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# **State and Federal E-Government in the United States, 2007**

by

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## Executive Summary

This report presents the seventh annual update on the features that are available online through American state and federal government websites. Using a detailed analysis of 1,548 state and federal government sites, we measure what is online, what variations exist across the country, and what differences appear between state and national government. We compare the 2007 results to 2000, 2001, 2002, 2003, 2004, 2005, and 2006.

*Among the more important findings of the research are the following:*

- 1) *Fifty-four percent of federal sites and 46 percent of state sites meet the World Wide Web Consortium (W3C) disability guidelines.*
- 2) *Eighty-six percent of state and federal sites have services that are fully executable online, compared to 77 percent last year.*
- 3) *One percent of government sites are accessible through personal digital assistants, pagers, or mobile phones, the same as last year.*
- 4) *Seventy-three percent have some form of privacy policy on their site, and 52 percent have a visible security policy.*
- 5) *Twenty-two percent of sites offered some type of foreign language translation, down from 30 percent last year.*
- 7) *Fifty-six percent of government websites are written at the 12th grade reading level, which is much higher than that of the average American.*
- 8) *Seventeen percent of sites have user fees, up from 12 percent the past year.*
- 9) *The highest ranking states include Delaware, Michigan, Maine, Kentucky, Tennessee, Massachusetts, Maryland, Texas, New Jersey, and Utah*
- 10) *The top ranking federal sites are the national portal USA.gov, Department of Agriculture, Postal Service, Social Security Administration, Securities and Exchange Commission, Department of Commerce, Federal Communications Commission, Federal Deposit Insurance Corporation, Department of Education, and the Internal Revenue Service*

## A Note on Methodology

This project is based on a comprehensive analysis of 1,548 government websites (1,487 state government websites, 48 federal government legislative and executive sites, and 13 federal court sites). The list of web addresses for the 50 states can be found at [www.OutsidePolitics.org/states.html](http://www.OutsidePolitics.org/states.html), while the federal government sites are located through the national portal, USA.gov.

Among the sites analyzed are portal or gateway sites as well as those developed by court offices, legislatures, elected officials, major departments, and state and federal agencies serving crucial functions of government, such as health, human services, taxation, education, corrections, economic development, administration, natural resources, transportation, elections, and agriculture. An average of 30 websites is studied for each individual state so we could get a full picture of what is available to the general public, plus all the major federal government sites. Tabulation for this project was completed at Brown University in Providence, Rhode Island by Laura Evans and Jeffrey Bayne during June and July, 2007.

Websites are evaluated for the presence of a number of different features, such as online publications, online databases, audio clips, video clips, foreign language or language translation, advertisements, premium fees, user payments or fees, disability access, several measures of privacy policy, multiple indicators of security policy, presence of online services, the number of online services, digital signatures, credit card payments, email addresses, comment forms, automatic email updates, website personalization, PDA accessibility, and readability level.

## Online Information

In looking at the availability of basic information at American government websites, we find that access to publications and databases is excellent. Ninety-eight percent of sites provide access to publications (the same as last year), while 84 percent have databases, compared to 82 percent in 2006).

A growing number of websites are incorporating audio clips or video clips into their sites. Twenty-four percent provide audio clips (up from 10 percent in 2006), while 35 percent have video clips (up from 28 percent).

### *Percentage of Websites Offering Publications and Databases*

	2000	2001	2002	2003	2004	2005	2006	2007
<i>Phone Contact Info.</i>	91%	94%	96%	--	--	--	--	--
<i>Address Info</i>	88	93	95	--	--	--	--	--
<i>Links to Other Sites</i>	80	69	71	--	--	--	--	--
<i>Publications</i>	74	93	93	98	98	98	98	98
<i>Databases</i>	42	54	57	80	87	67	82	84
<i>Audio Clips</i>	5	6	6	8	17	12	10	24
<i>Video Clips</i>	4	9	8	10	21	18	28	35

## Electronic Services

Fully executable online service delivery benefits both government and its constituents. In the long run, such services offer the potential for lower cost of service delivery and make them more widely accessible to the general public, who no longer have to visit, write, or call an agency in order to execute a specific service.

Of the web sites examined this year, 86 percent offer services that are fully executable online, up from 77 percent last year. Of the sites this year, 14 percent have no services, 15 percent offer one service, 13 percent have two services, and 58 percent have three or more services. Clearly, both state and federal governments are making significant progress at placing fully executable services online. Of the government websites analyzed, 38 percent accept credit cards, and 1 percent allow for digital signatures.

### *Percentage of Government Sites Offering Online Services*

	2000	2001	2002	2003	2004	2005	2006	2007
<i>No Services</i>	78%	75%	77%	56%	44%	27%	23%	14%
<i>One Service</i>	16	15	12	15	18	11	16	15
<i>Two Services</i>	3	4	4	8	11	8	12	13
<i>Three or More Services</i>	2	6	7	21	27	54	49	58

The on-line services that are the most common are the following: **Economic Development/Business Regulation sites:** business registration, business/professional license renewal; **Secretary of State sites:** Missing and Unclaimed Property search and locator, search for registered businesses/names/practitioners/trademarks; **Department of Motor Vehicles sites:** license plate renewal, drivers' license/ID card renewal, online practice driving tests, vanity plates (look up availability/reserve/order); **Corrections:** inmate information search, sex offender database search; **Game, Fish & Wildlife sites:** hunting/fishing/boat license purchase/renewal, campground reservations; **Tax and Revenue sites:** filing and paying taxes; **Attorney General sites:** locating information on sex offenders and missing persons, "National Do Not Call List"

registration, searchable AG opinions database; **Transportation sites:** traffic cameras and weather conditions (511 Travel Info); **Health sites:** vital records search/purchase; **Housing sites:** available property search; **Governor sites:** request for an appearance by the Governor/Lieutenant Governor/First Lady; **Consumer Protection sites:** online complaint forms; **Tourism sites:** online vacation planner and itinerary; **Labor/Employment sites:** statewide job search, apply for a job; **Legislature sites:** bill and legislation search, live broadcasts of Legislative sessions; **Natural Resources sites:** interactive and detailed maps/Geographic Information System (GIS), air quality updates; and **Judicial sites:** search current and archived case information. RSS feeds and free subscriptions to receive newsletters and updates via email.

