



# Following the Money 2018

How the 50 States Rate in Providing Online  
Access to Government Spending Data

FRONTIER GROUP

**WISPIRG**  
Foundation

# Following the Money 2018

How the 50 States Rate in Providing Online  
Access to Government Spending Data

Rachel J. Cross, Frontier Group

Michelle Surka and Scott Welder, U.S. PIRG Education Fund

April 2018

# Acknowledgments

The authors thank the public officials from the 41 states who responded to our survey questions and/or evaluation of their transparency websites. We appreciate the thoughtful comments on this document provided by Ann Ebberts of the Association of Government Accountants. Our appreciation goes to our team of 27 focus group participants for their research assistance. For editorial assistance, thanks go to Tony Dutzik and Gideon Weissman at Frontier Group.

The authors bear any responsibility for factual errors. The recommendations are those of WISPIRG Foundation. The views expressed in this report are those of the authors and do not necessarily reflect the views of our funders or those who provided review.

© 2018 WISPIRG Foundation. Some Rights Reserved. This work is licensed under a Creative Commons Attribution 4.0 License. To view the terms of this license, visit [www.creativecommons.org/licenses/by/4.0](http://www.creativecommons.org/licenses/by/4.0).

With public debate around important issues often dominated by special interests pursuing their own narrow agendas, WISPIRG Foundation offers an independent voice that works on behalf of the public interest. WISPIRG Foundation works to protect consumers and promote good government. We investigate problems, craft solutions, educate the public, and offer citizens meaningful opportunities for civic participation. For more information, please visit our website at [www.wispirgfoundation.org](http://www.wispirgfoundation.org).

Frontier Group provides information and ideas to help citizens build a cleaner, healthier and more democratic America. We address issues that will define our nation's course in the 21st century – from fracking to solar energy, global warming to transportation, clean water to clean elections. Our experts and writers deliver timely research and analysis that is accessible to the public, applying insights gleaned from a variety of disciplines to arrive at new ideas for solving pressing problems. For more information about Frontier Group, please visit [www.frontiergroup.org](http://www.frontiergroup.org).

*Cover Image: Negative Space CCO*

*Layout: Alec Meltzer/meltzerdesign.net*

# Contents

Executive Summary	1
Introduction	6
Transparency Websites Empower Citizens to Track Government Spending	7
Transparency Websites Make Government More Effective and Accountable	7
Transparency Websites Give Users Detailed Information on Government Expenditures	11
Making the Grade: Scoring States' Online Spending Transparency	15
Leading "A" States	17
Advancing "B" States	17
Middling "C" States	18
Lagging "D" States	19
Failing "F" States	19
What Makes a Transparency Website Usable?: Feedback from the Focus Groups	20
Search Bars and Other Searchability Functions	20
Expenditures: Itemization, Descriptions, and Subtotals	21
Checkbook Interface	23
New and Notable Features Help the Public to "Follow the Money"	27
New or Overhauled Websites	27
Cutting-Edge Practices	27
Continuing the Momentum toward Greater Transparency: How States Can Improve their Websites	31
Appendix A: Methodology	34
Appendix B: Transparency Scorecard	49
Appendix C: List of Questions Posed to Transparency Website Officials	55
Appendix D: Agencies or Departments Responsible for Administering Transparency Websites by State	57
Endnotes	59

# Executive Summary

State governments spend hundreds of billions of dollars each year on everything from employee salaries and office supplies to professional lawyers and subsidies to encourage economic development. Public accountability helps ensure that state funds are spent wisely.

State-operated transparency websites provide checkbook-level detail on government spending, allowing citizens and watchdog groups to view payments made to individual companies, details on purchased goods or services, and benefits obtained in exchange for public subsidies.

All 50 states now operate websites to make information on state expenditures accessible to the public. All but four states provide checkbook-level data for one or more economic development subsidy programs and more than half of states make that subsidy data available for researchers to download and analyze. These websites not only provide citizens with useful information, they are regularly used by citizens; **in 2017 alone, at least 1.5 million users viewed over 8.7 million pages on state transparency websites.**<sup>1</sup>

**Table ES-1: Top 10 and Bottom 10 States in Providing Online Access to Government Spending Data**

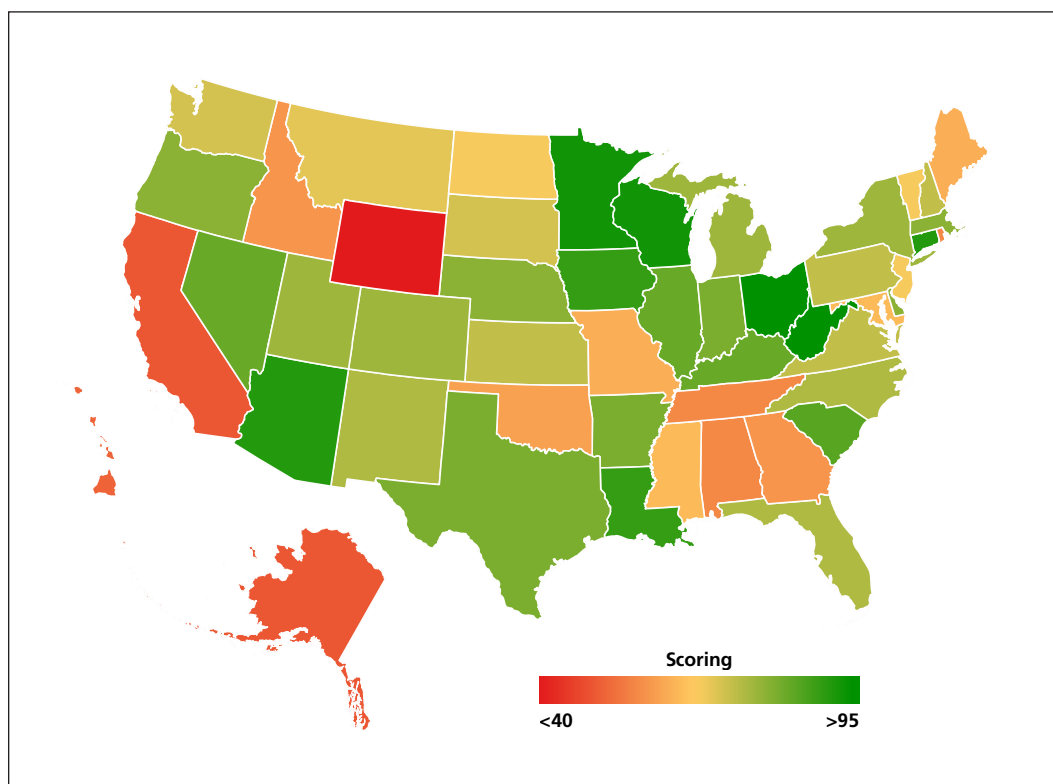
## Top 10 States

State	Grade	Score	Rank
Ohio	A+	98	1 (tie)
West Virginia	A+	98	1 (tie)
Minnesota	A	94	3 (tie)
Wisconsin	A	94	3 (tie)
Arizona	A-	93	5 (tie)
Connecticut	A-	93	5 (tie)
Iowa	A-	91	7
Louisiana	A-	90	8
South Carolina	B+	87	9
Kentucky	B	85	10 (tie)
Nevada	B	85	10 (tie)

## Bottom 10 States

State	Grade	Score	Rank
Wyoming	F	35	50
Alaska	F	46	49
California	F	47	48
Hawaii	F	48	47
Tennessee	D-	54	46
Rhode Island	D	55	45
Alabama	D	56	44
Georgia	D	57	43
Idaho	D	58	42
Oklahoma	D+	60	41

**Figure ES-1. How the 50 States Rate in Providing Online Access to Government Spending Data**



However, this analysis – U.S. PIRG Education Fund’s eighth evaluation of state transparency websites – finds that despite continued improvements in transparency websites, states still have a long way to go in making critical data about state spending truly accessible to the public. (See Figure ES-1 and Table ES-1.) State governments should follow the example set by the nation’s “Leading States” in enabling their residents to “follow the money” on state spending.

Eight states, led by Ohio and West Virginia, are leading in spending transparency, setting an example for other states nationwide.

- **Leading States (“A” range):** Eight states are leading the charge in online spending transparency. These states have created

user-friendly websites that provide visitors with accessible and comprehensive information on state spending. Citizens can access information on specific expenditures through easy-to-use features, including a multi-tiered search function that allows users to search for two or more criteria at once.

- **Advancing States (“B” range):** 11 states are advancing in online spending transparency, with spending information that is easy to access but more limited than the information provided by Leading States. All of these states host online checkbooks that are downloadable as well as searchable by recipient, keyword and agency, and all but Oregon include a subtotaling function that sums spending by department and category automatically for users.

## Confirmations of Findings with State Officials

Our researchers sent initial assessments and a list of questions to transparency website officials in all 50 states in order to ensure that the information presented in this report is accurate and up to date.

For the majority of the grades, state transparency officials were given the opportunity to verify information, clarify their online features, and discuss the benefits of transparency best practices in their states. Of the 50 states, officials from 41 states provided feedback. For a list of the questions posed to state officials, please see Appendix C.

Due to the nature of the new “Real World” test – in which states were graded on the ability of a reviewer to find information on a state website within a given period of time – states were not offered the ability to review the results of that portion of the evaluation. States were alerted to the purpose of and methods to be used in the Real World evaluation during our initial contact with them in winter 2018.

- **Middling States (“C” range):** This year, 17 states are “Middling” in online spending transparency. Their online checkbooks have the same basic search functionality as those in Leading and Advancing States, but lack other usability tools and provide limited information on subsidies or other “off budget” expenditures.
- **Lagging States (“D” range):** The 10 Lagging States fail to provide users with essential tools for using and understanding the data posted in their checkbook portals, and trail behind other states in providing specific information about the expected and actual benefits delivered by economic development subsidy programs.
- **Failing States (“F” range):** Four states fail to meet the basic standards of online spending transparency. For example, Wyoming’s checkbook lacks a fully functional search feature, while Hawaii has not posted any spending data for years after 2016.

**Many states have a long way to go in providing comprehensive information that is accessible to the public.** In order to grade state transparency websites on their comprehensiveness and usability, 27 professional and amateur researchers participated in our focus groups, looking for six specific expenditures on state sites and evaluating how easily they were able to find and understand the information. Many websites failed to match the user-friendliness and intuitiveness common to Americans’ everyday experience of the Internet.

- Only three states – Kentucky, Arkansas and South Carolina – proved comprehensive by hosting all six of the test expenditures in an easily accessible format in the online checkbook for fiscal year 2017.
- Researchers were able to locate three or fewer of the six test expenditures on 30 states’ websites; of those, researchers were unable to locate any of the expenditures in 13 states.

**Table ES-2: How the 50 States Rate in Providing Online Access to Government Spending Data**

State	Grade	Score	State	Grade	Score
Alabama	D	56	Montana	C-	69
Alaska	F	46	Nebraska	B-	80
Arizona	A-	93	Nevada	B	85
Arkansas	B-	82	New Hampshire	C	73
California	F	47	New Jersey	C-	67
Colorado	C+	78	New Mexico	C+	75
Connecticut	A-	93	New York	C+	78
Delaware	B-	80	North Carolina	C+	76
Florida	C+	76	North Dakota	C-	68
Georgia	D	57	Ohio	A+	98
Hawaii	F	48	Oklahoma	D+	60
Idaho	D	58	Oregon	B-	81
Illinois	B	84	Pennsylvania	C	73
Indiana	B	83	Rhode Island	D	55
Iowa	A-	91	South Carolina	B+	87
Kansas	C	73	South Dakota	C	72
Kentucky	B	85	Tennessee	D-	54
Louisiana	A-	90	Texas	B-	82
Maine	D+	62	Utah	C+	78
Maryland	D+	63	Vermont	C-	67
Massachusetts	B-	80	Virginia	C	74
Michigan	C+	78	Washington	C	71
Minnesota	A	94	West Virginia	A+	98
Mississippi	D+	63	Wisconsin	A	94
Missouri	D+	62	Wyoming	F	35

- Only 34 states provide for automatic generation of subtotals for spending by department or expenditure category, a feature that helps ensure that spending data is easy to find and understand for users.
- Only 24 states provide a multi-tiered search function that allows users to narrow their results by searching within department and expenditure categories simultaneously, or by conducting a second search inside the parameters of their first.

**All states, including Leading States, have opportunities to improve their transparency.**

- Only 33 states provide checkbook-level information that includes the recipients of economic development subsidy programs, based on an analysis of three such programs in each state. (See page 36 of the methodology for details.)

Disclosure for all programs would provide greater transparency and accountability.

- Four states – Alabama, California, Tennessee and Vermont – do not provide tax expenditure reports on their transparency websites that detail the impact on the state budget of targeted tax credits, exemptions or deductions.
- No state provides a comprehensive list of government entities outside the standard state budget. Ideally, all governmental and quasi-governmental entities – even those that are entirely financially self-supporting – would integrate their expenditures into the online checkbook, and a central registry of all such entities would be available for public reference. Some states provide comprehensive information on quasi-public agencies, but other entities like special districts are still excluded.

# Introduction

States spend money on a wide variety of things. Interest on debt payments. The state fair tractor pull. A tax break for the filming of *Law & Order: SVU*, Season 11. Wall clocks.

With so many moving parts in state government, it can be difficult for citizens to reach a satisfying answer to the question: Where exactly do my tax dollars go?

In the 21<sup>st</sup> century – when citizens can register to vote online, enroll their children in school online, and check the status of their parking tickets online – taxpayers should also be able to track how their government spends its money online. True transparency not only requires states to post financial information online, but also to do so in user-friendly, intuitive platforms that don’t require sifting through arcane budget categories, navigating complex bureaucratic structures, downloading special software, or calculating totals on scraps of paper to uncover and understand the ways their tax dollars are spent.

Increasingly, states are meeting citizens’ expectations for accessible spending data through online transparency portals. Every state now offers at least a basic website

for accessing information about state government spending, and many states now provide citizens with sophisticated and user-friendly online interfaces for searching through data. Collectively, states present information about hundreds of billions of dollars of government spending in great detail, and increasingly are expanding the definition of spending transparency to include state expenditures that occur indirectly through the tax code or through “off budget” government entities.

This report is the eighth *Following the Money* report assessing states’ ongoing progress in opening the books on expenditures by state governments. It also points to the need and opportunity for continued improvement.

States spend money on a wide variety of things. Health care. Public safety. Lab fees for drinking water tests and training for algebra teachers. Citizens deserve the opportunity to participate in decisions about how common resources are spent. In an increasingly digital world, online-accessible financial information is a good way to enable citizens to take part in that conversation.

# Transparency Websites Empower Citizens to Track Government Spending

**P**ublic information is not truly accessible unless it is online. Government spending transparency websites give citizens and government officials the ability to monitor many aspects of state spending in order to save taxpayer money, prevent corruption, reduce potential abuse of public dollars, and encourage the achievement of a wide variety of public policy goals.

## Transparency Websites Make Government More Effective and Accountable

States with good transparency web portals have experienced a wide variety of benefits, including saving money and obtaining assistance in the achievement of other public policy goals. This can add up to millions of dollars in taxpayer savings. Harder to measure is the potential abuse or misspending that is avoided because government officials, contractors and subsidy recipients know that the public may be looking over their shoulders. Transparency websites also help citizen watchdogs and journalists ensure that government contractors and vendors deliver goods or services at a reasonable price and allow for public scrutiny of economic development subsidies.

## Transparency Websites Save Money

States with transparency websites often realize significant financial returns on their investment. The savings include more efficient government administration, more competitive bidding for public projects, and less staff time spent on information requests.

Transparency websites can save money in a variety of ways, including:

- Negotiating contracts and increasing competition.
- Vendors seeking to do business with the state of Ohio have reported using OhioCheckbook.com as a business analytics tool, which has allowed them to determine when they can offer a state agency a product at a better value than the agency was currently receiving. In addition, an elected official from Hamilton County said that he used the site to compare the prices paid for road salt in neighboring villages to ensure that the county was getting a competitive rate.<sup>2</sup>
- Reducing costly information requests.

- Mississippi reported that every information request fulfilled by its transparency website rather than by a state employee saves the state between \$750 and \$1,000 in staff time.<sup>3</sup>
- South Carolina open records requests initially dropped by two-thirds after the creation of its transparency website, reducing staff time and saving an estimated tens of thousands of dollars.<sup>4</sup>
- Identifying and eliminating inefficient expenditures.
  - In Texas, the Comptroller's office uses its transparency website to evaluate state agency spending patterns. By monitoring contracts more closely and sourcing services from new vendors when the potential for cost-cutting was identified, the state claims to have saved more than \$163 million.<sup>5</sup>
  - State agencies in Arkansas have used the state's transparency portal to monitor travel spending and ensure that employees are making prudent decisions. For example, the Arkansas Teacher Retirement System has downloaded and analyzed travel spending data to ensure state employees are carpooling when possible, reducing the agency's travel costs.<sup>6</sup>

### **Online Transparency Provides Support for Achieving Policy Goals**

Transparency websites provide states with tools to assess their progress toward community investment, economic development, waste and abuse prevention and other public policy goals. Online transparency portals allow states to better measure and manage the progress of programs.

