

FEDERAL GOVERNMENT STRATEGIC SOURCING OF INFORMATION PRODUCTS AND SERVICES

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PREFACE

This report describes the current landscape of the federal marketplace regarding the acquisition of information goods and services, including electronic databases, books, and serials. It compiles comprehensive data from the first quarter of fiscal year (FY) 1990 through the second quarter of FY2012 on the amount federal agencies are spending on these products and services, and also identifies major vendors. In addition, the report forecasts through FY2015 the potential savings to the federal government if agencies purchased these products and services through a strategic-sourcing initiative. The data are presented in the form of tables, graphs, and charts, accompanied by narrative explanation and analysis.

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INTRODUCTION

This report provides an analysis of the federal government's spending on information products and services from fiscal year (FY) 1990 through the second quarter (Q2) of FY2012, as well as estimates of cost savings the federal government could realize from FY2012 through FY2015 by procuring information goods and services through a strategic-sourcing process. Among the topics analyzed in this report are the products and services that compose the information market, the federal agencies that have been major purchasers of those products and services, and the contractors that have provided them. Throughout this report, data tables, graphs, and charts detail and illustrate the findings.

Briefly summarized, the findings are that from FY1990 through FY2011 (all complete fiscal years in this study), federal-government agencies spent an estimated \$7.7 billion—nearly \$350 million annually—on print publications, electronic databases, information retrieval, and other commodities that can be collectively described as an "information market." Moreover, federal agencies spent an additional \$200 million on these commodities in the first two quarters of FY2012. If all federal agencies procured information products and services through the federal government's existing strategic-sourcing program, the Federal Strategic Sourcing Initiative (FSSI), the federal government could realize savings ranging from 9 to 20 percent, or around \$140–\$555 million in total savings for the four-year period from FY2012 through FY2015. In addition to these direct savings on purchases, the government could realize indirect savings on labor and other costs associated with procurement.

METHODOLOGY

The data in this report come from the Federal Procurement Data System–Next Generation (FPDS–NG), an on-line database that the U.S. General Services Administration (GSA) Federal Procurement Data Center operates to publicly disclose information on federal procurement contracts, including funding agency, award amount, and award recipient. The Office of Management and Budget (OMB) maintains a similar Web site called USAspending.gov, which also provides data on procurement contracts and on grants and loans. While previous iterations of this report used data from USASpending.gov, this report is based on data from the FPDS–NG, because the latter provides data for a greater time span (FY1979 to present) than does

USASpending.gov (FY2000 and later), thus allowing for better analyses of trends in federal spending.¹

The first step in the research process was to determine the categories of goods and services that can be reasonably considered to constitute an information market, by identifying the "product service codes" (PSCs) that federal procurement contracts use to classify contracted products and services. The researcher concluded that 15 PSCs cover information commodities (see table 1, below, for a listing of these PSCs) and then used the FDPS–NG Web site's "ezSearch" to acquire data on the 15 PSCs from FY1990 Q1 through FY2012 Q2, i.e., from October 1, 1989, through March 31, 2012. Focusing on a) the federal agencies that awarded contracts for all 15 PSCs and b) the contractors that were awarded those contracts, the researcher downloaded more than 150,000 records in comma-separated value-format (CSV-format) files, converted the files to Microsoft Excel, and then used Excel to produce the analysis detailed herein. The data are accurate as of April 4, 2012, the date on which they were downloaded. Future iterations of this report will incorporate spending data prior to FY1990 and, of course, data after FY2012 Q2.

OVERVIEW OF THE FEDERAL STRATEGIC-SOURCING INITIATIVE

In May 2005, OMB and the Office of Federal Procurement Policy issued a memorandum requiring federal agencies to identify commodities that the government could efficiently purchase through strategic sourcing. The document defined strategic sourcing as "the collaborative and structured process of critically analyzing an organization's spending and using this information to make business decisions about acquiring commodities and services more

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¹ Eleni Martin, "GSA Awards \$24 Million Contract to Global Computer Enterprises for Federal Procurement Data System Next Generation" (news release, May 2, 2003), http://www.gsa.gov/portal/content/100102 (accessed April 15, 2012); USASpending.gov, "Learn About USASpending.gov" (Washington, DC, n.d.), http://usaspending.gov/learn?tab=FAQ (accessed April 15, 2012).

² To locate the relevant data in FPDS–NG, the researcher used the search syntax PRODUCT_OR_SERVICE_CODE:"[PSC number]" SIGNED_DATE:[beginning date, end date]. For example, the search syntax for data on PSC 7610 (i.e., books and pamphlets) from FY1990 through the second quarter of FY2012 was PRODUCT_OR_SERVICE_CODE:"7610" SIGNED_DATE:[1989/10/01,2012/03/31]. It should also be noted that the first iteration of this study used 16 PSCs in its analysis, and the second incorporated 15 PSCs. One of the PSCs in the first study of the federal information market—miscellaneous printed matter (PSC 7690)—was dropped in the second analysis of the topic because it included substantial spending on products and services that were determined not to be information products and services. See William Noël Ivey, "Federal Government Strategic Sourcing of Information Products and Services" (report, Federal Research Division, Library of Congress, Washington, DC, December 2011), 4, http://www.loc.gov/flicc/publications/FRD/Strategic-Sourcing-Version-2_2011-Dec-5-Corrected.pdf (accessed April 15, 2012).

effectively and efficiently." Soon after, in November 2005, GSA and the Department of the Treasury launched the Federal Strategic Sourcing Initiative (FSSI), and the federal government later established individual FSSIs for domestic delivery services, office supplies, and wireless telecommunications services. ⁴ According to GSA, federal government agencies utilizing these FSSIs collectively saved \$17.5 million on office supplies and \$288 million on domestic delivery services in FY 2011 alone, as well as \$5.3 million on wireless services over an unspecified period of time. In percentage terms, federal agencies have saved 9 percent on their spending on office supplies, 19 percent on wireless services, and 72 percent on domestic delivery services.⁵

DEFINING THE FEDERAL INFORMATION MARKET

In order to present an analysis of the federal government's spending on the "information market," it is necessary to define the term operationally as it is used in this paper. The U.S. federal government does not formally define the information market, but a taxonomy of products and services that constitute an information market can be constructed from classification systems that federal agencies use in procurement contracts. One such system is the aforementioned PSCs, specifying goods and services purchased under government procurement contracts, and another is the North American Industry Classification System (NAICS), which outlines categories of industries and commercial activities that provide products and services.⁶

The information in this report is based on data organized by PSC rather than NAICS categories, because PSC categories are more appropriate for identifying procured products and services. In federal procurement contracts, PSC designations identify the procured products and services, whereas NAICS classifications specify only the industries that produce and distribute goods and services. Moreover, federal contract data on PSC classifications are more readily available than are contract data organized by NAICS categories, which are often not listed in procurement contract data available through FPDS-NG and USASpending.gov.

³ U.S. Office of Management and Budget, "Implementing Strategic Sourcing" (memorandum, Washington, DC, May 20, 2005), http://www.uspto.gov/web/offices/ac/comp/proc/OMBmemo.pdf (accessed July 15, 2011).

⁴ U.S. General Services Administration, "About Strategic Sourcing," http://strategicsourcing.gov/gsa/aboutstrategic-sourcing (accessed July 26, 2011).

U.S. General Services Administration, "Strategic Sourcing Metrics," http://strategicsourcing.gov/gsa/index.php (accessed November 16, 2011).