## Novel Services

Other services were unique to a few sites. **North Dakota, South Dakota, Tennessee, Nebraska, Montana, and Minnesota:** “Meth” Watch and Registry; **Wyoming and New Hampshire:** searchable database for the Next of Kin Registry; **North Dakota and South Dakota:** register for the ability to hold video conferences; **Virginia and Vermont:** online donations to troops, charities, and relief organizations; **Arizona:** free public access to court information and conviction history, though certain types of cases are excluded; **New York and New Jersey:** through the Privacy Policy links, users can request any site information that is public record; **California:** streaming video of CA highways from over 100 cameras; **New Mexico and South Carolina:** offer the option to receive AMBER alerts via a wireless device; **Virginia:** flag status updates and dangerous dog registry; **Colorado:** request an animal cruelty investigation through department of agriculture site; **Mississippi, Delaware and Missouri:** detailed self-screening questionnaires to determine eligibility for human services programs like Food Stamps, Medicaid, and Medicare; **Georgia:** search for lowest gas prices in the state; **Louisiana:** Secretary of State has multimedia archive with television programs, oral histories and political resources; **Massachusetts:** shows the waiting times at motor vehicle branches; **Michigan:** online form to report potholes; **Nebraska:** interactive weather and meteorological maps and graphs to monitor corn growth and production; **Oregon:** provides a similar formatted questionnaire to direct users to appropriate resources; **Texas:** free safety materials and videos to order; **Missouri:** report a pothole or damaged traffic/street sign; **North Dakota:** allows users to change the appearance theme of the portal page (summer, winter, Veterans’ Day, etc.); **South Carolina:** provides Legislative broadcasts with closed captioning; **Utah:** users can customize their RSS feeds for bill tracking and committee activity. Other novelty services include: **Mississippi:** site language translation; **Vermont, Rhode Island, New Jersey, Oregon, and Tennessee:** on-line live help/chat with a professional; **Oklahoma and New Mexico:** food recall searches.

## Privacy and Security

A growing number of sites offer privacy and security statements. In 2007, 73 percent have some form of privacy policy on their site, up from 71 percent in 2006. Fifty-two percent now have a visible security policy, down from 63 percent last year.

	2000	2001	2002	2003	2004	2005	2006	2007
Privacy Policies	7%	28%	43%	54%	63%	69%	71%	73%
Security Policies	5	18	34	37	46	54	63	52

In order to assess particular aspects of privacy and security, we evaluate the content of these publicly posted statements. For privacy policies, we look at several features: whether the privacy statement prohibits commercial marketing of visitor information; use of permanent

cookies or individual profiles of visitors; disclosure of personal information without the prior consent of the visitor, or disclosure of visitor information with law enforcement agents.

In this analysis, we found that 64 percent of government websites prohibited the commercial marketing of visitor information. Thirty-two percent prohibited the use of cookies or individual profiles. Thirty-seven percent say they do not share personal information, and 50 percent indicate they can disclose visitor information to law enforcement agents. Sixty-five percent indicate they use computer software to monitor website traffic.

### Assessment of E-government Privacy and Security Statements

	2001	2002	2003	2004	2005	2006	2007
Prohibit Commercial Marketing	12%	39%	32%	40%	64%	58%	64%
Prohibit Cookies	10	6	10	16	21	16	32
Prohibit Sharing Personal Information	13	36	31	36	65	54	37
Share Information with Law Enforcement	--	35	35	39	62	49	50
Use Computer Software to Monitor Traffic	8	37	24	28	46	60	65

### Readability

Literacy is the ability to read and understand written information. According to national statistics, about half of the American population reads at the eighth grade level or lower. A number of writers have evaluated text from health warning labels to government documents to see if they are written at a level that can be understood by citizens. The fear, of course, is that too many government documents and information sources are written at too high of a level for citizens to comprehend.

To see how government websites fare, we use a test of the grade-level readability of the front page of each state and federal government website that we studied. Our procedure is to employ the Flesch-Kincaid standard to judge each site's readability level. The Flesch-Kincaid test is a standard reading tool evaluator and is the one used by the United States Department of Defense. It is computed by dividing the average sentence length (number of words divided by number of sentences) by the average number of syllables per word (number of syllables divided by the number of words).

As shown below, the average grade readability level of American state and federal websites is at the 11.6th grade, up from the 10.8th grade last year. Both numbers are well above the comprehension of the typical American. Fifty-six percent of sites read at the 12th grade level, down from 64 percent last year. Only 18 percent fell at the eighth grade level or below, which is the reading level of half the American public, compared to 14 percent last year.

	Percentage Falling within Each Grade Level
Fourth Grade or Less	6%
Fifth Grade	1
Sixth Grade	2
Seventh Grade	4
Eighth Grade	5
Ninth Grade	7
Tenth Grade	8
Eleventh Grade	11
Twelve Grade	56
Mean Grade Level	11.6 years

## Disability Access

There has been some progress in disability access on government websites. We tested accessibility using automated software provided by Watchfire, Inc. Its accessibility module scans online properties for over 170 comprehensive checks such as appropriate text and background color contrast and the presence of text equivalent “alt” tags on images. The scan results automatically formulate user-friendly dashboards and reports, affording visibility into the issues that may be affecting the accessibility of the site and driving potential users away.

In our analysis, we used this software to judge whether sites are in compliance with the Priority Level One standards recommended by the World Wide Web Consortium (W3C). Sites are judged to be either in compliance or not in compliance based on the results of this test. In this year's study, 46 percent of state sites (up from 43 percent) satisfy the W3C standard of accessibility. Fifty-four percent of federal sites meet the W3C standard, the same as last year.

Percentage of State and Federal Sites Meeting W3C Disability Accessibility					
	2003	2004	2005	2006	2007
Federal	47%	42%	44%	54%	54%
State	33	37	40	43	46

## Foreign Language Access

This year, 22 percent of government sites provided foreign language accessibility. This is down from 30 percent last year. By foreign language feature, we mean any accommodation to the non-English speaker, from a text translation into a different language to translating software available for free on the site to translate pages into a language other than English.