Some states have improved their pro-

curement processes and streamlined government as a result of their government transparency efforts. In North Carolina, for example, the development of a state transparency portal spurred wholesale reform of the state's procurement process. During data collection, the state realized that it was using several different systems and processes to source contracts and began a reform initiative to consolidate and standardize procurement activities. Expected benefits for the state include greater efficiency, saving both time and money, and more effective leveraging of the state's buying power.<sup>7</sup>

Other states have used their online checkbooks to improve the functionality of local governments. In Ohio, six local governments made the decision to join the state's online checkbook following corruption scandals for an official's misuse of public funds. By posting their financials online, these governments sought to restore public trust and signify the beginning of a new chapter to their citizens.<sup>8</sup>

### **Online Transparency Costs Little**

The benefits of transparency websites have come with a low price tag, both for initial creation of the websites and ongoing maintenance. Several states – including South Carolina and Ohio – created and update their websites with funds from their existing budgets.<sup>9</sup>

As technology continues to improve, states may be able to lower their overhead costs even more. Massachusetts notes that the platform utilized by their previous checkbook site was expensive to customize and continued to incur high annual costs through licensing and web hosting fees. Last year, the state transferred to a “Software as a Service” system, hosting their transparency portal through a cloud-based system. The move has saved Massachusetts considerable money as the new

**Table 1. Cost to Create and Maintain a Transparency Website<sup>11</sup>**

State	Start-Up Costs	Annual Operating Costs
Alabama	\$125,000	Less than \$12,000
Alaska	\$5,000	"Nominal"
Arizona	\$20,000 for implementation of new website	\$120,000 + \$1,000 for each local government added
Arkansas	\$558,000	\$175,000
California	-	-
Colorado	\$200,000 from existing budget, plus existing staff time	\$169,400 from existing budget
Connecticut	Existing budget	\$18,000
Delaware	Existing budget	\$36,000 for Open Checkbook
Florida	Existing budget	\$421,978, including staff time and benefits, consulting and IT maintenance
Georgia	Existing budget	\$30,000, from existing budget
Hawaii	Existing budget	Existing budget
Idaho	Approximately \$28,000 from existing budget	Existing budget
Illinois	Approximately \$100,000	Approximately \$10,000
Indiana	-	-
Iowa	Less than \$330,000 over three years	\$120,000
Kansas	\$175,000, excluding administrative support	Existing budget
Kentucky	\$150,000	Existing budget, plus a significant upgrade in 2014 costing \$25,000 for IT programming; costs for state planning, oversight, decision-making and testing were not tracked
Louisiana	\$350,000 projected for new website currently in design over three fiscal years	\$25,000
Maine	\$30,000	\$25,000
Maryland	\$65,000	\$5,000
Massachusetts	\$125,000 for website redesign	\$443,700 in 2017, including data module addition and expansion
Michigan	\$50,000 to upgrade website	\$56,000
Minnesota	Existing budget	\$10,000 for web hosting and analytic service
Mississippi	\$2,200,000	\$413,000, including personnel
Missouri	\$293,140 from existing budget	\$3,332, plus staff time for maintenance

**Table 1 (cont'd). Cost to Create and Maintain a Transparency Website<sup>11</sup>**

State	Start-Up Costs	Annual Operating Costs
Montana	Existing budget	\$10,150 for application hosting and development and support
Nebraska	\$30,000-\$60,000	\$25,000
Nevada	\$78,000	\$30,000
New Hampshire	Existing budget	Existing budget
New Jersey	\$372,667 for initial purchase of and switchover to Socrata software	\$147,872, including updates and upgrades
New Mexico	\$230,000	\$36,000
New York	Existing budget	-
North Carolina	\$624,000	\$80,600
North Dakota	\$231,000	\$42,500
Ohio	\$814,000, from existing budget	Existing budget
Oklahoma	\$8,000, plus staff time	\$5,000
Oregon	Existing budget	Existing budget
Pennsylvania	\$900,000	Existing budget
Rhode Island	Existing budget	\$6,400
South Carolina	Existing budget	Existing budget
South Dakota	\$2,840 on updates	"Negligible"
Tennessee	Existing budget	\$60,000 for a website upgrade that came from the existing budget
Texas	\$310,000	No external costs, apart from in-house personnel
Utah	\$240,855 (\$192,000 initial plus \$48,855 for enhancements)	\$86,066, including web hosting and maintenance
Vermont	Existing budget	Existing budget
Virginia	Existing budget, including a 2017 redesign	Existing budget, plus one full-time staff member
Washington	\$340,000	\$190,000
West Virginia	\$271,216.50	Existing budget
Wisconsin	\$160,000	\$174,442
Wyoming	\$1,800	-

*Note: Some costs are approximations. Blank cells indicate that state officials did not provide or did not track the information. Funds for many websites for which states provided specific costs (as opposed to "existing budget") came from the agency's existing budget allocation as opposed to a separate appropriation. To see a list of the agencies or departments responsible for administering the transparency websites in each state, see Appendix D.*

system eliminates site infrastructure costs and has automatic data-loading capabilities, saving personnel time that would be otherwise spent on continuous manual site maintenance.<sup>10</sup> States hindered by high website costs due to site infrastructure or personnel costs, or other barriers such as limited staff time may benefit from making a similar move.

### Transparency Websites Are Important and Useful to Residents

Residents, watchdog groups and government officials use the tools and access the information available on transparency websites. In 2017 alone, at least 1.5 million users viewed over 8.7 million pages on state transparency websites.<sup>12</sup> The posting of state financial data online has enabled citizens to access important information about how their state spends money. In just the first two years of Ohio's checkbook, for example, the state's website was used to conduct almost a million searches.<sup>13</sup> As states have improved both the quality of posted information and the usability of sites, usage has risen; the number of users logging on to New Jersey's transparency website, for example, has increased more than seven-fold in just four years, while the number of page views of the Pennsylvania site has increased from 33,000 views in 2012 to over half a million in 2017.<sup>14</sup>

State transparency websites aren't only used by state residents curious about how their government spends its money; others, including government officials themselves, use these websites as well. West Virginia noted that several research groups and think tanks have used the website to obtain information for white papers with recommendations on state spending.<sup>15</sup> Washington state shared that an employee

with the state's community college system used the transparency website to collect data on the salaries of some employees in order to conduct analysis and was able to find all the needed information on the state's transparency website.<sup>16</sup>

### Transparency Websites Give Users Detailed Information on Government Expenditures

Current best practices for government spending transparency call for websites that are comprehensive, one-stop, one-click and meet modern standards of usability.

#### Comprehensive

High-quality transparency websites offer broad and detailed spending information, and help citizens answer three key questions: How much does the government spend on particular goods and services? Which companies receive public funds for these goods and services? And what results are achieved by specific expenditures? Topflight transparency websites empower citizens to answer those questions for every major category of state spending, including:

- **Payments to private vendors and nonprofits.** Many government agencies spend large portions of their budgets on outside vendors through contracts, grants and payments made outside the formal bidding process.<sup>17</sup> For example, in fiscal year 2017, Wisconsin's state agencies spent \$520 million on outside services.<sup>18</sup> These contracted vendors are generally subject to fewer public accountability rules, such as sunshine laws, civil service reporting requirements and freedom of infor-

mation laws. In addition, even when vendors are subject to disclosure rules, they may resist releasing data, claiming a need to protect trade secrets.<sup>19</sup>

- **Subsidies such as tax credits for economic development.** State and local governments allocate more than \$80 billion each year to private entities in the form of economic development subsidies.<sup>20</sup> These incentives – which can take the form of grants, loans, tax credits and tax exemptions – are awarded with the intent to create jobs and spur growth, yet many governments fail to disclose adequate company-specific information on these expenditures and their outcomes. When information is lacking on whether companies deliver on promised benefits, state officials cannot hold them accountable or make fully informed decisions to generate greater “bang for the buck” from economic development policies in the future. States that follow transparency best practices allow citizens and public officials to hold subsidy recipients accountable by listing the public benefits each company was expected to provide in exchange for the subsidy, and the benefits each company actually delivered, such as the precise number of new or retained jobs.<sup>21</sup> When governments recapture funds (through so-called “clawbacks”) from companies that fail to deliver on the agreed-upon public benefits, the best websites provide information on the funds recouped.
- **Other tax expenditures.** “Tax expenditures” are subsidies bestowed through the tax code in the form of special tax exemptions, credits, deferments and preferences. Tax expenditures have the same bottom-line impact on state budgets as direct spending: Every dollar must be balanced by increased taxes or

program cuts elsewhere. But, once created, tax expenditures typically are not subject to the same oversight as direct government appropriations because they do not appear as state budget line items subject to legislative debate and they rarely require legislative approval to renew. For these reasons, spending through the tax code is in particular need of disclosure. States that follow transparency best practices provide transparency and accountability for tax expenditures, usually by providing a link on their transparency portal to a tax expenditure report, which details a state’s tax credits, deductions and exemptions and the resulting revenue loss from each program.

- **Quasi-public agencies.** Each state contains a number of independent government corporations that are created through enabling legislation to perform a particular set of public functions, such as waste management, pension administration, or operation of toll roads or community development programs. The defining feature of a quasi-public agency is that, while it is typically governed by a board appointed substantially or entirely by representatives of state government, it is largely or wholly “off budget.” Quasi-public agencies typically collect fees or other revenue, and therefore do not rely solely, or often even at all, on regular appropriations from the legislature. They have also come to deliver a growing share of public functions.<sup>22</sup> According to a study by MASSPIRG Education Fund from 2010, revenues from quasi-public agencies in Massachusetts amounted to at least \$8.76 billion – equal to one third of the state’s general budget.<sup>23</sup> Since their expenditures typically are not subject to the checks and balances of the regular bud-

get process and accounts fall outside of the “official” state budget, quasi-public agencies can lack public accountability, making online transparency particularly important.

State officials themselves are typically not even aware of how many quasi-public agencies exist in a particular state.<sup>24</sup> The best practice is to maintain a central, public registry of all quasi-public entities in a state to facilitate transparency for their budgets. Transparency websites should include expenditure data for all of these bodies.

## One-Stop

Transparency websites in leading states offer a single portal from which citizens can search all government expenditures, just as they would use a single search engine to access anything on the internet. With one-stop transparency, residents and public officials can access comprehensive information on direct spending, contracts, tax expenditures and other subsidies from a single starting point. Expert users may already know what they are looking for and may already be familiar with the kinds of expenditures that fall within specific bureaucratic silos. Ordinary citizens, however, are more likely to be impeded by the need to navigate a variety of disparate websites in order to find information on government spending.

One-stop transparency is particularly important for public oversight of subsidies. Subsidies come in a dizzying variety of forms – including direct cash transfers, loans, equity investments, contributions of property or infrastructure, reductions or deferrals of taxes or fees, guarantees of loans or leases, and preferential use of government facilities – and are administered

by a variety of government agencies. Few people already know the range of these programs, their official names or which agencies’ websites they should search to find information about them. Making all data about government subsidies reachable from a single website empowers citizens to engage in closer scrutiny of spending supported by their tax dollars.

## One-Click Searchable and Downloadable

Transparent information is only as useful as it is accessible. Transparency websites in leading states offer a range of search and sort functions that allow residents to navigate complex expenditure data with a single click of the mouse. States that follow the best transparency standards allow residents to browse information by recipient, agency or category, and to make directed keyword and field searches. The most effective search tools are also multi-tiered, allowing users to use two or more search criteria at a time to narrow the number of results, or allowing users to conduct a second search inside the parameters of their first.

Citizens who want to dig deeper into government spending patterns typically need to download and analyze the data in a spreadsheet or database program. Downloading whole datasets enables citizens to perform a variety of advanced functions – such as aggregating expenditures for a particular company, agency or time period – to see trends or understand total spending amounts that might otherwise be lost in a sea of data. States should enable citizens to download the entire checkbook dataset in one file, but also allow casual users the ability to view state expenditures for at least the most recent fiscal year without downloading any files.

## Usable and Intuitive

In today's digital world, state websites should aspire to be as usable as the many other sites with which the average citizen interacts.

In addition to features such as a fully functional search bar and hosting an in-site viewing portal for citizens to interact with data without having to download a file, states can help ensure their websites are usable by itemizing spending into manageable and understandable categories,

as well as standardizing department and expenditure category descriptions to eliminate inconsistent abbreviations or misspellings that may complicate finding information. States should also ensure that the data available on their websites are accessible without users having to download external programs to view the site, make the data easily viewable on mobile devices, and include a subtotal feature in their checkbook portal that sums spending by department and category.

## State Employee Compensation and Government Transparency

Many states post the salaries of state workers online on their transparency websites or elsewhere. There is much debate about whether the benefits of this practice outweigh the costs.

On one hand, opening the books on public-sector compensation helps protect against salaries that the public might find unacceptable. Additionally, hard data allow for informed debate about public sector compensation practices. Public workers tend to be better compensated, on average, than those in the private sector, but public employees with an advanced degree typically receive lower salaries than comparably educated non-government employees.<sup>25</sup> Regardless, there can be considerable public interest in salary information. Of 12 states that provided us with a list of most visited pages on their transparency websites, nine states, including Rhode Island and Pennsylvania, reported the salary page was the most frequently visited one.<sup>26</sup> In 2017, the top four most downloaded files from the New Hampshire site were the four most recent years of salary information, and Kansas notes the transparency website received a considerable boost in traffic when it first posted compensation information.<sup>27</sup>

On the other hand, there can be good reasons to limit the scope of personal information in the public domain. People may use the information inappropriately, or it could be abused by marketers or criminals. Moreover, research sug-

gests that posting compensation details can undermine employee morale.<sup>28</sup> For these reasons, states such as Louisiana abstain from posting salary information on their transparency websites.

Delaware offers an example of one approach to navigating between these competing imperatives. The state publishes salary ranges by job title, thereby preserving some measure of anonymity while maintaining the ability to identify compensation that might be dramatically out of line with experience, qualifications or public norms.<sup>29</sup> Another way states might navigate the issue would be to post the salaries of only the highest compensated employees – such as those making more than three times the average state employee, the highest paid 10 employees and contractors in each department, or the 50 highest paid employees in the state.

Ultimately, there is a need for more information about the relative merits of different approaches to transparency in public sector employee compensation. One study examined the effects of a 2010 California mandate requiring cities to publicly post municipal salaries and found that, compared with cities that already posted such information, newly transparent municipalities cut salaries for their highest paid employees and experienced a 75 percent increase in quit rates among those workers.<sup>30</sup> Further study is necessary to know if these findings are representative of experiences at other public agencies.

# Making the Grade: Scoring States' Online Spending Transparency

All 50 states operate websites to make information on state spending accessible to the public and these web portals continue to improve. For instance, in 2018, all but three states allow users to search the online checkbook by keyword, and 47 states' transparency websites provide information on one or more economic development subsidies.<sup>31</sup> Many states are also disclosing information that is "off budget" and are making it easy for watchdogs and researchers to download and analyze large datasets about government spending.

For this, U.S. PIRG's eighth evaluation of state online spending transparency websites, each state's site was evaluated and assigned a grade based on its searchability and the breadth of information provided. In addition, this year states were graded on the comprehensiveness and usability of their websites via a "Real World" test. (See Appendix A for a full explanation of the grading methodology and how the scoring system was applied to each state's website, and Appendix B for the complete scorecard.) An initial inventory of each state's website and a set of questions were first sent to the administrative offices believed to be responsible for operating each

state's transparency website. (For a list of questions sent to state officials, see Appendix C.) Follow up e-mails and phone calls were used to maximize the number of responses we received. Officials from 41 states responded with insights and clarifications about their websites. In some cases, our research team adjusted scores based on this clarifying feedback. Officials were not given the opportunity to comment on the results of the Real World test.

A state's grade reflects the entire state government's performance in providing tools and information for citizens to access spending data through the online transparency portal. The grades do not necessarily measure the effort of the office that manages the transparency website. Improving transparency may require other offices or quasi-public agencies to provide information in a usable format, additional funding from the state legislature, or changes to laws and regulations outside the control of the managing office. Best practices in spending transparency typically require collaboration from several parts of state government. The grades in this report score the success of that collaboration.

Based on the grades assigned to each website, states can be divided into five categories: Leading States, Advancing States, Middling States, Lagging States and Fail-

ing States. The following sections summarize common traits shared by the states in each of these categories to highlight their strengths and weaknesses.

## Criteria Changes for 2018

States have made great progress in expanding citizen access to spending transparency data since the first *Following the Money* report in 2010. In 2010, 14 states didn't have any kind of government transparency website at all, and only 32 states provided some kind of checkbook-level spending record online; only three years later, every state had a transparency website and all hosted a checkbook. The number of states detailing the projected benefits of economic development subsidies rose from 18 in 2013 to 38 in 2014.

At the same time, however, citizens' expectations of the type of financial information that should be made available online, and the ease with which it should be accessed, have increased. To keep up with those rising expectations, each edition of *Following the Money* has raised the bar for what counts as a "Leading" state website, adding criteria for new features and types of information and reducing the amount of credit given for information that is now provided as a matter of course by most states.

As a result of this tightening of criteria, the scores received by states in successive editions of *Following the Money* are not strictly comparable. Indeed, some states may experience a decline in their scores from year to year even if their websites have improved overall.

Notable changes in the grading standards for the 2018 *Following the Money* report include:

- The number of points allocated for hosting a *checkbook-level spending* record has been

halved from its 2016 total to 12 points. Similarly, each of the *searchability* criteria point totals have been halved and now are worth four points each; *downloadability* has dropped two points to now account for four points total.

- The "*Real World*" test is entirely new this year and accounts for 18 points. The ability of researchers to find each of the six expenditures in the state's checkbook was worth three points each. (See Appendix A for a full explanation of the grading methodology and how the scoring system was applied to each state's website.)
- *Usability features* were added to the grading criteria this year. This evaluated the presence of two specific features in the online checkbook – a multi-tiered search function and a subtotalling feature – worth three points each. (See Appendix A for more information.) In addition, the usability criteria included the presence of a citizen-accessible report on a state's transparency website. As described by the Association for Government Accountants and the Government Finance Officers Association, this criterion graded states on the posting of simplified financial statements intended for citizen use. (See page 30 for more information.)
- The value of the checkbook-level criterion for *economic development subsidies* dropped three points from 2016 and is now worth 12 points.

## Leading “A” States

**Table 2. Leading States**

State	Grade	Score	Rank
Ohio	A+	98	1 (tie)
West Virginia	A+	98	1 (tie)
Minnesota	A	94	3 (tie)
Wisconsin	A	94	3 (tie)
Arizona	A-	93	5 (tie)
Connecticut	A-	93	5 (tie)
Iowa	A-	91	7
Louisiana	A-	90	8

This year, eight states received leading scores. These states have created user-friendly websites that provide visitors with accessible information on state spending. Citizens can find information on specific expenditures through easy-to-use features, such as a subtotalling function, providing users with an automatically generated annual sum by department and specific expenditure category, saving site visitors from having to add up individual amounts for themselves. All of the Leading States except Louisiana also offer a multi-tiered search function, allowing users to search by department and expenditure category simultaneously, or to conduct a second search inside the parameters of their first search.

While the online checkbooks in these states do not include all types of state spending – either because of limitations in the states’ accounting systems or privacy rules – all eight of these states provide at least some information on the nature of data exclusions, allowing users to understand why they might not be able to find particular information.

Leading States also provide visitors with recipient-specific information on subsidy awards. All Leading States provide information on the value of the subsidies received by companies through three of that state’s more significant and currently active subsidy pro-

grams, and all eight make the information downloadable for offline analysis. The top four Leading States – Ohio, West Virginia, Minnesota and Wisconsin – all also provide information on projected economic benefits for every program considered.

Leading States still have opportunities to improve transparency. For example, researchers in our focus groups were unable to locate at least one of the six expenditures on the Wisconsin, Arizona, Connecticut and Louisiana websites. Three of the Leading States – Wisconsin, Connecticut and Iowa – do not currently offer citizen-accessible financial reports on their websites, and Minnesota and Arizona reported actual public benefits for only one of the evaluated economic development subsidy programs.

## Advancing “B” States

**Table 3. Advancing States**

State	Grade	Score	Rank
South Carolina	B+	87	9
Kentucky	B	85	10 (tie)
Nevada	B	85	10 (tie)
Illinois	B	84	12
Indiana	B	83	13
Arkansas	B-	82	14 (tie)
Texas	B-	82	14 (tie)
Oregon	B-	81	16
Delaware	B-	80	17 (tie)
Massachusetts	B-	80	17 (tie)
Nebraska	B-	80	17 (tie)

This year, 11 states are “Advancing” in online spending transparency, with spending information that is easy to access but more limited than that of Leading States.

Advancing States have checkbooks that are downloadable as well as searchable by

recipient, keyword and agency. With the exception of Delaware, all also post an exclusions statement on their website, letting users know the types of information that are missing from the checkbook. Ten of the 11 Advancing States feature a subtotalling function in their checkbook portals, allowing users to view amount totals for certain expenditures quickly and without manual addition, and in all 10 checkbooks, researchers were able to find at least three of the test Real World expenditures, with Kentucky, South Carolina and Arkansas being the only states of all 50 to receive full points for the Real World portion of the evaluation. In addition, all of the Advancing states offer the most recent tax expenditure reports on their websites, and host checkbook-level recipient information for at least two of the evaluated economic development subsidies.

Only five of the Advancing States – Kentucky, Indiana, Delaware, Massachusetts and Oregon – offer a multi-tiered search function, saving users time in looking for specific expenditure information. In addition, only six states – South Carolina, Nevada, Illinois, Texas, Oregon and Nebraska – post a citizen-accessible financial report on their website, a feature the other five Advancing States should incorporate.

## Middling “C” States

This year, 17 states are “Middling” in online spending transparency. The online checkbooks in Middling States cover a wide range of spending. Their basic checkbooks have the same search functionality as those in Leading and Advancing States, with the exception of Virginia’s, which is not searchable by keyword, and only five of the Middling States – Utah,

**Table 4. Middling States**

State	Grade	Score	Rank
Colorado	C+	78	20 (tie)
Michigan	C+	78	20 (tie)
New York	C+	78	20 (tie)
Utah	C+	78	20 (tie)
Florida	C+	76	24 (tie)
North Carolina	C+	76	24 (tie)
New Mexico	C+	75	26
Virginia	C	74	27
Kansas	C	73	28 (tie)
New Hampshire	C	73	28 (tie)
Pennsylvania	C	73	28 (tie)
South Dakota	C	72	31
Washington	C	71	32
Montana	C-	69	33
North Dakota	C-	68	34
New Jersey	C-	67	35 (tie)
Vermont	C-	67	35 (tie)

Florida, South Dakota, Montana and Vermont – do not include a subtotalling function. All of the states except Pennsylvania allow users to download all or part of the checkbook data, and all except New Jersey include a statement about excluded expenditures. Just over half of the Middling States include a multi-tiered search function in their online checkbooks.

The information provided on subsidies in Middling States tends to be more limited than the subsidy information provided by Leading and Advancing States. While all of the states included checkbook-level spending data on at least one of the evaluated subsidy programs, six of the Middling States did not provide projected benefits information for the three programs, and 11 did not post information on actual benefits.

## Lagging “D” States

**Table 5. Lagging States**

State	Grade	Score	Rank
Maryland	D+	63	37 (tie)
Mississippi	D+	63	37 (tie)
Maine	D+	62	39 (tie)
Missouri	D+	62	39 (tie)
Oklahoma	D+	60	41
Idaho	D	58	42
Georgia	D	57	43
Alabama	D	56	44
Rhode Island	D	55	45
Tennessee	D-	54	46

Checkbook-level spending in the ten Lagging States is less accessible or complete than checkbook-level spending in other states. Four states – Idaho, Georgia, Alabama and Rhode Island – only make a portion of their checkbook downloadable for offline analysis. Only two states – Georgia and Tennessee – include a multi-tiered search function in their online checkbooks, while the only checkbooks with a subtotaling function are those of Maine, Missouri and Alabama. Researchers were unable to locate any of the six Real World expenditures in the checkbooks of Rhode Island, Maryland and Mississippi, as none of these state’s checkbooks provide a useful level of itemization to determine exact expenditures on line items for specific departments.

While six states – Maryland, Mississippi, Missouri, Oklahoma, Tennessee and Rhode Island – hosted checkbook-level spending information for the three subsidy programs evaluated in this report, no state posted both projected and actual benefits for all three programs. Only four states – Maryland, Mississippi, Idaho and Tennessee – posted any benefits information for at least one subsidy program, while the other six offered no benefits information at all.

## Failing “F” States

**Table 6. Failing States**

State	Grade	Score	Rank
Hawaii	F	48	47
California	F	47	48
Alaska	F	46	49
Wyoming	F	35	50

This year, four states receive a failing grade reflecting their failure to follow many of the best practices of online spending transparency. Wyoming’s online checkbook fails to provide a functional search feature, while the most current year of data available on Hawaii’s checkbook is 2016. While the state of California does publish tax expenditure reports, these are not included on the state’s transparency website, making this information more difficult for users to locate than if all state financial data were hosted in one central place.

### Members of Both Parties Support Government Transparency

The political leaning of a state provides little indication of its level of transparency. Neither Republican-leaning states nor Democratic-leaning states are significantly more transparent than the other. States with a Democratic governor averaged a transparency score of 73 in our study – near the average score of states with Republican governors (74). The average transparency score of states with single-party, Republican legislatures (75) was modestly higher than those with single-party, Democratic legislatures (71). Of the eight A-level states, five have a Republican governor while three have a Democratic governor, a partisan ratio near that of the nation’s governors in general (33 Republicans, 16 Democrats and 1 Independent).

# What Makes a Transparency Website Usable?: Feedback from the Focus Groups

States have started to prioritize user-friendliness and accessibility in their transparency portals. Some state websites, however, lack basic features that users have come to expect from an online experience. While evaluating states on the six test expenditures, our research team identified site features that served to enhance the user experience, and opportunities for states to improve.

## Search Bars and Other Searchability Functions

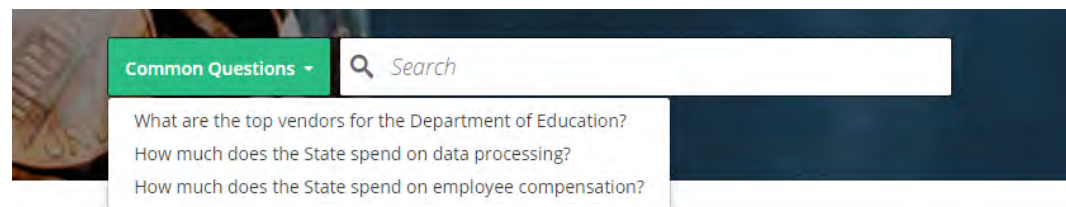
Information provided online is only as useful as it is easy to navigate. Search functions are particularly important in ensuring that citizens can locate information quickly.

## Features of the Most Usable Websites

Citizens have come to expect information hosted online to be accompanied by comprehensive search functions, such as intuitive “Google-style” search bars. States such as Ohio host this particular function, making their sites approachable and instantly understandable for citizens; as one researcher commented of Ohio, “this site is so beautiful and easy to use!”

A multi-tiered search function also serves to make sites easier to use by allowing users to search by department and expenditure category simultaneously, or to conduct a second search inside the parameters of their first search. These features allow users to narrow the number of results they must sift through to find information. Currently, 24 state check-

**Figure 1. Delaware Offers a “Common Questions” Feature by the Search Function**



books, including New York, Michigan and California, host a multi-tiered search function.<sup>32</sup>

Some states such as Ohio, Delaware and Illinois also provide a “most common searches” feature, allowing citizens with those questions to access information quickly, while providing information regarding popular uses of websites for researchers. (See Figure 1.)

### **Weaknesses of the Least Usable Websites**

Some states that host a multi-tiered search function make it difficult for users to find and use. Minnesota’s website, for example, offers users five search options, only one of which eventually allows for further refinement within the search term.

Some states, however, fall short of providing a fully functional search feature. Wyoming, for instance, requires users to search by vendor name before being able to access any other expenditure information. North Carolina similarly requires users to search by fund first, forcing citizens to use a search criterion with which they are likely to be less familiar than more common pieces of information such as an agency or department name. Other states lack a search function altogether, such as Missouri, which only offers users lists of categories and no search bar to sort through the information.

## **Expenditures: Itemization, Descriptions, and Subtotals**

If a curious citizen wants to know how much her governor spent on travel last year, having a state checkbook with clear expenditure descriptions is essential. For a transparency website to be usable, checkbooks need to provide users with intuitive

descriptions of individual state expenditures that are reasonably itemized, and to sum them so users don’t have to add the total of every individual check with “travel” in the memo line to know how much was spent in that category.

### **Features of the Most Usable Websites**

Almost all state checkbooks provide some level of itemization of state expenditures. More than half of state checkbooks also include the automatic generation of subtotals for spending by department or expenditure category; currently, 34 states host this feature, including Alabama, South Carolina and Indiana.

### **Weaknesses of the Least Usable Websites**

While almost all state checkbooks provide some level of itemization by expenditure type, not all states do so in a way that enhances the experience of using the online checkbook. Some states only provide users with relatively broad expenditure descriptions; any user trying to find how much a department in Washington state spent on office supplies would only be able to get as specific as the category “Goods and Services.” Similarly, the Rhode Island site prompted one focus group researcher to remark, “There is nothing breaking down the operating costs into smaller categories – all there is is a really long list of vendors, and no way to know what they received payments for.”

However, our researchers also found there is such a thing as categories that are too specific. Florida’s general search function only allows users to search by broad expenditure types, while the advanced search function provides users with a level of category detail so overly specific as to render the site all but unus-

**Figure 2. Florida’s Search Categories Are Too Specific**

Commodity/Service Type (Contract & Purchase Order Only) 1 selected

Lookup [Download](#) [Download Crosswalk](#)

- Non GMO barberry purees
- Non GMO bayberries and myrtles
- Non GMO bayberry and myrtle purees
- Non GMO bean purees
- Non GMO beans
- Non GMO bearberries
- Non GMO bearberry purees

able. If a citizen wanted to find how much the House of Representatives spent on food, for instance, he would either have to sift through a list of expenditures under “Travel and Food and Lodging and Entertainment Services” or use the advanced search function to conduct hundreds of individual searches by specific foods and preparation types, including canned, pureed or frozen foods. (See Figure 2.)

Extreme itemization can prove particularly difficult in state checkbooks that do not offer a subtotal function. For instance, users can find how much any given department in Montana spends on travel,

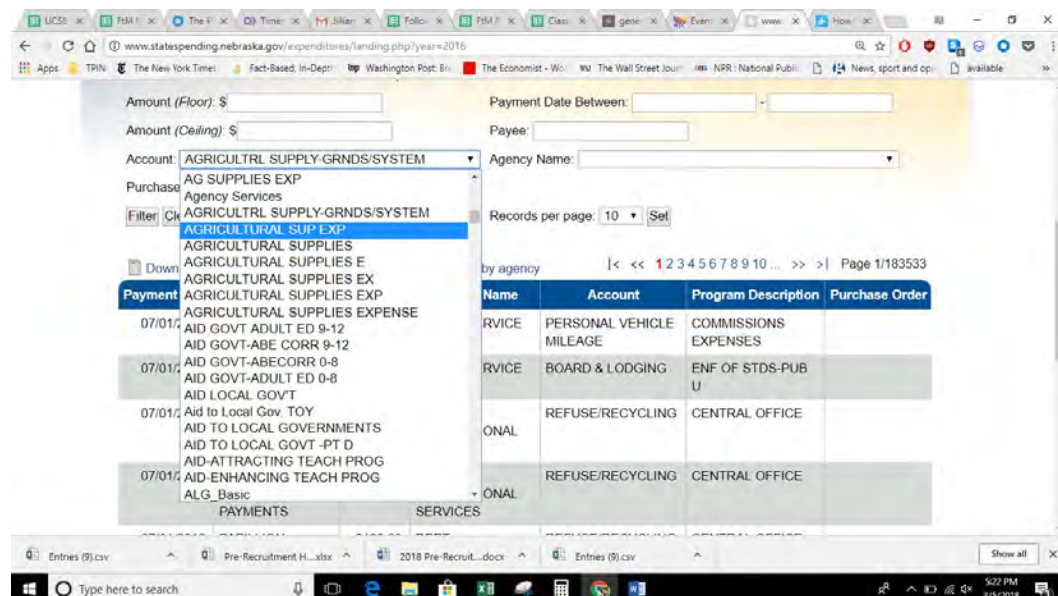
but the site offers over 50 travel-related categories, and no subtotal feature to help users determine overall postage expenditures. Said a focus group researcher of Montana’s site, “This website would be more helpful with more general ways to summarize the data, as well as the ability to easily add together different entries.” (See Figure 3.) There are 16 states that do not offer a subtotal feature in their checkbook, including Maryland, Tennessee and Oregon.<sup>33</sup>

Some states also provide duplicative expenditure categories that make it difficult for users to know which category will yield

**Figure 3. Montana Separates Travel Expenditures into Over 50 Categories**

Category	Payee
(All)	
<input checked="" type="checkbox"/> TRAVEL - OUT-OF-STATE COMMERCIAL TRANS	
<input checked="" type="checkbox"/> TRAVEL - OUT-OF-STATE FIRE MEALS	
<input checked="" type="checkbox"/> TRAVEL - OUT-OF-STATE LODGING	
<input checked="" type="checkbox"/> TRAVEL - OUT-OF-STATE LODGING-TRAINING	
<input checked="" type="checkbox"/> TRAVEL - OUT-OF-STATE MEALS	
<input checked="" type="checkbox"/> TRAVEL - OUT-OF-STATE MEALS OVRNIT-TRNG	
<input checked="" type="checkbox"/> TRAVEL - OUT-OF-STATE MEALS-OVERNIGHT	
<input checked="" type="checkbox"/> TRAVEL - OUT-OF-STATE MEALS-TRAINING	
<input checked="" type="checkbox"/> TRAVEL - OUT-OF-STATE MOTOR POOL-TRNG	
<input checked="" type="checkbox"/> TRAVEL - OUT-OF-STATE NO RECEIPT LODG	
<input checked="" type="checkbox"/> TRAVEL - OUT-OF-STATE OTHER	
<input checked="" type="checkbox"/> TRAVEL - OUT-OF-STATE OTHER-TRAINING	
<input checked="" type="checkbox"/> TRAVEL - OUT-OF-STATE PERS CAR MIL-TRNG	
<input checked="" type="checkbox"/> TRAVEL - OUT-OF-STATE PERSONAL CAR MLGE	

**Figure 4. Because Nebraska's Expenditure Categories Lack Standardization, There Are Seven Ways to Search for "Agricultural Expense"**



results for any given department. This can be a result of departments using their own accounting software and expenditure descriptions that are then pulled into the state checkbook without further standardization. For instance, a citizen searching for how much the state of Nebraska spent on security will have to conduct at least eight searches using expenditure tags that may spell out the word “and” or use an ampersand; spell out the word “security” or shorten it as “sec,” “secur” or “securit”; or start with the word “security” or be preceded by the term “law enforcement” instead. (See Figure 4.)

Many states face some standardization problems, as character limits on some sites lead states to spell out the word “department” in some cases, shorten it to “dept” or drop the word from the agency description altogether. In addition, some states seem to have departments that require manual entry of expenditure category descriptors, resulting in misspellings such as “training” found in the Nebraska checkbook, or “maintenace” found in Montana’s.

## Checkbook Interface

The quality of the interface of a state financial transparency website shapes how useful a citizen will find a site to be. Some website platforms such as OpenBook, the website template used by high-performing states such as Arizona and Massachusetts, provide useful interface tools such as data visualization and are viewable on any browser. Some states with unique site designs are working to provide these kinds of features as well.

## Features of Most Usable Websites

Increasingly, states are providing their financial information on platforms that enable users to easily view spending information and contextualize that data with visualization tools. States such as Ohio, West Virginia and Delaware all provide responsive charts and graphs that show spending information for departments and categories as users navigate through the site. Researchers frequently commented on the inclusion of charts on state

Figure 5. Kentucky's Checkbook Tool Provides the Previous Year's Expenditure Information

Transparency.ky.gov

Item	# Vendor Record	Amount	YOY%	Previous Year
<a href="#">PHOTOGRAPHIC &amp; RELATD SUPPLIES</a>	17	\$43,176.93	298.99%	\$10,821.34
<a href="#">JANITORIAL &amp; MAINTEN SUPPLIES</a>	67	\$18,911.61	24.56%	\$15,182.13
<a href="#">OFFICE SUPPLIES</a>	58	\$13,764.32	19.95%	\$11,474.64
<a href="#">BUILDING MATERIALS &amp; SUPPLIES</a>	27	\$13,324.56	187.93%	\$4,627.64
<a href="#">CHEMICALS &amp; LABRATORY SUPPLIES</a>	11	\$5,439.60	97.22%	\$2,758.00
<a href="#">HOUSEHOLD AND KITCHEN SUPPLIES</a>	9	\$5,312.69	114.95%	\$2,471.53
<a href="#">MECH MAINT MATERIALS &amp; SUPPLS</a>	4	\$3,121.98	N/A	N/A
<a href="#">CLOTHING &amp; PERS SUPP-NON-EMP</a>	2	\$1,467.00	-35.71%	\$2,281.86
<a href="#">OTHER SUPPLIES AND PARTS</a>	2	\$1,066.11	N/A	N/A
<a href="#">REC/ATH/THEAT/MUSICAL SUPPLIES</a>	3	\$598.90	49.91%	\$399.48

Export Records

websites; one researcher commented she thought the charts on Ohio's site were "lovely" while another said of West Virginia, "Good charts! Love the data visualization of this website."

Some states have started to incorporate other kinds of contextualizing features as well. For instance, any expenditure search conducted on the Kansas or Kentucky sites automatically generates the amount the state spent on that expenditure in the previous fiscal year, providing a quick comparison for site users. (See Figure 5.) Louisiana also provides users with the agency's budget for each expenditure category to better contextualize spending information.

Another feature of usable sites is the ability to access them using standalone browser software without requiring the user to download additional programs such as Adobe Flash to be able to interact with the online checkbook tool. Transparency sites should also work towards operating equally well on all web browsers. While some sites such as Missouri and In-

diana are primarily accessed by users using Internet Explorer, others, such as Washington state and Arizona, are accessed most often on other web browsers, like Chrome. User preferences may change; in 2016, South Dakota's users most frequently logged on with Internet Explorer, but by the next year, the preference had changed to Chrome.<sup>34</sup> By designing transparency websites that are accessible on all browsers, states can help ensure their websites remain available as user preferences change.

Another important step states can take towards increased usability is making their transparency websites accessible on all devices. Many states have witnessed rising use of mobile devices to access their websites, including Mississippi, Washington state and Montana. From 2016 to 2017, Nebraska witnessed an 8 percent jump in the share of users accessing the site using a mobile device, adding Nebraska to the list of states in which mobile device use accounts for nearly a third of site traffic, along with Minnesota, Utah, Arizona and Ohio.<sup>35</sup>

## Weaknesses of Least Usable Websites

Many states' financial transparency websites are accessible from any browser. However, some states such as Oklahoma have particular browser requirements, and some state sites are prone to frequent error messages and glitches, such as those of Hawaii and New Hampshire. Other states require having Adobe Flash Player installed on a user's computer in order to use whole or part of the site; New Mexico and North Carolina both require Flash to view the transparency checkbook, while Louisiana and Tennessee require Flash to view any of the site's charts and graphs. With Adobe's announced plans to discontinue the software in 2020 – brought on in part by companies such as Apple, Mozilla and Google limiting or banning Flash on their platforms outright, citing continual security issues – states with transparency sites dependent on Flash should find alternatives.<sup>36</sup>

Some transparency website platforms are less intuitive than others, and some require significantly longer loading times to view information, making efficient

use of the website difficult. For example, the website platform used by Colorado, Maine and Utah produces very slow search results, particularly when attempting to load the information of a department with a large budget and lots of expenditures. Pennsylvania's site also proved very slow to load information, generating a list of reports by alphabetical order for each search attempt.