⁶ U.S. General Services Administration, "Frequently Asked Questions About FPDS-NG," https://www.acquisition. gov/faqs_whataboutfpds.asp#q16 (accessed July 28, 2011).

U.S. Census Bureau, 2007 NAICS Definitions (Washington, DC, 2007), n.p. [page 376 of downloadable PDF],

http://www.census.gov/cgi-bin/sssd/naics/naicsrch?chart=2007 (accessed July 19, 2011).

Based on PSC classifications, 15 categories of products and services can be considered to be components of the federal government's information market. These products and services, which are listed in table 1 (see below), consist of a diverse array of commodities, including books, electronic databases, and library services. For formal definitions of these PSCs, see table 7 in Appendix 2.

One finding that emerges from the data in table 1 is that federal government agencies spent around \$7.7 billion on information products and services in the 22-year period from FY1990 through FY2011. In addition, average spending for all completed fiscal years, i.e., from FY1990 through FY2011, was \$350 million annually. In the first two quarters of FY2012, federal agencies spent an additional \$200 million, which brings total federal spending on information commodities to \$7.9 billion from FY1990 Q1 through FY2012 Q2. These figures, however, may undercount the actual value of information commodities, because they include only contract values for PSCs that can be reasonably categorized as part of an information market and not contracts for information products and services listing PSCs that cannot be so categorized. For example, the \$7.9 billion in federal spending on information products and services does not include contracts such as a Reed Elsevier agreement with the Department of the Treasury for the Lexis/Nexis electronic database under PSC 7030, "automatic data processing software." PSC 7030 covers commodities not defined as part of the information market, such as a Dell Incorporated contract with the Department of the Treasury for Dell Optiplex, a desktop computer system.

Table 1. Federal Information Market, Products and Services, FY1990-FY2011

Products and Services (Product Service Code)	Contracts (in \$ millions)	Percentage of Total Contracts	Cumulative Percentage ⁸
Web-based subscriptions (D317)	\$1,735.3	22.6%	22.6%
Books and pamphlets (7610)	\$1,491.2	19.4%	41.9%

⁸ Cumulative percentage is the total percentage for items listed up to a point. For example, the cumulative percentage listed in the first row of table 1 (22.6 percent) is the percentage of total contracts for the first commodity

(22.6 percent), the cumulative percentage listed in the second row (41.9 percent) is the sum of the percentage of total contracts for the first two commodities (22.6 + 19.4 = 41.9), the cumulative percentage in the third row (58.8 percent) is the sum of the percentages for the first three commodities (22.6 + 19.4 + 16.8 = 58.8), and so on. Some figures may not add exactly as shown because of rounding.

Table 1. Federal Information Market, Products and Services, FY1990–FY2011

Products and Services (Product Service Code)	Contracts (in \$ millions)	Percentage of Total Contracts	Cumulative Percentage ⁸
Administrative support: Library (R605)	\$1,293.3	16.8%	58.8%
Maps, atlases, charts, and globes (7640)	\$1,011.7	13.2%	71.9%
Administrative support: Information retrieval (R612)	\$927.8	12.1%	84.0%
Newspapers and periodicals (7630)	\$817.3	10.6%	94.6%
Microfilm processed (7670)	\$148.6	1.9%	96.5%
Drawings and specifications (7650)	\$142.8	1.9%	98.4%
Digital maps, charts, and geoditic products (7644)	\$79.2	1.0%	99.4%
Technical representation services—Books, maps, other publications (L076)	\$29.7	0.4%	99.8%
Sheet and book music (7660)	\$6.8	0.1%	99.9%
Aeronautical maps, charts, and geodesic products (7641)	\$4.4	0.1%	99.9%
Hydrographic maps, charts, and geodesic products (7642)	\$2.3	0.0%	100.0%
Topographic maps, charts, and geodesic products (7643)	\$2.0	0.0%	100.0%
Books, maps, other publications (76)	(\$934.0)	0.0%	100.0%
Total	\$7,692.4	100%	100%
Annual average, FY1990–FY2011	\$349.7		

Another finding that emerges from data available from FPDS-NG is that federal-government spending on information products and services has fluctuated but has shown an

overall increase over time. From FY1990 through FY2011, spending on information commodities increased from \$73 million in FY1990 to \$276 million in 2000 and then to \$510 million in 2010. In the most recently completed fiscal year in this study, FY2011, spending grew even further to nearly \$562 million. Figure 1, below, depicts the change in federal spending on information products and services from FY1990 through FY2011, with specific figures listed for five-year intervals starting in FY1990 (i.e., spending figures for FY1990, FY1995, FY2000, etc).

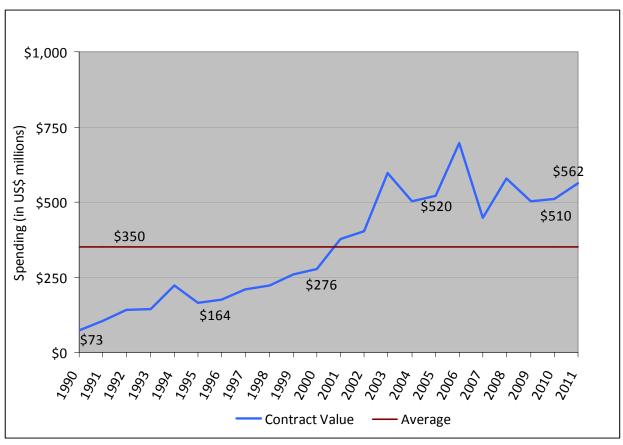


Figure 1. Value of the Federal Information Market by Fiscal Year, FY1990-FY2011

If the increase in federal spending on information products and services is expressed in terms of ratios rather than dollar figures, then spending on information products and services was 2.25 times greater in FY2000 than in FY1990 and nearly 7 times greater in FY2010 than in FY1990. These ratios are depicted in figure 2, below, by spheres whose relative sizes reflect the growth in federal spending on information commodities since FY1990, which serves as the base year of comparison in the graph.

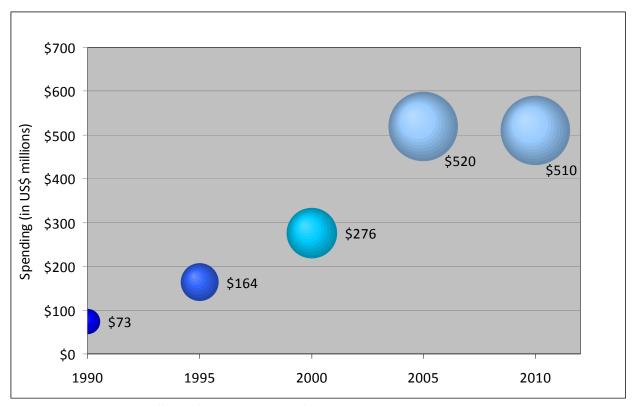


Figure 2. Size of the Federal Information Market, FY1990-FY2010

While federal spending on information commodities generally increased from FY1990 through FY2011, such spending has exhibited substantial fluctuations within those years. Federal spending on information commodities has occasionally exhibited both increases and declines of \$50 million or more from one quarter to the next. These variations are depicted in figure 3, below, which shows federal spending on information products and services for all completed fiscal quarters from FY1990 through FY2012 (The horizontal axis of figure 3 only lists the first quarter—Q1—of each year because of space limitations.) Figure 3 illustrates that spending on information commodities has trended upward but has proven to be quite variable from quarter to quarter, and that average spending by quarter was \$88 million for the time period.

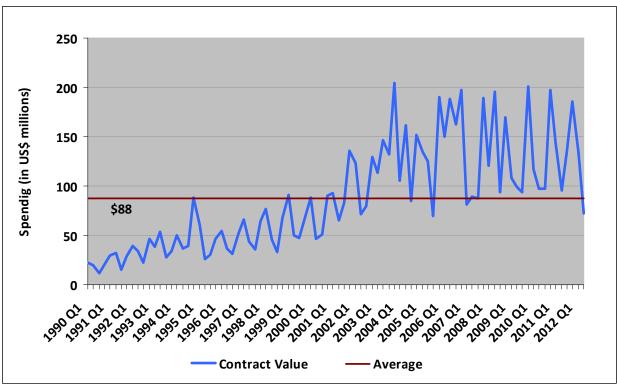


Figure 3. Value of the Federal Information Market by Quarter, FY1990 Q1-FY2012 Q2

Within the previous five years, i.e. FY2007 Q1 through FY2012 Q2, spending varied substantially but at higher dollar levels than for the nearly 23-year period from FY1990 Q1 through FY2012 Q2. In this most recent five-year period, spending generally ranged from \$100 million to \$200 million per quarter and sometimes grew or declined by \$100 million between quarters. In addition, the average spending per quarter was \$128 million, around 45 percent higher than the quarterly average of \$88 million for the longer time span from FY1990 Q1 through FY2012 Q2 (see figure 4, below).

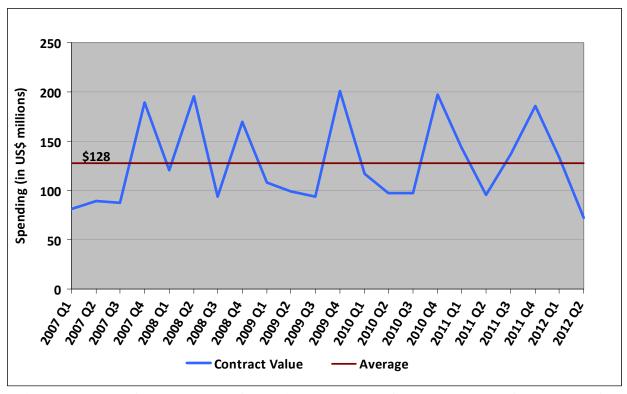


Figure 4. Value of the Federal Information Market by Quarter, FY2007 Q1-FY2012 Q2

Substantial variations in spending within fiscal years are also apparent in comparisons of average spending for the four fiscal quarters from the first quarter of the first year in this study, FY1990, through the fourth quarter of the last complete year in this analysis, FY2011. In this 22-year time span, the federal government's average spending on information products and services was highest in the fourth quarter (\$116 million) and lowest in the third quarter (\$67 million). Average quarterly spending for the first and second quarters fell between those two extremes, at \$87 million for the first quarter and \$80 million in the second (see figure 5, below).

However, this pattern in quarterly spending was not consistent from FY1990 through FY2011. In the first decade of that time span, i.e., from FY1990 through FY1999, average first-quarter spending on information products (\$53 million) was nearly the same as average fourth-quarter spending (\$52 million). This pattern changed in the subsequent decade (FY2000 through FY2009), as average first-quarter spending (\$112 million) dropped well below average fourth-quarter spending (\$166 million), and it has thus far continued into the two complete years of the third and current 10-year period in this study (i.e., FY2010 and FY2011).

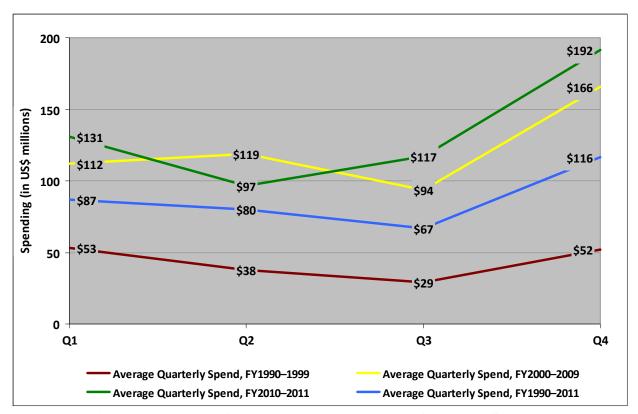


Figure 5. Federal Information Market, Average Quarterly Spending

With regard to the major products and services in the information market, six of the 15 types of information products and services accounted for nearly 95 percent of federal-government spending on the information market, as measured by contract value from FY1990 through FY2011. Those products and services include Web-based subscriptions (23 percent of total spending), books and pamphlets (19 percent), and administrative support for federal libraries (17 percent; see table 1, above, and figure 6, below). These three commodities alone illustrate the multidimensional nature of information and access to it: electronic resources, print media, and professional individual assistance.

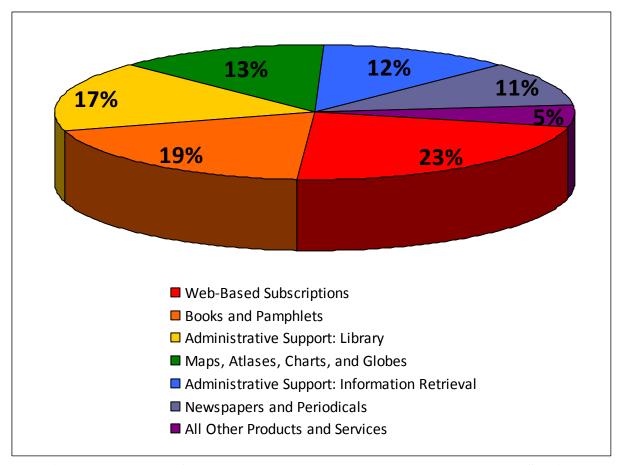


Figure 6. Federal Information Market FY1990–FY2011, Products and Services

Just as federal spending on the information market as a whole has varied over time, so, too, has federal spending on specific products and services within that market. One prominent example of such spending variations involves federal spending on an information product group called "maps, atlases, charts, and globes" (PSC 7640), which peaked at \$195 million in FY2003—33 percent of the entire information market for that year. Spending on this commodity dropped in FY2004 but remained higher than for any other single information commodity from FY2004 through FY2006, ranging from \$131 million to \$146 million in that three-year period. Thereafter, however, the decline in federal spending on this product category has been substantial, falling precipitously to \$4 million in FY2007 and to \$2 million by FY2011 (see figure 7, below).

Spending on the major elements of the federal government's information market has exhibited some interesting—and, perhaps, surprising—changes. For example, in the FY1997–FY2003 time period, the Internet emerged as a prominent medium and source of information,

and federal spending on Web-based subscriptions was higher than for most other information commodities. Although the Internet has remained a prominent information medium and source, federal spending on Web-based subscriptions has trended downward in the FY2004–FY2007 time period, while federal spending on two other commodity groups—books and pamphlets and administrative support for libraries—has trended upward and has exceeded spending on Web-based subscriptions (see figure 7, below).

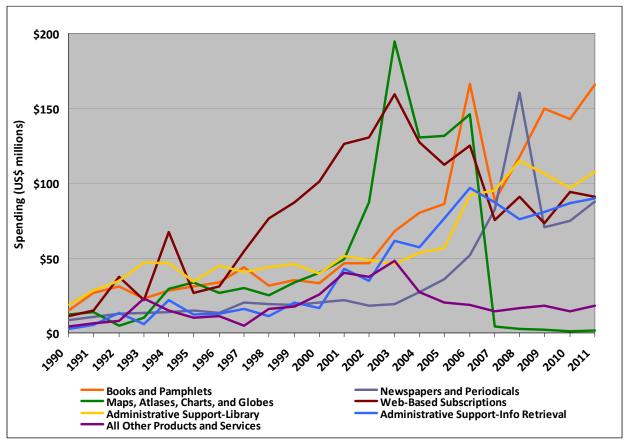


Figure 7. Federal Spending on Information Products and Services, FY1990–FY2011

The recent fluctuations in federal spending on various information commodities has meant that a smaller range of commodities has dominated the overall federal information market in the last five fiscal years (FY2007–FY2011) than in the overall 22-year period from FY1990 through FY2011. As federal spending on maps, atlases, charts, and globes has declined in the last five fiscal years, spending on five other commodities has grown and now makes up the bulk of spending on the total information market. More specifically, federal spending on five

commodities—books and pamphlets, administrative support for libraries, newspapers and periodicals, Web-based subscriptions, and administrative support for information retrieval—constituted nearly 96 percent of the federal information market in the most recent five-year span, from FY2007 through FY2011, as compared with about 82 percent of that market for the overall period from FY1990 through FY2011 (see figure 8, below, and Appendix 3).

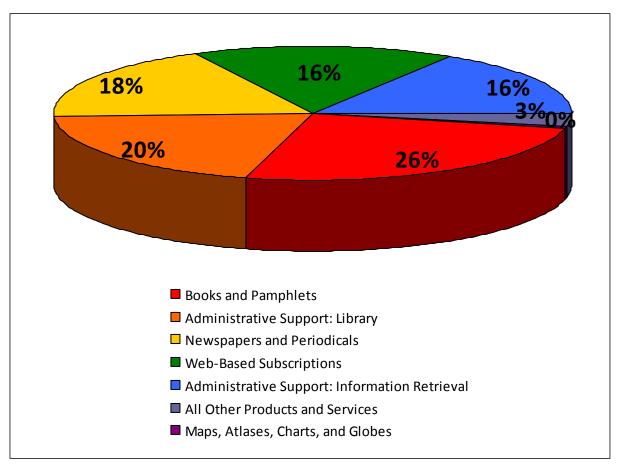


Figure 8. Federal Information Market FY2007-FY2011, Products and Services

INFORMATION-MARKET SPENDING BY FEDERAL AGENCIES

Federal-agency spending on information products and services from FY1990 through the second quarter of FY2012 varied substantially, from agency to agency, from approximately \$7.5 million (Small Business Administration) to nearly \$3.3 billion (Department of Defense). Furthermore, spending by federal agencies on information products and services from FY1990 through FY2012 Q2 averaged \$316 million per agency (see table 2 and figure 9, below).

Table 2. Federal Agencies' Spending on Information Products and Services, FY1990–FY2012 Q2

Department	Spending (in US\$ millions)	Percent of Total	Cumulative Percentage
Department of Defense	\$3,272.8	41%	41%
Department of Health and Human Services	\$817.8	10%	52%
Department of Commerce	\$439.2	6%	57%
Department of Justice	\$435.5	6%	63%
Environmental Protection Agency	\$351.1	4%	67%
General Services Administration	\$343.5	4%	72%
Department of the Treasury	\$331.8	4%	76%
Department of Veterans Affairs	\$304.6	4%	80%
All Other Agencies	\$272.2	3%	83%
Social Security Administration	\$194.2	2%	86%
Department of the Interior	\$169.4	2%	88%
Department of Homeland Security	\$167.2	2%	90%
Department of Transportation	\$127.4	2%	91%
Department of State	\$120.0	2%	93%
Department of Agriculture	\$113.2	1%	94%
National Aeronautics and Space Administration	\$110.4	1%	96%
Department of Energy	\$72.4	1%	97%
Department of Education	\$69.3	1%	98%
U.S. Agency for International Development	\$63.4	1%	98%
Department of Labor	\$47.1	1%	99%
Department of Housing and Urban Development	\$35.3	0%	99%
Nuclear Regulatory Commission	\$15.6	0%	100%
Office of Personnel Management	\$10.7	0%	100%
National Science Foundation	\$7.5	0%	100%
Small Business Administration	\$7.5	0%	100%
Total	\$7,899.1	100%	100%
Average	\$316.0		

Four agencies accounted for nearly 63 percent of all contracts for information products and services from FY1990 through FY2012 Q2, which, in dollar terms, represented \$5 billion in spending during that period. Those four agencies were: Defense (41 percent of total spending), Health and Human Services (10 percent), Commerce (6 percent), and Justice (6 percent) (see figure 9, below).

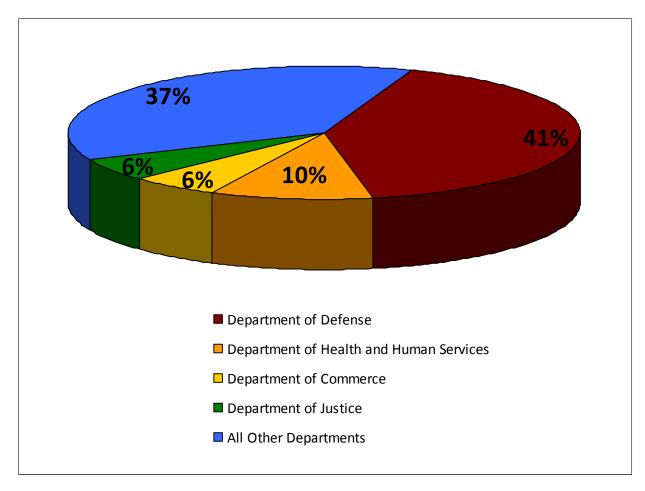


Figure 9. Federal Information Market Spending by Agency as a Proportion of Total Spending, FY1990–FY2012 Q2

Departments' spending on information products and services fluctuated during the complete fiscal years in this study, FY1990 through FY2011, but in general most departments' spending on information commodities either remained essentially constant or trended upward over the period. One apparent exception to this trend was the Department of Defense, as available data indicate a precipitous decline in that agency's FY2011 spending on information commodities (see figure 10, below).

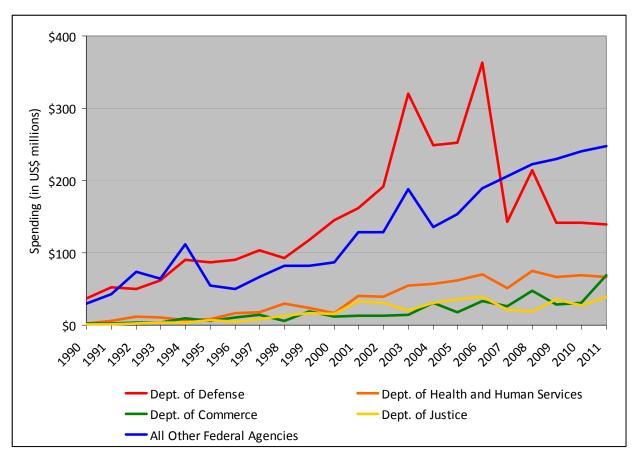


Figure 10. Federal Information Market, Top Federal-Agency Spending Trends, FY1990–FY2011

A better understanding of the federal entities that have been prominent buyers of information products and services emerges from examining the spending by agencies within federal departments. Federal procurement contracts specify a "contracting agency" that is sometimes listed as a department, such as the Department of State, but more often is listed as an agency within a department, such as the National Institutes of Health (NIH), which falls under the Department of Health and Human Services. In other cases, specific contracting agencies are difficult to determine, because the particular agency is vaguely listed, such as "Department of Defense Educational Activity." Despite these issues, federal procurement data from the FPDS–NG do allow for a detailed understanding of federal spending on the information products and services below the level of the department.

