

GUIDE

Follow the Money

How to Track Federal Funding to Local Governments

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Contents

Acknowledgments	iv
Executive Summary	5
Introduction	6
Structure of the Guide	7
Methods	8
Part I. Understanding Federal Aid to Local Governments	9
Types of Federal Aid	10
How Federal Grants Have Evolved over Time	11
Where Do Federal Dollars Go?	14
Part II. Data Transparency and Management	16
Federal Data Transparency	16
Local Data Management Practices	17
Challenges Tracking Federal Funds	18
Part III. Data Sources and Portals	25
Data User Tips	25
USAspending.gov	30
Single Audit Reports and the Federal Audit Clearinghouse	37
US Census of Governments	42
Comprehensive Annual Financial Reports	51
Local Budgets and Related Documents	55
Bond Offering Statements and Electronic Municipal Market Access	60
Catalog of Federal Domestic Assistance	64
Additional Resources	66
Conclusion and Recommendations	71
Appendix A. Using the Census of Governments Individual Unit File	75
Appendix B. Interview Methods	79
Notes	81
References	90
About the Authors	93
Statement of Independence	95

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Executive Summary

Local governments—the nation’s more than 90,000 cities, counties, towns, school districts, and special districts—deliver valued public services and critical investments to people and businesses.

But localities can’t, and don’t, do it alone. States and the federal government support their activities through a complex web of intergovernmental grants, loans, and other transfers. The purpose of this guide is to help local policymakers, the media, advocates, and community residents navigate the patchwork of primary data sources and online portals that show how the federal government distributes funding to local governments.

Tracking flows of funds between levels of government is not easy. Federal agencies, departments, and programs differ in the kinds of information they require from local grant recipients. Local governments, in turn, use different accounting systems and reporting standards. Further complicating matters, localities often receive federal funds via pass-through grants from states. And local governments vary widely in their capacity for collecting and reporting financial information in a timely, comprehensive, and accessible manner.

We drew on the literature, an inventory of online resources, interviews with local and federal officials, and Urban Institute research staff experience to catalog available data on federal-local transfers. We describe the strengths, weaknesses, and best uses of various data sources and portals and provide guidance on where users can find information to understand trends or how their community stands relative to its peers.

Recent policy flashpoints over issues such as immigration, justice policy, the environment, and changes to the federal tax code suggest that the need for reliable and accessible information on the federal-local relationship is greater than ever. Local policymakers need data to respond effectively, and the public and stakeholders require data to support robust engagement with fiscal policies.

Our guide concludes with simple recommendations for how we can improve data quality, comparability, and usability at all levels of government: (1) centralize local grants and financial management systems within a single city or county office; (2) improve USAspending.gov by reducing the reporting burden for federal agencies and award recipients; (3) collaborate across all levels of government to standardize reporting detail, especially on pass-through grants; (4) strengthen and improve the user interface for sites like USAspending.gov; and (5) invest in data dissemination and outreach to key policy audiences.

Introduction

Local governments—including cities, counties, towns, school districts, and special districts—deliver valued public services and critical investments to people and businesses.¹ Beyond “police and potholes,” localities educate children, train the workforce, and care for the sick and elderly. They build and run courthouses and jails; respond to fires and other natural disasters; and provide cash, housing, and other supportive services to the disadvantaged.

But they can’t, and don’t, do it alone. States and the federal government provide substantial financial resources to support local government activities. For example, the federal government distributed nearly \$700 billion in state and local grants in fiscal year (FY) 2017, equivalent to about 17 percent of its budget.² Although the average city received only about 5 percent of its revenue directly from the federal government, some received double that amount. And all cities and other local governments received state grants using federal funds, or pass-throughs.

But tracking flows of funds across levels of government is not easy. Shared financing and reporting responsibilities among more than 90,000 local governments, 50 states, and 96 federal grantmaking agencies mean that data are often incomplete or inconsistent.³ Local policymakers, nonprofits, researchers, and the media must therefore rely on a patchwork of sources to understand how much a community receives in federal funds, what types of activities and services these funds support, and how a community compares to its peers and itself over time.

Recent controversies over immigration, justice policy, and the environment have sparked new debates about the federal-local relationship. These debates are likely to intensify with recently enacted federal tax changes that include limits to the deductibility of state and local taxes, possible block granting of major social safety net programs such as Medicaid and the Supplemental Nutrition Assistance Program, and devolution of environmental and regulatory authorities.

City leaders, local nonprofits, and researchers all need access to reliable data on how federal funds flow to cities to understand how these changes will affect their communities. For example, the most recent Menino Survey of Mayors from Boston University suggests that mayors are very interested in how they compare to their peers (Einstein, Glick, and Palmer 2018). In fact, the survey found that most mayors are “more pessimistic” about the support they receive from both state and federal governments than they were even two years ago, and most believe they get less federal money than their peers. However, the report points out that “unless the distribution of funding is very strange,” this is likely a misperception (24). This misperception underscores the need for more and better data.

Structure of the Guide

This guide is designed for policymakers, the media, advocates, and researchers who want to answer the question, “How much federal funding does my community receive?” Users of this guide may also wish to delve into more complex questions, such as “How does my city or county compare to others in terms of federal funds?” or “What programs and activities do federal funds support in my community?” This guide is structured to equip individuals with the tools and knowledge necessary to navigate the patchwork of primary data sources and online portals that can help answer these questions.

Part I introduces basic concepts that will help users understand federal-state-local government relations relative to federal aid in the United States. It describes the main types of federal aid that flow to local governments and how federal-local transfers have changed over time. This section also introduces direct versus indirect forms of funding, and it describes how the state acts as an intermediary entity by disbursing federal pass-through funds to local governments. These concepts are critical to understanding the challenges involved with tracking federal funding to local governments, which are discussed at the end of Part II.

Part II discusses the evolution of federal data transparency and discusses some of the strategies that local governments use to collect and manage their own data. It also discusses some of the common challenges that users experience tracking flows of federal funds to their communities.

Users who wish to go straight to the data sources can skip ahead to **Part III**, which catalogs the various ways federal, state, and local governments gather information on grants to local governments.⁴ Although these data are often used for analysis and research, they typically were collected for operations, regulation, and compliance-monitoring purposes. This mismatch goes a long way in explaining why grants data are inaccessible or difficult to use for comparative or historical purposes.

To remedy the relative inaccessibility of federal government grants data, several organizations have created more user-friendly online portals. Part III provides information on how to access these portals. We provide detailed catalog entries for seven primary data sources and nine accompanying portals. Each entry walks users through the strengths and weaknesses of the data source and best uses of its portal.

More timely and reliable data are needed to improve decisionmaking at all government levels and support robust public engagement in fiscal policies. The guide concludes by making simple recommendations for how federal, state, and local governments can improve data on federal-local transfers.

Methods

To compile this guide, we relied on

- **key informant interviews** with seven municipal grants and budget staff, one current federal employee, one former federal employee (currently in the private sector), and one university researcher;
- **a scan of literature** from academic and other authoritative sources on federal transfers to local governments;
- **an inventory of online sources;** and
- **Urban Institute research staff experience** using the data sources and portals and creating our own resources for researchers, policymakers, the media, civic groups, and the engaged public. Urban Institute research staff regularly use these data sources for research purposes, as well as to create user-friendly portals (such as the State and Local Finance Data Query System, or SLF-DQS) that allow broader access to complex data sources.

We selected key informants from cities of varying size and geography to obtain a diverse range of experiences from local government officials collecting and using data on federal transfers to their community. We interviewed grant and budget officials from the City of Detroit, Michigan; the City of Falls Church, Virginia; the City of Phoenix, Arizona; the City and County of San Francisco, California; and the City of Stockton, California. We also interviewed Stephen D. Owens from the US Census Bureau, Christina Ho (former Deputy Assistant Secretary in the Office of Accounting Policy and Financial Transparency for the US Department of the Treasury), and Michael Pagano (Dean of the College of Urban Planning and Public Affairs at the University of Illinois at Chicago). See appendix B for more information about key informant interview methods.

We refer to and cite these interviews throughout the report. Although our small sample of interviewees cannot, and is not intended to be, a representative sample of all user experience with data on federal transfers, the interviews add context to the discussion and corroborate many of the themes we encountered in the literature and in our experience. Moreover, the cities represent a range of geographies, sizes, and demographic profiles, providing a richer background context for us to discuss data on federal transfers.

Part I. Understanding Federal Aid to Local Governments

The federal government, states, and local governments work together to provide a range of critical services to their residents. But which level of government should provide each service? And which government should pay? This section introduces basic concepts that will help users understand federal-state-local government fiscal relations in the United States. It describes the main types of federal aid that flow to local governments and how federal-local transfers have changed over time. These concepts are critical to understanding the challenges involved with tracking federal funding to local governments and why data on federal-local transfers matter.

Fiscal federalism helps us understand which functions of government are better centralized or decentralized and the most effective and efficient financial relationships between levels of government. It starts from the idea that local is often better when it comes to which level of government should perform a given service. However, higher levels of government have advantages, too. Namely, they sometimes enjoy “economies of scale,” or the ability to produce goods and services more efficiently than their smaller counterparts. They can also internalize “externalities,” or costs and benefits that might otherwise “spill over” or transcend a jurisdiction’s boundaries (e.g., pollution).

An especially important spillover concerns equity or fairness. Some states or regions have more resources, such as rich oil and mineral deposits, than other states or regions. Regardless of their level of resources, some places may opt to spend less on goods and services, such as elementary and secondary education or infrastructure investments, that many Americans deem important. However, some of those places still have a high level of need for services, as evidenced by their share of children or elderly below the poverty line, for example. Disparities across places can grow worse over time, especially if residents threaten to leave if they do not benefit directly from local spending (Oates 1999). The federal government can help mitigate these disparities by channeling resources to local governments through grants, loans, and other transfers and it can do so more efficiently than individuals in other parts of the country acting on their own.

Types of Federal Aid

To address efficiency and equity concerns arising from decentralized service provision, the federal government has long transferred funds to states and localities through grants. There are three main types of grants: categorical grants, block grants, and general revenue sharing. Different types of federal aid serve different purposes, and the federal government has evolved over time in the types of aid that it provides to local governments directly and indirectly through the states.

Categorical Grants

Categorical grants restrict funding to specific programs or activities. The federal government awards them either through a formula or a competitive, project-based application process. For example, the Transportation Investment Generating Economic Recovery (TIGER) grants program started in the Great Recession and awards funds to state and local governments on a merit basis for projects that could improve regional economies (GAO 2011). Historically, project-based grants have received criticism for demanding significant effort from local governments to prepare competitive grant applications and funneling resources to federal priorities at the expense of local needs (Dilger 2017). Categorical grants can create more paperwork and reporting requirements for localities, but they can more directly achieve federal goals.

