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# Benchmarking U.S. Government Websites

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and Alan McQuinn



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The public relies on federal websites to access information and services from the U.S. government, yet 91 percent of its most popular sites fail to meet basic standards for security, speed, mobile friendliness, or accessibility.

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## INTRODUCTION

One of the most important ways that the U.S. federal government provides access to government services and information is through its more than 4,500 websites on more than 400 domains.<sup>1</sup> Last year, the Information Technology and Innovation Foundation (ITIF) reviewed almost 300 of the most popular government websites and published a report in March 2017 documenting our findings.<sup>2</sup> At the time, we concluded that many federal government websites were not fast, mobile friendly, secure, or accessible. This report assesses progress federal agencies have made since the initial report. While a few agencies have addressed specific issues identified in the previous report, overall federal agencies have made little progress at modernizing government websites.

In this report, ITIF reviews almost 500 of the most popular federal websites and finds that approximately 91 percent failed to perform well on at least one of the metrics analyzed. For comparison, in the initial report 92 percent of the websites reviewed failed to perform well on at least one. It is incumbent on the Trump administration to address these failures and ensure the federal government can provide all Americans with secure and convenient access to online government services and information.

This second edition of the “Benchmarking U.S. Government Websites” report provides a detailed analysis of how U.S. federal websites are performing six months after the release of the initial report. In the initial report, ITIF reviewed 297 federal websites. In this edition, we analyzed 468 of the most popular federal websites. Of these sites, we analyzed 260 of them in the initial report. Those that we did not include in this report, we either omitted because they no longer ranked among the top one million sites globally or an agency had removed, archived, or merged the website with another one. This report shows that most of the websites reviewed in both years continue to fall short of requirements set by the federal government, as well as industry standards for web design and development.

This report uses publicly available tools to assess website performance in terms of page-load speed, mobile friendliness, security, and accessibility.

We analyzed two metrics for page-load speed: desktop page-load speed and mobile page-load speed. For desktop page-load speed, 63 percent of federal websites passed the test compared to 73 percent in the initial report. For mobile page-load speed, 27 percent of federal websites passed the test compared to 36 percent in the initial report.

Many federal websites also did not fare well with mobile friendliness. Just 61 percent of websites were mobile friendly, compared to 59 percent in the initial report. Common problems included not using proper metatags to configure the website for mobile devices and links or buttons that were too small for easy use on mobile devices.

As in the initial report, federal websites generally scored well on security. In this edition, we reviewed the same two security features: Hypertext Transfer Protocol Secure (HTTPS)—a common standard for encrypted Internet communications—and Domain Name System Security (DNSSEC), a set of protocols that add security to domain name system (DNS) lookup and exchange processes. To test for HTTPS, we used a tool that analyzes websites’ Secure Sockets Layer (SSL) certificates (which underpin most HTTPS connections). Seventy-one percent of the reviewed websites passed the SSL test, up from 67 percent in the initial report. To test for DNSSEC, we used a tool to determine whether reviewed websites enabled this security feature. We found that 88 percent of federal websites enabled

DNSSEC, down from 90 percent in the initial report. Sixty-four percent of websites passed both the SSL and DNSSEC tests, up from 61 percent.

Finally, 60 percent of the reviewed websites were accessible for users with disabilities, compared to 58 percent in the initial report. Issues with accessibility range from poor contrast on websites to a lack of labels, which may prevent the website from being easily navigated by someone using a screen reader, assistive technology commonly used by individuals who are blind.

Federal government websites still require significant improvement. Federal agencies should prioritize building and maintaining fast, convenient, secure, and accessible websites. Doing so will help ensure that the many Americans who routinely use the Internet to access government services and information can continue to do so.<sup>3</sup> There are multiple steps policymakers can take to improve federal websites:

1. Launch a website modernization sprint to fix known problems.
2. Require federal websites to meet basic desktop and mobile page-load speeds.
3. Launch a website consolidation initiative.
4. Require all federal agencies to report website analytics.
5. Appoint a federal CIO to lead federal IT modernization efforts.
6. Encourage nonexecutive agencies and branches of government to adopt federal website standards and practices.

## REQUIREMENTS AND BEST PRACTICES FOR FEDERAL WEBSITES

The report uses four criteria to evaluate federal government websites: page-load speed, mobile friendliness, security, and accessibility. For two of these criteria—security and accessibility—federal agencies must adhere to certain federal requirements. For page-load speed and mobile friendliness, there are industry best practices, though federal agencies are not required to meet them. Moreover, most federal requirements only apply to the executive branch. This report includes websites of independent agencies and congressional offices that are often not subject to these requirements. We include these websites, not only to compare them with other federal websites, but also to see how they fare with overall federal requirements and best practices.

### LEGISLATIVE REQUIREMENTS FOR FEDERAL WEBSITES

Federal websites are subject to numerous legislative requirements.<sup>4</sup> This report focuses on three of these laws and federal agency guidance that resulted from them.

First, the E-Government Act of 2002 establishes requirements for federal websites.<sup>5</sup> It requires federal agencies to create websites that provide a description of the agency's mission; strategic plan and statutory authority of the agency; information about its organization structure; and basic search functionality.<sup>6</sup> The law also requires the Office of Management and Budget (OMB) to create and implement rules for public federal websites.<sup>7</sup>

Second, the Rehabilitation Act of 1973 requires the General Services Administration (GSA) to ensure individuals with disabilities have access to and use information technology.<sup>8</sup> In 1998, another law amended section 508 of the Rehabilitation Act and directed the U.S. Access Board to publish standards for developing, procuring, maintaining, or using electronic or information technology.<sup>9</sup> This change went into effect in 2001 and these rules underpin the federal website accessibility requirements.<sup>10</sup>

Third, the Federal Information Security Management Act (FISMA) provides a framework for securing federal information technology to prevent inappropriate disclosure of sensitive information.<sup>11</sup> The federal government has used FISMA to periodically update its security practices related to all federal IT, including websites. For example, in 2007, the National Institute of Standards and Technology (NIST) issued guidance about how to secure public servers.<sup>12</sup>

In addition, Congress is considering legislation that, if passed, would affect federal government websites. The Connected Government Act (HR 2331), introduced by Rep. Robin Kelly (D-IL) is one example. The bill requires all federal agencies to make their websites mobile friendly. Furthermore, it would require the Office of Management and Budget (OMB), in consultation with the GSA, to report to Congress on the implementation of the new requirement within 18 months.<sup>13</sup>

## NON-LEGISLATIVE REQUIREMENTS FOR FEDERAL WEBSITES

The White House has also played a role in creating standards and best practices for federal websites.

In May 2017, President Trump signed an executive order establishing the American Technology Council to deliver better government digital services to the American people.<sup>14</sup> Although no technology industry representatives sit on the council, the administration can tap industry experts to advise them on certain policy issues.<sup>15</sup> In August 2017, the council in conjunction with the Office of American Innovation, released a report on federal IT modernization, and suggested that the report be open to public feedback. Although the report does not include any recommendations directly related to federal websites, it does address a variety of issues that will help federal agencies improve their services. For example, it outlines a set of recommendations the government can follow to ease the adoption of cloud technology and recommends the government consolidate and improve the acquisition of network services to improve security.<sup>16</sup> As of October 2017, a decision on whether to implement this plan was pending. If approved, it will likely set new standards for federal government IT infrastructure.<sup>17</sup>

Many of the modernizations recommended in the report to President Trump build on policies established during prior administrations. In 2009, the Obama administration outlined plans to create a roadmap that would help agencies improve digital services. The result was the Digital Government Strategy in 2012, which operationalized four strategic principles for federal websites.<sup>18</sup> First, federal websites must be “information centric”, meaning that information should be structured in an open way that enables meaningful use beyond its original purpose, be that internal to the government or external to the public.<sup>19</sup> This strategy includes making open data and application program interfaces (APIs)—whereby developers create customized software solutions—the new default policy for the federal government.<sup>20</sup> Second, the federal government pushed for a “shared platform” approach to share capabilities throughout the government. The benefits of this approach are mostly internal-facing (e.g., reducing costs by reducing the number of websites with duplicative services across different agencies). Third, federal websites should focus on the needs of their users and be “customer centric.”<sup>21</sup> For example, agencies should use modern tools and best practices for web development to deliver content and services; offer mobile alternatives for consumer-facing services; and measure performance with consumer-satisfaction surveys.<sup>22</sup> Fourth, federal websites should be secure, such as by using only approved domains, providing only online services via an encrypted connection, and securing the federal domain name system infrastructure.<sup>23</sup> Using the Digital Government Strategy as

a roadmap, in 2016 OMB released new guidance for federal agency public websites and digital services, updating this policy for the first time since 2004.<sup>24</sup>

In addition, the executive branch requires agencies to adhere to certain website security features. In 2008, OMB required all federal websites to deploy Domain Name System Security (DNSSEC)—a set of protocols that add security to domain name system (DNS) lookup and exchange processes—to ensure basic security for federal domains.<sup>25</sup> Similarly, the Obama administration issued a memorandum in 2015 requiring all federal websites to use HTTPS to provide a secure connection.<sup>26</sup> Using HTTPS ensures that interactions between federal websites and their users are secure and private.

Furthermore, the executive branch has offered guidance for how federal websites can be accessible for people with disabilities. Both the Bush and Obama administrations created rules to enable accessibility. In 2001, the Bush administration offered the New Freedom Initiative to push for accessibility in federal government information technology.<sup>27</sup> Similarly, in 2013 the Obama administration created a strategic plan for federal websites, including planning accessibility in the early stage of the design or redesign of websites, and using automated website accessibility scanning tools to test whether federal websites are accessible.<sup>28</sup>

Executive orders have also focused on consolidating and modernizing federal domains. In 2011, an executive order—designed to eliminate duplicative websites—issued a temporary freeze on all new government websites.<sup>29</sup> The executive order also delegated to GSA the authority to assign federal domains, requiring it to help agencies consolidate federal domains and review all new domains to ensure adherence to existing regulations and OMB guidance (e.g., accessibility and security requirements). In response to this guidance, many agencies consolidated their various websites into a single domain. For example, in 2011, the Department of Energy rolled Energy Empowers (energyempowers.gov) into its flagship website (energy.gov).<sup>30</sup> Furthermore, the Obama administration issued guidance in 2014 to modernize federal websites with the U.S. Digital Services Playbook, which contained 13 successful practices from both the public and private sector that agencies should implement in their websites, such as understanding what people need and making websites simple and intuitive.<sup>31</sup>

## PRIVATE-SECTOR BEST PRACTICES FOR WEBSITES

The private sector offers numerous best practices for websites, including page-load speed, mobile friendliness, security, and accessibility. As suggested in ITIF's initial report, the public sector should incorporate these common practices.

First, page-load speed is important, because people are more likely to visit websites that load quickly in a browser, and these websites will be ranked better by search engine algorithms.<sup>32</sup> While there are no set industry standards for page-load speed, there are best practices to optimize website speed.<sup>33</sup> Best practices include enabling file compression, reducing the number of embedded components on a webpage, reducing redirects, leveraging browser caching, optimizing images, and others. For example, developers can use tools to reduce the total size of the website's code (e.g., CSS, JavaScript, and HTML) by removing spaces, commas, unnecessary characters, code comments, and unused code to improve the speed of a website.

Second, mobile friendliness has grown more important to private-sector web development, because consumers increasingly use mobile devices for online commerce and finding important information. Google also ranks websites higher in its search algorithm if they are mobile friendly, and the company has released guidelines and a free test to allow developers to optimize for mobile devices.<sup>34</sup> These best practices include configuring websites so that people can easily read them from a mobile device and making buttons big enough to be easily tapped with a finger.

Third, while there are no set industry standards for website security, various organizations and companies have created basic security guidelines. For example, the Open Web Application Security Project—which is a nonprofit organization dedicated to enabling organizations to develop applications that are secure—has put out a number of resources and guidelines for businesses to develop secure websites.<sup>35</sup> Similarly, companies such as Microsoft have provided minimum-security guidelines for web applications.<sup>36</sup> These guidelines include using Secure Sockets Layer (SSL) certificates, which underpin most HTTPS connections, to transmit sensitive information between the browser and server, and using strong passwords.

Finally, there are best practices for web accessibility published by the Web Accessibility Initiative and the World Wide Web Consortium (W3C), an international standards organization for the Internet. The Web Content Accessibility Guidelines (WCAG) specify how web developers should make content accessible, primarily for people with disabilities, across all devices and platforms.<sup>37</sup> In 2008, W3C published the most updated version, called WCAG 2.0. The WCAG 2.0 guidelines have four principles—that online content should be perceivable, operable, understandable, and robust—and outlines specific techniques that web developers can use to optimize their content for users with disabilities.<sup>38</sup> WCAG 2.0 has three levels of conformance (A, AA, and AAA). Higher levels of conformance make sites more accessible but impose more restrictions on website design. In January 2017, the U.S. Architectural and Transportation Barriers Compliance Board adopted final rules to make WCAG 2.0 AA the accessibility standards that the federal government uses to provide accessible web services.<sup>39</sup>

## METHODOLOGY

The first step in the research process was to identify the most popular federal websites. The “Majestic Million” is a free online service that ranks the most popular websites in the world based on how many unique IP addresses refer to a particular domain. Majestic Million daily publishes its “Fresh Index,” which ranks sites over a rolling 90-day period.<sup>40</sup> For this report, we used the dataset from the “Fresh Index” downloaded on September 1, 2017.<sup>41</sup>

To identify the most popular federal government websites, we first filtered all of the entries in the Majestic Million list with a .gov top-level domain.<sup>42</sup> This list included over 1,500 government websites at the city, state, and federal levels. We reviewed these sites to determine which were for state or local government and excluded them from our analysis. Additionally, we excluded all subdomains of federal websites (except for the second-most popular federal website [ncbi.nlm.nih.gov](http://ncbi.nlm.nih.gov) and [share.america.gov](http://share.america.gov) that replaced the website [America.gov](http://America.gov), which was reviewed in the initial report). We also excluded all federal government websites that had been retired, failed to load, redirected to subdomains, or redirected to new pages whose domains were either unranked or already being tested.<sup>43</sup> Then, we reviewed all of the federal government websites included in the prior report that did not use a .gov top-level domain. If they were still ranked in the top million on Majestic Million, we

added them to the list (e.g., the U.S. Postal Service, [usps.com](https://usps.com), and the United States Forest Service, [fs.fed.us](https://fs.fed.us)).<sup>44</sup>

Next, to ensure that we did not miss any popular federal government websites (including those that do not have a .gov top-level domain, such as federal government websites that end in .org, .com, .us or .edu), we reviewed [analytics.usa.gov](https://analytics.usa.gov). [Analytics.usa.gov](https://analytics.usa.gov) is a GSA website that reports government website usage data for sites participating in the Digital Analytics Program (DAP). On September 6, 2017, we downloaded data for websites with at least 1,000 visits in the last 30 days—a total of 2,487 websites.<sup>45</sup>

To identify potential sites to include, we compared the list from [analytics.usa.gov](https://analytics.usa.gov) to that from the Majestic Million. To begin, we identified where the five lowest-ranking websites on the Majestic Million list appeared on the [analytics.usa.gov](https://analytics.usa.gov) list. Based on this threshold, we estimated that a reasonable cutoff for comparison would be websites on the [analytics.usa.gov](https://analytics.usa.gov) list that had at least 1,705 visits in the last 30 days. In considering whether to add a website from the [analytics.usa.gov](https://analytics.usa.gov) list, we first excluded all subdomains. Then we tested the remaining websites to see if they were ranked on the Majestic Million list. In particular, we looked for non-.gov websites. If these websites were ranked in the top million, we included them in our list of websites to review. Some examples of websites that we added to our list include [DocsTeach.org](https://docsteach.org) ([docsteach.org](https://docsteach.org)), the Bureau of Engraving and Printing ([moneyfactory.com](https://moneyfactory.com)), and the National Assessment Governing Board ([nagb.org](https://nagb.org)).<sup>46</sup>

Through this process, we identified 468 U.S. government websites (i.e., those with a .gov domain, plus federal government websites ending in .us, .com, .org, or .edu). Using publicly available testing tools, we assessed these 468 federal websites on each of the four benchmarks.<sup>47</sup> First, the report uses Google's "PageSpeed Insights" to gauge the speed of each website, based on both the desktop and mobile load-speed scores provided by the tool.<sup>48</sup> Second, the report uses the SEO Centro "Mobile Friendly Check" tool to score whether a website is mobile friendly.<sup>49</sup> Third, the report uses two tools to measure security: Qualys SSL Labs' "SSL Server Test" tool, which inspects public SSL certificates for security, and Verisign Labs' "DNSSEC Debugger" tool, which measures the security of DNS servers.<sup>50</sup> Finally, the report uses AChecker's "Web Accessibility Checker" to score websites on their level of accessibility based on WCAG 2.0.<sup>51</sup> We elaborate on each of these tools, why these factors are important, and how this report calculates scores in each corresponding section. Additionally, in each section, we compare the overall analysis of the 468 websites to those websites in the top 100,000 of the Majestic Million ranking to further understand how this subset of most popular federal websites rank on each of these metrics. To ensure the scoring for each of these four tests was reasonable, we also ran these tools on the top 20 nongovernment websites ranked on Majestic Million. Details on how we established a passing score for each criterion is explained in corresponding sections.

To calculate an overall ranking, we converted each of the metrics (desktop page-load speed, mobile page-load speed, mobile friendliness, accessibility, SSL, and DNSSEC) into z-scores, which indicate how many standard deviations a value is from the mean. Using z-scores allows for comparison across metrics with different distributions. We created a single score for page-load speed by averaging the z-scores of the desktop and mobile page-load speed metrics, and a single score for security based on the average of the SSL and DNSSEC z-scores. We then created an overall score by averaging each of the main categories (page-load speed, mobile friendliness, accessibility, and security). For the four sites missing accessibility scores, we used the average of the three remaining categories. To make

the overall scores more intuitive, we converted them to a 100-point scale based on the minimum and maximum percentage of points earned by the websites we reviewed.

## FINDINGS

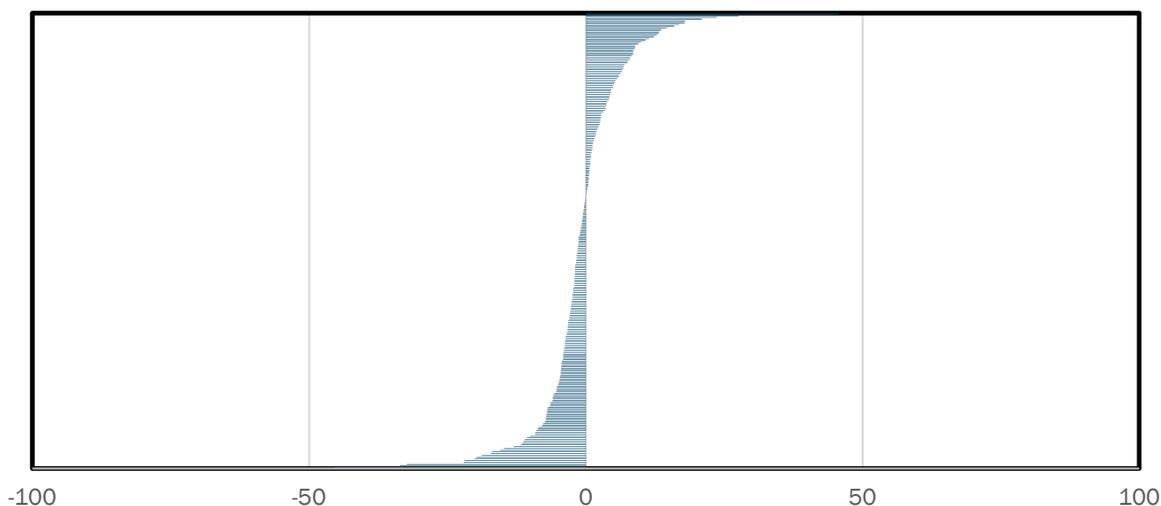
The following sections describe our findings for the four categories: page-load speed, mobile friendliness, security, and accessibility. In each section, we describe the findings for this sample of websites, as well as any relevant comparisons to the initial report. We also present an overall ranking determined from each of these variables.

There are limitations to our findings. The data presented below is not a complete analysis of all federal websites, and all the website testing tools have some limitations. The data was gathered in September 2017, and because of the shifting nature of online traffic, some of these federal websites may have since dropped from the top million popular websites while others that are not considered in this report may have moved up into the top million. There are more than 4,500 federal websites, and while this report looks at the most popular ones, it covers just over 10 percent. Furthermore, with the change to a new administration, the popularity and existence of several federal websites are in flux. Tests were conducted over a two-week period in September, and if we encountered any errors in the tests, we repeated them in late September and early October of 2017. Since that time, some agencies updated their websites. For example, the General Services Administration ([gsa.gov](http://gsa.gov)) in late October scored better for both desktop and mobile page-load speed, but in this report we analyze the score obtained in September to maintain consistency.

Of the 468 websites reviewed in this report, we also reviewed 260 last year. Figure 1 shows the change in overall score for these. For example, if a site scored 0 last year and 100 this year, then the graph would show a change of 100. Ideally, all sites would show some positive movement. Unfortunately, as the figure shows, more sites saw their scores drop than rise.

### FIGURE 1

Change in overall score for popular federal websites (2016-2017)



Among the websites we reviewed in both reports, the five websites that had the greatest positive change in score were: [osti.gov](http://osti.gov) (Office of Scientific and Technical Information, U.S. Department of Energy), [irs.gov](http://irs.gov) (Internal Revenue Service), [dni.gov](http://dni.gov) (Office of the Director of National Intelligence), [ttb.gov](http://ttb.gov) (Alcohol and Tobacco Tax and Trade Bureau), and [rrb.gov](http://rrb.gov) (U.S. Railroad Retirement Board). Some of these agencies, such as [irs.gov](http://irs.gov), [dni.gov](http://dni.gov), and [rrb.gov](http://rrb.gov), have substantially updated their sites, as reflected in the higher scores.

As shown in table 1, among the websites we reviewed, the top 10 best-performing websites are: [vote.gov](http://vote.gov) (Vote.gov), [ibwc.gov](http://ibwc.gov) (International Boundary and Water Commission), [nist.gov](http://nist.gov) (National Institute of Standards and Technology), [bop.gov](http://bop.gov) (Federal Bureau of Prisons), [science.gov](http://science.gov) (Science.gov), [osti.gov](http://osti.gov) (Office of Science and Technology Information), [fbi.gov](http://fbi.gov) (Federal Bureau of Investigation), [ameslab.gov](http://ameslab.gov) (Ames Laboratory), [fhfaoig.gov](http://fhfaoig.gov) (Office of Inspector General Federal Housing Finance Agency), and [justice.gov](http://justice.gov) (Department of Justice). Likewise, the 10 worst performing websites are: [pmi.gov](http://pmi.gov) (President's Malaria Initiative), [mspb.gov](http://mspb.gov) (U.S. Merit Systems Protection Board), [nro.gov](http://nro.gov) (National Reconnaissance Office), [achp.gov](http://achp.gov) (Advisory Council on Historic Preservation), [ars-grin.gov](http://ars-grin.gov) (Germplasm Resource Information Network), [lanl.gov](http://lanl.gov) (Los Alamos National Laboratory), [presidio.gov](http://presidio.gov) (Presidio), [gsaauctions.gov](http://gsaauctions.gov) (GSA Auctions), [blm.gov](http://blm.gov) (Bureau of Land Management), and [federalreserve.gov](http://federalreserve.gov) (Board of Governors of the Federal Reserve System).

**TABLE 1****Popular federal websites ranked by overall score (2017).**

Domain	Score	Rank	Domain	Score	Rank
vote.gov	95.5	658,543	ttb.gov	81.1	45,942
ibwc.gov	87.3	935,804	niem.gov	81.0	796,571
nist.gov	87.2	539	serve.gov	80.9	36,004
bop.gov	86.3	13,840	consumerfinance.gov	80.8	4,144
science.gov	86.3	28,568	nasa.gov	80.7	108
osti.gov	85.7	10,914	trumanlibrary.org	80.6	17,038
fbi.gov	85.2	610	donotcall.gov	80.3	8,116
ameslab.gov	85.1	42,697	uscp.gov	80.3	501,673
fhfaog.gov	85.1	903,178	tsa.gov	80.2	2,455
justice.gov	84.4	824	medicare.gov	80.1	2,168
investor.gov	84.1	46,094	stopalcoholabuse.gov	80.0	283,909
usajobs.gov	84.0	4,713	justthinktwice.gov	79.9	234,959
whitehouse.gov	83.8	192	womenshistorymonth.gov	79.9	109,565
fda.gov	83.7	258	onguardonline.gov	79.8	10,253
nih.gov	83.7	52	cancer.gov	79.6	901
visitthecapitol.gov	83.6	71,706	uscurrency.gov	79.6	575,870
usda.gov	83.3	248	code.gov	79.5	923,771
alaskacenters.gov	83.2	445,799	tsp.gov	79.3	103,131
share.america.gov	83.1	10,269	vets.gov	79.3	184,939
uspto.gov	82.9	522	africanamericanhistorymonth.gov	79.3	213,941
guidelines.gov	82.9	187,042	pay.gov	79.2	177,551
health.gov	82.9	4,522	cbo.gov	79.1	3,714
usa.gov	82.8	594	myra.gov	79.0	272,955
guideline.gov	82.8	19,083	aoc.gov	79.0	28,719
exim.gov	82.6	36,130	hru.gov	79.0	167,116
healthfinder.gov	82.6	5,234	fbijobs.gov	79.0	105,427
sustainablecommunities.gov	82.5	585,178	ftccomplaintassistant.gov	78.9	13,822
disasterassistance.gov	82.0	39,199	mycreditunion.gov	78.8	118,328
consumer.gov	81.9	17,482	hhs.gov	78.7	603
applicationmanager.gov	81.8	941,133	dhhs.gov	78.7	12,176
fcc.gov	81.7	760	cms.gov	78.6	1,975
medlineplus.gov	81.7	1,078	hiv.gov	78.6	17,467
nano.gov	81.6	58,766	ornl.gov	78.6	2,118
clinicaltrials.gov	81.6	1,313	indianaffairs.gov	78.6	323,948
fema.gov	81.5	821	uscc.gov	78.4	55,771
phe.gov	81.3	59,054	nara.gov	78.4	10,591
hudoig.gov	81.1	241,717	fordlibrarymuseum.gov	78.4	79,659
its.bldrdoc.gov	81.1	79,017	lsc.gov	78.4	88,816
hispanicheritagemonth.gov	81.1	211,081	nwcg.gov	78.3	34,088
smartgrid.gov	81.1	248,173	usability.gov	78.3	24,970

**TABLE 1 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
iarpa.gov	78.2	193,902	state.gov	76.3	259
alzheimers.gov	78.1	542,938	nnlm.gov	76.3	65,218
ncd.gov	78.1	59,887	fletc.gov	76.2	164,848
childwelfare.gov	77.9	11,221	medicaid.gov	76.2	10,648
listo.gov	77.9	583,774	nhtsa.gov	76.1	2,120
archives.gov	77.9	433	insurekidsnow.gov	76.1	90,260
usaid.gov	77.9	1,997	9-11commission.gov	76.0	37,398
frtr.gov	77.8	920,323	doleta.gov	75.9	4,330
ncjrs.gov	77.8	5,696	digitalgov.gov	75.9	105,697
defense.gov	77.8	1,407	helpwithmybank.gov	75.9	270,668
econsumer.gov	77.8	92,587	clintonlibrary.gov	75.8	137,120
cbp.gov	77.6	2,000	nationalgangcenter.gov	75.8	283,470
dnfsb.gov	77.5	743,978	ntis.gov	75.8	28,046
section508.gov	77.4	9,391	sba.gov	75.7	1,143
ffiec.gov	77.4	23,694	msha.gov	75.7	28,468
ncbi.nlm.nih.gov	77.3	84	imls.gov	75.7	21,990
hrsa.gov	77.3	3,635	wdol.gov	75.7	322,205
idmanagement.gov	77.2	728,074	ahrq.gov	75.6	2,548
sigtar.gov	77.2	249,304	nrel.gov	75.6	3,623
genome.gov	77.1	6,187	truman.gov	75.6	162,532
trafficsafetymarketing.gov	77.1	187,220	drugabuse.gov	75.5	2,719
agingstats.gov	77.0	241,759	drought.gov	75.4	115,975
privacyshield.gov	77.0	18,269	nps.gov	75.4	358
girlshealth.gov	77.0	73,085	ssa.gov	75.3	1,128
pepfar.gov	76.9	63,016	socialsecurity.gov	75.3	5,145
mbda.gov	76.9	45,367	wrp.gov	75.3	877,710
onrr.gov	76.8	932,962	llnl.gov	75.3	3,231
financialresearch.gov	76.8	489,436	ahcpr.gov	75.3	94,904
fueleconomy.gov	76.7	6,124	stopfraud.gov	75.2	134,862
congress.gov	76.7	950	usbr.gov	75.2	9,711
pppl.gov	76.6	44,053	bia.gov	75.2	57,918
eftps.gov	76.6	96,310	scijinks.gov	75.1	487,141
firstgov.gov	76.6	9,112	911.gov	75.0	675,028
telework.gov	76.6	569,475	atf.gov	75.0	10,449
kids.gov	76.6	59,531	studentaid.gov	74.9	195,346
reginfo.gov	76.5	47,449	peacecorps.gov	74.9	8,561
ftc.gov	76.5	409	ic3.gov	74.9	4,966
bjac.gov	76.4	68,850	senate.gov	74.9	456
sec.gov	76.4	572	secretservice.gov	74.9	18,923
studentloans.gov	76.3	15,454	supremecourt.gov	74.9	1,966

**TABLE 1 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
copyright.gov	74.8	1,457	sbir.gov	73.1	45,814
cio.gov	74.7	34,026	fdic.gov	73.1	3,284
bls.gov	74.6	591	papahanaumokuakea.gov	73.1	205,712
nrc.gov	74.6	7,809	nsopw.gov	73.0	42,143
prc.gov	74.5	169,908	nwbc.gov	73.0	180,507
abmc.gov	74.4	46,679	nsa.gov	73.0	3,442
cdc.gov	74.4	138	brac.gov	73.0	872,406
va.gov	74.4	750	sss.gov	73.0	23,278
feb.gov	74.3	31,594	commerce.gov	72.9	5,752
nifc.gov	74.2	23,822	usitc.gov	72.8	10,012
ice.gov	74.2	4,441	usaspending.gov	72.7	37,216
benefits.gov	74.1	27,616	sandia.gov	72.7	4,999
dni.gov	74.1	7,616	science360.gov	72.7	101,007
odni.gov	74.1	347,052	geomac.gov	72.6	731,966
acl.gov	74.1	14,015	fedbizopps.gov	72.6	180,106
whistleblowers.gov	74.1	213,108	bbg.gov	72.6	100,162
ofr.gov	74.1	53,292	cuidadodesalud.gov	72.6	152,346
dhs.gov	74.0	737	everykidinapark.gov	72.5	137,346
regulations.gov	73.9	3,390	nlr.gov	72.5	16,157
juvenilecouncil.gov	73.9	212,144	pubmed.gov	72.5	35,065
fedramp.gov	73.9	326,659	cfda.gov	72.5	68,921
organdonor.gov	73.9	35,648	usmint.gov	72.4	8,792
doi.gov	73.8	5,089	flra.gov	72.4	417,486
nitrd.gov	73.8	103,053	nga.gov	72.3	3,462
usembassy.gov	73.7	814	cpsc.gov	72.3	1,506
womenshealth.gov	73.7	5,229	fishwatch.gov	72.3	199,402
huduser.gov	73.6	10,323	house.gov	72.3	399
distraction.gov	73.6	22,280	fbo.gov	72.3	5,986
irs.gov	73.4	416	finccn.gov	72.3	15,259
makinghomeaffordable.gov	73.4	27,567	uspsaig.gov	72.2	102,867
manufacturing.gov	73.4	206,901	transportation.gov	72.2	3,340
export.gov	73.4	1,847	sciencebase.gov	72.2	731,860
faa.gov	73.3	1,090	identitytheft.gov	72.1	49,675
acquisition.gov	73.3	65,915	govloans.gov	72.0	341,481
recalls.gov	73.3	49,487	globe.gov	72.0	40,337
jimmycarterlibrary.gov	73.2	174,674	feedthefuture.gov	71.9	123,033
selectusa.gov	73.2	270,191	uscis.gov	71.7	1,629
nsf.gov	73.2	1,286	ovc.gov	71.7	151,503
ecfr.gov	73.1	6,610	stb.gov	71.7	459,398
healthcare.gov	73.1	2,146	usps.com	71.6	837

**TABLE 1 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
dot.gov	71.6	601	loc.gov	69.5	156
fafsa.gov	71.5	27,467	buyusa.gov	69.4	48,328
mcc.gov	71.5	87,982	pnnl.gov	69.4	21,128
bsee.gov	71.4	174,280	fvap.gov	69.4	66,369
cftc.gov	71.3	8,975	inl.gov	69.3	51,817
namus.gov	71.3	438,306	unicor.gov	69.1	289,791
ourdocuments.gov	71.3	20,258	fpds.gov	69.0	171,080
americaslibrary.gov	71.2	18,771	ovcttac.gov	68.9	911,165
ihs.gov	71.2	25,094	presidentialserviceawards.gov	68.8	217,018
usbg.gov	71.2	82,006	childstats.gov	68.6	61,353
access-board.gov	71.1	16,306	ustda.gov	68.6	214,534
ncifcrf.gov	70.9	54,570	foodsafety.gov	68.6	9,649
energycodes.gov	70.9	121,547	bea.gov	68.5	4,425
fjc.gov	70.9	31,455	occ.gov	68.5	28,708
pmf.gov	70.9	532,971	ofcm.gov	68.5	194,232
time.gov	70.9	15,403	amberalert.gov	68.5	125,102
edpubs.gov	70.8	644,524	cia.gov	68.3	650
ncua.gov	70.8	23,060	fedshirevets.gov	68.3	149,304
fws.gov	70.6	1,490	ucrdatatool.gov	68.2	330,854
collegedrinkingprevention.gov	70.5	60,712	foia.gov	68.1	82,912
nctc.gov	70.5	87,514	nagb.org	68.1	463,144
data.gov	70.5	9,103	us-cert.gov	68.1	3,298
osha.gov	70.3	1,179	itis.gov	68.1	71,919
healthit.gov	70.3	14,317	globalchange.gov	68.1	14,066
gpo.gov	70.2	720	recreation.gov	68.0	9,012
osc.gov	70.1	86,666	safercar.gov	68.0	7,903
research.gov	70.1	80,001	nationalresourcedirectory.gov	67.9	261,969
nutrition.gov	70.0	22,332	nrd.gov	67.9	374,568
idtheft.gov	70.0	633,739	treasury.gov	67.9	1,116
recoverymonth.gov	70.0	150,950	samhsa.gov	67.9	1,885
fec.gov	69.9	6,557	ed.gov	67.8	390
vehiclehistory.gov	69.9	296,022	healthypeople.gov	67.8	19,717
epa.gov	69.8	260	usds.gov	67.7	725,460
fedcenter.gov	69.7	137,649	ncirc.gov	67.6	820,214
orau.gov	69.7	62,917	saferproducts.gov	67.6	61,596
lep.gov	69.6	504,798	fhfa.gov	67.5	31,043
usgs.gov	69.6	393	energy.gov	67.4	711
youthrules.gov	69.6	289,347	eac.gov	67.2	38,072
usich.gov	69.6	112,718	gsa.gov	67.1	2,529
moneyfactory.gov	69.5	48,322	eeoc.gov	67.1	2,904

**TABLE 1 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
tonation-nsn.gov	67.1	555,364	pbgc.gov	64.2	50,696
opm.gov	67.0	4,388	solardecathlon.gov	64.2	58,957
fnal.gov	67.0	5,500	bnl.gov	64.1	7,036
fs.fed.us	66.8	1,578	energystar.gov	64.1	1,769
boem.gov	66.8	56,407	rrb.gov	64.1	157,248
digitalpreservation.gov	66.8	62,916	nationalmap.gov	64.0	46,765
vef.gov	66.8	705,883	sam.gov	64.0	50,196
americorps.gov	66.6	32,213	letgirlslearn.gov	63.9	283,438
surgeongeneral.gov	66.6	8,611	nersc.gov	63.9	71,381
climate.gov	66.6	14,607	usccr.gov	63.9	60,144
ferc.gov	66.5	16,122	fdlp.gov	63.7	181,423
treasurydirect.gov	66.4	10,008	mymoney.gov	63.6	45,132
savingsbonds.gov	66.4	160,647	hanford.gov	63.5	85,111
bpa.gov	66.4	89,556	weather.gov	63.3	904
pnl.gov	66.4	14,093	jfklibrary.org	63.0	7,728
hud.gov	66.4	1,344	gao.gov	62.9	1,902
read.gov	66.4	75,569	ojp.gov	62.8	16,576
majorityleader.gov	66.4	61,757	nationalservice.gov	62.8	9,127
iad.gov	66.3	740,298	anl.gov	62.8	2,598
vaccines.gov	66.2	69,084	dol.gov	62.7	883
dea.gov	66.1	7,344	tigta.gov	62.7	558,726
cdfifund.gov	66.1	124,256	opic.gov	62.6	62,611
arm.gov	66.0	166,427	adlnet.gov	62.5	169,931
stopbullying.gov	66.0	9,285	choosemyplate.gov	62.5	4,158
ginniema.gov	65.8	128,448	myplate.gov	62.5	593,063
gps.gov	65.8	61,903	acwi.gov	62.5	691,305
pcah.gov	65.4	176,199	bts.gov	62.4	4,981
airnow.gov	65.4	23,840	usap.gov	62.3	62,910
grants.gov	65.1	7,406	fara.gov	62.2	103,056
challenge.gov	65.1	43,970	crimesolutions.gov	62.0	245,674
arts.gov	65.1	7,327	nicic.gov	61.8	42,943
ada.gov	64.9	4,728	apps.gov	61.6	257,832
gsaadvantage.gov	64.8	29,556	jct.gov	61.5	96,319
bioethics.gov	64.7	85,493	smart.gov	61.4	902,846
mentalhealth.gov	64.5	46,899	eia.gov	61.3	1,501
neh.gov	64.5	6,671	wapa.gov	61.2	246,391
thecoolspot.gov	64.4	215,850	ncpc.gov	61.2	438,419
ems.gov	64.4	488,371	cfo.gov	61.0	752,773
nehrrp.gov	64.3	824,997	pacer.gov	61.0	51,014
fgdc.gov	64.3	89,039	nationsreportcard.gov	61.0	71,713

**TABLE 1 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
nij.gov	60.8	19,043	federalregister.gov	55.9	2,260
faasafety.gov	60.8	77,250	smokefree.gov	55.8	15,318
mymedicare.gov	60.7	244,142	adlnet.org	55.6	297,503
invasivespeciesinfo.gov	60.7	78,215	medpac.gov	55.4	98,197
vcf.gov	60.5	962,022	ustr.gov	55.2	5,307
nixonlibrary.gov	60.3	68,278	ndu.edu	55.1	21,474
foreignassistance.gov	60.2	201,411	moneyfactory.com	54.9	133,020
democraticleader.gov	59.8	75,692	ojdp.gov	54.7	27,867
ussc.gov	59.4	41,031	tswg.gov	54.6	985,963
volunteer.gov	59.1	239,243	broadbandmap.gov	54.6	34,499
noaa.gov	59.0	214	aviationweather.gov	54.2	24,862
rivers.gov	58.9	336,780	ntsb.gov	53.3	6,539
oge.gov	58.9	106,361	uscourts.gov	52.8	1,182
biopreferred.gov	58.5	297,616	arc.gov	52.8	101,902
gop.gov	58.5	43,731	lbl.gov	52.1	1,595
osac.gov	58.3	57,033	docsteach.org	51.6	10,868
usmarshals.gov	58.1	39,725	srs.gov	51.5	211,333
pclob.gov	57.9	368,950	udall.gov	51.0	161,422
eda.gov	57.8	71,201	fmc.gov	50.1	101,175
plainlanguage.gov	57.7	103,841	federallabs.org	48.9	34,889
itdashboard.gov	57.7	669,979	usphs.gov	48.6	69,476
uscirf.gov	57.3	61,994	cecc.gov	47.7	175,152
goes-r.gov	57.2	198,323	trade.gov	47.6	10,603
arctic.gov	56.8	808,339	tsunami.gov	47.2	316,948
eldercare.gov	56.6	21,073	pmi.gov	44.9	602,770
jobcorps.gov	56.6	37,019	mspb.gov	44.8	215,030
osmre.gov	56.6	117,679	nro.gov	44.0	144,044
csb.gov	56.3	69,368	achp.gov	43.9	113,794
speaker.gov	56.3	11,196	ars-grin.gov	41.8	32,550
bjs.gov	56.1	6,208	lanl.gov	41.6	2,665
ready.gov	56.1	2,683	presidio.gov	39.3	87,505
cnss.gov	56.1	836,904	gsaauctions.gov	39.1	129,665
poolsafely.gov	56.0	75,220	blm.gov	38.7	3,307
census.gov	56.0	472	federalreserve.gov	36.5	1,439

## LEGISLATIVE BRANCH WEBSITES

In May 2017, ITIF released a short report called *Benchmarking Legislative Branch Websites*, which tested legislative-branch websites on the same criteria: page-load speed, mobile friendliness, security, and accessibility. The report found that 99 percent of legislative-branch websites failed at least one test.<sup>52</sup> In this report, several legislative-branch websites were tested again. Some of those that overlapped with the report in May improved according to the benchmarks set. For example, the Capitol Visitors Center ([visitthecapitol.gov](http://visitthecapitol.gov)) and the U.S. Capitol Police ([uscg.gov](http://uscg.gov)) improved significantly in desktop and mobile page-load speed. Others failed to enable DNSSEC following ITIF's report in May, like the Speaker of the U.S. House of Representatives ([speaker.gov](http://speaker.gov)), the House of Representative ([house.gov](http://house.gov)), and the Congressional Budget Office ([cbo.gov](http://cbo.gov)). The House of Representatives' Majority Leader ([majorityleader.gov](http://majorityleader.gov)), House of Representatives' Democratic Leader ([democraticleader.gov](http://democraticleader.gov)), and Government Accountability Office ([gao.gov](http://gao.gov)), which were not reviewed in the initial report, also failed to enable DNSSEC. Additionally, several websites did not have HTTPS enabled. These included the Government Accountability Office ([gao.gov](http://gao.gov)) and the Speaker of the U.S. House of Representatives ([speaker.gov](http://speaker.gov)). Overall, of those legislative-branch websites reviewed, the most common failures were slow page-load speeds and low accessibility scores.

**TABLE 2**

**Popular legislative-branch websites ranked by overall score (2017).**

Domain	Score	Rank	Domain	Score	Rank
<a href="http://visitthecapitol.gov">visitthecapitol.gov</a>	91.0	71,706	<a href="http://copyright.gov">copyright.gov</a>	80.2	1,457
<a href="http://cbo.gov">cbo.gov</a>	85.6	3,714	<a href="http://americaslibrary.gov">americaslibrary.gov</a>	75.8	18,771
<a href="http://house.gov">house.gov</a>	77.3	399	<a href="http://cecc.gov">cecc.gov</a>	47.2	175,152
<a href="http://uscg.gov">uscg.gov</a>	86.9	501,673	<a href="http://majorityleader.gov">majorityleader.gov</a>	70.0	61,757
<a href="http://senate.gov">senate.gov</a>	80.4	456	<a href="http://jct.gov">jct.gov</a>	64.0	96,319
<a href="http://usbg.gov">usbg.gov</a>	75.8	82,006	<a href="http://speaker.gov">speaker.gov</a>	55.7	11,196
<a href="http://gao.gov">gao.gov</a>	65.8	1,902	<a href="http://loc.gov">loc.gov</a>	73.7	156
<a href="http://uscirf.gov">uscirf.gov</a>	59.9	61,994	<a href="http://democraticleader.gov">democraticleader.gov</a>	62.0	75,692
<a href="http://congress.gov">congress.gov</a>	82.5	950			

## PAGE-LOAD SPEED

The time it takes for webpages to load is important to Internet users. Slow page-load speeds negatively impact the user experience.<sup>53</sup> Several studies indicate that the longer a page takes to load, the more likely it is that users will abandon the site.<sup>54</sup> For example, a study from 2011 found that 47 percent of consumers expect a website to load in two seconds or less and 40 percent of individuals will abandon a website if it takes more than three seconds to load.<sup>55</sup>

This report uses the same publicly available tool as in the initial report. The tool is Google's "PageSpeed Insights," which conducts two tests. One test measures and scores the desktop page-load speed and the second measures and scores page-load speed for mobile devices. The tool uses 15 different rules to evaluate sites and assigns a score to each website from 0 to 100 points.<sup>56</sup> The same website may perform differently on desktops and mobile devices, and the tool offers suggestions on how to make websites load faster. For all tests, we measured page-load speed of the homepage of the domain. The tool measures the websites' performance based on the time it takes a website to load content above the fold (i.e., the portion of the website visible without scrolling) and the time it takes to load the full webpage. Delays can also be caused by insufficient bandwidth.<sup>57</sup>

As in the initial report, we consider a website to have failed the desktop page-load speed test if it scores a 54 or below, and a 56 or below for the mobile page-load speed. We chose these thresholds based on our review of the page-load speed of the 20 most popular nongovernment domains from Majestic Million.<sup>58</sup> We found that one standard deviation below the mean for each test was slightly below the standard deviations we calculated in the initial report. Nevertheless, we chose to use the same cut off to examine the data. This allows us to make better comparisons with the initial report. In comparison to the top 20 nongovernment websites, the federal websites perform poorly in terms of page-load speed.

This report finds that two-thirds of federal websites performed well on desktop page-load speed, and only one-quarter of federal websites performed well on mobile page-load speed. Out of 468 reviewed websites, 63 percent passed the desktop page-load speed test, compared with 78 percent in the initial report. Similarly, 66 percent of the federal websites in the global top 100,000 passed the test, compared with 74 percent in the initial report. Of the 260 websites reviewed in both reports, about 53 percent passed the desktop speed test this time, compared with 73 percent last year. Some websites are performing worse than before, like the Department of Homeland Security (dhs.gov), where desktop page-load speed declined from a score of 54 to a score of 47, and Medicare.gov (medicare.gov), which went from an initial score of 52 to a score of 49. Figure 2 shows the overall distribution of desktop page-load speed scores for reviewed federal websites. The blue squares in figure 2 indicate which websites failed to get the minimum passing score of 54.

## FIGURE 2

Desktop page load speed of federal websites by popularity (2017).

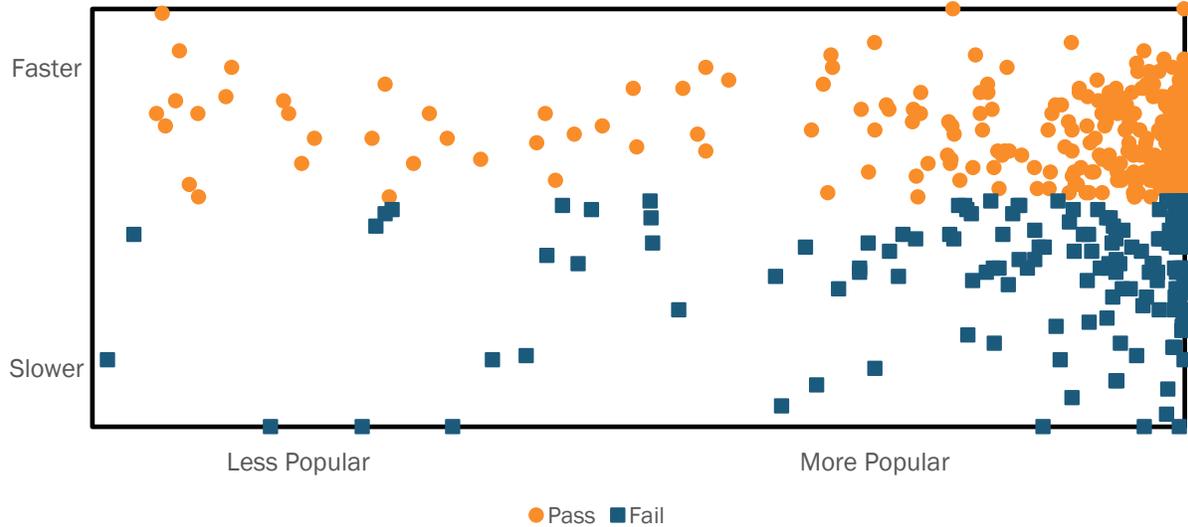
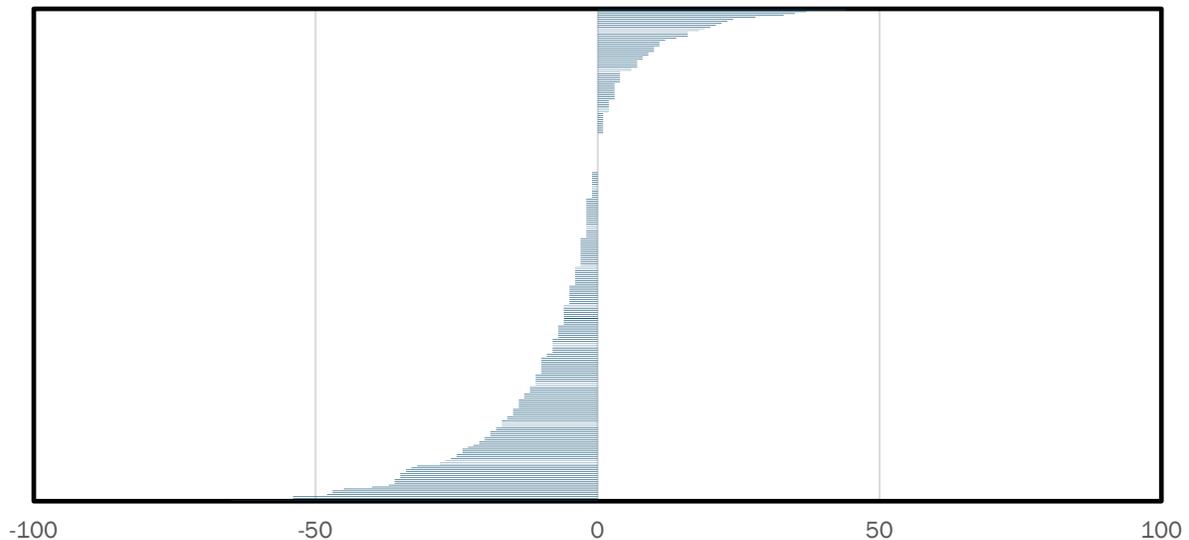


Figure 3 illustrates the change in desktop page-load speed scores of websites tested in both the initial report and this report. This figure shows that the majority (67 percent) of the federal websites tested in both reports declined in their performance of desktop page-load speed. A small proportion (less than 7 percent) of federal websites' desktop page-load speeds remained the same. Only 25 percent of the 260 websites tested in both reports improved their desktop page-load speeds.

## FIGURE 3

Change in desktop page-load speed score for federal websites (2016-2017).



For mobile page-load speed, we found that out of the 468 reviewed websites only 27 percent scored higher than 56. In addition, only 27 percent of the federal websites in the global top 100,000 passed the test. Interestingly, of the 260 websites reviewed in both reports, only about 23 percent passed the mobile speed test, compared with 31 percent last year. This indicates a decline for mobile page-load speed performance for these websites. For example, the National Endowment for the Arts ([arts.gov](http://arts.gov)) decreased its mobile page-load speed from 74 in the initial report to 37 at the time of testing for this report. This highlights the importance of frequent website testing to ensure that websites continue to perform well. Figure 4 shows the overall distribution of mobile page-load speed scores for reviewed federal websites. The blue squares in Figure 4 indicate which websites failed to get the minimum passing score of 56.

### FIGURE 4

Mobile page-load speed of federal websites by popularity (2017).

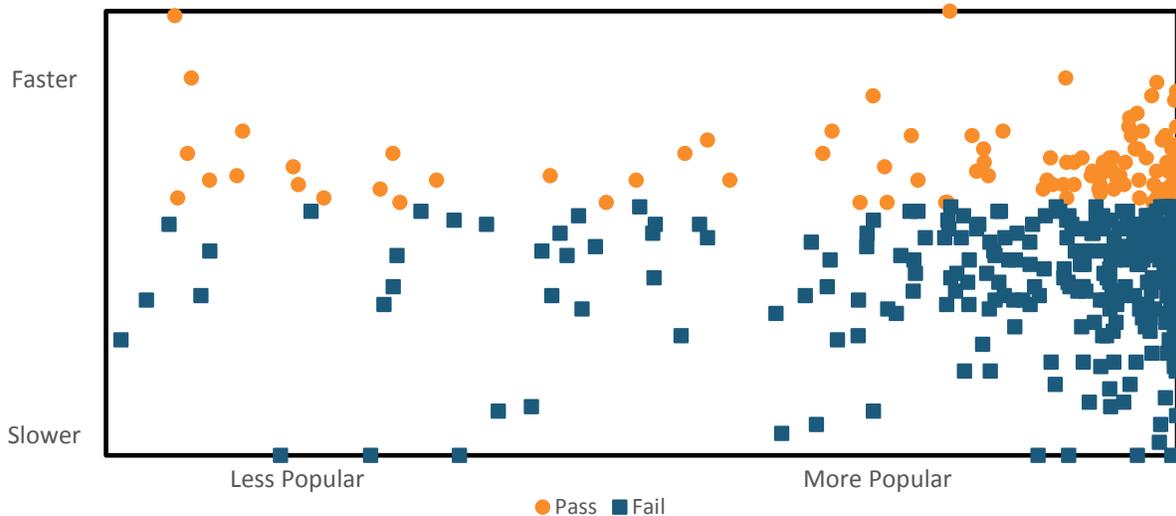
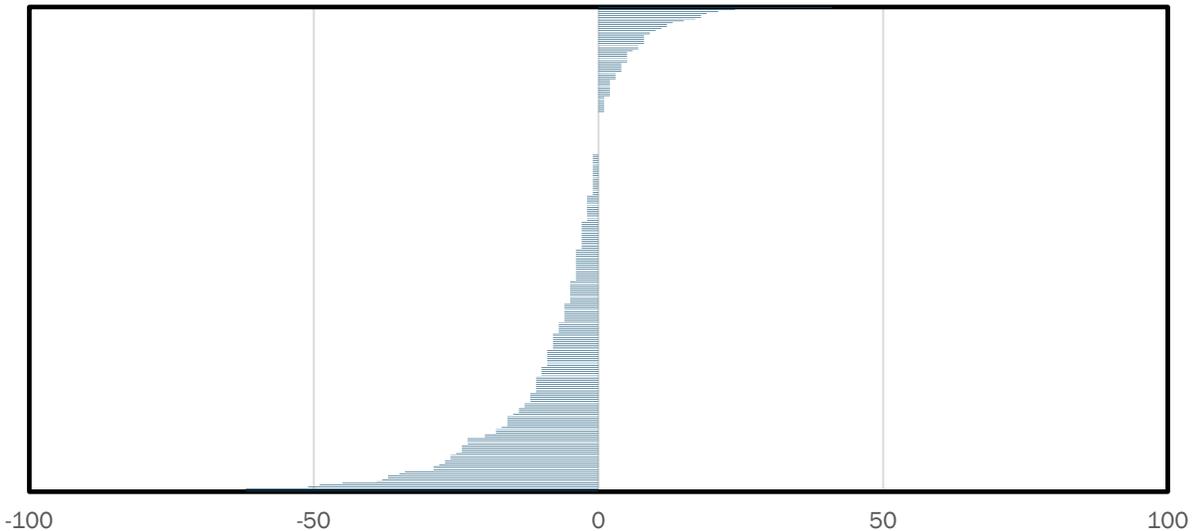


Figure 5 illustrates the change in mobile page-load speed score of websites tested both in the initial report and this report. This figure shows that the majority (70 percent) of federal websites tested in both reports declined in their performance on mobile page-load speed. Of the 260 websites tested in both reports, 8 percent of websites maintained the same scores and only 22 percent improved their scores.

## FIGURE 5

Change in mobile page-load speed of federal websites (2016-2017).



Despite setting a goal of improving convenience for users of digital services, federal agencies are failing to deliver fast websites. Notably, several websites that continue to be in the global top 100,000 and failed the desktop and mobile page-load speed tests in the initial report, have not improved their services. These include the General Services Administration ([gsa.gov](http://gsa.gov)) and IdentityTheft.gov ([identitytheft.gov](http://identitytheft.gov)). Others, like the website for the National Cancer Institute ([cancer.gov](http://cancer.gov)), remain in the global top 100,000 and now pass the desktop page-load speed test. Other popular and well-known websites in the global top 100,000, such as the CDC ([cdc.gov](http://cdc.gov)), the CIA ([cia.gov](http://cia.gov)), USPS ([usps.org](http://usps.org) and [usps.com](http://usps.com)), and Medicare ([medicare.gov](http://medicare.gov)), failed both the desktop and mobile page-load speed tests.