Specifically, from FY1990 Q1 through FY2012 Q2, several agencies under the Department of Defense were among the major purchasers of information products and services, namely the National Geospatial-Intelligence Agency (NGA) and the departments of the Air

Force, Army, and Navy (see figure 11, below). These four agencies collectively spent \$2.9 billion on information products and services, accounting for 36 percent of all federal-government spending in the information market. Other agencies that were prominent in the market were the NIH (\$566 million in spending; 7 percent of overall spending), the Environmental Protection Agency (\$351 million; 4 percent), and the Patent and Trademark Office (\$307 million, 4 percent).

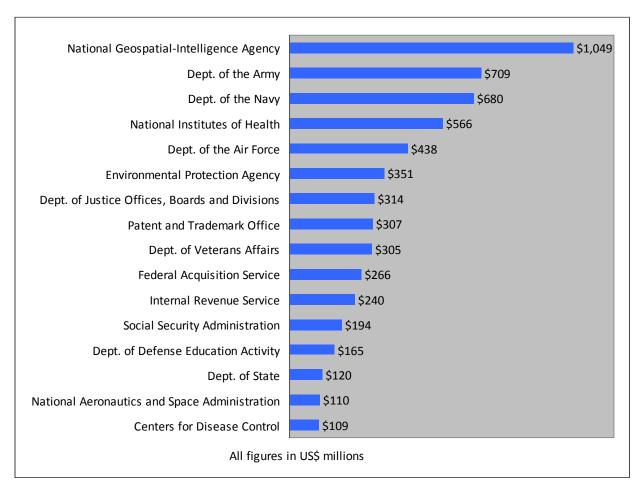


Figure 11. Federal Information Market, Top-Spending Federal Agencies, FY1990–FY2012 O2

With some exceptions, the agencies that were major purchasers from FY1990 through FY2012 Q2 have remained so within the last five complete fiscal years, i.e., FY2007 through FY2011. One prominent exception is the NGA, which spent more on information commodities than any one single agency from FY1990 through FY2006 but has since dropped completely out of the information market, at least as far as can be determined from unclassified procurement

data (see figure 12, below). Similarly, National Aeronautics and Space Administration (NASA) spending on information commodities was among the highest of any contracting agency in FY1990–FY2012 Q2, totaling \$110 million in that period, or 1.4 percent of total federal spending. While NASA's \$25 million in spending on information commodities from FY2007 to FY2011 has not declined as a percentage of federal spending on those commodities (2 percent for FY2007–FY2011), this level of spending is well below the spending level of other agencies that have been major buyers of information products and services.

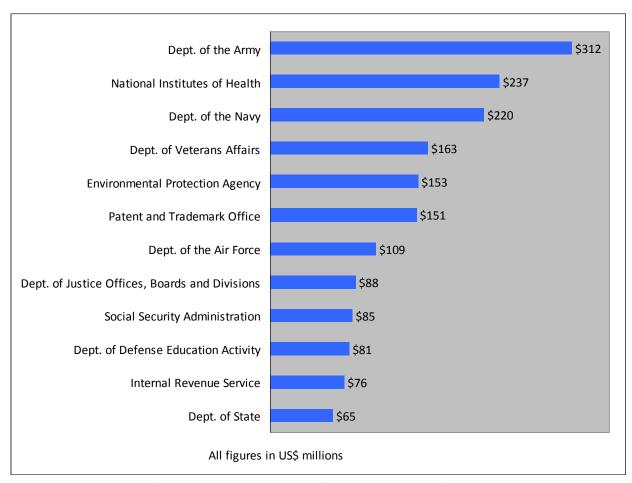


Figure 12. Federal Information Market, Top-Spending Federal Agencies, FY2007-FY2011

CONTRACTORS IN THE FEDERAL INFORMATION MARKET

From FY1990 to FY2011, federal agencies contracted with thousands of organizations to provide the 15 categories of information products and services listed in table 1 (see above).

Among this multitude of contractors, 13 contractors stood out for receiving one-fifth of all

contracts, as measured by the value of those contracts. The top contractor for information commodities for the federal government was Thomson Reuters, with \$408 million in contracts, followed by Reed Elsevier (\$383 million), GeoEye⁹ (\$322.2 million), and Computer Sciences Corporation (\$303 million). These four companies alone received \$1.4 billion in federal-government contracts for information products and services, nearly one-fifth of all contracts, as measured by contract value.

All of these contractors and others appear in table 3, below, which lists the top 50 recipients of federal-government contracts for information products and services from FY1990 to FY2011. These 50 contractors collectively received \$4 billion in contracts for information commodities, more than half (i.e., 52 percent) of the information market for that period.

It is important to note that information in table 3 is intended to be a readily accessible listing of the prominent contractors in the federal information market and thus includes the names of parent companies rather than subsidiaries. Consequently, the value of contracts for some contractors in this table is a combined figure for contracts awarded to both parent companies and their subsidiaries. For example, the value of contracts awarded to Reed Elsevier includes contracts awarded to Reed Elsevier and its subsidiaries Elsevier B.V., Elsevier STM, Inc., LexisNexis, etc. Similarly, the contract value for Thomson Reuters includes the values of contracts awarded to that company and its subsidiaries (West Government Services, Westlaw, etc.). It should also be noted that while some contractor names in this table are enigmatic and unclear—namely "Miscellaneous Foreign Contractor"—these are the contract awardees as they are listed in FPDS–NG.¹⁰

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⁹ This figure includes the combined contract totals for GeoEye and the two companies that combined to form GeoEye: Orbital Sciences Corporation and Space Imaging LLC. In 2006 Orbital Sciences Corporation (also known as ORBIMAGE) purchased Space Imaging LLC's assets and formed the company GeoEye. See GeoEye, "About Us," http://www.geoeye.com/CorpSite/about-us/ (accessed July 29, 2011).

¹⁰ It should be noted that the amounts in table 3 differ from those provided in the equivalent table in the first iteration of this report, with some vendors showing lower amounts and others showing higher amounts. These variations are the result of the discontinuation of one product service code (PSC) in these calculations (PSC 7690, see footnote 1) and of updated data available from FPDS–NG.

Table 3. Top Contractors in the Federal Information Market, FY1990–FY2011

	Table 5. Top Contractors in the Per			1 1 2 0 1 1
	Contractor	Contracts (in \$ millions)	Pct. of All Contracts	Cumulative Percentage
1	Thomson Reuters	\$408.0	5.3%	5.3%
2	Reed Elsevier	\$383.4	5.0%	10.3%
3	GeoEye	\$322.2	4.2%	14.5%
4	Computer Sciences Corp.	\$303.0	3.9%	18.4%
5	Arctic Slope Regional Corp.	\$239.7	3.1%	21.5%
6	Ebsco	\$210.0	2.7%	24.3%
7	Gartner	\$164.3	2.1%	26.4%
8	DigitalGlobe	\$160.8	2.1%	28.5%
9	Swets & Zeitlinger	\$94.5	1.2%	29.7%
10	Koniag	\$92.2	1.2%	30.9%
11	Labat-Anderson Inc.	\$78.1	1.0%	31.9%
12	Cenveo	\$75.2	1.0%	32.9%
13	American Chemical Society	\$73.7	1.0%	33.9%
14	Readmore Inc.	\$70.5	0.9%	34.8%
15	McGraw Hill	\$69.2	0.9%	35.7%
16	Calista Corp.	\$69.1	0.9%	36.6%
17	Choicepoint Inc.	\$63.5	0.8%	37.4%
18	Afognak Native Corp.	\$58.7	0.8%	38.2%
19	Pearson	\$58.7	0.8%	38.9%
20	Miscellaneous Foreign Contractors	\$55.3	0.7%	39.6%
21	International Health Terminology Standards Development Organisation	\$53.7	0.7%	40.3%
22	Information International Associates	\$52.5	0.7%	41.0%
23	Faxon Company	\$50.1	0.7%	41.7%
24	Basch Subscriptions	\$49.9	0.6%	42.3%
25	Dun & Bradstreet	\$49.0	0.6%	43.0%
26	Wolters Kluwer	\$48.3	0.6%	43.6%
27	Bureau of National Affairs	\$40.8	0.5%	44.1%
28	Lockheed Martin	\$34.6	0.5%	44.6%
29	Academy for Educational Development	\$34.6	0.4%	45.0%
30	Logical Technical Services Corp.	\$32.8	0.4%	45.4%
31	Boeing Company	\$31.9	0.4%	45.9%
32	Wilson Information Services	\$30.4	0.4%	46.3%
33	New Directions Technologies	\$30.3	0.4%	46.6%

Table 3. Top Contractors in the Federal Information Market, FY1990-FY2011

	Contractor	Contracts (in \$ millions)	Pct. of All Contracts	Cumulative Percentage
34	Scholastic Corp.	\$29.6	0.4%	47.0%
35	Dialog LLC	\$29.0	0.4%	47.4%
36	CSR Inc.	\$28.7	0.4%	47.8%
37	Electronic Data Systems Corp.	\$27.5	0.4%	48.1%
38	Southern Bell Telephone Co.	\$27.3	0.4%	48.5%
39	SAIC	\$27.3	0.4%	48.9%
40	Techna-Graphics	\$27.1	0.4%	49.2%
41	Hewlett-Packard Co.	\$26.5	0.3%	49.5%
42	GRB Environmental Services	\$26.2	0.3%	49.9%
43	Cambridge Information Group	\$25.9	0.3%	50.2%
44	Systems Integration and Research	\$23.2	0.3%	50.5%
45	QuickSeries Publishing	\$22.3	0.3%	50.8%
46	Library Associates	\$21.8	0.3%	51.1%
47	McKing Consulting	\$21.6	0.3%	51.4%
48	Dyncorp Information Systems	\$21.4	0.3%	51.7%
49	Intermap Federal Services	\$20.6	0.3%	51.9%
50	IHS, Inc	\$20.4	0.3%	52.2%
	Total	\$4,014.8	52.2%	

The data in table 3 indicate the major vendors in the overall information market, but not the major vendors for particular PSCs. Appendix 3 contains tables listing the major vendors for the top-five information commodities for the previous five fiscal years, i.e., from FY2007 through FY2011. Those five commodities were (in declining order of their proportion of the market; see figure 8, above): books and pamphlets, administrative support for libraries, newspapers and periodicals, Web-based subscriptions, and administrative support for information retrieval.

BENEFITS OF A STRATEGICALLY SOURCED INFORMATION MARKET

Thus far, the analysis of the federal information market has examined the market as it has existed without a federal strategic-sourcing program for information products and services.

Library of Congress – Federal Research Division Strategic Sourcing of Information Products and Services

Calculations based on existing spending figures suggest that an initiative to strategically source information products and services could yield substantial savings on these products and services. If, for example, information commodities were covered by an FSSI in FY2011, the federal government could have saved in the range of \$28 million to \$112 million on information products and services. This range of savings is based on different scenarios of 5-percent to 20-percent savings on those commodities, reflecting the aforementioned discounts that federal agencies have realized in existing strategic-sourcing initiatives administered by GSA (see Overview of the Federal Strategic Sourcing Initiative, above). The savings scenarios for information commodities are detailed in table 4 and illustrated in figure 13, below. It is helpful to note that in figure 13, the tops of the colored-bar segments indicate the total spending levels that could be realized through strategic sourcing of information commodities at different discount rates. Specifically, spending on such commodities with no discount is depicted by the top of the orange segments, spending at a 9-percent discount is depicted by the top of the yellow segments, and so on.

Table 4. FY2011 Spending by Agency Under Different Savings Scenarios

Agonov	No FSSI	5%		9%		20%	
Agency	Spending	Spending	Savings	Spending	Savings	Spending	Savings
Dept. of Defense	\$139.3	\$132.4	\$7.0	\$126.8	\$12.5	\$111.5	\$27.9
Dept. of Commerce	\$68.6	\$65.2	\$3.4	\$62.4	\$6.2	\$54.9	\$13.7
Dept. of Health and Human Services	\$66.7	\$63.4	\$3.3	\$60.7	\$6.0	\$53.4	\$13.3
Dept. of Justice	\$39.7	\$37.7	\$2.0	\$36.1	\$3.6	\$31.8	\$7.9
All other agencies	\$247.4	\$235.0	\$12.4	\$225.1	\$22.3	\$197.9	\$49.5
Total	\$562.0	\$533.9	\$28.1	\$511.4	\$50.6	\$449.6	\$112.4
All figures are in \$ millions.							

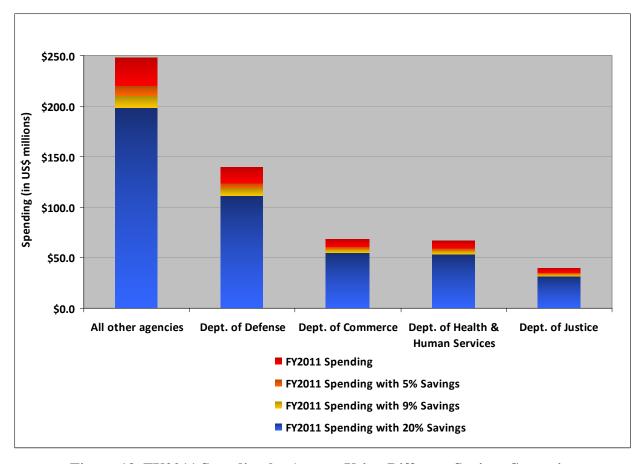


Figure 13. FY2011 Spending by Agency Using Different Savings Scenarios

With regard to the potential savings that strategic sourcing could provide for information products and services beyond FY2011, overall growth in the information market from FY1990 through FY2011 suggests that the market can be projected to grow from an estimated \$654 million in FY2012 to \$734 million in FY2015. If the federal government established a strategic-sourcing program for information products and services, and if all federal agencies participated in the program, the government could realize total savings in the range of \$140 million to \$555 million over that four-year period (see table 5, Appendix 1). These savings are based on discounts of 5 percent and 20 percent, respectively. Figure 14, below, depicts the estimations of growth in the information market by FY2015 under various discount scenarios.

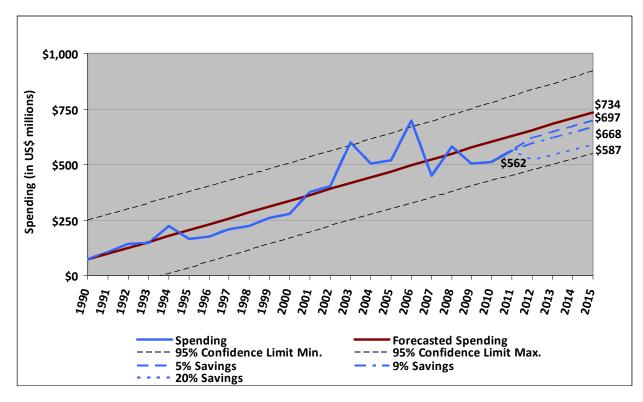


Figure 14. Projected Growth and Potential Savings in the Federal Information Market, FY2012–FY2015

These forecasts are derived from a statistical analysis of changes in the federal information market from FY1990 through FY2011. More specifically, the researcher fitted a linear regression model to the data for FY1990 through FY2011 and used the model to derive forecasts for FY2012 through FY2015. The linear regression line is shown in red in figure 14, above, and the solid blue line depicts actual spending. Forecasts of spending at various savings rates are indicated by the red regression line and various dashed blue lines. ¹¹

These projections of the future growth and potential savings in the information market are based on the assumption that all federal agencies would participate in a strategic-sourcing program for information products and services. Such calculations are illustrations of the economic usefulness of strategic sourcing, but they are also greatly simplified generalizations and unrealistic estimations based on the performance of existing FSSI programs. More specifically, the number of federal agencies participating in the three currently available FSSI

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 $^{^{11}}$ The equation for the linear regression is Y=71.4 + 26.5 X_1 ; R^2 =0.834, and model standard error of equation is 78.7.

programs has varied. Three agencies have participated in the wireless-services program, and 95 agencies have participated in the program for domestic delivery services, for example. 12

If these growth and savings scenarios were recalculated to include variations in federal-agency participation, a richer, more detailed picture of potential savings through strategic sourcing would emerge. However, such an exercise is beyond the scope of this report, because it entails creating numerous scenarios in which agencies do or do not participate in strategic sourcing to varying extents and at varying discount rates. In order to gain some estimation of the different savings that could be realized if varying proportions of agencies participated in an information-commodity FSSI program, more limited calculations were made of savings based on varying proportions of spending through such an FSSI program at varying discount rates. Specifically, calculations were made of spending and savings on information products and services if one-fourth, one-third, and one-half of such spending occurred at 5-percent, 9-percent, and 20-percent discount rates.

The findings, which are detailed in table 6 (see Appendix 1) and depicted in figure 15, below, are that total savings on federal spending on information commodities would vary from almost \$33 million if one-fourth of such spending occurred at a 5-percent discount to nearly \$555 million if all of this spending occurred at a 20-percent discount. In figure 15, the tops of the colored bar segments indicate the spending levels at different discount rates. For example, spending on information commodities at a 5-percent discount is depicted by the top of the orange segments, spending at a 9-percent discount is depicted by the top of the yellow segments, and so forth. Future spending estimates with no discount are depicted by the red bar on the left of the graph.

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¹² U.S. General Services Administration, "Strategic Sourcing Metrics."

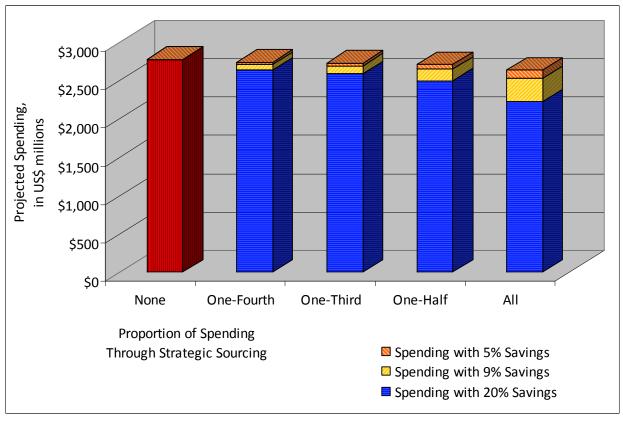


Figure 15. FY2012–FY2015 Total Spending Projections Based on Various Strategic-Sourcing Scenarios

APPENDIX 1. Estimated Spending and Savings Projections

Table 5. Projected Growth and Savings in the Federal Information Market, FY2012-FY2015

	201	12	201	13	20:	14	20	15		Total	
Savings	Spending	Savings	Spending	Savings	Spending	Savings	Spending	Savings	Spending	Savings	Average Annual Savings
No FSSI	\$654.4	\$0	\$680.9	\$0	\$707.4	\$0	\$733.9	\$0	\$2,776.7	\$0	\$0
5% savings	\$621.7	\$32.7	\$646.9	\$34.0	\$672.1	\$35.4	\$697.2	\$36.7	\$2,637.9	\$138.8	\$34.7
9% savings	\$595.5	\$58.9	\$619.6	\$61.3	\$643.8	\$63.7	\$667.9	\$66.1	\$2,526.8	\$249.9	\$62.5
20% savings	\$523.5	\$130.9	\$544.7	\$136.2	\$565.9	\$141.5	\$587.1	\$146.8	\$2,221.4	\$555.3	\$138.8

All figures are in US\$ millions.

Table 6. FY2012-FY2015 Total Spending Projections Based on Strategic-Sourcing Spending

Proportion of	5% Dis	count	9% Dis	count	20% Discount		
Spending Through Strategic Sourcing	Spending	Savings	Spending	Savings	Spending	Savings	
None	\$2,776.7	\$0	\$2,776.7	\$0	\$2,776.7	\$0	
One-Fourth	\$2,742.0	\$34.7	\$2,714.2	\$62.5	\$2,637.9	\$138.8	
One-Third	\$2,730.9	\$45.8	\$2,694.2	\$82.5	\$2,593.4	\$183.3	
One-Half	\$2,707.3	\$69.4	\$2,651.7	\$125.0	\$2,499.0	\$277.7	
All	\$2,637.9	\$138.8	\$2,526.8	\$249.9	\$2,221.4	\$555.3	

All figures are in US\$ millions.

APPENDIX 2. Product Service Codes Definitions

The U.S. General Services Administration (GSA) has established formal definitions for the product service codes (PSCs) that are utilized in federal government procurement contracts. The following table includes the GSA's definitions for the 15 PSCs that are featured in this report.

Table 7. Formal Definitions of Product Service Codes

Table 7. Formal Definitions of Product Service Codes					
PSC	Definition				
76	None. This is not a product service code, but a product service group, specifically books, maps, and other publications.				
7610	Books and pamphlets. Includes: Technical and nontechnical books and pamphlets; regulations; instruction manuals; technical orders. Excludes: Sheet and book music; periodicals; bibles.				
7630	Newspapers and periodicals.				
7640	Maps, atlases, charts, and globes. Excludes: Training aid maps.				
7641	Aeronautic maps, charts, and geodetic products.				
7642	Hydrographic maps, charts, and geodetic products.				
7643	Topographic maps, charts, and geodetic products.				
7644	Digital maps, charts, and geoditic products.				
7650	Drawings and specifications. Includes: Federal, military, and departmental specifications.				

Library of Congress – Federal Research Division Strategic Sourcing of Information Products and Services

7660	Sheet and book music. Excludes: Hymnbooks.
7670	Microfilm processed.
D317	IT and telecom— Web-based subscription. Includes: Subscriptions to data, electronic equivalent of books, periodicals, newspapers, etc.
L076	Technical representative–books, maps, and other publications.
R605	Support–administrative: Library.
R612	Support–administrative: Information retrieval. Includes: services related to search and storage of text, images, video, and other such data.

Source: U.S. General Services Administration, Office of Governmentwide Policy, *Federal Procurement Data System, Product and Service Codes Manual* (Washington, DC: August 2011): 66–202. https://www.acquisition.gov/PSC%20Manual%20-%20Final%20-%20I1%20August%202011.pdf (accessed September 12 2011).

APPENDIX 3. Major Vendors for Major Information Commodities, FY2007–FY2011

The tables below provide spending data for the top vendors of the top information commodities for the last five complete fiscal years, FY2007 through FY2011. Five information products and services have accounted for \$2.5 billion in federal spending on information commodities in the previous five years, nearly 96 percent of the \$2.6 billion spent in that time period. The following tables provide details of spending on those commodities in that five-year span and the top 10 vendors for each commodity.

Table 8. Federal Information Market, Products and Services, FY2007–FY2011

Products and Services (Product Service Code)	Contracts (in \$ millions)	Percentage of Total Contracts	Cumulative Percentage
Books and pamphlets (7610)	\$664.8	25.6%	25.6%
Administrative support: Library (R605)	\$520.8	20.0%	45.6%
Newspapers and periodicals (7630)	\$476.3	18.3%	63.9%
Web-based subscriptions (D317)	\$424.4	16.3%	80.2%
Administrative support: Information retrieval (R612)	\$420.6	16.2%	96.4%
Drawings and specifications (7650)	\$31.7	1.2%	97.6%
Digital maps, charts, and geoditic products (7644)	\$23.6	0.9%	98.5%
Maps, atlases, charts, and globes (7640)	\$11.7	0.4%	99.0%
Microfilm processed (7670)	\$11.1	0.4%	99.4%
Technical representation services—Books, maps, other publications (L076)	\$10.3	0.4%	99.8%
Hydrographic maps, charts, and geodesic products (7642)	\$2.0	0.1%	99.9%

Table 8. Federal Information Market, Products and Services, FY2007–FY2011

Products and Services (Product Service Code)	Contracts (in \$ millions)	Percentage of Total Contracts	Cumulative Percentage
Aeronautical maps, charts, and geodesic products (7641)	\$1.6	0.1%	99.9%
Topographic maps, charts, and geodesic products (7643)	\$0.9	0.0%	100.0%
Sheet and book music (7660)	\$0.7	0.0%	100.0%
Books, maps, other publications (76)	\$0.0	0.0%	100.0%
Total Annual average, FY1990–FY2011	\$2,600.4 \$173.4	100%	100%

Table 9. Top Contractors for Books and Pamphlets (PSC 7610), FY2007-FY2011

	Contractor	Contracts (in \$ millions)	Pct. of All Contracts	Cumulative Percentage
1	American Chemical Society	\$58.0	8.7%	8.7%
2	Thomson Reuters	\$48.5	7.3%	16.0%
3	Pearson	\$43.2	6.5%	22.5%
4	Ebsco	\$31.2	4.7%	27.2%
5	Miscellaneous Foreign Contractors	\$19.6	3.0%	30.2%
6	QuickSeries Publishing	\$19.6	2.9%	33.1%
7	XMCO Inc	\$19.1	2.9%	36.0%
8	Reed Elsevier	\$18.3	2.7%	38.8%
9	Mackin Book Company	\$16.4	2.5%	41.2%

Table 9. Top Contractors for Books and Pamphlets (PSC 7610), FY2007-FY2011

Contractor	Contracts (in \$ millions)	Pct. of All Contracts	Cumulative Percentage
10 Basch Subscriptions	\$15.9	2.4%	43.6%
Total	\$290.0	43.6%	

Table 10. Top Contractors for Administrative Support: Library (PSC R605), FY1990-FY2011

	Contractor	Contracts (in \$ millions)	Pct. of All Contracts	Cumulative Percentage
1	Arctic Slope Regional Corp.	\$150.75	28.9%	28.9%
2	Ebsco	\$23.45	4.5%	33.5%
3	Library Associates	\$21.23	4.1%	37.5%
4	Computer Sciences Corporation	\$20.44	3.9%	41.5%
5	GRB Environmental Services	\$18.27	3.5%	45.0%
6	Information International Associates	\$14.60	2.8%	47.8%
7	Wilson Information Services	\$11.60	2.2%	50.0%
8	Logical Technical Services Corp.	\$11.43	2.2%	52.2%
9	University of Maryland	\$10.01	1.9%	54.1%
10	K4 Solutions, Inc	\$8.62	1.7%	55.8%
	Total	\$290.4	55.8%	

Table 11. Top Contractors for Newspapers and Periodicals (PSC 7630), FY2007–FY2011

_	Contractor	Contracts (in \$ millions)	Pct. of All Contracts	Cumulative Percentage
1	Calista Corp.	\$69.1	14.5%	14.5%
2	Swets & Zeitlinger	\$59.8	12.6%	27.1%
3	Afognak Native Corp.	\$50.0	10.5%	37.6%
4	Reed Elsevier	\$37.8	7.9%	45.5%
5	Ebsco	\$35.6	7.5%	53.0%
6	Great Atlantic News LLC	\$22.7	4.8%	57.7%
7	Thomson Reuters	\$20.9	4.4%	62.1%
8	Miscellaneous Foreign Awardees/Contractors	\$17.5	3.7%	65.8%
9	Basch Subscriptions	\$10.3	2.2%	68.0%
10	Proquest	\$7.6	1.6%	69.6%
	Total	\$331.3	69.6%	

Table 12. Top Contractors for Web-Based Subscriptions (PSC D317), FY1990–FY2011

	Contractor	Contracts (in \$ millions)	Pct. of All Contracts	Cumulative Percentage
1	Reed Elsevier	\$53.5	12.6%	12.6%
2	Thomson Reuters	\$25.7	6.0%	18.7%
3	Dyncorp Information Systems	\$18.9	4.4%	23.1%

Table 12. Top Contractors for Web-Based Subscriptions (PSC D317), FY1990–FY2011

	Contractor	Contracts (in \$ millions)	Pct. of All Contracts	Cumulative Percentage
4	New Directions Technologies	\$14.4	3.4%	26.5%
5	International Health Terminology Standards Development Organisation	\$14.3	3.4%	29.9%
6	Computer Sciences Corporation	\$11.3	2.7%	32.5%
7	Gartner	\$8.2	1.9%	34.5%
8	McGraw Hill	\$6.9	1.6%	36.1%
9	CSR Inc.	\$5.5	1.3%	37.4%
10	Regenstrief Institute	\$1.5	0.3%	37.8%
	Total	\$160.3	37.8%	

Table 13. Top Contractors for Administrative Support: Information Retrieval (PSC R612), FY1990–FY2011

	Contractor	Contracts (in \$ millions)	Pct. of All Contracts	Cumulative Percentage
1	Thomson Reuters	\$408.0	5.3%	5.3%
2	Reed Elsevier	\$383.4	5.0%	10.3%
3	GeoEye	\$322.2	4.2%	14.5%
4	Computer Sciences Corp.	\$303.0	3.9%	18.4%
5	Arctic Slope Regional Corp.	\$239.7	3.1%	21.5%
6	Ebsco	\$210.0	2.7%	24.3%

Table 13. Top Contractors for Administrative Support: Information Retrieval (PSC R612), FY1990–FY2011

	Contractor	Contracts (in \$ millions)	Pct. of All Contracts	Cumulative Percentage
7	Gartner	\$164.3	2.1%	26.4%
8	DigitalGlobe	\$160.8	2.1%	28.5%
9	Swets & Zeitlinger	\$94.5	1.2%	29.7%
10	Koniag	\$92.2	1.2%	30.9%
	Total	\$4,014.8	52.2%	

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