	2000	2001	2002	2003	2004	2005	2006	2007
Foreign Language Access	4%	6%	7%	13%	21%	18%	30%	22%

## Ads, User Fees, and Premium Fees

One percent of sites have commercial advertisements on their sites, meaning non-governmental corporate and group sponsorships, compared to one percent last year. When defining an advertisement, we eliminate computer software available for free download (such as Adobe Acrobat Reader, Netscape Navigator, and Microsoft Internet Explorer) since they are necessary for viewing or accessing particular products or publications. Links to commercial products or services available for a fee are included as advertisements as are banner, pop-up, and fly-by advertisements.

The following states had websites that contained advertisements: **Arkansas, Idaho, Colorado, Louisiana, Nebraska, New Hampshire, North Carolina, Pennsylvania, Utah, Virginia, Washington, West Virginia, and Wisconsin.** **Pennsylvania and Wisconsin Treasury:** sites had an ad for eBay; **West Virginia Tax & Revenue:** had several tax company ads--TurboTax, Tax Slayer, and Tax Engine; **Arkansas Economic Development and Idaho Veterans Services:** sites had an ad for the weather channel/weather.com that showed the forecast in the state capital; **West Virginia Tourism:** had a small Toyota ad; **Washington Tourism:** contained an advertisement for Kenmore Air; **Nebraska Tourism:** common site ads were Marriott, Holiday Inn, and Days Inn for North Carolina and Holiday Inn, Fairfield Inn, Super 8 Motel, Best Western, Days Inn, and Kool Aid; **Colorado Tourism:** contained ads for Telluride

Ski Resort, Keystone Resort, Marriot, Rock Resorts, The Curtis, Montaneros and The Charter at Beaver Creek; **Louisiana Tourism**: had ads for Best Western, Hampton Inns and Hilton Family Hotels; **New Hampshire Economic Development**: website displayed advertisements for Citizen's Bank and New England Dragway.

*Percentage of Sites with Ads, User Fees, and Premium Fees*

	2001	2002	2003	2004	2005	2006	2007
Ads	2%	2%	1%	9%	3%	1%	1%
User Fees	2	2	3	19	2	12	17
Premium Fees	--	1	0.4	4	0	4	8

Seventeen percent of state and federal sites require user fees to access information and services, up from 12 percent last year. Among the examples include: **Pennsylvania online tax filing**: 2.49% of total; **Texas tax filing**: between \$1.00 and \$5.00, depending on the amount, or 2.155% for amounts over \$500; **Washington license**: \$9.00 processing fee for Corporation or Limited Liability Company (LLC) renewal; **Tennessee licenses**: a \$2.00 user fee in order to renew professional or business licenses, the same amount applies for renewal of a **Rhode Island Real Estate Broker or Travel Agency license**; **Rhode Island business**: charges \$1.00 for subscribers and \$2.00 for non-subscribers, per label for renewal; **Mississippi Secretary of State**: the user fee for Uniform Commercial Code (UCC) filing ranges from \$1.00-\$4.00, depending on the type of filing.

Birth, Death, Marriage, and Divorce certificates can be ordered through VitalChek Inc. on most state Health websites; however, the user fees are often the highest. **Oregon health**: \$12.50 user fee to obtain vital records online; **Pennsylvania**: charges \$8.00; **Louisiana** \$12.95; **Colorado** \$9; and **Utah**: \$10.00. Other user fees arise through the Natural Resources and Game and Wildlife sites for hunting/fishing licenses, vehicle registration renewal, and campsite reservation. **Wisconsin Natural Resources**: charges ranging from \$1.00 to \$3.00 for hunting license user fee, depending on type; **Texas**: has a \$5.00 fee; **South Carolina**: \$3.00; and **New Hampshire**: charges a 2.75% credit card fee; **Rhode Island**: boat renewal fees range between \$1.00 and \$12.00, depending on the size of the craft; **Minnesota natural resources**: has an \$8.50 campsite reservation fee, \$3.50 snowmobile registration renewal fee, and a \$6.00-\$8.50 fee for water crafts.

Other miscellaneous user fees were: **Alabama**: 4% fee to pay traffic tickets or district criminal case fines; **Illinois Department of Employment Security**: 2.5% fee for businesses making unemployment insurance payments; **Florida**: 3.2% fee (\$3.50 minimum) for child support payments; **Kentucky**: \$2 for driving history record; **Mississippi's Public Safety**: \$2.37 for driver's license renewal; **Indiana Natural Resources**: a fee of \$1 and another of \$1.64 to renew license for snowmobile or ATV; **New Jersey Judiciary**: \$1.00-\$4.00 fee to pay traffic tickets; **Wisconsin DMV**: \$1.00 fee for renewing a license plate; **Colorado Motor Vehicles Division**: 2.25% plus \$.75 per transaction to renew drives license by credit card and \$1 per transaction to do so by eCheck; and **Wisconsin Environment**: 4.75% surcharge to make a donation to an environmental organization.

Eight percent of government websites require premium fees to access portions of the e-government site. By a premium fee, we mean financial charges that are required to access particular areas on the website, such as business services, access to databases, or viewing up-to-the-minute legislation. A charge is classified as a premium fee if a payment is required in order to enter a general area of the website or access a set of premium services.

Websites users tend to encounter premium fees when looking to view specific government data, especially reports, case findings, and legislation. **Rhode Island portal**: has a premium fee of \$75.00/year for up to 10 user names and passwords to subscribe to RI.gov. People who are subscribers then can renew DBR Liquor Transport Certifications, apply for new