Block Grants

Block grants restrict funding to a broad set of goals, but they allow states and localities to choose how they will spend the money to meet those goals. The federal government allocates these grants on a formula basis. For example, the federal government established two block grant programs in the 1970s that consolidated many separate categorical grant programs: the Comprehensive Employment and Training Assistance Block Grant and Community Development Block Grant (CDBG). In 1996, the Personal Responsibility and Work Opportunity Reconciliation Act replaced Aid to Families with Dependent Children and other programs geared to low-income families with children with a block grant called Temporary Assistance for Needy Families. Block grants give localities or states more flexibility, but it can shift the portion of resources supporting programs' core missions.⁵

General Revenue Sharing

General revenue sharing, the third major type of federal grant, provides largely unrestricted funds to state and local governments on a formula basis. US policymakers have generally avoided this type of assistance apart from the General Revenue Sharing program that began in 1972 and ended in 1986. The official justification for the program's end was that the federal government had "no revenue to share."⁶ However, General Revenue Sharing had long engendered controversy because of its complicated formula and questions about political accountability with revenues collected at one level of government but spent at another.⁷

Nongrant Forms of State and Local Assistance

Beyond direct grants, the federal government has subsidized state and local governments by allowing federal income tax payers to deduct state and local taxes and exclude bond interest from taxable income. These subsidies had an estimated value of \$137 billion in foregone federal revenue for FY 2016.⁸ The law previously known as the Tax Cuts and Jobs Act of 2017 caps the state and local tax deduction at \$10,000 in property plus income or sales taxes.⁹

Other dollars flow into communities through low-interest loan programs and contracts for services provided. For example, the Environmental Protection Agency provides grants to states for water and sewerage improvements.¹⁰ States then establish revolving loan funds that localities access at low interest rates for local infrastructure improvements. The presence of a military base or other large federal employer also produces indirect economic benefit for communities (Hultquist and Petras 2012). The federal government may also provide impact aid to school districts that lose property tax base due to the presence of large, tax-exempt federal employers in their district.¹¹

How Federal Grants Have Evolved over Time

For most of American history, states and localities were the main providers of public goods and services. The federal government focused on national defense, foreign relations, courts, and the postal service. But that relationship shifted during the Great Depression and World War II, when the federal government introduced spending programs like Social Security and grew its military. Even then, however, the federal government relied on states and localities to administer many public programs, especially in infrastructure and public welfare.

From 1933 to 1940, federal grants to state and local governments grew from a negligible share of the federal budget (mainly comprising highway construction grants and land grants for public colleges and universities) to 9 percent of total outlays (Wallis 2000).¹² The period from 1933 to 1960, during which intergovernmental tensions were low and state and local governments were granted significant latitude on how to spend funds, is generally known as one of cooperative federalism (Dilger 2017).

The next major phase of federal-state-local relations ran from 1960 to 1968. It included the Johnson administration's Great Society and War on Poverty and saw the birth of two new major grant programs, Medicaid and Title I of the Elementary and Secondary Education Act, both of which were structured as matching grants in which the federal government reimbursed states for their own expenditures per a formula reflecting measures of need, such as the poverty rate.

The preponderance of new grants created during this period were categorical, or restricted to narrowly defined purposes (such as combating illiteracy, controlling crime, or fixing substandard housing) with strings attached. By one estimate, 204 categorical programs were created during the Great Society, including 109 in 1965 alone (Office of State and Local Finance 1995). Hence, this phase is known as coercive or creative federalism (Dilger 2017).

During this time, the federal government also sought to engage local leaders directly through "community action groups" and to achieve "maximum feasible input" in the allocation of federal funds. Critics expressed concern about poor coordination among federal agencies and the administrative burden to local governments (Dilger 2017).

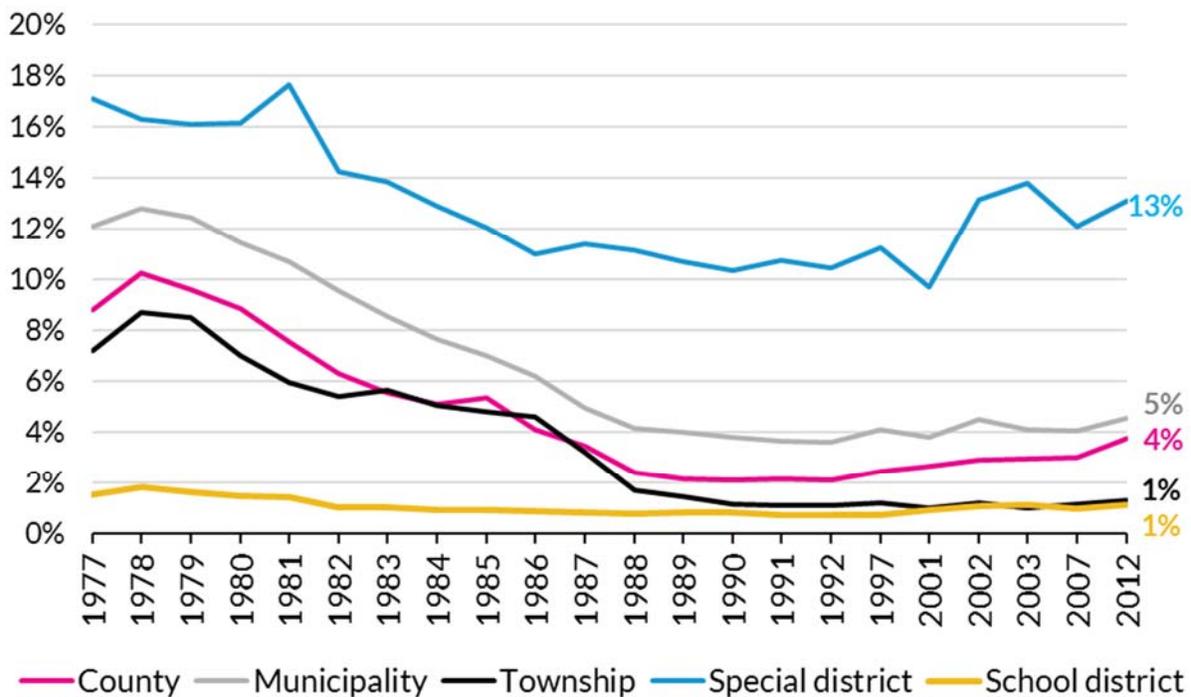
The pendulum swung in the other direction after President Richard Nixon's election in 1968. His New Federalism agenda consolidated categorical grants into block grants. For example, the Comprehensive Employment and Training Assistance block grant consolidated 17 categorical programs into one, and CDBG consolidated 6 community and economic development categorical grants into one.

In the 1980s, many place-based programs were reduced or eliminated. Direct federal aid declined in real per capita terms, although pass-through grants from states continued to support local governments to a degree. The 1990s brought major changes to the structure of intergovernmental transfers, including the block granting of the country's main welfare program, Aid to Families with Dependent Children (as noted above). In the 2000s, the federal government flexed its muscle again, instituting new accountability requirements in education, such as the No Child Left Behind Act.

The Trump administration has charted a different vision of federalism, calling for the elimination of CDBG, the Low Income Home Energy Assistance Program, and Community Services Block Grant as well as certain secondary and postsecondary education grants and the TIGER grant program.¹³

Direct federal assistance has declined as a share of total revenue for all local governments since 1977 (figure 1). But some local governments have experienced a steeper decline than others. For example, direct federal aid to municipalities declined from 12 to 5 percent of total city revenue between 1977 and 2012, and direct aid to townships declined from 7 to 1 percent. Direct county aid declined from 8 to 4 percent of revenues. However, some of this decline was offset by pass-through grants from states.

FIGURE 1
Local Revenues from the Federal Government (1977–2012)
Percentage of total local government revenues from direct federal transfers



Source: US Bureau of the Census, Census of Governments and Survey of State and Local Government Finance, 1977–2012, accessed through SLF-DQS.

Note: Since 1992, sublocal government finance data have been released every five years in years ending in either 2 or 7. This chart depicts direct federal transfers and does not include federal funds that first pass through states.

Where Do Federal Dollars Go?

Some of the largest sources of direct federal funding for local governments include grants for transit and CDBG. For example, in 2015 the federal government transferred roughly \$26 billion to localities for housing and community development and \$9 billion for transit. The next largest single category was education, including elementary, secondary, and higher education, at \$7.6 billion.

Local governments may also receive a large share of federal funding indirectly from states. For example, California and New York transfer substantial federal funds to local governments to administer Medicaid and other social safety-net programs.

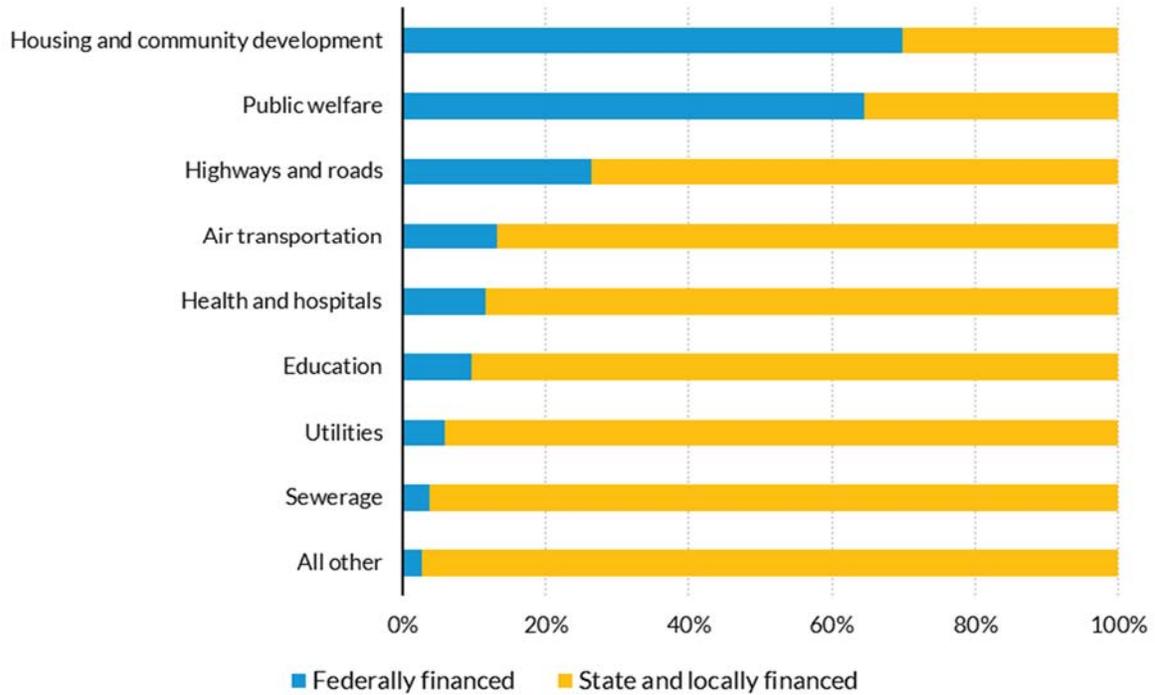
The amount of federal funding that flows directly to local governments versus flowing to local governments through states is very difficult to track. US Census of Governments data, although one of the most reliable and detailed sources of state and local public finance available, do not break out pass-through funding. Pass-throughs are instead counted as state intergovernmental transfers to local governments.

Because of the difficulty of tracking indirect or pass-through funds, it is impossible to produce an exhaustive list of local programs supported by federal funds. However, we do know what share of federal dollars go toward financing state and local services combined. In 2015, for example, the federal government funded most state and local spending on housing and community development (70 percent) and a sizable chunk of state and local spending on highways and roads (26 percent) (figure 2).

FIGURE 2

Federally Financed Share of State and Local Spending

By functional category, 2015



Source: US Census Bureau, Annual Survey of State and Local Government Finance, 2015, accessed via the Urban Institute, SLF-DQS, May 25, 2017, <http://sldqs.taxpolicycenter.org/>.

Notes: Education includes both higher education and elementary and secondary education. Medicaid spending is divided between the public welfare and health and hospitals functional categories, with the majority allocated to the former. State and local sources of finance include user fees, such as tuition for higher education.

Part II. Data Transparency and Management

In this section, we discuss recent legislation affecting how the federal government collects, manages, and reports on its grant data to nonfederal entities, including local governments. We then discuss ways in which local governments manage their internal federal grants data. The section concludes with a discussion of common challenges that data users experience when tracking federal funds to local governments. These challenges are important for understanding how to properly use the data sources and portals discussed in Part III.

Federal Data Transparency

Through legislation and agency action, the federal government has recently taken steps to improve data transparency and provide users access to a range of federal data. Two notable federal laws govern the transparency of federal data.

