collaboration. Such standards provide a basis for more seamless systems, data, and business process integration on collaborative projects, and help to ensure that those systems and processes can work together. Specifically, ensuring that there are processes in place by which project partners can select and agree upon standards and that all partners are adopting them are key factors in establishing these essential common standards. In GSA's Government Without Boundaries program, which provided a virtual pool of government information and services, all stakeholders agreed to a technical approach for interoperability and implemented a demonstration to prove the concept.¹⁹

These five key practices and their major elements are summarized in table 1.

¹⁸Industry Advisory Council, e-Government Shared Interest Group, *Cross-Jurisdictional e-Government Implementations* (September 2002), 16–17.

¹⁹Office of Intergovernmental Solutions, General Services Administration, *Government Without Boundaries: A Management Approach to Intergovernmental Programs* (May 23, 2002).

Table 1: Key Collaboration Practices and Their Major Elements

Key practice	Major elements
Establish a collaborative management structure	<p>Strong leadership is present among partners.</p> <p>Involvement of all leadership levels is an instituted practice.</p> <p>Partner/stakeholder roles and responsibilities are clearly defined, agreed to, and understood by participants.</p>
Maintain collaborative relationships	<p>A common vision is shared among partners.</p> <p>A climate of trust and respect is fostered through open communication.</p> <p>Formal agreements with a clear purpose, common performance outputs, and realistic performance measures are used to provide a firm management foundation.</p>
Contribute resources equitably	<p>Formal processes to contribute human capital and funds, such as written agreements, ensure that needed resources are promised and delivered.</p>
Facilitate communication and outreach	<p>Communication strategies facilitate two-way communication among the project team, partners, and other stakeholders.</p> <p>Outreach programs keep those affected by the initiative informed of new developments and provide structured means for feedback and questions.</p>
Adopt a common set of standards	<p>Processes are in place by which partners can discuss, develop, and agree to common standards needed for initiative success.</p>

Source: GAO.

Initiatives Have Achieved Varying Degrees of Collaboration

The four initiatives we reviewed have all taken steps to promote collaboration with their partner agencies. However, none of the initiatives has been fully effective in collaborating with important stakeholders. In comparing the four initiatives' ongoing and planned activities with the key collaboration practices, we identified significant accomplishments as well as shortcomings and potential challenges. For example, regarding two key practices (establishing a collaborative management structure and contributing resources equitably) we found that three of the four initiatives—e-Payroll, Geospatial One-Stop, and Integrated Acquisition Environment—had taken actions that met planned objectives or that stakeholders found to be effective. However, regarding another key practice—facilitating communication and outreach—an equal number (Geospatial One-Stop, Integrated Acquisition Environment, and Business Gateway) had not taken all the steps they could. The four initiatives have all faced short time frames to accomplish their tasks, and they generally

have not fully adopted key collaboration practices because of other competing priorities. However, without involving important stakeholders, the initiatives increase the risk that they will not fully achieve their objectives or the broader goals of the President’s management agenda.

e-Payroll

OPM has taken positive steps to facilitate collaboration among the e-Payroll initiative’s partners, such as (1) establishing a management structure with well-defined partner agency roles and responsibilities and (2) including the four provider agencies in its effort to identify a common set of payroll standards for the federal government. However, OPM has not fully addressed concerns raised as part of the collaborative process, including concerns about potential changes to payroll standards that may be required for the final migration to the two provider partnerships. Interagency collaboration on developing a common set of payroll standards is particularly important because federal agencies operate under a variety of legislative mandates that have complex requirements for payroll processing, all of which must be fully addressed in the new standards. In table 2, we provide an overview of the initiative’s implementation of the key collaboration practices that we identified earlier, followed by a discussion of each of the practices.

Table 2: e-Payroll Implementation of Key Collaboration Practices

Key practice	e-Payroll implementation
Establishing a collaborative management structure	OPM has successfully established a collaborative management structure.
Maintaining collaborative relationships	OPM is more successful at maintaining collaborative relationships with payroll providers than with other stakeholders.
Contributing resources equitably	OPM has developed a plan to ensure that resources are contributed equitably.
Facilitating communication and outreach	Payroll providers report that OPM’s efforts at communication and outreach have been effective.
Adopting a common set of standards	OPM has begun an effort to collect views on common standards but faces potential challenges in reaching governmentwide agreement.

Source: GAO.

- *Establishing a collaborative management structure.* OPM has provided guidance to its partner agencies that defines roles and responsibilities

and specifies those partners' responsibilities with respect to their collaborative relationships with their payroll customers. For example, in memorandums of agreement with the four selected payroll providers, OPM defined the structure that would be used to manage the project. The management structure includes the four provider agencies, a payroll advisory council with 11 representatives from different federal agencies, different functional areas (such as human resources, IT, and financial management), and OMB. In addition, OPM developed a plan that outlines the content of service level agreements between payroll providers and their agency clients. According to the plan, such agreements should detail both the scope of client services and performance expectations for the service provider and should specifically address issues such as change management, billing procedures, and support services. Officials from the Department of Agriculture's National Finance Center and the Department of the Interior's National Business Center, two of OPM's four partner agencies, cited this project management approach as successful in promoting collaboration on the e-Payroll project.

- *Maintaining collaborative relationships.* OPM has taken steps to develop and maintain collaborative relationships with its partners and other federal stakeholders. OPM established a group with representatives from the four payroll providers, which holds regular meetings to address project status and other initiative issues. Officials from three of the four provider agencies told us that this group has been very effective in affording them the opportunity to discuss common issues and concerns.²⁰ Specifically, Interior's National Business Center representative told us that this forum allowed the federal payroll providers to discuss standardizing and implementing two recent governmentwide payroll actions—the initiation of flexible spending accounts (a program of optional pretax health and dependent care savings accounts for federal employees) and a retroactive federal pay raise for the first part of 2003—resulting in a consolidated governmentwide time frame for the availability of these features.