labels, and have access to the interactive Drivers' License Records Search through the DMV; **Nebraska and Montana portals:** have offer similar services, with premium fees of \$50.00/ year and \$75.00/year (up from last year's \$50 annual fee), respectively. With Nebraska's online subscription, users can order Certificates of Good Standing for \$10.00, search for titles and liens, search Drivers' Records, and have access to judicial cases and reports that are otherwise unattainable; **Arkansas Indiana and Kentucky portals:** have premium fees of \$75, \$50 and \$75 respectively for various database bulk downloads; **Idaho portal:** Access Idaho as a premium fee of \$75/year for access to UCC searches, drivers license record searches and motor vehicle record searches; **Kansas portal:** offers access to motor vehicle records and motor vehicle carrier vehicle records, as well as all Kansas.gov services, for \$75 for the first year and \$60/year after that; **Hawaii portal:** has subscription services for \$75/year that lets citizens pay for online services monthly instead of individually; **Hawaii Adult Crime Information:** a \$1 credit card fee (to verify identity) give citizens access to conviction information searches; **Florida portal:** \$120/year gives subscribers unlimited access to MyFloridaCounty.com services and discounts compared to non-subscribers; **Maine portal:** premium fee of \$75/year is needed for a number of services such as driver's license searches, title records, interactive corporate services, public criminal records and UCC searches; **Maryland portal:** *MdProperty View* and *Finder* require a subscription, but one must request information on how to subscribe be mailed to them; **Montana Historical Society:** also has a membership fee of \$45.00/year, which allows subscribers to access the latest information via the Historical Society magazine and receive discounts on Historical Society merchandise; **Utah portal:** Utah.gov subscription fee is \$75/year, up from last year's \$60 annual fee; **Oregon Judiciary:** Oregon Judicial Information Network (OJIN) is \$295.00 set-up fee and \$10.00/month for each User ID, other fees are based on the types of searches conducted. Users can access Oregon cases on-line that otherwise have restricted access; **Alabama Judiciary:** \$200/year for appellate opinions; **Massachusetts Operational Services Division:** citizens can use SMARTBID to track their online bids and notify them of all new bids for \$275/year.

## Public Outreach

One of the most promising aspects of e-government is its ability to bring citizens closer to their governments. In our examination of state and federal government websites, we determine whether a visitor to the website can email a person in the particular department other than the webmaster. In 2007, we found that 89 percent have email addresses. Other methods that government websites employ to facilitate democratic conversation include areas to post comments (other than through email), the use of message boards, surveys, and chat rooms. This year, we found that 44 percent of websites offer this feature.

	2000	2001	2002	2003	2004	2005	2006	2007
<i>Email</i>	68%	84%	81%	91%	93%	92%	92%	89%
<i>Search</i>	48	52	43	--	--	--	--	--
<i>Comments</i>	15	5	10	24	29	28	46	44
<i>Email Updates</i>	5	9	5	12	24	21	31	39
<i>Broadcast</i>	2	7	4	--	--	--	--	--
<i>Personalization</i>	0	1	2	2	3	3	6	10
<i>PDA Access</i>	--	--	--	1	1	1	1	1

Thirty-nine percent of government websites allow citizens to register to receive updates regarding specific issues. With this feature, web visitors can input their email address, street

address, or telephone number to receive information about a particular subject as new information becomes available. The information can be in the form of a monthly e-newsletter highlighting an attorney general's recent opinions to alerts notifying citizens whenever a particular portion of the website is updated. Ten percent of sites allow for personalization of the site in order to tailor the website information directly to the individual viewer, and one percent provide PDA access.

### **State E-Government Ranking**

In order to see how the 50 states rank overall, we created a 0 to 100 point e-government index for each website within that state. Four points are awarded each website for the following features: publications, databases, audio clips, video clips, foreign language access, not having ads, not having user fees, not having premium fees, W3C disability access, having privacy policies, security policies, allowing digital signatures on transactions, an option to pay via credit cards, email contact information, areas to post comments, option for email updates, allowing for personalization of the website, and PDA or handheld device accessibility. These features provide a maximum of 72 points for particular websites.

Each site then qualifies for up to 28 additional points based on the number of online services executable on that site (zero for no services, one point for one service, two points for two services, three points for three services, four points for four services, and so on up to a maximum of 28 points for 28 services or more). The e-government index therefore runs along a scale from zero (having none of these features and no online services) to 100 (having all 18 features plus at least 28 online services). This total for each website is averaged across all of the state's web sites to produce a zero to 100 overall rating for that state. On average, we assess around 30 government websites in each state across the executive, legislative, and judicial branches of government.

The top state in our ranking is Delaware with a 65.6 percent ranking. It is followed by Michigan, Maine, Kentucky, Tennessee, Massachusetts, Maryland, Texas, New Jersey, and Utah (see Appendix A-1 for full listing).

### **Federal Agency E-Government Ranking**

Federal sites are rated by the same criteria as the 50 states. An identical e-government index is devised that rated federal websites on contact information, publications, databases, portals, and number of online services (see previous section). The unit of analysis is the individual federal agency.

The top e-government performers are the national portal USA.gov, followed by the Department of Agriculture, Postal Service, Social Security Administration, Securities and Exchange Commission, Department of Commerce, Federal Communications Commission, Federal Deposit Insurance Corporation, Department of Education, and the Internal Revenue Service (see Appendix A-2 for full listing).

### **Conclusions**

Considerable progress has been made in placing services and information online but many websites are poorly organized, especially their portal pages, making it difficult to navigate to a centralized list of on-line services or government departments and agencies. Mississippi's portal page is an example of a well-organized site with a centralized section for links and resources; it has divided links into four categories: Forms and Application (cannot be completed online), useful Information, E-transactions (full on-line services), and Secured Access (services that require users to have a user ID, and password). Other times, the portal pages are great, along with the Governor and the executive agencies that comprise the Governor's cabinet, however the

outlying sites, like the Ethics Commission, Elections, or Consumer Protection, do not receive the same attention and suffer structurally and from a dearth of information.

Similarly, portal sites that do not have an A-Z list, sites that have one that's hard to access, and sites that alphabetize their A-Z strictly and literally (i.e. if users were searching for New Jersey Department of Health it might be found under N, instead of H) are frustrating to navigate and make information and resources hard to find.

Some sites require that you become a member with a username and password, not necessarily attached with a subscription fee. The issue with this system is that often times they did not provide all the information needed upfront, costs, convenience fees, privacy, etc. until you logged in as a member, which sometimes made it difficult to fairly determine if there were user fees associated with particular services or if credit cards were accepted.

Many sites were poorly formatted so that if they did not themselves offer an option for larger text size for the visually impaired, attempts to manually adjust the size made the site format illegible. Others do not provide a link back to the state's main portal page and seem disconnected and unaffiliated with the official state government site. This makes it harder to navigate back. Also, search engines are helpful tools, however, those that are associated through Google often become a hindrance and usually do not just search that site or that state's sites, but the entire web. Similarly, some search bars found on department pages search all state websites. Search engines that let you choose what sites you are searching are much more useful. Minnesota has one of the better and more useful search engines.

Other sites have privacy policies that are not explicit enough. Several sites, including North Dakota, state that information provided on that site will be treated in the same manner as information collected in person at that specific agency; however no details were provided as to how in-person given information is treated.

Instead of providing useful links to news stories and services some sites, such as Vermont, placed too much information and too much text on the main pages, cluttering the page and making it overwhelming to navigate. Other sites, like the Wyoming Attorney General's homepage, claim the W3C disability test, however, after running it through the program it seems they do not.

It seems unnecessary to have many links to get to certain types of resources. For instance, on the Texas Commission on Environmental Quality website, to access the privacy policy you first have to click web policy, then go to privacy policies, then go to capture and use of information and so on.

Suggestions for improvement include the following. Include more foreign language translation options especially in states with high numbers of foreign language speakers and on website that warrant foreign language options, such as Human Rights sites, Tourism, Business/Economic Development, and Transportation. For example, it was surprising that states like Texas and New Mexico do not have more websites with Spanish language options. New York is also lacking in language options. Government websites should attempt to standardize their site privacy policy in order to create continuity throughout the sites.

Most Transportation, DMV, and Attorney General sites that contained video clips, had ones that were posted with the intent of frightening people into obeying the law. Many of the ad campaigns encouraging citizens to wear seat belts or to discourage drug abuse had cynical and pessimistic overtones: "Highways or Dieways" (WV), "Arrive Alive, Buckle up" t-shirt and music video (MO), "Stay Out-Stay Alive" (PA), "One Hit Leads to Another" (UT) "Meth Makes you Ugly" (SD). While video and audio clips are innovative and add to the depth of websites, not all of them should be cautionary and focused solely on scaring the public.

There should be more kids' pages to get children interested in local and state government. Tennessee's Health and Wildlife websites had great kid's pages as did Nevada's Agriculture site and Texas' Governor and Legislature pages, to name a few. However, some times these pages were better constructed and more engaging than the homepage it came from, often because of

their expansive use of multimedia tools, mainly audio and video clips, along with great intellectual games for several age levels.

Personalization and Customization tools are good features to have on websites with a lot of information. These features allow users to customize and tailor their account specifically for their needs and interests, allowing them to directly access needed resources and prevent them from having to sort through tons of superfluous data.

## Appendix

**Table A-1 Overall State E-Govt Ratings, 2006 and 2007 (2006 ranking in parentheses)**

Rank	State	Rating Out of 100 Pts	Rank	State	Rating Out of 100 Pts
1. (15)	Delaware	65.6 (44.8)	2. (4)	Michigan	64.0 (48.5)
3. (18)	Maine	62.0 (43.8)	4. (21)	Kentucky	56.2 (42.9)
5. (11)	Tennessee	54.1 (45.7)	6. (22)	Massachusetts	53.8 (42.5)
7. (35)	Maryland	53.5 (39.5)	8. (1)	Texas	51.3 (51.7)
9. (2)	New Jersey	50.0 (51.5)	10. (5)	Utah	47.0 (48.1)
11. (6)	Montana	46.9 (47.8)	12. (31)	California	46.0 (40.8)
13. (38)	Georgia	45.6 (38.0)	14. (40)	Oklahoma	44.9 (37.3)
15. (14)	Minnesota	44.4 (44.9)	16. (9)	Indiana	44.4 (46.6)
17. (3)	Oregon	44.3 (49.1)	18. (19)	Nebraska	44.3 (43.6)
19. (27)	Connecticut	44.2 (41.5)	20. (10)	Pennsylvania	43.7 (46.4)
21. (7)	New York	43.5 (47.3)	22. (20)	Missouri	42.9 (43.0)
23. (16)	Ohio	42.6 (44.1)	24. (13)	North Dakota	42.6 (44.9)
25. (17)	South Carolina	42.5 (44.0)	26. (25)	North Carolina	42.5 (41.9)
27. (12)	Washington	42.4 (45.4)	28. (33)	Louisiana	41.9 (40.6)
29. (8)	Illinois	41.8 (46.9)	30. (32)	Rhode Island	41.7 (40.6)
31. (41)	Colorado	41.7 (36.8)	32. (24)	Iowa	41.1 (42.0)
33. (34)	New Hampshire	41.0 (40.1)	34. (36)	Arizona	40.8 (39.5)
35. (26)	Florida	40.8 (41.6)	36. (23)	Kansas	40.4 (42.0)
37. (50)	Alaska	40.1 (28.3)	38. (43)	Hawaii	39.5 (35.3)
39. (29)	Virginia	39.3 (40.8)	40. (30)	Idaho	39.1 (40.8)
41. (28)	South Dakota	39.0 (41.1)	42. (42)	Wisconsin	38.4 (36.5)
43. (37)	Vermont	38.2 (38.6)	44. (39)	Nevada	38.1 (37.3)
45. (49)	Alabama	37.2 (28.4)	46. (45)	Arkansas	36.7 (33.8)
47. (47)	Mississippi	33.1 (33.4)	48. (44)	New Mexico	32.9 (34.3)
49. (46)	West Virginia	31.4 (33.6)	50. (48)	Wyoming	28.6 (29.0)

**Table A-2 Overall Federal Agency E-Govt Ratings, 2006 and 2007 (2006 ranking in parentheses)**

<b>Rank</b>	<b>Site</b>	<b>Rating Out of 100 Pts.</b>	<b>Rank</b>	<b>Site</b>	<b>Rating Out of 100 Pts.</b>
1. (1)	USA.Gov Portal	92.0 (84.0)	2. (2)	Dept. of Agriculture	84.0 (80.0)
3. (7)	Postal Service	84.0 (64.0)	4. (9)	Social Security Administration	79.0 (63.0)
5. (12)	SEC	76.0 (60.0)	6. (4)	Department of Commerce	72.0 (73.0)
7. (11)	FCC	70.0 (61.0)	8. (27)	FDIC	67.0 (48.0)
9. (8)	Department of Education	65.0 (63.0)	10. (6)	IRS	64.0 (71.0)
11. (17)	NASA	61.0 (57.0)	12. (40)	FDA	60.0 (42.0)
13. (16)	Small Business Administration	60.0 (48.0)	14. (3)	Housing/Urban Development	59.0 (80.0)
15. (19)	Consumer Products Safety Commission	58.0 (54.0)	16. (38)	Health and Human Services	58.0 (44.0)
17. (15)	Library of Congress	57.0 (58.0)	18. (30)	National Parks	57.0 (47.0)
19. (5)	Department of Treasury	56.0 (72.0)	20. (20)	General Services Administration	56.0 (54.0)
21. (36)	Veterans Affairs	56.0 (46.0)	22. (10)	Department of State	55.0 (62.0)
23. (23)	House of Representatives	55.0 (53.0)	24. (13)	Department of Interior	53.0 (58.0)
25. (31)	EPA	52.0 (46.0)	26. (43)	Homeland Security	52.0 (41.0)
27. (49)	National Labor Relations	52.0 (32.0)	28. (18)	White House	52.0 (57.0)
29. (31)	Department of Energy	51.0 (46.0)	30. (50)	National Endowment Human	51.0 (31.0)
31. (26)	Department of Labor	50.0 (49.0)	32. (37)	Central Intelligence	49.0 (41.0)

				Agency	
33. (34)	Government Printing Office	49.0 (46.0)	34. (42)	Department of Justice	48.0 (41.0)
35. (22)	Department of Defense	48.0 (53.0)	36. (14)	Department of Transportation	48.0 (58.0)
37. (35)	National Science Foundation	48.0 (46.0)	38. (24)	National Transportation Safety Board	48.0 (53.0)
39. (54)	Office of Management and Budget	48.0 (28.0)	40. (28)	Senate	48.0 (48.0)
41. (29)	Federal Election Commission	44.0 (47.0)	42. (44)	National Endowment for the Arts	44.0 (41.0)
43. (39)	Equal Employment Opportunity	40.0 (43.0)	44. (41)	Federal Trade Commission	40.0 (42.0)
45. (46)	GAO	40.0 (38.0)	46. (33)	Federal Reserve	38.0 (46.0)
47. (21)	Congressional Budget Office	37.0 (53.0)	48. (25)	US Trade Rep	37.0 (50.0)
49. (47)	Federal Court of Appeals	36.0 (37.0)	50. (45)	Supreme Court	36.0 (41.0)
51. (51)	1 <sup>st</sup> Circuit Court of Appeals	32.0 (29.0)	52. (53)	8 <sup>th</sup> Circuit Court of Appeals	32.0 (28.0)
53. (56)	6 <sup>th</sup> Circuit Court of Appeals	28.0 (25.0)	54. (55)	11 <sup>th</sup> Circuit Court of Appeals	26.0 (26.0)
55. (48)	4 <sup>th</sup> Circuit Court of Appeals	25.0 (33.0)	56. (52)	9 <sup>th</sup> Circuit Court of Appeals	25.0 (29.0)
57. (57)	2 <sup>nd</sup> Circuit Court of Appeals	24.0 (24.0)	58. (59)	10 <sup>th</sup> Circuit Court of Appeals	22.22 (22.0)
59. (60)	3 <sup>rd</sup> Circuit Court of Appeals	20.0 (21.0)	60. (58)	5 <sup>th</sup> Circuit Court of Appeals	20.0 (24.0)
61. (61)	7 <sup>th</sup> Circuit Court of Appeals	20.0 (20.0)			

<b>Table A-3 Individual State/Fed Profiles for Publications, Databases, Foreign Language, and Services, 2007</b>								
	<i>Pubs</i>	<i>Data</i>	<i>Audio</i>	<i>Video</i>	<i>For Lang</i>	<i>PDA</i>	<i>Has Services</i>	<i>User Fees</i>
<b>AK</b>	1.00	.94	.33	.36	.03	.00	.79	.00
<b>AL</b>	1.00	.75	.21	.36	.43	.00	.82	.29
<b>AR</b>	.93	.87	.10	.30	.07	.00	.73	.07
<b>AZ</b>	1.00	.77	.35	.42	.13	.00	.71	.03
<b>CA</b>	1.00	.96	.39	.50	.25	.00	.89	.04
<b>CO</b>	1.00	.84	.39	.32	.13	.03	.87	.16
<b>CT</b>	1.00	.88	.15	.46	.08	.00	.85	.00
<b>DE</b>	1.00	.89	.32	.36	.82	.00	.96	.79
<b>FL</b>	1.00	.94	.23	.45	.16	.00	.84	.13
<b>GA</b>	1.00	.82	.14	.46	.21	.00	.89	.21
<b>HI</b>	1.00	.93	.23	.47	.03	.00	.87	.10
<b>IA</b>	.96	.89	.26	.44	.19	.00	.89	.15
<b>ID</b>	1.00	.93	.28	.45	.10	.03	.90	.14
<b>IL</b>	1.00	.97	.39	.39	.16	.00	.84	.23
<b>IN</b>	.97	.87	.23	.42	.23	.00	.87	.13
<b>KS</b>	1.00	.90	.41	.21	.07	.00	.90	.17
<b>KY</b>	.97	.93	.24	.34	.14	.00	.93	.69
<b>LA</b>	.97	.97	.31	.59	.00	.00	.93	.21
<b>MA</b>	.94	.88	.27	.52	.03	.00	.94	.63
<b>MD</b>	1.00	.90	.23	.32	.16	.00	.94	.61
<b>ME</b>	1.00	.90	.23	.39	.81	.03	.90	.81
<b>MI</b>	1.00	.93	.43	.61	.04	.00	1.00	.79
<b>MN</b>	1.00	.86	.34	.41	.21	.00	.93	.10
<b>MO</b>	.97	.90	.45	.45	.45	.07	.93	.17
<b>MS</b>	.93	.85	.15	.15	.19	.00	.89	.15
<b>MT</b>	1.00	.90	.17	.27	.07	.00	.97	.10
<b>NC</b>	1.00	.97	.20	.13	.40	.00	1.00	.03
<b>ND</b>	.97	.86	.28	.38	.10	.00	.90	.07
<b>NE</b>	1.00	.89	.19	.52	.37	.04	.96	.15
<b>NH</b>	.97	.80	.23	.20	.03	.00	.90	.07
<b>NJ</b>	1.00	.82	.21	.36	.39	.00	.96	.14
<b>NM</b>	1.00	.77	.07	.13	.33	.03	.80	.10
<b>NV</b>	1.00	.90	.13	.17	.43	.00	.87	.07
<b>NY</b>	.93	.77	.13	.27	.40	.00	.83	.07
<b>OH</b>	1.00	.97	.19	.39	.16	.00	.94	.06
<b>OK</b>	.97	.77	.17	.30	.10	.07	.90	.10
<b>OR</b>	1.00	.80	.17	.33	.33	.00	.93	.07
<b>PA</b>	1.00	.91	.06	.41	.16	.03	.91	.09
<b>RI</b>	1.00	.79	.07	.10	.38	.00	.86	.21
<b>SC</b>	.97	.77	.13	.27	.20	.07	.90	.03
<b>SD</b>	.96	.64	.18	.25	.04	.00	.89	.04

TN	1.00	.89	.18	.54	.25	.00	.96	.46
TX	.93	.87	.40	.50	.50	.10	.93	.13
US	1.00	.98	.62	.64	.46	.02	.59	.00
UT	1.00	.76	.24	.29	.06	.09	.88	.03
VA	1.00	.62	.27	.23	.23	.04	.81	.08
VT	.97	.70	.27	.20	.07	.03	.70	.03
WA	.97	.56	.09	.28	.47	.00	.81	.03
WI	.97	.64	.14	.17	.17	.00	.78	.14
WV	.96	.48	.04	.11	.04	.00	.74	.07
WY	.82	.36	.09	.06	.03	.00	.45	.00

**Table A-4 Individual State/Fed Profiles for Disability Access, Privacy, and Security, 2007**

	<i>Email</i>	<i>Comment</i>	<i>Update</i>	<i>Personalization</i>	<i>Disability</i>	<i>Privacy</i>	<i>Security</i>		
AK	1.00	.24	.24	.09	.33	.52	.24		
AL	.82	.32	.14	.07	.21	.64	.50		
AR	.87	.30	.27	.10	.37	.87	.40		
AZ	.74	.39	.52	.13	.32	.84	.61		
CA	.89	.68	.54	.00	.39	1.00	.89		
CO	.94	.26	.29	.16	.32	.84	.58		
CT	1.00	.23	.58	.08	.77	.92	.92		
DE	.82	.36	.46	.18	.71	.93	.89		
FL	.90	.39	.45	.16	.48	.81	.03		
GA	.75	.57	.29	.21	.36	.71	.64		
HI	.70	.40	.23	.03	.63	.63	.47		
IA	.89	.48	.52	.07	.41	.74	.04		
ID	.86	.45	.31	.14	.21	.48	.28		
IL	.68	.35	.35	.16	.29	.94	.65		
IN	.90	.77	.45	.19	.32	.71	.71		
KS	1.00	.45	.45	.07	.62	.55	.24		
KY	.97	.55	.38	.24	.48	.83	.76		
LA	.90	.55	.62	.10	.55	.17	.48		
MA	.82	.42	.52	.06	.70	.76	.73		
MD	.94	.45	.32	.10	.32	.68	.29		
ME	.94	.42	.45	.10	.77	.81	.81		
MI	.82	.86	.57	.11	.54	.86	.86		
MN	1.00	.31	.83	.10	.41	.48	.31		
MO	1.00	.21	.62	.07	.72	.59	.10		
MS	.96	.19	.37	.07	.07	.15	.07		
MT	.90	.43	.40	.17	.17	1.00	1.00		
NC	.90	.43	.47	.07	.47	.53	.33		
ND	1.00	.14	.31	.00	1.00	.76	.52		
NE	.96	.30	.37	.15	.26	.93	.81		
NH	.87	.77	.33	.17	.60	.87	.83		
NJ	.89	.82	.39	.11	.29	1.00	.93		
NM	.90	.27	.33	.03	.40	.20	.07		
NV	.93	.27	.30	.07	.37	.47	.00		



<b>NY</b>	.87	.53	.33	.07	.50	.90	.27		
<b>OH</b>	.87	.48	.23	.06	.35	.55	.42		
<b>OK</b>	1.00	.33	.27	.00	.60	.40	.37		
<b>OR</b>	1.00	.80	.33	.07	.80	.90	.10		
<b>PA</b>	.88	.47	.53	.06	.41	.69	.66		
<b>RI</b>	.90	.31	.55	.00	.55	.72	.59		
<b>SC</b>	1.00	.50	.20	.07	.53	.60	.33		
<b>SD</b>	.93	.61	.29	.00	.29	.82	.82		
<b>TN</b>	.89	.79	.25	.00	.18	.96	.93		
<b>TX</b>	.93	.50	.57	.17	.80	.87	.33		
<b>US</b>	.79	.57	.46	.28	.54	.84	.80		
<b>UT</b>	1.00	.38	.44	.00	.44	.91	.88		
<b>VA</b>	.77	.38	.38	.12	.50	.88	.23		
<b>VT</b>	.80	.47	.20	.10	.50	.70	.60		
<b>WA</b>	.94	.56	.56	.06	.41	.88	.88		
<b>WI</b>	.94	.42	.25	.08	.58	.69	.69		
<b>WV</b>	.85	.33	.26	.11	.15	.44	.48		
<b>WY</b>	.85	.21	.21	.06	.39	.73	.00		

## I. Top Five Federal Agencies

### 1) USA.gov

Out of all of the federal websites looked at, the US portal ranks number one. The site is very well laid out, with information divided by both who the user is (citizens, businesses/nonprofits, government employees and visitors) and by topic. The site can be translated into twenty-eight foreign languages, and also offers email updates, RSS feeds, and live chat. One hundred and eighty online services are available, and you can receive email updates when there are changes made to the online services page. The services range from finding the cheapest gas prices to federal government surplus and seized property sales. Another strong point is the ease in which one can contact the government through the US portal site. There are lists of phone numbers and email addresses organized by agencies and contact information for elected officials. USA.gov is one of the most straightforward sites in terms of how it is structured, and allows citizens to interact with the federal government with ease.