Federal Funding Accountability and Transparency Act

In 2006, Congress passed the Federal Funding Accountability and Transparency Act, which required the federal Office of Management and Budget (OMB) to create a public, online database displaying recipients and amounts of federal grants, loans, contracts, and other forms of assistance. The resulting database is USAspending.gov, which provides a variety of data on federal grantmaking efforts, including amounts disbursed to local governments. Strengths and weaknesses of USAspending.gov are reported in Part III of this report.

Data Accountability and Transparency Act

In 2014, Congress passed the Data Accountability and Transparency Act (DATA Act), which added new reporting requirements for federal agencies to address underreporting and inconsistency in the USAspending.gov data (GAO 2014). Revisions to both the internal data architecture and user interface of USAspending.gov are ongoing, and the objective is to publish all data in compliance with the new

governmentwide data standards by the spring of 2018. The improved beta version of USAspending.gov is available at beta.usaspending.gov.

According to reports from the Offices of the Inspector General at various federal agencies and accounts from people familiar with the DATA Act, there is wide variation in compliance across agencies.¹⁴ Some agencies, including the US Department of Health and Human Services (HHS) and the Department of the Treasury (Treasury), have successfully met the demands of the legislation.¹⁵ The most recent audits of these two agencies describe significant improvement in DATA Act compliance.¹⁶ By contrast, the audit for the US Department of Housing and Urban Development (HUD) found serious problems with noncompliance and noted many areas in need of improvement.¹⁷

Local Data Management Practices

Local governments use their own internal systems to track flows of funding within and across departments. Often, they do so through budgeting software that allows inputs from multiple departments. Local governments may use these systems to collect the data that are subsequently reported to the federal government via the single audit report or to the public via their local Comprehensive Annual Financial Reports (CAFRs) and other regularly reported financial statements. (Single audit reports and CAFRs are described in greater detail in “Challenges Tracking Federal Funds.”)

Local governments employ varying degrees of centralization in their internal financial management system. In Phoenix, for example, each department’s grants team applies for and administers grants separately.¹⁸ They report spending to the central budget authority only for oversight purposes.

In San Francisco, individual departments have access to detailed spending information within their own departments by program and function, but not all detailed data are reported to the central budget office.¹⁹ For more detailed data on how federal funds have been allocated within a department, budget officers may need to check with grants management staff in those departments.

Other cities employ a hybrid approach, centralizing some functions but leaving others up to individual agencies. In Stockton, grants received by individual departments are all run through the central city manager’s office.²⁰ Software that centralizes these functions can also help make reporting more accurate and less labor intensive. Phoenix is currently upgrading its 20-year-old budget software to eliminate duplicative spreadsheets and create a central repository that is less laborious to update.²¹

Detroit centralized its grants management system in 2014. The central grants office helps individual departments research and apply for grants together so that no one is searching for funding in a vacuum.²² Detroit employs basic standards and checklists that each department must meet to make its grant files complete once a grant is received, although these requirements can still vary depending on the terms of the grant.²³ Detroit also uses eCivis, a financial and grants management software platform, to track grants that come to nonprofit partners in the community rather than directly to the city. The city also uses its system to track sources of funding from private and state entities.

LEVEL OF DETAIL

Not all local governments distinguish between direct federal funding, state funding, and state pass-through grants in their financial reporting systems. For example, Stockton and San Francisco both track pass-through in addition to direct federal grants in their central budget office; however, Phoenix does not.²⁴ Sometimes smaller cities, like Falls Church, receive primarily (or only) pass-through funding and no distinction is required.²⁵ If the internal systems for managing information on federal funding don't provide a high level of detail, it is difficult to locate that detail in public budget reports. And localities may not have a practical reason to track funding at that level of detail if it is not required for grant reporting.²⁶

Sometimes, specific departments will have access to a high level of detail, even when the central finance office does not track it.²⁷ Larger cities subject to single audit reporting requirements may have a larger incentive to implement more detailed pass-through-tracking systems, since they are required to report on those expenditures annually, as described below.²⁸

Challenges Tracking Federal Funds

Data users should be aware of the primary challenges they will likely encounter when trying to track federal flows of funds. The data sources and portals discussed in this guide all seek to address the challenges described below.

Finding Data

Before the improvements in technology and the open data movement of the 2000s, obtaining public finance data required users to submit public information requests directly to governments.²⁹

Information was often delivered to users as a hard copy, or more recently as a digital PDF. This method made the data difficult or impossible to analyze with computer software.

Today, users can get a wide range of machine-readable data directly from state and local government websites and from federal portals like USAspending.gov. However, some local governments continue to provide financial statements in PDF form, requiring the user to manually comb through volumes of information. Others publish only limited information to their public-facing websites. Meanwhile, users report that federal portals are difficult to navigate and missing critical information.³⁰ For example, Treasury has indicated that it is still aware of user challenges with USAspending.gov and its user search functionality, including issues with search fragmentation and keyword search limitations (GAO 2017c). These search challenges can contribute to incomplete data collection if users are unable to pull down a comprehensive list of award entries for their jurisdiction.

Following Flows

Even when data are accessible, it can be difficult to track funds that originate at the federal level but move through different sublevels of government before reaching their destination. A large portion of federal assistance to local governments comes in the form of pass-through grants, which are funded by the federal government, allocated or administered by the state, and spent locally. Some local entities themselves act as pass-through entities for grants to even smaller local governments. Both San Francisco and Phoenix, for example, administer federal transportation grants for other local and regional governments.³¹

Distribution requirements vary by grant. Categorical grants tend to be much more specific with respect to distributions to local governments. Some pass-through grants such as Title I Education and Individuals with Disabilities Education Act grants require states to make allocations to specific local governments, ensuring that the federal government knows how states distribute that pass-through funding.³² Other times, states have wide latitude over how and what share of funding to pass through to local governments, in which case the federal government may not know who the final recipients are. “The more entities and agencies it passes through, the harder it is to track the money,” said Stephen D. Owens of the US Census Bureau.

The Single Audit Act requires states to report what they spent out of specific grants both through direct state spending and monies passed on to subrecipients.³³ But the responsibility often ends there. So, although a state is required to account for the amount of a specific grant passed down to their local

governments, they are generally not required to report the amount given to each subrecipient unless the specific grant program calls for it. Problems that arise from uneven reporting are compounded by matching grants, differing fund structures, and interfund transfers. For example, in the case of a matching grant, when the state cuts the check to a local government, it contains both state and federal funds.

Complicating matters further, a grant's "place of performance" (i.e., the geographical location where grant dollars are disbursed to benefit a community) may consist of several overlapping jurisdictions, not all of which will record a federal disbursement on their balance sheets. Indirect investments that come through large federal employers and contractors are also hard to quantify, even though federal Armed Services and other such facilities have an economic impact on a community.³⁴ Local governments may also benefit from federally financed loans, including loans administered by the state.³⁵

Carol Lu, the Citywide Revenue Manager for the Controller's Office in San Francisco, said that the overall influx of federal funds benefitting San Francisco's residents can be hard to track.³⁶ "We know our own city and county," she said. "But there are other flows of federal funds that impact the well-being of the city that are flowing outside the city's agencies. We don't have as good of a grasp on those. I don't know what the direct payments to residents are in terms of financial aid, or food stamps, for example. If someone asked me what the total amount of federal funding to all of San Francisco was, I wouldn't be able to answer that question."

Reporting and Measuring Federal Funds

REPORTING REQUIREMENTS

Each federal grant or other payment type has specific reporting requirements dictating what states and localities must report to the federal government and at what level of detail. In other words, state and local governments report different information to different agencies for different grants and programs.

The Single Audit Act requires all state and local governments that spend at least \$750,000 in federal funding over the course of a fiscal year to submit a single audit report to the federal government through the Federal Audit Clearinghouse (FAC).³⁷ But states include varying degrees of information about subgrantees in their audits, depending on their own accounting practices. And in smaller jurisdictions that do not meet the \$750,000 threshold, the amount of federal spending may remain unknown. At the local level, governments may also choose to voluntarily comply with accounting standards set by the Governmental Accounting Standards Board to produce a CAFR that will contain

some level of information about federal funding, but not always at the same level of detail across governments.³⁸

MEASUREMENT DIFFERENCES

Different sources of data will capture different metrics on federal funding. Some measures may be more useful than others, depending on the question a user is asking. For example, a user may choose to track the federal funds that agencies have obligated to grantees through grant agreements, but which grantees have not necessarily spent. Obligated funds can be found in local government budgets or in reports on grantmaking activities submitted to USAspending.gov by federal agencies. Alternatively, a user can look at outlays, that is, funds spent by the grantee. Outlays are reported in the single audit reports that local governments provide to OMB (via FAC) or a local government's public financial statements, such as a CAFR.

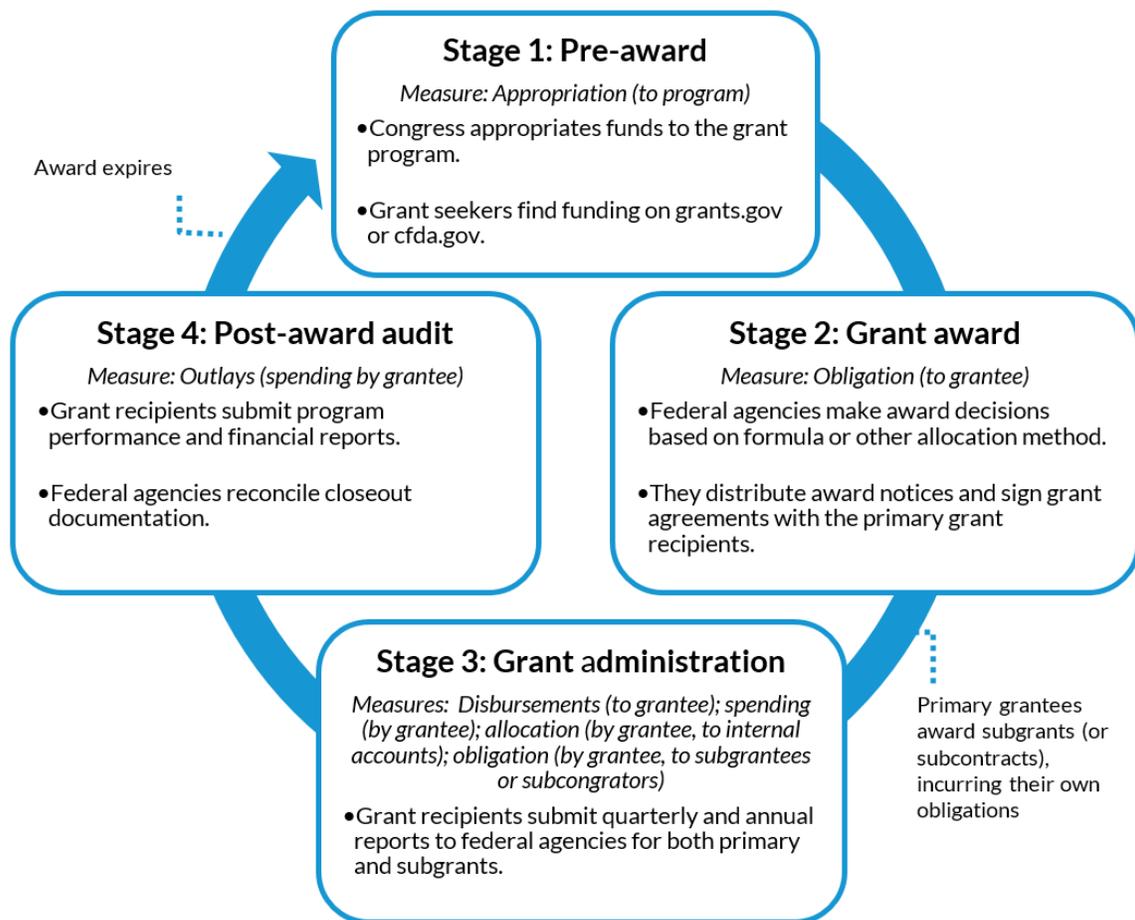
Funds allocated by Congress when passing the initial legislation may tell a story about what programs, broadly, the federal government wishes to invest resources in. Funds obligated by state agencies to specific governments may tell a more detailed story about where, and to whom, the federal government is directing those programmatic resources. Funds actually spent by local governments (and how those funds have been allocated internally or further obligated to subgrantees) may, in comparison, illustrate how federal funds flow into the community and how local governments manage those funds. The life cycle of a federal grant can help data users understand the stages of the grantmaking process and which metrics to focus on (figure 3).