In order to elicit full participation, all partners in a collaborative undertaking need to share a common vision and work in a climate of trust and respect. One way to create such an environment is by ensuring

²⁰The fourth provider, the Defense Finance and Accounting Service, did not respond to our request for information.

that all stakeholder concerns are articulated and fully addressed. However, according to one stakeholder, OPM has not always effectively addressed concerns by agencies being affected by e-Payroll consolidation. Specifically, the director of the Payroll/HR Systems Service at the Department of Veterans Affairs (VA) told us that his department was not allowed enough time to make a complete evaluation of payroll providers before OPM finalized its decision to align the department with the Defense Finance and Accounting Service. VA had advised OPM in writing that it had concerns that needed to be resolved before the selection of a provider was finalized. According to VA projections, migrating to the Defense Finance and Accounting Service would be both costly and inefficient, because VA would have to separate its payroll system from its human resources system. However, OPM's written responses did not directly address VA's concerns but instead emphasized that time available to reconsider the decision was short. For example, in a letter dated January 14, 2003, OPM informed VA that a business case justifying VA's position would have to be prepared and submitted within 2 days. While OPM exercises the ultimate authority in deciding how payroll operations are to be consolidated, it could put e-Payroll's overall schedule at risk by not fully considering and responding to stakeholder concerns.

- *Contributing resources equitably.* OPM has instituted a collaborative strategy for financing the e-Payroll project that includes guidance identifying the responsibilities of partner and other participating agencies for contributing resources for the e-Payroll initiative. For example, OPM's plan for financing the consolidation of payroll service providers and the migration of agency payroll operations to designated service providers states that the provider agencies are to recover the costs of their operations from fees levied on their customers as defined in service level agreements. In addition, OPM's plan relied on OMB to apportion funds to the providers for migration expenses by identifying agency funding contributions in fiscal years 2003 and 2004. The intent was to redirect funding that had been planned for upgrades or other payroll system operations and maintenance to support the governmentwide effort. In keeping with this intent, officials from Energy, Health and Human Services, and the Nuclear Regulatory Commission reported that they were using funds earmarked for upgrade and maintenance of payroll systems to finance migration costs.
- *Facilitating communication and outreach.* The e-Payroll management team has taken steps to facilitate effective communication of project

status and needs. For example, OPM began by inventorying stakeholders to identify those affected by the initiative and then developed a plan for communicating with them. The resulting communications plan identified a variety of methods for conveying project information to affected parties, including direct meetings, workshops, telephone contact, and formal letters to agency heads regarding significant decisions relating to the initiative. OPM also held a governmentwide forum intended to provide information about e-Payroll to agencies and facilitate interaction among the executive branch agencies and the selected providers. In addition, three of the four designated payroll providers reported that attending the quarterly provider conferences and participating in biweekly conference calls sponsored by OPM were effective communications mechanisms.

- *Adopting a common set of standards.* Consolidating the existing 22 federal payroll systems into a single system requires that OPM develop a common set of payroll standards that will meet the requirements of multiple federal agencies with different missions and legislated payroll constraints. OPM has taken steps to help ensure that federal agencies have input on development of a common set of standards. For example, OPM commissioned a study to identify significant differences among the payroll processes of the existing 22 providers. Representatives of agencies from a cross section of the executive branch, including all four of OPM's partners—the selected payroll providers—participated in the study. The resulting 87 payroll standardization opportunities were provided to federal agencies for review and comment.²¹ OPM received approximately 250 comments and suggestions for action from federal agencies on the standardization opportunities that it identified. These agencies' comments show the complexity of the standardization tasks that OPM and its partners have yet to undertake—from proposing new legislation to addressing union negotiations. According to OPM officials, a focus group was established in July 2003 to further analyze the previously identified opportunities and develop recommended solutions. Officials told us that standardizing the payroll process is an ongoing process and that work to develop a single payroll standard would continue with input from other federal agencies.

²¹Examples of "standardization opportunities" include such things as establishing a standard official payday each pay period for the entire federal government and consolidating all employees to one biweekly pay cycle.

Although OPM has involved its partners and other federal agencies in the process of identifying opportunities for standardization, it still faces the challenging task of getting federal agencies to reach agreement on a single payroll standard that they all can use. As agencies migrate to consolidated payroll providers, changes may need to be made either to the providers' payroll processes and standards—so that the various payroll mandates can be accommodated—or to the mandated requirements themselves, so that agencies can conform to a single standard. Fully identifying and assessing the impact on agencies of potential payroll standards will be a challenging effort. For example, VA's Acting Deputy Assistant Secretary for Finance expressed concern that OPM officials might not appreciate the complexities of administering payroll systems under Title 38 of the United States Code²²—the legislation that governs VA's payroll processes—and that changes would be necessary to support VA's payroll processing once it migrates to its new payroll provider. According to an OPM study, in addition to Title 38, there at least 13 other sets of legislated federal payroll provisions that will need to be reviewed and addressed before consolidated federal payroll systems can be implemented.²³ Without effective interagency collaboration, changes mandated by OPM may not fully address agencies' individual payroll processing requirements, increasing the risk that agencies will not be able to migrate as planned to their new payroll providers. In commenting on a draft of this report, OPM officials stated that they have taken steps to ensure that a collaborative process was in place for payroll standards development, based on establishing a focus group of cross-agency representatives within the Payroll Advisory Council. If supported by a detailed strategy, OPM's action may help to address this issue.