As in the initial report, federal websites fail these tests due to four big issues: using render-blocking CSS and JavaScript, not optimizing images, not prioritizing visible content, and using landing page redirects. These are all issues that can be addressed (for details, see the initial report).<sup>59</sup>

**TABLE 3****Popular federal websites ranked by desktop page load speed (2017).**

Domain	Score	Rank	Domain	Score	Rank
usa.gov	100	594	lep.gov	81	504,798
juvenilecouncil.gov	100	212,144	section508.gov	80	9,391
ibwc.gov	99	935,804	buyusa.gov	80	48,328
plainlanguage.gov	92	103,841	cfda.gov	80	68,921
stopalcoholabuse.gov	92	283,909	eftps.gov	80	96,310
vote.gov	92	658,543	fedbizopps.gov	80	180,106
9-11commission.gov	90	37,398	guidelines.gov	80	187,042
frtr.gov	90	920,323	hudoig.gov	80	241,717
indianaffairs.gov	89	323,948	consumerfinance.gov	79	4,144
nist.gov	88	539	ecfr.gov	79	6,610
americaslibrary.gov	88	18,771	guideline.gov	79	19,083
pppl.gov	87	44,053	nutrition.gov	79	22,332
nih.gov	86	52	aoc.gov	79	28,719
osti.gov	86	10,914	usccr.gov	79	60,144
truman.gov	86	162,532	lsc.gov	79	88,816
wdol.gov	86	322,205	wrp.gov	79	877,710
namus.gov	86	438,306	medlineplus.gov	78	1,078
brac.gov	86	872,406	phe.gov	78	59,054
ornl.gov	85	2,118	its.blrdoc.gov	78	79,017
ffiec.gov	85	23,694	nehpp.gov	78	824,997
ars-grin.gov	85	32,550	code.gov	78	923,771
ameslab.gov	85	42,697	justice.gov	77	824
ncbi.nlm.nih.gov	84	84	usajobs.gov	77	4,713
usembassy.gov	84	814	fbo.gov	77	5,986
ic3.gov	83	4,966	consumer.gov	77	17,482
research.gov	83	80,001	ofr.gov	77	53,292
flra.gov	83	417,486	ncd.gov	77	59,887
cbo.gov	82	3,714	visitthecapitol.gov	77	71,706
science.gov	82	28,568	usich.gov	77	112,718
pubmed.gov	82	35,065	mycreditunion.gov	77	118,328
nwbc.gov	82	180,507	myra.gov	77	272,955
ucrdatatool.gov	82	330,854	bea.gov	76	4,425
geomac.gov	82	731,966	health.gov	76	4,522
clinicaltrials.gov	81	1,313	donotcall.gov	76	8,116
healthfinder.gov	81	5,234	bop.gov	76	13,840
serve.gov	81	36,004	uscc.gov	76	55,771
disasterassistance.gov	81	39,199	collegedrinkingprevention.gov	76	60,712
digitalpreservation.gov	81	62,916	gps.gov	76	61,903
jct.gov	81	96,319	pcah.gov	76	176,199
stb.gov	81	459,398	smartgrid.gov	76	248,173

**TABLE 3 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
helpwithmybank.gov	76	270,668	pmf.gov	72	532,971
vehiclehistory.gov	76	296,022	onrr.gov	72	932,962
usitc.gov	75	10,012	nsa.gov	71	3,442
investor.gov	75	46,094	nara.gov	71	10,591
childstats.gov	75	61,353	nifc.gov	71	23,822
itis.gov	75	71,919	ussc.gov	71	41,031
democraticleader.gov	75	75,692	ncifcrf.gov	71	54,570
energycodes.gov	75	121,547	fara.gov	71	103,056
trafficsafetymarketing.gov	75	187,220	amberalert.gov	71	125,102
agingstats.gov	75	241,759	vets.gov	71	184,939
sustainablecommunities.gov	75	585,178	nationalgangcenter.gov	71	283,470
acwi.gov	75	691,305	govloans.gov	71	341,481
ncirc.gov	75	820,214	ndu.edu	70	21,474
fhfaorig.gov	75	903,178	hispanicheritagemonth.gov	70	211,081
applicationmanager.gov	75	941,133	alaskacenters.gov	70	445,799
irs.gov	74	416	tigta.gov	70	558,726
faa.gov	74	1,090	usda.gov	69	248
uscourts.gov	74	1,182	fema.gov	69	821
llnl.gov	74	3,231	supremecourt.gov	69	1,966
regulations.gov	74	3,390	usaid.gov	69	1,997
uspto.gov	73	522	fdic.gov	69	3,284
congress.gov	73	950	cftc.gov	69	8,975
drugabuse.gov	73	2,719	broadbandmap.gov	69	34,499
ada.gov	73	4,728	usbg.gov	69	82,006
secretsservice.gov	73	18,923	911.gov	69	675,028
ourdocuments.gov	73	20,258	dnfsb.gov	69	743,978
pbgc.gov	73	50,696	niem.gov	69	796,571
nationsreportcard.gov	73	71,713	fda.gov	68	258
oge.gov	73	106,361	state.gov	68	259
thecoolspot.gov	73	215,850	usgs.gov	68	393
sigtar.gov	73	249,304	ssa.gov	68	1,128
whitehouse.gov	72	192	eeoc.gov	68	2,904
fbi.gov	72	610	us-cert.gov	68	3,298
nhtsa.gov	72	2,120	choosemyplate.gov	68	4,158
childwelfare.gov	72	11,221	socialsecurity.gov	68	5,145
hiv.gov	72	17,467	nrc.gov	68	7,809
recalls.gov	72	49,487	data.gov	68	9,103
girlshealth.gov	72	73,085	medicaid.gov	68	10,648
bpa.gov	72	89,556	trumanlibrary.org	68	17,038
whistleblowers.gov	72	213,108	organdonor.gov	68	35,648

**TABLE 3 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
pacер.gov	68	51,014	edpubs.gov	64	644,524
osc.gov	68	86,666	sec.gov	63	572
myplate.gov	68	593,063	uscis.gov	63	1,629
archives.gov	67	433	tsa.gov	63	2,455
safercar.gov	67	7,903	hrsa.gov	63	3,635
exim.gov	67	36,130	sandia.gov	63	4,999
womenshistorymonth.gov	67	109,565	fec.gov	63	6,557
uscр.gov	67	501,673	foodsafety.gov	63	9,649
fcc.gov	66	760	nano.gov	63	58,766
copyright.gov	66	1,457	bja.gov	63	68,850
treasurydirect.gov	66	10,008	ustda.gov	63	214,534
share.america.gov	66	10,269	justthinktwice.gov	63	234,959
healthit.gov	66	14,317	vef.gov	63	705,883
reginfo.gov	66	47,449	arctic.gov	63	808,339
inl.gov	66	51,817	nasa.gov	62	108
tsp.gov	66	103,131	ftc.gov	62	409
savingsbonds.gov	66	160,647	eldercare.gov	62	21,073
fletc.gov	66	164,848	makinghomeaffordable.gov	62	27,567
fpds.gov	66	171,080	benefits.gov	62	27,616
ncpc.gov	66	438,419	ahcpr.gov	62	94,904
gpo.gov	65	720	fedcenter.gov	62	137,649
cms.gov	65	1,975	jimmycarterlibrary.gov	62	174,674
onguardonline.gov	65	10,253	iarpa.gov	62	193,902
access-board.gov	65	16,306	opm.gov	61	4,388
fafsa.gov	65	27,467	time.gov	61	15,403
cio.gov	65	34,026	studentloans.gov	61	15,454
globe.gov	65	40,337	privacyshield.gov	61	18,269
mentalhealth.gov	65	46,899	usaspending.gov	61	37,216
vaccines.gov	65	69,084	abmc.gov	61	46,679
invasivespeciesinfo.gov	65	78,215	majorityleader.gov	61	61,757
fedshirevets.gov	65	149,304	foia.gov	61	82,912
hru.gov	65	167,116	bioethics.gov	61	85,493
presidentialserviceawards.gov	65	217,018	science360.gov	61	101,007
fs.fed.us	64	1,578	feedthefuture.gov	61	123,033
ahrq.gov	64	2,548	youthrules.gov	61	289,347
distraction.gov	64	22,280	house.gov	60	399
usability.gov	64	24,970	hhs.gov	60	603
fjc.gov	64	31,455	gao.gov	60	1,902
poolsafely.gov	64	75,220	doleta.gov	60	4,330
africanamericanhistorymonth.gov	64	213,941	dhhs.gov	60	12,176

**TABLE 3 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
ftccomplaintassistant.gov	60	13,822	presidio.gov	56	87,505
nwcg.gov	60	34,088	insurekidsnow.gov	56	90,260
nicic.gov	60	42,943	digitalgov.gov	56	105,697
sam.gov	60	50,196	fedramp.gov	56	326,659
uspsaig.gov	60	102,867	epa.gov	55	260
crimesolutions.gov	60	245,674	cancer.gov	55	901
atf.gov	59	10,449	stopbullying.gov	55	9,285
healthypeople.gov	59	19,717	globalchange.gov	55	14,066
ojjdp.gov	59	27,867	fhfa.gov	55	31,043
msha.gov	59	28,468	sbir.gov	55	45,814
feb.gov	59	31,594	ttb.gov	55	45,942
gop.gov	59	43,731	mymedicare.gov	55	244,142
mbda.gov	59	45,367	idmanagement.gov	55	728,074
bia.gov	59	57,918	smart.gov	55	902,846
saferproducts.gov	59	61,596	osha.gov	54	1,179
papahanaumokuakea.gov	59	205,712	eia.gov	54	1,501
uscurrency.gov	59	575,870	lanl.gov	54	2,665
nga.gov	58	3,462	nrel.gov	54	3,623
womenshealth.gov	58	5,229	climate.gov	54	14,607
mymoney.gov	58	45,132	nrlb.gov	54	16,157
medpac.gov	58	98,197	drought.gov	54	115,975
bbg.gov	58	100,162	pay.gov	54	177,551
volunteer.gov	58	239,243	financialresearch.gov	54	489,436
ovcttac.gov	58	911,165	defense.gov	53	1,407
treasury.gov	57	1,116	healthcare.gov	53	2,146
neh.gov	57	6,671	transportation.gov	53	3,340
ferc.gov	57	16,122	recoverymonth.gov	53	150,950
nij.gov	57	19,043	cuidadodesalud.gov	53	152,346
imls.gov	57	21,990	foreignassistance.gov	53	201,411
cdfifund.gov	57	124,256	manufacturing.gov	53	206,901
stopfraud.gov	57	134,862	telework.gov	53	569,475
prc.gov	57	169,908	loc.gov	52	156
ed.gov	56	390	ncua.gov	52	23,060
weather.gov	56	904	fordlibrarymuseum.gov	52	79,659
hud.gov	56	1,344	arc.gov	52	101,902
genome.gov	56	6,187	fishwatch.gov	52	199,402
fincen.gov	56	15,259	alzheimers.gov	52	542,938
nsopw.gov	56	42,143	usds.gov	52	725,460
nationalmap.gov	56	46,765	dot.gov	51	601
read.gov	56	75,569	usps.com	51	837

**TABLE 3 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
dea.gov	51	7,344	peacecorps.gov	45	8,561
surgeongeneral.gov	51	8,611	firstgov.gov	45	9,112
rrb.gov	51	157,248	pnnl.gov	45	21,128
studentaid.gov	51	195,346	airnow.gov	45	23,840
sciencebase.gov	51	731,860	pepfar.gov	45	63,016
ready.gov	50	2,683	srs.gov	45	211,333
bjs.gov	50	6,208	wapa.gov	45	246,391
recreation.gov	50	9,012	dol.gov	44	883
nixonlibrary.gov	50	68,278	export.gov	44	1,847
nersc.gov	50	71,381	arts.gov	44	7,327
ems.gov	50	488,371	speaker.gov	44	11,196
bls.gov	49	591	pnl.gov	44	14,093
cbp.gov	49	2,000	fvap.gov	44	66,369
medicare.gov	49	2,168	unicor.gov	44	289,791
fueleconomy.gov	49	6,124	scijinks.gov	44	487,141
huduser.gov	49	10,323	senate.gov	43	456
trade.gov	49	10,603	dni.gov	43	7,616
fbijobs.gov	49	105,427	moneyfactory.gov	43	48,322
ncjrs.gov	48	5,696	ginniema.gov	43	128,448
nnlm.gov	48	65,218	moneyfactory.com	43	133,020
iad.gov	48	740,298	odni.gov	43	347,052
cdc.gov	47	138	usmarshals.gov	42	39,725
dhs.gov	47	737	hanford.gov	42	85,111
va.gov	47	750	fmc.gov	42	101,175
acl.gov	47	14,015	selectusa.gov	42	270,191
boem.gov	47	56,407	listo.gov	41	583,774
everykidinapark.gov	47	137,346	opic.gov	40	62,611
sba.gov	46	1,143	clintonlibrary.gov	40	137,120
commerce.gov	46	5,752	ovc.gov	40	151,503
ntsb.gov	46	6,539	ntis.gov	39	28,046
bnl.gov	46	7,036	occ.gov	39	28,708
mcc.gov	46	87,982	gsaadvantage.gov	39	29,556
econsumer.gov	46	92,587	kids.gov	39	59,531
arm.gov	46	166,427	csb.gov	39	69,368
mspb.gov	46	215,030	tonation-nsn.gov	39	555,364
apps.gov	46	257,832	nsf.gov	38	1,286
vcf.gov	46	962,022	blm.gov	38	3,307
cia.gov	45	650	ustr.gov	38	5,307
cpsc.gov	45	1,506	usphs.gov	38	69,476
energystar.gov	45	1,769	faasafety.gov	38	77,250

**TABLE 3 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
nro.gov	38	144,044	sss.gov	28	23,278
adlnet.gov	38	169,931	nagb.org	28	463,144
cecc.gov	38	175,152	fws.gov	27	1,490
adlnet.org	38	297,503	eda.gov	26	71,201
samhsa.gov	37	1,885	energy.gov	25	711
grants.gov	37	7,406	nctc.gov	25	87,514
aviationweather.gov	37	24,862	federalregister.gov	24	2,260
americorps.gov	37	32,213	osmre.gov	24	117,679
usap.gov	37	62,910	gsa.gov	23	2,529
fdlp.gov	37	181,423	goes-r.gov	22	198,323
biopreferred.gov	37	297,616	solardecathlon.gov	20	58,957
nationalresourcedirectory.gov	36	261,969	bsee.gov	20	174,280
nrd.gov	36	374,568	nationalservice.gov	19	9,127
ihs.gov	35	25,094	docsteach.org	19	10,868
fgdc.gov	35	89,039	challenge.gov	17	43,970
ofcm.gov	35	194,232	pmi.gov	17	602,770
noaa.gov	34	214	census.gov	16	472
nps.gov	34	358	achp.gov	16	113,794
udall.gov	34	161,422	idtheft.gov	16	633,739
lbl.gov	33	1,595	tswg.gov	16	985,963
fnal.gov	33	5,500	letgirlslearn.gov	14	283,438
jfklibrary.org	33	7,728	uscirf.gov	11	61,994
identitytheft.gov	33	49,675	orau.gov	11	62,917
osac.gov	33	57,033	rivers.gov	10	336,780
tsunami.gov	33	316,948	smokefree.gov	9	15,318
anl.gov	32	2,598	nitrd.gov	7	103,053
doi.gov	31	5,089	pclob.gov	5	368,950
usmint.gov	31	8,792	ojp.gov	3	16,576
federallabs.org	31	34,889	bts.gov	0	4,981
acquisition.gov	31	65,915	jobcorps.gov	0	37,019
ice.gov	30	4,441	gsaauctions.gov	0	129,665
eac.gov	29	38,072	itdashboard.gov	0	669,979
federalreserve.gov	28	1,439	cfo.gov	0	752,773
usbr.gov	28	9,711	cnss.gov	0	836,904

**TABLE 4****Popular federal websites ranked by mobile page-load speed (2017).**

Domain	Score	Rank	Domain	Score	Rank
juvenilecouncil.gov	100	212,144	usembassy.gov	66	814
ibwc.gov	99	935,804	congress.gov	66	950
plainlanguage.gov	85	103,841	medlineplus.gov	66	1,078
vote.gov	85	658,543	gao.gov	66	1,902
frtr.gov	85	920,323	health.gov	66	4,522
americaslibrary.gov	84	18,771	healthfinder.gov	66	5,234
nist.gov	82	539	fbo.gov	66	5,986
ffiec.gov	81	23,694	section508.gov	66	9,391
stopalcoholabuse.gov	81	283,909	buyusa.gov	66	48,328
ornl.gov	80	2,118	cfda.gov	66	68,921
9-11commission.gov	77	37,398	eftps.gov	66	96,310
pppl.gov	76	44,053	nitrd.gov	66	103,053
bls.gov	74	591	fedbizopps.gov	66	180,106
mymoney.gov	74	45,132	cbo.gov	65	3,714
ars-grin.gov	73	32,550	usitc.gov	65	10,012
truman.gov	73	162,532	myra.gov	65	272,955
wdol.gov	73	322,205	nehrrp.gov	65	824,997
brac.gov	73	872,406	justice.gov	64	824
osti.gov	72	10,914	nrel.gov	64	3,623
ameslab.gov	72	42,697	donotcall.gov	64	8,116
smartgrid.gov	72	248,173	guideline.gov	64	19,083
bop.gov	71	13,840	usccr.gov	64	60,144
namus.gov	71	438,306	gps.gov	64	61,903
fbi.gov	70	610	its.bldrdoc.gov	64	79,017
sandia.gov	69	4,999	guidelines.gov	64	187,042
serve.gov	69	36,004	ofr.gov	63	53,292
disasterassistance.gov	69	39,199	visitthecapitol.gov	63	71,706
nwbc.gov	69	180,507	research.gov	63	80,001
uscourts.gov	68	1,182	pcah.gov	63	176,199
ucrdatatool.gov	68	330,854	sustainablecommunities.gov	63	585,178
stb.gov	68	459,398	wrp.gov	63	877,710
geomac.gov	68	731,966	organdonor.gov	62	35,648
code.gov	68	923,771	uscc.gov	62	55,771
ncbi.nlm.nih.gov	67	84	energycodes.gov	62	121,547
clinicaltrials.gov	67	1,313	agingstats.gov	62	241,759
science.gov	67	28,568	flra.gov	62	417,486
ncd.gov	67	59,887	lep.gov	62	504,798
digitalpreservation.gov	67	62,916	acwi.gov	62	691,305
lsc.gov	67	88,816	fhfaoig.gov	62	903,178
mycreditunion.gov	67	118,328	llnl.gov	61	3,231

**TABLE 4 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
bea.gov	61	4,425	thecoolspot.gov	57	215,850
ic3.gov	61	4,966	helpwithmybank.gov	57	270,668
ndu.edu	61	21,474	vehiclehistory.gov	57	296,022
recalls.gov	61	49,487	pmf.gov	57	532,971
itis.gov	61	71,919	usds.gov	57	725,460
jct.gov	61	96,319	supremecourt.gov	56	1,966
oge.gov	61	106,361	ada.gov	56	4,728
drought.gov	61	115,975	nrc.gov	56	7,809
ncirc.gov	61	820,214	cftc.gov	56	8,975
faa.gov	60	1,090	nara.gov	56	10,591
ecfr.gov	60	6,610	time.gov	56	15,403
share.america.gov	60	10,269	democraticleader.gov	56	75,692
hiv.gov	60	17,467	usich.gov	56	112,718
phe.gov	60	59,054	hispanicheritagemonth.gov	56	211,081
girlshealth.gov	60	73,085	uscps.gov	56	501,673
amberalert.gov	60	125,102	copyright.gov	55	1,457
dnfsb.gov	60	743,978	nij.gov	55	19,043
fdic.gov	59	3,284	investor.gov	55	46,094
childwelfare.gov	59	11,221	pacer.gov	55	51,014
nationsreportcard.gov	59	71,713	womenshistorymonth.gov	55	109,565
fda.gov	58	258	fletc.gov	55	164,848
state.gov	58	259	hru.gov	55	167,116
nhtsa.gov	58	2,120	hudoig.gov	55	241,717
trumanlibrary.org	58	17,038	sigtar.gov	55	249,304
secretsservice.gov	58	18,923	vef.gov	55	705,883
pubmed.gov	58	35,065	arctic.gov	55	808,339
tsp.gov	58	103,131	cdc.gov	54	138
niem.gov	58	796,571	usda.gov	54	248
onrr.gov	58	932,962	irs.gov	54	416
nih.gov	57	52	defense.gov	54	1,407
whitehouse.gov	57	192	drugabuse.gov	54	2,719
usgs.gov	57	393	doleta.gov	54	4,330
ftc.gov	57	409	ourdocuments.gov	54	20,258
usaid.gov	57	1,997	nifc.gov	54	23,822
eeoc.gov	57	2,904	fafsa.gov	54	27,467
consumerfinance.gov	57	4,144	aoc.gov	54	28,719
ftccomplaintassistant.gov	57	13,822	csb.gov	54	69,368
consumer.gov	57	17,482	science360.gov	54	101,007
nutrition.gov	57	22,332	feedthefuture.gov	54	123,033
ustda.gov	57	214,534	fishwatch.gov	54	199,402

**TABLE 4 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
tigta.gov	54	558,726	whistleblowers.gov	51	213,108
fs.fed.us	53	1,578	uspto.gov	50	522
medicare.gov	53	2,168	ssa.gov	50	1,128
regulations.gov	53	3,390	uscis.gov	50	1,629
nsa.gov	53	3,442	socialsecurity.gov	50	5,145
usajobs.gov	53	4,713	atf.gov	50	10,449
nationalmap.gov	53	46,765	invasivespeciesinfo.gov	50	78,215
childstats.gov	53	61,353	fordlibrarymuseum.gov	50	79,659
read.gov	53	75,569	fedshirevets.gov	50	149,304
fara.gov	53	103,056	youthrules.gov	50	289,347
africanamericanhistorymonth.gov	53	213,941	financialresearch.gov	50	489,436
nationalgangcenter.gov	53	283,470	uscurrency.gov	50	575,870
911.gov	53	675,028	gpo.gov	49	720
data.gov	52	9,103	fema.gov	49	821
fjc.gov	52	31,455	neh.gov	49	6,671
exim.gov	52	36,130	treasurydirect.gov	49	10,008
ussc.gov	52	41,031	globalchange.gov	49	14,066
medpac.gov	52	98,197	benefits.gov	49	27,616
stopfraud.gov	52	134,862	nano.gov	49	58,766
vets.gov	52	184,939	uspsaig.gov	49	102,867
alaskacenters.gov	52	445,799	savingsbonds.gov	49	160,647
scijinks.gov	52	487,141	foreignassistance.gov	49	201,411
edpubs.gov	52	644,524	presidentialserviceawards.gov	49	217,018
applicationmanager.gov	52	941,133	justthinktwice.gov	49	234,959
usps.com	51	837	ncpc.gov	49	438,419
us-cert.gov	51	3,298	epa.gov	48	260
womenshealth.gov	51	5,229	archives.gov	48	433
safercar.gov	51	7,903	cms.gov	48	1,975
studentloans.gov	51	15,454	tsa.gov	48	2,455
distraction.gov	51	22,280	genome.gov	48	6,187
nwcg.gov	51	34,088	jfklibrary.org	48	7,728
mbda.gov	51	45,367	fincen.gov	48	15,259
abmc.gov	51	46,679	imls.gov	48	21,990
pbgc.gov	51	50,696	fhfa.gov	48	31,043
ncifcrf.gov	51	54,570	cio.gov	48	34,026
bjac.gov	51	68,850	globe.gov	48	40,337
poolsafely.gov	51	75,220	fedcenter.gov	48	137,649
bioethics.gov	51	85,493	jimmycarterlibrary.gov	48	174,674
bpa.gov	51	89,556	govloans.gov	48	341,481
trafficsafetymarketing.gov	51	187,220	ed.gov	47	390

**TABLE 4 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
treasury.gov	47	1,116	saferproducts.gov	45	61,596
ahrq.gov	47	2,548	prc.gov	45	169,908
nga.gov	47	3,462	apps.gov	45	257,832
opm.gov	47	4,388	telework.gov	45	569,475
fec.gov	47	6,557	idmanagement.gov	45	728,074
healthit.gov	47	14,317	loc.gov	44	156
healthypeople.gov	47	19,717	eia.gov	44	1,501
usability.gov	47	24,970	lanl.gov	44	2,665
ojjdp.gov	47	27,867	ready.gov	44	2,683
msha.gov	47	28,468	hrsa.gov	44	3,635
sbir.gov	47	45,814	fueleconomy.gov	44	6,124
ttb.gov	47	45,942	ferc.gov	44	16,122
unicor.gov	47	289,791	feb.gov	44	31,594
alzheimers.gov	47	542,938	reginfo.gov	44	47,449
nasa.gov	46	108	bia.gov	44	57,918
fcc.gov	46	760	recoverymonth.gov	44	150,950
weather.gov	46	904	rrb.gov	44	157,248
choosemyplate.gov	46	4,158	iarpa.gov	44	193,902
medicaid.gov	46	10,648	crimesolutions.gov	44	245,674
climate.gov	46	14,607	indianaffairs.gov	44	323,948
nlr.gov	46	16,157	sec.gov	43	572
access-board.gov	46	16,306	hud.gov	43	1,344
nsopw.gov	46	42,143	ntsb.gov	43	6,539
gop.gov	46	43,731	broadbandmap.gov	43	34,499
sam.gov	46	50,196	usaspending.gov	43	37,216
majorityleader.gov	46	61,757	osc.gov	43	86,666
vaccines.gov	46	69,084	insurekidsnow.gov	43	90,260
foia.gov	46	82,912	everykidinapark.gov	43	137,346
ahcpr.gov	46	94,904	house.gov	42	399
fpds.gov	46	171,080	trade.gov	42	10,603
volunteer.gov	46	239,243	pepfar.gov	42	63,016
myplate.gov	46	593,063	fbijobs.gov	42	105,427
smart.gov	46	902,846	cdfifund.gov	42	124,256
dol.gov	45	883	hhs.gov	41	603
ustr.gov	45	5,307	sba.gov	41	1,143
foodsafety.gov	45	9,649	ncjrs.gov	41	5,696
onguardonline.gov	45	10,253	stopbullying.gov	41	9,285
privacyshield.gov	45	18,269	speaker.gov	41	11,196
nicic.gov	45	42,943	dhhs.gov	41	12,176
mentalhealth.gov	45	46,899	nixonlibrary.gov	41	68,278

**TABLE 4 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
pay.gov	41	177,551	manufacturing.gov	37	206,901
papahanaumokuakea.gov	41	205,712	wapa.gov	37	246,391
mymedicare.gov	41	244,142	dot.gov	36	601
transportation.gov	40	3,340	healthcare.gov	36	2,146
acl.gov	40	14,015	dni.gov	36	7,616
ncua.gov	40	23,060	recreation.gov	36	9,012
nnlm.gov	40	65,218	firstgov.gov	36	9,112
digitalgov.gov	40	105,697	usmarshals.gov	36	39,725
srs.gov	40	211,333	inl.gov	36	51,817
ems.gov	40	488,371	ginniema.gov	36	128,448
senate.gov	39	456	udall.gov	36	161,422
bjs.gov	39	6,208	odni.gov	36	347,052
dea.gov	39	7,344	listo.gov	36	583,774
peacecorps.gov	39	8,561	ovcttac.gov	36	911,165
pnl.gov	39	14,093	energystar.gov	35	1,769
pnnl.gov	39	21,128	fvap.gov	35	66,369
makinghomeaffordable.gov	39	27,567	nersc.gov	35	71,381
usap.gov	39	62,910	nro.gov	35	144,044
arc.gov	39	101,902	cuidadodesalud.gov	35	152,346
arm.gov	39	166,427	adlnet.gov	35	169,931
studentaid.gov	39	195,346	adlnet.org	35	297,503
va.gov	38	750	vcf.gov	35	962,022
cancer.gov	38	901	dhs.gov	34	737
cbp.gov	38	2,000	cpsc.gov	34	1,506
moneyfactory.gov	38	48,322	export.gov	34	1,847
presidio.gov	38	87,505	commerce.gov	34	5,752
mcc.gov	38	87,982	ntis.gov	34	28,046
bbg.gov	38	100,162	occ.gov	34	28,708
moneyfactory.com	38	133,020	boem.gov	34	56,407
fedramp.gov	38	326,659	clintonlibrary.gov	34	137,120
sciencebase.gov	38	731,860	ofcm.gov	34	194,232
usa.gov	37	594	mspb.gov	34	215,030
cia.gov	37	650	iad.gov	34	740,298
osha.gov	37	1,179	nsf.gov	33	1,286
arts.gov	37	7,327	doi.gov	33	5,089
surgeongeneral.gov	37	8,611	eldercare.gov	33	21,073
airnow.gov	37	23,840	federallabs.org	33	34,889
collegedrinkingprevention.gov	37	60,712	opic.gov	33	62,611
hanford.gov	37	85,111	cecc.gov	33	175,152
econsumer.gov	37	92,587	selectusa.gov	33	270,191

**TABLE 4 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
tonation-nsn.gov	33	555,364	sss.gov	23	23,278
usmint.gov	32	8,792	fws.gov	22	1,490
nationalresourcedirectory.gov	32	261,969	federalregister.gov	21	2,260
nrd.gov	32	374,568	eac.gov	21	38,072
samhsa.gov	31	1,885	solardecathlon.gov	21	58,957
blm.gov	31	3,307	nctc.gov	21	87,514
fnal.gov	31	5,500	osmre.gov	21	117,679
bnl.gov	31	7,036	gsa.gov	20	2,529
aviationweather.gov	31	24,862	eda.gov	20	71,201
americorps.gov	31	32,213	energy.gov	19	711
usbr.gov	30	9,711	bsee.gov	19	174,280
huduser.gov	30	10,323	goes-r.gov	19	198,323
osac.gov	30	57,033	challenge.gov	16	43,970
faasafety.gov	30	77,250	achp.gov	16	113,794
lbl.gov	29	1,595	orau.gov	15	62,917
anl.gov	29	2,598	docsteach.org	13	10,868
gsaadvantage.gov	29	29,556	identitytheft.gov	12	49,675
fgdc.gov	29	89,039	usb.gov	12	82,006
ovc.gov	29	151,503	uscirf.gov	11	61,994
ihs.gov	28	25,094	pmi.gov	11	602,770
kids.gov	28	59,531	letgirlslearn.gov	10	283,438
acquisition.gov	27	65,915	idtheft.gov	10	633,739
usphs.gov	27	69,476	census.gov	9	472
biopreferred.gov	27	297,616	smokefree.gov	7	15,318
nagb.org	27	463,144	rivers.gov	7	336,780
grants.gov	26	7,406	pclob.gov	5	368,950
tsunami.gov	26	316,948	ojp.gov	3	16,576
tswg.gov	26	985,963	bts.gov	0	4,981
noaa.gov	25	214	jobcorps.gov	0	37,019
nps.gov	25	358	fmc.gov	0	101,175
fdlp.gov	25	181,423	gsaauctions.gov	0	129,665
federalreserve.gov	24	1,439	itdashboard.gov	0	669,979
ice.gov	24	4,441	cfo.gov	0	752,773
nationalservice.gov	23	9,127	cnss.gov	0	836,904

## MOBILE FRIENDLINESS

The federal government requires that its websites be mobile friendly. The OMB's policy for federal websites states that agencies "must, to the extent practicable, ensure that their public websites and digital services perform equally well on non-desktop devices such as mobile devices and tablets."<sup>60</sup> This requirement is critical because roughly 56 percent of overall search volume in the United States in 2015 came from mobile from mobile devices.<sup>61</sup> To be mobile friendly, a website should offer easy-to-use buttons, the ability to navigate from a small screen, and legibility, featuring its most important information at the forefront of the page for its users.

In the initial report, to measure mobile friendliness, we used Google's "Mobile Friendly Test." But since the release of the initial report, the test has changed and no longer offers a score of 0 to 100. Therefore, ITIF decided to use SEO Centro's "Mobile Friendly Check," a publicly available tool that is comparable to the older version of Google's "Mobile Friendly Test." This tool allows non-paying users to test five domains for mobile friendliness daily. Like Google's older tool, it bases its score on five criteria. First, the tool tests whether a website's touch elements are too close together, which causes difficulty for mobile users who cannot easily tap a desired button with their finger without also tapping another button.<sup>62</sup> Second, the tool tests whether a website's viewport, the portion of the website visible to the user, is configured with meta tags—web elements that provide information about a webpage such as its height, width, and initial scale for a mobile device—so that websites can easily work on a variety of devices with varying screen sizes.<sup>63</sup> Third, the tool tests whether a website sizes content to the viewport.<sup>64</sup> If content is not sized properly to fit a mobile-device screen, a user may have to scroll through websites horizontally, leading to a poor user experience. Fourth, the tool tests whether the website uses plugins, which are not supported on most mobile devices. If left unaddressed, plugins can disrupt users' experiences through hangs (i.e., when a phone freezes and stops responding to commands), crashes, and security vulnerabilities.<sup>65</sup> Fifth, the tool measures whether a website is properly configured so that text on the page is large enough for a user to read.

We determined a reasonable benchmark for passing the mobile-friendliness test was a score of 90 or above, the same threshold we used in the initial report. We verified this cut-off by testing the top 20 nongovernment websites on Majestic Million for mobile friendliness. These websites had an average score of 98 for mobile friendliness.<sup>66</sup> Although websites scoring in this range (90-100) can still be further optimized for mobile devices, they generally provide users a positive mobile experience.

We find mixed results for mobile friendliness among federal websites. Overall, 60 percent of federal websites reviewed scored a 90 or above on the test. Among the federal websites in the global top 100,000 reviews, 63 percent passed the mobile-friendliness test. Many of the failing websites performed very poorly. Of the websites that failed the test, 32 percent scored below 75. Yet, of the 260 websites tested both last year and this year, about two-thirds (65 percent) passed the mobile-friendliness test.

In doing a comparison of the federal websites reviewed in the initial report, there are some interesting takeaways. Some poorly performing websites did not improve their mobile friendliness since the initial report, such as the Department of the Treasury ([treasury.gov](http://treasury.gov)), Government Publishing Office ([gpo.gov](http://gpo.gov)), and the U.S. Energy Information Association ([eia.gov](http://eia.gov)). Other federal websites declined in mobile friendliness, such as the U.S. Courts ([uscourts.gov](http://uscourts.gov)), which scored 70 compared to 99 in the initial report; and the website of U.S. Embassies, Consulates, and Diplomatic Missions

(useembassy.gov), which scored a 67 compared to 100 in the initial report. Some significantly increased their mobile-friendliness score, such as the U.S. Senate website (senate.gov), which scored 99 compared to 61 in the initial report. Another example is the Internal Revenue Service (irs.gov), which scored a 99 compared to a 60 in the initial report.

Figure 6 shows the overall distribution of mobile-friendliness data. The blue squares in figure 6 indicate which websites failed to get a minimum passing score of 90.

## FIGURE 6

Mobile Friendliness of federal websites by popularity (2017).

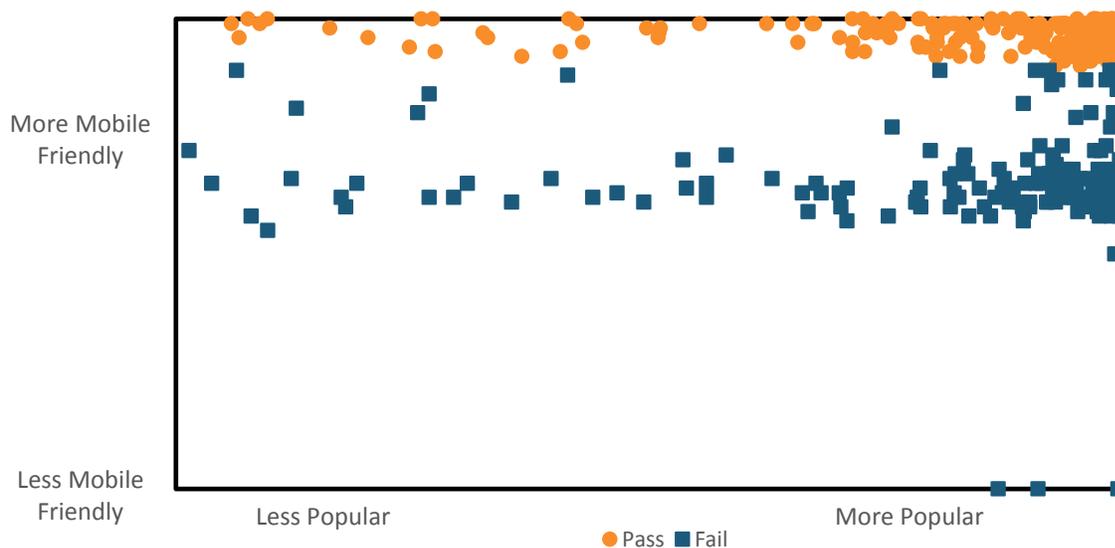
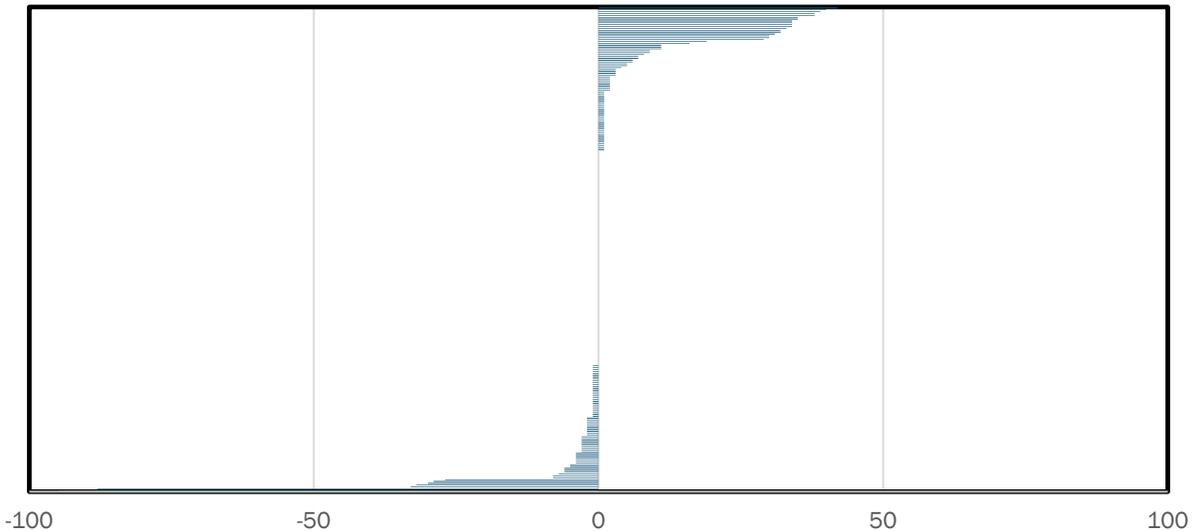


Figure 7 illustrates the change in mobile-friendliness scores of websites tested in both the initial report and this report. The figure shows that the majority (74 percent) of federal websites tested in both reports either maintained the same mobile-friendliness score or improved in score. It is important to note that maintaining the same score does not necessarily mean the website passed the mobile-friendliness test. Of those websites where the score did not change, 37 percent failed the mobile-friendliness test. Of the 260 websites tested in both reports 26 percent declined in mobile friendliness and only 29 percent improved in mobile friendliness.

## FIGURE 7

Change in mobile friendliness scores of federal websites (2016-2017).



The three most common reasons a website failed the mobile-friendliness test were: The website was not configured properly and thus did not scale appropriately to mobile devices; it used illegible font sizes; or it used buttons or links that were too small to be easily tapped with a finger. Figure 6 highlights three popular websites that failed the mobile-friendliness test: National Weather Service ([weather.gov](http://weather.gov)), Ready.gov ([ready.gov](http://ready.gov)), and Bureau of Justice Statistics ([bjs.gov](http://bjs.gov)). Because this seemed surprising, those three websites were tested again in early October. We found that two of the three continued to earn low scores on the mobile-friendliness test for the reasons listed above. Yet, Ready.gov scored significantly higher and now passes the test. Of the federal websites in the top 100,000, only 37 percent failed the mobile-friendliness test. These included the National Weather Service ([weather.gov](http://weather.gov)), National Defense University ([ndu.edu](http://ndu.edu)), and the Department of Housing and Urban Development ([hud.gov](http://hud.gov)). Each of these common mobile-friendliness problems has an easily solution, as discussed in the initial report.<sup>67</sup>

**TABLE 5****Popular federal websites ranked by mobile friendliness (2017).**

Domain	Score	Rank	Domain	Score	Rank
noaa.gov	100	214	energy.gov	99	711
bls.gov	100	591	fcc.gov	99	760
usa.gov	100	594	usps.com	99	837
defense.gov	100	1,407	cancer.gov	99	901
gsa.gov	100	2,529	uscis.gov	99	1,629
nga.gov	100	3,462	cms.gov	99	1,975
donotcall.gov	100	8,116	nhtsa.gov	99	2,120
firstgov.gov	100	9,112	healthcare.gov	99	2,146
docsteach.org	100	10,868	lanl.gov	99	2,665
trumanlibrary.org	100	17,038	llnl.gov	99	3,231
usability.gov	100	24,970	cbo.gov	99	3,714
makinghomeaffordable.gov	100	27,567	consumerfinance.gov	99	4,144
occ.gov	100	28,708	usajobs.gov	99	4,713
ttb.gov	100	45,942	sandia.gov	99	4,999
digitalgov.gov	100	105,697	healthfinder.gov	99	5,234
womenshistorymonth.gov	100	109,565	genome.gov	99	6,187
cdfifund.gov	100	124,256	fec.gov	99	6,557
clintonlibrary.gov	100	137,120	bnl.gov	99	7,036
hispanicheritagemonth.gov	100	211,081	dni.gov	99	7,616
africanamericanhistorymonth.gov	100	213,941	jfklibrary.org	99	7,728
hudoig.gov	100	241,717	usmint.gov	99	8,792
myra.gov	100	272,955	data.gov	99	9,103
stopalcoholabuse.gov	100	283,909	onguardonline.gov	99	10,253
alzheimers.gov	100	542,938	huduser.gov	99	10,323
tonation-nsn.gov	100	555,364	speaker.gov	99	11,196
listo.gov	100	583,774	dhhs.gov	99	12,176
vote.gov	100	658,543	bop.gov	99	13,840
idmanagement.gov	100	728,074	ojp.gov	99	16,576
iad.gov	100	740,298	consumer.gov	99	17,482
fhfaoig.gov	100	903,178	distraction.gov	99	22,280
code.gov	100	923,771	msha.gov	99	28,468
nih.gov	99	52	science.gov	99	28,568
cdc.gov	99	138	aoc.gov	99	28,719
usda.gov	99	248	federallabs.org	99	34,889
fda.gov	99	258	exim.gov	99	36,130
ftc.gov	99	409	eac.gov	99	38,072
irs.gov	99	416	mbda.gov	99	45,367
senate.gov	99	456	sbir.gov	99	45,814
uspto.gov	99	522	investor.gov	99	46,094
hhs.gov	99	603	abmc.gov	99	46,679

**TABLE 5 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
bia.gov	99	57,918	womenshealth.gov	98	5,229
nano.gov	99	58,766	recreation.gov	98	9,012
kids.gov	99	59,531	usbr.gov	98	9,711
majorityleader.gov	99	61,757	atf.gov	98	10,449
orau.gov	99	62,917	smokefree.gov	98	15,318
acquisition.gov	99	65,915	guideline.gov	98	19,083
csb.gov	99	69,368	ncua.gov	98	23,060
hanford.gov	99	85,111	disasterassistance.gov	98	39,199
nctc.gov	99	87,514	globe.gov	98	40,337
bbg.gov	99	100,162	ussc.gov	98	41,031
tsp.gov	99	103,131	nsopw.gov	98	42,143
usich.gov	99	112,718	pepfar.gov	98	63,016
everykidinapark.gov	99	137,346	fgdc.gov	98	89,039
cuidadodesalud.gov	99	152,346	uspsdig.gov	98	102,867
hru.gov	99	167,116	fbijobs.gov	98	105,427
bsee.gov	99	174,280	stopfraud.gov	98	134,862
pay.gov	99	177,551	guidelines.gov	98	187,042
vets.gov	99	184,939	goes-r.gov	98	198,323
trafficsafetymarketing.gov	99	187,220	wapa.gov	98	246,391
fishwatch.gov	99	199,402	scijinks.gov	98	487,141
justthinktwice.gov	99	234,959	uscpc.gov	98	501,673
smartgrid.gov	99	248,173	cnss.gov	98	836,904
nationalresourcedirectory.gov	99	261,969	state.gov	97	259
indianaffairs.gov	99	323,948	fbi.gov	97	610
fedramp.gov	99	326,659	ssa.gov	97	1,128
odni.gov	99	347,052	sba.gov	97	1,143
nrd.gov	99	374,568	nsf.gov	97	1,286
alaskacenters.gov	99	445,799	fdic.gov	97	3,284
uscurrency.gov	99	575,870	hrsa.gov	97	3,635
ovcttac.gov	99	911,165	socialsecurity.gov	97	5,145
applicationmanager.gov	99	941,133	arts.gov	97	7,327
loc.gov	98	156	share.america.gov	97	10,269
whitehouse.gov	98	192	studentloans.gov	97	15,454
nps.gov	98	358	privacyshield.gov	97	18,269
sec.gov	98	572	serve.gov	97	36,004
dhs.gov	98	737	usaspending.gov	97	37,216
federalreserve.gov	98	1,439	gop.gov	97	43,731
ornl.gov	98	2,118	inl.gov	97	51,817
drugabuse.gov	98	2,719	its.bldrdoc.gov	97	79,017
blm.gov	98	3,307	mcc.gov	97	87,982

**TABLE 5 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
mycreditunion.gov	97	118,328	fws.gov	95	1,490
truman.gov	97	162,532	cpsc.gov	95	1,506
sigtar.gov	97	249,304	fs.fed.us	95	1,578
apps.gov	97	257,832	export.gov	95	1,847
selectusa.gov	97	270,191	usaid.gov	95	1,997
ems.gov	97	488,371	nrel.gov	95	3,623
911.gov	97	675,028	fueleconomy.gov	95	6,124
nasa.gov	96	108	medicaid.gov	95	10,648
justice.gov	96	824	imls.gov	95	21,990
medlineplus.gov	96	1,078	benefits.gov	95	27,616
lbl.gov	96	1,595	fhfa.gov	95	31,043
samhsa.gov	96	1,885	challenge.gov	95	43,970
gao.gov	96	1,902	uscc.gov	95	55,771
medicare.gov	96	2,168	nnlm.gov	95	65,218
ahrq.gov	96	2,548	lsc.gov	95	88,816
ice.gov	96	4,441	jimmycarterlibrary.gov	95	174,674
health.gov	96	4,522	iarpa.gov	95	193,902
doi.gov	96	5,089	ustda.gov	95	214,534
commerce.gov	96	5,752	nationalgangcenter.gov	95	283,470
nationalservice.gov	96	9,127	govloans.gov	95	341,481
acl.gov	96	14,015	telework.gov	95	569,475
americorps.gov	96	32,213	house.gov	94	399
usbg.gov	96	82,006	cia.gov	94	650
econsumer.gov	96	92,587	va.gov	94	750
ahcpr.gov	96	94,904	energystar.gov	94	1,769
rrb.gov	96	157,248	cbp.gov	94	2,000
adlnet.gov	96	169,931	fnal.gov	94	5,500
ofcm.gov	96	194,232	ncjrs.gov	94	5,696
mymedicare.gov	96	244,142	pppl.gov	94	44,053
adlnet.org	96	297,503	mentalhealth.gov	94	46,899
financialresearch.gov	96	489,436	solardecathlon.gov	94	58,957
itdashboard.gov	96	669,979	uscirf.gov	94	61,994
niem.gov	96	796,571	fordlibrarymuseum.gov	94	79,659
onrr.gov	96	932,962	science360.gov	94	101,007
epa.gov	95	260	recoverymonth.gov	94	150,950
census.gov	95	472	papahanaumokuakea.gov	94	205,712
fema.gov	95	821	manufacturing.gov	94	206,901
osha.gov	95	1,179	whistleblowers.gov	94	213,108
clinicaltrials.gov	95	1,313	cfo.gov	94	752,773
copyright.gov	95	1,457	faa.gov	93	1,090

**TABLE 5 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
tsa.gov	93	2,455	ameslab.gov	90	42,697
nsa.gov	93	3,442	bj.gov	90	68,850
choosemyplate.gov	93	4,158	bts.gov	89	4,981
doleta.gov	93	4,330	childwelfare.gov	89	11,221
nlr.gov	93	16,157	democraticleader.gov	89	75,692
hiv.gov	93	17,467	insurekidsnow.gov	89	90,260
secretservice.gov	93	18,923	ibwc.gov	89	935,804
ihs.gov	93	25,094	usgs.gov	88	393
collegedrinkingprevention.gov	93	60,712	sustainablecommunities.gov	88	585,178
visitthecapitol.gov	93	71,706	anl.gov	87	2,598
fdlp.gov	93	181,423	fincon.gov	87	15,259
helpwithmybank.gov	93	270,668	jobcorps.gov	87	37,019
letgirlslern.gov	93	283,438	fvap.gov	87	66,369
myplate.gov	93	593,063	ed.gov	86	390
usds.gov	93	725,460	girlshealth.gov	86	73,085
nist.gov	92	539	dot.gov	85	601
congress.gov	92	950	transportation.gov	85	3,340
supremecourt.gov	92	1,966	sciencebase.gov	84	731,860
peacecorps.gov	92	8,561	nitrd.gov	82	103,053
osti.gov	92	10,914	brac.gov	81	872,406
sss.gov	92	23,278	grants.gov	80	7,406
ntis.gov	92	28,046	feb.gov	80	31,594
nwcg.gov	92	34,088	dnfsb.gov	80	743,978
organdonor.gov	92	35,648	reginfo.gov	79	47,449
identitytheft.gov	92	49,675	trade.gov	77	10,603
pbgc.gov	92	50,696	agingstats.gov	77	241,759
phe.gov	92	59,054	time.gov	73	15,403
drought.gov	92	115,975	gps.gov	73	61,903
ovc.gov	92	151,503	bioethics.gov	73	85,493
prc.gov	92	169,908	pnnl.gov	72	21,128
studentaid.gov	92	195,346	fafsa.gov	72	27,467
idtheft.gov	92	633,739	foreignassistance.gov	72	201,411
archives.gov	91	433	tswg.gov	72	985,963
cftc.gov	91	8,975	nersc.gov	71	71,381
nara.gov	91	10,591	fletc.gov	71	164,848
ftccomplaintassistant.gov	91	13,822	flra.gov	71	417,486
globalchange.gov	91	14,066	uscourts.gov	70	1,182
fjc.gov	91	31,455	nationsreportcard.gov	70	71,713
cio.gov	91	34,026	medpac.gov	70	98,197
ncd.gov	91	59,887	arm.gov	70	166,427

**TABLE 5 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
nagb.org	70	463,144	wdol.gov	65	322,205
nixonlibrary.gov	69	68,278	namus.gov	65	438,306
climate.gov	68	14,607	acwi.gov	65	691,305
airnow.gov	68	23,840	arctic.gov	65	808,339
sam.gov	68	50,196	vcf.gov	65	962,022
osac.gov	68	57,033	ntsb.gov	64	6,539
opic.gov	68	62,611	stopbullying.gov	64	9,285
ginniema.gov	68	128,448	section508.gov	64	9,391
usembassy.gov	67	814	vaccines.gov	64	69,084
us-cert.gov	67	3,298	achp.gov	64	113,794
ustr.gov	67	5,307	energycodes.gov	64	121,547
americaslibrary.gov	67	18,771	fedshirevets.gov	64	149,304
digitalpreservation.gov	67	62,916	juvenilecouncil.gov	64	212,144
usphs.gov	67	69,476	youthrules.gov	64	289,347
eda.gov	67	71,201	stb.gov	64	459,398
poolsafely.gov	67	75,220	ecfr.gov	63	6,610
read.gov	67	75,569	safercar.gov	63	7,903
osc.gov	67	86,666	ferc.gov	63	16,122
udall.gov	67	161,422	access-board.gov	63	16,306
cecc.gov	67	175,152	eldercare.gov	63	21,073
federalregister.gov	66	2,260	ndu.edu	63	21,474
regulations.gov	66	3,390	gsaadvantage.gov	63	29,556
neh.gov	66	6,671	nationalmap.gov	63	46,765
healthit.gov	66	14,317	ofr.gov	63	53,292
healthypeople.gov	66	19,717	ncifcrf.gov	63	54,570
ars-grin.gov	66	32,550	boem.gov	63	56,407
nicic.gov	66	42,943	childstats.gov	63	61,353
recalls.gov	66	49,487	amberalert.gov	63	125,102
research.gov	66	80,001	pcah.gov	63	176,199
feedthefuture.gov	66	123,033	biopreferred.gov	63	297,616
nwbc.gov	66	180,507	tsunami.gov	63	316,948
pclob.gov	66	368,950	rivers.gov	63	336,780
pmi.gov	66	602,770	pmf.gov	63	532,971
wrp.gov	66	877,710	eia.gov	62	1,501
dol.gov	65	883	ic3.gov	62	4,966
buyusa.gov	65	48,328	nrc.gov	62	7,809
saferproducts.gov	65	61,596	usitc.gov	62	10,012
foia.gov	65	82,912	ourdocuments.gov	62	20,258
bpa.gov	65	89,556	9-11commission.gov	62	37,398
fmc.gov	65	101,175	moneyfactory.gov	62	48,322

**TABLE 5 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
pacer.gov	62	51,014	dea.gov	60	7,344
usccr.gov	62	60,144	pnl.gov	60	14,093
usap.gov	62	62,910	ffiec.gov	60	23,694
itis.gov	62	71,919	nifc.gov	60	23,822
moneyfactory.com	62	133,020	ojdp.gov	60	27,867
fpds.gov	62	171,080	pubmed.gov	60	35,065
mspb.gov	62	215,030	eftps.gov	60	96,310
ncpc.gov	62	438,419	plainlanguage.gov	60	103,841
tigta.gov	62	558,726	nro.gov	60	144,044
vef.gov	62	705,883	fedbizopps.gov	60	180,106
geomac.gov	62	731,966	srs.gov	60	211,333
nehpp.gov	62	824,997	vehiclehistory.gov	60	296,022
bea.gov	61	4,425	ncirc.gov	60	820,214
ada.gov	61	4,728	treasury.gov	59	1,116
surgeongeneral.gov	61	8,611	opm.gov	59	4,388
foodsafety.gov	61	9,649	aviationweather.gov	59	24,862
nij.gov	61	19,043	mymoney.gov	59	45,132
usmarshals.gov	61	39,725	arc.gov	59	101,902
cfda.gov	61	68,921	ucrdatatool.gov	59	330,854
faasafety.gov	61	77,250	weather.gov	58	904
invasivespeciesinfo.gov	61	78,215	treasurydirect.gov	58	10,008
jct.gov	61	96,319	nutrition.gov	58	22,332
oge.gov	61	106,361	fedcenter.gov	58	137,649
osmre.gov	61	117,679	savingsbonds.gov	58	160,647
thecoolspot.gov	61	215,850	crimesolutions.gov	58	245,674
presidentalserviceawards.gov	61	217,018	frtr.gov	58	920,323
volunteer.gov	61	239,243	fara.gov	57	103,056
lep.gov	61	504,798	unicor.gov	57	289,791
edpubs.gov	61	644,524	smart.gov	55	902,846
ncbi.nlm.nih.gov	60	84	bjs.gov	50	6,208
gpo.gov	60	720	ready.gov	0	2,683
hud.gov	60	1,344	broadbandmap.gov	0	34,499
eeoc.gov	60	2,904	presidio.gov	0	87,505
fbo.gov	60	5,986	gsaauctions.gov	0	129,665

## SECURITY

Security is a critical component of user interaction with federal websites. As outlined in the initial report, the federal government put in place several security requirements for federal websites. Like in the initial report, this second edition focuses on two of these requirements: HTTPS and DNSSEC. We also tested each website for major known security vulnerabilities.

To measure federal websites' compliance with these standards, the report uses two different publicly available tools. First, we used the Verisign Labs' "DNSSEC Debugger," a web-based tool that inspects websites for DNSSEC, testing that digital certificates are verified in a "chain of trust" for each federal website's domain.<sup>68</sup> The tool shows a step-by-step validation for a specific domain, highlighting any problems it discovers. The tool then grades each step in this process with a "good," "warning," or "error." Given the binary outcome of whether a website uses DNSSEC, if a website showed an "error" for any step, it scored 0 on this test.<sup>69</sup> If the tool found that each step in the process was either "good" or only elicited "warnings," then the website scored 100. Figure 8 shows the distribution of DNSSEC scores, where blue squares indicate failing websites.