Some interfaces included features that made certain parts of the websites difficult to use. For example, the filter function on Oregon's site allows users to view a complete list of agencies and expenditure categories, but only displays the first 15 letters of the selected list items, while also requiring that the user's mouse be hovering over the list at all times to remain viewable. (See Figure 6.) The site proved somewhat frustrating for researchers; "I can't imagine my mother being able to use this," one commented.

State checkbooks that require clicking through many levels of information to reach certain expenditures or lots of scrolling to view information proved more difficult to use as well. Some states

**Figure 6. Oregon's Filter Function Provides Limited Viewability**

The screenshot shows a web interface for Oregon's transparency website. At the top, there's a search bar with the text "correction" and a "Revert" button. Below the search bar, there's a navigation bar with buttons for "Manage", "More Views", "Filter", "Visualize", "Export", "Discuss", and "Email". The main content area displays a table with columns: "TLE", "COMPT\_OBJ", "COMPT\_OBJ\_TITLE", "VENDOR\_STATE", and "VENDOR\_NAME". The table lists various agencies and their expenditures. A dropdown menu is open over the "COMPT\_OBJ\_TITLE" column, showing options: "Sort Ascending", "Sort Descending", "Filter This Column", and "Hide Column". The "Filter This Column" option is selected, and a list of department names is displayed, including "DEPARTMENT OF...", "DEPARTMENT OF...", "DEPARTMENT OF...", "DEPARTMENT OF...", "DEPARTMENT OF ENVIRONMENTAL QUALITY", "DEPARTMENT OF...", "DEPARTMENT OF...", and "DEPARTMENT OF...". The table rows show various agencies, including "OF HUMAN SERVICES", "SPEC PAYMENTS-MEDICAL SERVICES", "APPLIES", "INTEGRATED CLINIC", "MARION COUNTY CI", "NEVADA DEPARTME", "NORTHWEST FOOT", "OREGON CORRECT", and "OREGON CORRECT". At the bottom, there's a footer with links for "Data & Moderation Policy", "Suggest A Dataset", "Socrata Terms of Service", and "Socrata Privacy Policy". The page is powered by Socrata.

that nest their checkbook-level expenditures inside a small frame within the current window as opposed to opening a new window required more scrolling to view expenditures. Some states also allow site visitors to view only a limited number of checkbook entries at a time; New Hampshire's checkbook displays only 20 items of any list at once, while Florida's checkbook only displays 10 expenditure entries. Especially given both sites' lack of a fully functional subtotal function, users may find it nearly impossible to glean use-

ful summary-level information about the state's spending.

Some interfaces were simply less polished than modern web users have come to expect, and as a result proved less intuitive for researchers to use than other sites. Mississippi's interface, for example, requires site visitors to enter prompts into a complex command box before viewing any information on the site. One researcher said of the site, "I consider myself a pretty smart person, but this site is impossible for me to figure out."

# New and Notable Features Help the Public to “Follow the Money”

Over the past two years, several states have added new features or practices to improve transparency. They have revamped their websites or added datasets giving citizens a new or enhanced ability to view, analyze, monitor and influence how their government allocates resources.

## New or Overhauled Websites

Several states have greatly improved their transparency websites in the past two years by posting new data, improving the user experience or making existing transparency tools more user-friendly. Both Arizona and Delaware launched new and more user-friendly checkbook portals since 2016. Despite this year’s tighter grading criteria, ten states improved their scores from 2016: Alaska, Arizona, California, Delaware, Idaho, Minnesota, Nevada, North Dakota, South Carolina and West Virginia.

### West Virginia

Making its debut on the list of Leading States, West Virginia has made its checkbook-level spending data fully download-

able and added a dedicated page to listing the state’s quasi-public agencies. The state has also begun posting or linking to more information on its economic development subsidies.

### California

Since 2016, California has added full searchability features to its transparency checkbook. The state also has begun to link to some information on its economic development subsidy programs from its main transparency website, making it easier for citizens to find valuable information without searching across bureaucratic silos.

## Cutting-Edge Practices

Other states have improved transparency through the adoption of cutting-edge practices, setting an example for other states to emulate.

### Providing a Platform for Local Government Transparency

More states now include data from localities, municipalities and school districts in their state transparency portals. By working with these

local entities, states such as Arizona and Massachusetts are pulling the curtain back on the spending that hits closest to home for ordinary citizens. Often, the barriers to launching local transparency websites – such as cost and staff availability – can be high for smaller governmental bodies. By making the framework for a functional transparency website available to smaller governmental entities, these states are helping to shed a light on local spending. Utah's transparency website, for example, includes more than 898 million records for 860 smaller government entities. These data are submitted by counties, cities, towns, school districts, charter schools, institutions of higher education, and special and local districts.<sup>37</sup>

Ohio has also made significant progress towards incorporating the state's 3,962 local government entities into its online checkbook.

Ohio Treasurer Josh Mandel sent a letter to 18,062 local government and school officials throughout the state calling on them to place their checkbook level data on OhioCheckbook.com and extending an invitation to partner with his office at no cost to local governments. Since then, the Ohio Treasurer's office has worked closely with local government officials, including holding trainings for new financial officers on how to get the most out of their accounting systems and working with software providers to make respective governments' reporting systems compatible with the state checkbook's software. Currently, more than 970 local governments post their finances to the state's checkbook, and an additional 400 governments have committed to working with the Treasurer's office to post their financials on the state's site in the next year.<sup>38</sup>

## With a Little Creativity, Local Governments Are Overcoming Barriers in Ohio

As the Ohio Treasurer's office has worked with local governments to post their financials on the state checkbook site, officials have faced some significant barriers. For instance, few smaller government entities even had financial software with which the team could coordinate reporting systems. Some kept important financial data in paper records, requiring a level of effort to even digitize the records that would have been prohibitive for towns given their existing staff resources.

Overcoming these barriers has required inventive solutions. When the township of Chagrin Falls decided to join the state checkbook, they first needed to digitize their hand-written paper ledgers – something they accomplished by partnering with the local high school, where students helped input the township's expenses into an Excel workbook. Chagrin Falls now hosts two full years of expenditures on Ohio's website.<sup>39</sup>

Providing online access to local government budget and spending data isn't always easy. But

with creativity, commitment and support from higher levels of government, there is no reason that citizens should not have data on how their local governments spend money at their fingertips.



*Officials and students announcing Chagrin Falls Township's debut on the state's checkbook site at Chagrin Falls High School. From left to right: Mike Wise, Chagrin Falls official; Danielle Currey, Chagrin Falls High School student; Josh Mandel, Ohio Treasurer; Grace Hass-Hill, Chagrin Falls High School student; and John Finley, Chagrin Falls official. Photo provided by the Ohio Treasurer's office.*

## Adding Quasi-Public Agencies

Quasi-public agencies – government entities established by legislation that provide a specific public service – generally operate “off budget” with little oversight and few of the reporting standards required of other government agencies. Some states have incorporated reporting on the expenditures of quasi-public agencies into their state transparency portals.

With a webpage dedicated solely to quasi-public agencies, boards, authorities and commissions prominently featured on its transparency site, Michigan has joined the ranks of states such as Massachusetts, West Virginia, Oregon and Nebraska that are making financial information for at least some of their quasi-public agencies more accessible. In 2016, Nebraska passed a bill requiring all of the state’s quasi-public agencies to report financial information to the state treasurer for inclusion on the state transparency website.<sup>40</sup>

Special districts – a type of quasi-public agency that is not limited to providing services within a single state, but may instead serve any number of political subdivisions such as townships, counties, or even stretch across multiple states – inhabit a particularly murky corner of the government transparency landscape. The 2017 edition of *Following the Money* evaluated 79 special districts across the country on their basic financial transparency; of those, only seven met basic financial transparency standards.<sup>41</sup>

Some states have taken steps towards improving special district financial transparency. In 2013, Kentucky passed a bill to create a central reporting agency for special districts in the state. This agency, the Department of Local Governments, publishes a public portal of special district budget and spending information.<sup>42</sup> Ohio, too, has been focused on increasing the number of special districts that contribute their financial information to the state’s checkbook. Since 2015,

the Office of Public Affairs has worked with the state’s special districts to post their financials on the state’s website; as of March 2018, Ohio’s checkbook includes more than 120 special districts.<sup>43</sup>

Texas has taken particularly strong steps to improve special district financial transparency. The Comptroller’s Office rewards exemplary local spending transparency through its “Transparency Stars” program; of the seven leading special districts evaluated in 2017’s *Following the Money* report, three were from Texas and all three had received at least one Transparency Star from the Comptroller.<sup>44</sup> In 2017, Texas also passed a bill creating the Special Purpose District Information Database, an online hub of special district financial information and tax rates hosted on the state comptroller’s site that will be updated annually and available for public use. The database is expected to go live in September 2018.<sup>45</sup>

## Implementing GASB 77 for Improved Subsidy Transparency

In August 2015, the Governmental Accounting Standards Board (GASB), a body that develops standards for state and local accounting and financial reporting, adopted new guidelines requiring state governments to include in their Comprehensive Annual Financial Reports (CAFRs) information on the costs of economic development incentives, including forgone tax revenue, commitments made by subsidy recipients such as job creation or capital investment, and rules that establish “clawback” provisions if promises go unfulfilled.<sup>46</sup> Though the guidelines allow aggregate rather than company-specific reporting and do not require that the new data in CAFRs be easily accessible to the public, this step will nonetheless provide a standard format as the basis for better re-

porting. Of the 41 states that responded to our survey, 31 have already adopted these reporting guidelines in their most recent CAFRs available online.

## Citizen-Accessible Reports

Detailed financial documents such as the Comprehensive Annual Financial Report (CAFR) are essential transparency tools but can be overwhelming for readers without professional accounting experience. The Association for Government Accountants (AGA) developed the “citizen-centric reporting” (CCR) program in 2007, designed to provide guidelines for simplified financial statements intended for citizen use. The CCR format is now being leveraged by government entities at all levels to communicate clearly and simply with citizens about their government’s spending and performance. The AGA’s suggestions for these documents include a target length of about four pages for state entities, visualizations on the government’s progress towards meeting specific goals, and inclusion of easy-to-understand graphics of a government’s revenue and spending with an active link to more detailed financial information online.<sup>47</sup> Government agencies can submit their CCRs to AGA for review and receive comments and suggestions for improvement. Both Idaho and Texas have these kinds of reports available on their state transparency websites.<sup>48</sup>

However, there are multiple ways states can choose to publish their financial reports for citizen use. While we awarded credit to those states having received AGA recognition for their citizen-centric reports, and we modeled our own citizen-accessible criterion after some of the basic principles outlined by AGA’s program, states could also receive credit in this year’s *Following the Money* for posting other kinds of citizen-accessible financial reports.

For example, the Government Finance Officers Association awards governments for publication of a Popular Annual Financial Report (PAFR), a document that distills the state’s CAFR into a more accessible format.<sup>49</sup> States that currently offer PAFRs online include Virginia, Nevada, Illinois, North Carolina, Minnesota and New York. PAFRs also received credit for our citizen-accessible criterion, in addition to other states that have found different ways to present this data, such as a financial highlights report or, as Arizona provides, a financial highlights webpage with graphs intended to clearly illustrate government spending. (See “Usability Features” of the grading rubric in Appendix A for more details.)

## Improving Website Infrastructure for a Better User Experience

States are continuing to add features that make their websites more useful and intuitive for site users. Massachusetts, for example, recently upgraded the transparency website’s platform. The new cloud-based system has afforded the state many advantages, including automated data uploads that both free staff from manual maintenance and keep the site continuously up-to-date for users. In its first 17 months, Massachusetts’ new site surpassed one million views.<sup>50</sup> In 2017, Washington state implemented a new visualization software for its salary database. Previously, a site visitor may have needed to run multiple reports to access data across multiple institutions or years. With the new visualization capabilities, users can instead view and filter data to meet their needs in a single report. Since the new salary portal’s launch in September 2017, Washington notes that the number of individual reports run has decreased by 80 percent while the site’s views have increased 40 percent, suggesting a better experience for site visitors.<sup>51</sup>

# Continuing the Momentum toward Greater Transparency: How States Can Improve their Websites

Every year, many states take steps toward greater transparency, from incorporating more agencies into their checkbooks to making data easier to analyze. However, there remains room for further improvement, even for states with the highest scores.

## Core Checkbook

- Five states do not provide any details on the specific types of payments excluded from the checkbook. By providing details about the information that is excluded from the checkbook and the reason for the exclusion, states can allow citizens to have a better understanding of what information may exist but is inaccessible.
- The checkbooks in four states have a limited search feature that does not allow users to search by agency, keyword or vendor. Currently, 26 states do not offer a multi-tiered search function that allows users to search for both agency and keyword at the same time.
- Most websites fail to match the user-friendliness and intuitiveness common to Americans' everyday experience of the Internet, including, for example, the ability to easily compare data sets or graphs. The checkbooks of 16 states do not include a subtotal feature that easily allows users to determine total expenditure amounts for a particular category of expenditures over an entire year.
- States continue to expand the universe of data accounted for by their transparency portals. One important next step would be to support transparency efforts at the municipal and county levels and make spending data provided by those entities available through the state's transparency website. Ohio is a leader in this regard, already incorporating many localities into the central transparency site. Several other states have begun to explore options relating to local government transparency, including Wisconsin and West Virginia.

- No state provides a comprehensive list of government entities outside the standard state budget, though both Texas and Ohio are making progress in this regard.
- Ideally, states would incorporate expenditures of all quasi-governmental entities – even those that are entirely financially self-supporting – into the online checkbook, and a central registry of all such entities would be available for public reference. Some Leading States incorporate what they claim is a complete list of quasi-public agencies. Others include in their transparency sites those entities that receive direct allocations from the general state budget.
- Transparency websites should include details of spending by all public-private partnerships and their related public and private expenses, goals and deliverables. Several states have begun to work through the legal and logistical barriers that have prevented this type of data disclosure in the past. Earlier in 2018, legislation was introduced in the South Dakota House of Representatives that would improve the financial transparency of public-private partnerships.<sup>52</sup>
- Special districts are similarly left out of most state-level transparency efforts. As of 2012, there were more than 38,000 special districts in the U.S., making up over 40 percent of all state and local government entities.<sup>53</sup> With many possessing the power to spend and tax like municipalities but typically unconstrained by the spending and debt limits that apply to municipal governments, special districts should be included in government transparency efforts but

instead are often left in the shadows. Some states, including Texas, have plans to create comprehensive databases of special district spending and others should follow.

- Only 22 states currently offer some type of citizen-accessible financial report, a simplified document of the government's financial statements that is easy to understand and intended for citizen use.

## Economic Development Subsidies

- Only 33 states provide checkbook-level information on the recipients of the three currently active programs evaluated in this report. While many other states provide checkbook-level information for some of these programs, disclosure for all programs would provide greater transparency and accountability.
- Fourteen states do not provide any recipient-specific details on the benefits – either projected or actual – of economic development subsidies. Without this information, watchdog groups and concerned citizens cannot ensure that taxpayers are getting their money's worth from the subsidy programs.
- In 2018, legislation was introduced in the Indiana, Nebraska and Kansas legislatures to increase state reporting of the impacts of economic development subsidy programs. The Kansas bill would create a dedicated website disclosing incentive data such as job creation information and property tax exemptions going back to 2003.<sup>54</sup> The Nebraska bill would require that its online database of economic development incentives

include actual benefits realized and the amount of money clawed back for all programs since 2005.<sup>55</sup> The bill in Indiana would require a job creation and compliance report to be published on the state's transparency website detailing how much the state spends on incentives and the amount of money recaptured from businesses that have failed to meet state requirements.<sup>56</sup>

## **Tax Expenditure Reports**

- Four states do not provide tax expenditure reports that detail the impact on the state budget of tax credits, exemptions or deductions.

With continued progress toward online transparency, citizens will have greater opportunity to monitor government spending, including spending by “off budget” entities, and ensure that contracts with private companies are smart choices for the state.

# Appendix A: Methodology

Grades for the scorecard were determined by assigning points for information included on (or in some cases, linked to) a state’s transparency website or another government website that provides information on government spending. (See the “Criteria Descriptions and Point Allocation for the Scorecard” table on page 38 for a detailed description of the grading system.)

## What We Graded

We graded one website for each state. If states had a designated transparency website, that site was graded. If a state had more than one transparency website, we graded the transparency website that earned the highest score. If states lacked a designated transparency website, we graded the state website that earned the highest score.

The grades in this report reflect the status of state transparency websites as of February 2018, with the exception of cases in which state officials alerted us to oversights in our evaluation or informed us of changes that had been made to the websites prior to March 2018. In these cases, we confirmed the presence of the information pointed out by the state officials and gave appropriate credit for that information on our scorecard.

## How We Inventoried and Assessed the Websites

The researchers reviewed websites and corresponded with state officials as follows:

- During late January and early February 2018, our researchers evaluated every state transparency website based on the criteria laid forth in the “Criteria Descriptions and Point Allocation for the Scorecard” table of the methodology.
- In mid-February, state agencies administering transparency websites received our evaluation via e-mail and were asked to review it for accuracy by March 7, 2018. That deadline was extended for a few states that requested additional time.
- In late February and early March 2018, our researchers reviewed the state officials’ comments, followed up on potential discrepancies, and made adjustments to the scorecard as warranted. As necessary, our researchers continued to correspond with state officials clarifying the criteria and discussing websites’ features.

For the “Real World” test, each site was evaluated at least twice for the presence of the six expenditures in the state’s checkbook.

(See Table A-1.) If the two graders disagreed on the point allotment for an expenditure, a third researcher then also evaluated the checkbook for the expenditure and served as the tiebreaking grade. A total of 27 graders were involved in the grading of the “Real World” test. Due to the nature of this portion of the evaluation, designed to evaluate the usability of transparency websites, states were not given an opportunity to review their scores. Officials were alerted to the purpose of and methods to be used in the Real World evaluation during our initial contact with them in winter 2018.

**Table A-1. The Six “Real World” Expenditures**

Governor’s Office spending on travel
Department of Corrections spending on electricity
State Tourism Board spending on advertising
Public Pensions Office spending on postage
Department of Agriculture spending on motor fuel
Attorney General’s Office spending on contracted legal services



*Researchers evaluate state websites during a focus group in Denver, CO.*

## Calculating the Grades

States could receive a total of 100 points based on our core scoring rubric. Based on the points each state received, letter grades were assigned as listed in Table A-2.

**Table A-2. Grading Scale**

Score	Grade
97 to 100 points	A+
94 to 96 points	A
90 to 93 points	A-
87 to 89 points	B+
83 to 86 points	B
80 to 82 points	B-
75 to 79 points	C+
70 to 74 points	C
65 to 69 points	C-
60 to 64 points	D+
55 to 59 points	D
50 to 54 points	D-
1 to 49 points	F

States were given full credit for making particular categories of information available on their websites, regardless of whether we could ascertain if the data evaluated were complete. For example, if a state’s contract checkbook contains only a portion of the payments the state made to vendors through contracts, full credit was awarded.

To determine which subsidy programs to assess, our researchers used the Subsidy Tracker maintained by Good Jobs First, a non-partisan research group that promotes corporate and government accountability in economic development programs. For each state, our researchers evaluated the presence in the state checkbook of the three most costly programs included in Good Jobs First’s Subsidy Tracker for 2017. For states that did not have at least three subsidy programs avail-

able for that year, our researchers then included the largest subsidies in 2016, and then 2015. If states still did not have three unique subsidies after expanding the range of years to 2015, our researchers then selected the largest currently active subsidies that were included in the database from 2008-2014.

For all subsidy programs operating from 2008-2015 that were used in the evaluation, our researchers ensured that the programs remain active by:

- verifying inclusion of the program in the state's GASB 77 statement when available,
- identifying active application windows or 2017 economic development incentive reports on the state's economic development agency's website, or

- identifying a list of 2017 recipients on either the state's or economic development agency's website.

For states for which the Subsidy Tracker did not list three programs from 2008-2017, any programs included in the dataset that proved currently active using the above verification methods were graded. For states where this process failed to deliver three valid incentives, additional programs were located using the above resources. For programs selected due to inclusion in a state's GASB 77 statement, the costliest ones were selected for grading. For programs selected due to presence in other documents identified above, where actual reported cost information is not provided, programs with the highest cost ceiling as laid out in the program's description by either the state or the state's economic development agency were selected for grading.

# Criteria Descriptions and Point Allocation for the Scorecard

## Checkbook-Level Spending Features

Criteria	Description	Partial Credit	Points
Checkbook	A list or database of individual expenditures made to individual recipients.	No partial credit.	12
Searchable	Ability to search checkbook-level expenditures by recipient (e.g., contractor or vendor) name; by purchasing agency name; and by keyword (e.g., type of service, item purchased, or the paying government fund). Search features must be part of the checkbook tool.	4 points are awarded for searchability per identified criteria category.	12
Bulk Downloadable	The complete dataset – by year, quarter, or month – can be downloaded for data analysis (via xlsx, csv, xml, etc.).	2 points are awarded if a portion of the database is downloadable.	4

## Checkbook-Level Spending Information

Criteria	Description	Partial Credit	Points
Excluded Information	Statement about the specific types of transactions and/or government entities excluded from the checkbook.	2 points are awarded for a statement about more general types of excluded transactions and/or government entities.	4
Quasi-Public Agencies	Expenditures from all* quasi-public agencies are included in the checkbook, which enables search by agency making the purchase, or downloads that indicate purchasing agency. (*Based on states' claims that all are included, which we spot-checked for verification.)	If the checkbook includes some quasi-public agencies but excludes others, 4 points are awarded. States that also employ the best practice of maintaining a dedicated page for these agencies on their transparency portals, even if the page does not list all quasi-public agencies, receive 5 points.	6

## Checkbook "Real World" Test

Criteria	Description	Partial Credit	Points
Expenditure Check	<p>The following expenditures are present in the state's checkbook for the specific office in FY 2017. They are able to be viewed in the state's checkbook portal without downloading information and are able to be located in five minutes or less. To earn 3 points, the expenditures must be identified by the full-credit keyword or identified by related keywords that are able to be summed within the allowed five minutes. (See "'Real World' Test Rubric," below.)</p> <ul style="list-style-type: none"> <li>Amount the Governor's Office spent on travel</li> <li>Amount the Department of Corrections spent on electricity</li> <li>Amount the State Tourism Board spent on advertising</li> <li>Amount the Public Pensions Office spent on postage</li> <li>Amount the Department of Agriculture spent on motor fuel for vehicles</li> <li>Amount the Attorney General spent on contracted legal services</li> </ul>	<p>3 points are awarded for each expenditure present in the state's checkbook.</p> <p>1 point is awarded for expenditures that are present in the state's checkbook but are subsets of a larger, clearly related spending category, or are available only in constituent parts that are numerous enough they are not able to be summed in five minutes or less.</p>	18

## Usability Features

Criteria	Description	Partial Credit	Points
Multi-Tiered Search	The checkbook tool includes a search feature that allows users to either A) search for a department and an expenditure keyword simultaneously or B) conduct a secondary search for an expenditure within the parameters of a specific department.	No partial credit.	3
Subtotaling	The checkbook tool offers users a sum of how much a specific department spent in a given expenditure category.	No partial credit.	3
Citizen-Accessible Report	The website provides an analysis document of government finances included in a Comprehensive Annual Financial Report that is produced for public consumption, such as the Government Finance Officers Association's Popular Annual Financial Report or the Association of Government Accountants' Citizen-Centric Reporting. In order to qualify for points, these documents must provide information on the state's spending with at least five categories of itemization and be 35 pages or less in length. Full credit is awarded for states that provide this information through graphs or other visualizations that are hosted on one central webpage or portal.	No partial credit.	3

## Economic Development Subsidies

Criteria	Description	Partial Credit	Points
Checkbook-Level	A list or database of individual payments made through the three economic development subsidy programs selected for evaluation. Recipients must be named in order to receive credit (i.e., referring to a company with a numerical code, project number or some other identifier that is not the company name does not earn credit).	5 points if the payments made by one of the state's subsidy programs are available. 9 points if the payments made by two subsidy programs are available. 12 points if the payments made by the three subsidy programs are available.	12
Downloadable	Checkbook-level subsidy information can be downloaded for data analysis (via xlsx, csv, xml, etc.).	2 points if subsidy information is downloadable for one program. 3 points if subsidy information is downloadable for two programs. 4 points if subsidy information is downloadable for three programs.	4
Projected Public Benefits	The public benefits, such as the number of jobs, intended to be produced by specific private recipients of economic development subsidies (in the form of tax credits, grants or other types of programs) are included. Recipients must be named in order to receive credit (i.e., referring to a company with a numerical code, project number or some other identifier that is not the company name does not earn credit).	3 points if projected public benefits information is available for one program. 4 points if projected public benefits information is available for two programs. 5 points if projected public benefits information is available for three programs.	5
Actual Public Benefits	The public benefits, such as the number of jobs, actually produced by the specific private recipients of economic development subsidies (in the form of tax credits, grants or other types of programs) are included. Recipients must be named in order to receive credit (i.e., referring to a company with a numerical code, project number or some other identifier that is not the company name does not earn credit).	3 points if actual public benefits information is available for one program. 4 points if actual public benefits information is available for two programs. 5 points if actual public benefits information is available for three programs.	5

## Tax Expenditure Reports

Criteria	Description	Partial Credit	Points
Tax Expenditures from Multiple Years	The state's tax expenditure report is available from the transparency website.	6 points plus one additional point for every 12-month period detailed in the tax expenditure reports, excluding the most recent, for a maximum of 9 points. Two points docked if the most recent report available is from 2013 or earlier.	9

## “Real World” Test Rubric

Expenditure Type	Full-Credit Keywords	Related Keywords
Amount the Governor’s Office spent on travel	<ul style="list-style-type: none"> <li>• Travel</li> </ul>	<ul style="list-style-type: none"> <li>• Hotel/Motel/Lodging</li> <li>• Airfare</li> <li>• Meals</li> <li>• In State/Out of State</li> <li>• Overnight/NonOvernight</li> </ul>
Amount the Department of Corrections spent on electricity	<ul style="list-style-type: none"> <li>• Electricity</li> </ul>	<ul style="list-style-type: none"> <li>• Energy</li> <li>• Utilities</li> </ul>
Amount the State Tourism Board spent on advertising	<ul style="list-style-type: none"> <li>• Advertising</li> <li>• Marketing</li> <li>• Publicity</li> <li>• Promotion</li> </ul>	<ul style="list-style-type: none"> <li>• TV Media</li> <li>• Radio Media</li> <li>• Print Media</li> <li>• Ad Agency Fee</li> </ul>
Amount the Public Pensions Office spent on postage	<ul style="list-style-type: none"> <li>• Postage</li> <li>• Mail Services</li> <li>• Shipping</li> </ul>	<ul style="list-style-type: none"> <li>• Post Office Box Rental</li> <li>• Courier Service</li> <li>• Stamps</li> <li>• Freight</li> </ul> <p>Or, report the expenditure for one of the constituent pension administration groups</p>
Amount the Department of Agriculture spent on motor fuel for vehicles	<p>Specified for automobile or vehicle use:</p> <ul style="list-style-type: none"> <li>• Fuel</li> <li>• Gasoline</li> <li>• Diesel</li> <li>• Petroleum</li> </ul>	<p>Without specification, or grouped with air or water craft:</p> <ul style="list-style-type: none"> <li>• Fuel</li> <li>• Gasoline</li> <li>• Diesel</li> <li>• Petroleum</li> </ul>
Amount the Attorney General spent on contracted legal services	<p>Specified as professional, contractual or outside services:</p> <ul style="list-style-type: none"> <li>• Attorneys</li> <li>• Lawyers</li> </ul> <p>Or without specification:</p> <ul style="list-style-type: none"> <li>• Legal Services</li> </ul>	<p>Without specification:</p> <ul style="list-style-type: none"> <li>• Attorneys</li> <li>• Lawyers</li> </ul>

## State-by-State Scoring Explanations

Below is a state-by-state list of explanations for point allocations beyond the information provided in the expanded scorecard in Appendix B.

**Alaska:** No points were awarded for the projected or actual public benefit data of the economic development subsidies, as the information is not recipient-specific and instead is based on categories of savings and jobs created.

**Colorado:** No points were awarded for a multi-tiered search function in the checkbook as researchers were unable to confirm the presence of this feature due to slow site functionality. Other states using the same online platform also received no points, as researchers were unable to confirm this feature on any of the sites.

**Connecticut:** While the state's checkbook appears to contain five individual tourism programs, researchers were unable to locate a central tourism office in the state's checkbook, and none of the five programs had any expenditure data for 2017, earning the state no points for the real world criterion of how much the state tourism board spent on advertising.

**Florida:** (1) No points were awarded for a multi-tiered search function as the checkbook portal only allows simultaneous or nested searches of the broadest expenditure types and not more specific types of expenditures. (2) No points were awarded for a subtotaling feature as the only expenditures the site automatically sums for users are the amount a particular vendor was paid for an expenditure type, while the amount that a department paid overall for an expenditure type had to be manually summed.

**Georgia:** One point was awarded for the Real World criterion of the amount that the Governor's Office spent on travel as the high level of itemization in this category made it impossible for researchers to sum the expenses within five minutes.

**Hawaii:** (1) No points were awarded for the six Real World expenditures as the most recent fiscal year of data available on the checkbook site was 2016. (2) No points were awarded for a multi-tiered search function as this feature was not operational on either of the two dates the site was evaluated.

**Idaho:** The checkbook earned four of a possible twelve points for searchability as it lacks the ability to search by vendor or keyword.

**Indiana:** (1) Seven points were awarded for Tax Expenditure Reports as the most recent report available was from 2013. (2) While Indiana's transparency website publishes a number of standalone pieces of information that could be incorporated into a citizen-accessible report, these features received no credit for the citizen-accessible criterion as they are scattered across multiple pages of the site, as opposed to compiled in a single, easy-to-read report.

**Iowa:** (1) Full credit was awarded for quasi-public agency inclusion. While it is possible that there are quasi-public entities in Iowa that are not included in the state's online checkbook, none could be identified. (2) One point was awarded for the Real World criterion of the amount that the Department of Corrections spent on electricity as all the component institutions in the correctional system are listed separately with no centralized sum of electricity spending, making it impossible for researchers to sum within five minutes.

**Kansas:** While Kansas' transparency website publishes graphs that could be incorporated into a citizen-accessible report, the feature received no credit for this criterion as it failed to provide a useful level of itemization for citizens to understand their state's spending.

**Maine:** No points were awarded for a multi-tiered search function in the checkbook as researchers were unable to confirm the presence of this feature due to slow site functionality. Other states using the same online platform also received no points, as researchers were unable to confirm this feature on any of the sites.

**Maryland:** (1) Full credit was awarded for quasi-public agency inclusion. While it is possible that there are quasi-public entities in Maryland that are not included in the state's online checkbook, none could be identified. (2) The checkbook earned only eight of a possible twelve points for searchability as it lacks the ability to search by keyword or fund.

**Michigan:** (1) Governor Rick Snyder signed legislation ending the Film and Digital Media Tax Credit on July 10, 2015. However, the film office has continued to track and satisfy existing contracts. As a result, the program was included in our evaluation of the state's economic development subsidy programs. (2) Information provided on the Industrial Facilities Exemption did not receive credit for downloadability as it is only available for download as a pdf file. (3) While Michigan publishes a series of resources on state spending including MiDashboard, the feature received no credit for the citizen-accessible report criterion as it failed to provide a useful level of itemization for citizens to understand their state's spending. (4) Full credit was awarded for quasi-public agency inclusion. While it is pos-

sible that there are quasi-public entities in Michigan that are not included in the state's online checkbook, none could be identified.

**Missouri:** None of Missouri's economic development subsidies received points for downloadability as data was only downloadable as .txt files.

**Montana:** While Montana's transparency website includes a "CAFR at a Glance" tool with graphs on the state's revenue and spending, the feature received no credit for the citizen-accessible report criteria as it failed to provide a useful level of itemization for citizens to understand their state's spending.

**Nebraska:** Full credit was awarded for quasi-public agency inclusion. While it is possible that there are quasi-public entities in Nebraska that are not included in the state's online checkbook, none could be identified.

**New York:** Full credit was awarded for quasi-public agency inclusion. While it is possible that there are quasi-public entities in New York that are not included in the state's online checkbook, none could be identified.

**Oklahoma:** While the transparency website does appear to have a data-viewing portal allowing citizens to interact with spending information without downloading a file, none of our researchers were able to make this feature work, disqualifying the state from receiving points on the Real World test criteria.

**Oregon:** Full credit was awarded for quasi-public agency inclusion. While it is possible that there are quasi-public entities in Oregon that are not included in the state's online checkbook, none could be identified.

**Rhode Island:** No points were awarded for a subtotaling function as the checkbook only provides this feature a department's top five expenditure categories.

**South Dakota:** No points were awarded for the six Real World expenditures as the checkbook portal only allows users to view the current fiscal year's data; 2017 expenditures are present on the site but require a download to view.

**Utah:** (1) No points were awarded for a multi-tiered search function in the checkbook as researchers were unable to confirm the presence of this feature due to slow site functionality. Other states using the same online platform also received no points, as researchers were unable to confirm this feature on any of the sites. (2) Two of three economic development subsidy programs did not receive credit for projected public benefits or actual public benefits, as both programs reported this information without itemizing by recipient.

**Virginia:** (1) The checkbook earned only eight of a possible twelve points for searchability as it lacks the ability to search by vendor. (2) Full credit was awarded for quasi-public agency inclusion. While it is possible that there are quasi-public enti-

ties in Virginia that are not included in the state's online checkbook, none could be identified. (3) One point was awarded for the Real World criterion of the amount the State Tourism Board spent on advertising as the only advertising expense researchers were able to locate was the amount administered by the Authority's Tourism Promotion Program, which administers grants, and offers no further itemization as to what entities received these grants and what purpose these funds ultimately served.

**Wisconsin:** (1) Full credit was awarded for quasi-public agency inclusion. While it is possible that there are quasi-public entities in Wisconsin that are not included in the state's online checkbook, none could be identified. (2) While Wisconsin publishes a "Budget in Brief" document and a factsheet summarizing state finances, neither of these earned points for the citizen-accessible report criterion; the former document was over 90 pages in length, while the latter failed to provide a useful level of itemization for citizens to understand their state's spending.

**Wyoming:** Six points were awarded for Tax Expenditure Reports as the only report available was the 2017 report.

Below is a list of the subsidy programs assessed in each state and the criteria that were fulfilled. For descriptions of the criteria, see the previous section titled “Criteria Descriptions and Point Allocation for the Scorecard.”

- Alabama
  - Alabama Industrial Development Training: checkbook-level, downloadable
  - Investment Credit: no credit
  - Jobs Credit: no credit
- Alaska
  - Film Tax Credit: no credit
  - Oil and Gas Production Tax Credit: no credit
  - Minerals Exploration Tax Credit: no credit
- Arizona
  - Arizona Competes Fund: checkbook-level, downloadable, projected public benefits, actual public benefits
  - Arizona Innovation Challenge: checkbook-level, downloadable
  - Arizona Job Training Program: checkbook-level, downloadable
- Arkansas
  - Create Rebate Program: checkbook-level, downloadable
  - Business Industry Training Program: checkbook-level, downloadable
  - Governor’s Quick Action Closing Fund: checkbook-level, downloadable
- California
  - Film & Television Tax Credit Program 2.0: no credit
  - California Competes: no credit
  - Employment Training Panel: checkbook-level, projected public benefits, actual public benefits
- Colorado
  - Job Growth Incentive Tax Credit: checkbook-level, downloadable, projected public benefits
  - Existing Industry Training Program: checkbook-level, downloadable
  - Colorado First Training Program: checkbook-level, downloadable
- Connecticut
  - Manufacturing Assistance Act: checkbook-level, downloadable, projected public benefits, actual public benefits
  - Digital Media and Film Tax Credit: checkbook-level, downloadable, projected public benefits, actual public benefits
  - Small Business Express: checkbook-level, downloadable, projected public benefits, actual public benefits
- Delaware
  - Delaware Strategic Fund: checkbook-level, projected public benefits, actual public benefits
  - Blue Collar Training Grant: projected public benefits, actual public benefits
  - Industrial Revenue Bond: checkbook-level, projected public benefits, actual public benefits
- Florida
  - Film and Entertainment Incentive: checkbook-level, projected public benefits, actual public benefits
  - Qualified Target Industry Tax Refund: checkbook-level, downloadable, projected public benefits, actual public benefits
  - Quick Action Closing Fund: checkbook-level, downloadable, projected public benefits, actual public benefits

- Georgia
  - Economic Development, Growth and Expansion (EDGE) Fund: no credit
  - Regional Economic Business Assistance Program (REBA): no credit
  - Film, Television and Interactive Entertainment Tax Credit: no credit
- Hawaii
  - Hawaii Enterprise Zone Partnership: no credit
  - Motion Picture, Digital Media, and Film Production Income Tax Credit: no credit
  - Qualified High Technology Businesses: no credit
- Idaho
  - Workforce Development Training Fund: no credit
  - Business Advantage Tax Credits: no credit
  - Idaho Tax Reimbursement Incentive: checkbook-level, projected public benefits, actual public benefits
- Illinois
  - High Impact Business Designation: checkbook-level, projected public benefits, actual public benefits
  - Large Business Development Assistance Program: checkbook-level, projected public benefits, actual public benefits
  - Enterprise Zone Expanded Machinery and Equipment Sales Tax Exemption: checkbook-level, projected public benefits, actual public benefits
- Indiana
  - Economic Development for a Growing Economy: checkbook-level, downloadable, projected public benefits
  - Skills Enhancement Fund: checkbook-level, downloadable, projected public benefits
  - 21 Fund: checkbook-level, downloadable, projected public benefits
- Iowa
  - Research Activities Credit: checkbook-level, downloadable
  - Industrial New Jobs Training (260E): checkbook-level, downloadable, projected public benefits, actual public benefits
  - High Quality Jobs Program: checkbook-level, downloadable, projected public benefits, actual public benefits
- Kansas
  - Promoting Employment Across Kansas (PEAK): no credit
  - Job Creation Program Fund (JCF): checkbook-level, downloadable, projected public benefits
  - Kansas Industrial Retraining (KIR): no credit
- Kentucky
  - Kentucky Enterprise Initiative Act: checkbook-level, projected public benefits
  - Kentucky Business Investment Program: checkbook-level, projected public benefits
  - Kentucky Reinvestment Act: checkbook-level
- Louisiana
  - Industrial Tax Exemption: checkbook-level, downloadable, projected public benefits, actual public benefits
  - Quality Jobs Program: checkbook-level, downloadable, projected public benefits, actual public benefits
  - Enterprise Zone Program: checkbook-level, downloadable, projected public benefits, actual public benefits
- Maine
  - Business Equipment Tax Reimbursement (BETR): checkbook-level
  - Employment Tax Increment Financing: no credit
  - Pine Tree Development Zones: no credit

- Maryland
  - One Maryland Tax Credit: checkbook-level, downloadable, actual public benefits
  - Research and Development Tax Credit: checkbook-level, downloadable
  - MEDAAF-2 Local Economic Development Opportunities: checkbook-level, downloadable, actual public benefits
- Massachusetts
  - Economic Development Incentive Program: checkbook-level, downloadable
  - Historic Rehabilitation Tax Credit: checkbook-level, downloadable
  - Film Tax Credit: checkbook-level, downloadable
- Michigan
  - Business Development Program: checkbook-level, downloadable, projected public benefits, actual public benefits
  - Industrial Property Tax Abatement (or Industrial Facilities exemption): checkbook-level, projected public benefits, actual public benefits
  - Film and Digital Media Tax Credit: checkbook-level, downloadable, projected public benefits, actual public benefits
- Minnesota
  - Job Creation Fund: checkbook-level, downloadable, projected public benefits
  - Minnesota Investment Fund: checkbook-level, downloadable, projected public benefits
  - Job Opportunity Building Zones (JOBZ): checkbook-level, downloadable, projected public benefits, actual public benefits
- Mississippi
  - Tourism Rebate Program: checkbook-level, projected public benefits
  - Economic Development Highway Program: checkbook-level, actual public benefits
  - Investment Tax Credit: checkbook-level
- Missouri
  - Job Retention Training Program: checkbook-level
  - New Jobs Training Program: checkbook-level
  - Remediation Tax Credits (Brownfields): checkbook-level
- Montana
  - Big Sky Development Trust Fund: checkbook-level, downloadable
  - Montana Board of Research and Commercialization Technology: checkbook-level, downloadable
  - Primary Sector Workforce Training Grant Program: checkbook-level, downloadable
- Nebraska
  - Nebraska Advantage Act: checkbook-level, projected public benefits
  - Nebraska Advantage Rural Development Act: checkbook-level
  - Nebraska Advantage Job Training Program (also known as Nebraska Customized Job Training Advantage): checkbook-level, downloadable
- Nevada
  - Sales and Use Tax Abatement: checkbook-level, projected public benefits, actual public benefits
  - Personal Property Tax Abatement: checkbook-level, projected public benefits, actual public benefits
  - Catalyst Fund: checkbook-level, projected public benefits, actual public benefits

- New Hampshire
  - New Hampshire Job Training Fund: checkbook-level, projected public benefits
  - Economic Revitalization Zone: no credit
  - New Hampshire Research and Development Tax Credit: no credit
- New Jersey
  - Economic Redevelopment and Growth (ERG) Program: checkbook-level, projected public benefits
  - Grow New Jersey Assistance Program: checkbook-level, projected public benefits
  - Business Employment Incentive Program: checkbook-level, projected public benefits, actual public benefits
- New Mexico
  - Job Training Incentive Program: checkbook-level, projected public benefits, actual public benefits
  - Film Production Tax Credit: no credit
  - High-Wage Jobs Tax Credit: no credit
- New York
  - Brownfield Cleanup Program Tax Credit: checkbook-level, downloadable
  - Film Tax Credit Program: checkbook-level, actual public benefits
  - Empire Zones: checkbook-level, downloadable, actual public benefits
- North Carolina
  - One North Carolina Fund: checkbook-level, downloadable, projected public benefits, actual public benefits
  - Industrial Development Fund: checkbook-level, downloadable
  - Building Reuse Grant: no credit
- North Dakota
  - North Dakota Development Fund: checkbook-level
  - New Jobs Training: no credit
  - Renaissance Zone Program: no credit
- Ohio
  - Job Creation Tax Credit: checkbook-level, downloadable, projected public benefits, actual public benefits
  - Incumbent Workforce Training Voucher: checkbook-level, downloadable, projected public benefits, actual public benefits
  - Third Frontier: checkbook-level, downloadable, projected public benefits, actual public benefits
- Oklahoma
  - Exempt Manufacturing Reimbursements: checkbook-level
  - Oklahoma Investment/New Jobs Credit: checkbook-level, downloadable
  - Quality Jobs Incentive Payment: checkbook-level, downloadable
- Oregon
  - Enterprise Zone Program: checkbook-level, downloadable, projected public benefits, actual public benefits
  - Energy Incentive Program: checkbook-level, downloadable, projected public benefits, actual public benefits
  - Biomass Producer or Collector Tax Credit Program: checkbook-level, downloadable, projected public benefits, actual public benefits
- Pennsylvania
  - Job Creation Tax Credit: checkbook-level, projected public benefits
  - Pennsylvania First - Grant: checkbook-level, projected public benefits
  - Film Tax Credit: checkbook-level, projected public benefits

- Rhode Island
  - Jobs Development Act/Corporate Income Tax Reductions: checkbook-level, downloadable
  - Historic Preservation Tax Credit: checkbook-level, downloadable
  - Distressed Areas Economic Revitalization Act-Enterprise Zones: checkbook-level, downloadable
- South Carolina
  - Enterprise Zone Job Development Credit: checkbook-level, downloadable, projected public benefits
  - Film Production Incentives: no credit
  - Rural Infrastructure Fund: checkbook-level, downloadable, projected public benefits
- South Dakota
  - Dakota Seeds: checkbook-level, downloadable, projected public benefits
  - SDWorks: checkbook-level, downloadable, projected public benefits
  - Revolving Economic Development and Initiative (REDI) Fund: checkbook-level, downloadable, projected public benefits
- Tennessee
  - FastTrack Infrastructure Development Program: checkbook-level, projected public benefits
  - FastTrack Economic Development Program: checkbook-level, projected public benefits
  - FastTrack Job Training Assistance: checkbook-level, projected public benefits
- Texas
  - Texas Enterprise Fund: checkbook-level, projected public benefits, actual public benefits
  - Enterprise Zones: checkbook-level, projected public benefits, actual public benefits
  - Skills Development Fund: projected public benefits
- Utah
  - Economic Opportunity Incentive Fund: checkbook-level, downloadable, projected public benefits
  - Industrial Assistance Fund: checkbook-level, downloadable, projected public benefits
  - Enterprise Zone Program: no credit
- Vermont
  - Direct Loan Program: checkbook-level
  - Vermont Employment Growth Incentive (VEGI): checkbook-level, downloadable
  - Vermont Training Program: checkbook-level, projected public benefits
- Virginia
  - Commonwealth's Development Opportunity Fund: checkbook-level, downloadable
  - Tobacco Region Opportunity Fund: checkbook-level
  - Governor's Motion Picture Opportunity Fund: checkbook-level, downloadable
- Washington
  - High Technology Sales & Use Tax Deferral: checkbook-level
  - Aerospace Manufacturing Site Sales & Use Tax Exemption: checkbook-level
  - Data Center Sales & Use Tax Exemption: checkbook-level

- West Virginia
  - Film Tax Credit: checkbook-level, downloadable, projected public benefits, actual public benefits
  - Governor's Guaranteed Work Force Program: checkbook-level, downloadable, projected public benefits, actual public benefits
  - Economic Development Authority Direct Loan Program: checkbook-level, downloadable, projected public benefits, actual public benefits
- Wisconsin
  - Historic Preservation Tax Credit: checkbook-level, downloadable, projected public benefits, actual public benefits
  - Enterprise Zone: checkbook-level, downloadable, projected public benefits, actual public benefits
  - Qualified New Business Venture: checkbook-level, downloadable, projected public benefits, actual public benefits
- Wyoming
  - Economic Development Large Project Loan: no credit
  - Business Ready Community Grant: checkbook-level, actual public benefits
  - Managed Data Center Cost Reduction Program: no credit

# Appendix B: Transparency Scorecard

Criterion			Checkbook-level spending				
			Checkbook	Searchable (Recipient, Agency, Keyword)	Excluded Information	Bulk Downloadable	Quasi-Public Agencies
Detail	Grade	Total					
Max		100	12	12	4	4	6
Alabama	D	56	12	12	0	2	4
Alaska	F	46	12	12	4	4	5
Arizona	A-	93	12	12	4	4	6
Arkansas	B-	82	12	12	4	4	4
California	F	47	12	12	0	4	4
Colorado	C+	78	12	12	4	2	4
Connecticut	A-	93	12	12	4	4	5
Delaware	B-	80	12	12	0	4	4
Florida	C+	76	12	12	4	4	6
Georgia	D	57	12	12	4	2	4
Hawaii	F	48	12	12	4	4	4
Idaho	D	58	12	4	2	2	4
Illinois	B	84	12	12	4	4	4
Indiana	B	83	12	12	4	4	5
Iowa	A-	91	12	12	4	4	6
Kansas	C	73	12	12	4	4	4
Kentucky	B	85	12	12	4	4	4
Louisiana	A-	90	12	12	4	4	5
Maine	D+	62	12	12	4	4	4
Maryland	D+	63	12	8	4	4	6
Massachusetts	B-	80	12	12	4	4	5
Michigan	C+	78	12	12	4	4	6
Minnesota	A	94	12	12	4	4	4
Mississippi	D+	63	12	12	4	4	4
Missouri	D+	62	12	12	4	4	0
Montana	C-	69	12	12	4	4	6
Nebraska	B-	80	12	12	4	4	6
Nevada	B	85	12	12	4	4	4
New Hampshire	C	73	12	12	4	4	6
New Jersey	C-	67	12	12	0	4	4
New Mexico	C+	75	12	12	4	4	4
New York	C+	78	12	12	4	4	6
North Carolina	C+	76	12	12	4	4	4

Criterion			Checkbook-level spending				
			Checkbook	Searchable (Recipient, Agency, Keyword)	Excluded Information	Bulk Downloadable	Quasi-Public Agencies
Detail	Grade	Total					
<i>Max</i>		<i>100</i>	<i>12</i>	<i>12</i>	<i>4</i>	<i>4</i>	<i>6</i>
North Dakota	C-	68	12	12	4	4	4
Ohio	A+	98	12	12	4	4	6
Oklahoma	D+	60	12	12	4	4	4
Oregon	B-	81	12	12	4	4	6
Pennsylvania	C	73	12	12	4	0	4
Rhode Island	D	55	12	12	4	2	0
South Carolina	B+	87	12	12	4	4	6
South Dakota	C	72	12	12	4	4	4
Tennessee	D-	54	12	12	0	4	4
Texas	B-	82	12	12	4	4	4
Utah	C+	78	12	12	4	4	4
Vermont	C-	67	12	12	4	4	4
Virginia	C	74	12	8	4	4	6
Washington	C	71	12	12	4	4	6
West Virginia	A+	98	12	12	4	4	6
Wisconsin	A	94	12	12	4	4	6
Wyoming	F	35	12	0	2	0	4

Criterion	"Real World" Test					
	Governor's Office on Travel	Corrections on Electricity	Tourism Board on Advertising	Public Pensions Office on Postage	Dept. of Agriculture on Motor Fuel	Attorney General on Contracted Legal Services
<i>Max</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>
Alabama	3	3	3	3	1	3
Alaska	0	0	0	0	0	0
Arizona	3	3	3	3	0	3
Arkansas	3	3	3	3	3	3
California	0	0	0	0	1	0
Colorado	3	3	3	0	1	0
Connecticut	3	3	0	3	3	3
Delaware	3	1	3	3	1	3
Florida	1	3	0	0	0	0
Georgia	1	3	1	3	3	0
Hawaii	0	0	0	0	0	0
Idaho	3	3	0	3	1	1
Illinois	3	3	1	0	1	3

Criterion	"Real World" Test					
	Governor's Office on Travel	Corrections on Electricity	Tourism Board on Advertising	Public Pensions Office on Postage	Dept. of Agriculture on Motor Fuel	Attorney General on Contracted Legal Services
Max	3	3	3	3	3	3
Indiana	3	3	0	0	3	3
Iowa	3	1	3	3	3	1
Kansas	0	3	3	3	3	3
Kentucky	3	3	3	3	3	3
Louisiana	3	3	3	0	0	3
Maine	3	3	0	0	3	0
Maryland	0	0	0	0	0	0
Massachusetts	3	3	0	3	3	0
Michigan	0	0	0	0	0	0
Minnesota	3	1	3	3	3	3
Mississippi	0	0	0	0	0	0
Missouri	3	3	0	0	0	0
Montana	1	1	0	3	1	0
Nebraska	1	1	3	3	1	1
Nevada	3	1	3	3	1	1
New Hampshire	3	1	1	3	0	1
New Jersey	0	0	0	0	0	0
New Mexico	1	3	3	3	0	3
New York	3	0	0	0	0	0
North Carolina	3	0	0	3	1	0
North Dakota	3	3	0	3	3	3
Ohio	3	3	3	1	3	3
Oklahoma	0	0	0	0	0	0
Oregon	1	1	0	0	0	0
Pennsylvania	3	3	0	3	0	3
Rhode Island	0	0	0	0	0	0
South Carolina	3	3	3	3	3	3
South Dakota	0	0	0	0	0	0
Tennessee	1	1	0	0	0	0
Texas	3	3	0	3	1	3
Utah	3	1	1	3	3	0
Vermont	3	1	1	3	3	0
Virginia	3	1	1	3	1	1
Washington	3	0	0	0	0	0
West Virginia	3	3	3	3	1	3
Wisconsin	3	3	3	3	3	0
Wyoming	0	0	0	0	0	0

Criterion	Usability Features			Economic Development Subsidies			
	Subtotaling Function	Multi-Tiered Search Function	Citizen-Accessible Reporting	Checkbook-Level	Downloadable	Projected Public Benefits	Actual Public Benefits
Max	3	3	3	12	4	5	5
Alabama	3	0	0	5	2	0	0
Alaska	0	0	0	0	0	0	0
Arizona	3	3	3	12	4	3	3
Arkansas	3	0	0	12	4	0	0
California	0	3	0	5	0	3	3
Colorado	3	0	3	12	4	3	0
Connecticut	3	3	0	12	4	5	5
Delaware	3	3	0	9	0	5	5
Florida	0	0	0	12	3	5	5
Georgia	0	3	0	0	0	0	0
Hawaii	3	0	0	0	0	0	0
Idaho	0	0	3	5	0	3	3
Illinois	3	0	3	12	0	5	5
Indiana	3	3	0	12	4	5	0
Iowa	3	3	0	12	4	4	4
Kansas	3	0	0	5	2	3	0
Kentucky	3	3	0	12	0	4	0
Louisiana	3	0	3	12	4	5	5
Maine	3	0	0	5	0	0	0
Maryland	0	0	0	12	4	0	4
Massachusetts	3	3	0	12	4	0	0
Michigan	3	3	0	12	3	5	5
Minnesota	3	3	3	12	4	5	3
Mississippi	0	0	0	12	0	3	3
Missouri	3	0	0	12	0	0	0
Montana	0	0	0	12	4	0	0
Nebraska	3	0	3	12	2	3	0
Nevada	3	0	3	12	0	5	5
New Hampshire	3	3	3	5	0	3	0
New Jersey	3	3	0	12	0	5	3
New Mexico	3	3	0	5	0	3	3
New York	3	3	3	12	3	0	4
North Carolina	3	0	3	9	3	3	3
North Dakota	3	0	0	5	0	0	0
Ohio	3	3	3	12	4	5	5
Oklahoma	0	0	0	12	3	0	0
Oregon	0	3	3	12	4	5	5

Criterion	Usability Features			Economic Development Subsidies			
	Subtotaling Function	Multi-Tiered Search Function	Citizen-Accessible Reporting	Checkbook-Level	Downloadable	Projected Public Benefits	Actual Public Benefits
<i>Max</i>	3	3	3	12	4	5	5
Pennsylvania	3	0	0	12	0	5	0
Rhode Island	0	0	0	12	4	0	0
South Carolina	3	0	3	9	3	4	0
South Dakota	0	3	3	12	4	5	0
Tennessee	0	3	0	12	0	5	0
Texas	3	0	3	9	0	5	4
Utah	0	3	3	9	3	4	0
Vermont	0	3	0	12	2	3	0
Virginia	3	0	3	12	3	0	0
Washington	3	3	3	12	0	0	0
West Virginia	3	3	3	12	4	5	5
Wisconsin	3	3	0	12	4	5	5
Wyoming	0	0	3	5	0	0	3

Criterion	Tax Expenditure Reports	Website
	Score	
<i>Max</i>	9	
Alabama	0	<a href="http://www.open.alabama.gov/">http://www.open.alabama.gov/</a>
Alaska	9	<a href="http://doa.alaska.gov/dof/reports/transparency.html">http://doa.alaska.gov/dof/reports/transparency.html</a>
Arizona	9	<a href="http://openbooks.az.gov/">http://openbooks.az.gov/</a>
Arkansas	9	<a href="http://transparency.arkansas.gov/">http://transparency.arkansas.gov/</a>
California	0	<a href="http://www.dgs.ca.gov/">http://www.dgs.ca.gov/</a>
Colorado	9	<a href="https://www.colorado.gov/apps/oit/transparency/">https://www.colorado.gov/apps/oit/transparency/</a>
Connecticut	9	<a href="http://www.osc.ct.gov/openCT/">http://www.osc.ct.gov/openCT/</a>
Delaware	9	<a href="http://www.delaware.gov/topics/transparency">http://www.delaware.gov/topics/transparency</a>
Florida	9	<a href="http://www.myfloridacfo.com/Transparency">http://www.myfloridacfo.com/Transparency</a>
Georgia	9	<a href="http://www.open.georgia.gov/">http://www.open.georgia.gov/</a>
Hawaii	9	<a href="http://transparency.hawaii.gov/">http://transparency.hawaii.gov/</a>
Idaho	9	<a href="http://transparent.idaho.gov/">http://transparent.idaho.gov/</a>
Illinois	9	<a href="http://www.accountability.illinois.gov/">http://www.accountability.illinois.gov/</a>
Indiana	7	<a href="http://www.in.gov/itp/">http://www.in.gov/itp/</a>
Iowa	9	<a href="https://data.iowa.gov/">https://data.iowa.gov/</a>
Kansas	9	<a href="http://www.kanview.ks.gov/">http://www.kanview.ks.gov/</a>
Kentucky	9	<a href="https://transparency.ky.gov/">https://transparency.ky.gov/</a>
Louisiana	9	<a href="https://www.wcfprd.louisiana.gov/latrac/portal.cfm">https://www.wcfprd.louisiana.gov/latrac/portal.cfm</a>
Maine	9	<a href="http://opencheckbook.maine.gov/transparency/">http://opencheckbook.maine.gov/transparency/</a>
Maryland	9	<a href="http://www.spending.dbm.maryland.gov/">http://www.spending.dbm.maryland.gov/</a>

Criterion	Tax Expenditure Reports	Website
	Score	
Max	9	
Massachusetts	9	<a href="https://www.macomptroller.org/cthru">https://www.macomptroller.org/cthru</a>
Michigan	9	<a href="http://www.michigan.gov/openmichigan">http://www.michigan.gov/openmichigan</a>
Minnesota	9	<a href="https://mn.gov/mmb/transparency-mn/">https://mn.gov/mmb/transparency-mn/</a>
Mississippi	9	<a href="https://www.msegov.com/dfa/transparency/">https://www.msegov.com/dfa/transparency/</a>
Missouri	9	<a href="https://mapyourtaxes.mo.gov/MAP/Portal/Default.aspx">https://mapyourtaxes.mo.gov/MAP/Portal/Default.aspx</a>
Montana	9	<a href="http://transparency.mt.gov/">http://transparency.mt.gov/</a>
Nebraska	9	<a href="http://www.statespending.nebraska.gov/">http://www.statespending.nebraska.gov/</a>
Nevada	9	<a href="http://open.nv.gov/">http://open.nv.gov/</a>
New Hampshire	9	<a href="https://www.nh.gov/transparentnh/">https://www.nh.gov/transparentnh/</a>
New Jersey	9	<a href="http://www.yourmoney.nj.gov/">http://www.yourmoney.nj.gov/</a>
New Mexico	9	<a href="http://www.sunshineportalnm.com/">http://www.sunshineportalnm.com/</a>
New York	9	<a href="http://www.openbooknewyork.com/">http://www.openbooknewyork.com/</a>
North Carolina	9	<a href="https://www.nc.gov/government/open-budget">https://www.nc.gov/government/open-budget</a>
North Dakota	9	<a href="http://data.share.nd.gov/pr/">http://data.share.nd.gov/pr/</a>
Ohio	9	<a href="http://www.ohiotreasurer.gov/transparency/">http://www.ohiotreasurer.gov/transparency/</a>
Oklahoma	9	<a href="https://data.ok.gov/">https://data.ok.gov/</a>
Oregon	9	<a href="http://www.oregon.gov/transparency/">http://www.oregon.gov/transparency/</a>
Pennsylvania	9	<a href="http://pennwatch.pa.gov/">http://pennwatch.pa.gov/</a>
Rhode Island	9	<a href="http://www.transparency.ri.gov/">http://www.transparency.ri.gov/</a>
South Carolina	9	<a href="http://www.cg.sc.gov/fiscaltransparency/">http://www.cg.sc.gov/fiscaltransparency/</a>
South Dakota	9	<a href="http://www.open.sd.gov/">http://www.open.sd.gov/</a>
Tennessee	0	<a href="https://www.tn.gov/transparenttn.html">https://www.tn.gov/transparenttn.html</a>
Texas	9	<a href="https://comptroller.texas.gov/transparency/">https://comptroller.texas.gov/transparency/</a>
Utah	9	<a href="https://www.utah.gov/transparency/">https://www.utah.gov/transparency/</a>
Vermont	0	<a href="http://www.spotlight.vermont.gov/">http://www.spotlight.vermont.gov/</a>
Virginia	9	<a href="https://www.datapoint.apa.virginia.gov/">https://www.datapoint.apa.virginia.gov/</a>
Washington	9	<a href="http://www.fiscal.wa.gov/">http://www.fiscal.wa.gov/</a>
West Virginia	9	<a href="http://www.transparencywv.org/">http://www.transparencywv.org/</a>
Wisconsin	9	<a href="http://www.openbook.wi.gov/">http://www.openbook.wi.gov/</a>
Wyoming	6	<a href="http://ai.wyo.gov/home/transparency">http://ai.wyo.gov/home/transparency</a>

# Appendix C: List of Questions Posed to Transparency Website Officials

Our researchers sent a list of questions and an initial assessment of each state's transparency website to the officials responsible for their state's site and received responses from such officials in 34 states. Our researchers used the responses to ensure that the information gathered from the websites was up-to-date and to supplement the content of the report. Below is a list of questions posed to state officials:

1. Please find attached our initial inventory evaluating how well your state's transparency website provides online access to government spending data. A revised inventory will be used to calculate your state's grade in this year's annual study, *Following the Money 2018: How the 50 States Rate in Providing Online Access to Government Spending Data* released by the U.S. PIRG Education Fund and Frontier Group. **We seek your feedback by Wednesday, March 7th**, to ensure accuracy and to ensure your state's particular challenges and successes with implementing best practices are properly reflected in our report.

If you believe that our scoring gives less credit than appropriate, **please explain to us exactly how to find the feature so we can confirm it is on the website.** You can do so in the box marked "State Response" to the right of the inventory item. If you believe that our scoring gives more credit than appropriate, please also let us know. There is an appendix included at the end of the inventory for quick reference if you have immediate questions about a particular criterion.

2. For transparency sites to be of public value, it is important that citizens actually use them. As such, this year we would like to include a brief section about transparency portal web traffic. For the write-up, we would like to know the following:

**How many citizens logged on to your transparency portal's homepage (or the most visited webpage if it is different from the homepage) in each of the last two years (2016-2017)?** If you can offer more detailed information, such as additional years of web traffic data, we would appreci-

ate it. Other information we would be interested in knowing about includes: the most visited pages on your site; the locations from which visitors accessed your site (in-state, out-of-state, international); and the types of devices used to access your site (computer, phone, etc.). If you can provide any other interesting web traffic information that you feel would be valuable, feel free to share that with us as well.

3. **What actions has your state taken to implement GASB 77 standards or, if your state has not yet begun implementing these standards, what are your state's plans to implement them?** Many states will have already introduced these standards into their financial reporting. If this is the case for your state, please tell us as much. For those not familiar with GASB 77 standards, these standards seek to provide more information and greater clarity about the tax abatements that governments provide. Under this new guidance, governments are required to disclose the following information about the tax abatement agreements they have entered into: the purpose of the tax abatement program; the tax being abated; the dollar amount of taxes abated; the types of commitments made by tax abatement recipients; and, other commitments made by a government in tax abatement agreements, such as to build infrastructure assets.
4. While states have made great progress in improving government spending transparency and data accessibility, towns, cities, and localities have noticeably lagged behind. To close this gap, it is incumbent on states to offer as much help as possible. With that in mind, we ask the following: **What steps has your state taken to support transparency efforts at the municipal and county level? For example, has your state made efforts to make local-level data available on your state website or has your state helped municipal and county officials create their own transparency portals?** Additionally, as in 2016, we would be interested in getting state feedback about the barriers to this type of progress.
5. If you have launched a new transparency portal since 2016, please let us know the start-up cost of the website and the annual operating cost. If your portal has existed since before 2016, please let us know the annual operating cost.
6. Please let us know about any special circumstances or barriers to transparency progress your state faces.

# Appendix D: Agencies or Departments Responsible for Administering Transparency Websites by State

State	Who Is Responsible for the Transparency Website?	Transparency Website Address
Alabama	State Comptroller's Office, Department of Finance	<a href="http://www.open.alabama.gov/">http://www.open.alabama.gov/</a>
Alaska	Department of Administration, Office of Management and Budget	<a href="http://doa.alaska.gov/dof/reports/transparency.html">http://doa.alaska.gov/dof/reports/transparency.html</a> <a href="http://data.alaska.gov/">http://data.alaska.gov/</a>
Arizona	General Accounting Office, Department of Administration	<a href="http://openbooks.az.gov/">http://openbooks.az.gov/</a>
Arkansas	Department of Finance and Administration	<a href="http://transparency.arkansas.gov/">http://transparency.arkansas.gov/</a>
California	Department of General Services	<a href="http://www.dgs.ca.gov/">http://www.dgs.ca.gov/</a>
Colorado	Office of the State Controller, Department of Personnel and Administration	<a href="https://www.colorado.gov/apps/oit/transparency/">https://www.colorado.gov/apps/oit/transparency/</a>
Connecticut	Office of the State Comptroller	<a href="http://www.osc.ct.gov/openCT/">http://www.osc.ct.gov/openCT/</a>
Delaware	Cooperation between Office of Management and Budget, Government Information Center, and Department of Finance	<a href="http://www.delaware.gov/topics/transparency">http://www.delaware.gov/topics/transparency</a>
Florida	Department of Financial Services	<a href="http://www.myfloridacfo.com/Transparency">http://www.myfloridacfo.com/Transparency</a>
Georgia	Department of Audits and Accounts	<a href="http://www.open.georgia.gov/">http://www.open.georgia.gov/</a>
Hawaii	Office of Enterprise Technology Services (ETS)	<a href="http://transparency.hawaii.gov/">http://transparency.hawaii.gov/</a>
Idaho	Office of the State Controller	<a href="http://transparent.idaho.gov/">http://transparent.idaho.gov/</a>
Illinois	Department of Central Management Services	<a href="http://www.accountability.illinois.gov/">http://www.accountability.illinois.gov/</a>
Indiana	State Auditor's Office	<a href="http://www.in.gov/itp/">http://www.in.gov/itp/</a>
Iowa	Department of Management	<a href="https://data.iowa.gov/">https://data.iowa.gov/</a>
Kansas	Department of Administration	<a href="http://www.kanview.ks.gov/">http://www.kanview.ks.gov/</a>
Kentucky	Kentucky Finance and Administration Cabinet	<a href="https://transparency.ky.gov/">https://transparency.ky.gov/</a>
Louisiana	Division of Administration	<a href="https://wwwcfprd.doa.louisiana.gov/latrac/portal.cfm">https://wwwcfprd.doa.louisiana.gov/latrac/portal.cfm</a>
Maine	Office of the State Controller	<a href="http://opencheckbook.maine.gov/transparency/">http://opencheckbook.maine.gov/transparency/</a>
Maryland	Department of Budget and Management	<a href="http://www.spending.dbm.maryland.gov/">http://www.spending.dbm.maryland.gov/</a>
Massachusetts	Office of the State Comptroller	<a href="https://www.macomptroller.org/cthru">https://www.macomptroller.org/cthru</a>
Michigan	Office of Financial Management, State Budget Office, Department of Technology, Management and Budget	<a href="http://www.michigan.gov/openmichigan">http://www.michigan.gov/openmichigan</a>
Minnesota	Minnesota Management and Budget	<a href="https://mn.gov/mmb/transparency-mn/">https://mn.gov/mmb/transparency-mn/</a>

State	Who Is Responsible for the Transparency Website?	Transparency Website Address
Mississippi	Department of Finance and Administration	<a href="https://www.msegov.com/dfa/transparency/">https://www.msegov.com/dfa/transparency/</a>
Missouri	Office of Administration	<a href="https://mapyourtaxes.mo.gov/MAP/Portal/Default.aspx">https://mapyourtaxes.mo.gov/MAP/Portal/Default.aspx</a>
Montana	State Information Technology Services Division, Department of Administration	<a href="http://transparency.mt.gov/">http://transparency.mt.gov/</a>
Nebraska	State Treasurer's Office	<a href="http://www.statespending.nebraska.gov/">http://www.statespending.nebraska.gov/</a>
Nevada	Budget and Planning Division, Department of Administration	<a href="http://open.nv.gov/">http://open.nv.gov/</a>
New Hampshire	Department of Administrative Services and the Department of Information Technology	<a href="https://www.nh.gov/transparentnh/">https://www.nh.gov/transparentnh/</a>
New Jersey	Office of the Treasurer	<a href="http://www.yourmoney.nj.gov/">http://www.yourmoney.nj.gov/</a>
New Mexico	Department of Information Technology	<a href="http://www.sunshineportalnm.com/">http://www.sunshineportalnm.com/</a>
New York	Office of the State Comptroller	<a href="http://www.openbooknewyork.com/">http://www.openbooknewyork.com/</a>
North Carolina	Office of State Budget and Management (OSBM) with substantial help from the Department of Administration (DOA), the Office of the State Controller (OSC), and the Office of Information Technology Services (ITS)	<a href="http://www.ncopenbook.gov/">http://www.ncopenbook.gov/</a>
North Dakota	Office of Management and Budget	<a href="http://data.share.nd.gov/pr/Pages/home.aspx">http://data.share.nd.gov/pr/Pages/home.aspx</a>
Ohio	Office of the Ohio Treasurer	<a href="http://www.ohiotreasurer.gov/transparency/">http://www.ohiotreasurer.gov/transparency/</a>
Oklahoma	Office of Management and Enterprise Services	<a href="https://data.ok.gov/">https://data.ok.gov/</a>
Oregon	Office of the State Chief Information Officer	<a href="http://www.oregon.gov/transparency/">http://www.oregon.gov/transparency/</a>
Pennsylvania	Office of Administration	<a href="http://pennwatch.pa.gov/">http://pennwatch.pa.gov/</a>
Rhode Island	Department of Administration	<a href="http://www.transparency.ri.gov/">http://www.transparency.ri.gov/</a>
South Carolina	Comptroller General's Office	<a href="http://www.cg.sc.gov/fiscaltransparency/">http://www.cg.sc.gov/fiscaltransparency/</a>
South Dakota	Bureau of Finance and Management	<a href="http://www.open.sd.gov/">http://www.open.sd.gov/</a>
Tennessee	Department of Finance and Administration	<a href="https://www.tn.gov/transparenttn.html">https://www.tn.gov/transparenttn.html</a>
Texas	Comptroller of Public Accounts' Office	<a href="https://comptroller.texas.gov/transparency/">https://comptroller.texas.gov/transparency/</a>
Utah	Division of Finance, Department of Administrative Services	<a href="https://www.utah.gov/transparency/">https://www.utah.gov/transparency/</a>
Vermont	Department of Finance and Management	<a href="http://www.spotlight.vermont.gov/">http://www.spotlight.vermont.gov/</a>
Virginia	Auditor of Public Accounts	<a href="https://www.datapoint.apa.virginia.gov/">https://www.datapoint.apa.virginia.gov/</a>
Washington	Legislative Evaluation and Accountability Program and the Office of Financial Management	<a href="http://www.fiscal.wa.gov/">http://www.fiscal.wa.gov/</a>
West Virginia	State Auditor's Office	<a href="http://www.transparencylvv.org/">http://www.transparencylvv.org/</a>
Wisconsin	Division of Executive Budget and Finance, Department of Administration	<a href="http://www.openbook.wi.gov/">http://www.openbook.wi.gov/</a>
Wyoming	Department of Administration and Information	<a href="http://ai.wyo.gov/home/transparency">http://ai.wyo.gov/home/transparency</a>

# Endnotes

<sup>1</sup> This statistic contains web traffic data from 34 states. Alabama: Kathleen D. Baxter (State Comptroller), State Comptroller's Office, personal communication, 7 March 2018; Arizona: Amy Aeppli, General Accounting Office – Arizona Department of Administration, personal communication, 15 March 2018; Delaware: Dana Rohrbough, Government Information Center – Delaware Department of State, personal communication, 9 March 2018; Florida: Tanya McCarty, Florida Department of Financial Services, personal communication, 6 March 2018; Indiana: Staci Schneider, Office of the Auditor of State, personal communication, 5 March 2018; Iowa: Scott Vander Hart, Iowa Department of Management, personal communication, 9 March 2018; Louisiana: Richard “Dickie” Howze, Office of Technology Services – Division of Administration, personal communication, 7 March 2018; Maine: Phillip Platt, Office of the State Controller, personal communication, 12 March 2018; Maryland: Robin Sabatini, Department of Budget and Management – Office of Budget Analysis, personal communication, 8 March 2018; Massachusetts: Scott Olsen, Office of the State Comptroller, personal communication, 7 March 2018; Minnesota: Janelle Tummel, Minnesota Management and Budget, personal communication, 7 March 2018; Mississippi: Jenny Bearss, Department of Finance and Administration, personal communication 23 February 2018; Missouri: Libbie Farrell, Office of Administration – Division of Accounting, personal communication, 8 March 2018; Montana: Audrey Hinman, Montana Department of Administration, personal communication, 7 March 2018; Nebraska: Jason Walters, Nebraska State Treasurer's Office, personal communication, 7 March 2018;

New Hampshire: Chris Brantley, Administrative Services – Bureau of Accounting, personal communication, 7 March 2018; New Jersey: Christine Brilla Trappe, Office of Management and Budget, personal communication, 23 March 2018; New Mexico: Estevan Lujan, New Mexico Department of Information Technology, personal communication, 10 March 2018; New York: Nick Lado-poulos, Office of the State Comptroller, personal communication, 9 March 2018; North Dakota: Toby Mertz, Office of Management and Budget, personal communication, 7 March 2018; Oregon: Paula Newsome, Office of the Chief Information Officer, personal communication, 12 March 2018; Pennsylvania: Dan Egan, Office of Administration, personal communication, 7 March 2018; Rhode Island: Brenna McCabe, Department of Administration, personal communication, 19 March 2018; South Carolina: Eric Ward, South Carolina Comptroller General's Office, personal communication, 7 March 2018; South Dakota: Colin Keeler, Bureau of Finance and Management, personal communication, 5 March 2018; Tennessee: Lola Potter, Department of Finance and Administration, personal communication, 16 March 2018; Texas: Greg Conte, Texas Comptroller's Office, personal communication, 12 March 2018; Utah: Brenda Lee, Utah State Division of Finance, personal communication, 7 March 2018; Washington: Michael Mann, Legislative Evaluation & Accountability Program (LEAP) Committee, personal communication, 7 March 2018; West Virginia: Lou Ann Fauver, Office of the State Auditor, personal communication, 7 March 2018; Wisconsin: Steve Michels, Department of Administration, personal communication, 9 March 2018.

2 Seth Unger, Office of the Treasurer of Ohio, personal communication, 4 February 2016.

3 Jenny Bearss, Mississippi Department of Finance and Administration, personal communication, 14 February 2014.

4 R.J. Shealy, Spokesperson, South Carolina Comptroller General's Office, personal communication, 2 March 2010.

5 Beth Hallmark, Office of the Texas State Comptroller, personal communication, 27 January 2015.

6 Paul Louthian, Department of Finance and Administration, personal communications, 10 February 2014, 28 February 2014 and 29 January 2015.

7 Anita Ward, Office of State Budget and Management, personal communication, 28 January 2015.

8 Ohio Treasurer's Office, "Waste, Fraud & Abuse – Rebuilding Trust with OhioCheckbook.com", 2018.

9 South Carolina: Eric Ward, SC Comptroller General's Office, personal communication, 7 March 2018; Ohio: Chris Berry, Office of the Ohio Treasurer, personal communication, 7 March 2018.

10 Scott Olsen, Office of the State Comptroller, personal communication, 7 March 2018.

11 There is no standard methodology for estimating these initial investment and operational costs, and researchers could not ascertain the costs for some states. The sources of state cost estimates are as follows: Alabama: Mike Hudson, Office of the Alabama State Comptroller, personal communication, 27 January 2012; Alaska: Scot Arehart, Alaska Division of Finance, personal communication, 26 January 2012 and 29 January 2015; Arizona: Amy Aeppli, General Accounting Office – Arizona Department of Administration, personal communication, 15 March 2018; Arkansas: Paul Louthian, Arkansas Department of Finance and Administration, personal communication, 1 February 2013 and 29 January 2015; Colorado: Brent

Voge, Office of the State Controller, personal communication, 4 February 2016; Connecticut: Joshua Wojcik, Office of the State Comptroller, personal communication, 4 February 2016; Delaware: Dana Rohrbough, Government Information Center – Delaware Department of State, personal communication, 4 February 2016 and 9 March 2018; Florida: Christina Smith, Florida Department of Financial Services, personal communication, 4 February 2016 and Tanya McCarty, Florida Department of Financial Services, personal communication, 6 March 2018; Georgia: Lynn Bolton, Georgia Department of Audits, personal communication, 7 March 2018; Hawaii: Keith DeMello, Office of Enterprise Technology Services, personal communication, 4 February 2016; Idaho: Scott Phillips, Office of the Idaho State Controller, personal communication, 8 February 2013; Illinois: Markus Veile, Illinois Department of Central Management Services, personal communication, 2 February 2016; Iowa: Scott Vander Hart, Iowa Department of Management, personal communication, 4 February 2016 and 9 March 2018; Kansas: Bradley Elkins, Kansas Department of Administration, personal communication, 16 March 2018; Kentucky: Tony Hutchins, Finance and Administration Cabinet, personal communication, 25 January 2016; Louisiana: Richard "Dickie" Howze, Office of Technology Services – Division of Administration, personal communication, 7 March 2018; Maine: Phillip Platt, Office of the State Controller, personal communication, 4 February 2016 and 12 March 2018; Maryland: Robin Sabatini, Maryland Department of Budget and Management, personal communication, 4 February 2016 and 8 March 2018; Massachusetts: Scott Olsen, Office of the State Comptroller, personal communication, 7 March 2018; Michigan: Daniel Jaroche, Michigan Office of Financial Management, personal communication, 2 February 2016 and Shawna Hessling, Office of Financial Management, personal communication, 7 March 2018; Minnesota: John Pollard, Minnesota Management and Budget, personal communication, 4 February 2016 and Janelle Tummel, Minnesota Management and Budget, personal communication, 7 March 2018; Mississippi: Jenny Bearss, Mississippi Department of Finance and Administration, personal communication, 4 February 2016 and 23 February 2018; Missouri: Dwayne Rasmussen, Missouri Office of Administration,

personal communication, 4 February 2016, and Libbie Farrell, Office of Administration – Division of Accounting, personal communication, 8 March 2018; Montana: Audrey Hinman, Montana Department of Administration, personal communication, 3 February 2016 and 7 March 2018; Nebraska: Jason Walters, Nebraska State Treasurer’s Office, personal communications, 3 February 2016, and 7 March 2018; Nevada: Russell Cook, Nevada Department of Administration, personal communication, 4 February 2016; New Hampshire: Stephen McLocklin, New Hampshire Department of Administrative Services, personal communication, 4 February 2016 and Chris Brantley, Administrative Services – Bureau of Accounting, personal communication, 7 March 2018; New Jersey: Christine Brilla Trappe, New Jersey Office of the Treasurer, personal communication, 3 March 2016 and 23 March 2018; New Mexico: Estevan Lujan, New Mexico Department of Information Technology, personal communication, 4 February 2016; New York: Nick Ladopoulos, New York Office of the State Comptroller, personal communication, 4 February 2016; North Carolina: Jonathan Womer, North Carolina Office of State Budget and Management, personal communication, 27 January 2012, and Anita Ward, Office of State Budget and Management, personal communication, 28 January 2015; North Dakota: Toby Mertz, North Dakota Office of Management and Budget, personal communication, 2 February 2016 and 7 March 2018; Ohio: Chris Berry, Office of the Ohio Treasurer, personal communication, 7 March 2018; Oklahoma: Center for Fiscal Accountability, *Transparency in Government Spending: Cost vs. Savings*, downloaded from [www.fiscalaccountability.org/userfiles/cost&savings.pdf](http://www.fiscalaccountability.org/userfiles/cost&savings.pdf), 16 February 2012, and Lisa McKeithan, Office of Management & Enterprise Services, personal communication, 3 February 2016; Oregon: Paula Newsome, Office of the State CIO, 8 February 2016; Pennsylvania: Dan Egan, Pennsylvania Office of Administration, personal communication, 25 January 2016; Rhode Island: Treasury Online Checkbook, State of Rhode Island, Frequently Asked Questions, downloaded from [www.treasury.ri.gov/opengov/faq.php](http://www.treasury.ri.gov/opengov/faq.php), 14 September 2009, and Brenna McCabe, Department of Administration, personal communication, 19 March 2018; Eric Ward, South Carolina Comptroller General’s Office, personal communica-

tion, 7 March 2018; South Dakota: Colin Keeler, Bureau of Finance and Management, personal communication, 4 February 2016 and 5 March 2018; Tennessee: Lola Potter, Tennessee Department of Finance and Administration, personal communication, 8 February 2016; Texas: Hailey Wynn, Texas Comptroller of Public Accounts, personal communication, 29 January 2016, and Greg Conte, Texas Comptroller’s Office, personal communication, 12 March 2018; Utah: Brenda Lee, Utah Department of Finance, personal communication, 4 February 2016 and 7 March 2018; Vermont: Susan Zeller, Vermont Department of Finance and Management, personal communication, 3 February 2016; Virginia: April Cassada, Virginia Auditor’s Office, personal communication, 20 February 2018; Washington: Jerry Brito and Notes 55 Gabriel Okolski, Mercatus Center, George Mason University, *The Cost of State Online Spending Transparency Initiatives*, April 2009, and Michael Mann, Legislative Evaluation & Accountability Program (LEAP) Committee, personal communication, 7 March 2018; West Virginia: Lou Ann Fauver, Office of the State Auditor, personal communication, 7 March 2018; Wisconsin: Stephanie Marquis, Wisconsin Department of Administration, personal communication, 12 February 2014, and Steve Michels, Department of Administration, personal communication, 9 March 2018; Wyoming: Tim Thorson, Wyoming Department of Administration and Information, personal communication, 5 February 2016.

12 See note 1.

13 Chris Berry, Office of the Ohio Treasurer, personal communication, 7 March 2018.

14 New Jersey: Christine Brilla Trappe, New Jersey Office of the Treasurer, personal communication, 23 March 2018; Pennsylvania: Dan Egan, Pennsylvania Office of Administration, personal communication, 7 March 2018.

15 Justin Southern, West Virginia State Auditor’s Office, personal communication, 4 February 2016.

16 Michael Mann, Washington State Legislative Evaluation & Accountability Program (LEAP) Committee, personal communication, 7 March 2018.

17 According to one estimate, total state and local government procurement spending may total as much as \$1.5 trillion annually, per Danielle M. Conway, “Sustainable Procurement Policies and Practices at the State and Local Government Level,” in Keith H. Hirokawa and Patricia E. Salkin, eds., *Greening Local Government: Legal Strategies for Promoting Sustainability, Efficiency, and Fiscal Savings* (Chicago, IL: American Bar Association, 2012), 43-74.

18 Department of Administration, *State of Wisconsin Contractual Services Annual Report Fiscal Year 2017*, February 2018. Accessed at <https://doa.wi.gov/DEO/FY2017ContractSvcRpt.pdf>.

19 In the Public Interest, *Closing the Books: How Government Contractors Hide Public Records*, March 2015, archived at [web.archive.org/web/20160324231951/http://www.inthepublicinterest.org/wp-content/uploads/In\\_the\\_Public\\_Interest\\_Closing\\_the\\_Books.pdf](http://web.archive.org/web/20160324231951/http://www.inthepublicinterest.org/wp-content/uploads/In_the_Public_Interest_Closing_the_Books.pdf).

20 Louise Story, “As Companies Seek Tax Deals, Governments Pay High Price,” *New York Times*, 1 December 2012.

21 For a detailed description of states’ disclosure on economic development incentives, not limited to those listed on states’ transparency portals, see: Philip Mattera et al., Good Jobs First, *Show Us the Subsidized Jobs: An Evaluation of State Government Online Disclosure of Economic Development Subsidy Awards and Outcomes*, January 2014, archived at [web.archive.org/web/20160325225739/http://www.goodjobsfirst.org/sites/default/files/docs/pdf/showusthesubsidizedjobs.pdf](http://web.archive.org/web/20160325225739/http://www.goodjobsfirst.org/sites/default/files/docs/pdf/showusthesubsidizedjobs.pdf).

22 Alberta M. Sbragia, *Debt Wish: Entrepreneurial Cities, U.S. Federalism, and Economic Development*, University of Pittsburgh Press, 1996.

23 Deirdre Cummings, MASSPIRG Education Fund, Phineas Baxandall, U.S. PIRG Education Fund, and Kari Wohlschlegel, Frontier Group, *Out of the Shadows: Massachusetts Quasi-Public Agencies and the Need for Budget Transparency*, Spring 2010.

24 In Kentucky: Adam Edelen, Kentucky Auditor of Public Accounts, *Ghost Government: A Report on Special Districts in Kentucky*, No-

vember 2012, archived at [https://web.archive.org/web/20170410212110/http://apps.auditor.ky.gov/Public/Audit\\_Reports/Archive/%202012GhostGvoernmentSpecialDistrictsreport.pdf](https://web.archive.org/web/20170410212110/http://apps.auditor.ky.gov/Public/Audit_Reports/Archive/%202012GhostGvoernmentSpecialDistrictsreport.pdf); In Idaho: State of Idaho Legislative Services Office, *Special Districts in Idaho*, 14 January 2014, archived at: <https://web.archive.org/web/20170410213018/https://legislature.idaho.gov/wp-content/uploads/audit/localgov-audits/specialdistrictreport2014.pdf>.

25 Olivera Perkins, “Public Sector Workers Make More in Salary and Benefits Than Those in Private Sector, Labor Department Says,” *Cleveland Plain Dealer*, 12 September 2013; Congressional Budget Office, *Comparing the Compensation of Federal and Private-Sector Employees*, January 2012, archived at [web.archive.org/web/20160325230506/https://www.cbo.gov/sites/default/files/112th-congress-2011-2012/reports/01-30-FedPay\\_0.pdf](http://web.archive.org/web/20160325230506/https://www.cbo.gov/sites/default/files/112th-congress-2011-2012/reports/01-30-FedPay_0.pdf).

26 The sources of state web traffic are as follows: Indiana: Staci Schneider, Office of the Auditor of State, personal communication, 5 March 2018; Massachusetts: Scott Olsen, Office of the State Comptroller, personal communication, 7 March 2018; Minnesota: Janelle Tummel, Minnesota Management and Budget, personal communication, 7 March 2018; Missouri: Libbie Farrell, Office of Administration – Division of Accounting, personal communication, 8 March 2018; Oregon: Pennsylvania: Dan Egan, Office of Administration, personal communication, 7 March 2018; Rhode Island: Brenna McCabe, Department of Administration, personal communication, 19 March 2018; Washington: Michael Mann, Washington State Legislative Evaluation & Accountability Program (LEAP) Committee, personal communication, 7 March 2018; West Virginia: Lou Ann Fauver, Office of the State Auditor, personal communication, 7 March 2018.

27 New Hampshire: Chris Brantley, New Hampshire Administrative Services – Bureau of Accounting, personal communication, 7 March 2018; Kansas: Bradley Elkins, Kansas Department of Administration, personal communication, 16 March 2018.

28 David Card, Alexandre Mas, Enrico Moretti, Emmanuel Saez, National Bureau of Economic Research, NBER Working Paper No.

16396, *Inequality at Work: The Effect of Peer Salaries on Job Satisfaction*, September 2010, archived at [web.archive.org/web/20160325230608/http://www.nber.org/papers/w16396.pdf](http://web.archive.org/web/20160325230608/http://www.nber.org/papers/w16396.pdf).

29 State of Delaware, *Classification and Compensation*, 8 January 2015, archived at <http://web.archive.org/web/20160325230642/http://www.jobaps.com/de/auditor/ClassReports.asp>.

30 Alexandre Mas, National Bureau of Economic Research, NBER Working Paper No. 20558, *Does Transparency Lead to Pay Compression?*, October 2014.

31 The three states with checkbooks lacking a keyword search function are Maryland, Virginia and Wyoming.

32 States did not have the opportunity to confirm scores received for the presence of this feature on their websites.

33 Ibid.

34 Missouri: Libbie Farrell, Office of Administration – Division of Accounting, personal communication, 8 March 2018; Indiana: Staci Schneider, Office of the Auditor of State, personal communication, 5 March 2018; Washington: Michael Mann, Legislative Evaluation & Accountability Program (LEAP) Committee, personal communication, 7 March 2018; Arizona: Amy Aeppli, General Accounting Office – Arizona Department of Administration, personal communication, 15 March 2018; South Dakota: Colin Keeler, Bureau of Finance and Management, personal communication, 5 March 2018.

35 Mississippi: Jenny Bearss, Department of Finance and Administration, personal communication 23 February 2018; Montana: Audrey Hinman, Montana Department of Administration, personal communication, 7 March 2018; Minnesota: Janelle Tummel, Minnesota Management and Budget, personal communication, 7 March 2018; Washington: Michael Mann, Legislative Evaluation & Accountability Program (LEAP) Committee, personal communication, 7 March 2018; Nebraska: Jason Walters, Nebraska State Treasurer's Office, personal communication, 7 March 2018; Utah: Brenda Lee, Utah State Division of Finance, personal communication, 7 March 2018; Arizona: Amy Aeppli, General Accounting Office – Arizona Department

of Administration, personal communication, 15 March 2018. Ohio: Chris Berry, Office of the Ohio Treasurer, personal communication, 7 March 2018.

36 Swapna Krishna, "Adobe is Ending Development and Support for Flash in 2020," *Engadget*, 25 July 2017.

37 Brenda Lee, Utah State Division of Finance, personal communication, 7 March 2018.

38 Chris Berry, Frank Kohstall and Dan Risko, Office of the Ohio Treasurer, personal communication, 20 February 2018.

39 Ibid.

40 Legislature of Nebraska, "Legislative Bill 851", 8 January 2016, accessed at <https://nebraskalegislature.gov/FloorDocs/104/PDF/Final/LB851.pdf>.

41 Rachel J. Cross, Frontier Group and Michelle Surka, U.S. PIRG Education Fund, *Following the Money 2017, Governing in the Shadows: Rating the Online Financial Transparency of Special District Governments*, April 2017.

42 Kentucky Department for Local Governments, *Special Purpose Governmental Entities (SPGEs)*, accessed 18 February 2018 at [https://kydlgweb.ky.gov/entities/16\\_SpgeHome.cfm](https://kydlgweb.ky.gov/entities/16_SpgeHome.cfm).

43 See note 38.

44 Texas Office of the Comptroller, *Transparency Stars Program*, accessed on 14 February 2018 at [comptroller.texas.gov/transparency/local/stars/](https://comptroller.texas.gov/transparency/local/stars/).

45 Texas Office of the Comptroller, *Special Purpose District Financial and Tax Reporting*, accessed on 14 February 2018 at <https://comptroller.texas.gov/transparency/local/sb625/>.

46 Governmental Accounting Standards Board, *Statement No. 77 of the Governmental Accounting Standards Board: Tax Abatement Disclosures*, August 2015, archived at [http://web.archive.org/web/20160325225844/http://www.gasb.org/jsp/GASB/Document\\_C/GASBDocumentPage?cid=1176166283745&acceptedDisclaimer=true](http://web.archive.org/web/20160325225844/http://www.gasb.org/jsp/GASB/Document_C/GASBDocumentPage?cid=1176166283745&acceptedDisclaimer=true).

47 Association of Government Accountants, *Resources: How to Construct a CCR*, accessed

on 23 February 2018 at <https://www.agacgfm.org/Resources/Performance-Accountability/CCR/How-to-Construct-a-CCR.aspx>.

48 Association of Government Accountants, *Resources: Recent Sampling from Government Entities*, accessed on 23 February 2018 at <https://www.agacgfm.org/Resources/Performance-Accountability/CCR/Completed-CCRs/Government-entity-CCRs.aspx>.

49 Government Finance Officers Association, *Popular Annual Financial Reporting Awards Program*, accessed on 23 February 2018 at <http://www.gfoa.org/popular-annual-financial-reporting-awards-program-pafr-program>.

50 See note 10.

51 See note 16.

52 South Dakota Legislature Legislative Research Council, “House Bill 1290,” ac-

cessed on 13 February 2018 at [http://sdlegislature.gov/legislative\\_session/bills/Bill.aspx?Bill=1290&Session=2018](http://sdlegislature.gov/legislative_session/bills/Bill.aspx?Bill=1290&Session=2018).

53 See note 41.

54 Kansas Legislature, “House Bill No. 2572”, accessed on 13 February 2018 at [http://kslegislature.org/li/b2017\\_18/measures/documents/hb2572\\_00\\_0000.pdf](http://kslegislature.org/li/b2017_18/measures/documents/hb2572_00_0000.pdf).

55 Nebraska Legislature, “LB565-Require the posting of tax incentive information under the Taxpayer Transparency Act”, accessed on 13 February 2018 at [https://nebraskalegislature.gov/bills/view\\_bill.php?DocumentID=31397](https://nebraskalegislature.gov/bills/view_bill.php?DocumentID=31397).

56 LegiScan, “Indiana Senate Bill 254”, accessed on 13 February 2018 at <https://legiscan.com/IN/drafts/SB0254/2018>.