The e-Payroll initiative has achieved initial progress based in part on an effective collaborative management structure and collaborative relationships with its designated payroll providers. However, the issue regarding consideration of VA's concerns could have an adverse impact on the success of the project as migration of agency payroll operations progresses. Furthermore, unless OPM places increased emphasis on collaboration as governmentwide standards are developed and

²²38 U.S.C., Part V, Chapter 74—Veterans Health Administration—Personnel.

²³Office of Personnel Management, *e-Payroll Initiative: Plan for Standardization of Federal Payroll Policy*, Revision 1 (Washington, D.C.: Jan. 13, 2003).

consolidation of payroll systems progresses, it will be at increased risk that the consolidated systems will not meet the needs of all federal agencies.

Geospatial One-Stop

Ensuring effective collaboration on Geospatial One-Stop is a significant challenge. In addition to the eight federal agencies designated as partners, the project's stakeholders include thousands of state and local governments, as well as other nonpartner federal agencies. State and local agencies perform key functions in collecting and managing geospatial data—it is estimated that about 90 percent of geospatial data is collected by state and local governments, and that those governments invest over twice as much as the federal government to collect and maintain such data. Consequently, states' and localities' participation in the Geospatial One-Stop initiative is critical. Interior has taken steps to include nonfederal stakeholders on the project. For example, it established an intergovernmental management structure, conducted briefings at meetings and conferences across the country to promote stakeholder participation, appointed an outreach coordinator to facilitate communication with stakeholders, and included states and localities in drafting national geospatial data standards. However, given the large number of stakeholders, Interior has not yet ensured that many states and localities are involved in the project. In addition, although Interior has collaborated with its partners and other stakeholders in developing draft geospatial standards, it has not taken steps to ensure that those standards will be used by a majority of the project's federal, state, or local stakeholders. Table 3 is an overview of the key collaboration practices as implemented by the Geospatial One-Stop initiative, followed by further discussion.

Table 3: Geospatial One-Stop Implementation of Key Collaboration Practices

Key practice	Geospatial One-Stop implementation
Establishing a collaborative management structure	Interior has established a board of directors that includes federal and nonfederal stakeholders.
Maintaining collaborative relationships	Partners and stakeholders largely have not established formal agreements outlining a common vision and roles and responsibilities for collaborative relationships.
Contributing resources equitably	Although partner agencies initially did not contribute funds as projected, they have made planned contributions in fiscal year 2003.
Facilitating communication and outreach	Despite a range of outreach efforts, many state and local governments are not participating, apparently because they do not perceive the benefits to outweigh the effort and expense of doing so.
Adopting a common set of standards	Participation in drafting standards has been limited, with many states and almost all counties and cities not participating. Further, achieving consistent implementation of the standards across levels of government will be challenging.

Source: GAO.

- Establishing a collaborative management structure.* Geospatial One-Stop includes eight federal partners and thousands of other stakeholders—over 3,000 counties, over 18,000 municipalities, and the 50 states, as well as other federal agencies that are not partners on the project. To help ensure that nonfederal stakeholders have a voice in the direction of the project, Interior established an intergovernmental board of directors that votes on significant decisions, such as selection of the portal architecture and establishment of project schedule dates. Two-thirds of the votes are held by state, local, and tribal representatives, and one-third by federal partner agencies. Establishment of the board has worked well to facilitate collaborative intergovernmental management and oversight of the Geospatial One-Stop initiative. For example, at recent board meetings, members discussed issues such as the status of the initiative, standards concerns, and the management structure of the initiative as reflected in its most recent business case. The representative to the board from the National States Geographic Information Council told us that state, county, and municipal levels of government were well represented and played a

useful role in providing alternative views about the direction of the initiative.²⁴

- *Maintaining collaborative relationships.* While Geospatial One-Stop has established a management structure to facilitate collaboration, it has made less progress in defining working relationships among its collaborative partners. One positive step was the development of a charter for the project's board of directors, which discusses authority, responsibilities, voting procedures, and coordinating mechanisms for the board members. The charter was signed by each of the board's members. However, at the time of our review, other than this charter, only one memorandum of understanding had been established regarding collaborative relationships—an agreement on coordinating GIS standards related to homeland security, which was signed by the Federal Geographic Data Committee, the U.S. Geological Survey, and the National Imagery and Mapping Agency. Without formal agreements among the Geospatial One-Stop project partners, it may be difficult to sustain a shared vision for the project and ensure that progress is being made toward achieving its objectives.
- *Contributing resources equitably.* While Geospatial One-Stop initially had difficulty obtaining resource contributions from federal partner agencies, these early problems have largely been resolved. According to the executive director, partner agencies did not contribute funds for fiscal year 2002 as had been projected in the project's capital asset plan, even though the agencies had been involved in preparing the plan. Instead, Interior provided all fiscal year 2002 funds for the project. For fiscal year 2003, the capital asset plan estimated that Interior would contribute about \$2.2 million, while the other seven partner agencies would contribute the remaining \$6.2 million. According to a project official, all agencies have made their planned contributions. The availability of funds from partner agencies in fiscal year 2003 has allowed Geospatial One-Stop to complete several tasks on schedule, such as deploying the initial version of the www.geodata.gov portal and submitting draft national geospatial data standards to the American National Standards Institute.