In addition to obligations versus actual spending, the user may also want to know how local governments managed and spent federal funds once they received the grant. That is, to what programs and activities did local governments allocate those funds, and how did they manage them internally? Data sources do not typically allow this level of detailed insight into how federal funds flow into a community. For example, some sources, such as the US Census of Governments (see Part III for more information on this portal), aggregate spending into functional categories, such as "health" or "housing." These broad functional categories avoid classification differences across local governments but at the expense of detail.

Additionally, parsing by category can be difficult because many programs cut across functional categories. The Census of Governments, for example, counts much of Medicaid spending under public welfare, but some under health and hospitals. Other sources, like single audit reports and USAspending.gov, try to classify spending by federal program numbers (as described in the Catalog of Federal Domestic Assistance, or CFDA, also described in Part III).

Virtually no aggregate data sources allow insight into how local governments allocate funds that they receive from the federal government internally across different accounting fund types, such as general funds (that can be spent for any purpose) or earmarked funds that are set aside for specific purposes. Mike Pagano of the University of Illinois at Chicago highlighted that it is important to understand how funds are earmarked and that not all federal funds are fungible. Without this level of detail, it can be difficult to understand or draw lessons from local government behavior in response to federal funding.

FIGURE 3
Life Cycle of a Federal Grant
 With associated federal funding measures



Source: Adapted from Keegan (2012).

Making Comparisons

COMPARING LOCAL GOVERNMENTS

Local governments' responsibilities for delivering services vary from state to state. For example, in New York and California, local governments administer health care and Medicaid services, but in most states those services are state administered. This difference means that a larger share of federal dollars shows up on the local ledger for some California cities and counties than for local governments in other states.

Because of these differences, some local budget officials report that they don't often try compare their city to others in terms of total federal funding.³⁹ Researchers at the Lincoln Institute of Land Policy have attempted to get around this problem by creating fiscally standardized units of comparison (see discussion on the Fiscally Standardized Cities database, or FiSC, in Part III). Although expanding, as of this writing, comparisons are only available for 150 locations.⁴⁰

Differing levels of fiscal capacity or other local demographic characteristics may also prevent apples-to-apples comparisons. Cities with larger disadvantaged populations may be more exposed to fluctuating levels of federal funding because they likely rely more on several federal sources (e.g., CDBG and Title I education funding).

COMPARING OVER TIME

In addition, federal funds can fluctuate from year to year due to one-time project or capital grants, such as for housing and neighborhood preservation. Table 1 shows a breakdown of the cities with the lowest and highest share of their revenue from intergovernmental funding, including both state and federal funds, in 2007 and how their rankings changed from 2007 to 2012. For example, San Antonio Texas derived 5 percent of its revenues from intergovernmental transfers in 2007, but over 7 percent in 2012 (resulting in its ranking dropping from fourth to tenth, when ranking from lowest to highest share). In another pronounced change, Boston, Massachusetts, went from 32 percent of its revenues coming from intergovernmental transfers in 2007 (putting it at a rank of 33), to only 22 percent in 2012 (a rank of 22). Total intergovernmental revenues includes both state and federal transfers, including pass-through grants that flow through states to local governments.

Users should exercise caution when interpreting point-in-time data and be sure to compare it to years before and after to ascertain if there were any especially large federal funding inputs in the year being considered.

TABLE 1

Ranking of Cities by Intergovernmental (IG) Revenue (2007)

Total IG revenue (state and federal), as a share of total revenue

Governments with populations over 500,000 (35 local governments)

City	2007 Rank	2007 %	2012 Rank	2012 %
Five Cities with Lowest Share of IG Revenue (as % of Total Revenue) in 2007				
City of Los Angeles, California	1	3.97%	4	6.05%
City of Fort Worth, Texas	2	4.54%	3	5.92%
City of Dallas, Texas	3	4.79%	2	5.81%
City of San Antonio, Texas	4	5.09%	10	7.43%
City of Austin, Texas	5	5.67%	1	2.95%
Five Cities with Highest Share of IG Revenue (as % of Total Revenue) in 2007				
City of Tucson, Arizona	31	28.98%	30	30.13%
City of Philadelphia, Pennsylvania	32	30.49%	28	26.84%
City of Boston, Massachusetts	33	31.61%	22	22.38%
City of Las Vegas, Nevada	34	37.80%	35	50.85%
City of Baltimore, Maryland	35	40.35%	34	47.12%

Source: US Census of Governments 2007 and 2012.

Notes: Includes all transfers, including pass-through federal grants that flow through states.

Part III. Data Sources and Portals

In this section, we discuss data sources and accompanying digital data portals that allow users to view, explore, and download data on federal transfers to local governments. Users should read this section to gain an in-depth understanding of the available data sources and portals and when to use them. No single source or portal provides a comprehensive, accurate, and user-friendly picture of federal-local grantmaking, and each has strengths and weaknesses.

For each source, we comment on the following characteristics:

- **Level of detail.** Does the platform relay detailed information on federal funding flows to local governments? For example, does it provide data by individual recipient? Does it provide breakdowns by programs or categories, and does it provide dollar amounts?
- **Quality.** Do the data accurately relay the dollar value of federal flows of funding to local governments? Can users expect dollar amounts, recipient information, and program classifications to be reported correctly?
- **Comparability.** Can local governments be compared to one another using this source, and can the data be compared to other sources? What are the key differences users should consider when comparing this source against other sources?
- **Timeliness.** Are the data current? How frequently are they updated?

Most of the accompanying digital portals share the same strengths and weaknesses as their source data. We explain any differences in level of detail, quality, comparability, or timeliness in the portal-specific entries. Because portals may also vary on ease of use, we discuss usability and provide step-by-step user cases for how to draw down data on specific local governments, where possible. We comment on whether the platform requires high levels of fluency in either statistical or financial concepts.

Data User Tips

The remaining sections of this report provide a detailed inventory of data sources used to track federal funding to local governments. When using these data, users should take the following steps to ensure they are using the optimal data sources and drawing correct conclusions.

1. Define the question and objective.

A narrowly defined question will aid the user in selecting the optimal data source. Which of the following factors does the user want to collect data on?

- » **Collection:** A single point in time, or over time?
- » **Number and type of governments:** A single local government, multiple specific local governments, or sum totals (of all local governments, or by level of local government)? Does the user want to research one local government in depth or compare multiple governments?
- » **Spending measure:** Understanding specific programs funded by the federal government, or aggregate funding levels to local governments across programs and purposes?
- » **Assistance type:** Federal grants, contracts, or other (e.g., loans)?
- » **Primary or indirect:** Direct federal funding or pass-through grants?
- » **Funding measure:** Dollars obligated to local governments or dollars spent by local governments?

Table 2 provides a quick glance at which sources and portals provide the above information.

2. Know data strengths and weaknesses.

It is important to understand what questions the data can or cannot answer as well as idiosyncrasies in how data are reported or made available. For example, analyzing CAFRs and budgets often requires users to examine PDF files. Some PDF files contain searchable text, allowing users to perform an easy “Ctrl F” keyboard search. Others do not and will require a visual scan (see the Step-by-Step User Case for Stockton, California, in “Local Budgets” for an example).

3. Compare apples to apples.

When using different sources of data, remember that there are reporting inconsistencies across local governments, fluctuations in federal funding over time, and different jurisdictional responsibilities for services like elementary and secondary education and health care that affect federal funding flows and reporting categories.

Fewer platforms are available to access local data sources than federal data, in part because local data are highly decentralized. Cities and counties may produce a CAFR and share some top-line financial information with the Census, but they are not required to share any of that information via a publicly accessible data platform. All the platforms that we reviewed for this guide are free and easy to find and access on the internet.

TABLE 2

Data Source and Portal Characteristics

Data Sources and Portals	Collection		Level of Government			Spending Measure		Assistance Type			Primary or Indirect		Funding Measure	
	Point in time	Time series	Single	Mult.	Sum (total)	Prog.	Func.	Grants	Contracts	Other	Direct	Pass-through	Obligated	Outlay
Source: USAspending.gov														
Federal Assistance Award Data System (FAADS) and FAADS-Plus	✓	✓*	✓	✓	*	✓		✓		✓	✓		✓*	
Federal Procurement Data System-Next Generation (FPDS-NG)	✓	✓	✓	✓	*				✓		✓		✓*	
Federal Funding Accountability and Transparency Act Subaward Reporting System (FSRS; data users cannot access directly)	✓	✓	✓	✓	*	✓		✓	✓		✓		✓*	
Portal: USAspending.gov	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	
Source: Single Audit Reports														
Individual single audit reports	✓		✓			✓		✓	✓	✓	✓	✓		✓
Portal: Federal Audit Clearinghouse (FAC)	✓	✓	✓	✓	*	✓		✓	✓	✓	✓	✓		✓
Source: US Census of Governments														
Individual unit single-year files	✓	*	✓	✓	*		✓	✓			✓			✓
Government-level single-year files	✓	*			✓		✓	✓			✓			✓
Portal: Fiscally Standardized Cities Database (FiSC)	✓	✓	✓	✓	✓		✓	✓			✓			✓

Data Sources and Portals	Collection		Level of Government			Spending Measure		Assistance Type			Primary or Indirect		Funding Measure	
	Point in time	Time series	Single	Mult.	Sum (total)	Prog.	Func.	Grants	Contracts	Other	Direct	Pass-through	Obligated	Outlay
<i>Portal: State and Local Finance-Data Query System (SLF-DQS)</i>	✓	✓			✓*		✓	✓			✓			✓
<i>Portal: USAFacts</i>	✓	✓			✓	✓*	✓	✓			✓			✓
Source: Comprehensive Annual Financial Reports (CAFRs)														
Individual CAFRs	✓		✓			✓		*	*	*	*	*	*	✓
<i>Portal: GovRank</i>	✓	✓	✓	✓	✓									✓
Source: Local Budgets														
Individual budgets	✓		✓			✓		✓	✓	✓	✓	*	✓	
City budget supplements	✓		✓			✓		*	*	*	*	*	✓	
<i>Portal: City Data Portals</i>	✓	*	✓			*		*	*	*	*	*	✓	*
Source: Bond Offering Statements														
Individual bond offering statements	✓		✓			*		*	*	*	*	*	*	*
<i>Portal: Electronic Municipal Market Access (EMMA)</i>	✓		✓			*		*	*	*	*	*	*	*
Catalog of Federal Domestic Assistance (CFDA)														
Catalog of Federal Domestic Assistance (CFDA)	✓	*				✓		✓		✓	✓	✓		
Count (yes)	19	9	15	8	6	10	5	12	6	6	12	5	7	9

Notes: Func. = functional; Mult. = multiple; Prog. = programs; ✓ = yes; * = see note below.

* Bond offering statements and EMMA contain varying levels of detail.

* Budgets and budget supplements may mention grants received as pass-through funding from the federal government, or they may lump them in with state funding. City budget supplements and individual data portals contain varying levels of detail, depending on the government and portal in question.

- * CAFRs may, but do not necessarily, provide detailed information about specific grants, contracts, or other types of assistance. Local government vary in the level of detail they provide in their CAFRs.
- * CFDA provides current and historical data on federal assistance programs offered, but it is not available in a time-series format. It provides data, but not necessarily spending numbers, on assistance programs.
- * FAADS is available as point-in-time files that the user can download to create time-series data. FAADS-Plus is only available on USAspending.gov, as both point-in-time and time series. The data are not automatically available as a sum total, but the user can arrive at one by downloading and analyzing the full datasets. Funds reported are those disbursed by the federal agency to the grant recipient. They do not reflect local outlays.
- * FAC data are not automatically available as a sum total, but the user can arrive at one by downloading and analyzing the full datasets.
- * FPDS-NG data are not automatically available as a sum total, but the user can arrive at one by downloading and analyzing the full datasets. Funds reported are those disbursed by the federal agency to the grant recipient. They do not reflect local outlays.
- * FSRS data are not automatically available as a sum total, but the user can arrive at one by downloading and analyzing the full datasets. Funds reported are those disbursed by the grant recipient to the grant subrecipient. They do not reflect local outlays of the subrecipient.
- * SLF-DQS provides data as a sum total by level of government, which is more detailed than USAFacts, for example, but less detailed than what is available via the individual unit file.
- * US Census of Governments individual unit files are available as point-in-time files that the user can download to create time-series data. The data are not automatically available as a sum total, but the user can arrive at one by downloading and analyzing the full datasets. Pass-through grants are included in the intergovernmental funding from state totals, but they are not separately identified as federally financed.
- * USAFacts provides some program-specific grant totals that it derives from agency-specific data sources, in addition to the US Census of Governments data.
- * USAspending.gov reports funds disbursed by the grant recipient to the grant subrecipient. They do not reflect local outlays of the subrecipient.

USAspending.gov

USAspending.gov is a data portal that allows users to search for, view, and download data on federal funding to nonfederal entities, including states, local governments, and nongovernmental organizations. Users can find information on (including the dollar amount of) federal grants, loans, and other financial assistance awards that exceed \$25,000, as well as certain federal contracts that exceed \$3,000.⁴¹ The site went live in 2007 and is managed by Treasury.

USAspending.gov is a unique resource because it combines multiple federal data sources into a single user-friendly data portal. It is a potentially powerful tool because it allows the user to track both direct and pass-through grants, thereby providing a fuller picture of total federal funds disbursed to one (or multiple) local governments. But the site and its underlying data have serious weaknesses. Important components of each award entry are inaccurate at least 25 percent of the time in the underlying data, and the online search function returns inconsistent information depending on the recipient type or name selected (GAO 2017c). Below, we discuss the data sources that are reported on USAspending.gov, as well as the strengths, weaknesses, and best uses of this data portal.

Data Sources

The OMB requires federal agencies to report on the amount and type of assistance they have disbursed to nonfederal entities. It also requires award recipients to report on the amount of federal funds they have passed on to subrecipients, when applicable. The federal assistance-tracking architecture consists of several databases and reports that Treasury subsequently compiles and presents under the umbrella of USAspending.gov (Gerli 2015; Keegan 2016).

FEDERAL ASSISTANCE AWARD DATA SYSTEM-PLUS REPORTS

Federal agencies are required to upload Federal Assistance Award Data System-Plus (FAADS-Plus) reports, containing data on federal assistance to nonfederal entities, within 30 days of the award obligation. Federal assistance includes grants, direct payments, loans, cooperative agreements, and insurance commitments. The definition of assistance excludes contracts and procurement activities, which are reported in a separate database discussed below.

Up until the passage of the Federal Funding Accountability and Transparency Act in 2006, the federal government relied on a prior version of the FAADS-Plus report, known simply as the FAADS report, for data on federal assistance. FAADS reports, which were submitted by agencies quarterly, contained 34 data elements on all financial assistance awards (box 1). In 2006, Congress introduced more rigorous reporting requirements, requiring OMB to collect additional, and timelier, information on all awards over \$25,000 within 30 days of obligation. To satisfy this requirement, OMB introduced the FAADS-Plus form, which added more detailed elements to the original FAADS report, such as a unique entity identifier (a number issued by Dun and Bradstreet using the Data Universal Numbering System, or DUNS), postal address, and other items.

BOX 1

Data Beginnings: The Federal Assistance Award Data System (1982–2010)

Under the Consolidated Federal Funds Act of 1982, Congress charged OMB with creating a system to centrally track the amounts and recipients of federal assistance.⁴² To comply with this requirement, OMB created the FAADS report.

From 1982 to 2011, the Census Bureau managed FAADS with oversight from OMB. Agencies were required to submit a quarterly FAADS report to the Census Bureau containing 34 data elements on each financial assistance award granted to a nonfederal entity. The Census Bureau would then append program numbers and descriptions from CFDA.⁴³ FAADS reports contain information on all financial assistance awards, regardless of the amount of the award, but they do not provide information on subgrants and pass-through funding.⁴⁴

FAADS is not a searchable database. Rather, it is a series of quarterly reports published in text file format. The text files are available for public download, but users wishing to read and analyze them may need experience handling text files through statistical analysis software.⁴⁵ FAADS data from 1982 to 2010 are available on the National Archives website,⁴⁶ and USAspending.gov's legacy site contains archived FAADS data going back to 2000. Otherwise, users can access combined FAADS and FAADS-Plus reports through the legacy site's Application Programming Interface.

- **National Archives and Records Administration (1982–2010):**
<https://www.archives.gov/research/electronic-records/reference-report/federal-contracts>
(text files)
- **USAspending.gov (legacy site) Archives (2000–2010):**
<https://www.usaspending.gov/DownloadCenter/Pages/dataarchives.aspx> (CSV, TSV, XML, or ATOM files)

Agencies upload FAADS-Plus reports directly through the Award Submission Portal on USAspending.gov,⁴⁷ which updates its FAADS-Plus reports daily.⁴⁸ This practice makes the data source very timely, although agency submissions and required processing times may vary.⁴⁹ FAADS-Plus reports are integrated into the assistance data that users can view and download on both the legacy and beta USAspending.gov sites. The data are also available on the legacy site, both in the view and download sections of the site and the Application Programming Interface (for more advanced data users).

- **USAspending.gov (legacy site) Application Programming Interface (includes both FAADS and FAADS-Plus):** <https://www.usaspending.gov/DownloadCenter/API/Pages/faads.aspx> (query system)

FEDERAL PROCUREMENT DATA SYSTEM-NEXT GENERATION

Since 1974, federal agencies have been required to report on their contracts and procurement activities to the General Services Administration (GSA).⁵⁰ A contract is different from a grant in that, with a contract, the federal government is procuring a service directly for a set price. Agencies are required to report contracts exceeding \$3,500.⁵¹ The Federal Procurement Data System-Next Generation (FPDS-NG) database has its own website; users can register to view the data. (Users can access the same data by searching for contracts via either the legacy or beta USAspending.gov site.) The FPDS-NG database does not contain detailed information on subcontracts. That information is reported in the Federal Funding Accountability and Transparency Act Subaward Reporting System (FSRS) database, which is described below. Data on specific vendors come from the federal System for Award Management database, which contains information on potential government business partners. The data from FPDS-NG are timely, as USAspending.gov updates its FPDS-NG data nightly.⁵²

- **FPDS-NG:** <https://www.fpds.gov/> (query system, CSV and PDF files)

FEDERAL FUNDING ACCOUNTABILITY AND TRANSPARENCY ACT SUBAWARD REPORTING SYSTEM

The FSRS was introduced in 2010 to collect more information on first-tier federal subawards and subcontracts. This database reports on whether federal contractors or recipients of federal assistance have passed any of that funding on as subawards to other entities (also known as pass-through grants). As previously described, many local governments receive indirect federal assistance through another primary grantee, often the state government. The primary grantee (e.g., the state agency that received the federal funding) is required to report on the subaward amount and subrecipient through FSRS. State

agencies do not always comply with subrecipient reporting requirements, however, and in 2014 the Government Accountability Office (GAO) reported that because federal agencies are not required to maintain records on subawards, it was unable to verify the accuracy of the subaward data (GAO 2014).⁵³ Contractors are also required to report on subcontracts that exceed \$30,000. FSRS does not provide data on its website, but users can access the data by searching for subawards on USAspending.gov. For more information about FSRS reporting, see the FSRS website.

- **FSRS:** <https://www.fsrs.gov/> (frequently asked questions and additional information; no data view or download options)

Data Strengths

LEVEL OF DETAIL

When combined, the federal data sources described above provide a detailed and comprehensive account of all federal funding flows to state and local governments. Users can pull data on either single or multiple local governments; for one year or over time; for grants, contracts, or other forms of assistance; and by federal program (CFDA number). Importantly, users can differentiate between direct and pass-through funding. However, award recipients and contractors are only required to report on first-tier subawards, so no federal data will be available on further subawards made by subrecipients.

TIMELINESS

Agencies are required to report assistance data within a month of obligating the funds. The site updates its assistance, contracts, and subawards data daily, making them timely compared to most other federal data sources. However, although official guidelines dictate that postings be made 30 days after obligation, postings are often late (GAO 2014). Late or unreported funds totaled \$619 billion in FY 2012; properly reporting this amount would have raised the cumulative amount of federal assistance reported through February 2013 (a total of \$2.6 trillion) by roughly 23 percent (GAO 2014).

Data Weaknesses

QUALITY

USAspending.gov obtains its data directly from agencies and grant recipients (as described in “Data Sources”). Thus, data accuracy depends on the quality of the underlying reports that different entities

submit.⁵⁴ In 2014 and again in 2017, GAO found high levels of inconsistency between data on USAspending.gov and audits of federal agencies disbursing the funds. When GAO examined seven budgetary data elements in USAspending.gov (GAO 2017c), including the obligation amount, they found that up to only 75 percent of the records on USAspending.gov were fully consistent with the audited agency reports.⁵⁵

The federal government has been working to improve the quality of the data. Between fall 2013 and fall 2017, Treasury implemented several reforms, allowing it to cross-check agency-reported data against other sources.⁵⁶ However, the most recent report (GAO 2017c) found that problems remained with at least two fields important for the purposes of this guide: “Place of Performance” and “Award Description.” The Place of Performance field, which seeks to describe the geographical location where federal dollars are spent, was inaccurate or inconsistent for the majority of records on USAspending.gov. The Award Description field was inaccurate or inconsistent for about half.⁵⁷ The quality of subaward data (i.e., the data from FSRS on pass-through grants that governments make to other governments) also remains poor for a variety of reasons.⁵⁸

COMPARABILITY

It is difficult to compare USAspending.gov data to other federal or local data sources. For example, FAADS-Plus reports contain data on grants to nonfederal recipients identified by their DUNS number.⁵⁹ The Internal Revenue Service, by comparison, identifies unique federal awards using a different identifier, the Employer Identification Number. Matching DUNS-identified data to Employer Identification Number-identified data makes verifying the accuracy of the FAADS-Plus data a challenge (Lecy and Thornton 2016). There has been some movement to replace the DUNS number with an open source identifier, but no changes have yet been made.

USAspending.gov also does not always align with local data sources because of timing differences. USAspending.gov data are reported by agencies on the federal fiscal year cycle; local CAFRs and budgets reflect the local fiscal year. For example, the federal fiscal year ends September 30 of any given year, whereas the City of Minneapolis’ fiscal year ends December 31. Many other cities have fiscal years that do not align with the federal government’s.

Data Portal: USAspending.gov

USAspending.gov has the potential to be a powerful resource for users wanting to access a timely and highly detailed level of data on federal transfers to local governments. But the portal and its underlying

data have serious weaknesses. Efforts are underway to improve accuracy, but the incomplete nature of data and inaccuracies remain a challenge.

- **Legacy site:** USAspending.gov (query system)
- **Beta site:** Beta.usaspending.gov (query system)

WHEN TO USE

USAspending.gov is most helpful for users who want to

- **Find federal transfers at a single point in time or over time.** Data are downloadable for each fiscal year dating back to 2000 on the legacy site and to 2008 on the beta site.
- **Quantify federal grants, loans, and contracts** to specific jurisdictions or geographies.⁶⁰ The site has a full record of all award types.⁶¹
- **Quantify either direct federal funding or pass-through grants.** In 2008, the federal government added subaward reporting to the site, allowing users to view and download data on federal grants received as pass-through funds through states. The beta site does not yet provide access to subaward data, although it will reportedly do so in its fully updated version. For now, subaward data are available at the legacy site (USAspending.gov).
- **Quantify dollars obligated by federal agencies,** but not necessarily dollars spent by local governments. The site presents the dollar value of federal contracts, grants, direct payments, loans, and other federal assistance to the recipient at the time money is transferred from Treasury to the recipient or from the recipient to the subrecipient. Technically, these are funds disbursed (although USAspending.gov frequently refers to them as obligations). They do not show when funds are spent by the final recipient.
- **Research one local government in depth or compare multiple governments.**⁶² Users can view or download data for one grant recipient, multiple grant recipients, or all grant recipients. Users can view data by geography, including zip code and congressional district,⁶³ and they can compare one jurisdiction to another. However, users should exercise caution when comparing governments in a single year, as funding may fluctuate over time. Some governments provide different mixes of services, which will be reflected in their federal funding flows.
- **Understand specific programs funded by the federal government.** A user can search for awards by federal agency, CFDA program number, and description.

EASE OF USE

Users criticized the previous version of USAspending.gov prior to the upgrade implemented by Treasury in March 2015.⁶⁴ The beta site incorporates multiple user improvements, making it more intuitive to navigate and download data.⁶⁵ However, effective use of the site is still likely to demand basic fluency in government operations and federal grants.

Treasury has indicated that it is still aware of challenges that users experience using the search functionality, including issues with search fragmentation and keyword search limitations (GAO 2017c). These search challenges can contribute to incomplete data collection if users are unable to pull down a comprehensive list of award entries for their jurisdiction.

When drawing down data on a specific jurisdiction, it is important to search for all DUNS identifiers associated with that jurisdiction. Users can, in many cases, accomplish this step via a keyword or recipient name search. This step is necessary because local governments may have separate DUNS numbers for different departments, and all these entries must be aggregated to arrive at a total for one jurisdiction. Box 2 demonstrates how to find data on federal funding to a city government using both the legacy and beta sites.

We recommend using the beta.USAspending.gov site when possible because it has more intuitive search features and is more accessible to lay users. However, not all data elements are currently available on the beta site. Treasury plans to launch a fully upgraded version of USAspending.gov soon, with the beta site replacing the legacy site.

BOX 2

Step-by-Step User Case: Minneapolis, Minnesota

The instructions below illustrate how to use USAspending.gov to find data on federal funding to Minneapolis.

Option 1: Use the legacy site USAspending.gov to obtain both recipient and subrecipient awards.

- Go to USAspending.gov and select “Advance Search” (upper right hand corner of the page).
- Enter the “Recipient Name”: Type in “City of Minneapolis” to find all awards to entities with “City of Minneapolis” in their title.
- Select other relevant filters, such as spending type, amount, awarding or funding agency.

- The search will return all “City of Minneapolis” entries. It is important to look at the total number of awards to entities with this name, regardless of separate DUNS numbers, capitalization schemes, or other naming conventions. A single city may have separate DUNS numbers assigned to each department.
- To download a zipped CSV file, select the “Download” button at the top of the search results on the right. Assistance awards, contracts, and subawards will be available in different files. In the downloaded assistance file, see the column labeled “fed_funding_amount.”

Option 2: Use beta.usaspending.gov, which is user friendly but does not yet include subawards data.

- Go to beta.USAspending.gov and select “Award Search” (menu at the top of the page).
- Filter by “Recipient”: Type “Minneapolis” or “City of Minneapolis.”
- Filter by other desired variables, like fiscal year, award type, or agency. Data for each “award type” (i.e., grants, contracts, loans, direct payments, or other) are displayed as separate tabs. See the column labeled “Award Amount” for the full federal funding amount.
- To download a zipped CSV file, click the “Download” button at the top of the Award Search page. For “Choose Level of Data,” select “Award” (or “Transactions” for more detailed data on award modifications). For “Choose Columns,” select “Everything.” Assistance and contract data are provided in separate CSV files. See the column labeled “obligated_amount” for the value of the federal award or contract.

Source: Authors’ analysis.

Single Audit Reports and the Federal Audit Clearinghouse

The OMB requires any nonfederal entity that annually expends more than \$750,000 in federal funds to submit an annual single audit report,⁶⁶ detailing how the entity spent its money and complied with the terms of the award.⁶⁷ These audits are publicly available via FAC, a digital portal that houses the actual audit reports for many governments as well as a database of audit data going back to 1977.

For local governments that have an auditing requirement, single audit reports contain some of the most detailed public information on federal funds received.⁶⁸ Importantly, single audit reports include

information on pass-through funds, both received and disbursed, which are otherwise difficult to track.⁶⁹ The detail and accuracy of single audits make them a strong resource for data users. However, the data are only updated annually, and entities have up to nine months following the end of the fiscal year to submit the reports, making them less timely than, for example, USAspending.gov data.

Single audits may be difficult to interpret, and the database available via FAC can be difficult to navigate, especially for novice data users. Moreover, not all federal funding recipients meet the auditing requirement threshold, meaning that users will not find any data on them via FAC. USAspending.gov may contain more timely information on smaller governments that do not receive large sums of federal funding and therefore have no auditing requirement.

Data Strengths

LEVEL OF DETAIL

Single audits contain some of the most detailed public information on federal funding to local governments. The reports contain valuable information on pass-through funding.⁷⁰ However, due to the \$750,000 threshold, not all federal funding recipients are required to file a single audit. And, although OMB requires a baseline level of detail, reports can vary in level of detail and specificity once basic requirements are met.⁷¹ For information on governments that receive pass-through funding but lack an auditing requirement, data users may look at the state's single audit report to see if it provides additional detail on pass-through grant recipients.⁷² Single audit reports classify spending by CFDA program number, making these data uniform across all reporting entities. Audits contain data on grants, loans, and contracts.

QUALITY

Single audit reports are also widely considered one of the most accurate sources of information on federal funding to local governments.⁷³ In 2000, the US Department of Commerce's Office of the Inspector General audited the 1998 FAC and found most of its fields to be accurate. Some problematic fields included the designation of an oversight agency for the audit, identification of federal agencies receiving the audit package, and the auditor's summary (Office of the Inspector General, US Department of Commerce 2000). In 2004, a similar audit was performed, and no data were at egregious risk of error, although the auditor's address and the identification of low-risk auditees had moderate levels of error (Office of the Inspector General, Department of Commerce 2004). Some of the reported

errors were due to programming errors in the clearinghouse itself, and others were due to auditors' errors in filling out the single audit report forms.

Data Weaknesses

TIMELINESS

Entities are required to submit single audit reports to FAC within nine months of the end of the fiscal year, and audits are produced only annually. Single audits therefore provide a lagged source of data.

COMPARABILITY

Single audit reports from different governments are somewhat comparable to one another, although not all have the same level of detail. For example, audit reports are required to distinguish between pass-through and direct federal funds, but not all governments identify recipients of funds that they pass on to other governments. Moreover, single audit data may not be comparable to other sources. For example, it may not match data from USAspending.gov, as those sources reflect dollars obligated and single audits represent outlays. There may also be differences in the fiscal year reporting period that prevent easy comparison.

Data Portal: Federal Audit Clearinghouse

The FAC houses entities' original single audit reports, as well as data on federal single audit reports going back to 1977. Users can access completed audit reports and associated data through FAC's Image Management System, a query system that allows users to search for specific entities and years, among other variables.⁷⁴ The FAC operates on behalf of OMB.⁷⁵

As a repository of these documents and data, FAC provides detailed data on federal funds. Users looking for recent information on a locality can download individual audits for single or multiple years. Users who are proficient in data analysis and have access to statistical analysis software can download the full Single Audit Database, which goes back to 1977.

- **Federal Audit Clearinghouse:** <https://harvester.census.gov/facweb/> (query system)

WHEN TO USE

The FAC is best for users who want to obtain data on federal transfers:

- **At a single point in time or over time.** Users can find detailed federal expenditure data going back to FY 2010 in CSV form or review the full audit file going back to FY 2016. Prior to 2014, the FAC published only the audit forms and summary data from the full audit packages. In 2013, however, the federal government adopted new rules requiring that full audit packages be made public for fiscal years beginning after December 2014.⁷⁶ Thus full audit packages are available beginning in FY 2016 for most entities. Technically proficient users also have the option to download the complete database,⁷⁷ which contains data back to 1997.
- **On a single local government in depth or to compare multiple governments.** The FAC is an excellent source of information for researching a specific government in depth, if a researcher has the patience to review lengthy schedules of federal expenditures or to organize multitab and multicolumn CSV files. It would also be a useful resource for comparing a handful of local governments.

Technically proficient users have the option to download the complete Single Audit Database, which contains data on all auditees back to 1997 on agency, CFDA number, pass-through grants, and other information.⁷⁸ However, the size of this database demands technical proficiency in data analysis and statistical programming software to process.

- **For specific programs funded by the federal government.** Spending amounts are available by CFDA number.
- **For federal grants, loans, and contracts.** Auditees are required to include a Schedule of Expenditure of Federal Awards in the audit package.⁷⁹ This schedule contains all federal expenditures, including grants, loan and loan guarantee programs, and contracts.⁸⁰ The FAC compiles these data, including data on individual governments, into a searchable database.
- **On direct federal funding and pass-through grants.** Auditees are required to report funds they have received directly from the federal government and indirectly in the form of pass-through grants from other state or local agencies, as well as funds they have passed through to other entities.
- **To quantify federal dollars spent by local governments.** Audits report on actual spending completed by the recipient. The FAC database also includes information about the type of entity to which the grant was awarded, the number of months over which the award money was spent, identification numbers, geographic location, the name of the person who heads the account, and other information.

EASE OF USE

Although the Instruction Manual for the Image Management System offers details on how to run different queries,⁸¹ the system is difficult to use and requires a high level of user sophistication in data analysis and public finance to navigate. Accessing single reports for specific grantees is easier than working with the full database, but reading through individual audit reports is still time consuming. It requires both patience and extensive knowledge of public finance terminology. Moreover, the density of the audits makes it difficult for a novice user to compare multiple governments or even the same government over time. The CSV download is probably the most user-friendly option for users wishing to analyze and sort data in an Excel format.

FAC data have been used for a variety of projects in the academic world, some dealing with nonprofits or businesses and others with local governments. All such research has relied on the database's accuracy to publish peer-reviewed findings.⁸² The federal government also used single audit reports to monitor Recovery Act funds during the Great Recession (Manning 2010). Box 3 shows how users can use FAC to find information on federal funding for a city government.

BOX 3

Step-by-Step User Case: New Orleans, Louisiana

The instructions below illustrate how to use FAC to find data on federal funding to New Orleans, Louisiana.

Step 1: Go to the FAC homepage at <https://harvester.census.gov/facweb/>.

- Select “Find Audit Information” at the bottom of the page. This will take the user to the Image Management System.

Step 2: Select the “Search for Single Audits” tab, then click “Search for Single Audits.”

Step 3: From there, the user can search for recipients by general information, financial statements, federal awards, or federal awards findings details.

Step 4: Select the “General Information” dropdown menu from the search options.

- Enter “City of New Orleans” under the “Auditee Name” field.
- Users can limit their search to specific fiscal years. Bear in mind that the most recent audit for a given entity may not be available yet.

- Users must acknowledge some statutory use agreement language before they can see results of the search.

Step 5: Browse the “Auditee Name” search results for the City of New Orleans to locate the audit for the most recent year.

- The PDF of the FY 2017 audit for the City of New Orleans is over 200 pages. Most of the report consists of a full audit of New Orleans’ finances.
- Federal awards to New Orleans are addressed under “Schedule of Expenditures of Federal Awards” (186).

Step 6: Alternatively, use the “Download Summary Report” button on the search results page to download all available audit data as a CSV file (in this case going back to FY 2010).

- Use the city’s DUNS number to sort through direct, indirect, and pass-through funding on the “CFDA Info” tab in the spreadsheet.

Findings: The Schedule of Expenditure of Federal Awards and CSV file list all federal expenditures that flowed through the City of New Orleans in each fiscal year, organized by CFDA number and agency. It also identifies pass-through grants, both those that flowed through another government entity before reaching New Orleans and those that New Orleans passed on to a subrecipient. For example, New Orleans received \$5.3 million in federal funds to administer the Supplemental Nutrition Assistance Program for Women, Infants, and Children in the year ending on December 31, 2016. The funds came through the Louisiana Department of Social Services from the US Department of Agriculture. The city also passed through many grants to subrecipients. For example, it passed the entirety of the direct \$7.3 million it received for HIV Emergency Relief Projects Grants on to subrecipients. Of the total \$142 million the city received in federal awards, it passed \$36 million of that on to subrecipients. The audit does not contain detail on specific subrecipients.

Source: Authors’ analysis.

US Census of Governments

The Census Bureau performs a full census of state and local government public finance every five years and conducts a smaller sample survey annually.⁸³ The data contain over 500 variables on revenue, expenditure, and debt for each of the 50 states and District of Columbia as well as local governments. Data are collected directly from state and local governments via the survey and the Census Bureau’s review of public administrative records. The Census Bureau compiles and reports the data by

government level and by individual unit. Government-level data include data from states (individual states and total), all local governments (totals), or specific types of governments, like school and special districts (totals). Individual-unit data are from specific state or local governments, like the City of Minneapolis.

Census of Governments data are one of the most reliable sources for aggregate data on state and local government finance.⁸⁴ The data are used in a variety of digital data platforms (discussed below), including the Urban Institute’s State and Local Finance Data Query System (SLF-DQS), the Lincoln Institute’s Fiscally Standardized Cities database (FiSC), and USAFacts. For advanced users, the data provide a high level of detail (not easily found elsewhere) on specific local governments, including on intergovernmental revenues and expenditures. However, the data are unable to track pass-through grants, leaving out an important part of the flow of funds from federal to local governments. Additionally, the data are only released annually, typically with a two-year lag (2015 Survey of State and Local Finance data were released in the fall of 2017).

In addition to the portals described above, users can access the Census of Governments data directly via the Census’ websites. For example, American Factfinder provides summary tables for Census of Governments and Survey of State and Local Finance data. And the original single-year data going back to 1992 are available for individual download on the US Census of Governments website. In February, 2018, the US Census Bureau also launched its own “State & Local Government Snapshot” tool that allows users to explore aggregated data from 2012 to present. The portals discussed in this section make the Census of Governments data easier to access and download, but for local individual data, users will likely have to go to the archived individual unit data file, which goes back to 1967. See appendix A for a more detailed description of how to create time-series data from the Census of Governments individual unit files.

- **Single-year data (1992–present):** <https://www.census.gov/govs/local/> (text file for each year, individual download)
- **Historical data (1967–2012):** <https://www2.census.gov/pub/outgoing/govs/special60/> (text files; see appendix A on how to use)
- **State & Local Government Snapshot (2012 – present):** <https://www.census.gov/library/visualizations/interactive/state-local-snapshot.html> (data visualization and query system)

Data Strengths

QUALITY

The Census of Governments is widely regarded as a reliable source of information on state and local finance data. The “2012 Census of Governments: Finance Methodology” details the steps the Census Bureau takes to encourage state and local governments to submit information and minimize inaccuracies.⁸⁵ Respondents can answer the survey electronically, which reduces handwriting and mistyping errors. All data are edited to flag and follow up on possible errors.

Between quinquennial census years, the Census Bureau conducts a survey of state and local governments and imputes data to arrive at totals. The methodology report reviews the process for imputing missing values. Sampling error is present for years not ending in 2 or 7; nonsampling error is likely also present, but the Census Bureau does not estimate the amount that may exist. A 2002 technical documentation report identifies possible sources of error:

The estimates are also subject to the inaccuracies in classification, response, and processing. Efforts were made at all phases of collection, processing, and tabulation to minimize errors. However, the data are still subject to errors from estimating for missing data, errors from misreported data, errors from miscoding, and difficulties in identifying every unit that should be included in the report. Every effort was made to keep such errors to a minimum through care in examining, editing, and tabulating the data reported by government officials.⁸⁶

The Census of Governments response rate was 83 percent in 2012.⁸⁷ All 50 states responded, and approximately 83 percent of local governments responded. The Census Bureau puts out a methodology report every year. The response rate to the 2015 survey was 88.8 percent.

Data Weaknesses

LEVEL OF DETAIL

Census of Governments data do not provide a complete picture of federal funding to local governments because they cannot distinguish pass-through grants from direct grants. The Census only reports on direct spending by state and local governments, and the federal funding that flows directly to either states or local governments. US Census data also do not relay what specific programs funds go to, or requirements for how local governments must spend those funds.⁸⁸

The Census of Governments classifies spending by functional category, but some nuances are lost in this process. For example, the data report how much direct federal funding went toward local

spending on public welfare, but they cannot tell which federal agency provided those funds or which federal programs (e.g., Medicaid, Temporary Assistance for Needy Families, State Supplemental Security Income) made up the bulk of the spending. Similarly, Census is aware that CDBG grants are allocated to many different types of projects, but it classifies all CDBG spending under Housing and Community Development.⁸⁹

However, users can reliably obtain data on direct federal transfers to different types of local governments or on direct state transfers to local governments. The individual unit file also provides a high level of detail on specific local governments (including cities, counties, townships, school districts, and special districts).

TIMELINESS

A full Census of Governments is only performed once every five years. Although survey data are available in interim years, the data are only released annually, typically with a two-year lag (2015 Survey of State and Local Finance data were released in the fall of 2017).

COMPARABILITY

Census data are comparable across cities (especially useful when using the individual unit file). However, because the Census sources its data from local financial documents, the data reflect dollars spent by local governments. Users should exercise caution when comparing to sources like USAspending.gov, which measures dollars obligated. Additionally, because programs are collapsed into functional spending categories, comparing spending across data sources that report spending by program can be difficult.

Data Portal 1: State and Local Finance Data Query System

The Urban Institute maintains a system that allows flexible presentation of data from the US Census of Governments State and Local Finance series. The SLF-DQS reports on spending, revenues, and debt by state as well as local government, including cities, counties, townships, school districts, and special districts.

- **SLF-DQS:** <http://sldqs.taxpolicycenter.org/>

WHEN TO USE

The SLF-DQS is best for users who wish to quantify federal funding flows to local governments:

- **At a single point in time or over time.** The SLF-DQS provides data going back to 1977.
- **As a sum total by level of government.** Data are available as state, local, state and local totals, and local government detail (i.e., counties, cities, special districts, school districts, and townships). All data reflect state aggregates of finance data for the selected level of government. The SLF-DQS allows users to compare aggregate direct federal revenues across levels of government but not individual units of government. To analyze and compare individual governments, users need to access the Census individual unit files discussed in appendix A.
- **By functional program area.** Although the Census of Governments contains data on over 500 debt, revenue, and expenditure variables, SLF-DQS combines several of these variables into aggregate sums that match the totals provided in the Census of Governments' summary tabulations. This aggregation makes it easier for users to see totals for specific functional areas, as well as overall spending and revenues, without having to combine several Census Bureau codes.
- **By total federal grants and other forms of direct assistance** including general revenue sharing and payments in lieu of taxes, for example, but not contracts or loans.
- **By direct federal funding.** Federal pass-through grants are included in state funding to local governments, but are not broken out separately
- **By dollars spent by local governments,** as opposed to dollars obligated. The data can be viewed in real or nominal dollars and on a per capita or fraction of personal income, general revenues, or total expenditures basis.

EASE OF USE

The platform takes users through an intuitive, step-by-step process to generate custom-made tables. However, some fluency with public finance is required, especially to select the series variables (detailed revenue, debt, and expenditure data) that are derived from the Census of Governments summary tables.

The website is structured as a step-by-step tool that allows users to create their own data tables. Users may select the level of government, state, variables, and years they are interested in, as well as units of display. Users make these choices by navigating through the step-by-step tabs, accessed at the top of the page or through the “next”/“previous” buttons. Each tab has an associated help page (“?” box) that provides more detail.

Data Portal 2: Fiscally Standardized Cities Database

The FiSC, developed by the Lincoln Institute of Land Policy, contains over 120 variables on revenue, debt, expenditures, and assets for 150 of the United States' largest cities.⁹⁰ Cities provide different mixes of services like elementary and secondary education, housing, and transit, making it difficult to compare their finances. FiSC standardizes these differences, controlling for variation in government structure and public services delivery, by adding financial totals from the central city municipal government to those of overlapping governments such as school districts, counties, and special districts.

FiSC is constructed with data on local governments from the US Census of Governments Survey of State and Local Finance. It is an excellent source of information for comparing federal funding across different city geographies. It may be helpful for cities that want to understand why their federal funding differs from other cities that provide different mixes of services. The database conveys information on fiscally standardized cities as opposed to specific political jurisdictions. This standardization may dampen its relevance for a city that wishes to analyze its own grant performance relative to other cities as political jurisdictions. However, FiSC may be more relevant for users wishing to analyze the flow of intergovernmental revenues into a specific geography, rather than a political jurisdiction.

There are some methodological challenges in building financial variables in FiSC, especially for special districts, and some challenges in selecting the cities to participate (Langley 2016). FiSC couldn't include cities from Hawaii or New Jersey, for example, because of problems with the way school districts in those states are structured. The database includes some imputed values. FiSC is updated annually along with Census of Governments data.

- **FiSC:** <http://datatoolkits.lincolninst.edu/subcenters/fiscally-standardized-cities>

WHEN TO USE

The FiSC database has been used by researchers at the Lincoln Institute of Land Policy and elsewhere to study the relationship between revenue systems and fiscal health (Chernick 2017), household mobility and local government finance (Li, Cushing, and Anderson 2017), and the fiscal conditions of US cities (Chernick and Reschovsky 2017). Chernick, Langley, and Reschovsky (2015) also outline how to compare central city finances by using the FiSC approach.

FiSC is best for users who want to obtain data on federal dollars to local governments:

- **At a single point in time or over time.** FiSC provides data going back to 1977.

- **For one or multiple fiscally standardized units of local government.** The tool allows users to analyze direct transfers from the federal or state government to fiscally standardized city geographies. Users can rank city geographies on key variables of interest, including intergovernmental revenues and expenditures. FiSC cities are artificially constructed and do not reflect finances of independent political jurisdictions. Rather, they convey information about the city’s geographic area where services are provided, revenues are collected, and funds are spent by a combination of different governments.
- **In aggregate revenue and spending terms, by function.** However, FiSC does not break down intergovernmental revenues by functional category.
- **For total federal grants and other forms of direct assistance** including general revenue sharing and payments in lieu of taxes, for example, but not contracts or loans.
- **For direct federal funding.** The Census only reports on direct spending by state and local governments and the federal funding that flows directly to either states or local governments.
- **As dollars spent by local governments,** as opposed to dollars obligated. The data can be viewed in real or nominal dollars and on a per capita or fraction of personal income.

EASE OF USE

Users can create their own tables via an easy-to-use dropdown menu. Box 4 offers a step-by-step case of using FiSC to compare two cities.

BOX 4

Step-by-Step User Case: Philadelphia, Pennsylvania and Phoenix, Arizona

The steps below show how Lincoln Institute of Land Policy’s FiSC can be used to compare fiscal variables for two cities of similar size: Philadelphia, Pennsylvania, and Phoenix, Arizona.

Step 1: Go to <http://datatoolkits.lincolninst.edu/subcenters/fiscally-standardized-cities> and click on the “Access FiSC Database” link on the sidebar menu.

Step 2: Select Phoenix and Philadelphia from the list of cities and search for data from 2015.

Step 3: Select variables.

- Variables that would provide a broad picture of the two cities' finances include total revenue, intergovernmental revenue (which includes revenue from other levels of government, including federal grants and contracts), and spending on broad categories like education, transportation, and health.
- Population and school district enrollment can be selected in the "Additional Variables" section at the bottom the page.

Step 4: Create a table that compares the variables between the two cities.

Findings: The resulting table shows that although Philadelphia and Phoenix have close to the same number of residents, Philadelphia's government collects and spends more revenue on a per capita basis, spending about \$7,600 per resident compared to Phoenix's \$4,900 per resident. FiSC also shows that Philadelphia receives a higher percentage of its revenue via intergovernmental transfers—34.8 percent compared to Phoenix's 28.7 percent. These revenues pertain to all overlapping government jurisdictions in the geographic area, including the city, county, school district, and other governments. In this way, the FiSC data tool allows users to make easy fiscal comparisons among the country's most prominent cities.

Source: Authors' analysis.

Data Portal 3: USAFacts

USAFacts measures and graphs a variety of data points on the US population and government finances. Founder Steve Ballmer wanted to provide a "10-K" for the US government that would report revenues, expenditures, and key performance indicators across the federal, state, and local governments. Publicly traded firms are annually required to produce a "10-K" report for shareholders that describes the firm's financial activity and standing, market conditions and performance, and other contributors to the firm's financial health. USAFacts attempts to compile the data necessary to produce such a report and present it in a visually appealing format.

The portal is a project of Steve Ballmer in collaboration with the Penn Wharton Budget Model, Lynchburg College, and the Stanford Institute for Economic Policy Research. Data come from over 70 government agencies, including all major government departments, OMB, US federal courts, the Federal Reserve, the Consumer Financial Protection Bureau, the Consumer Product Safety Commission, and many others.⁹¹

The portal sorts data into the four missions outlined in the preamble to the US Constitution: establish justice and ensure domestic tranquility, provide for the common defense, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity.⁹² It provides detailed information on federal expenditures from a variety of data sources and contains limited data on state and local government public finance as well as federal grants.

The portal's state and local finance data are from the US Census of Governments five-year census and its annual Survey of State and Local Government Finance. The portal is in development, and USAFacts plans to incorporate additional data sources and user improvements.

- **USAFacts:** <https://usafacts.org/government-finances> (query system, navigate to revenue or spending pages for state and local data)

WHEN TO USE

Users interested in state and local public finance data can go to USAFacts for topline state and local revenue and expenditure data:

- **At a single point in time or over time.** The portal provides single-year download options for state and local revenue and spending data, as well as time-series data. Select “Compare by Fiscal Year” and “State & Local for Government Type” to see data going back to 1980.
- **For state and local governments combined.** The portal does not break out data by single governments or government type. It only provides state and local aggregated numbers.
- **State and local spending amounts by mission,** as outlined in the preamble to the Constitution.
- **Major federal grant amounts** to state and local governments for select service areas. USAFacts also compiles data from federal agencies on grants to state and local governments for the following services: child and social services, transportation, community and regional development, cash programs for aid to the disadvantaged, noncash programs for aid to the disadvantaged, elementary and secondary education, and vocational education.⁹³
- **Direct federal funding** to both state and local governments. The portal's state and local finance data do not allow a user to break out pass-through grants, distinguish between state and local data, or drill down to specific local governments. These restrictions limit the relevance of USAFacts for users who want to answer the question of, “How much does my community receive in federal grant funding?”
- **Federal dollars spent by state and local governments** (or revenues received).

EASE OF USE

The site is well-formatted and easy to navigate. It functions best for a user who wants to access single numbers, or visually appealing tables and graphics, on the federal or state and local sectors. The site is exploratory and users can click on different links to browse information. These features make it more accessible for a novice data user. However, the site is less user friendly for researchers or other users who want to download time-series data on state and local public finance. The site has visually appealing tables and graphic visualizations or single-year downloads in CSV format.

Comprehensive Annual Financial Reports

To comply with standards set by the Governmental Accounting Standards Board, state and local governments must produce an annual third party-audited accounting of all funds and enterprise accounts, such as local utilities, parking, or other pay-for-service operations. State governments, municipalities, counties, and other local governments all produce CAFRs.

CAFR data are excellent for users who want to obtain detailed financial information for a small number of governments at a single point in time. Gathering data across multiple jurisdictions, or constructing a panel dataset across time for even one jurisdiction, can prove time intensive, as CAFRs typically come in the form of non-machine-readable PDFs for each year. This format makes them difficult to analyze in large volumes. Some researchers have attempted to aggregate CAFR data manually, and other organizations have implemented automated PDF scraping programs to aggregate CAFR data. But these options may not be available to all users. State governments usually publish CAFRs on the website of their finance division or comptroller's office. One website, GovRank (discussed below), has compiled a large and easy-to-search collection of high-level financial information from CAFRs.

Data Strengths

QUALITY

The Governmental Accounting Standards Board sets accounting regulations for CAFRs, although compliance is voluntary, and CAFRs are also audited by the external American Institute of Certified Public Accountants. They are reliable for use in academic research. The U.S. Pension Tracker, a tool from the Stanford Institute for Economic Policy Research, gets data from state CAFRs, for example.⁹⁴

LEVEL OF DETAIL

CAFRs provide more detail than a local budget (see box 5). They report on the financial history of the government for the most recent year, as well as the fiscal accumulation (or net position) of debt over time. One section compares the budgeted amount to actual spending. CAFRs also report how much a local government received in federal grants in the most recent fiscal year(s). This information is usually contained within a broader section on the status of the local government's general fund. In city CAFRs, the auditor often prepares a section that contains the most detailed description of federal flows that affect the city. In fact, CAFRs provide such a high level of detail on the city's financial positioning that users may have difficulty searching through lengthy complex documents to find a single data point of interest.

However, CAFRs may only report a combined total for intergovernmental aid, making it impossible to distinguish between pass-through grants, state-funded grants, and direct federal grants. Data on more indirect subsidies like loans may also be found in the notes section of a CAFR.⁹⁵ Some local governments may even receive pass-through funds from other local governments that may not be identified in the CAFR, but this depends on the city or county.⁹⁶

TIMELINESS

CAFRs are released annually.

Data Weaknesses

COMPARABILITY

CAFRs provide the best detail at an individual level of government, but they are not good for aggregate analysis and are not always uniform in level of data across governments.⁹⁷

BOX 5

Step-by-Step User Case: Minneapolis, Minnesota

CAFRs provide an even more detailed accounting of city expenditures than the budget, and they reflect actual, as opposed to merely planned, spending. The following steps show how a CAFR can be used to obtain information on federal funding for a city.

Step 1: Type “Minneapolis, Minnesota CAFR” into a search engine (e.g., Google) to find the most recent city CAFRs on the Finance Department’s website.

- **Minneapolis Comprehensive Annual Financial Reports:**
http://www.ci.minneapolis.mn.us/finance/reports/CAFR/financial-reports_caf-r-home
- Select the most recent 2016 CAFR.

Step 2: Use the “Ctrl F” keyboard search function to search the document for “federal” for general references to federal mandates, revenues, and expenditures. For more specific information, search for “Schedule of Expenditures of Federal Awards.”

Findings: Federal funds are addressed in a series of tables. The most relevant tables are “Schedule of Intergovernmental Revenue” and “Schedule of Expenditures of Federal Awards—All Fund Types.” The revenue schedule shows how much yearly revenue Minneapolis received from each government agency. The schedule of expenditures breaks down the spending by program. Together, the two sections illustrate which federal agencies give money to the City of Minneapolis. The largest grants came from HUD (e.g., CDBG Entitlement Grants) and the Department of Transportation (for highway construction). Minneapolis received approximately \$50 million in federal funding annually, of which it passed \$9.4 million on to subrecipients. Subrecipients are not individually identified in the CAFR.

Source: Authors’ analysis.

Data Portal: GovRank

GovRank is a project of United States Common Sense that ranks local governments’ financial performance and provides data from local financial reports and audits. Its stated goal is to “open government data and resources to the public, develop data-driven policy analysis, and educate citizens about how their governments work.” It is meant to function as a one-stop shop for people looking for information about government spending. United States Common Sense has amassed data from nearly 100,000 state and local financial reports and 70,000 budgets. These data are available on the city, county, and state levels. GovRank contains data for “over 13,000 local governments and all 50 states dating back to 2008–09.”⁹⁸

To construct the dataset, GovRank staff electronically scraped state and local CAFRs, single audit reports, and other miscellaneous reports. When necessary, it issued public information requests to state and local governments to obtain the necessary financial documents. The data are scraped directly from audited CAFRs, which have a high level of detail and accuracy. However, the scraping process may

introduce errors, as it is an automated process with a large dataset. There have been no audits or attempts to check the accuracy of GovRank numbers against other numbers, so accuracy may still be an outstanding question. United States Common Sense does not provide any supplemental information on data accuracy.

- **GovRank:** www.govrank.org

WHEN TO USE

Users should employ GovRank to see CAFR data:

- **At a single point in time or over time.** The data are only available from 2008 through 2014.
- **For single or multiple city or county governments.** Users can pull down one city or county at a time or compare multiple governments.
- **On topline financial indicators** across state and local governments, rather than spending by program or category. The portal lacks any information on federal funding, specifically. The portal is not good for drawing down data on spending by program, functional category, or type of assistance.
- **On programs and type of assistance.** Users can go to the portal to look up specific CAFRs for cities or counties of interest. Depending on the local government, the CAFR may contain programmatic spending information or information on federal funding. Individual CAFRs may also contain information on contracts and other types of federal financial assistance in addition to grants. All units will be reported in dollars spent.

EASE OF USE

Users interested in federal funding may use GovRank as an easy-to-access repository of detailed financial documents like budgets and CAFRs that may contain federal funding data. The site has easy-to-use dropdown menus and search functions.

Researchers have used GovRank to assess the effect of financial resources on local public union labor practices (Reilly and Singla 2017) as well as entrepreneurial orientation (Singla, Stritch, and Feeney n.d.). GovRank uses its own data to perform fiscal analysis and rank local governments' fiscal health.⁹⁹ Box 6 shows how GovRank can be used to obtain financial data on a specific city.

BOX 6

Step-by-Step User Case: Minneapolis, Minnesota

Users can access topline financial data on specific cities and local governments via GovRank. Minneapolis is used as an example below.

Step 1: Go to www.govrank.org.

- Type “Minneapolis” into the search bar under “What’s your government’s ranking?”

Step 2: Filter to “Minneapolis, MN.”

- This step brings up a “Quick Guide” followed by a financial statement for FY 2014.
- The financial statement gives big summary numbers, such as Total Revenues, