

## Government Transparency

## Three Papers

- The Cost of State Online Spending-Transparency Initiatives
- Opening Government: Mashups
- Ending Translucent Government: Putting Government Data Online


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## Government Transparency

Across America more and more governments are realizing that citizens want to know how their government functions and that means they need easily available and understood information. With the continued expansion of the use of the internet, and with more technology available to our citizens, more and more taxpayers are demanding that government be more transparent.

Here in Virginia, the Governor's Commission on Government Reform and Restructuring has focused on this transparency issue and is encouraging the state to make available more and more information. And the Reform Commission has urged that financial information be put on line and made available in a format that allows the user to easily compare costs and manipulate between agencies and between programs.

The Thomas Jefferson Institute has advocated transparent government and has been a leader in this field. It has analyzed local government websites here in Virginia and has rated those as to what financial information is available, are public hearing publicly announced, can citizens easily find information on these websites, etc. And the Jefferson Institute will be urging those running for office this year - at the state and local level - to sign a Government Transparency Pledge as was requested in 2009. Those who sign and don't sign the pledge will be listed on the Jefferson Institute Website.

The three papers that are reprinted here were originally published by the Mercatus Center at George Mason University. This nationally recognized research center has become a major resource for understanding and reforming the federal government and state governments. These three papers clearly outline why governments should be more transparent and how to do it. Many governments are making more and more information available on their websites and this should be a priority here in Virginia. As these papers indicate, not only should information be easily available, but it needs to be made available in a manner that is useful to those who are interested in finding out how well their tax money is being spent by their state and local governments.

## MERCATUS ON POLICY

By Jerry Brito and Gabriel Okolski
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Legislatures around the country have begun to propose spending-transparency Web sites. The most effective argument against these efforts is the potential high cost of such Web sites. We looked at ten recently established state spending sites and found that initial cost estimates often overestimated the final cost. The cost of the surveyed sites range from $\$ 30,000$ to $\$ 300,000$, and there is little correlation between the amount spent and the quality of the Web site.

## INTRODUCTION

Senators Barack obama and Tom Coburn sponsored legislation in 2006 to create a Web site that transparently details all of the federal government's expenditures. It can now be found at USAspending.gov.

The idea is a simple one: By placing the details of every government purchase and contract online where citizens can easily review them, the government will be much more accountable. Why? First, hundreds or thousands of citizens' eyes will pore over the newly transparent data, discovering instances of previously unnoticed waste, fraud, and abuse. As a result, one can expect that these constituents will hold their elected representatives accountable and demand action. Second, once government officials become aware of the heightened scrutiny created by a transparency Web site, they will have an increased incentive to be more careful, frugal, and to think twice before making questionable expenditures.

State legislators and governors around the country have begun to follow Obama and Coburn's lead by introducing measures to create state-spending Web sites. To date, about 20 states have passed legislation or adopted executive orders creating some type of online fiscal database.

One does not have to be a cynic to recognize that a proposal to throw light on how politicians spend tax dollars-and therefore make it easier for citizens to hold them accountablemight not be a very popular idea among politicians. Of course, it is virtually impossible to oppose a transparency measure on the grounds that one prefers more government secrecy and less citizen scrutiny. As a result, the most persuasive reason to oppose online transparency legislation is the potential high cost of developing a searchable Web site.

While an online spending database may be desirable, critics could contend, it may not be feasible given a cash-strapped state budget. This is a legitimate concern. The facts show, however, that governments have often overestimated the cost of creating spending-transparency Web sites. Additionally, there is some evidence to suggest that these sites produce cost savings that may recover any initial outlay.

## THE FEDS

When Senators Coburn and Obama introduced the Federal Funding Accountability and Transparency Act, the Congressional Budget Office estimated that creating and maintaining the Web site the legislation mandated would cost $\$ 15$ million over five years. ${ }^{1}$ It calculated that creating the Web site would cost $\$ 10$ million and maintaining it would cost $\$ 2$ million annually. ${ }^{2}$ Ultimately, however, the Office of Management and Budget (OMB), which was tasked with developing the site, was able to acquire the software and consulting it needed to build the site for $\$ 600,000 .^{3}$ The agency purchased it from OMB Watch, a watchdoggroup that had developed the software for its own expenditure-tracking site. What OMB Watch understood, and luckily made clear to OMB, is that while one can certainly hire a contractor to build a $\$ 10$ million site, quality Web sites do not have to be expensive, especially when using free open-source software tools.

## THE STATES

As online spending-Transparency bills were introduced in legislatures around the country, state budget offices prepared estimates of what those sites might cost. In figure l, we list ten states that have launched some type of spending transparency Web site. For each state, we list the initial bud-get-office estimate of how much the site would cost as well as the final actual cost. Four states on our list launched their sites as a result of executive order, so no initial budget office estimates are available for them. However, the actual cost figures for these sites are instructive.

What we find is that although the quality of these sites varies, the average actual cost for developing a spending-transparency Web site is about $\$ 140,000$. The most expensive site we looked at is Texas's at $\$ 310,000$. Additionally, the states often overestimate the cost of creating spending-transparency Web

FIGURE 1: ESTIMATED AND ACTUAL COSTS FOR STATE SPENDING-TRANSPARENCY WEB SITES

| STATE | ESTIMATED COST | ACTUAL COST |
| :---: | :---: | :---: |
| Alaska ${ }^{4}$ | EO | \$15,000-\$25,000 from existing budget ${ }^{5}$ |
| Kansas ${ }^{\text {s }}$ | $\$ 280,000$ to study possibility ${ }^{7}$ | \$100,000 ${ }^{8}$ |
| Louisiana ${ }^{\text {a }}$ | $\$ 1$ million for initial site development ${ }^{\text {T }}$ | LaTrac within existing resources ${ }^{\text {" }}$ |
| Maryland ${ }^{\text {i2 }}$ | $\$ 400,000$ over two fiscal years ${ }^{13}$ | Less than $\$ 100,000^{14}$ |
| Missouri ${ }^{\text {it }}$ | EO | $\$ 293.140$ from existing budget ${ }^{76}$ |
| Nebraska ${ }^{17}$ | EO | \$38,000 ${ }^{18}$ |
| Oklahoma ${ }^{\text {a }}$ | $\$ 40,000$ for initial site development ${ }^{20}$ | $\$ 40,000$ from existing budget ${ }^{23}$ |
| South Carolina ${ }^{22}$ | EO | $\$ 25,000-\$ 50,000$ from existing budget ${ }^{23}$ |
| Texas ${ }^{24}$ | \$405.090 ${ }^{25}$ | \$310,000 ${ }^{26}$ |
| Washington ${ }^{27}$ | $\$ 1,244,316$ over six years ${ }^{28}$ | \$300,000 ${ }^{29}$ |

sites. In no case has a site cost millions of dollars as some budget estimates have suggested. For example, an estimate ${ }^{30}$ prepared by the Virginia Department of Planning and Budget prompted Nebraska Treasurer Shane Osborn to write to Virginia legislators:

I heard the same arguments about the cost of a searchable database; we received an estimate of $\$ 1.1$ million at one point. In the end, we were able to shine light on Nebraska's budget at a cost to the taxpayer of $\$ 38,000$. . . As far as the $\$ 3$ million fiscal impact statement attached to Virginia SB 936, I can't envision a situation in which a budget site would even approach that price range. ${ }^{31}$

## DATA AVAILABLE

Not all state spending-transparency Web sites are created equal. While each site aims to give the public a handle on state financial activities, the breath of information provided and the presentation of that data vary greatly across each of these Web portals.

For example, Maryland's Funding Accountability \& Transparency site is limited to state payments in excess of $\$ 25,000$ and does not include information on state employee compensation, which many other Web portals list. Other sites like Kansas's KanView include figures like state revenue and bond debt. In addition to showing information on state expenditures, Oklahoma's Open Books and the Missouri Accountability Portal provide searchable, but not browseable, data on tax credits for certain fiscal years. Some sites also omit data because of differences in financial reporting methods; for example, Louisiana's LaTrac site does not include information on legislative and judicial branch spending because of different financial reporting systems.

When it comes to the data that are available, certain sites provide an extremely comprehensive breakdown of spending information. Texas's Where the Money Goes page allows users to break down spending information by state agency, spending category, the vendor from whom a purchase was made, and the purchasing code. Certain databases, such as Rhode Island Treasury Online Checkbook, break down payments by fund or account, as opposed to by department.

## USABILITY

Ultimately, regardless of the range and categories of data being presented, ease of use is a key factor in effectively disseminating state financial data to the public. Of the 10 sites reviewed, Alaska's and Washington's are the only ones that provide data in downloadable Microsoft Excel or PDF files. All other sites utilize some sort of data viewer imbedded in the page to show fiscal data by category. Once again, there is great variety as to the ease of use of these tools.

Web sites such as Oklahoma's Open Books, South Carolina's Spending Transparency, and Kansas's KanView allow users to browse spending by starting with a broad category (by agency, for example) and to click on each item to obtain a further breakdown of the data in each category. Washington State Fiscal Information requires users to specify the information they want from a series of drop-down menus, which is somewhat cumbersome. NebraskaSpending.com presents current fiscal year spending information in a long table listing each state agency. In general, those sites that let users click through the data provide a simple and easy-to-use model; however it often comes at the cost of having to view larger amounts of data.

While a few spending-transparency Web sites utilize a search function for certain information, such as Oklahoma Open Books's search of tax credit information and the Missouri Accountability Portal's expenditure search by vendor, many sites lack any such tool. Maryland's Funding Accountability \& Transparency is one of the few standouts in this area. In addition to browsing spending by state agency, by vendor, and by vendor ZIP code, visitors can use a prominently displayed search bar to find information in each of these categories. Implementing a simple tool such as this one would help a number of states' Web sites improve ease of access to financial information. In the future, states may also consider making their sites capable of supporting structures like data feeds, which would be an effective way of keeping the public updated on government activities. ${ }^{32}$

Overall, it is not clear whether the amount of money spent on each state's Web site correlates to the quality of the Web site. Alaska, Nebraska, and South Carolina's Web sites had the lowest actual cost of those reviewed: $\$ 15,000-\$ 25,000$, $\$ 38,000$, and $\$ 25,000-\$ 50,000$, respectively. All of these sites feature a simple design and show little more than spending
data. The similarly priced Oklahoma Web site, on the other hand, includes state funding and revenue data, contains other tools such as a "Citizen Education" section and glossary and features a crisper design than those of Alaska, Nebraska, and South Carolina. The Texas site, which had the highest price tag, includes its own specialized data acquisition interface that goes above and beyond the presentations of the other Web sites; however it did not offer fundamentally different information than other sites.

As already discussed, the rest of the Web sites, all falling within the $\$ 100,000-\$ 300,000$ range, have a variety of strengths and weaknesses pertaining to the type of data presented, the years for which the data is offered, and the presentation to the user. The key point underscored by some of the less-expensive Web sites that provide a clean presentation of key spending data is that all states are able to mount a solid effort at making financial data more transparent through the Internet.

## CONCLUSION

THE воттOM LINE is that official cost estimates of spending transparency Web sites should be taken with a grain of saltespecially those that put a price tag in the millions. Additionally, the potential budget benefits of transparency should be taken into account. For example, according to Texas Comptroller Susan Combs, the state's transparency initiative has saved the state over $\$ 5$ million. ${ }^{33}$ This was possible because the site facilitated the discovery of wasteful duplicative contracts for express mail, printer toner, and other goods and services that were later consolidated and renegotiated.

Because there is little correlation between the amount of money spent and the quality of the final Web sites, this leads us to conclude that the most important investment is in the design and implementation of the site. Perhaps counterintuitively, good sites can be inexpensive, but they require a knowledgeable developer using state-of-the-art technology. One simple way states can cut their costs and attract talented developers is to provide raw data feeds rather than attempting to create a user-friendly interface for the data. Third parties such as academics and watchdog groups can then take the data to build useful interfaces that citizens can use. ${ }^{34}$

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## mercatus ON POLICY <br> OPENING GOVERNMENT: MASHUPS

By Jerry Brito


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Making government information available online would not only benefit individual users of government websites, it would also make it simpler for third parties to aggregate government data. By aggregating data, websites can present govemment information in innovative and useful ways. For example, federal spending data gathered from a government website could be presented by a third party as an interactive map that shows the locations of funding recipients. Such applications make data exponentially more valuable. Government need not develop such innovative tools itself; as long as the data is made available online in a structured format, private parties will make good use of it.
"Structured data" is a term of art. It means that information is presented in a format that allows computers to easily parse and manipulate it. While a static web page that lists a series of news stories or proposed regulations is not structured, the web page may have a companion XML file containing the same information. Structured XML allows a user to sort the data by ascending or descending date, alphabetically by headline or author, by number of words, and in many other ways that a static web page does not afford.

When the government makes data available in a structured format, it opens the doors to innovative and enlightening remixes of information known as mashups. Mashups are tools that can be used by journalists, bloggers, and citizens to better analyze and monitor government's activities.

## MASHUPS

The term "Mashup" has its origins in music. The advent of digital editing technologies made it relatively simple for DJs and amateurs to take two or more songs and mash them together to produce novel creations. The paradigmatic example of a music mashup may be Danger Mouse's highly acclaimed and highly illegal "The Grey Album," which mixed music from The Beatle's "The White Album" with vocals from rapper Jay-Z's "The Black Album."

The term mashup now extends to applications that mix together disparate sets of data to create new and unique information. For example, the popular free classified ad site CraigsList.com is an almost definitive source for rental housing listings in urban areas. However, the site lists ads in the

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order users add them to the site. This means, using the Washington D.C. metro area as an example, one listing could be for an apartment in the Adams Morgan neighborhood of the District and the very next ad would be for a house in Alexandria, Virginia. This frustrated software engineer Paul Rademacher when he was looking for a place to live in Silicon Valley in 2004. So, he built HousingMaps.com, a mashup of the listings from CraigsList.com and Google Maps. This mashup allows users to bring up a map of the area in which they are interested (say five square blocks in a particular neighborhood). Then, pushpin icons will appear representing the properties available for rent in that area. Clicking on a HousingMaps. com pushpin brings up a bubble with the rental listing data including rooms, price, location, photos, and a link to the actual listing.

What is amazing about HousingMaps.com is it offers a new and unique information source that is richer, and more useful, than either Craigslist or Google Maps alone. What makes this possible is Google's choice to make its maps application interface open for anyone to use and Craigslist's similar choice to make its data available in an open and structured format.

These decisions to support openness and useful data formats allowed for an innovation that neither company could have predicted would emerge.

Mashups built on open interfaces and structured data represent a great potential fount of information about the workings of government. Mashups produce varied and unexpected outcomes that could make government activities more transparent, and reveal patterns currently hidden in murky mountains of unstructured data. To get a sense of what is possible, we can take a look at a leading transparency mashup called MAPLight.org.

The MAP in MAPLight.org stands for "money and politics," and the site's mission is to illuminate the connection between the two. Founded by computer expert Dan Newman, the site mashes together congressional voting data with campaign finance information. The result is a searchable database that highlights the connections between campaign contributions and how members of Congress vote. Using the MAPLight database, users can look up a particular bill and see the interest groups, as well as the individuals and corporations, who support and oppose it. MAPLight also allows users to look up individual members of Congress in order to see how they voted on a particular bill and to see how much money they received from groups supporting and opposing the bill. This is a new window into congressional actions that legislators did not previously need to consider. Such a mashup would not be possible without the structured data government often fails to provide and is being made accessible by third-party "hacks" from non-profit groups such as GovTrack.us and OpenSecrets.org.

Another mashup aimed at increasing government transparency is OpenCongress.org. Among other things, this site takes bill and vote data from GovTrack.us and mashes it with data feeds from blogs and mainstream news sources so that one can pull up a page for a bill or a legislator and see news stories and blog posts that mention the bill and/or legislator.

## RECOMMENDATIONS

The foundation on which Internet technologies can help improve transparency is the idea, to the greatest extent feasible, government data should be made public. The next building block is the idea information should not just be made available online, but online resources must also be useful. This means putting data online in structured, open, and searchable formats.

Structured means the data is presented in a machine-readable format that makes it easy for individuals to subscribe to discrete data feeds and for others to use the data in their own cre-ations-that is, as the source data for a community site such as WashingtonWatch.com or mashups like MAPLight.org.


Open means that the digital formats chosen should be nonproprietary and widely accepted. Open formats are often created and maintained by independent standards organizations and are free of copyright restrictions on their use. For example, MP3 is an open audio file format, while RealMedia and Apple QuickTime are proprietary.

## CONCLUSION

To hold government accountable for its actions, citizens must know what those actions are. To that end, they must insist government act openly and transparently to the greatest extent possible. In the twenty-first century, this entails making its data available online and easy to access. If government data is made available online in useful and flexible formats, citizens will be able to utilize modern Internet tools to shed light on government activities. Such tools include mashups, which highlight hidden connections between different data sets.

Today, however, the state of government's online offerings is very sad. Some nominally publicly available information is not online at all, and the data that is online is often not in useful formats. Government should release public information online in a structured, open, and searchable manner. To the extent that government does not modernize, however, we should hope that private third parties build unofficial databases and make these available in a useful form to the public.

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## mercatus ON POLICY

## ENDING TRANSLUCENT GOVERNMENT: <br> Puting Government Data Online

By Jerry Brito

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The federal government makes an overwhelming amount of data publicly available each year. Laws ranging from the Administrative Procedure Act to the Paperwork Reduction Act require these disclosures in the name of transparency and accountability. However, the data is often only nominally available to the public. First, much government data is not available online or even in electronic format. Second, the data that can be found online is often not available in an easily accessible or searchable format. If the government made information public online in standard open formats, the millions of Americans online could help ensure the transparency and accountability that is the reason for making information public in the first place.

## THE HISTORY OF PUBLICLY AVAILABLE GOVERNMENT INFORMATION

Laws encouraging government transparency and accountability have been a feature of the American system of government since the founding of the Republic. The Constitution, for example, requires that each house of Congress "keep a Journal of its Proceedings, and from time to time publish the same, excepting such Parts as may in their Judgment require Secrecy." ${ }^{n / 2}$ Today, the Congressional Record satisfies this requirement.

Recent years have seen a renewed effort to increase government transparency in the United States. In the wake of the Jack Abramoff, Duke Cunningham, and William Jefferson scandals, Congress has moved again to shed light on its own activities. ${ }^{3}$ In 2006, Senators Barack Obama and Tom Coburn introduced legislation requiring the full disclosure of all organizations receiving federal funds through an online database to
be operated by the Office of Management and Budget (OMB). ${ }^{4}$ The result was the Federal Funding Accountability and Transparency Act of 2006. ${ }^{5}$ Additionally, House Democrats, led by Speaker Nancy Pelosi, pledged that after the 2006 congressional elections they would enact legislation to "restore accountability, honesty, and openness at all levels of government."。 The result was the Honest Leadership and Open Government Act of 2007 , which requires that information about earmarks be published on a public, searchable website 48 hours before a vote can be taken on the bill containing the earmarks. ${ }^{7}$

> There are no other official
> means of searching the databases, something that presents a major barrier to widespread dissemination of nominally publicly available information.

## PUBLIC GOVERNMENT DATA IS OFTEN NOT ONLINE

Unfortunately, many of the statutory requirements for disclosure do not take Internet technology into account. For example, the 1978 Ethics in Government Act requires the disclosure of financial information-including the source, type, and amount of income-by many federal employees, elected officials, and candidates for office, including the president and vice president, and members of Congress. ${ }^{3}$ The Act further requires that all flings be available to the public, subject to certain limited exceptions. ${ }^{9}$ You might imagine, then, that every representative's or senator's information would be just a web search away, but you would be wrong.

The House and Senate maintain searchable electronic databases of its members' filings. ${ }^{10}$ However, to access these databases, citizens must go to Washington, D.C., and visit Capitol Hill records offices during business hours. ${ }^{11}$ There are no other official means of searching the databases, something that presents a major barrier to widespread dissemination of nominally publicly available information.

## NOT EVEN GOOGLE CAN HELP: THE DIFFICULTIES OF USING ONLINE PUBLIC GOVERNMENT DATA

EvEN WHEN PUBLIC information is available online, it is often not available in an easily accessible form. If data is difficult to search for and find, the effect might be the same as if it were
not online. Additionally, for users to exploit the full potential of the Internet-subscribing to data streams and mixing and matching data sources-data must be presented in a structured machine-readable format.

For example, the Federal Communications Commission (FCC) is an independent government agency with an active regulatory agenda that it manages via its online docket system. ${ }^{12}$ In theory, users of the FCC website can see active rulemakings, search for and read FCC documents and comments filed by interested parties, and file their own comments. In practice, the site seems to be an exercise in obscurantism.

To obtain a listing of documents in a given docket, you must know the docket's number and search using that number. ${ }^{13}$ There is no way of searching within dockets for specific keywords. This is fine for an industry lobbyist with expertise and resources, but a mom in California wanting to look up comments filed in an inquiry into children's television would have a difficult time finding the information. Moreover, even if one could run a keyword search, many documents are posted as image files. ${ }^{14}$ Computers cannot easily parse these files, so a keyword search would not return any information from these files. Not even Google can help: the FCC blocks the search engine from its document repository. ${ }^{15}$

## THE PROMISE OF STRUCTURED DATA

Most government sites do not offer access to their data in a structured format. What does this mean? The most common form of subscribable structured data is an RSS feed. RSS stands for "really simple syndication" and usually refers to a family of data formats that allow the automation and aggregation of data. ${ }^{16}$ For example, the New York Times offers an RSS feed for its homepage. A user can subscribe to these feeds with an application called a "feed reader." Any time something is added to the home page of the newspaper, it is simultaneously published in that newspaper's RSS feed. When a subscriber turns on his feed reader, it checks all the subscribed feeds for new items and then displays them. So, with one simple feed reader application, a user can keep track of dozens or hundreds of feeds without having to regularly visit the websites of the publishers.

Imagine being able to subscribe to feeds from official government websites. If you were subscribed to the FCC's RSS feed and the FCC added a new regulation, your reader would alert you automatically. ${ }^{17}$ But the RSS feed could be even more useful. Just as the New York Times publishes a feed for its automotive section so those readers interested only in cars don't have to wade through the rest of the paper, so the FCC could publish a feed for each of its bureaus. People interested in just wireless spectrum regulations or cable regulations could subscribe to those feeds only and not worry about indecency enforcement or homeland security issues.

Once users are aware of regulations they would like to track, why should they not be able to subscribe to those regulations? A government website should allow users to subscribe to regulatory dockets and be notified of all official actions and public interest comments filed in a particular docket.

The New York Times also offers a series of "Times Topics" web pages and companion RSS feeds. These range from persons (Rupert Murdoch, Hillary Clinton) to countries (Sudan, Colombia) to organizations, general subjects, and issues (New York Yankees, Supreme Court, cancer). If you were to subscribe to the RSS feed for one of these keywords, your feed reader would display all articles published anywhere in the pages of the Times that relate to that keyword. Imagine if such keyword subscriptions were available from regulatory agencies. The EPA, for example, could offer topic subscriptions such as "pesticides," "Superfund," or "Vermont," making it easier for citizens to engage in the topics that matter to them.

Finally, even if the government cannot predict every possibly useful topic, readily available technology today allows for RSS subscriptions to keyword searches. Google News, for example, allows users to make a regular web searches and then to subscribe to the results. Each time a new item using the search terms appears anywhere on the web, Google alerts the subscribers.

## CONCLUSION

The first building block of a foundation on which Internet technologies can help improve transparency is the idea that government should make its data public to the greatest extent feasible. While technically government makes data available to the public, practically speaking the data is out of reach. Government needs to make data publicly available in a meaningful sense, which in this day and age means it needs to put that data online.

There is no excuse for not making data available online. Almost all data today is created electronically using word processors and other computer applications. Because documents enter the world digitally, the initial step of online publication (i.e., digital formatting) is complete. The next steps-including designing and implementing useful websites to host the data-should be a minimal cost since most agencies already have online presences. The rest of the world knows that the electronic dissemination of data presents efficiencies and savings over paper. Government should know it too.

The second building block needed for a solid foundation of government data is the idea that information should not just be made available online, but that online resources must also be useful. This means putting data online in structured, open, and searchable formats.

For the good of the country, citizens should encourage the federal government to release public information online in a structured, open, and searchable manner. If the government would make data available online in useful and flexible formats, citizens would be able to use modern Internet tools to perform their duty to hold government accountable for its action. In turn, the government would begin to fulfill its responsibility of acting as openly and transparently as possible.

A government website should allow users to subscribe to regulatory dockets and be notified of all official actions and public interest comments filed in a particular docket.

## FOOTNOTES

1. Administrative Procedure Act $\S \S 3-4,5$ U.S.C. $\S \S 552-53$ (2006); Paperwork Reduction Act, 44 U.S.C. $\S \S 3501-3520$ (2000 \& Supp. IV 2004).
2. U.S. Constitution, Article I, §5, cl. 3.
3. See generally Susan Schmidt \& James V. Grimaldi, "Abramoff Pleads Guilty to 3 Counts," Washington Post, Jan. 4, 2006, A1; Charles R. Babcock \& Jonathan Weisman, "Congressman Admits Taking Bribes, Resigns," Washington Post, Nov. 29, 2005, A1; Jerry Markon \& Allan Lenget, "Lawmaker Indicted on Corruption Charges," Washington Post, June 5, 2007, A1.
4. Press Release, Sen. Barack Obama (D-III.), U.S. Senate, "Obama, Coburn Introduce Bill Requiring Public Disclosure of All Recipients of Federal Funding" (Apr. 7. 2006), http://obama.senate.gov/ press/060407-coburn_introduc/.
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6. Office of the House Democratic Leader Nancy Pelosi, 109th Congress, A New Direction for America 21 (2006), http://www.speaker.gov/ pdf/thebook.pdf.
7. Honest Leadership and Open Government Act of 2007, Pub. L. No. 110-28, § 521, 121 Stat. 735, 760-64.
8. Ethics in Government Act of 1978 §§ 101-02, 5 U.S.C. app. 4 §§ 10102 (2006).
9. 5 U.S.C. app. 4 § 105 (2006).
10. The Open House Project, Sunlight Found, Congressional Information \& the Internet: A Collaborative Examination of the House of Representatives and Internet Technology 45 (2007) [hereinafter Open House Report], http://www.theopenhouseproject.com/report/openhouseproject_may8_07.pdf.
11. Ibid; see also Rob Bluey, "Why Aren't These Documents Available Online?" The Open House Project, Mar. 7, 2007, http://www.theo-penhouseproject.com/2007/03/07/why-arent-these-documents-
available-online (describing the process of accessing documents at the House Legislative Resource Center).
12. Federal Communications Commission, FCC Electronic Comment Filing System, http://www.fcc.gov/cgb/ecfs (last visited Oct. 10, 2007).
13. Federal Communications Commission, Electronic Comment Filing System [Enter Search Criteria], http://fjallfoss.fcc.gov/prod/ecfs/ comsrch_v2.cgi (last visited Oct. 10, 2007). A note at the bottom of this page states that it was last updated on Dec. 11, 2003. Id.
14. One of the main document types used by the FCC is Portable Document Format (PDF). PDFs can contain digital text that is subject to search (usually created by saving as a PDF document from a word processing application) or images of text that cannot be searched (usually created by simply scanning a printed document). See Adobe Systems Inc., Adobe Reader 7.0 for Windows and Macintosh 166 (2004), available at http://www.adobe.com/products/acrobat/pdfs/ acrruserguide.pdf ("PDF documents that are created by scanning a printed page are inherently inaccessible because the document is an image, not text that can be tagged into a logical document structure or reading order."). The Department of Justice (DOI) has taken note of this problem as it relates to the accessibility of websites for disabled users who rely on devices that depend on machine-readable text. In a 2004 report, the DOI stated:

A more significant problem involves agencies' use of inaccessible content on their sites. An agency may create a Web page that is easily navigated by people using a text-only browser but then include downloadable files that are inherently inaccessible. This problem occurs most frequently with two types of file content used by many components-files rendered by scanning to Adobe Acrobat's portable document format (pdf) and multimedia files.

Department of Justice, Section 508 of the Rehabilitation Act: Accessibility for People with Disabilities in the Information Age, http://www. usdoj.gov/crt/508/report/web.htm (last visited Oct. 10, 2007)
15. Declan McCullagh, "Feds use robots.txt files to stay invisible online. Lame." C-Net News.com (Aug, 24, 2007), ahttp://www.news. com/8301-13578_3-9765451-38.html.
16. Mark Pilgrim, "What is RSS?", O'Reilly XML.com (Dec. 18, 2002), http://www.xml.com/pub/a/2002/12/18/dive-into-xml.html.
17. There are scattered uses of RSS in government. The SEC for example provides RSS feeds for financial disclosure data that firms voluntarily submit in a structured format. See SEC XBRL RSS Feed Files, http:// www.sec.gov/info/edgar/ednews/xbrirss.htm (last visited Oct. 10. 2007). The Copyright Office uses RSS extensively for its publications, including its Federal Register notices. See Copyright Office Federal Register Notices, http://www.copyright.gov/fedreg (last visited Oct. 10, 2007).

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"... a wise and frugal government, which shall restrain men from injuring one another, shall leave them otherwise free to regulate their own pursuits of industry and improvement, and shall not take from the mouth of labor the bread it has earned. This is the sum of good government, and this is necessary to close the circle of our felicities."

Thomas Jefferson

1801