²⁴The National States Geographic Information Council is an organization of states that promotes the adoption and use of geographic information technologies. Members include state GIS coordinators, senior state GIS managers, and representatives from federal agencies, local government, the private sector, academia, and other professional organizations.

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- *Facilitating communication and outreach.* The Geospatial One-Stop project team uses a number of different mechanisms to communicate information about the project to potential stakeholders and the public. For example, the project management team established a Web site that provides information such as minutes of the board of directors meetings, links to partners' and other stakeholders' Web sites, geospatial data standards, and the most recent Geospatial One-Stop business case. The executive director and other Geospatial One-Stop project members also provide briefings and question-and-answer sessions at conferences and participate in other forums to provide information about the project to other stakeholders. The project's executive director attended the midyear meeting of the National States Geographic Information Council, where he provided a briefing and a luncheon talk about Geospatial One-Stop to all attendees and addressed the attendees' questions and concerns. In addition, the initiative's project team, in conjunction with the National Association of Counties, the National League of Cities, and the International City/County Managers Association, conducted a survey of local governments to gather information about the extent of respondents' use of geospatial data and the reasons why such data are not being used more extensively by those governments.

Despite these measures, according to state GIS officials the project has not yet gained participation from other governments because they may not perceive it to be beneficial to undertake the effort and expense of documenting and making available local geospatial data for inclusion in the www.geodata.gov portal. For example, the executive director of Vermont's Center for Geographic Information, Inc., told us that he did not know whether Vermont's geospatial data holdings were being considered for inclusion in Geospatial One-Stop and that the benefits of participation had not been well communicated. In addition, Montana's GIS coordinator told us that Montana had not yet committed to participate in the project and that state government officials did not understand the benefits of participating. According to the Geospatial One-Stop Capital Asset Plan, Interior is planning to provide incentives for state, local, and tribal governments to participate, although the project's executive director told us that carrying out these plans is contingent on approval of funding. Also, in a draft of Interior's fiscal year 2005 plan, several planned actions to accomplish these tasks have been identified. Planned actions include providing funding to help state, local, and tribal organizations to become more engaged in intergovernmental geospatial activities and establishing a liaison

program with funding to local stakeholder associations to work with Geospatial One-Stop and serve as a liaison between federal agencies and those associations. In addition, according to the Geospatial One-Stop outreach coordinator, other efforts not provided in the initiative's capital asset plans include identifying opportunities to promote geospatial information as part of the state and local government policy efforts and enhance outreach in other areas of the project, such as standards development and management of the portal. However, there are no plans to develop a formal outreach plan for the Geospatial One-Stop initiative. Unless a detailed plan is documented and implemented for conducting effective outreach, state and local geospatial information may remain inaccessible through the Geospatial One-Stop portal, significantly reducing the usefulness of the portal as a central access point for such data.

- *Adopting a common set of standards.* Interior has taken steps to collaboratively develop a set of basic standards to support the collection of interoperable geospatial data for the Geospatial One-Stop initiative. Specifically, project participants have drafted standards for seven types of data²⁵ as well as a base standard, with participants from other federal agencies, states, localities, the private sector, and academia participating in their development. However, participation in the standards-setting process has been limited. Several large nonpartner federal agencies—such as the Departments of Treasury, Justice, and Health and Human Services—were not represented on the standards development effort. In addition, local government representation included only 23 counties and 3 cities. As a result, the risk is substantial that many federal and local stakeholders may not adopt the proposed standards because those standards may not meet their needs.

Further, definition of the standards is only the first step in realizing their benefits; Geospatial One-Stop has not addressed the challenge of gaining consistent implementation of the standards across governments—a key factor in effective collaboration. Many states and localities have already established Web sites that provide a variety of location-related information services, such as updated traffic and

²⁵The seven types are transportation, hydrography, government units, geodetic control (supporting a common coordinate system), elevation, digital orthoimagery (having the characteristics of a map and the image of a photograph), and cadastral (relating to land ownership).

transportation information, land ownership and tax records, and information on housing for the elderly, using existing commercial products that are already meeting their needs. Hence these organizations are likely to have little incentive to adopt potentially incompatible standards that could require substantial new investments. According to Arizona's state cartographer, many local governments currently do not comply with existing federal standards because most of their GIS applications were created primarily to meet their internal needs, with little concern for data sharing with federal systems. If designated standards are not widely adopted, geospatial data could continue to be collected in incompatible formats and systems, preventing officials from gaining the benefits of better-informed decisions about public investments in infrastructure and services based on an integrated view of geospatial information.

While the Geospatial One-Stop project established a significant collaborative management structure in its broadly representative board of directors, the project has not fully adopted other key collaborative practices. It faces significant challenges in obtaining participation from thousands of potential project stakeholders and obtaining their agreement on and implementation of geospatial data standards. Such participation will be difficult to achieve without a more structured and rigorous outreach effort to involve federal, state, and local government agencies.

Integrated Acquisition Environment

The General Services Administration has taken steps to ensure that a variety of mechanisms are in place to facilitate collaboration on the Integrated Acquisition Environment initiative. For example, the project team developed a formal charter outlining the objectives, tasks, and roles and responsibilities of project partners, and it is in the process of completing implementation of memorandums of agreement with all participating agencies to further define their roles and financial responsibilities. In addition, GSA has developed a communication strategy for the initiative to help ensure that partners and stakeholders are informed. However, that strategy does not include key financial decision makers throughout the government, although our research shows that such officials should be informed of project status and needs on a continuous basis. Finally, GSA's plans for developing standards for the federal acquisitions process are in line with the key practices that we identified. Table 4 provides an overview of the initiative's collaboration practices, followed by further discussion.

Table 4: Integrated Acquisition Environment Implementation of Key Collaboration Practices

Key practice	Integrated Acquisition Environment implementation
Establishing a collaborative management structure	Interagency development of a charter established a common foundation for collaboration, and the use of subteams to develop project modules facilitates collaboration at the working level.
Maintaining collaborative relationships	Effective collaboration mechanisms have been established, including memorandums of agreement that define partners' roles and funding contributions, as well as regular weekly meetings of business area teams and project managers.
Contributing resources equitably	GSA has been successful in obtaining allotted resource contributions from most of its participating partner agencies.
Facilitating communication and outreach	A detailed communication plan and a range of outreach efforts have been effective at promoting collaboration, but key financial decision makers—the Chief Financial Officers—have not been included.
Adopting a common set of standards	The project team is planning to use commercial standards to develop proposed standard interfaces and to distribute them to the federal procurement community for comment.

Source: GAO.

- Establishing a collaborative management structure.* The project team established a charter for the Integrated Acquisition Environment initiative that all partners and stakeholders agreed to during the initial phase of the project. According to the project manager, the interagency development of and agreement to the initiative's charter allowed the project team to collectively establish a common foundation for working collaboratively on the initiative. In addition, the project management team established a structure of subteams responsible for leading development within each of five project modules defined in the charter. The subteams consist of representatives from at least 22 agencies who are tasked with serving as the primary liaisons between their agencies and the project management team. This well-defined subteam structure can contribute to effective collaboration at the working level among the many agencies involved in the project. Further, GSA is in the process of developing a comprehensive change management plan to be completed in early 2004. This plan is to address stakeholder involvement through the use of multi-agency, cross-functional teams at the executive level

and collaborative design of the system through business area teams populated with partner agency representatives.

- *Maintaining collaborative relationships.* The project management team is in the process of establishing memorandums of agreement with each partner agency; these agreements further define each partner's role and expected funding contributions. As of September 2003, memorandums of agreement had been signed with 21 agencies, 3 were near completion, and 7 remained to be completed. In addition, GSA officials reported that several collaborative forums for Integrated Acquisition Environment stakeholders were in place. For example, business area teams and project managers hold regular weekly meetings, which serve to reinforce collaborative relationships that cut across organizational boundaries. In addition, an Industry Advisory Board provides industry perspectives on priority needs, requirements, best practices, and trends. Officials from 10 partner and stakeholder agencies that we contacted indicated that the project's collaboration mechanisms were effective.
- *Contributing resources equitably.* To date, the project has been successful in obtaining resource contributions from most of its partner agencies. According to GSA officials, as of September 2003, 94 percent of requested funds had been received. According to the project managers, GSA anticipates that all participating partner agencies will contribute their allotted amounts in fiscal year 2004.
- *Facilitating communication and outreach.* The Integrated Acquisition Environment's project team has taken a number of concrete steps to build communication and outreach among partners and stakeholders. For instance, the team has developed a detailed communication plan that clearly identifies their audience, as well as various communication tactics, such as creating e-mail news updates, participating in "industry days," meeting with agencies' senior officials, and contributing content to the press. Project officials also established an online workspace where participants can share information, organize conferences to share information with private industry, and hold regular team meetings. According to comments from several participants and interested parties, these strategies are effective in providing necessary information regarding the initiative. Interior's deputy assistant secretary for performance and management, for example, noted that these measures have been effective at promoting collaboration by focusing on sharing information and generating agency support for the initiative.

However, the project team has not included all stakeholders that it could in its communication and outreach efforts. Specifically, Chief Financial Officers (CFO) of partner and stakeholder agencies, who make key decisions about financial contributions to the initiative, said they had not been included and consequently have not been kept up to date about the objectives and requirements of the initiative. Representatives of the partner agency CFOs provided suggestions that highlighted shortcomings in GSA's communications with the financial community to date. For example, Treasury's CFO noted that the specific objectives of the initiative should be communicated to senior financial managers so that they understand how the initiative will support the missions of their organizations. According to the assistant CFO for the Department of Housing and Urban Development, the project team could more effectively reach the financial community by interacting regularly with the federal CFO Council, a mechanism established as a focal point for financial management issues in the federal government. According to the Integrated Acquisition Environment's project managers, increased support from the CFOs could increase the likelihood of partner agencies contributing funds to the initiative. These officials told us that they are working to better include financial decision makers in future project communications by updating the project's communication plan to include agencies' CFOs and coordinating more actively with the CFO council as new project modules are developed. In commenting on a draft of this report, GSA officials stated that GSA has scheduled discussions about the initiative with a cross section of CFOs and plans to invite a representative of the CFO Council to participate in the Integrated Acquisition Environment governance body. However, at the time of our review, these actions had not yet been completed. Without taking such an inclusive approach, the project could be at greater risk of not meeting its objectives due to future funding shortfalls.

- *Adopting a common set of standards.* The lack of standardization in government-to-government transactions adds to the complexity and inefficiency of the current process. A primary objective of the Integrated Acquisition Environment initiative is to establish standard data elements, business definitions, interfaces, and roles and responsibilities for government acquisitions. Achieving this objective is likely to be challenging. Once agreed upon, the new standards are expected to streamline the data handling processes, reduce workload, improve billing accuracy, and help enforce data stewardship roles and responsibilities. The project team's standards development strategy includes obtaining comments from as many affected federal agencies as

possible, which is in line with the key collaboration practices that we identified. Having begun by mapping the process currently in place, the project team intends in October 2003 to begin using commercial standards to develop proposed standard interfaces. As proposed standards are developed, the project team plans to distribute them to all members of the federal procurement community—128 agencies—for comment. The process of addressing these comments and reaching final agreement on standards is likely to be challenging, given the number of affected agencies.

GSA has adopted a variety of effective collaborative practices that have contributed to progress in advancing the goals of the project. Like the other initiatives, Integrated Acquisition Environment still faces additional challenging tasks, especially in setting standards. Involving agency financial decision makers could help reduce the risk that agencies may not contribute resources in future years.

Business Gateway

Collaboration on the Business Gateway project is critical at two broad levels. First, several key federal agencies that are responsible for business regulation—such as the Departments of Labor and Transportation and the Environmental Protection Agency—must collaborate to make it easier for businesses to access and comply with their regulations. Second, the Business Gateway project team must collaborate with industry-specific groups that are the subject of business regulation—such as truckers and miners—to ensure that the planned gateway will meet their needs. In specific areas, such as development of the gateway’s profiler module, collaboration has been successful. However, on the whole, SBA’s actions to involve its partners and other stakeholders in the Business Gateway initiative have not addressed many of the areas that we found to be essential to achieving effective collaboration. SBA has not yet taken steps to document project responsibilities in interagency agreements, achieve equitable resource contributions among partners, or provide adequate outreach to partners and potential stakeholders to ensure that they are kept fully informed about the project. Table 5 is an overview of the key collaboration practices as implemented by the Business Gateway initiative, followed by further discussion.

Table 5: Business Gateway Implementation of Key Collaboration Practices

Key practice	Business Gateway implementation
Establishing a collaborative management structure	A project charter has been developed, but it does not define roles or responsibilities or establish collaborative decision-making processes.
Maintaining collaborative relationships	Mechanisms have not yet been established to maintain collaborative working relationships among partners and stakeholders.
Contributing resources equitably	Rather than having partners contribute resources, SBA is both funding the initiative and controlling decision making, which does not encourage participation and collaboration.
Facilitating communication and outreach	Although subgroups have displayed effective communication practices, projectwide communication and outreach have been limited, resulting in key decision makers not being involved.
Adopting a common set of standards	The initiative has agreed on common standards, adopting existing data and technical standards where available and developing ad hoc standards when needed.

Source: GAO.

- Establishing a collaborative management structure.* To facilitate collaboration on the Business Gateway initiative, SBA developed a project charter that addresses the goals of the initiative, its benefits, project components, and critical success factors. However, the charter does not define an interagency approach to managing the initiative, discuss participants’ roles and responsibilities, or establish collaborative decision-making processes. According to the Internal Revenue Service’s (IRS) representative to the project, the charter contains no specific assignment of responsibilities—it was developed only to document general support for the concept of the initiative. Without a well-defined decision-making process, including specified roles and responsibilities, designated partner agencies may be unwilling to make significant commitments to supporting the goals and objectives of the initiative.
- Maintaining collaborative relationships.* SBA has not yet established mechanisms to maintain effective relationships with its agency partners or other stakeholders. Although it reached agreements in 2002 with four of its nine federal partner agencies, those agreements specified single, limited-scope project tasks rather than establishing working relationships with a common vision for the initiative. For example,

SBA's memorandum of understanding with IRS was to develop a pilot program under which small businesses could apply for Federal Employer Identification Numbers via the Internet rather than by mail or fax. Similarly, SBA's agreement with the Occupational Safety and Health Administration was to develop a tool to help small businesses comply with emergency standards. Further, SBA has not yet established formal agreements with organizations that represent small businesses, such as the American Trucking Association, the Owner-Operator Independent Drivers Association, or the National Private Truck Council—all of whom represent the ultimate intended beneficiaries of the initiative's services. According to the OMB portfolio manager for government-to-business initiatives, the project has not been able to establish formal collaboration agreements because key management components, such as partner agency roles and responsibilities, have not yet been defined. Without well-defined mechanisms for collaboration, the project risks not meeting the needs of partner agencies or gaining their commitment to continue supporting the project.

- *Contributing resources equitably.* SBA also has not developed a strategy for sharing resource commitments across its partner agencies. On the contrary, the project manager's strategy has relied solely on SBA to fund the initiative. According to the OMB government-to-business portfolio manager, SBA's strategy was to promote collaboration by not burdening potential partners with financial responsibilities for the initiative. However, in taking on all financial responsibility, SBA also took control of decision-making responsibility, which reduced agency collaboration. Officials from designated partner agencies told us that because they did not provide funds for the initiative, they have had little input in the decision-making process and, as a result, do not have a strong incentive to participate in the Business Gateway. Without the involvement of partner agencies, the initiative risks not being able to achieve its broader objective of providing small businesses with a single integrated source for compliance with federal regulations.
- *Facilitating communication and outreach.* The Business Gateway initiative has produced examples of effective communication and outreach. For example, SBA designated the Environmental Protection Agency (EPA) to take the lead in developing the profiler, which is intended to gather information about a user's business (such as type of business, number of employees, and so on) to aid in providing focused assistance. Based on comments from participating agency representatives, EPA has been effective at leading communication and

outreach for that task. EPA established a cross-agency workgroup that meets weekly to discuss progress, make decisions, and address the next steps with regard to development of the module. The profiler module workgroup members also routinely coordinate via e-mail and telephone, and EPA communicates updated information on development of the profiler module at projectwide team meetings. Participants in the workgroup told us they found that these meetings and briefings by EPA were an effective means for collaboration. For example, according to the Occupational Safety and Health Administration's representative on the profiler workgroup, EPA did an excellent job of facilitating consensus as to next steps, specifying what tasks were to be done by participants, following up on performance, and relaying information or requests from SBA.

However, despite subgroup examples such as this, communication and outreach by SBA to partners and stakeholders projectwide remain limited, with key decision makers not having access to up-to-date information about the initiative. For example, according to the trucking module leader, key agency decision makers were not involved in meetings, conference calls, and monthly workgroup meetings, and therefore agency participants were limited in their ability to support the initiative because they could not make resource commitments. More specifically, federal agency decision makers were often not present at meetings where decisions, such as those on the costs and schedule, were made for the initiative. As a result, project issues could not be effectively discussed and resolved, slowing progress and hindering collaboration.

- *Adopting a common set of standards.* The Business Gateway project team has adopted existing data and technical standards when they were available. For example, the team examined the technical reference model associated with the OMB-sponsored Federal Enterprise Architecture to identify relevant standards and ensure that technical elements of the gateway were compatible with the Federal Enterprise Architecture. In cases where standards were not previously defined, the project team either reached agreement or began a process to reach agreement on ad hoc standards. For example, EPA and the Department of Energy agreed to use the same set of basic key words to direct inquiries by users on topics related to environmental protection regulations. These practices are in line with key practices that we identified for adopting common sets of standards.

The collaboration challenges faced by the Business Gateway project may have contributed to the slow progress on recent work. Specifically, the lack of well-defined roles and responsibilities may have inhibited the stakeholder participation necessary to complete tasks on schedule. The lack of shared responsibility for funding the project may have also limited stakeholder commitment. In addition, limited communication and outreach left key partners and stakeholders ill-informed about the initiative's progress and development issues.

Conclusions

Each of the four e-government initiatives has made progress toward achieving its overall objectives. A number of early goals have been achieved, including establishing Web portals such as www.geodata.gov for the Geospatial One-Stop initiative and www.BusinessLaw.gov for the Business Gateway project. All four initiatives rely on cross-agency collaboration, and they still have a number of tasks to complete, some of which require extensive interorganizational cooperation and could be very challenging.

In our assessment of previous research into cross-organizational collaboration, five broad key practices emerged as being of critical importance. These practices include establishing a collaborative management structure, maintaining collaborative relationships, contributing resources equitably, facilitating communication and outreach, and adopting a common set of standards.

When assessed according to these practices, the record for the four e-government initiatives is mixed. In some cases, the practices were effectively used, whereas in other cases project managers did not take full advantage of them. For example, while OPM has taken steps to promote close collaboration with its four designated e-Payroll providers, it has not fully addressed the concerns of a key stakeholder that may be required to make costly changes to its payroll processes and policies in response to OPM's decisions. Interior has instituted a board of directors for Geospatial One-Stop that includes certain state and local representatives, but it has not yet established formal agreements with all of its federal partners or developed an outreach plan to encourage a broad range of states and localities to participate in the initiative. GSA has adopted a variety of effective collaboration practices on the Integrated Acquisition Environment project, but it has not yet fully involved CFOs from partner agencies. Finally, SBA has not yet taken important steps—including defining roles and responsibilities, establishing formal agreements with

federal partner agencies, and establishing a funding strategy based on shared resource commitments—to facilitate effective collaboration with its partners and stakeholders. Until these issues are addressed, the initiatives may be at risk of not fully achieving their goals.

Recommendations for Executive Action

To enhance the effectiveness of collaboration as a tool for the four e-government initiatives to use in achieving their goals, we recommend that

- the Director of OPM (1) institute a review and feedback process with VA to ensure that its concerns are reviewed and addressed before decisions are made that could have a policy or resource impact on agency payroll operations, and (2) ensure that a collaborative process is in place for development of governmentwide payroll standards;
- the Secretary of the Interior establish formal agreements with federal agency partners to clarify collaborative relationships and develop an outreach plan for the Geospatial One-Stop initiative that includes specific tasks for contacting and interacting with a wider range of state and local government GIS officials to facilitate and explain the benefits of broad participation in the initiative and promote the use of federal geospatial data standards;
- the Administrator, GSA, modify the structure of its working groups and other communication mechanisms for the Integrated Acquisition Environment initiative to fully include the CFOs of partner agencies and better ensure that agreed-upon partner resource contributions are made; and
- the Administrator, SBA, establish a more collaborative management structure for the Business Gateway initiative by defining roles and responsibilities, establishing formal collaboration agreements with federal agency partners, developing a shared funding strategy, and implementing projectwide communication and outreach mechanisms to ensure that key decision makers at partner agencies are kept informed and involved in the management of the project.

Agency Comments and Our Evaluation

We received written comments on a draft of this report from the Director of OPM; Interior's Assistant Secretary Policy, Management and Budget; and SBA's Program Executive Officer for e-Government. We also received oral

comments from the Administrator of GSA. All four agencies generally agreed with our discussion of the collaboration challenges facing e-government initiatives. In addition, each of the agencies provided comments and additional or updated information about collaboration activities associated with their initiatives, as well as technical comments, which have been incorporated into the final report where appropriate.

OPM stated that it was concerned with our assessment that e-Payroll had not been fully effective in taking steps to promote collaboration with partner agencies. In the report, we noted that OPM has taken steps to develop and maintain collaborative relationships with its partners and focused our concern on OPM's relationship with VA. Concerning our recommendation that OPM institute a review and feedback process with VA to ensure that concerns are addressed, OPM reported that such a process has been established and that it would continue to hold discussions with VA. In addition, concerning our recommendation that OPM ensure that a collaborative process is in place for the development of governmentwide payroll standards, we noted in the final report OPM's position that it has taken steps to help ensure a collaborative standards development process by establishing a cross-agency focus group to address standards setting issues. If supported by a detailed strategy, OPM's actions may help to address the issues we raised. OPM also provided technical comments, which we have incorporated as appropriate.

Interior stated that it agreed with our assessment that e-government projects face many challenges and that Geospatial One-Stop had made substantial progress in achieving its initial objectives and goals. Interior also acknowledged that it had not resolved all the challenges in gaining greater collaboration on the part of the potential stakeholders at the state and local levels. Interior stated that, in several ways, the draft report had mischaracterized the Geospatial One-Stop project as being "federal-centric." We do not believe that the report characterizes the initiative in this way. Rather, the focus is on the challenge of gaining as broad participation as possible from state and local representatives, a task that Interior agrees is challenging. Interior's Assistant Secretary, Policy, Management and Budget, also stated that the agency disagreed that the existence of formal agreements is key to sustaining a vision and making progress. However, Interior noted in its comments that it had established memorandums of agreement or funding agreements with each of its partner agencies. Further, our research into key collaboration practices revealed that formal agreements with a clear purpose, common performance outputs, and

realistic performance measures are useful in providing a firm management foundation for collaboration.

GSA concurred with our recommendation regarding the Integrated Acquisition Environment initiative. GSA provided additional information about its planned activities to address our recommendation as well as updated information about the status of the initiative. This information has been incorporated in the final report as appropriate.

SBA provided several suggested technical corrections to the draft report, and we have made those corrections in the final report where appropriate. In its comments, SBA officials stated that the project manager believed that slow progress in 2003 was due primarily to lack of funding from within SBA and the addition of tasks by OMB, rather than to any shortcomings in collaboration, and that efforts at collaboration had been made until funding for the project became problematic. We have clarified in the final report that the funding shortfall was within SBA and not due to a lack of funding contributions from partner agencies. However, as noted in the report, the fact that partner agencies did not share resource commitments for the Business Gateway limited their overall commitment to and involvement in the project, thus putting the project at risk of not meeting its objectives.

As agreed with your offices, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this report. At that time, we will send copies to the Ranking Minority Member, House Committee on Government Reform, and the Ranking Minority Member, Subcommittee on Technology, Information Policy, Intergovernmental Relations and the Census. In addition, we will provide copies to the Directors of OMB and OPM, the Secretary of the Interior, and the Administrators of GSA and SBA. Copies will be made available to others on request. In addition, this report will be available at no charge on the GAO Web site at www.gao.gov.

If you should have any questions concerning this report, please call me at (202) 512-6240 or send e-mail to koontzl@gao.gov. Key contributors to this

report were Shannin Addison, Neha Bhavsar, Barbara Collier, Felipe Colón, Jr., Larry Crosland, John de Ferrari, and Elizabeth Roach.

Linda D Koontz

Linda D. Koontz
Director, Information Management Issues

Objectives, Scope, and Methodology

Our objectives were to assess (1) the progress that has been made to date in implementing the selected initiatives, (2) the major factors that can affect successful collaboration on e-government initiatives, and (3) the extent to which federal agencies and other entities have been collaborating on the selected initiatives.

We considered several factors in selecting the four initiatives for our review. These factors included the number of potential collaborating agencies, reported costs of the initiatives, variety among the types initiative categories (i.e., “government to citizen,” “government to business,” “government to government,” “internal efficiency and effectiveness,” and “cross-cutting”), potential cost savings from implementing the initiatives, variety among managing partners, and variety among the kinds of stakeholders. Based on a consideration of these factors, we selected the following four initiatives: e-Payroll, Geospatial One-Stop, Integrated Acquisition Environment, and Business Gateway.

To assess the progress of the initiatives, we reviewed capital asset plans and other project documentation, conducted interviews with project officials, and assessed electronic services made available to customers to date. In addition to determining the status of planned milestones, we evaluated the progress that had been made in achieving the overall objectives of each initiative within the framework of the e-government strategy of the Office of Management and Budget (OMB).

To identify key practices affecting collaboration on e-government initiatives, we developed criteria through a review of government, academic, and private sector literature on interorganizational collaboration. We provided these criteria to officials of OMB’s Office of Information and Regulatory Affairs, who agreed that the criteria were reasonable for assessing collaboration on e-government initiatives. Based on these criteria, we summarized individual key practices (i.e., those practices that were most commonly cited among our sources) into five broad practices: establishing a collaborative management structure, maintaining collaborative relationships, contributing resources equitably, facilitating communication and outreach, and reaching agreement on a common set of standards.

To assess the extent to which federal agencies and other entities were collaborating on the selected e-government initiatives, we reviewed project documents related to collaboration, such as communication strategies and memorandums of understanding. We conducted interviews with project

managers for each of the initiatives we reviewed, as well as with officials from the four managing partner agencies and OMB's portfolio managers, to determine collaborative management practices that were in place. We also contacted project officials from the initiatives' partner agencies, as well as the National States Geographic Information Council (regarding Geospatial One-Stop) and representatives from small business associations (regarding Business Gateway). We collected information from these entities to determine the extent to which key collaboration practices were being used effectively for the four initiatives we studied.

Our work was conducted from December 2002 to September 2003 in accordance with generally accepted government auditing standards.

Source Materials for Key Collaboration Practices

Following are the source documents that we consulted in identifying the key collaboration practices described in the body of the report.

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

Public Affairs

Jeff Nelligan, Managing Director, NelliganJ@gao.gov (202) 512-4800
U.S. General Accounting Office, 441 G Street NW, Room 7149
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