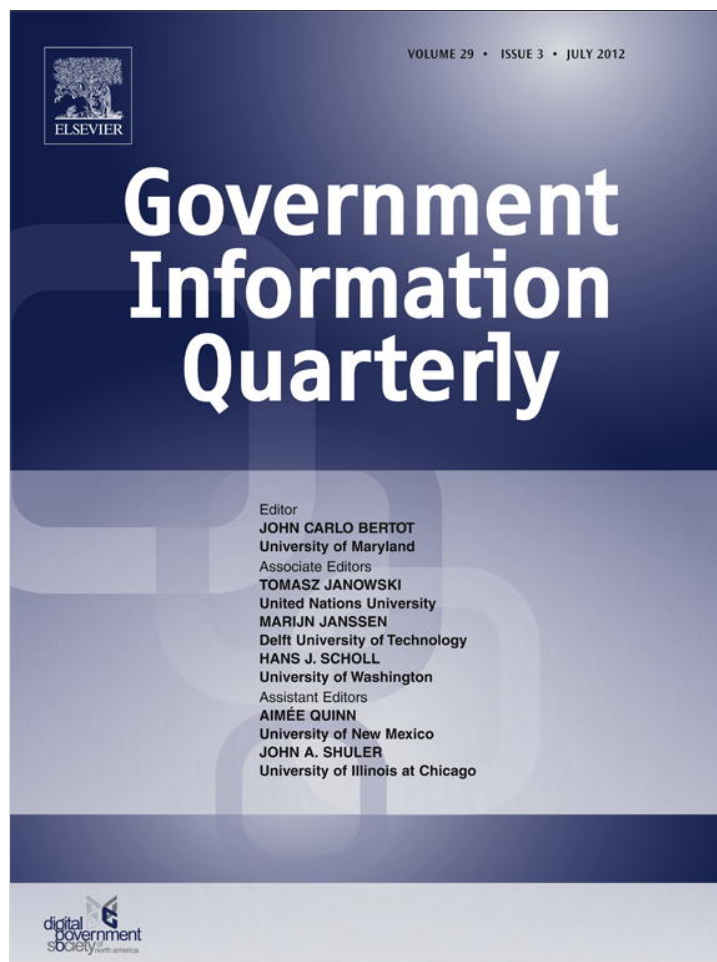


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LOCKSS-USDOCS Program. Managed by Stanford University Libraries. 1450 Page Mill Road, Stanford, CA 94305. Retrieved September 06, 2011 from <http://lockss-usdocs.stanford.edu>.

LOCKSS-USDOCS [<http://lockss-usdocs.stanford.edu>] is a collaborative digital preservation program focusing on US government publications and led by Stanford University Libraries. There are currently 35 libraries and the US Government Printing Office (GPO) participating in the program, including 10 regional libraries in the Federal Depository Library Program (FDLP) and two libraries outside the United States.¹ The program is actively seeking new participants.

LOCKSS-USDOCS utilizes the open source software *Lots of Copies Keep Stuff Safe (LOCKSS)*² which leverages collaboration and geographically distributed redundancy to harvest and preserve content hosted on GPO's *Federal Digital System (FDsys)* [<http://fdsys.gov>] – and seeks to expand its collections in the future to include other digital US government information within scope of the FDLP.³ Content currently being preserved includes key FDLP titles from 1991 to present including *US Budget, Federal Register, Code of Federal Regulations (CFR), US Code, Congressional Record, Congressional reports, hearings and documents, Congressional Bills, Public Laws, Papers of U.S. Presidents, GAO Reports, FDsys bulk data repository* and much more.⁴ There is no additional fee for LOCKSS Alliance participants to join LOCKSS-USDOCS. Non-LOCKSS Alliance participants may join for a small annual service fee of \$1250 (\$750 each if two libraries join together). According to the LOCKSS-USDOCS FAQ, the multiple LOCKSS caches are currently storing between 1.1 and 1.4 Terabytes (TB) of content with FDsys content growing at a rate of approximately 380 GB/year. The Stanford University LOCKSS engineers recommend that participants have the equivalent of a system with four 2 TB disks for 8 TB of storage in order to plan for estimated future growth. New Machines with those specifications can be purchased for around \$1500. Older machines may also be recycled and utilized as LOCKSS boxes.⁵

Over 95 percent of all government publications are now published digitally.⁶ Digital preservation, therefore, is and will continue to be a critical part of the FDLP going forward. Any sustainable long-term digital preservation system needs to be evaluated on the following qualities: affordability, redundancy of content and infrastructure, community support, technical standards and access.⁷ LOCKSS-USDOCS was examined through these vectors.

AFFORDABILITY: As noted above, the costs to libraries associated with LOCKSS-USDOCS are kept deliberately affordable. Participants share both the costs and responsibility for preservation of content. Alliance annual fees go towards the continued development and maintenance of the open-source LOCKSS software and content ingest. Participants pay for local hardware maintenance. According to the LOCKSS-USDOCS FAQ, "Hardware/software upkeep is very minimal

(less than one h/month for one IT staff). Staff time for documents librarians is less than 15 h/year which includes periodic conference calls and selection of new archival units as they are harvested."⁸ The LOCKSS system spreads out the economic cost of digital preservation and uses off the shelf hardware, so that libraries can easily and affordably create, preserve, and archive local electronic collections.⁹

REDUNDANCY: Content and infrastructure redundancy are absolutely critical for digital preservation to ensure long-term viability. Redundancy is one of the core strengths of the LOCKSS software. LOCKSS-USDOCS participants each maintain exact duplicates of all content in their local LOCKSS boxes – meaning content is hosted in multiple geographically distributed sites and replicated many times. The LOCKSS software continuously audits and repairs the bits and bytes hosted in each cache (see footnote 2). LOCKSS is format neutral so all types of file formats (.pdf, .jpg, .txt, .doc, .ppt, etc.) can be preserved in the LOCKSS-USDOCS caches. LOCKSS-USDOCS distributed caches are "tamper evident," a key tenet to both digital preservation as well as the FDLP in general.¹⁰

COMMUNITY SUPPORT: The LOCKSS software is open-source and is maintained and supported by Alliance participants' fees from over 200 libraries and academic institutions in the US and around the world. The number of libraries participating in the LOCKSS-USDOCS program has grown over the last two years from 12 to 36. GPO – though they do not host a LOCKSS-USDOCS box – joined the LOCKSS Alliance in June, 2010¹¹ and fully cooperates and participates in the program. GPO has expressly sanctioned the collection and preservation of FDsys content by embedding and maintaining LOCKSS permission statements on each FDsys collection as well as the FDsys bulk data repository.¹² The Program itself is managed collaboratively and through consensus decision-making.

TECHNICAL STANDARDS: Widely accepted and open – as opposed to proprietary – standards allow for improved data interchange and exchange and the maintenance of and long-term sustainability of digital ecosystems – software, hardware and file formats.¹³ The LOCKSS system is built on the following open standards: Open Archival Information System (OAIS),¹⁴ OpenURL, Hypertext Transfer Protocol (HTTP), and Web Archive file format (WARC).

ACCESS: The primary goal of LOCKSS is digital preservation, but access to digital government information is enhanced through the use of LOCKSS. Because digital content is hosted locally, each participant has access routes via the open Web as well as their own infrastructure if publisher access is lost for any reason.¹⁵ Readers can access archived and newly published content transparently at its original URLs. Content is accessed via library catalogs as well as through commonly used link resolvers.¹⁶

⁸ LOCKSS-USDOCS Frequently Asked Questions http://www.lockss.org/lockss/US_Government_Documents_PLN_Frequently_Asked_Questions Accessed September 4, 2011.

⁹ For more on costs of distributed digital preservation, see Rosenthal et al (2005) listed in footnote 7. See also the Blue Ribbon Task Force (BRTF) on Sustainable Digital Preservation and Access <http://brtf.sdsc.edu/> Accessed September 4, 2011.

¹⁰ Jacobs, J. and Reich, V. (2010). Preservation for all: LOCKSS-USDOCS and our digital future. *Documents to the People (Dtp)* Volume 38:3 (Fall 2010) [http://freegovinfo.info/system/files/lockssusdocs-dtp38\(3\).pdf](http://freegovinfo.info/system/files/lockssusdocs-dtp38(3).pdf). Accessed September 4, 2011.

¹¹ <http://www.fdlp.gov/component/content/article/19-general/710-alliance-digital-preservation>. Accessed September 4, 2011.

¹² LOCKSS permission statements are one of the key elements to LOCKSS. An example FDsys permission statement can be seen at <http://www.gpo.gov/fdsys/bulkdata/FR/resources/lockss.html>. Accessed September 4, 2011.

¹³ For more on the importance of open standards, see *Free and Open Source Software: Open Standards*. Hoe, Nah Soo. International Open Source Network and UNDP Asia-Pacific Development Information Programme (UNDP-APDIP). 2006 http://en.wikibooks.org/wiki/FOSS_Open_Standards. Accessed September 4, 2011.

¹⁴ http://en.wikipedia.org/wiki/Open_Archival_Information_System. Accessed September 4, 2011.

¹⁵ This is not a theoretical occurrence. In August 2009, GPO's PURL server – its primary link resolver and critical piece of its infrastructure – crashed and links to government publications were inaccessible for several weeks. For more see <http://freegovinfo.info/node/2704>. Accessed September 4, 2011.

¹⁶ Gust, P. (2010). Accessing LOCKSS Content Through OPACS and Link Resolvers. November 11, 2010. http://lockss.org/locksswiki/files/Link_Resolver_Integration_White_Paper.pdf. Accessed September 4, 2011.

¹ List and map of LOCKSS-USDOCS participants <http://snipurl.com/lockss-usdocs-participants>. Accessed September 4, 2011.

² <http://lockss.org>. For more on how the LOCKSS software works, see http://lockss.org/lockss/How_It_Works. Accessed September 4, 2011.

³ <http://www.fdlp.gov/>. Accessed September 4, 2011.

⁴ For a full list of FDsys collections currently being preserved, see <http://www.gpo.gov/fdsys/browse/collectiontab.action>. A future goal of the program is to collect and preserve all of the titles on the FDLP Essential Titles List <http://www.fdlp.gov/collections/building-collections/135-essential-titles-list>. Accessed September 4, 2011.

⁵ LOCKSS-USDOCS Frequently Asked Questions http://www.lockss.org/lockss/US_Government_Documents_PLN_Frequently_Asked_Questions Accessed September 4, 2011.

⁶ The "95% born-digital" figure has been stated at least since 2003 by GPO Superintendent of Documents Judy Russell in remarks to the Depository Library Council Fall, 2003 meeting in Arlington, VA, October 20, 2003 (<http://sn.im/russell-2003dlc-update>). More recently, that figure has been stated as "97% born digital." See for example, Keiser, B. (2011). Public Printer Goes to the Hill—GPO at a Crossroads. *Information Today*. May 16, 2011 <http://sn.im/infotoday-publicprinter-quote>. Accessed September 4, 2011.

⁷ For a more in-depth analysis of digital preservation, see: Rosenthal, D., Robertson, T., Lipkis, T., Reich, V., Morabito, S. (2005). Requirements for Digital Preservation Systems: A Bottom-Up Approach. *D-Lib Magazine*. 11(11), November 2005. <http://www.dlib.org/dlib/november05/rosenthal/11rosenthal.html> Accessed September 4, 2011.

LOCKSS-USDOCS distributed digital government document preservation program offers the FDLP community a solid, cost-effective tool that replicates and embodies the ideals of the FDLP: LOCKSS-USDOCS ensures the long-term viability of content in a flexible, efficient, cost-effective and highly scalable fashion; the program protects digital content from natural disaster, server outage, etc.; it assures the authenticity of preserved content; because the content is distributed, it prevents the surreptitious withdrawal or tampering of information; and allows libraries to build local services for local collections.

James Jacobs
Government Documents Librarian, Stanford University Library
23D Green Library, Stanford, CA 94305, USA
E-mail address: jrjacobs@stanford.edu

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Congress vs. the Bureaucracy: Muzzling Agency Public Relations. Mordecai Lee. Norman, OK: University of Oklahoma Press, 2011. 316 pp. \$39.95 (hardcover), ISBN 978-0-8061-4203-6.

In this book, Lee explores the U.S. Congress's attempts over the past century to restrict or prohibit the executive branch agencies from engaging in public relations. He describes public relations as one way that federal agencies attempt to gain autonomy from Congress, creating public pressure on Congress to support agency missions and programs rather than relying on Congress to determine their value. This public pressure reduces the power of Congress to control the agencies, changing the balance of power between the executive and legislative branches of government. Lee looks for patterns and themes in Congress's efforts and evaluates their effectiveness.

Congress's efforts to restrict agency public relations have been directed both at agency staff that create publicity and at activities that constitute public relations in the eyes of Congress. Not all efforts have become law, and many of those that did make their way into the *Statutes at Large* were not enforced or were difficult to enforce. Lee also goes beyond the Congressional debate to examine how laws restricting agency public relations were interpreted by the government agencies that must enforce them. He looks primarily at the Government Accountability Office and its predecessors (all legislative branch agencies), and at the Office of Legal Counsel (an executive branch agency, part of the Department of Justice). Although these agencies were naturally on opposite sides of this struggle, they often agreed on how and when to enforce these laws. One notable exception was in 2004 when they disagreed over the appropriateness of pre-packaged video news releases that were distributed by the Department of Health and Human Services. The Government Accountability Office objected to the fact that a government video presented itself as objective reporting, not mentioning that the "reporter" was paid by the agency. The Office of Legal Counsel took a broader view, allowing for video news releases if they were factual rather than persuasive in content. Much confusion and jockeying for position ensued, until Congress passed a requirement in 2005 that video news releases contain a notice that they are produced by a government agency.

In several of the Congressional efforts to restrict public relations, the issue of where to draw a line between publicity and information was discussed. On one extreme, in 1913 an appropriations amendment proposed that appropriations for individual War Department publications must be approved by Congress. The Department of Agriculture's Extension Service and its publications for farmers were repeated topics of congressional attention, but the publications' clear usefulness to Congress's constituents won the day. The Department of the Interior produced a radio version of its annual report in

the late 1930's, which led some members of Congress to object that the Department was trying to be accountable to the people rather than to Congress.

Another trend that became clear in this analysis is that anti-public relations laws are most rigorously enforced, to the extent they are enforceable, when the President is from a different political party than the majority in Congress. The most striking example of this was during the Great Depression. The President was creating more agencies and expanding existing ones, which Republicans in Congress saw as a dangerous expansion of the power of the Executive Branch. One way they attempted to counteract this trend was with restrictions on public relations: the Justice Department appropriations bill for 1936 limited the Department's salary appropriation to paying employees with law degrees, for example, and in 1940 the Interior Department was prohibited from paying for radio programs.

Although Congress was occasionally successful in limiting the public relations activities of agencies, Lee concludes that in most of the examples he discovered, the agencies were not deterred from communicating directly with citizens; he therefore declares the agencies winners in the long battle over public relations. In some cases this is because they were successful in explaining their position to Congress or had an advocate in Congress, and the proposed legislation did not pass. More often, Congress passed language that was difficult to apply to specific situations and therefore difficult to enforce.

Lee draws most of his information from Congressional hearings, the *Congressional Record*, bills both enacted and not enacted, and opinions from the Government Accountability Office and the Office of Legal Counsel. From these intricate and often opaque sources, he creates a compelling and readable narrative about one aspect of the balance of powers between the branches of the U.S. government. He also puts his narrative in the context of Congress's resistance to agency autonomy so that it illuminates the larger questions scholars ask about how power is balanced among the branches of federal government.

Karen Hogenboom
University of Illinois Library, Government Documents
408 W. Gregory Drive, Urbana, IL 61801, USA
E-mail address: hogenboo@illinois.edu

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Fundamentals of Government Information: Mining, Finding, Evaluating, and Using Government Resources. Eric, J Forte, Cassandra J. Hartnett, and Andrea L. Severson. New York: Neal-Schuman Publishers, 2011. 450 pp. \$75.00, ISBN 978-1-55570-737-8.

Faculty in the field of information science have long needed a new textbook to introduce students to government information in the electronic age. Over the last decade, search strategies have changed as government information has become more electronic and government services are approached electronically – E-Government. In addition, information professionals, whether or not in a federal depository setting, need basic guidelines in navigating the ever-more complex world of electronic government information. Three accomplished librarians with extensive backgrounds working with federal government data have created a textbook for government information in the 21st century, and they have produced an excellent product. This text is not only an easy-to-read resource for students, but it is also very helpful as a refresher for depository librarians who must keep abreast of new websites, and for information professionals not familiar with government information who suddenly find themselves accessing it online for their researchers. As a tribute to its usefulness, the book is already in use in several schools of information science. It not only directs the reader to online resources but it provides background information about the various agencies of