

Leaving the Library to Google the Government: How Academic Patrons Find Government Information

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In February 2011, a survey was conducted at 11 academic depository libraries in the United States in an attempt to better understand users awareness of and preferences for government information. The survey's results show that many academic users are bypassing the library when they use government information, preferring to use general search engines, like Google. These results suggest that the current measures for the use of government information aren't capturing the way users are searching and accessing documents.

Introduction

A new era in government information began in 1994, with the introduction of GPO Access, the first online portal for federal information. By 2002, 60% of all titles were available online.¹ A widely cited statistic from Ithaka S+R's "Documents for a Digital Democracy" states that by 2009, 97% of new government publications were available digitally, either in addition to print or as its sole format.² There has been some uncertainty about the role that depository libraries will play as the environment shifts from a print focused environment to one with open access via the internet.³ "The challenge today is not that the public cannot find federal government information; instead it is that they may find too much, outdated, incorrect, too little, "not quite right," or misleading government information, and do not realize it nor do they know how to corroborate what they have found."⁴

Digital access to government information has been both a blessing and a curse. On the one hand, digital access seems to have demystified some government information, taking it out of dusty stacks orga-

nized by an archaic system and into the open web. Even the digitized documents that are available only through subscription databases now have full text search. Patrons now have the ability to access government information without travelling to a depository library or without asking help from their local government documents librarian. This disintermediation has changed the way patrons use government information, but it has also made it harder for librarians to measure and assess document use. In order to provide the best service to local government information users and to advocate for the value of government information, it's important for depository coordinators to understand how their collection is being used. In the past we were able to collect shelving and circulation statistics, database hits, and reference transactions, but how do we measure use when users can bypass the library completely?

In February 2011, 11 academic libraries conducted a survey of faculty, staff, and students at their institution, asking about the use of and attitudes towards government information. The participants in-

cluded the University of Montana, Grand Valley State University, Illinois State University, Rice University, the University of Akron, the University of Florida, the University of Idaho, the University of Wisconsin at Eau Claire, Northeastern State University, Northwestern University, and New Mexico State University. Each library is a member of the Federal Depository Library Program and provides access and services to both affiliated individuals and non-affiliated members of the community.

The goal of this survey was to gather information on government document attitudes and use among academic library patrons affiliated with a depository library. By conducting the survey at multiple sites throughout the United States at the same time, it was hoped that local and national trends and differences could be identified.

Literature Review

There has been significant research done on government information awareness, although most studies focus either on the patrons of a single institution. There are several studies, however, that seek to measure usage across institutions. Although most of the studies referenced in this paper focus on more recent research involving the Internet, librarians have been seeking to discover how users find documents for some time. In a 1978 survey by Peter Herson, government document users primarily found the documents via citations in other works and indexes of government publications.⁵ In a 1986 study by Christopher Nolan looking specifically at undergraduate students, upperclassmen cited previous knowledge and faculty recommendations when asked how they found government documents.⁶

The survey discussed in this paper is a follow up of a survey conducted at the University of Montana by Jennie Burroughs. She found that general search engines were the most common way to find government information, with 77.4% of survey respondents reporting using them at least quarterly.⁷ She also discovered that library patrons were more than twice as likely to ask for help from a peer than they were to approach a librarian (41.6% vs. 18%).⁸ Other research has suggested that users are likely to rely on a few all-purpose resources, and will not necessarily show any preference for library resources. They will seek help at the point of need "from a trusted source."⁹ Research into peer-to-peer networks dealing with public ser-

vice support suggests that citizens are using the Internet to find people in similar situations to ask for support and guidance, rather than approaching librarians or other experts.¹⁰

Wen-Hua Ren highlighted the tension between learning of government information from personal sources, like friends and colleagues, versus from impersonal sources, like the Internet in her research on the government information awareness of small business executives.¹¹ She also discovered a positive relationship between awareness of government information and its perceived importance, supporting the argument that increasing awareness patrons awareness of government information will increase use.¹²

There have been two major nation-wide surveys recently conducted that relate to the use of government information, although they did not focus on a specific user group the way this survey did. At the same time that the data for this paper was collected, an official user survey seeking to evaluate the needs and perceptions of depository users was conducted by Outsell, Inc. under contract with the Government Printing Office.¹³ Responses were solicited via postcards distributed to depository libraries and notices placed on library websites, with 70% coming from academic libraries.¹⁴ 38% of respondents reported using FDLP resources at least 6 times a year, while a further 25% reported using them at least twice a year.¹⁵ When asked how they accessed government information via non-FDLP sources, 55% reported frequently using Google, while 36% reported sometimes using Google (only 9% said they never used Google).¹⁶ Other highly reported sources were the Internet not in the library (49% reported frequently using the internet in a location other than the library, 36% said they sometimes used non-library internet) and accessing the agencies website directly (32% frequently, 46% sometimes, 22% never).¹⁷

To demonstrate how widespread use of online government information and services is, according to the Pew Internet & American Life Project's 2010 report on online government use, 82% of all internet users in the United States looked for information or completed a transaction on a government website in the 12 months prior to the survey.¹⁸ People with higher incomes and higher levels of education are more likely to interact with the government on the Internet.¹⁹ Of those who could remember the last government website they visited, 44% found it via an online

search, 16% visited a site they had used before, 14% relied on a friend or family member, 11% on a government publication or notice, and just 4% used a general government website.²⁰

Several studies have looked at the impact of electronic access to government information at academic institutions. A citation study undertaken by Amy Brunvand and Tatiana Pashkova-Balkenhol found an emphasis by classroom faculty on avoiding web sources as sources for research papers, combined with “instruction strategies intended to improve the quality of student papers may actively discourage the use of online government information.”²¹ They found that emphasizing scholarly sources discouraged students from using government information sources that were easiest accessed online, versus via the library’s collection. When students were asked how they found the government information included in their list of sources, 47% (53 out of 111) reported using a general search engine. Only 9 (8%) reported using the library’s catalog or an article database.²² Christopher Brown tracked click through data from the University of Denver’s government documents collection in order to estimate usage of digital documents by library patrons. After adding URLs to records linking to many different types of resources, from NASA reports to the digital Serial Set, online usage increased significantly. By 2008, online usage was 4.75 times greater than usage of the physical collection (in 2004 digital was used only 1.65 times more than physical materials).²³ Unfortunately, this study only examined how many times government resources were accessed, and did not evaluate whether users who clicked a resource found it helpful.

Methodology

This section contains a broad overview of the methods used to develop and conduct this survey. Although all 11 institutions used very similar methods to choose sample populations and administer the survey, there were some differences due to local policies. Since this author was personally involved in the survey administration at Grand Valley State University, the procedures used in that instance of the survey are discussed in detail.

Preparation/Survey Instrument

The text of this survey was originally drafted by Jennie Burroughs, then at the University of Montana, and

based on her previous survey of government document use and preferences.²⁴ Burroughs, interested in the potential to compare results gathered at different institutions, solicited potential partners in an August 6, 2010 email to the GOVDOC-L listserv.²⁵ While there was initially significant interest from many academic libraries, a number of institutions chose not to participate in light of the Depository Library User Survey announced and conducted by the Government Printing Office in the Fall of 2010.²⁶

The University of Montana conducted a pilot test in September 2011 of the survey instrument to ensure that questions were clear and understandable. That pilot, along with discussion on the survey’s wiki and at the Depository Library Council meeting held in the Fall of 2011, resulted in several changes. Language was clarified, frequencies were tweaked, and a definition of government information, including examples, was inserted prior to the first question. Approval was sought and received from the Human Research Review Committee for the survey modifications.

While the majority of the survey was the same at each institution, participants were able to add local questions and modify terminology or services to match the local situation. For example, Question 8 (“Which of the following library services have you used or participated in?”) was modified based on which services each library offered. Additionally, Question 20, asking about the respondent’s position or status, was modified by each institution to ensure that the language used matched designations at each institution. This paper focuses on questions that were the same at each institution, although the demographic information reported in Question 20 is used.