Second, to identify whether websites enable HTTPS, we used a tool that checks Secure Sockets Layer (SSL) certificates, which underpin most HTTPS connections. Qualys SSL Labs' "SSL Server Test" inspects public SSL web servers based on four criteria: certificate, protocol support, key strength, and cipher strength.<sup>70</sup> The tool also analyzes websites for several other factors that would be detrimental to its security, such as outdated protocols or security vulnerabilities. Using the numerical value of the tool's four criteria and weighting these scores based on whether the tool detected major issues with a website's security (e.g., a known security vulnerability), we produced a final SSL score for each website between 0 and 100 points. If "SSL Server Test" failed to detect an SSL certificate or resulted in an error for a specific website, we used the Chrome web browser to determine whether the website used HTTPS, adjusting the website's SSL score to reflect whether it used HTTPS.<sup>71</sup>

To determine the benchmark to rate the performance of federal websites for SSL security, we tested the top 20 nongovernment domains from Majestic Million for the SSL test.<sup>72</sup> Using the average of these scores and factoring in the importance of security standards for federal websites, we determined that a passing score for the SSL test was a score of 90 or above. This is the same benchmark used in the initial report. To pass the test, a website must use HTTPS, have few issues with its SSL protocols (e.g., not use outdated certificates), and have no major security vulnerabilities. Figure 10 shows the overall distribution of SSL scores. The blue squares indicate which websites failed to get the minimum passing score of 90.

There are mixed results for the two security tests. Roughly 90 percent of websites reviewed enabled DNSSEC. This is a similar result to the initial report. Of the websites in the top 100,000, 90 percent passed this test, the same percentage that passed the test in the initial report. Additionally, of the 260 websites reviewed both this year and last year, about 92 percent passed the DNSSEC test. However, only 71 percent of all the reviewed websites passed the SSL test this year, compared to 67 percent in the initial report. Of the websites in the top 100,000, 75 percent passed the SSL test compared to 78 percent in the initial report. Additionally, of the 260 websites tested both this year and last year, about 75 percent passed the SSL test.

## FIGURE 8

DNSSEC scored of federal websites by popularity (2017)

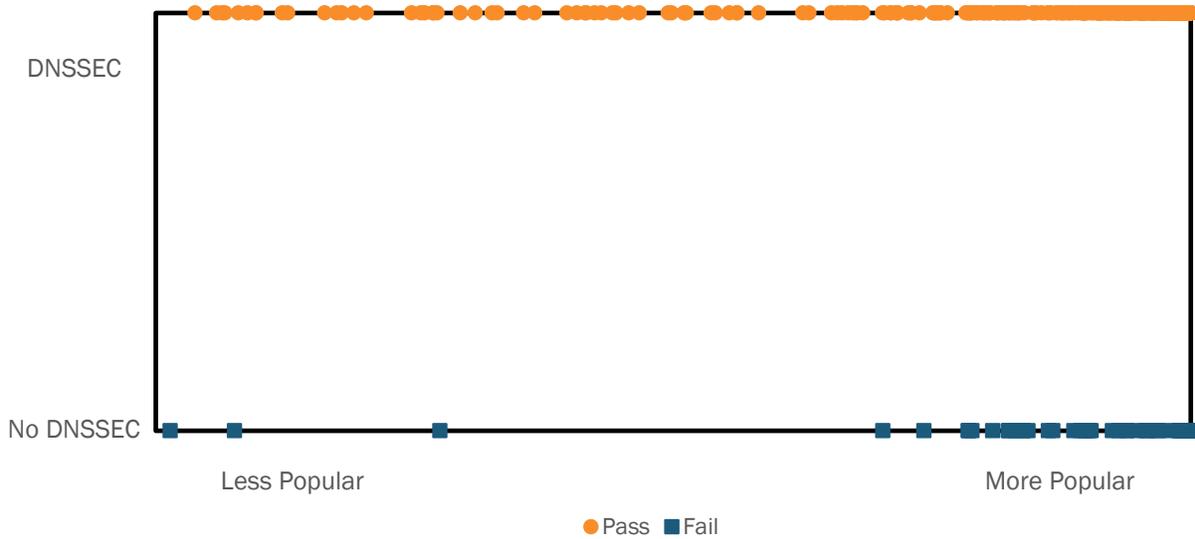
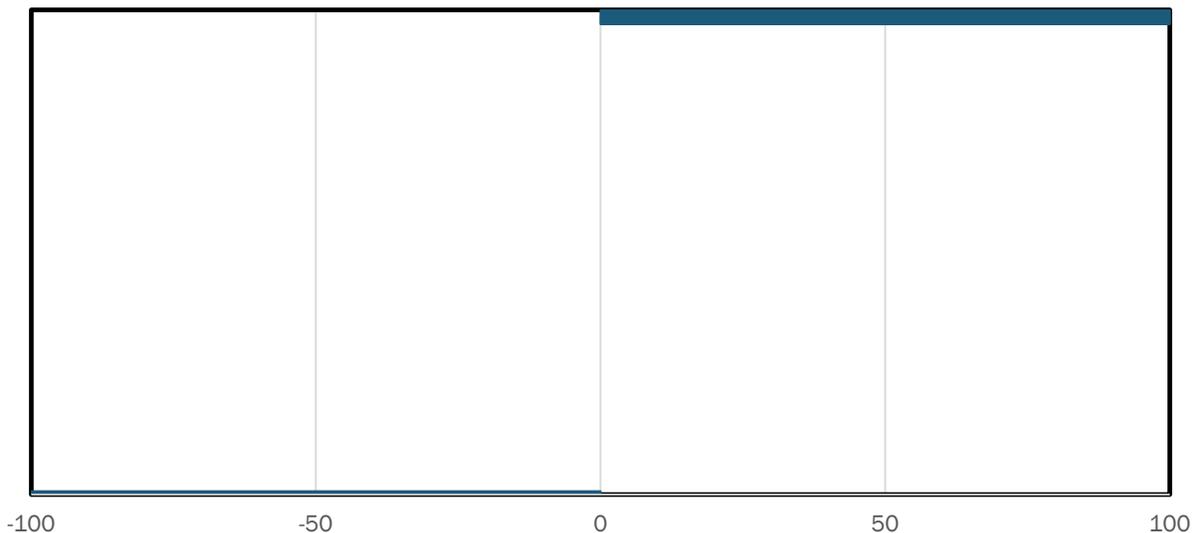


Figure 9 illustrates the change in DNSSEC scores and SSL scores for websites tested in both the initial report and this report. The figure shows that the majority (96 percent) of federal websites tested in both reports made no change in this area—they either continued to enable DNSSEC or failed to implement it. Of the 260 websites reviewed in both reports, only two federal websites deactivated their DNSSEC certificates between the two testing periods and 15 federal websites activated DNSSEC in that same time period. Of the websites that maintained the same score, only 8 percent failed to implement DNSSEC in both testing periods.

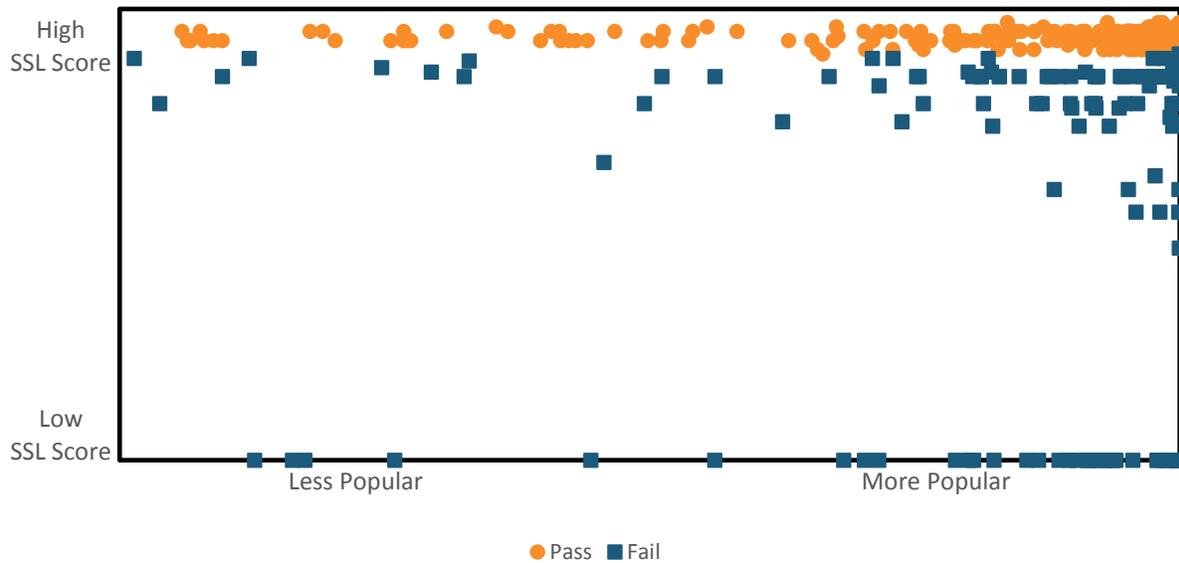
## FIGURE 9

Change in DNSSEC scores of federal websites (2016-2017).



## FIGURE 10

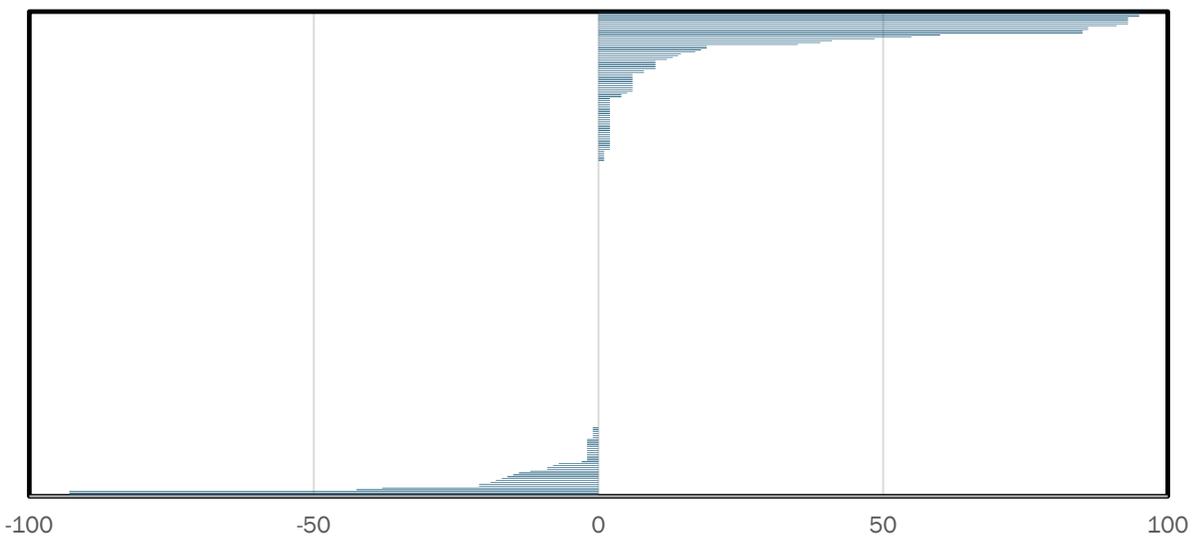
SSL scored of federal websites by popularity (2017).



Figures 11 illustrates the change in SSL scores for websites tested in both the initial report and this report. The figure shows that the majority (55 percent) of federal websites tested in both reports did not improve or decline in SSL score. Of the 260 websites tested in both reports, 31 percent improved in SSL score and only 14 percent declined. Of the websites where the score did not change, 23 percent failed the SSL test.

## FIGURE 11

Change in SSL scores of federal websites (2016-2017).



Some federal websites failed to implement at least one of the security protocols. Of the reviewed websites, 10 percent lacked DNSSEC compared to 10 percent in the initial review. Those include the three websites highlighted in the initial report, which were the House of Representatives ([house.gov](http://house.gov)), the Speaker of the House of Representatives ([speaker.gov](http://speaker.gov)), and the U.S. Forest Service ([fs.fed.us](http://fs.fed.us)). Of the websites reviewed, only 8 percent lacked HTTPS. This is an improvement from the initial report where 14 percent of the websites lacked HTTPS. Since the release of the initial report, the Department of Defense ([defense.gov](http://defense.gov)) and Grants.gov ([grants.gov](http://grants.gov)) have enabled HTTPS. On the other hand, the International Trade Administration ([trade.gov](http://trade.gov)) still has not enabled HTTPS. Two percent of federal websites reviewed failed to implement both HTTPS and DNSSEC compared to 3 percent in the initial report. Four of these websites are associated with executive-branch agencies, including the National Defense University ([ndu.edu](http://ndu.edu)), Bureau of Engraving and Printing ([moneyfactory.gov](http://moneyfactory.gov)), the Savannah River Site ([srs.gov](http://srs.gov)), and the Advanced Distributed Learning Initiative ([adlnet.org](http://adlnet.org)). The other six websites belong to nonexecutive-branch agencies and include the Congressional-Executive Commission on China ([cecc.gov](http://cecc.gov)), the U.S. Chemical Safety Board ([csb.gov](http://csb.gov)), the U.S. Government Accountability Office ([gao.gov](http://gao.gov)), the Speaker of the House of Representatives ([speaker.gov](http://speaker.gov)), the Administrative Office of the U.S. Courts ([uscourts.gov](http://uscourts.gov)) and the Medicare Payment Advisory Commission ([medpac.gov](http://medpac.gov)). Although nonexecutive-branch agencies are not always bound by the same requirements, all government websites should be expected to follow government best practices on cybersecurity.

Some websites failed; in these cases, the SSL test found major security vulnerabilities. For example, the U.S. Trade Representative ([ustr.gov](http://ustr.gov)) and the National Weather Service ([weather.com](http://weather.com)) are vulnerable to the POODLE attack, a weakness in certain systems that support SSL 3.0 which allows attackers to gain access to sensitive data passed within the encrypted traffic.<sup>73</sup> Others, like the International Trade Administration ([trade.gov](http://trade.gov)) are vulnerable to the DROWN attack, a problem that affects HTTPS, allowing attackers to break into certain HTTPS servers and steal sensitive communications.<sup>74</sup> In the initial report, the U.S. Tsunami Warning Centers ([tsunami.gov](http://tsunami.gov)) was also vulnerable to the DROWN attack. Although it seems to have resolved this vulnerability, the website does not have HTTPS enabled.

In addition to major security flaws, many federal websites failed the SSL test due to other security issues, such as the lack of perfect forward secrecy and outdated cryptographic algorithms. Perfect forward secrecy is the security practice where each encrypted session uses different encryption keys.<sup>75</sup> Changing the keys with each new session minimizes the impact that an adversary can have if a key used to encrypt information is compromised. Some federal websites also use cryptographic standards that have not been updated to eliminate vulnerabilities, such as Rivest Cipher 4 (RC4)—which has known vulnerabilities, and many private companies recommend should not be used, or weak Diffie-Hellman key exchange parameters—a popular cryptographic algorithm that allows a web browser and server to negotiate secure connections.<sup>76</sup> These issues alone were not enough for a federal website to fail this security test, but are important to improving the security of federal websites.

That said, several federal websites have improved since the release of the initial report. These include the Department of Defense ([defense.gov](http://defense.gov)), which enabled HTTPS and the House Republican website ([gop.gov](http://gop.gov)), which also enabled HTTPS but not DNSSEC. Of the top 100,000 websites reviewed, only 70 percent passed both the DNSSEC and SSL test. Several of these top 100,000 websites did not have

DNSSEC or HTTPS implemented. One example is the Administrative Office of the U.S. Courts (uscourts.gov), which also earned a low score in the security category in the initial report.

All these problems highlighted with website security can be resolved by federal web servers enabling HTTPS and DNSSEC, as well as following modern information-security principles. These standards should be applied across the federal government and not limited to executive-branch websites. Additionally, federal agencies should monitor and update their websites to mitigate against known or emerging vulnerabilities.

**TABLE 6****Popular federal websites that enable DNSSEC (2017).**

Domain	Score	Rank	Domain	Score	Rank
nih.gov	100	52	congress.gov	100	950
ncbi.nlm.nih.gov	100	84	medlineplus.gov	100	1,078
nasa.gov	100	108	faa.gov	100	1,090
cdc.gov	100	138	treasury.gov	100	1,116
loc.gov	100	156	ssa.gov	100	1,128
whitehouse.gov	100	192	sba.gov	100	1,143
noaa.gov	100	214	osha.gov	100	1,179
usda.gov	100	248	nsf.gov	100	1,286
fda.gov	100	258	clinicaltrials.gov	100	1,313
state.gov	100	259	hud.gov	100	1,344
epa.gov	100	260	defense.gov	100	1,407
nps.gov	100	358	federalreserve.gov	100	1,439
ed.gov	100	390	copyright.gov	100	1,457
usgs.gov	100	393	fws.gov	100	1,490
ftc.gov	100	409	eia.gov	100	1,501
irs.gov	100	416	cpsc.gov	100	1,506
archives.gov	100	433	lbl.gov	100	1,595
senate.gov	100	456	uscis.gov	100	1,629
census.gov	100	472	energystar.gov	100	1,769
uspto.gov	100	522	export.gov	100	1,847
nist.gov	100	539	samhsa.gov	100	1,885
sec.gov	100	572	cms.gov	100	1,975
bls.gov	100	591	usaid.gov	100	1,997
usa.gov	100	594	cbp.gov	100	2,000
dot.gov	100	601	ornl.gov	100	2,118
hhs.gov	100	603	nhtsa.gov	100	2,120
fbi.gov	100	610	healthcare.gov	100	2,146
cia.gov	100	650	medicare.gov	100	2,168
energy.gov	100	711	federalregister.gov	100	2,260
gpo.gov	100	720	tsa.gov	100	2,455
dhs.gov	100	737	gsa.gov	100	2,529
va.gov	100	750	ahrq.gov	100	2,548
fcc.gov	100	760	anl.gov	100	2,598
usembassy.gov	100	814	lanl.gov	100	2,665
fema.gov	100	821	ready.gov	100	2,683
justice.gov	100	824	drugabuse.gov	100	2,719
usps.com	100	837	eeoc.gov	100	2,904
dol.gov	100	883	llnl.gov	100	3,231
cancer.gov	100	901	fdic.gov	100	3,284
weather.gov	100	904	blm.gov	100	3,307

**TABLE 6 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
transportation.gov	100	3,340	recreation.gov	100	9,012
regulations.gov	100	3,390	data.gov	100	9,103
nga.gov	100	3,462	firstgov.gov	100	9,112
nrel.gov	100	3,623	nationalservice.gov	100	9,127
hrsa.gov	100	3,635	stopbullying.gov	100	9,285
consumerfinance.gov	100	4,144	section508.gov	100	9,391
choosemyplate.gov	100	4,158	foodsafety.gov	100	9,649
doleta.gov	100	4,330	usbr.gov	100	9,711
opm.gov	100	4,388	treasurydirect.gov	100	10,008
bea.gov	100	4,425	usitc.gov	100	10,012
ice.gov	100	4,441	onguardonline.gov	100	10,253
health.gov	100	4,522	share.america.gov	100	10,269
usajobs.gov	100	4,713	huduser.gov	100	10,323
ada.gov	100	4,728	atf.gov	100	10,449
ic3.gov	100	4,966	nara.gov	100	10,591
bts.gov	100	4,981	trade.gov	100	10,603
sandia.gov	100	4,999	medicaid.gov	100	10,648
doi.gov	100	5,089	osti.gov	100	10,914
socialsecurity.gov	100	5,145	childwelfare.gov	100	11,221
womenshealth.gov	100	5,229	dhhs.gov	100	12,176
healthfinder.gov	100	5,234	ftccomplaintassistant.gov	100	13,822
fnal.gov	100	5,500	bop.gov	100	13,840
ncjrs.gov	100	5,696	acl.gov	100	14,015
commerce.gov	100	5,752	globalchange.gov	100	14,066
fbo.gov	100	5,986	pnl.gov	100	14,093
fueleconomy.gov	100	6,124	healthit.gov	100	14,317
genome.gov	100	6,187	climate.gov	100	14,607
bjs.gov	100	6,208	fincen.gov	100	15,259
ecfr.gov	100	6,610	smokefree.gov	100	15,318
bnl.gov	100	7,036	time.gov	100	15,403
dea.gov	100	7,344	studentloans.gov	100	15,454
grants.gov	100	7,406	ferc.gov	100	16,122
dni.gov	100	7,616	nlr.gov	100	16,157
nrc.gov	100	7,809	access-board.gov	100	16,306
safercar.gov	100	7,903	ojp.gov	100	16,576
donotcall.gov	100	8,116	trumanlibrary.org	100	17,038
peacecorps.gov	100	8,561	hiv.gov	100	17,467
surgeongeneral.gov	100	8,611	consumer.gov	100	17,482
usmint.gov	100	8,792	privacyshield.gov	100	18,269
cftc.gov	100	8,975	americaslibrary.gov	100	18,771

**TABLE 6 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
secretservice.gov	100	18,923	usaspending.gov	100	37,216
nij.gov	100	19,043	9-11commission.gov	100	37,398
guideline.gov	100	19,083	eac.gov	100	38,072
healthypeople.gov	100	19,717	disasterassistance.gov	100	39,199
ourdocuments.gov	100	20,258	usmarshals.gov	100	39,725
eldercare.gov	100	21,073	globe.gov	100	40,337
pnnl.gov	100	21,128	nsopw.gov	100	42,143
imls.gov	100	21,990	ameslab.gov	100	42,697
distraction.gov	100	22,280	nicic.gov	100	42,943
nutrition.gov	100	22,332	challenge.gov	100	43,970
ncua.gov	100	23,060	pppl.gov	100	44,053
sss.gov	100	23,278	mymoney.gov	100	45,132
ffiec.gov	100	23,694	mbda.gov	100	45,367
nifc.gov	100	23,822	sbir.gov	100	45,814
airnow.gov	100	23,840	ttb.gov	100	45,942
aviationweather.gov	100	24,862	investor.gov	100	46,094
usability.gov	100	24,970	abmc.gov	100	46,679
ihs.gov	100	25,094	nationalmap.gov	100	46,765
fafsa.gov	100	27,467	mentalhealth.gov	100	46,899
makinghomeaffordable.gov	100	27,567	reginfo.gov	100	47,449
benefits.gov	100	27,616	moneyfactory.gov	100	48,322
ojdp.gov	100	27,867	buyusa.gov	100	48,328
ntis.gov	100	28,046	recalls.gov	100	49,487
msha.gov	100	28,468	identitytheft.gov	100	49,675
science.gov	100	28,568	sam.gov	100	50,196
occ.gov	100	28,708	pbgc.gov	100	50,696
aoc.gov	100	28,719	inl.gov	100	51,817
gsaadvantage.gov	100	29,556	ofr.gov	100	53,292
fhfa.gov	100	31,043	ncifcrf.gov	100	54,570
feb.gov	100	31,594	uscc.gov	100	55,771
americorps.gov	100	32,213	boem.gov	100	56,407
ars-grin.gov	100	32,550	osac.gov	100	57,033
cio.gov	100	34,026	bia.gov	100	57,918
nwcg.gov	100	34,088	nano.gov	100	58,766
broadbandmap.gov	100	34,499	solardecathlon.gov	100	58,957
pubmed.gov	100	35,065	phe.gov	100	59,054
organdonor.gov	100	35,648	kids.gov	100	59,531
serve.gov	100	36,004	ncd.gov	100	59,887
exim.gov	100	36,130	usccr.gov	100	60,144
jobcorps.gov	100	37,019	collegedrinkingprevention.gov	100	60,712

**TABLE 6 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
childstats.gov	100	61,353	insurekidsnow.gov	100	90,260
saferproducts.gov	100	61,596	econsumer.gov	100	92,587
gps.gov	100	61,903	ahcpr.gov	100	94,904
opic.gov	100	62,611	eftps.gov	100	96,310
usap.gov	100	62,910	bbg.gov	100	100,162
digitalpreservation.gov	100	62,916	science360.gov	100	101,007
orau.gov	100	62,917	uspsdig.gov	100	102,867
pepfar.gov	100	63,016	nitrd.gov	100	103,053
nnlm.gov	100	65,218	fara.gov	100	103,056
acquisition.gov	100	65,915	tsp.gov	100	103,131
fvap.gov	100	66,369	plainlanguage.gov	100	103,841
nixonlibrary.gov	100	68,278	fbijobs.gov	100	105,427
bja.gov	100	68,850	digitalgov.gov	100	105,697
cfda.gov	100	68,921	womenshistorymonth.gov	100	109,565
vaccines.gov	100	69,084	achp.gov	100	113,794
usphs.gov	100	69,476	drought.gov	100	115,975
eda.gov	100	71,201	osmre.gov	100	117,679
nersc.gov	100	71,381	mycreditunion.gov	100	118,328
visitthecapitol.gov	100	71,706	energycodes.gov	100	121,547
nationsreportcard.gov	100	71,713	feedthefuture.gov	100	123,033
itis.gov	100	71,919	cdfifund.gov	100	124,256
girlshealth.gov	100	73,085	amberalert.gov	100	125,102
poolsafely.gov	100	75,220	ginniema.gov	100	128,448
read.gov	100	75,569	gsaauctions.gov	100	129,665
faasafety.gov	100	77,250	stopfraud.gov	100	134,862
invasivespeciesinfo.gov	100	78,215	clintonlibrary.gov	100	137,120
its.bldrdoc.gov	100	79,017	fedcenter.gov	100	137,649
fordlibrarymuseum.gov	100	79,659	nro.gov	100	144,044
research.gov	100	80,001	fedshirevets.gov	100	149,304
usbg.gov	100	82,006	recoverymonth.gov	100	150,950
foia.gov	100	82,912	ovc.gov	100	151,503
hanford.gov	100	85,111	cuidadodesalud.gov	100	152,346
bioethics.gov	100	85,493	savingsbonds.gov	100	160,647
osc.gov	100	86,666	fletc.gov	100	164,848
presidio.gov	100	87,505	arm.gov	100	166,427
nctc.gov	100	87,514	hru.gov	100	167,116
mcc.gov	100	87,982	prc.gov	100	169,908
lsc.gov	100	88,816	fpds.gov	100	171,080
fgdc.gov	100	89,039	bsee.gov	100	174,280
bpa.gov	100	89,556	jimmycarterlibrary.gov	100	174,674

**TABLE 6 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
pay.gov	100	177,551	biopreferred.gov	100	297,616
fedbizopps.gov	100	180,106	tsunami.gov	100	316,948
nwbc.gov	100	180,507	wdol.gov	100	322,205
fdlp.gov	100	181,423	indianaffairs.gov	100	323,948
vets.gov	100	184,939	fedramp.gov	100	326,659
guidelines.gov	100	187,042	ucrdatatool.gov	100	330,854
trafficsafetymarketing.gov	100	187,220	rivers.gov	100	336,780
iarpa.gov	100	193,902	govloans.gov	100	341,481
ofcm.gov	100	194,232	odni.gov	100	347,052
studentaid.gov	100	195,346	pclob.gov	100	368,950
goes-r.gov	100	198,323	nrd.gov	100	374,568
fishwatch.gov	100	199,402	flra.gov	100	417,486
foreignassistance.gov	100	201,411	namus.gov	100	438,306
papahanaumokuakea.gov	100	205,712	ncpc.gov	100	438,419
manufacturing.gov	100	206,901	alaskacenters.gov	100	445,799
hispanicheritagemonth.gov	100	211,081	stb.gov	100	459,398
juvenilecouncil.gov	100	212,144	nagb.org	100	463,144
whistleblowers.gov	100	213,108	scijinks.gov	100	487,141
africanamericanhistorymonth.gov	100	213,941	ems.gov	100	488,371
thecoolspot.gov	100	215,850	financialresearch.gov	100	489,436
presidentialserviceawards.gov	100	217,018	uscsp.gov	100	501,673
justthinktwice.gov	100	234,959	lep.gov	100	504,798
volunteer.gov	100	239,243	pmf.gov	100	532,971
hudoig.gov	100	241,717	alzheimers.gov	100	542,938
agingstats.gov	100	241,759	tonation-nsn.gov	100	555,364
mymedicare.gov	100	244,142	tigta.gov	100	558,726
crimesolutions.gov	100	245,674	telework.gov	100	569,475
wapa.gov	100	246,391	uscurrency.gov	100	575,870
smartgrid.gov	100	248,173	listo.gov	100	583,774
sigtar.gov	100	249,304	sustainablecommunities.gov	100	585,178
nationalresourcedirectory.gov	100	261,969	myplate.gov	100	593,063
selectusa.gov	100	270,191	pmi.gov	100	602,770
helpwithmybank.gov	100	270,668	idtheft.gov	100	633,739
myra.gov	100	272,955	edpubs.gov	100	644,524
letgirlslearn.gov	100	283,438	itdashboard.gov	100	669,979
nationalgangcenter.gov	100	283,470	911.gov	100	675,028
stopalcoholabuse.gov	100	283,909	acwi.gov	100	691,305
youthrules.gov	100	289,347	vef.gov	100	705,883
unicor.gov	100	289,791	idmanagement.gov	100	728,074
vehiclehistory.gov	100	296,022	sciencebase.gov	100	731,860

**TABLE 6 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
geomac.gov	100	731,966	speaker.gov	0	11,196
iad.gov	100	740,298	ndu.edu	0	21,474
dnfsb.gov	100	743,978	fjc.gov	0	31,455
cfo.gov	100	752,773	federallabs.org	0	34,889
niem.gov	100	796,571	ussc.gov	0	41,031
arctic.gov	100	808,339	gop.gov	0	43,731
ncirc.gov	100	820,214	pacer.gov	0	51,014
nehrrp.gov	100	824,997	majorityleader.gov	0	61,757
cnss.gov	100	836,904	uscirf.gov	0	61,994
brac.gov	100	872,406	csb.gov	0	69,368
wrp.gov	100	877,710	democraticleader.gov	0	75,692
smart.gov	100	902,846	jct.gov	0	96,319
fhfaoig.gov	100	903,178	medpac.gov	0	98,197
ovcttac.gov	100	911,165	fmc.gov	0	101,175
frtr.gov	100	920,323	arc.gov	0	101,902
onrr.gov	100	932,962	oge.gov	0	106,361
ibwc.gov	100	935,804	usich.gov	0	112,718
applicationmanager.gov	100	941,133	moneyfactory.com	0	133,020
vcf.gov	100	962,022	everykidinapark.gov	0	137,346
house.gov	0	399	rrb.gov	0	157,248
uscourts.gov	0	1,182	udall.gov	0	161,422
fs.fed.us	0	1,578	truman.gov	0	162,532
gao.gov	0	1,902	adlnet.gov	0	169,931
supremecourt.gov	0	1,966	cecc.gov	0	175,152
us-cert.gov	0	3,298	pcah.gov	0	176,199
nsa.gov	0	3,442	srs.gov	0	211,333
cbo.gov	0	3,714	ustda.gov	0	214,534
ustr.gov	0	5,307	mspb.gov	0	215,030
ntsb.gov	0	6,539	apps.gov	0	257,832
fec.gov	0	6,557	adlnet.org	0	297,503
neh.gov	0	6,671	vote.gov	0	658,543
arts.gov	0	7,327	usds.gov	0	725,460
jfklibrary.org	0	7,728	code.gov	0	923,771
docsteach.org	0	10,868	tswg.gov	0	985,963

**TABLE 7****Popular federal websites ranked by SSL scores (2017).**

Domain	Score	Rank	Domain	Score	Rank
archives.gov	97	433	gsa.gov	95	2,529
ferc.gov	97	16,122	drugabuse.gov	95	2,719
ourdocuments.gov	97	20,258	llnl.gov	95	3,231
nixonlibrary.gov	97	68,278	blm.gov	95	3,307
truman.gov	97	162,532	regulations.gov	95	3,390
doi.gov	96	5,089	choosemyplate.gov	95	4,158
time.gov	96	15,403	doleta.gov	95	4,330
studentloans.gov	96	15,454	opm.gov	95	4,388
trumanlibrary.org	96	17,038	usajobs.gov	95	4,713
ntis.gov	96	28,046	bts.gov	95	4,981
gsaadvantage.gov	96	29,556	socialsecurity.gov	95	5,145
ginniema.gov	96	128,448	fbo.gov	95	5,986
indianaffairs.gov	96	323,948	nrc.gov	95	7,809
alaskacenters.gov	96	445,799	donotcall.gov	95	8,116
edpubs.gov	96	644,524	surgeongeneral.gov	95	8,611
nih.gov	95	52	usmint.gov	95	8,792
ncbi.nlm.nih.gov	95	84	firstgov.gov	95	9,112
nasa.gov	95	108	stopbullying.gov	95	9,285
cdc.gov	95	138	foodsafety.gov	95	9,649
whitehouse.gov	95	192	treasurydirect.gov	95	10,008
usda.gov	95	248	onguardonline.gov	95	10,253
fda.gov	95	258	atf.gov	95	10,449
epa.gov	95	260	medicaid.gov	95	10,648
nps.gov	95	358	dhhs.gov	95	12,176
usgs.gov	95	393	ftccomplaintassistant.gov	95	13,822
ftc.gov	95	409	bop.gov	95	13,840
sec.gov	95	572	smokefree.gov	95	15,318
usa.gov	95	594	consumer.gov	95	17,482
hhs.gov	95	603	secretservice.gov	95	18,923
fbi.gov	95	610	sss.gov	95	23,278
energy.gov	95	711	ffiec.gov	95	23,694
cancer.gov	95	901	nifc.gov	95	23,822
medlineplus.gov	95	1,078	usability.gov	95	24,970
faa.gov	95	1,090	fhfa.gov	95	31,043
ssa.gov	95	1,128	ars-grin.gov	95	32,550
clinicaltrials.gov	95	1,313	nwcg.gov	95	34,088
fs.fed.us	95	1,578	pubmed.gov	95	35,065
cms.gov	95	1,975	jobcorps.gov	95	37,019
healthcare.gov	95	2,146	9-11commission.gov	95	37,398
federalregister.gov	95	2,260	globe.gov	95	40,337

**TABLE 7 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
challenge.gov	95	43,970	mymedicare.gov	95	244,142
ttb.gov	95	45,942	apps.gov	95	257,832
investor.gov	95	46,094	myra.gov	95	272,955
abmc.gov	95	46,679	letgirlslearn.gov	95	283,438
nationalmap.gov	95	46,765	biopREFERRED.gov	95	297,616
mentalhealth.gov	95	46,899	flra.gov	95	417,486
moneyfactory.gov	95	48,322	stb.gov	95	459,398
recalls.gov	95	49,487	scijinks.gov	95	487,141
identitytheft.gov	95	49,675	pmf.gov	95	532,971
sam.gov	95	50,196	sustainablecommunities.gov	95	585,178
pbgc.gov	95	50,696	myplate.gov	95	593,063
bia.gov	95	57,918	idtheft.gov	95	633,739
kids.gov	95	59,531	vote.gov	95	658,543
collegedrinkingprevention.gov	95	60,712	acwi.gov	95	691,305
saferproducts.gov	95	61,596	sciencebase.gov	95	731,860
pepfar.gov	95	63,016	arctic.gov	95	808,339
nnlm.gov	95	65,218	ncirc.gov	95	820,214
cfda.gov	95	68,921	code.gov	95	923,771
vaccines.gov	95	69,084	applicationmanager.gov	95	941,133
usphs.gov	95	69,476	wdol.gov	94	322,205
itis.gov	95	71,919	loc.gov	93	156
democraticleader.gov	95	75,692	irs.gov	93	416
fgdc.gov	95	89,039	senate.gov	93	456
insurekidsnow.gov	95	90,260	cia.gov	93	650
econsumer.gov	95	92,587	dhs.gov	93	737
tsp.gov	95	103,131	fcc.gov	93	760
oge.gov	95	106,361	fema.gov	93	821
osmre.gov	95	117,679	dol.gov	93	883
feedthefuture.gov	95	123,033	congress.gov	93	950
clintonlibrary.gov	95	137,120	treasury.gov	93	1,116
everykidinapark.gov	95	137,346	sba.gov	93	1,143
fedshirevets.gov	95	149,304	osha.gov	93	1,179
cuidadodesalud.gov	95	152,346	defense.gov	93	1,407
rrb.gov	95	157,248	federalreserve.gov	93	1,439
savingsbonds.gov	95	160,647	copyright.gov	93	1,457
bsee.gov	95	174,280	cpsc.gov	93	1,506
jimmycarterlibrary.gov	95	174,674	uscis.gov	93	1,629
fedbizopps.gov	95	180,106	export.gov	93	1,847
whistleblowers.gov	95	213,108	samhsa.gov	93	1,885
thecoolspot.gov	95	215,850	supremecourt.gov	93	1,966

**TABLE 7 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
cbp.gov	93	2,000	cio.gov	93	34,026
ornl.gov	93	2,118	broadbandmap.gov	93	34,499
medicare.gov	93	2,168	exim.gov	93	36,130
tsa.gov	93	2,455	usaspending.gov	93	37,216
ready.gov	93	2,683	eac.gov	93	38,072
fdic.gov	93	3,284	disasterassistance.gov	93	39,199
us-cert.gov	93	3,298	ameslab.gov	93	42,697
nsa.gov	93	3,442	gop.gov	93	43,731
hrsa.gov	93	3,635	mymoney.gov	93	45,132
cbo.gov	93	3,714	sbir.gov	93	45,814
consumerfinance.gov	93	4,144	pacer.gov	93	51,014
bea.gov	93	4,425	ncifcrf.gov	93	54,570
ice.gov	93	4,441	boem.gov	93	56,407
health.gov	93	4,522	solardecathlon.gov	93	58,957
ic3.gov	93	4,966	phe.gov	93	59,054
womenshealth.gov	93	5,229	ncd.gov	93	59,887
healthfinder.gov	93	5,234	childstats.gov	93	61,353
fnal.gov	93	5,500	majorityleader.gov	93	61,757
fueleconomy.gov	93	6,124	uscirf.gov	93	61,994
genome.gov	93	6,187	opic.gov	93	62,611
neh.gov	93	6,671	usap.gov	93	62,910
arts.gov	93	7,327	orau.gov	93	62,917
dni.gov	93	7,616	nersc.gov	93	71,381
peacecorps.gov	93	8,561	nationsreportcard.gov	93	71,713
usbr.gov	93	9,711	girlshealth.gov	93	73,085
share.america.gov	93	10,269	usb.gov	93	82,006
huduser.gov	93	10,323	osc.gov	93	86,666
docsteach.org	93	10,868	nctc.gov	93	87,514
osti.gov	93	10,914	eftps.gov	93	96,310
childwelfare.gov	93	11,221	jct.gov	93	96,319
pnl.gov	93	14,093	bbg.gov	93	100,162
climate.gov	93	14,607	science360.gov	93	101,007
nlr.gov	93	16,157	fmc.gov	93	101,175
access-board.gov	93	16,306	nitrd.gov	93	103,053
hiv.gov	93	17,467	digitalgov.gov	93	105,697
pnnl.gov	93	21,128	womenshistorymonth.gov	93	109,565
makinghomeaffordable.gov	93	27,567	drought.gov	93	115,975
science.gov	93	28,568	cdfifund.gov	93	124,256
fjc.gov	93	31,455	udall.gov	93	161,422
feb.gov	93	31,594	fletc.gov	93	164,848

**TABLE 7 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
arm.gov	93	166,427	ncjrs.gov	92	5,696
hru.gov	93	167,116	fincen.gov	92	15,259
fdlp.gov	93	181,423	ojdp.gov	92	27,867
iarpa.gov	93	193,902	bja.gov	92	68,850
foreignassistance.gov	93	201,411	mcc.gov	92	87,982
papahanaumokuakea.gov	93	205,712	fbijobs.gov	92	105,427
manufacturing.gov	93	206,901	juvenilecouncil.gov	92	212,144
hispanicheritagemonth.gov	93	211,081	wapa.gov	92	246,391
africanamericanhistorymonth.gov	93	213,941	house.gov	91	399
ustda.gov	93	214,534	uspto.gov	91	522
mspb.gov	93	215,030	justice.gov	91	824
presidentialserviceawards.gov	93	217,018	eia.gov	91	1,501
justthinktwice.gov	93	234,959	energystar.gov	91	1,769
sigtar.gov	93	249,304	usaid.gov	91	1,997
youthrules.gov	93	289,347	eeoc.gov	91	2,904
fedramp.gov	93	326,659	transportation.gov	91	3,340
odni.gov	93	347,052	nga.gov	91	3,462
pclob.gov	93	368,950	nrel.gov	91	3,623
nagb.org	93	463,144	commerce.gov	91	5,752
financialresearch.gov	93	489,436	bnl.gov	91	7,036
uscg.gov	93	501,673	grants.gov	91	7,406
tigta.gov	93	558,726	jfklibrary.org	91	7,728
telework.gov	93	569,475	recreation.gov	91	9,012
uscurrency.gov	93	575,870	data.gov	91	9,103
listo.gov	93	583,774	nationalservice.gov	91	9,127
pmi.gov	93	602,770	section508.gov	91	9,391
usds.gov	93	725,460	usitc.gov	91	10,012
idmanagement.gov	93	728,074	privacyshield.gov	91	18,269
geomac.gov	93	731,966	healthypeople.gov	91	19,717
dnfsb.gov	93	743,978	imls.gov	91	21,990
niem.gov	93	796,571	airnow.gov	91	23,840
fhfaoig.gov	93	903,178	fafsa.gov	91	27,467
ovcttac.gov	93	911,165	benefits.gov	91	27,616
frtr.gov	93	920,323	occ.gov	91	28,708
onrr.gov	93	932,962	americorps.gov	91	32,213
ibwc.gov	93	935,804	organdonor.gov	91	35,648
nist.gov	92	539	serve.gov	91	36,004
dot.gov	92	601	nsopw.gov	91	42,143
usps.com	92	837	mbda.gov	91	45,367
fws.gov	92	1,490	reginfo.gov	91	47,449

**TABLE 7 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
nano.gov	91	58,766	nij.gov	85	19,043
acquisition.gov	91	65,915	guideline.gov	85	19,083
eda.gov	91	71,201	distraction.gov	85	22,280
visitthecapitol.gov	91	71,706	nutrition.gov	85	22,332
bpa.gov	91	89,556	ihs.gov	85	25,094
fedcenter.gov	91	137,649	aoc.gov	85	28,719
recoverymonth.gov	91	150,950	federallabs.org	85	34,889
fpds.gov	91	171,080	nicic.gov	85	42,943
hudoig.gov	91	241,717	ofr.gov	85	53,292
helpwithmybank.gov	91	270,668	uscc.gov	85	55,771
vehiclehistory.gov	91	296,022	faasafety.gov	85	77,250
govloans.gov	91	341,481	invasivespeciesinfo.gov	85	78,215
rivers.gov	90	336,780	research.gov	85	80,001
state.gov	89	259	uspsog.gov	85	102,867
healthit.gov	89	14,317	usich.gov	85	112,718
aviationweather.gov	89	24,862	energycodes.gov	85	121,547
nwbc.gov	89	180,507	amberalert.gov	85	125,102
selectusa.gov	89	270,191	ovc.gov	85	151,503
unicor.gov	89	289,791	prc.gov	85	169,908
wrp.gov	89	877,710	adlnet.gov	85	169,931
tswg.gov	89	985,963	guidelines.gov	85	187,042
hud.gov	89	1,344	trafficsafetymarketing.gov	85	187,220
itdashboard.gov	87	669,979	studentaid.gov	85	195,346
cfo.gov	87	752,773	agingstats.gov	85	241,759
fec.gov	86	6,557	crimesolutions.gov	85	245,674
lsc.gov	86	88,816	smartgrid.gov	85	248,173
pay.gov	86	177,551	ucrdatatool.gov	85	330,854
fishwatch.gov	86	199,402	namus.gov	85	438,306
vef.gov	86	705,883	ems.gov	85	488,371
gpo.gov	85	720	911.gov	85	675,028
nsf.gov	85	1,286	smart.gov	85	902,846
nhtsa.gov	85	2,120	ed.gov	84	390
anl.gov	85	2,598	ustr.gov	83	5,307
lanl.gov	85	2,665	msha.gov	83	28,468
bjs.gov	85	6,208	nationalgangcenter.gov	83	283,470
ecfr.gov	85	6,610	census.gov	79	472
safercar.gov	85	7,903	va.gov	79	750
nara.gov	85	10,591	ada.gov	79	4,728
acl.gov	85	14,015	dea.gov	79	7,344
ojp.gov	85	16,576	usmarshals.gov	79	39,725

**TABLE 7 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
fordlibrarymuseum.gov	79	79,659	sandia.gov	0	4,999
foia.gov	79	82,912	trade.gov	0	10,603
fara.gov	79	103,056	speaker.gov	0	11,196
gsaauctions.gov	79	129,665	globalchange.gov	0	14,066
stopfraud.gov	79	134,862	eldercare.gov	0	21,073
vets.gov	79	184,939	ndu.edu	0	21,474
lep.gov	79	504,798	pppl.gov	0	44,053
vcf.gov	79	962,022	usccr.gov	0	60,144
inl.gov	78	51,817	gps.gov	0	61,903
osac.gov	78	57,033	digitalpreservation.gov	0	62,916
its.bldrdoc.gov	78	79,017	csb.gov	0	69,368
arc.gov	76	101,902	poolsafely.gov	0	75,220
cftc.gov	75	8,975	read.gov	0	75,569
nationalresourcedirectory.gov	75	261,969	hanford.gov	0	85,111
nrd.gov	75	374,568	bioethics.gov	0	85,493
ahrq.gov	74	2,548	presidio.gov	0	87,505
ntsb.gov	74	6,539	medpac.gov	0	98,197
ahcpr.gov	74	94,904	plainlanguage.gov	0	103,841
pcah.gov	74	176,199	achp.gov	0	113,794
volunteer.gov	70	239,243	moneyfactory.com	0	133,020
fvap.gov	66	66,369	nro.gov	0	144,044
alzheimers.gov	63	542,938	cecc.gov	0	175,152
ncua.gov	60	23,060	ofcm.gov	0	194,232
buyusa.gov	60	48,328	goes-r.gov	0	198,323
mycreditunion.gov	60	118,328	srs.gov	0	211,333
bls.gov	55	591	stopalcoholabuse.gov	0	283,909
usembassy.gov	55	814	adlnet.org	0	297,503
americaslibrary.gov	55	18,771	tsunami.gov	0	316,948
ussc.gov	47	41,031	ncpc.gov	0	438,419
noaa.gov	0	214	tonation-nsn.gov	0	555,364
weather.gov	0	904	iad.gov	0	740,298
uscourts.gov	0	1,182	nehrp.gov	0	824,997
lbl.gov	0	1,595	cnss.gov	0	836,904
gao.gov	0	1,902	brac.gov	0	872,406

## ACCESSIBILITY

Accessible websites are designed to eliminate barriers that might prevent people with disabilities from using them. Web developers often assume users can see content or that they use a keyboard and a mouse to navigate the site. Building a website that relies on only those tools can create issues for users with disabilities. Creating accessible websites entails adhering to accessible-design principles, such as using high-contrast text, providing alternative text for all images, and using labels for buttons so that people using a screen reader can navigate the site. To measure accessibility, this report uses AChecker’s “Web Accessibility Checker,” an online tool that analyzes URLs to identify accessibility issues based on the Web Content Accessibility Guidelines (WCAG) 2.0 AA Guidelines.<sup>77</sup> Using these guidelines, the “Web Accessibility Checker” evaluates online content for three types of problems: known problems (i.e., issues that are identified with certainty as barriers to accessibility), likely problems (i.e., identified issues that require a human to verify), and potential problems (i.e., issues that the checker cannot specifically identify, but that may indicate problems exist).<sup>78</sup> To avoid unfairly penalizing websites, this report only scores websites based on known problems the tool identifies. When the tool detected a known problem with a website, we reduced its accessibility score to produce a final score between 0 and 100. After testing the top nongovernment websites from the “Majestic Million” list we determined that a reasonable benchmark for passing the accessibility test was a score of 85. This is the same benchmark as in the initial report. Websites with this score may have up to 10 known problems—problems that should be fixed—but generally these websites are in close compliance with the WCAG 2.0 AA guidelines. We were unable to successfully run the tool on four websites, so we omitted these sites from the accessibility test.<sup>79</sup> This report found that 63 percent of federal websites passed the accessibility test compared to 58 percent in the initial report. A similar trend held for those websites in the global top 100,000. Figure 12 shows the overall distribution of accessibility data. Of the 260 websites tested both last year and this year, about 58 percent passed the accessibility test. The blue squares in figure 12 indicate which websites failed to get the minimum passing score of 85.

**FIGURE 12**

Accessibility of federal websites by popularity.

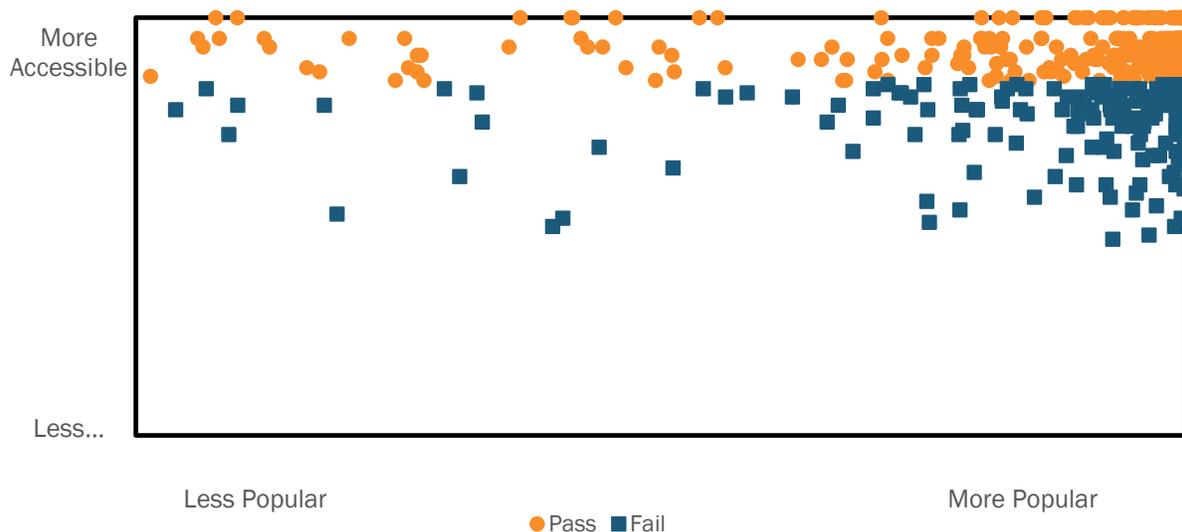
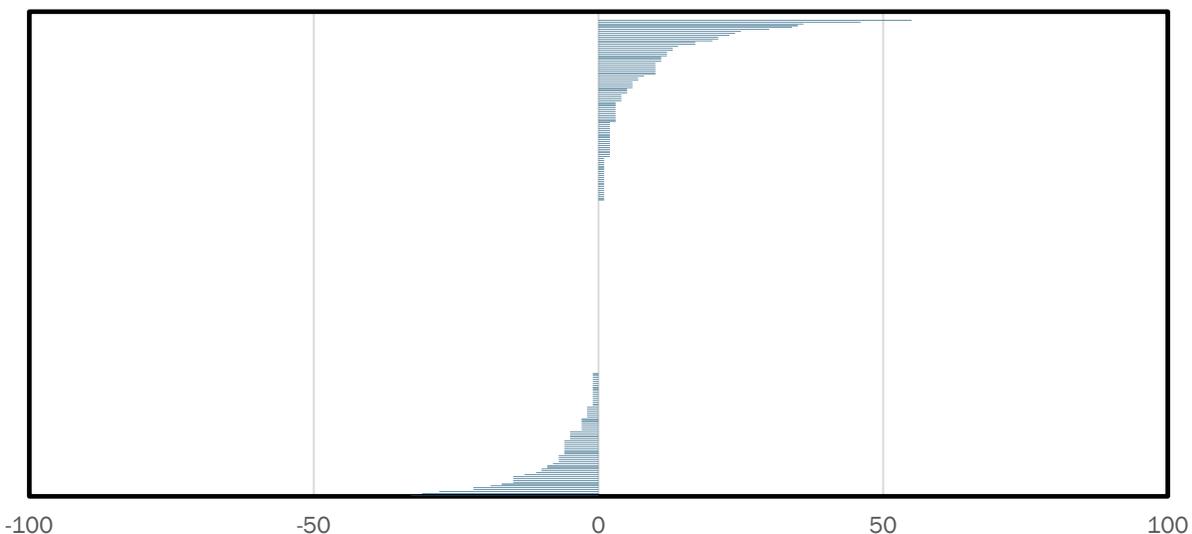


Figure 13 illustrates the change in accessibility scores of websites tested in both the initial report and this report. The figure shows that the majority (74 percent) of federal websites tested in both reports either maintained the same accessibility score or improved in score. Of the 260 websites tested in both reports, 38 percent improved their accessibility scores. In comparison, 26 percent declined in accessibility. Of the websites where the score did not change, 28 percent failed the accessibility test.

### FIGURE 13

Change in accessibility scores of federal websites (2016-2017).



Unfortunately, as in the initial report, the International Trade Administration ([trade.gov](http://trade.gov)) scored very poorly on the WCAG 2.0 AA guidelines. Other federal websites in the global top 100,000 that also earned low scores included the Internal Revenue Service ([irs.gov](http://irs.gov)) and the U.S. Census ([census.gov](http://census.gov)). In addition, some federal websites that might cater to users who are more likely to have disabilities, such as MetalHealth.gov ([mentalhealth.gov](http://mentalhealth.gov)), failed the accessibility test. In the initial report, Medicare.gov failed the test, yet when we tested the website in September it passed the accessibility test with a score of 100. This shows a significant improvement.

Many of the failures encountered in the second edition were the same as those described in the initial report. These included the failure to add text labels to images, buttons, or input controls like a “search” bar, which are necessary for individuals using screen readers; the failure to present information or interactive elements in a sequential order, which makes navigating websites difficult for users with an impairment or disability; the failure to make text sufficiently readable by specifying the language being used on the page; and the failure to make it easy for users to discern content, by making the websites foreground distinguishable from the background. Federal websites need to make significant improvements to ensure they are complying with WCAG 2.0. To make these changes, there are many online resources federal agencies can follow.<sup>80</sup>

**TABLE 8****Popular federal websites ranked by accessibility (2017).**

Domain	Score	Rank	Domain	Score	Rank
ncbi.nlm.nih.gov	100	84	moneyfactory.gov	100	48,322
nasa.gov	100	108	identitytheft.gov	100	49,675
whitehouse.gov	100	192	nano.gov	100	58,766
usda.gov	100	248	kids.gov	100	59,531
fda.gov	100	258	visitthecapitol.gov	100	71,706
nps.gov	100	358	read.gov	100	75,569
house.gov	100	399	fordlibrarymuseum.gov	100	79,659
uspto.gov	100	522	econsumer.gov	100	92,587
nist.gov	100	539	eftps.gov	100	96,310
fbi.gov	100	610	nitrd.gov	100	103,053
fcc.gov	100	760	fbijobs.gov	100	105,427
fema.gov	100	821	moneyfactory.com	100	133,020
justice.gov	100	824	everykidinapark.gov	100	137,346
cancer.gov	100	901	fletc.gov	100	164,848
weather.gov	100	904	pay.gov	100	177,551
supremecourt.gov	100	1,966	ofcm.gov	100	194,232
cbp.gov	100	2,000	unicor.gov	100	289,791
medicare.gov	100	2,168	alaskacenters.gov	100	445,799
tsa.gov	100	2,455	nagb.org	100	463,144
ready.gov	100	2,683	alzheimers.gov	100	542,938
us-cert.gov	100	3,298	listo.gov	100	583,774
cbo.gov	100	3,714	sustainablecommunities.gov	100	585,178
ice.gov	100	4,441	idtheft.gov	100	633,739
usajobs.gov	100	4,713	fhfaoig.gov	100	903,178
ncjrs.gov	100	5,696	code.gov	100	923,771
nrc.gov	100	7,809	nih.gov	95	52
section508.gov	100	9,391	usa.gov	95	594
usbr.gov	100	9,711	hhs.gov	95	603
share.america.gov	100	10,269	gpo.gov	95	720
osti.gov	100	10,914	va.gov	95	750
bop.gov	100	13,840	usembassy.gov	95	814
sss.gov	100	23,278	regulations.gov	95	3,390
nifc.gov	100	23,822	nsa.gov	95	3,442
ntis.gov	100	28,046	health.gov	95	4,522
science.gov	100	28,568	ic3.gov	95	4,966
exim.gov	100	36,130	doi.gov	95	5,089
ameslab.gov	100	42,697	fueleconomy.gov	95	6,124
ttb.gov	100	45,942	neh.gov	95	6,671
investor.gov	100	46,094	peacecorps.gov	95	8,561
reginfo.gov	100	47,449	firstgov.gov	95	9,112

**TABLE 8 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
onguardonline.gov	95	10,253	pnnl.gov	93	21,128
dhhs.gov	95	12,176	ihs.gov	93	25,094
ftccomplaintassistant.gov	95	13,822	fjc.gov	93	31,455
access-board.gov	95	16,306	pppl.gov	93	44,053
guideline.gov	95	19,083	boem.gov	93	56,407
ffiec.gov	95	23,694	its.bldrdoc.gov	93	79,017
feb.gov	95	31,594	feedthefuture.gov	93	123,033
nwcg.gov	95	34,088	ovc.gov	93	151,503
ofr.gov	95	53,292	pcah.gov	93	176,199
phe.gov	95	59,054	vets.gov	93	184,939
orau.gov	95	62,917	hispanicheritagemonth.gov	93	211,081
pepfar.gov	95	63,016	rivers.gov	93	336,780
nnlm.gov	95	65,218	uscsp.gov	93	501,673
acquisition.gov	95	65,915	tonation-nsn.gov	93	555,364
insurekidsnow.gov	95	90,260	telework.gov	93	569,475
clintonlibrary.gov	95	137,120	edpubs.gov	93	644,524
fedcenter.gov	95	137,649	brac.gov	93	872,406
bsee.gov	95	174,280	ibwc.gov	93	935,804
guidelines.gov	95	187,042	senate.gov	91	456
iarpa.gov	95	193,902	medlineplus.gov	91	1,078
studentaid.gov	95	195,346	treasury.gov	91	1,116
justthinktwice.gov	95	234,959	export.gov	91	1,847
agingstats.gov	95	241,759	cms.gov	91	1,975
stopalcoholabuse.gov	95	283,909	hrsa.gov	91	3,635
uscurrency.gov	95	575,870	healthfinder.gov	91	5,234
vote.gov	95	658,543	surgeongeneral.gov	91	8,611
dnfsb.gov	95	743,978	usitc.gov	91	10,012
niem.gov	95	796,571	acl.gov	91	14,015
wrp.gov	95	877,710	globalchange.gov	91	14,066
frtr.gov	95	920,323	healthit.gov	91	14,317
applicationmanager.gov	95	941,133	trumanlibrary.org	91	17,038
archives.gov	93	433	privacyshield.gov	91	18,269
sba.gov	93	1,143	gsaadvantage.gov	91	29,556
nsf.gov	93	1,286	broadbandmap.gov	91	34,499
fws.gov	93	1,490	pubmed.gov	91	35,065
ecfr.gov	93	6,610	recalls.gov	91	49,487
dea.gov	93	7,344	ncifcrf.gov	91	54,570
nara.gov	93	10,591	fvap.gov	91	66,369
pnl.gov	93	14,093	bjagov	91	68,850
consumer.gov	93	17,482	bioethics.gov	91	85,493

**TABLE 8 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
nctc.gov	91	87,514	fec.gov	89	6,557
womenshistorymonth.gov	91	109,565	huduser.gov	89	10,323
srs.gov	91	211,333	hiv.gov	89	17,467
africanamericanhistorymonth.gov	91	213,941	imls.gov	89	21,990
hudoig.gov	91	241,717	nutrition.gov	89	22,332
selectusa.gov	91	270,191	disasterassistance.gov	89	39,199
financialresearch.gov	91	489,436	digitalpreservation.gov	89	62,916
idmanagement.gov	91	728,074	girlshealth.gov	89	73,085
sciencebase.gov	91	731,860	tsp.gov	89	103,131
dot.gov	90	601	digitalgov.gov	89	105,697
dhs.gov	90	737	fedbizopps.gov	89	180,106
clinicaltrials.gov	90	1,313	presidentialserviceawards.gov	89	217,018
defense.gov	90	1,407	sec.gov	88	572
ahrq.gov	90	2,548	cpsc.gov	88	1,506
transportation.gov	90	3,340	usaid.gov	88	1,997
consumerfinance.gov	90	4,144	fafsa.gov	88	27,467
bts.gov	90	4,981	msha.gov	88	28,468
genome.gov	90	6,187	aoc.gov	88	28,719
dni.gov	90	7,616	mbda.gov	88	45,367
usmint.gov	90	8,792	cfda.gov	88	68,921
foodsafety.gov	90	9,649	gsaauctions.gov	88	129,665
childwelfare.gov	90	11,221	manufacturing.gov	88	206,901
ourdocuments.gov	90	20,258	smartgrid.gov	88	248,173
usability.gov	90	24,970	ncpc.gov	88	438,419
9-11commission.gov	90	37,398	pmf.gov	88	532,971
foia.gov	90	82,912	iad.gov	88	740,298
osc.gov	90	86,666	cnss.gov	88	836,904
ahcpr.gov	90	94,904	doleta.gov	87	4,330
mycreditunion.gov	90	118,328	opm.gov	87	4,388
hru.gov	90	167,116	medicaid.gov	87	10,648
prc.gov	90	169,908	serve.gov	87	36,004
fpds.gov	90	171,080	uscc.gov	87	55,771
youthrules.gov	90	289,347	medpac.gov	87	98,197
wdol.gov	90	322,205	energycodes.gov	87	121,547
odni.gov	90	347,052	ginniema.gov	87	128,448
pclob.gov	90	368,950	stopfraud.gov	87	134,862
hud.gov	89	1,344	truman.gov	87	162,532
sandia.gov	89	4,999	vehiclehistory.gov	87	296,022
commerce.gov	89	5,752	scijinks.gov	87	487,141
fbo.gov	89	5,986	geomac.gov	87	731,966

**TABLE 8 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
nehrrp.gov	87	824,997	ndu.edu	84	21,474
safercar.gov	86	7,903	faasafety.gov	84	77,250
donotcall.gov	86	8,116	lsc.gov	84	88,816
studentloans.gov	86	15,454	savingsbonds.gov	84	160,647
healthypeople.gov	86	19,717	papahanaumokuakea.gov	84	205,712
airnow.gov	86	23,840	sigtar.gov	84	249,304
cio.gov	86	34,026	letgirlslearn.gov	84	283,438
usccr.gov	86	60,144	cdc.gov	83	138
saferproducts.gov	86	61,596	state.gov	83	259
drought.gov	86	115,975	ftc.gov	83	409
nwbc.gov	86	180,507	energy.gov	83	711
tswg.gov	86	985,963	atf.gov	83	10,449
gao.gov	85	1,902	climate.gov	83	14,607
arts.gov	85	7,327	nlr.gov	83	16,157
stopbullying.gov	85	9,285	benefits.gov	83	27,616
fincen.gov	85	15,259	challenge.gov	83	43,970
time.gov	85	15,403	pacer.gov	83	51,014
ferc.gov	85	16,122	childstats.gov	83	61,353
ojp.gov	85	16,576	usap.gov	83	62,910
ncua.gov	85	23,060	mcc.gov	83	87,982
buyusa.gov	85	48,328	amberalert.gov	83	125,102
bia.gov	85	57,918	cuidadodesalud.gov	83	152,346
ncd.gov	85	59,887	adlnet.gov	83	169,931
gps.gov	85	61,903	ustda.gov	83	214,534
uscirf.gov	85	61,994	adlnet.org	83	297,503
usb.gov	85	82,006	stb.gov	83	459,398
fedshirevets.gov	85	149,304	vef.gov	83	705,883
arm.gov	85	166,427	onrr.gov	83	932,962
trafficsafetymarketing.gov	85	187,220	congress.gov	82	950
nationalgangcenter.gov	85	283,470	ssa.gov	82	1,128
indianaffairs.gov	85	323,948	gsa.gov	82	2,529
fedramp.gov	85	326,659	eeoc.gov	82	2,904
lep.gov	85	504,798	socialsecurity.gov	82	5,145
usds.gov	85	725,460	eldercare.gov	82	21,073
cfo.gov	85	752,773	hanford.gov	82	85,111
bls.gov	84	591	helpwithmybank.gov	82	270,668
healthcare.gov	84	2,146	myra.gov	82	272,955
nrel.gov	84	3,623	fira.gov	82	417,486
grants.gov	84	7,406	911.gov	82	675,028
treasurydirect.gov	84	10,008	copyright.gov	81	1,457

**TABLE 8 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
nhtsa.gov	81	2,120	jfklibrary.org	78	7,728
bea.gov	81	4,425	organdonor.gov	78	35,648
americaslibrary.gov	81	18,771	eda.gov	78	71,201
makinghomeaffordable.gov	81	27,567	bpa.gov	78	89,556
eac.gov	81	38,072	science360.gov	78	101,007
nsopw.gov	81	42,143	uspsdig.gov	78	102,867
opic.gov	81	62,611	osmre.gov	78	117,679
vaccines.gov	81	69,084	rrb.gov	78	157,248
research.gov	81	80,001	goes-r.gov	78	198,323
bbg.gov	81	100,162	fishwatch.gov	78	199,402
usich.gov	81	112,718	crimesolutions.gov	78	245,674
cecc.gov	81	175,152	vcf.gov	78	962,022
nationalresourcedirectory.gov	81	261,969	cia.gov	77	650
nrd.gov	81	374,568	nga.gov	77	3,462
namus.gov	81	438,306	ada.gov	77	4,728
womenshealth.gov	80	5,229	cftc.gov	77	8,975
usaspending.gov	80	37,216	occ.gov	77	28,708
sbir.gov	80	45,814	arc.gov	77	101,902
abmc.gov	80	46,679	recoverymonth.gov	77	150,950
jimmycarterlibrary.gov	80	174,674	noaa.gov	76	214
osha.gov	79	1,179	ed.gov	76	390
fs.fed.us	79	1,578	usps.com	76	837
samhsa.gov	79	1,885	ntsb.gov	76	6,539
drugabuse.gov	79	2,719	americorps.gov	76	32,213
ustr.gov	79	5,307	jobcorps.gov	76	37,019
fnal.gov	79	5,500	nationalmap.gov	76	46,765
speaker.gov	79	11,196	osac.gov	76	57,033
secretsservice.gov	79	18,923	csb.gov	76	69,368
distraction.gov	79	22,280	presidio.gov	76	87,505
solardecathlon.gov	79	58,957	biopreferred.gov	76	297,616
majorityleader.gov	79	61,757	ornl.gov	75	2,118
nersc.gov	79	71,381	anl.gov	75	2,598
itis.gov	79	71,919	llnl.gov	75	3,231
jct.gov	79	96,319	usmarshals.gov	75	39,725
fmc.gov	79	101,175	inl.gov	75	51,817
whistleblowers.gov	79	213,108	govloans.gov	75	341,481
ucrdatatool.gov	79	330,854	itdashboard.gov	75	669,979
ncirc.gov	79	820,214	faa.gov	74	1,090
smart.gov	79	902,846	eia.gov	74	1,501
dol.gov	78	883	nationalservice.gov	74	9,127

**TABLE 8 CONTINUED**

Domain	Score	Rank	Domain	Score	Rank
globe.gov	74	40,337	fhfa.gov	67	31,043
sam.gov	74	50,196	achp.gov	67	113,794
collegedrinkingprevention.gov	74	60,712	ussc.gov	66	41,031
fara.gov	74	103,056	census.gov	65	472
oge.gov	74	106,361	bnl.gov	65	7,036
loc.gov	73	156	ems.gov	64	488,371
epa.gov	73	260	docsteach.org	63	10,868
irs.gov	73	416	foreignassistance.gov	63	201,411
uscis.gov	73	1,629	smokefree.gov	62	15,318
federalregister.gov	73	2,260	cdfifund.gov	62	124,256
fdic.gov	73	3,284	acwi.gov	62	691,305
recreation.gov	73	9,012	gop.gov	60	43,731
juvenilecouncil.gov	73	212,144	democraticleader.gov	60	75,692
volunteer.gov	73	239,243	plainlanguage.gov	60	103,841
bjs.gov	72	6,208	lbl.gov	59	1,595
nicic.gov	72	42,943	mentalhealth.gov	58	46,899
fdlp.gov	72	181,423	nationsreportcard.gov	57	71,713
thecoolspot.gov	72	215,850	nro.gov	57	144,044
apps.gov	72	257,832	wapa.gov	56	246,391
ovcttac.gov	72	911,165	ojdp.gov	55	27,867
poolsafely.gov	71	75,220	pbgc.gov	54	50,696
usgs.gov	70	393	mspb.gov	54	215,030
uscourts.gov	70	1,182	arctic.gov	53	808,339
nij.gov	70	19,043	choosemyplate.gov	52	4,158
mymoney.gov	70	45,132	myplate.gov	52	593,063
udall.gov	70	161,422	mymedicare.gov	51	244,142
invasivespeciesinfo.gov	69	78,215	trade.gov	50	10,603
fgdc.gov	69	89,039	pmi.gov	50	602,770
tigta.gov	69	558,726	federallabs.org	48	34,889
data.gov	68	9,103	usphs.gov	47	69,476
nixonlibrary.gov	68	68,278	federalreserve.gov	**	1,439
tsunami.gov	68	316,948	lanl.gov	**	2,665
energystar.gov	67	1,769	blm.gov	**	3,307
aviationweather.gov	67	24,862	ars-grin.gov	**	32,550

\*\* Accessibility testing tool could not run successfully on this website.

## RECOMMENDATIONS

As this report illustrates, most federal websites continue not to perform well in at least one of the reviewed benchmarks. Although individual websites made improvements, there are several steps the federal government should take to ensure that it continues to improve and optimize its websites. These include:

- Launching a website modernization sprint to fix known problems;
- Requiring federal websites to meet basic desktop and mobile page-load speeds;
- Launching a website consolidation initiative;
- Requiring all federal agencies to report website analytics;
- Appointing a federal CIO; and
- Encouraging nonexecutive agencies and branches of government to adopt federal website standards and practices.

### THE WHITE HOUSE SHOULD LAUNCH A SERIES OF WEBSITE MODERNIZATION “SPRINTS” TO FIX KNOWN PROBLEMS WITH THE MOST POPULAR GOVERNMENT WEBSITES

The Trump administration is interested in improving IT infrastructure of the federal government. In May 2017, the president established the American Technology Council. That same month he signed Executive Order (EO) 13800, Strengthening the Cybersecurity of Federal Networks and Critical Infrastructure, which tasked the director of the American Technology Council to coordinate a report regarding the modernization of federal IT.<sup>81</sup> The initiative outlines ways for the government to increase its cybersecurity posture, modernize the IT system, and create a stronger partnership with the IT industry.<sup>82</sup> Although this initiative is a general step in the right direction, an appendix should be added that directly addresses federal website standards and known vulnerabilities. The White House should direct agencies to launch a series of “sprints” to address known problems, especially those that fail to meet security and accessibility requirements for websites. This is prudent given the threats that cyberattacks pose to national governments. As the National Infrastructure Advisory Council wrote earlier this year, “there is a narrow and fleeting window of opportunity before a watershed, 9/11-level cyber-attack to organize effectively and take bold action.”<sup>83</sup>

### THE WHITE HOUSE SHOULD MANDATE THAT WEBSITES MEET DESKTOP AND MOBILE PAGE-LOAD SPEED REQUIREMENTS.

As discussed above, many federal agencies have yet to optimize their websites for speed. Past administrations have set the precedent of establishing standards and best practices based on consumer convenience, accessibility, and security for federal websites. Given that the majority of federal websites still need to significantly improve their page-load speeds, the White House should direct the federal Chief Information Officer (CIO) to work with the Office of Management and Budget (OMB) to develop federal guidelines on page-load speed across devices. In 2015, three of four Americans used the Internet to obtain information about government services at the federal, state, and local levels.<sup>84</sup> Government websites get millions of visitors each day. In the last three months alone, U.S. government websites had 2.51 billion visitors, the majority of whom were domestic users.<sup>85</sup> Of those visits, 54.8 percent were from a desktop and 45.2 percent were either from a mobile device or tablet.<sup>86</sup> Therefore, it is critical that the government upgrade federal websites to ensure fast page-load speeds on both desktops and mobiles to ensure that citizens can access government websites in a timely manner.

## **THE WHITE HOUSE SHOULD LAUNCH A WEBSITE CONSOLIDATION INITIATIVE.**

In mid-March President Trump signed an executive order aimed at cutting federal government waste with the intention of improving the efficiency, effectiveness, and accountability of the executive branch.<sup>87</sup> As part of the Trump administration's effort to increase efficiency and effectiveness, the Office of Management and Budget (OMB) and the Federal CIO Council should launch a website consolidation initiative with the goal of eliminating and consolidating duplicative or unnecessary websites. Additionally, each newly created website should have a planned life cycle, which details a specific date when that website should be removed (and archived) or renewed and refreshed. The same planning mechanism should be employed for old government websites.

## **GSA, IN COLLABORATION WITH WHITE HOUSE, SHOULD MANDATE THAT ALL AGENCIES MONITOR AND REPORT WEBSITE ANALYTICS.**

The federal government should better track website metrics to promote accountability. First, federal agencies should enforce the OBM requirement that federal government agencies should participate in the Digital Analytics Program (DAP) hosted by the Government Services Administration (GSA).<sup>88</sup> As of October 2017, 63 percent of federal government websites participate in DAP.<sup>89</sup> This is an improvement from last year when only 52 percent of federal government websites were participating. Of those websites not participating in DAP, many scored poorly against the benchmarks analyzed in this report. For example, the U.S. Trade Representative ([ustr.gov](http://ustr.gov)) is not currently participating in DAP and failed all four metric tests reviewed in this report. In addition, DAP does not currently review subdomains (e.g., [Travel.state.gov](http://Travel.state.gov)). Nevertheless, these are also frequently visited websites and should be included in future reviews.<sup>90</sup>

Second, the federal government should expand DAP to include additional metrics, such as page-load speed, mobile friendliness, and accessibility. Currently, DAP publishes web-traffic data, including information on the types of devices used to access federal websites, while 18F—a digital service agency within the General Service Administration (GSA)—tracks which government domains use HTTPS and participate in DAP through its online platform called “Pulse” ([pulse.cio.gov](http://pulse.cio.gov)). Although each of these are helpful, DAP should include more metrics that site managers need to improve government websites. Additionally, combining the two websites will help avoid duplicative content online.

Third, the government should consolidate the data it collects on federal websites into a single public dashboard. Currently the data is reported on several websites, including [Pulse.CIO.gov](http://Pulse.CIO.gov) and [Analytics.USA.gov](http://Analytics.USA.gov). By creating a single dashboard for benchmarking federal websites, the public will be able to more easily access information. Additionally, the government will be able to ensure that federal agencies are held accountable for the state of their websites.

Fourth, GSA should create a shared suite of tools through which federal agencies can test their websites on specific metrics, including page-load speed, mobile friendliness, security, and accessibility. Since virtually all of these tests can be automated, the federal government should mandate that each agency regularly test its websites against each of these metrics, because, as the findings in this report demonstrate, websites' performance levels can deteriorate over short periods of time.

Finally, the White House should require that federal agencies with websites that fail to meet minimum requirements develop remediation plans. The White House and Congress should hold senior agency officials responsible for successfully executing these plans.

By developing a single set of metrics for agency websites, ensuring that all agencies participate, and holding agencies accountable for how their websites score, the federal government can create a better and more consistent experience across federal government websites.

### **APPOINT A FEDERAL CIO TO LEAD FEDERAL IT MODERNIZATION EFFORTS.**

As of November 2017, the Trump administration had not yet appointed a Federal Chief Information Officer. The Federal CIO oversees all federal technology spending and IT policy, and strives to bridge the gap between the public and private sector on technology and innovation.<sup>91</sup> While there is an acting CIO, appointing a federal CIO will create stronger accountability and oversight of federal IT systems. Moreover, appointing a federal CIO is likely a necessary initial step before the Trump administration will follow through on earlier commitments it has made to modernize the federal government's IT infrastructure and implement recommendations offered by the American Technology Council.<sup>92</sup>

### **CONGRESS AND THE WHITE HOUSE SHOULD ENCOURAGE NONEXECUTIVE AGENCIES AND OTHER BRANCHES OF THE GOVERNMENT TO ADOPT FEDERAL WEBSITES BEST PRACTICES.**

In May 2017, ITIF conducted a short follow-up report, which detailed how certain legislative websites were performing across the same metrics explored in this report. The study found 99 percent of legislative websites reviewed failed at least one of the metric tests.<sup>93</sup> In this report, we found that certain congressional websites performed particularly poorly compared to the initial report released in March and the legislative report released in May. One example is the Speaker of the House of Representatives ([speaker.gov](http://speaker.gov)), which failed several of the metrics tests and continues to not have HTTPS or DNSSEC enabled.

Legislative websites are not the only websites falling behind. Judicial websites are also performing poorly. An example is the United States Courts ([uscourts.gov](http://uscourts.gov)), which failed several metric tests and does not have HTTPS or DNSSEC enabled.

Nonexecutive agencies are not required to follow the same rules as the executive branch with regards to their websites. Yet, these websites are also an important resource of information for individuals and businesses, and the public likely expects them to deliver the same standard of service as any other federal government websites. Therefore, the three branches of the federal government should consider establishing a working group to develop guidelines, based on existing best practices in the private sector and to advise the executive branch on creating better and more secure websites across the federal government.

## **CONCLUSION**

The second edition of the *Benchmarking U.S. Government Websites* report demonstrates that six months after the release of the initial report, federal government agencies have made little progress on improving their websites. The federal government oftentimes moves slowly when it comes to implementing new best practices. Nevertheless, it is incumbent on the Trump administration and Congress to build upon previous initiatives to modernize federal websites and push for them to be more convenient, accessible, and secure. These efforts will continue to come to fruition by identifying key problems, creating clear plans to address them, and promoting a government-wide system for measuring website metrics.

## APPENDIX

### Popular federal websites ranked across all metrics (2017).

Domain	Overall Score	MM Rank	Desktop Speed	Mobile Speed	Mobile Friendly	DNSSEC	SSL	Access.
vote.gov	95.5	658,543	92	85	100	100	95	95
ibwc.gov	87.3	935,804	99	99	89	100	93	93
nist.gov	87.2	539	88	82	92	100	92	100
bop.gov	86.3	13,840	76	71	99	100	95	100
science.gov	86.3	28,568	82	67	99	100	93	100
osti.gov	85.7	10,914	86	72	92	100	93	100
fbi.gov	85.2	610	72	70	97	100	95	100
ameslab.gov	85.1	42,697	85	72	90	100	93	100
fhfaig.gov	85.1	903,178	75	62	100	100	93	100
justice.gov	84.4	824	77	64	96	100	91	100
investor.gov	84.1	46,094	75	55	99	100	95	100
usajobs.gov	84.0	4,713	77	53	99	100	95	100
whitehouse.gov	83.8	192	72	57	98	100	95	100
fda.gov	83.7	258	68	58	99	100	95	100
nih.gov	83.7	52	86	57	99	100	95	95
visitthecapitol.gov	83.6	71,706	77	63	93	100	91	100
usda.gov	83.3	248	69	54	99	100	95	100
alaskacenters.gov	83.2	445,799	70	52	99	100	96	100
share.america.gov	83.1	10,269	66	60	97	100	93	100
uspto.gov	82.9	522	73	50	99	100	91	100
guidelines.gov	82.9	187,042	80	64	98	100	85	95
health.gov	82.9	4,522	76	66	96	100	93	95
usa.gov	82.8	594	100	37	100	100	95	95
guideline.gov	82.8	19,083	79	64	98	100	85	95
exim.gov	82.6	36,130	67	52	99	100	93	100
healthfinder.gov	82.6	5,234	81	66	99	100	93	91
sustainablecommunities.gov	82.5	585,178	75	63	88	100	95	100
disasterassistance.gov	82.0	39,199	81	69	98	100	93	89
consumer.gov	81.9	17,482	77	57	99	100	95	93
applicationmanager.gov	81.8	941,133	75	52	99	100	95	95
fcc.gov	81.7	760	66	46	99	100	93	100
medlineplus.gov	81.7	1,078	78	66	96	100	95	91
nano.gov	81.6	58,766	63	49	99	100	91	100
clinicaltrials.gov	81.6	1,313	81	67	95	100	95	90
fema.gov	81.5	821	69	49	95	100	93	100
phe.gov	81.3	59,054	78	60	92	100	93	95
hudoig.gov	81.1	241,717	80	55	100	100	91	91
its.bldrdoc.gov	81.1	79,017	78	64	97	100	78	93
hispanicheritagemoth.gov	81.1	211,081	70	56	100	100	93	93
smartgrid.gov	81.1	248,173	76	72	99	100	85	88

## APPENDIX CONTINUED

Popular federal websites ranked across all metrics (2017).

Domain	Overall Score	MM Rank	Desktop Speed	Mobile Speed	Mobile Friendly	DNSSEC	SSL	Access.
ttb.gov	81.1	45,942	55	47	100	100	95	100
niem.gov	81.0	796,571	69	58	96	100	93	95
serve.gov	80.9	36,004	81	69	97	100	91	87
consumerfinance.gov	80.8	4,144	79	57	99	100	93	90
nasa.gov	80.7	108	62	46	96	100	95	100
trumanlibrary.org	80.6	17,038	68	58	100	100	96	91
donotcall.gov	80.3	8,116	76	64	100	100	95	86
usc.gov	80.3	501,673	67	56	98	100	93	93
tsa.gov	80.2	2,455	63	48	93	100	93	100
medicare.gov	80.1	2,168	49	53	96	100	93	100
stopalcoholabuse.gov	80.0	283,909	92	81	100	100	0	95
justthinktwice.gov	79.9	234,959	63	49	99	100	93	95
womenshistorymonth.gov	79.9	109,565	67	55	100	100	93	91
onguardonline.gov	79.8	10,253	65	45	99	100	95	95
cancer.gov	79.6	901	55	38	99	100	95	100
uscurrency.gov	79.6	575,870	59	50	99	100	93	95
code.gov	79.5	923,771	78	68	100	0	95	100
tsp.gov	79.3	103,131	66	58	99	100	95	89
vets.gov	79.3	184,939	71	52	99	100	79	93
africanamericanhistorymonth.gov	79.3	213,941	64	53	100	100	93	91
pay.gov	79.2	177,551	54	41	99	100	86	100
cbo.gov	79.1	3,714	82	65	99	0	93	100
myra.gov	79.0	272,955	77	65	100	100	95	82
aoc.gov	79.0	28,719	79	54	99	100	85	88
hru.gov	79.0	167,116	65	55	99	100	93	90
fbijobs.gov	79.0	105,427	49	42	98	100	92	100
ftccomplaintassistant.gov	78.9	13,822	60	57	91	100	95	95
mycreditunion.gov	78.8	118,328	77	67	97	100	60	90
hhs.gov	78.7	603	60	41	99	100	95	95
dhhs.gov	78.7	12,176	60	41	99	100	95	95
cms.gov	78.6	1,975	65	48	99	100	95	91
hiv.gov	78.6	17,467	72	60	93	100	93	89
ornl.gov	78.6	2,118	85	80	98	100	93	75
indianaffairs.gov	78.6	323,948	89	44	99	100	96	85
uscc.gov	78.4	55,771	76	62	95	100	85	87
nara.gov	78.4	10,591	71	56	91	100	85	93
fordlibrarymuseum.gov	78.4	79,659	52	50	94	100	85	100
lsc.gov	78.4	88,816	79	67	95	100	86	84
nwcg.gov	78.3	34,088	60	51	92	100	95	95
usability.gov	78.3	24,970	64	47	100	100	95	90

## APPENDIX CONTINUED

### Popular federal websites ranked across all metrics (2017).

Domain	Overall Score	MM Rank	Desktop Speed	Mobile Speed	Mobile Friendly	DNSSEC	SSL	Access.
iarpa.gov	78.2	193,902	62	44	95	100	93	95
alzheimers.gov	78.1	542,938	52	47	100	100	63	100
ncd.gov	78.1	59,887	77	67	91	100	93	85
childwelfare.gov	77.9	11,221	72	59	89	100	93	90
listo.gov	77.9	583,774	41	36	100	100	93	100
archives.gov	77.9	433	67	48	91	100	97	93
usaid.gov	77.9	1,997	69	57	95	100	91	88
frtr.gov	77.8	920,323	90	85	58	100	93	95
ncjrs.gov	77.8	5,696	48	41	94	100	92	100
defense.gov	77.8	1,407	53	54	100	100	93	90
econsumer.gov	77.8	92,587	46	37	96	100	95	100
cbp.gov	77.6	2,000	49	38	94	100	93	100
dnfsb.gov	77.5	743,978	69	60	80	100	93	95
section508.gov	77.4	9,391	80	66	64	100	91	100
ffiec.gov	77.4	23,694	85	81	60	100	95	95
ncbi.nlm.nih.gov	77.3	84	84	67	60	100	95	100
hrsa.gov	77.3	3,635	63	44	97	100	93	91
idmanagement.gov	77.2	728,074	55	45	100	100	93	91
sigtar.gov	77.2	249,304	73	55	97	100	93	84
genome.gov	77.1	6,187	56	48	99	100	93	90
trafficsafetymarketing.gov	77.1	187,220	75	51	99	100	85	85
agingstats.gov	77.0	241,759	75	62	77	100	85	95
privacyshield.gov	77.0	18,269	61	45	97	100	91	91
girlshealth.gov	77.0	73,085	72	60	86	100	93	89
pepfar.gov	76.9	63,016	45	42	98	100	95	95
mbda.gov	76.9	45,367	59	51	99	100	91	88
onrr.gov	76.8	932,962	72	58	96	100	93	83
financialresearch.gov	76.8	489,436	54	50	96	100	93	91
fueleconomy.gov	76.7	6,124	49	44	95	100	93	95
congress.gov	76.7	950	73	66	92	100	93	82
pppl.gov	76.6	44,053	87	76	94	100	55	93
eftps.gov	76.6	96,310	80	66	60	100	93	100
firstgov.gov	76.6	9,112	45	36	100	100	95	95
telework.gov	76.6	569,475	53	45	95	100	93	93
kids.gov	76.6	59,531	39	28	99	100	95	100
reginfo.gov	76.5	47,449	66	44	79	100	91	100
ftc.gov	76.5	409	62	57	99	100	95	83
bj.gov	76.4	68,850	63	51	90	100	92	91
sec.gov	76.4	572	63	43	98	100	95	88
studentloans.gov	76.3	15,454	61	51	97	100	96	86

## APPENDIX CONTINUED

Popular federal websites ranked across all metrics (2017).

Domain	Overall Score	MM Rank	Desktop Speed	Mobile Speed	Mobile Friendly	DNSSEC	SSL	Access.
state.gov	76.3	259	68	58	97	100	89	83
nnlm.gov	76.3	65,218	48	40	95	100	95	95
fletc.gov	76.2	164,848	66	55	71	100	93	100
medicaid.gov	76.2	10,648	68	46	95	100	95	87
nhtsa.gov	76.1	2,120	72	58	99	100	85	81
insurekidsnow.gov	76.1	90,260	56	43	89	100	95	95
9-11commission.gov	76.0	37,398	90	77	62	100	95	90
doleta.gov	75.9	4,330	60	54	93	100	95	87
digitalgov.gov	75.9	105,697	56	40	100	100	93	89
helpwithmybank.gov	75.9	270,668	76	57	93	100	91	82
clintonlibrary.gov	75.8	137,120	40	34	100	100	95	95
nationalgangcenter.gov	75.8	283,470	71	53	95	100	83	85
ntis.gov	75.8	28,046	39	34	92	100	96	100
sba.gov	75.7	1,143	46	41	97	100	93	93
msha.gov	75.7	28,468	59	47	99	100	83	88
imls.gov	75.7	21,990	57	48	95	100	91	89
wdol.gov	75.7	322,205	86	73	65	100	94	90
ahrq.gov	75.6	2,548	64	47	96	100	74	90
nrel.gov	75.6	3,623	54	64	95	100	91	84
truman.gov	75.6	162,532	86	73	97	0	97	87
drugabuse.gov	75.5	2,719	73	54	98	100	95	79
drought.gov	75.4	115,975	54	61	92	100	93	86
nps.gov	75.4	358	34	25	98	100	95	100
ssa.gov	75.3	1,128	68	50	97	100	95	82
socialsecurity.gov	75.3	5,145	68	50	97	100	95	82
wrp.gov	75.3	877,710	79	63	66	100	89	95
llnl.gov	75.3	3,231	74	61	99	100	95	75
ahcpr.gov	75.3	94,904	62	46	96	100	74	90
stopfraud.gov	75.2	134,862	57	52	98	100	79	87
usbr.gov	75.2	9,711	28	30	98	100	93	100
bia.gov	75.2	57,918	59	44	99	100	95	85
scijinks.gov	75.1	487,141	44	52	98	100	95	87
911.gov	75.0	675,028	69	53	97	100	85	82
atf.gov	75.0	10,449	59	50	98	100	95	83
studentaid.gov	74.9	195,346	51	39	92	100	85	95
peacecorps.gov	74.9	8,561	45	39	92	100	93	95
ic3.gov	74.9	4,966	83	61	62	100	93	95
senate.gov	74.9	456	43	39	99	100	93	91
secretservice.gov	74.9	18,923	73	58	93	100	95	79
supremecourt.gov	74.9	1,966	69	56	92	0	93	100

## APPENDIX CONTINUED

Popular federal websites ranked across all metrics (2017).

Domain	Overall Score	MM Rank	Desktop Speed	Mobile Speed	Mobile Friendly	DNSSEC	SSL	Access.
copyright.gov	74.8	1,457	66	55	95	100	93	81
cio.gov	74.7	34,026	65	48	91	100	93	86
bls.gov	74.6	591	49	74	100	100	55	84
nrc.gov	74.6	7,809	68	56	62	100	95	100
prc.gov	74.5	169,908	57	45	92	100	85	90
abmc.gov	74.4	46,679	61	51	99	100	95	80
cdc.gov	74.4	138	47	54	99	100	95	83
va.gov	74.4	750	47	38	94	100	79	95
feb.gov	74.3	31,594	59	44	80	100	93	95
nifc.gov	74.2	23,822	71	54	60	100	95	100
ice.gov	74.2	4,441	30	24	96	100	93	100
benefits.gov	74.1	27,616	62	49	95	100	91	83
dni.gov	74.1	7,616	43	36	99	100	93	90
odni.gov	74.1	347,052	43	36	99	100	93	90
acl.gov	74.1	14,015	47	40	96	100	85	91
whistleblowers.gov	74.1	213,108	72	51	94	100	95	79
ofr.gov	74.1	53,292	77	63	63	100	85	95
dhs.gov	74.0	737	47	34	98	100	93	90
regulations.gov	73.9	3,390	74	53	66	100	95	95
juvenilecouncil.gov	73.9	212,144	100	100	64	100	92	73
fedramp.gov	73.9	326,659	56	38	99	100	93	85
organdonor.gov	73.9	35,648	68	62	92	100	91	78
doi.gov	73.8	5,089	31	33	96	100	96	95
nitrd.gov	73.8	103,053	7	66	82	100	93	100
usembassy.gov	73.7	814	84	66	67	100	55	95
womenshealth.gov	73.7	5,229	58	51	98	100	93	80
huduser.gov	73.6	10,323	49	30	99	100	93	89
distraction.gov	73.6	22,280	64	51	99	100	85	79
irs.gov	73.4	416	74	54	99	100	93	73
makinghomeaffordable.gov	73.4	27,567	62	39	100	100	93	81
manufacturing.gov	73.4	206,901	53	37	94	100	93	88
export.gov	73.4	1,847	44	34	95	100	93	91
faa.gov	73.3	1,090	74	60	93	100	95	74
acquisition.gov	73.3	65,915	31	27	99	100	91	95
recalls.gov	73.3	49,487	72	61	66	100	95	91
jimmycarterlibrary.gov	73.2	174,674	62	48	95	100	95	80
selectusa.gov	73.2	270,191	42	33	97	100	89	91
nsf.gov	73.2	1,286	38	33	97	100	85	93
ecfr.gov	73.1	6,610	79	60	63	100	85	93
healthcare.gov	73.1	2,146	53	36	99	100	95	84

## APPENDIX CONTINUED

### Popular federal websites ranked across all metrics (2017).

Domain	Overall Score	MM Rank	Desktop Speed	Mobile Speed	Mobile Friendly	DNSSEC	SSL	Access.
sbir.gov	73.1	45,814	55	47	99	100	93	80
fdic.gov	73.1	3,284	69	59	97	100	93	73
papahanaumokuakea.gov	73.1	205,712	59	41	94	100	93	84
nsopw.gov	73.0	42,143	56	46	98	100	91	81
nwbc.gov	73.0	180,507	82	69	66	100	89	86
nsa.gov	73.0	3,442	71	53	93	0	93	95
brac.gov	73.0	872,406	86	73	81	100	46	93
sss.gov	73.0	23,278	28	23	92	100	95	100
commerce.gov	72.9	5,752	46	34	96	100	91	89
usitc.gov	72.8	10,012	75	65	62	100	91	91
usaspending.gov	72.7	37,216	61	43	97	100	93	80
sandia.gov	72.7	4,999	63	69	99	100	0	89
science360.gov	72.7	101,007	61	54	94	100	93	78
geomac.gov	72.6	731,966	82	68	62	100	93	87
fedbizopps.gov	72.6	180,106	80	66	60	100	95	89
bbg.gov	72.6	100,162	58	38	99	100	93	81
cuidadodesalud.gov	72.6	152,346	53	35	99	100	95	83
everykidinapark.gov	72.5	137,346	47	43	99	0	95	100
nlr.gov	72.5	16,157	54	46	93	100	93	83
pubmed.gov	72.5	35,065	82	58	60	100	95	91
cfda.gov	72.5	68,921	80	66	61	100	95	88
usmint.gov	72.4	8,792	31	32	99	100	95	90
fira.gov	72.4	417,486	83	62	71	100	95	82
nga.gov	72.3	3,462	58	47	100	100	91	77
cpsc.gov	72.3	1,506	45	34	95	100	93	88
fishwatch.gov	72.3	199,402	52	54	99	100	86	78
house.gov	72.3	399	60	42	94	0	91	100
fbo.gov	72.3	5,986	77	66	60	100	95	89
fincen.gov	72.3	15,259	56	48	87	100	92	85
usps.gov	72.2	102,867	60	49	98	100	85	78
transportation.gov	72.2	3,340	53	40	85	100	91	90
sciencebase.gov	72.2	731,860	51	38	84	100	95	91
identitytheft.gov	72.1	49,675	33	12	92	100	95	100
govloans.gov	72.0	341,481	71	48	95	100	91	75
globe.gov	72.0	40,337	65	48	98	100	95	74
feedthefuture.gov	71.9	123,033	61	54	66	100	95	93
uscis.gov	71.7	1,629	63	50	99	100	93	73
ovc.gov	71.7	151,503	40	29	92	100	85	93
stb.gov	71.7	459,398	81	68	64	100	95	83
usps.com	71.6	837	51	51	99	100	92	76

## APPENDIX CONTINUED

### Popular federal websites ranked across all metrics (2017).

Domain	Overall Score	MM Rank	Desktop Speed	Mobile Speed	Mobile Friendly	DNSSEC	SSL	Access.
dot.gov	71.6	601	51	36	85	100	92	90
fafsa.gov	71.5	27,467	65	54	72	100	91	88
mcc.gov	71.5	87,982	46	38	97	100	92	83
bsee.gov	71.4	174,280	20	19	99	100	95	95
cftc.gov	71.3	8,975	69	56	91	100	75	77
namus.gov	71.3	438,306	86	71	65	100	85	81
ourdocuments.gov	71.3	20,258	73	54	62	100	97	90
americaslibrary.gov	71.2	18,771	88	84	67	100	55	81
ihs.gov	71.2	25,094	35	28	93	100	85	93
usbg.gov	71.2	82,006	69	12	96	100	93	85
access-board.gov	71.1	16,306	65	46	63	100	93	95
ncifcrf.gov	70.9	54,570	71	51	63	100	93	91
energycodes.gov	70.9	121,547	75	62	64	100	85	87
fjc.gov	70.9	31,455	64	52	91	0	93	93
pmf.gov	70.9	532,971	72	57	63	100	95	88
time.gov	70.9	15,403	61	56	73	100	96	85
edpubs.gov	70.8	644,524	64	52	61	100	96	93
ncua.gov	70.8	23,060	52	40	98	100	60	85
fws.gov	70.6	1,490	27	22	95	100	92	93
collegedrinkingprevention.gov	70.5	60,712	76	37	93	100	95	74
nctc.gov	70.5	87,514	25	21	99	100	93	91
data.gov	70.5	9,103	68	52	99	100	91	68
osha.gov	70.3	1,179	54	37	95	100	93	79
healthit.gov	70.3	14,317	66	47	66	100	89	91
gpo.gov	70.2	720	65	49	60	100	85	95
osc.gov	70.1	86,666	68	43	67	100	93	90
research.gov	70.1	80,001	83	63	66	100	85	81
nutrition.gov	70.0	22,332	79	57	58	100	85	89
idtheft.gov	70.0	633,739	16	10	92	100	95	100
recoverymonth.gov	70.0	150,950	53	44	94	100	91	77
fec.gov	69.9	6,557	63	47	99	0	86	89
vehiclehistory.gov	69.9	296,022	76	57	60	100	91	87
epa.gov	69.8	260	55	48	95	100	95	73
fedcenter.gov	69.7	137,649	62	48	58	100	91	95
orau.gov	69.7	62,917	11	15	99	100	93	95
lep.gov	69.6	504,798	81	62	61	100	79	85
usgs.gov	69.6	393	68	57	88	100	95	70
youthrules.gov	69.6	289,347	61	50	64	100	93	90
usich.gov	69.6	112,718	77	56	99	0	85	81
moneyfactory.gov	69.5	48,322	43	38	62	100	95	100

## APPENDIX CONTINUED

### Popular federal websites ranked across all metrics (2017).

Domain	Overall Score	MM Rank	Desktop Speed	Mobile Speed	Mobile Friendly	DNSSEC	SSL	Access.
loc.gov	69.5	156	52	44	98	100	93	73
buyusa.gov	69.4	48,328	80	66	65	100	60	85
pnnl.gov	69.4	21,128	45	39	72	100	93	93
fvap.gov	69.4	66,369	44	35	87	100	66	91
inl.gov	69.3	51,817	66	36	97	100	78	75
unicor.gov	69.1	289,791	44	47	57	100	89	100
fpds.gov	69.0	171,080	66	46	62	100	91	90
ovcttac.gov	68.9	911,165	58	36	99	100	93	72
presidentialserviceawards.gov	68.8	217,018	65	49	61	100	93	89
childstats.gov	68.6	61,353	75	53	63	100	93	83
ustda.gov	68.6	214,534	63	57	95	0	93	83
foodsafety.gov	68.6	9,649	63	45	61	100	95	90
bea.gov	68.5	4,425	76	61	61	100	93	81
occ.gov	68.5	28,708	39	34	100	100	91	77
ofcm.gov	68.5	194,232	35	34	96	100	0	100
amberalert.gov	68.5	125,102	71	60	63	100	85	83
cia.gov	68.3	650	45	37	94	100	93	77
fedshirevets.gov	68.3	149,304	65	50	64	100	95	85
ucrdatatool.gov	68.2	330,854	82	68	59	100	85	79
foia.gov	68.1	82,912	61	46	65	100	79	90
nagb.org	68.1	463,144	28	27	70	100	93	100
us-cert.gov	68.1	3,298	68	51	67	0	93	100
itis.gov	68.1	71,919	75	61	62	100	95	79
globalchange.gov	68.1	14,066	55	49	91	100	75	91
recreation.gov	68.0	9,012	50	36	98	100	91	73
safercar.gov	68.0	7,903	67	51	63	100	85	86
nationalresourcedirectory.gov	67.9	261,969	36	32	99	100	75	81
nrd.gov	67.9	374,568	36	32	99	100	75	81
treasury.gov	67.9	1,116	57	47	59	100	93	91
samhsa.gov	67.9	1,885	37	31	96	100	93	79
ed.gov	67.8	390	56	47	86	100	84	76
healthypeople.gov	67.8	19,717	59	47	66	100	91	86
usds.gov	67.7	725,460	52	57	93	0	93	85
ncirc.gov	67.6	820,214	75	61	60	100	95	79
saferproducts.gov	67.6	61,596	59	45	65	100	95	86
fhfa.gov	67.5	31,043	55	48	95	100	95	67
energy.gov	67.4	711	25	19	99	100	95	83
eac.gov	67.2	38,072	29	21	99	100	93	81
gsa.gov	67.1	2,529	23	20	100	100	95	82
eeoc.gov	67.1	2,904	68	57	60	100	91	82

## APPENDIX CONTINUED

### Popular federal websites ranked across all metrics (2017).

Domain	Overall Score	MM Rank	Desktop Speed	Mobile Speed	Mobile Friendly	DNSSEC	SSL	Access.
tonation-nsn.gov	67.1	555,364	39	33	100	100	0	93
opm.gov	67.0	4,388	61	47	59	100	95	87
fnal.gov	67.0	5,500	33	31	94	100	93	79
fs.fed.us	66.8	1,578	64	53	95	0	95	79
boem.gov	66.8	56,407	47	34	63	100	93	93
digitalpreservation.gov	66.8	62,916	81	67	67	100	0	89
vef.gov	66.8	705,883	63	55	62	100	86	83
americorps.gov	66.6	32,213	37	31	96	100	91	76
surgeongeneral.gov	66.6	8,611	51	37	61	100	95	91
climate.gov	66.6	14,607	54	46	68	100	93	83
ferc.gov	66.5	16,122	57	44	63	100	97	85
treasurydirect.gov	66.4	10,008	66	49	58	100	95	84
savingsbonds.gov	66.4	160,647	66	49	58	100	95	84
bpa.gov	66.4	89,556	72	51	65	100	91	78
pnl.gov	66.4	14,093	44	39	60	100	93	93
hud.gov	66.4	1,344	56	43	60	100	89	89
read.gov	66.4	75,569	56	53	67	100	0	100
majorityleader.gov	66.4	61,757	61	46	99	0	93	79
iad.gov	66.3	740,298	48	34	100	100	0	88
vaccines.gov	66.2	69,084	65	46	64	100	95	81
dea.gov	66.1	7,344	51	39	60	100	79	93
cdfifund.gov	66.1	124,256	57	42	100	100	93	62
arm.gov	66.0	166,427	46	39	70	100	93	85
stopbullying.gov	66.0	9,285	55	41	64	100	95	85
ginniema.gov	65.8	128,448	43	36	68	100	96	87
gps.gov	65.8	61,903	76	64	73	100	0	85
pcah.gov	65.4	176,199	76	63	63	0	74	93
airnow.gov	65.4	23,840	45	37	68	100	91	86
grants.gov	65.1	7,406	37	26	80	100	91	84
challenge.gov	65.1	43,970	17	16	95	100	95	83
arts.gov	65.1	7,327	44	37	97	0	93	85
ada.gov	64.9	4,728	73	56	61	100	79	77
gsaadvantage.gov	64.8	29,556	39	29	63	100	96	91
bioethics.gov	64.7	85,493	61	51	73	100	0	91
mentalhealth.gov	64.5	46,899	65	45	94	100	95	58
neh.gov	64.5	6,671	57	49	66	0	93	95
thecoolspot.gov	64.4	215,850	73	57	61	100	95	72
ems.gov	64.4	488,371	50	40	97	100	85	64
nehrp.gov	64.3	824,997	78	65	62	100	0	87
fgdc.gov	64.3	89,039	35	29	98	100	95	69

## APPENDIX CONTINUED

Popular federal websites ranked across all metrics (2017).

Domain	Overall Score	MM Rank	Desktop Speed	Mobile Speed	Mobile Friendly	DNSSEC	SSL	Access.
pbgc.gov	64.2	50,696	73	51	92	100	95	54
solardecathlon.gov	64.2	58,957	20	21	94	100	93	79
bnl.gov	64.1	7,036	46	31	99	100	91	65
energystar.gov	64.1	1,769	45	35	94	100	91	67
rrb.gov	64.1	157,248	51	44	96	0	95	78
nationalmap.gov	64.0	46,765	56	53	63	100	95	76
sam.gov	64.0	50,196	60	46	68	100	95	74
letgirlslearn.gov	63.9	283,438	14	10	93	100	95	84
nersc.gov	63.9	71,381	50	35	71	100	93	79
usccr.gov	63.9	60,144	79	64	62	100	0	86
fdlp.gov	63.7	181,423	37	25	93	100	93	72
mymoney.gov	63.6	45,132	58	74	59	100	93	70
hanford.gov	63.5	85,111	42	37	99	100	0	82
weather.gov	63.3	904	56	46	58	100	54	100
jfklibrary.org	63.0	7,728	33	48	99	0	91	78
gao.gov	62.9	1,902	60	66	96	0	75	85
ojp.gov	62.8	16,576	3	3	99	100	85	85
nationalservice.gov	62.8	9,127	19	23	96	100	91	74
anl.gov	62.8	2,598	32	29	87	100	85	75
dol.gov	62.7	883	44	45	65	100	93	78
tigta.gov	62.7	558,726	70	54	62	100	93	69
opic.gov	62.6	62,611	40	33	68	100	93	81
adlnet.gov	62.5	169,931	38	35	96	0	85	83
choosemyplate.gov	62.5	4,158	68	46	93	100	95	52
myplate.gov	62.5	593,063	68	46	93	100	95	52
acwi.gov	62.5	691,305	75	62	65	100	95	62
bts.gov	62.4	4,981	0	0	89	100	95	90
usap.gov	62.3	62,910	37	39	62	100	93	83
fara.gov	62.2	103,056	71	53	57	100	79	74
crimesolutions.gov	62.0	245,674	60	44	58	100	85	78
nicic.gov	61.8	42,943	60	45	66	100	85	72
apps.gov	61.6	257,832	46	45	97	0	95	72
jct.gov	61.5	96,319	81	61	61	0	93	79
smart.gov	61.4	902,846	55	46	55	100	85	79
eia.gov	61.3	1,501	54	44	62	100	91	74
wapa.gov	61.2	246,391	45	37	98	100	92	56
ncpc.gov	61.2	438,419	66	49	62	100	0	88
cfo.gov	61.0	752,773	0	0	94	100	87	85
pacer.gov	61.0	51,014	68	55	62	0	93	83
nationsreportcard.gov	61.0	71,713	73	59	70	100	93	57

## APPENDIX CONTINUED

Popular federal websites ranked across all metrics (2017).

Domain	Overall Score	MM Rank	Desktop Speed	Mobile Speed	Mobile Friendly	DNSSEC	SSL	Access.
nij.gov	60.8	19,043	57	55	61	100	85	70
faasafety.gov	60.8	77,250	38	30	61	100	85	84
mymedicare.gov	60.7	244,142	55	41	96	100	95	51
invasivespeciesinfo.gov	60.7	78,215	65	50	61	100	85	69
vcf.gov	60.5	962,022	46	35	65	100	79	78
nixonlibrary.gov	60.3	68,278	50	41	69	100	97	68
foreignassistance.gov	60.2	201,411	53	49	72	100	93	63
democraticleader.gov	59.8	75,692	75	56	89	0	95	60
ussc.gov	59.4	41,031	71	52	98	0	47	66
volunteer.gov	59.1	239,243	58	46	61	100	73	73
noaa.gov	59.0	214	34	25	100	100	0	76
rivers.gov	58.9	336,780	10	7	63	100	90	93
oge.gov	58.9	106,361	73	61	61	0	95	74
biopREFERRED.gov	58.5	297,616	37	27	63	100	95	76
gop.gov	58.5	43,731	59	46	97	0	93	60
osac.gov	58.3	57,033	33	30	68	100	78	76
usmarshals.gov	58.1	39,725	42	36	61	100	79	75
pclob.gov	57.9	368,950	5	5	66	100	93	90
eda.gov	57.8	71,201	26	20	67	100	91	78
plainlanguage.gov	57.7	103,841	92	85	60	100	0	60
itdashboard.gov	57.7	669,979	0	0	96	100	87	75
uscirf.gov	57.3	61,994	11	11	94	0	93	85
goes-r.gov	57.2	198,323	22	19	98	100	0	78
arctic.gov	56.8	808,339	63	55	65	100	95	53
eldercare.gov	56.6	21,073	62	33	63	100	51	82
jobcorps.gov	56.6	37,019	0	0	87	100	95	76
osmre.gov	56.6	117,679	24	21	61	100	95	78
csb.gov	56.3	69,368	39	54	99	0	0	76
speaker.gov	56.3	11,196	44	41	99	0	55	79
bjs.gov	56.1	6,208	50	39	50	100	85	72
ready.gov	56.1	2,683	50	44	0	100	93	100
cnss.gov	56.1	836,904	0	0	98	100	0	88
poolsafely.gov	56.0	75,220	64	51	67	100	0	71
census.gov	56.0	472	16	9	95	100	79	65
federalregister.gov	55.9	2,260	24	21	66	100	95	73
smokefree.gov	55.8	15,318	9	7	98	100	95	62
adlnet.org	55.6	297,503	38	35	96	0	0	83
medpac.gov	55.4	98,197	58	52	70	0	0	87
ustr.gov	55.2	5,307	38	45	67	0	83	79
ndu.edu	55.1	21,474	70	61	63	0	51	84

## APPENDIX CONTINUED

### Popular federal websites ranked across all metrics (2017).

Domain	Overall Score	MM Rank	Desktop Speed	Mobile Speed	Mobile Friendly	DNSSEC	SSL	Access.
moneyfactory.com	54.9	133,020	43	38	62	0	0	100
ojjdp.gov	54.7	27,867	59	47	60	100	92	55
tswg.gov	54.6	985,963	16	26	72	0	89	86
broadbandmap.gov	54.6	34,499	69	43	0	100	93	91
aviationweather.gov	54.2	24,862	37	31	59	100	89	67
ntsb.gov	53.3	6,539	46	43	64	0	74	76
uscourts.gov	52.8	1,182	74	68	70	0	0	70
arc.gov	52.8	101,902	52	39	59	0	76	77
lbl.gov	52.1	1,595	33	29	96	100	75	59
docsteach.org	51.6	10,868	19	13	100	0	93	63
srs.gov	51.5	211,333	45	40	60	0	0	91
udall.gov	51.0	161,422	34	36	67	0	93	70
fmc.gov	50.1	101,175	42	0	65	0	93	79
federallabs.org	48.9	34,889	31	33	99	0	85	48
usphs.gov	48.6	69,476	38	27	67	100	95	47
cecc.gov	47.7	175,152	38	33	67	0	0	81
trade.gov	47.6	10,603	49	42	77	100	32	50
tsunami.gov	47.2	316,948	33	26	63	100	0	68
pmi.gov	44.9	602,770	17	11	66	100	93	50
mspb.gov	44.8	215,030	46	34	62	0	93	54
nro.gov	44.0	144,044	38	35	60	100	0	57
achp.gov	43.9	113,794	16	16	64	100	0	67
ars-grin.gov	41.8	32,550	85	73	66	100	95	**
lanl.gov	41.6	2,665	54	44	99	100	85	**
presidio.gov	39.3	87,505	56	38	0	100	0	76
gsaauctions.gov	39.1	129,665	0	0	0	100	79	88
blm.gov	38.7	3,307	38	31	98	100	95	**
federalreserve.gov	36.5	1,439	28	24	98	100	93	**

\*\* Accessibility testing tool could not run successfully on this website.

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43. We checked whether a website is retired or redirects to a new page by typing in the URL into Chrome and seeing whether the website still exists or directs us to a new page. Since we tested the websites in September, agencies may have consolidated federal websites, retired websites, or fixed websites that would not load.
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45. Data downloaded from analytics.usa.gov on September 6, 2017. The data represents websites visited at least 1,000 times in August. Similarly, to the Majestic Million list, the DAP list is updated regularly. Website rankings depend on the number of visits to that website over the past 30 days. Therefore, websites can either move up in the rankings or fall from the list. Additionally, some federal websites may receive more visits during specific

months than others. For example, if there is a natural disaster a website associated with that disaster may have more visits in certain months than in others.

46. In addition to these websites, several presidential library websites were also added including [nixonlibrary.gov](http://nixonlibrary.gov), [jfklibrary.org](http://jfklibrary.org), and [trumanlibrary.org](http://trumanlibrary.org).
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72. When we encountered an error, and confirmed that those websites did not have HTTPS enabled we did not test them for the vulnerabilities explained in this section. Rather, they were given a score of “0” across the board.

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## ERRATA

This report was updated on November 29, 2017 to remove a website that should have been excluded from the analysis and correct minor grammatical and typographical errors.

## ABOUT ITIF

The Information Technology and Innovation Foundation (ITIF) is a nonprofit, nonpartisan research and educational institute focusing on the intersection of technological innovation and public policy. Recognized as one of the world's leading science and technology think tanks, ITIF's mission is to formulate and promote policy solutions that accelerate innovation and boost productivity to spur growth, opportunity, and progress.