

# A Strategic Vision for the 21st Century

December 1, 2004



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## Strategic Vision

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December 1, 2004

### I. SITUATION

The United States Government Printing Office is at the epicenter of change in the ways humans create and use information to communicate, remain informed, research a topic and preserve a record.

For more than 500 years tangible documents were created using processes that could be seen and felt by craftspeople trained in the art and craft of typesetting, printing and binding. Authors began with a paper manuscript and saw their words transformed into type and reproduced as pamphlets, catalogs and books. These tangible documents were distributed by booksellers and delivered by the postal service and many found their way into the collections of libraries.

Today, for many documents, there is no longer a requirement for typesetting, printing or binding and there is no tangible document to make its way to library shelves or to be preserved for the future. Authors begin the process by digitally recording their manuscript on a personal computer. By making this document available through a web portal there often is no need for original printing of multiple copies. Such documents are said to be “born digital and published to the Web.”

We estimate that as many as 50% of all U.S. Government documents are now born digital, published to the Web and will never be printed by the Federal government.

Therein lies the biggest challenge for the Government Printing Office.

Recently, Congress asked the Government Accountability Office to examine the current state of printing and dissemination of public government information. The study, which is summarized in Appendix A, has proven a very useful guide and benchmark in the preparation of this Strategic Vision for the future of the Government Printing Office.

### II. THE MISSION

By law and tradition, GPO has three essential missions:

- To provide the agencies and organizations which make up the three branches of the Federal government with expert publishing and printing services, on a cost recovery basis, in order to avoid duplication and waste of government resources.
- To provide, in partnership with Federal Depository libraries, for nationwide community facilities for the perpetual, free and ready public access to the printed and electronic documents, and other information products, of the Federal government.
- To distribute, on a cost recovery basis, copies of printed and electronic documents and other government information products to the general public.

Throughout its history, GPO has been organized to carry out its mission in a traditional printing craft setting with its emphasis on extensive capital investments in heavy metal equipment operated in a large factory environment.

While GPO's mission will remain essentially the same in the future, the introduction of digital technology has changed the ways its products and services will be created and how they will look and function to meet the ever changing needs of the Federal government and the way public users of Government information now prefer it.

It is the reorganization of the Government Printing Office to carry out its mission to meet the changing requirements of the Federal government that this document addresses.

### III. THE VISION

To deliver Federal information products and services from a flexible digital platform.

## IV. GOALS

### A. Develop a flexible digital information content system for Federal documents.

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#### Objectives:

- To have a single authoritative resource to authenticate digital Federal documents.
- To have a responsible digital repository for all Federal documents – past, present and future – that are within the scope of the Federal Depository Library Program (FDLP) of permanent preservation for public access.
- To have a single authoritative source from which masters can be made to create printed or digital copies of documents to meet government, library and public needs.
- To have the flexibility to expand beyond text to include other future formats such as full motion video and sound.

### B. Prepare and equip GPO to provide the future services and products required by its Federal customers.

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#### Objectives:

- To have an organizational structure that focuses on customer service and dissemination at every level and which is designed to guide customers in the development of information products and services to meet their needs.
- To build and equip a next generation “digital information factory” and back it up with a remote facility that both protects the Government’s information assets and provides additional and emergency production capabilities.
- To train GPO employees who have the interest and aptitude in the digital information skills that will be needed in the future.
- To supplement the skills of existing GPO employees as required by recruiting new employees with specialized education in physics, mathematics, electrical and computer engineering, nanotechnology, chemistry, computer chip design and fabrication and computer security, as examples.

### C. Develop a new model for the Federal Depository Library Program which increases partner flexibility.

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#### Objectives:

- To provide FDLP members access to all past, present and future Federal documents in a digital format that can be searched, downloaded and printed over the Internet at no charge.
- To provide specialized Web search tools and training to depository librarians to enable them to better serve their clients in locating and using Federal information.
- To continue to offer FDLP members the option of receiving print versions of key Federal documents (when made available by the authoring agency), or to substitute available electronic documents for printed documents.
- To allow the existing 53 regional depository libraries to combine their tangible collections in a manner that will continue to offer acceptable public access to documents at reduced operating costs to participating libraries.
- To develop two collections, one in the East and one in the West, which will hold all known tangible and electronic FDLP documents in a safe and secure archival environment, with documents withdrawn on a controlled basis as a last resort when no circulating copy is available.
- To revise document holding period requirements for selective depositories to better meet their needs and the public’s requirements in consideration of the availability of digital documents.

### D. To serve the public’s needs by increasing the access to, and the usefulness of, Federal information.

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#### Objectives:

- To digitize and authenticate all known Federal documents, beginning with the Federalist Papers, to allow the entire collection to be searched on the Web and viewed over the Internet from a home, office, school or library.

- To employ on-demand printing technology to enable single copy printing of documents which were either born digital or are no longer in warehouse stock.
- To offer unique versions of digital information to meet the special needs of individuals and businesses.

**E. To increase the percentage of Federal documents procured by GPO pursuant to Title 44 of the U.S. Code and ensure that all pertinent documents enter the FDLP.**

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**Objectives:**

- To streamline GPO's printing procurement system to make it easier and less expensive for agencies to use its services in accordance with the agreements in the GPO/OMB Compact.
- To organize GPO's printing procurement operations around Federal department and agency structures to enable GPO personnel to become experts in the missions of customers and their corresponding information needs.
- To be proactive in customer communications to make certain that customers understand their responsibilities under the law and the wide variety of products and services that GPO has, or which it can develop, to meet their needs including electronic documents and information within the scope of the FDLP.
- To help agencies which maintain their own internal printing operations to determine if their needs could be better served, and costs reduced, by either shutting their plants and contracting the printing to the private sector or by contracting the operation of their facilities to the private sector.

**F. Develop a modern, integrated enterprise approach to managing GPO's business, operational and financial systems.**

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**Objectives:**

- To improve operations by enabling managers to have more timely and accurate information for decision making.
- To reduce costs associated with the operation and maintenance of several stand alone, legacy computer systems.
- To improve customer satisfaction with more accurate and timely job and billing information.
- To improve employee satisfaction with timely and integrated personnel information.

**G. Provide the financial resources required to accomplish our Strategic Vision using GPO's own operations and assets as well as normal appropriations, with the exception of a one-time infusion of workforce development and training funds.**

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**Objectives:**

- To maintain the appropriation for Congressional Printing & Binding at existing levels, adjusting only for volume and any increase in direct costs, through fiscal year 2008, thereafter reducing the appropriation by approximately 30% to reflect the operating efficiencies of a new plant and equipment.
- To maintain the appropriation for the Federal Depository Library Program at existing levels, adjusting only for increases in direct costs, through fiscal year 2008, after which we expect cash generated from operating efficiencies to be used to supplement the existing appropriation level to cover the operating costs of the new digital content system.
- For Congress to allow GPO to reprogram in fiscal year 2005 existing appropriated funds from prior years that will not be needed, to help pay the one-time costs associated with the development of the digital content system.

## V. THE STRATEGY

### **A. Create a Digital Information System**

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The core of our future operations will revolve around the GPO developed Digital Content System designed to organize, manage and output authenticated content for any use or purpose and to preserve the content independent of specific hardware or software so that it can be migrated forward and preserved for the benefit of future generations. (A summary of the Concept of Operations for this system may be found as Appendix B to this document.)

All known Federal Government documents within the scope of the FDL, whether printed or born digital, will be catalogued and authenticated and then entered into the system according to GPO metadata and document creation standards. Content may include text and associated graphics, video and sound and other requirements that may come to be.

Content will be available for Web searching and Internet viewing, downloading and printing, and as document masters for conventional and on-demand printing, or other digital requirements.

We expect the Digital Content System to be fully functional by December 2007.

### **B. Build a New Printing and Digital Information Factory**

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To meet continuing printing needs of Congress and agency customers and provide for a modern information processing environment, we must relocate to new facilities sized and equipped for our future requirements. The GPO's current buildings are both too large and too antiquated and continue to drain the organization of vital resources needed for investments in new technology.

We have engaged the services of the Staubach Company to assist in site selection, development of facilities and equipment specifications, selection of developers and general oversight of construction. We expect to relocate GPO's main facilities in the greater Washington, DC area and locate a backup facility for security and intelligent documents and other requirements at the Nevada Test Site, one of the nation's most secure Federal locations.

We expect the Nevada site to be functional and producing passports and other documents by July 2006, and GPO's main site will be functional and producing the Official Journals of Government, passports and other security documents by December 2007.

### **C. Streamline and Refocus Customer Services for Government Agencies**

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For our customers in Federal agencies, we will continue to provide traditional printed products and services through private sector vendors using GPO's experience and buying power to create the best value for taxpayers. In keeping with the spirit of the GPO/OMB Compact, we will offer customers more flexibility in choosing and working directly with vendors, especially with small value purchases and complex purchases involving multiple functions such as data preparation, personalization, and distribution. To achieve maximum government wide efficiency, it is GPO's goal to have most purchases under \$10,000 bought under the SPA program, through term contracts, or directly from vendors with GPO contracted price schedules. It is also GPO's goal to have most high value, complex purchases procured under best value practices that allow vendors more latitude and creativity in meeting the Government's requirements for publishing programs.

In many agencies, conventional printing is only one aspect of their communications needs. Most agency programs now consist of both printed and electronic information products. In order to guide our customers in the most efficient use of conventional and emerging technologies, GPO will reorganize its Customer Service unit to include teams of individuals assigned to specific departments and agencies. These teams will provide conventional printing support, but will also be available to work with program managers in planning the best solutions to their information dissemination needs, such as content development, graphic design, web site design and hosting, rich media and on-demand printing.

The existing regional office structure was originally designed to provide local face-to-face support for customers and vendors, but for the most part, offices now operate in competition with each other to win work from agencies throughout the country. Most communication with customers and vendors occurs through telephone, fax, e-mail and courier. For most of the printing processed through regional offices and their satellites, geography is not a factor. This structure is no longer economically viable. Our strategy is to consolidate the organization into fewer regional offices which will support the central office teams through face-to-face visits with customers to develop new business, assist them in program design and solve problems. They will also have responsibility for vendor development including face-to-face visits for customer support activities such as press checks and inspections.

We expect all aspects of this strategy to be fully functional by December 2005.

#### **D. Create a New Internal Production Platform**

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Because of rapid changes in technology, which in turn affect customer requirements, GPO's internal printing production capabilities will be narrowly focused in support of the Official Journals of Government, including the Congressional Record and Federal Register, Congress's requirements, and security and intelligent documents.

It is clear that while print quantities continue to drop there will remain a need for printed documents in support of the Official Journals of Government. The GPO will engineer a new, more flexible and cost efficient printing platform for these documents in conjunction with the move to new facilities.

Security and intelligent documents will be a growing and increasingly important business line for GPO. More documents, such as passports, will incorporate electronic devices for added security. We will continue to use our expertise in this area to guide government agencies in the design and application of

complex intelligent documents. To protect national security interests, GPO will manufacture most documents internally. At present GPO is designing a new production platform for passports which will be moved, when appropriate, to the new Washington facility and duplicated at the Nevada facility to enable load balanced production at both sites.

#### **E. Focus Federal Depository Library Program on Digital Content Management**

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It is clear that all future Government information, including text and graphics, still and moving images, and sound, will either be born digital or transformed into digital structure for manipulation, storage and delivery to end users. It is the convergence of text, still and moving images, and sound, into a single electronic content database that will revolutionize future communications.

The FDLP will determine the content of GPO's new Digital Content System, set standards for Federal documents, authenticate documents, catalog and manage the content, and determine the standards for preservation of the content for future generations. This will be done in context with the development of the Digital Content System.

The FDLP will also set the standards for digitizing retrospective tangible documents, acquire both the tangible documents and digitizing services and provide quality assurance for the content. The goal is to digitize all retrospective documents that can be authenticated back to the Federalist Papers. We expect to complete 70% of this task by December 2007.

The future Digital Content System is under development by GPO's Office of Innovation and New Technology, in collaboration with other business units, and is scheduled for full implementation by December 2007. The hardware and software associated with the system will be managed by GPO's Office of Information Technology and Systems.

## **F. Train GPO's Workforce in Digital Information Skills**

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In the first quarter of 2005, GPO will inaugurate Digital Media Services, a new business unit that will provide a platform for training GPO employees in 21st century workforce skills while providing retrospective document scanning services for the FDLP and other Federal agencies.

Employees will be selected to work in this unit based on their interest, aptitude, existing skills and education. Jobs will range from simple machine operation to complex editorial requirements. All, however, will be under the umbrella of 21st century workforce skills. After training, some employees will be rotated back to other business units to utilize their newly learned skills.

It is our goal to have 300 employees participate in this program by December 2007.

## **G. Develop a New Enterprise Wide Computing Platform**

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GPO will migrate its current business, operational, and financial systems, including associated workflow processes, to an integrated system of enterprise system software and applications, which meet all security and privacy requirements. Enterprise program activities will include implementation and administration of remote systems hosting and disaster recovery services. The scope of this program will be agency-wide, and will include financial applications, human resource information, inventory, work-in-process, and procurement applications and functionality. A significant part of this program will allow GPO to leverage e-commerce functionality to increase customer ease-of-use, and to provide industry leading on-demand printing and e-Production capabilities. Development and implementation of modules is ongoing with full implementation to be completed by December 2007.

## **H. Redevelop Existing Headquarter Facilities**

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The Government Printing Office headquarters real estate holdings consist of 60, mostly contiguous, parcels located between G and H Streets on North Capitol Street, NW, which together comprise four buildings and vacant land on approximately 8.5 total acres.

The GPO proposes to trade these facilities, which are uneconomic and functionally obsolete, for new facilities designed and equipped to meet its current mission and flexible enough to expand or contract to meet future requirements, on the following basis:

- The proceeds from the transaction are sufficient to pay all costs associated with new buildings and equipment and moving expenses.
- The new operating environment lowers GPO's operating costs so that appropriation burdens may be reduced and sufficient cash flow is generated to meet ongoing capital requirements.
- That the financial transaction be structured in a fashion that permits the Federal Government to retain title to the real property situated on the west side of North Capitol, and that any scoring issues be acceptable to Congress.
- That the GPO retains a presence in the existing facilities, so that its headquarters can be said to remain in the North Capitol complex.

The Government Printing Office has engaged the services of the Staubach Company to assist in the development process. We expect the terms of any redevelopment to be settled by mid-2005.

## **I. Reorganizing GPO Around Business Lines**

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Unlike organizations of Government that receive most of their income through appropriations, GPO receives about 15% of its income through appropriations and earns the rest by providing products and services to other Government entities. It operates much like a business, setting revenue and expense goals and earning a profit, or making a loss, depending on its operating skills.

To better address the many challenges and opportunities posed by the 21st century publishing environment, GPO will reconfigure its organizational structure around six business lines. The new organization will assist GPO's transformation into a more efficient and customer-driven agency, implement a more integrated approach to printing, publishing, and information dissemination requirements, employ more advanced business systems, and improve management control and decision making.

These new Business Units will be phased in over the next two years in the following order:

### **1. Security and Intelligent Documents**

This line of business will work with Federal agencies to assist in the safe and secure design, production and distribution of security and intelligent documents, many of which will incorporate electronic and other fraud and counterfeit protection features. In the post 9/11 era, documents such as U.S. passports, Social Security cards, travel documents, and immigration forms require new levels of security from their creation to their ultimate disposition. The unit will manage highly secure and duplicative production facilities in Washington and at the Nevada Test Site. It will participate and contribute to establishing U.S. and International standards for security and other sensitive documents and, as recommended by the 9/11 Commission, for items such as birth certificates and drivers' licenses that are used in the establishment of identity in interaction with Federal agencies.

### **2. Digital Media Services**

This unit will develop and maintain the resources necessary to provide services to Federal agencies and the FDLP, to allow them to both add content to GPO's Digital Content System, and to withdraw or receive content to produce specific products and services.

It will develop the capability to efficiently convert printed legacy documents into searchable digital content that meets FDLP standards.

This group will lead in the development of new GPO electronic products and services to better meet our customers' information needs, including Web site design and hosting, and rich media capabilities. It will also house GPO's creative capabilities for customers.

### **3. Customer Services**

This is an existing GPO business unit that was previously focused primarily on printing procurement functions and operated in a decentralized fashion with roughly half the purchasing requirements handled by its Washington headquarters and the other half in 20 offices throughout the country. As the total number of Government printing jobs continues to decline and the quantities are reduced for existing jobs, the current structure is no longer financially viable and is not needed with today's business communication capabilities.

This unit will be transformed into a consultative selling organization with an emphasis on educating Government customers in regard to the best ways of using information technology to meet their program objectives. The unit will continue to purchase most required services, including printing, in the private sector.

This unit will be organized around its customers, with a team of GPO employees assigned to each principal agency customer. Each team will have a manager whose responsibility it is to become an authority on the mission of their customer agency and will be supported by a national account manager whose responsibility it is to develop new business from the agency and to visit the agency's principal locations on a regular basis to consult with program managers. We proposed to reduce the number of field offices. These offices will offer further support to customer teams and will aid the business unit in vendor development. In special situations, GPO will station Customer Service employees at customer sites as required.

#### **4. Library Services and Content Management**

This unit will continue to manage the Federal Depository Library Program under the direction of Congress to ensure equitable, secure, convenient, and permanent public access to Government information in tangible and digital forms.

It will oversee the development of processes and standards to ensure the timely inclusion of all past, present and future Government publications, whether born digital or created through digitization of print material, into the GPO Digital Publication Content system to create a complete FDLP digital information collection that can be authenticated and preserved for future generations.

The unit will support the Federal Depository Library community in its efforts to create a reasonable number of comprehensive collections of tangible Government publications in view of changing library resources and technology. GPO will also develop two complete collections, as last resorts, that will store both tangible and digital versions of all publications.

#### **5. Publication and Information Sales Program**

Because of dwindling demand for printed products, GPO will discontinue ordering printed copies of agency publications for warehousing and subsequent sale. Instead, this unit will develop a capability to fulfill customer orders through other booksellers.

GPO will continue to provide subscription services for Government periodical publications that can be fulfilled directly from the printer or its mail house, and that are economically viable. Back copies will be provided by a contract vendor employing on-demand printing technology to back a modest inventory.

While the FDLP will continue to offer free public access to all Government information available through the Internet, GPO will focus on developing unique collections of digital information, which will

be “pushed” over the Internet to primarily business customers on a subscription basis. GPO is interested in forming alliances with Federal agencies and private sector information vendors as appropriate.

#### **6. Official Journals of Government**

The need for traditional print products such as the Official Journals of Government (such as the Congressional Record and many legislative products, and the Federal Register and related products), will remain until such time as practicable alternatives are developed and accepted by our customers. This business line will continue to meet congressional and agency needs for these types of traditional products while at the same time ensuring the proper coordination of their digital versions with other GPO business operations and meeting GPO’s electronic information dissemination mandate.

## VI. SUCCESS FACTORS

To successfully implement GPO's Strategic Vision and achieve our goals and objectives, certain critical conditions must be met:

### A. Developing a Digital Content System

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This will be the core of GPO's future operations. The system will ingest content from many sources, catalog and authenticate it, manage it, output it for a variety of purposes and preserve it for future generations.

### B. Constructing New Facilities

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To meet continuing printing needs of Congress and agency customers, and provide for a modern information processing environment, we must relocate to a new facility sized and equipped for our future requirements. The GPO's current buildings are both too large and too antiquated and continue to drain the organization of vital resources needed for investments in new technology. In addition, a second facility will be required to provide production and communications backup for the primary facility.

### C. Acquiring and Installing New Technology

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Relocating to modern facilities will require GPO to install new technology, communications equipment, enterprise architecture, and modern printing production equipment to continue operations seamlessly to our customers. New technology will ensure that our future business processes meet the challenges of collecting, managing, and disseminating Government information in the years ahead.

### D. Establishing New Financing

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GPO will pursue new financing strategies, under existing authority, that will supplement our revenues, such as developing new pricing and revenue-sharing strategies and implementing cost-reduction programs. In addition, with GPO currently owning its real estate, constructing and financing a new facility, at a minimum, would allow us to substitute one asset for another of equal fair market value. Any financial resources that would be obtained, over and above the cost of a new facility, would be used to finance important future technology investments once new authority is granted.

### E. Training GPO's Workforce

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A newly equipped and modern facility will require the right people with the right skills for the right jobs. We will select, train, and place a diverse workforce, using best business practices to ensure the talent necessary to accomplish the GPO mission. Innovative organizational design will be used to align the workforce with GPO's business-wide strategic goals and objectives.

### F. Obtaining Legislative Authorities

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Most of the activities outlined in this document can be undertaken with the approval of the Joint Committee on Printing. However, GPO will seek specific legislative authority to redevelop its current real estate holdings and retain the proceeds to develop and equip a new main facility and make other technology investments. GPO will also ask Congress to review proposed changes to the FDLP to determine whether or not new legislative authority is required. Financially, GPO will seek permission from Congress to reprogram some appropriated but unspent funds to meet one time costs associated with new digital technology in support of Congress and the FDLP.

## VII. CONCLUSION

Printing, the predominant means for information exchange for centuries, has been superseded by electronic information technologies, which are now the preferred mechanism for producing and accessing Government information. The times have changed and the GPO must change with them if it is to continue carrying out its core mission.

We need to forge a new GPO for the 21st century, one that is rooted in our core mission, but which uses the technologies of today and tomorrow – not yesterday – to keep their vision alive. This strategic plan is dedicated to that purpose, and to the men and women of the GPO who will carry it out in the months and years ahead.

### **What will GPO finally look like in the 21st century?**

Our digital technology will represent a 21st century model of excellence, in leading customers to digital solutions through effective leadership, employee assistance, and customer-driven partnerships.

Our facilities, fully equipped with the new technology, will reflect GPO's full participation in the digital information world.

And finally, we will be branded with a new organizational culture, as the men and women of the GPO work in an environment of intelligent risk taking that encourages continuous innovation, change, and improvement in service.

UNITED STATES GOVERNMENT PRINTING OFFICE

## Business Plan

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For Fiscal Years 2005 Through 2009

The Government Printing Office's business activities are financed through a business-like revolving fund authorized by 44 USC 309. The fund is reimbursed by payments from customer agencies for printing, binding, and information products and services, sales to the public of Government publications, and transfers from two appropriations – the Congressional Printing and Binding Appropriation, which covers authorized congressional work, and the Salaries and Expenses Appropriation of the Superintendent of Documents, which covers expenses associated with the distribution of Government information as required by law. Congress has also appropriated money to the revolving fund for purposes other than printing requirements, such as facilities, technology improvements, and retirement incentive programs.

Table 1 below forecasts increasing cash flow over the fiscal year 2005-2009 timeframe, giving recognition to essential capital requirements that must be financed at various stages of the plan. It also reflects the GPO's financing needs for both new and existing operations. Underlying this financial projection is the assumption that excess funds will not be generated in the early years of the plan, as all funds will be needed to finance the GPO's transformation. Not until the last two years of the plan will GPO be in a position to start generating excess funds from normal operations because of the reduction of overhead costs and new business operating efficiencies. With the appropriate authorization, these funds could be used as an alternative to the current level of congressional funding.

**TABLE 1**

**SOURCES OF FUNDING – GPO REVOLVING FUND**

<b>Sources of Funding:</b>	<b>FY2005</b>	<b>FY2006</b>	<b>FY2007</b>	<b>FY2008</b>	<b>FY2009</b>
Funds Available from Prior Year:	-	16,700	2,950	(5,550)	1,450
Existing Operations	5,000	7,500	5,000	7,500	5,000
Cost Savings from New Building				17,000	17,000
<b>Revolving Fund (existing operations)</b>	<b>5,000</b>	<b>7,500</b>	<b>5,000</b>	<b>24,500</b>	<b>22,000</b>
Security and Intelligent Documents	7,000	8,000	10,000	12,000	14,000
Tangible and Digital Content	-	1,000	2,000	3,000	4,000
Digital Media Services		1,000	2,000	3,000	4,000
<b>Revolving Fund (new operations):</b>	<b>7,000</b>	<b>10,000</b>	<b>14,000</b>	<b>18,000</b>	<b>22,000</b>
<b>Appropriation for Workforce Retraining</b>	<b>-</b>	<b>5,000</b>			
<b>Reprogram prior year unexpended appropriations for Digital Content Management</b>					
<b>S&amp;E (FY2000 - FY2002)</b>	<b>5,000</b>				
<b>CP&amp;B (FY2002 - FY2004)</b>	<b>15,000</b>				
<b>Income from Building Redevelopment</b>				<b>-</b>	<b>10,000</b>
<b>Total Sources of Funding:</b>	<b>32,000</b>	<b>39,200</b>	<b>21,950</b>	<b>36,950</b>	<b>55,450</b>

Rather than seek a new appropriation to help finance the transformation of GPO into a more digitally focused information provider, GPO will be seeking Congressional approval in fiscal year 2005 to reprogram \$20.0 million from previously appropriated funds that will no longer be needed for their intended purposes and to use these funds to partially pay the one-time costs associated with the development of a new integrated digital content management system to be implemented over three years at a cost of \$29.0 million. This system will incorporate the digital files of all Congressional documents produced through the GPO. The GPO will also seek a one-time fiscal year 2006 appropriation of \$5.0 million to retrain existing GPO workers in the digital skills that will be needed in the future.

The heart of the GPO business plan is the redevelopment of its present headquarters and its relocation to new facilities. It is expected that the proceeds received will offset the costs of new land, facilities, equipment, furniture and fixtures and the costs of relocating.

The new GPO building is expected to be operational toward the end of fiscal year 2007. The combined cost of the building and land is expected to be about \$100.0 million, with another \$40.0 million for equipment, furniture, fixtures, and equipment. Additional costs include the expected moving and other miscellaneous costs of about \$5.0 million, and consultant services of about \$2.6 million. Because of improved efficiencies that are intrinsic to any new facility, GPO's current cost structure will be

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**USES OF FUNDING – GPO REVOLVING FUND**

<b>Uses of Funding:</b>	<b>FY2005</b>	<b>FY2006</b>	<b>FY2007</b>	<b>FY2008</b>	<b>FY2009</b>
Revenue Enhancing	3,000	2,000	2,000	6,000	6,000
Cost Reducing	1,000	2,950	2,500	6,000	6,000
Maintenance/Infrastructure	2,000	7,500	7,500	17,500	7,500
<b>Capital (Existing Operations)</b>	<b>6,000</b>	<b>12,450</b>	<b>12,000</b>	<b>29,500</b>	<b>19,500</b>
Digital Content Management System	5,000	12,500	11,500	5,000	5,000
Investment in GPO Workforce Retraining	2,000	5,000	-	-	-
Digitization Equipment	1,000	5,000	-	-	-
Capital New Building	1,300	1,300	4,000	1,000	
Appropriation Reductions					30,000
<b>Total Uses of Funding:</b>	<b>15,300</b>	<b>36,250</b>	<b>27,500</b>	<b>35,500</b>	<b>54,500</b>
<b>Available Funds (Cumulative)</b>	<b>16,700</b>	<b>2,950</b>	<b>(5,550)</b>	<b>1,450</b>	<b>950</b>

significantly decreased, thus generating positive cash flow in the out years. This expected stream of cash should help to reduce the size of future Congressional appropriations. The new building should generate cost savings of about \$17 million in fiscal year 2008, and another \$17 million, in fiscal year 2009.

Table 2 below forecasts future revenue by program area. It shows strong business growth areas in the Security and Intelligent Documents, Digital Media Services, Library and Content Management, and Sales of Tangible and Digital Content business lines,

with moderate growth followed by declines in the traditional printing areas involving Official Journals of Government and Printing and Customer Services. Other Revenue is projected to increase with the infusion of additional appropriated funds for FY 2006, and by FY 2009 with the commencement of the income stream from the redevelopment of the GPO's current structures. Continued cost reduction strategies are assumed to hold operating expenses relatively constant.

**TABLE 2**

**REVENUE PROJECTIONS FY 2005-2009**

(in thousands of dollars)

REVENUE	2005	2006	2007	2008	2009
Library Services and Content Management	\$43,000	\$46,700	\$50,100	\$52,400	\$49,700
Sales of Tangibles and Digital Content	32,400	33,800	35,300	36,700	38,100
Official Journals of the Government	130,800	133,200	132,900	125,500	98,300
Security and Intelligent Documents	65,000	140,000	150,000	160,000	170,000
Digital Media Services	0	5,000	12,500	17,500	20,000
Printing and Customer Services	464,300	473,600	483,100	473,000	449,000
Other Revenue	7,900	22,900	2,900	2,900	12,900
	<b>\$743,400</b>	<b>\$855,200</b>	<b>\$866,800</b>	<b>\$868,000</b>	<b>\$838,000</b>

**ASSUMPTIONS**

Security and Intelligent Documents assumes new passports will be issued during 2005  
Other security documents will be issued in addition to passports in succeeding years

Official Journals of Government and Printing and Customer Services will begin to decline in 2007 as a result of investments in Content Management

2005 Other Revenue assumes \$5 million of reprogrammed funds invested in Digital Content Management System

2006 Other Revenue assumes \$15 million spending on Digital Content Management System and \$5 million on Workforce Retraining from reprogrammed funds and new appropriation.

2009 Other Revenue assumes \$10M of income from redeveloped main GPO facility

2009 Revenue decline reflects reduced GPO appropriations requirements

## APPENDICES

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December 1, 2004

(A) Highlights of GAO Report “Actions to Strengthen  
and Sustain GPO’s Transformation”

(B) Summary of GPO’s Future Digital Content System —  
Concept of Operations





Highlights of GAO-04-830, a report to the Chairmen and Ranking Minority Members, Committee on Appropriations, U.S. Senate, and Subcommittee on Legislative Branch, Committee on Appropriations, U.S. Senate

### Why GAO Did This Study

The transformation of the Government Printing Office (GPO) is under way. This report captures the results of our efforts over the past year to assess and help strengthen GPO's transformation and strategic planning efforts. It is the final part of GAO's response to both a mandate requiring GAO to examine the current state of printing and dissemination of public government information and a congressional request that we conduct a general management review of GPO focusing on that GPO's transformation and management.

### What GAO Recommends

To further GPO's transformation and build on the actions already taken by GPO's leaders, GAO is recommending that GPO leaders take steps to improve planning and goal setting for the transformation. GAO is also recommending that GPO begin adopting leading practices of world-class organizations in financial management and information technology management.

We provided a draft of this report in June 2004 to the Public Printer for review and comment. The Public Printer agreed with our findings and recommendations and noted that this report will be a major part of GPO's transformation process.

[www.gao.gov/cgi-bin/getrpt?GAO-04-830](http://www.gao.gov/cgi-bin/getrpt?GAO-04-830).

To view the full product, including the scope and methodology, click on the link above. For more information, contact J. Christopher Mihm at (202) 512-6806 or [mihmj@gao.gov](mailto:mihmj@gao.gov).

## GOVERNMENT PRINTING OFFICE

### Actions to Strengthen and Sustain GPO's Transformation

#### What GAO Found

Federal government printing and dissemination are changing due to the underlying changes to the technological environment. The Public Printer and his leadership team understand the effects of this technological change on GPO and have begun an ambitious effort to transform GPO and reexamine its mission. Federal agencies are publishing more documents directly to the Web and are doing more of their printing and dissemination of information without using GPO services. At the same time, the public is obtaining government information from government Web sites such as GPO Access rather than purchasing paper copies. As a result, GPO has seen declines in its printing volumes, printing revenues, and document sales. To assist in the transformation process under way at GPO, GAO convened a panel of printing and information dissemination experts, who developed a series of options for GPO to consider in its strategic planning. The panel suggested that GPO

- develop a business plan to focus its mission on information dissemination as its primary goal, rather than printing;
- demonstrate to its customers the value it can provide;
- improve and extend partnerships with agencies to help establish itself as an information disseminator; and
- ensure that its internal operations are adequate for efficient and effective management of core business functions and for service to its customers.

GPO can also use other key practices that GAO identified to help agencies successfully transform, such as involving employees to obtain their ideas and gain their ownership for the transformation. GPO fully applied one of these practices, related to ensuring that top management drives the transformation, and has partially implemented each of the remaining eight practices. To fully implement the remaining practices, GPO needs to take actions including establishing its mission and strategic goals and developing a documented plan for its transformation.

GPO has taken some initial steps to adopt the best practices of other public and private sector organizations, most notably with respect to human capital management. GPO is actively implementing the recommendations GAO made in October 2003 (see GAO-04-85). For example, GPO reorganized the human capital office into customer-focused teams devoted to meeting the human capital needs of GPO's operating units. Continued leadership attention is needed to build on the initial progress made in information technology and financial management. For example, GPO should implement an information technology investment management process to help management choose, monitor, and evaluate projects, and GPO should train its line managers to effectively use financial data.

# GPO's Future Digital Content System

Summary of GPO's Future Digital Content System Concept of Operations

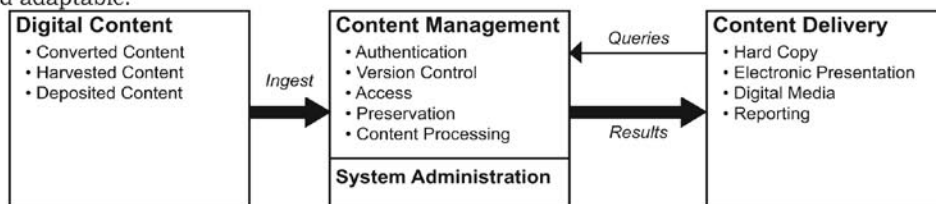
<http://www.gpoaccess.gov/pr/media/2004/04news24.pdf>

## SETTING THE STAGE

A Concept of Operations (ConOps) document was created as a guideline for developing the Future Digital System. A ConOps document is the IEEE standard for describing the high level user requirements of a software-intensive system. This document concentrates on WHAT the system capabilities and requirements are, not HOW the system will be implemented. Based on the Open Archival Information System (OAIS) model, the Future Digital System will be a rules based, policy driven system capable of being configured to meet the needs of users. The ConOps is a reference model driven approach containing functional as well as user models. The ConOps document is currently in the review stage and will be available to the public at a future date.

### Background

The Future Digital System will be a world class information life cycle management system that will transform GPO into a leadership content management agency. The Future Digital System will be system and policy neutral such that it can support changes resulting from technology, policy, or customer needs. The system will be modular and adaptable.



## CRITICAL FUNCTIONS

- **Version Control:** Relating to a specific issuance, edition, or revision of a document or publication.

Version control within the Future Digital system will be the process of establishing the version of the content. Once the version has been established, the Future Digital System will evaluate and track it throughout its entire life cycle based on GPO established best practices.

The chain of responsibility will be reflected in the version information (ie., who created it, when, etc.)

- **Authentication:** Validation of a user, a computer, or some digital object to ensure that it is what it claims to be. In the specific context of the Future Digital System, the assurance that an object is as the author or issuer intended it.

The Authentication function will verify that digital content within the Future Digital System is authentic or official, and certify this to users accessing the content *as needed*. When a digital publication is received by GPO, the Future Digital System must have the capability to verify the authenticity of the content and determine its status as official content.

The Future Digital System will have the capability to provide users who access content with a token (or digital certificate) containing a visual representation that the content is certified to be official or authentic. The Future Digital System will also provide a means by which sections or small pieces of a document could be digitally certified. This concept is otherwise known as granularity.

- **Preservation:** Maintaining information products over time for use in their original form or in some other verifiable, usable form.

GPO's users expect us to provide permanent public access to official U.S. Government publications. GPO's responsibility for this is mandated by law. Preservation storage for current and permanent access are key elements of the Future Digital System:

The active storage component, or access archive, includes files used to deliver content to users.

Preservation archival storage, the Collection of Last Resort (CLR), is a permanent collection of the final published, official version(s) of U.S. Government publications in all formats intended to provide comprehensive, timely, permanent public access.

The CLR will consist of multiple collections of tangible and digital publications with identical content located at geographically-separated sites. This redundancy ensures continuity of access and guaranteed permanence in the event of a disaster or significant discontinuation of service at a single site. Creation of the CLR will follow best practices in the preservation community. The exact number of sites is yet to be determined. There is no direct public access or use of content in the Collection of Last Resort. Only when all other avenues of access are exhausted does the official content in the CLR come into use. Then access copies, called derivatives, are produced to support public access.

- **Access:** The primary interface between End Users and the the Future Digital System.

The 5 major components of Access include Finding, Ordering, Retrieval, User Support, and Data Mining.

Finding is comprised of three tools that interact seamlessly to create a total user experience:

- Search Tools perform queries on content and metadata.
- Reference Tools are lists and resources that point to content.
- National Bibliography (or Cataloging) Tools add descriptive metadata to content in the form of library standard bibliographic records.

Ordering provides the capability for users to place orders and submit payment electronically.

Retrieval Tools provide retrieval instructions so that content may be retrieved from storage and ultimately delivered to End Users.

User Support Tools assist in delivering services to End Users. User Support tools may include alert services, CRM tools, knowledge bases, and stored user preferences.

Data Mining Tools find, aggregate, and associate business process information. This type of information may include document retrievals and agency billing information.

## CONTENT

### *Digital Standards*

Standards are the means for our participation in the communities we serve, making information available and usable. The Future Digital System will be driven by GPO developed best practices that support Government publishing. This includes the creation of:

- **Metadata:** Data that describes the content, quality, condition, or other characteristics of other data.

Metadata describes how, when, and by whom information was collected, where it resides, and how it is formatted. Metadata helps locate, interpret, and manage content throughout its lifecycle in the Future Digital System. Virtually every function within the Future Digital System will require, and often create, information describing the context, quality, condition, use, or nature of content, users, or processes. The system will require tools to create, interpret, and share this metadata between and among a wide variety of existing frameworks and standards already deployed in the various communities of use and practice whom we serve.

- **Preservation Digital Master:** A faithful, high quality version of content which is created in a controlled environment, bound together with information which supports long-term preservation.

We will, with awareness of and leadership in the developing best practice for digital preservation, define specification for a uniform package of digital information to serve as a Preservation Digital Master. It will capture, at the highest possible quality, digital content intended for preservation in the Future Digital System, together with rich metadata, which will support preservation processes over the long term. The goal of that preservation is a contextually meaningful, fully functional, and complete rendering of the content which can be certified as official and faithful to the original issue, regardless of obsolescences and other shifts in technology.

- **Style Tools:** Tools that help customers create and provide content to the Future Digital System.

Style tools will allow GPO to move further upstream in the publishing process - towards content creators - which may allow us to fully capture content. Style Tools are designed to validate to the proposed new GPO Style Manual.

The Future Digital System will contain 3 possible style tools:

- A Validator assures that content is acceptable for the Future Digital System (based on GPO best practices)
- Conversion tools that convert content in structured or proprietary formats (e.g., Quark) to a package that is accepted by the Future Digital System
- Auto-Composition tools that provide a comprehensive range of services to agencies (Auto Composition, Collaboration, etc.)

### *Digital Content*

The focus of the Future Digital System will be on born digital content. The Future Digital System will also support converted legacy content and harvested material.

- **Deposited Content:** Electronic content that is pushed to the Future Digital System by originating agencies for preservation and access.

Based on the ease of system usage and providing Style Tools, it will streamline the process for customers using the Future Digital System. Deposited Content will be consistent with the digital standards for the system. The system will not be limited to the formats that exist today.

- **Harvested Content:** Electronic documents that are first published directly to agency Web sites and then pulled into the the Future Digital System in a way that is consistent with digital standards.

It will be necessary for the Future Digital System to use a suite of tools to discover, harvest, and assess content.

Discovery Tools will be used to discover electronic documents that are in scope.

Harvesting Tools will systematically capture content and available metadata.

Assessment Tools will be used to determine if a document is in scope and if a version of that document already exists in the system.

If the document is in scope and not already in the Future Digital System, it will be ingested into the system.

- **Converted Content:** Electronic files created from tangible documents which can then be preserved and derived into new digital products.

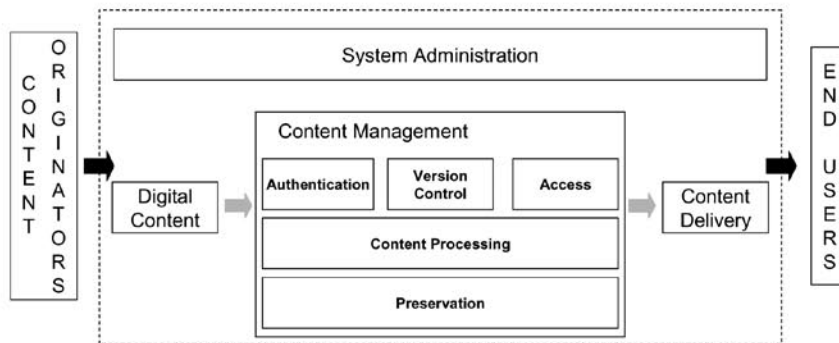
GPO will work with various user communities (including the library community) on digitizing the collection of legacy documents held in Federal depository libraries. This collection will be made available in the public domain for permanent public access through GPO’s dissemination programs.

Conversion must be performed at a level that is adequate to support preservation as well as public access.

As a result, converted files must be compatible with standards and best practices for conversion and digital preservation masters.

## CONTENT MANAGEMENT

The Future Digital System’s working layer that controls and manages content.



## CONTENT DELIVERY

The Future Digital System will deliver content to meet user needs and in conformance with GPO developed best practices. This includes, but is not limited to the following delivery methods:

- Hard Copy is tangible printed content. Print on Demand is hard copy produced in a short production cycle time and typically in small quantities.
- Electronic Presentation is defined as a delivery mechanism of the dynamic and temporary representation of content in digital format.
- Digital Media is a content delivery mechanism consisting of data storage devices. Digital media includes:
  - Data storage devices
  - Wireless handheld devices
  - Future media (e.g., flexible electronic displays, etc.)
  - Storage at user sites (e.g. subscription services, etc.)

As electronic presentation becomes the primary method of disseminating Government publications, the goal will shift away from making the digital format match the printed product and will instead focus on presenting the electronic content in the most useable format.

Regardless of format, the primary goal of delivery is to meet the requirements of users. The Future Digital System will provide capabilities based on those requirements. Tools will allow users to customize, compile, and proof content before delivery.