Participants

Participants at each institution were chosen with a similar method. First, the local investigator identified the size of specific groups within the local populations—undergraduate students, graduate students, faculty, and support staff. At Grand Valley State University, the size of these four populations came from the 2010 Quick Facts listed on the university’s website.²⁷ The investigator then determined the number of surveys to be sent out, using Table 4.4 in Powell and Connaway’s *Basic Research Methods for Librarians*.²⁸ Table 1 below shows the population size and sample chosen for GVSU using this method.

TABLE 1
Grand Valley State University Survey
Sample Size

User Population	Total Number	Sample Size
Undergraduates	20,986	377
Graduate Students	3,555	346
Faculty (regular)	837	260
Staff	1,148	285

Once the sample was chosen, each institution followed local procedures for randomly selecting participants. At some institutions, the list was generated internally from library records. At Grand Valley State University, the desired number of participants was sent to the University's Office of Institutional Analysis (OIA), along with proof of approval from the local Human Research Review Committee. Staff within the OIA created a randomly selected list of faculty, staff, and students, based on their status within the university's records system. All participants at GVSU were over the age of 18. The list of participants was not shared by the Office of Institutional Analysis, which was responsible for sending out the email with an invitation to participate in the survey. This ensured confidentiality for all survey participants.

Materials

Each participating institution had the option to use their local survey software or to have the University of Montana host their survey on that institution's Select Survey account. Grand Valley State University, Illinois State University, and the University of Akron chose to have the University of Montana host their iteration of the survey. The other institutions chose local software including Inquisite, Checkbox, Survey Monkey, and Constant Contact. Since more than half of the surveys were hosted locally, the principle investigator at each of those 7 institutions was responsible for downloading the results and sharing it with Jennie Burroughs, who then compiled the data into a single file containing results for all of the surveys.

Procedure

On February 14, 2011, the randomly selected students, faculty, and staff at Grand Valley State University received an email invitation sent by the Office of Institutional Analysis, but appearing to come from the author/principle investigator's email address. This email served as both an invitation to participate in the

survey and as an informed consent document. Much of the text of the invitation email was repeated on the first page of the survey, serving to again inform participants of the confidentiality of their answers and to remind them that they were free to leave the survey at any time. Other participating institutions used a similar method.

Analysis

Data was collected by Jennie Burroughs from the principle investigator at each site. She then combined the 11 datasets into a single SPSS file and added demographic information about each depository (e.g. size of collection, how long the institution has been a depository, etc.). This file was analyzed locally with the assistance of the Grand Valley State University Statistical Consulting Center, a program staffed by faculty and students from the Statistics Department who assist with developing surveys and analyzing data.

Results

Survey respondents were asked about the frequency of their use of government documents in research, which the question clarified included searching for information for school, work, or personal reasons. That question received 2,523 valid responses from the 11 institutions.

TABLE 2
Frequency of Government Information Use

	Frequency	Percent	Valid Percent
Daily	110	4.2	4.4
Weekly	393	14.9	15.6
Monthly	484	18.3	19.2
Quarterly	332	12.6	13.2
Rarely	889	33.7	25.2
Never	315	11.9	12.5

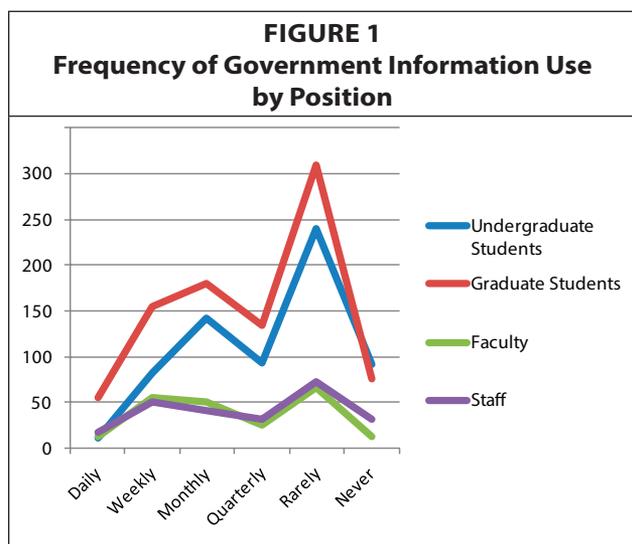
52.3% of respondents reported using government information on at least a quarterly basis (i.e. quarterly, monthly, weekly, or daily). This rate is similar to the rates reported in numerous surveys of government document use in academic libraries going back as far as the 1970s, which reported heavy and moderate use at 56% of all users, 68% for light and moderate use by undergraduates and 71% for faculty members.²⁹ Although these rates are not directly comparable, given the differing definitions used to define heavy, moder-

ate, and light use, they do suggest that the results of this survey are accurate, and that the rates of government document use have not changed significantly.

TABLE 3
Frequency of Government Information Use by Position

	Undergraduate Students	Graduate Students	Faculty	Staff
Daily	11	55	13	18
Weekly	82	155	55	51
Monthly	143	180	50	42
Quarterly	94	135	26	32
Rarely	240	309	67	73
Never	92	76	13	32

Table 3 shows the reported frequency of government document use by the position reported by the survey respondent.³⁰ Because this table only includes responses from those who reported a position, there are fewer valid responses (2,068). When the data is graphed, a pattern becomes clear.



Although the group sizes vary, it is clear that there are trends in regards to how frequently the group uses government information, with peaks at monthly (for undergraduate and graduate students) or weekly (faculty and staff) for somewhat regular users, with the largest group of respondents reporting rarely using documents. This is meaningful because it suggests that different groups of academic patrons have relatively similar usage rates regardless of their position.

Although Question Three gives 14 options for what tools respondents use to find government information, this paper will focus on those that focus on library oriented answers and services offered by or similar to Google. These two areas of focus were chosen to emphasize the changes in access patterns from a world in which the library was the gate-keeper to government information, to a world in which government information is (relatively) easily available to anyone with an Internet connection. A useful point of comparison for all of the statistics reported in this section may be the rates at which users report browsing government websites directly. 57.2% of users report going directly to government websites on a quarterly or more frequent basis. Only 16.9% report never going directly to government websites. The omission of responses for the category of “rarely” are omitted in order to provide a clearer picture of regular users and non-users.

Only 11.1% of respondents reported asking a librarian for assistance at least quarterly (e.g. quarterly, monthly, or weekly) with finding government information. 51.5% reported never asking a librarian for help. Similarly, only 15.5% of users reported browsing the library shelves, vs. 47.7% who reported never browsing the shelves. While it isn’t surprising that few users are browsing the government documents, given the notoriously confusing nature of the SuDoc classification system, it is interesting that so few users report asking for assistance.

The library’s OPAC, databases, and subject guides were all significantly more popular with users than browsing and librarian assistance. On a quarterly or more frequent basis, 24.3% of users reported searching the catalog, 35% reported searching library databases, and 23.6% reported using library created subject guides to find government information. Still, there are large groups of users who never search the catalog (53.1%), library databases (42%), or subject guides (54%).

Although many librarians might consider these rates of use and non-use acceptable, given that government information is often treated as a niche resource, it becomes clear that there is room for growth when you compare these rates with those related to a general search engine. Using the same frequency category (weekly, monthly, or quarterly), 72% of survey participants reported using Google or a similar search engine to locate government information.

TABLE 4
How Users Report Finding Government Information

	Ask a Librarian				Browse Library Shelves			
	Undergraduate Students	Graduate Students	Faculty	Staff	Undergraduate Students	Graduate Students	Faculty	Staff
weekly/ monthly/ quarterly	10.6	11.2	16.2	7.1	18.6	14.9	18.3	6.3
never	67.0	63.3	42.9	61.3	57.3	61.3	46.2	63.0
	Google or similar search engine				Google Books or Internet Archive			
	Undergraduate Students	Graduate Students	Faculty	Staff	Undergraduate Students	Graduate Students	Faculty	Staff
weekly/ monthly/ quarterly	72.2	70.7	74.6	77.8	47.8	42.6	36.9	33.9
rarely/never	10.0	8.9	9.4	6.7	31.8	38.5	39.6	44.5
	Library Catalog				Library Databases			
	Undergraduate Students	Graduate Students	Faculty	Staff	Undergraduate Students	Graduate Students	Faculty	Staff
weekly/ monthly/ quarterly	26.9	21.8	38.1	16.8	34.9	35.1	50.9	22.2
rarely/ never	51.7	56.1	38.6	55.9	40.9	44.0	26.9	51.0
	Browse Government Websites				Library Subject Guides			
	Undergraduate Students	Graduate Students	Faculty	Staff	Undergraduate Students	Graduate Students	Faculty	Staff
weekly/ monthly/ quarterly	48.9	57.2	74.5	69.7	24.2	23.6	35.1	11.5
rarely/ never	21.7	15.7	9.0	11.5	52.9	56.7	38.0	60.7

Only 9.1% reported never using Google. Even Google Books sees extremely high rates of reported usage, with 42.8% reporting quarterly or more frequent use, although a large group (37.2%) never utilizes it. Table 4 shows responses broken out by position within the university, demonstrating that while there is some variation based on position, the trends are similar across the groups.

Discussion

There are a number of different ways to interpret the results presented in this paper, based on a vari-

ety of factors. For example, are patrons not browsing the government documents because the stacks aren't welcoming or the classification system is confusing? Or are they not browsing because many libraries are receiving fewer publications in print? But whatever the reasons, it is clear that only a fraction of academic patrons are accessing government information via library resources. While this isn't a bad thing (indeed making government information more easily available to non-experts is a great thing), it does mean that many of the measures used by academic libraries to track usage and value are not representative of full

picture. If 53% of users don't search the library's catalog and 42% don't search library databases for government information, even the most advanced technological solution to capture searches and measure use will miss any government document use by those people. If they aren't using any of the places we can count (print materials, database hits, subject guides or websites), we need to find a new way to ensure that patrons have access to the materials they want.

Perhaps one reason why users are most likely to report using a general search engine to locate government information is that users are generally searching for information as a result of a specific need and that "these needs are not articulated in terms of needing information from a specific government agency."³¹ In Fall 2012, an article was published in *Document to the People* reporting awareness and usage of government documents at Francis Marion University. At that institution only 12% of students and 16% of faculty reported ever using the library for government documents.³² It's possible that rates of government information usage among those groups are higher, but the survey respondents under-reported because of the word "library". Librarians need to decide which part of government information use is most important: the method of access or the actual object being used.

Because this survey did not include incentives at any of the participating institutions, it's probable that the responses represent a best-case scenario, with respondents being more likely to know about and use government information than the general population. If an incentive was offered, it's possible that there would be higher rates reported for rarely or never using government information. Additionally, it's possible that we are seeing some under-reporting of government information use by respondents that use a particular resource regularly. For example, lab coordinators are required to abide by federal regulations concerning certain materials. Those individuals may consult those materials regularly without realizing that it is a "government document" as defined in this survey or may not connect their use with "research".

Suggestions for Further Research

There is significantly more analysis that can be done with this dataset. This paper was limited to looking at the overall percentages and at responses organized by the position of the respondent. More analysis can be done into the relationship between how a user hears

about government information, whether it is a source or the particular fact, and the method in which they find or access government information. Additionally, the data could be analyzed to determine the relationship between government information use frequency on how users hear about and find government information.

It is likely that other survey participants will publish and present their findings in the near future, with the potential for very different interpretations of data. Ramirose Attebury of the University of Idaho, another participant of this survey, has published an article comparing her institution's responses to the wider dataset.³³ Her paper has very different conclusions than this one, emphasizing the promotion and awareness of specialized tools like Metalib and FDsys over general tools like Google. Multiple interpretations of the dataset will hopefully allow for a strong discussion among the government documents community about what these responses mean.

Conclusion

There is a tension between the FDLF's goal of free perpetual public access and access at a patron's point of need.³⁴ Print will continue to be important and to play a role in many libraries—either as the only way to access historical materials or as an option for users who are more comfortable with print, rather than digital, materials. This article is not meant to imply that print documents and library services are not valuable, nor should it be used as a reason to cease promotion of FDLF resources within academic libraries. On the contrary, it's hoped that this article will show that libraries are capturing just a fraction of the use and value of FDLF materials with traditional measures.

There were several spots in this survey that allowed participants to provide comments. Although these responses are still being analyzed and coded, two strong themes emerged, both of which will be familiar to government documents specialists, and indeed many librarians in other specialties. Many respondents believed that the government didn't have any information they could use. Many others reported that they had no idea there was such a thing as "government information" or that it was available in so many ways.

Perhaps it's time to reimagine what government documents and government information can be. Instead of place bound objects that intimidate many

librarians, to say nothing of undergraduate students, we should be promoting resources that are reliable and authoritative **and** available in the places our users are already searching. Encouraging the use of Google and other search engines to locate government information also gives government information specialists a unique opportunity to support the teaching of information literacy and evaluation—skills that will prepare students for their careers and help faculty and staff identify and fulfill their personal and professional information needs. Those of us who use government sources frequently know that it contains useful information or tools for every age group and almost every situation, from figuring out how to pay for college to making sure your laboratory is following safety regulations to learning about a newly diagnosed illness. Now it's our job to show everyone else the value, utility, and availability of these amazing resources.

Notes

1. Brown, "Knowing Where They Went," 43.
2. "Schonfeld and Houseright, "Documents for a Digital Democracy," 23.
3. Jaeger, Bertot, and Shuler, "Federal Depository Library Program."
4. Selby, "Age of Aquarius," 40.
5. Postema and Weech, "Use of Government Publications," 227.
6. *Ibid.*, 229.
7. Burroughs, "What Users Want."
8. *Ibid.*, 208.
9. West, "Coming Soon," 63.
10. Meijer, Brimmelikhuijsen, and Brandsma, "Communities of Public Service."
11. Ren, "U.S. Government Information Need," 456.
12. *Ibid.*, 462
13. Powell, King, and Healy, "FDLP Users Speak"
14. *Ibid.*, 6.
15. *Ibid.*, 3.
16. *Ibid.*, 15
17. *Ibid.*, 15.
18. Smith, "Government Online," 2.
19. *Ibid.*, 3.
20. *Ibid.*, 8.
21. Brunvand and Pashkova-Balkenhol, "Undergraduate Use of Government Information," 200.
22. *Ibid.*, 204.
23. Brown, "Knowing Where They Went," 55.
24. Burroughs, Email.

25. Jennie Burroughs. Email to GOVDOC-L, August 6, 2010.
26. Powell, King, and Healy, "FDLP Users Speak."
27. Quick Facts about Grand Valley (2010). Retrieved from <http://gvsu.edu/aboutgvsu.htm>
28. Connaway and Powell.
29. Postema and Weech, "Use of Government Publications."
30. This section collapsed more detailed responses into broad categories that would make the data easier to analyze. Undergraduate Students includes those who reported that they were first year undergraduates, second year undergraduates, third year undergraduates, fourth year undergraduates, fifth year or above undergraduates, and non-degree undergraduates. Graduate Students include masters students, doctoral students, and non-degree or undecided graduate students. Faculty includes adjunct faculty, lecturers, assistant professors, associate professors, professor, and other academic status. Staff includes research staff and other staff positions.
31. Jaeger and Bertot, "Transparency and Technological Change," 373.
32. "Johnson, "Government Documents Usage," 22.
33. Attebury, "Government Information Use"
34. Schonfeld and Houseright, "Documents for a Digital Democracy."

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