### 2) Department of Agriculture

The U.S. Department of Agriculture ranks second in our study. Finding forms and information is simple by using the “I want to...” box, and the site is customizable by registering with MyUSDA. Furthermore, there is a menu called “Information For...” that organizes information based on the user. Users can access image and video libraries, radio broadcasts and transcripts of speeches, and the site can be translated into Spanish. The U.S. Department of Agriculture offers a variety of means for feedback, such as a general feedback from “Ask the Expert” and an email directory of all personnel within the department. Perhaps the most impressive aspect of the site is the huge number of services offered, over five hundred and fifty. While the U.S. Department of Agriculture site contains a massive amount of information and services, it is well organized and provides a number of features designed to help people find what they are looking for.

### 3) Postal Service

The United States Postal Service website has many resources and many online services. The website is organized with three main menu tool bars. The first one at the top allows users to

find zip codes, calculate postage, print shipping labels, schedule a pickup, locate a post office, and track and confirm package statuses. Directly underneath, the second menu bar divides information into: business services, household services, buy stamps and shop online, search all products and services, and about USPS and news. The third menu is located in the middle of the page and is divided into shipping tools, mailing tools, and receiving mail. Due to this organization of information with both broad and narrow categories, users are able to search for resources through different channels, depending on what they are looking for and their needs at the time. Users can also change their address online and create their own accounts online with the Postal Service in order to have access to particular services. The web page also has a link for Missing and Exploited children, noting the USPS's dedication to finding America's missing children.

#### 4) Social Security Administration

The fourth ranked Social Security Administration website is easy to navigate and clearly organized. The section on the left side, labeled, "What you can do online", links you to all the services one can perform via the Internet. This section is also divided into three groups: online services for those receiving benefits, services for those with a password (which you can apply for on the site), and a section to apply for benefits. The middle of the homepage contains information and resources specific for Social Security Records, Medicare, Retirement, Disability and SSI, and Widows and Widowers. There are also links for Frequently Asked Questions, Useful Links, and Business Services Online. The SSA site also offers users the option to sign up to receive free updates via email. The site is also user friendly in that visually impaired users can utilize a feature that demonstrates three ways to enlarge the site's text size. The Social Security site is simply constructed, well organized, and clear and straightforward, which is helpful for people who are unfamiliar with the Internet or want to go directly to a particular service.

#### 5) Securities and Exchange Commission

The Securities and Exchange Commission was ranked fifth for the U.S. websites. The page was neatly organized into eight categories, with a ninth section dedicated to Information For..., with options of Accountants, Broker dealers, EDGAR filers, Small Businesses, among others. Headlines and "Spotlights" were displayed on the side bar. Each section link provided expansive information for that particular category and a search tool for that individual group. RSS feeds were provided for speaker and public statements and for administrative proceedings. Other novel services included SEC webcasts, podcasts and investor calculators. This website was clearly organized and straightforward, providing useful information and resources while also incorporating some novel services.

## II. Top Five States

### 1) Delaware

Delaware ranks first in e-government out of the fifty states. The portal site is well laid out with clear links to a list of state agencies, the kids' page, the governor's page, multi media files and online services. To help users find the service they are looking for, the online services are divided into several categories such as citizen services, corporation and business online services and tax services. Nearly all of the Delaware sites have a link at the top of the page to a list of all the online services. Also, the vast majority of Delaware sites can be translated into Chinese, French, German, Italian, Japanese, Korean, Portuguese and Spanish. Navigating through the various Delaware pages is easy because most of the sites followed the same layout, with translation tools, online services, privacy statements, contact information and search bars all located in the same place. Delaware's efficient design, variety of services and consistency sets it apart from the other forty-nine states.

## 2) Michigan

Ranking second in our 2007 study is Michigan. Like Delaware, most of Michigan's sites link to a list of the state's online services. Michigan has over seventy services executable online, from filing taxes to reporting potholes. Most of Michigan's sites offer live updates through RSS feeds, and there are sixty-six RSS feeds in total. Michigan has one of the more comprehensive privacy statements, with instructions on how to control cookie settings on your computer. Generally the different Michigan websites follow the same format, making it easier to find what you are looking for. Also, the portal page contains a list of the services, questions and forms most commonly searched for. Michigan's sites contain a wealth of information, and unlike some states, this information is easy to locate.

## 3) Maine

Maine is ranked number three in our study. The portal page is designed to allow people to get to the information they are looking for as quickly as possible, and has a list of all online services, commonly asked questions, winning lottery numbers, traffic conditions and state agencies. The page can even be customized to make finding specific information easier. Maine's portal page is also accessible for cell phones, blackberries and other mobile devices. The majority of Maine's sites have a link to all the state's online services and can be translated into Spanish or French by using a pull-down menu at the top of the page. For a fee of \$75 a year, subscribers to inforME can access to public criminal records, driver's license records and interactive corporate services. Although Maine's websites sometimes have trouble loading, there is little trouble in being able to find the information and services you are looking for.

## 4) Kentucky

Ranked fourth in our study is the Kentucky website, due to its success in presenting clear, organized, and consistent web pages that offer citizens a plethora of resources, services, information, and multimedia. The portal page is well organized and on the left hand side, features a menu of Alerts & Information, where users can stay up-to-date with the ability to access RSS feeds, AMBER alerts, the flag status, podcasts, traffic conditions, new notifications, and GIS maps. The services are organized into five sections so that people can search through them by category, agency, business, citizen services, or through all of them. The portal page also offers a link for Translation Resources, offering the pages in six other languages. Other pages throughout the state's website are also well constructed and feature easy to navigate menus, most with a specific link to that department's online services, several audio and video clips, easy access links that take them back to the portal page, links that show them an A-Z Kentucky agency list, and centralized privacy policies.

## 5) Tennessee

Tennessee's website received a fifth-place ranking in our 2007 study. The Tennessee portal page includes many dynamic features including RSS feeds, Live Help, a digital photo album, and multiple audio and video files. All of the offered online services were neatly centralized through one link and divided into 13 easy access categories. The portal page also featured a Law and Justice link that provides national and state AMBER alerts and allows users to search for felony, meth, and sex offenders. The privacy policy is consistent throughout all the state's pages and links located on nearly all department and agency homepages make for easy navigation between them and the main portal site. The Tennessee Wildlife and Health Department sites offer great kids' pages and the Governor's site contains many multimedia resources, including an on-line blog.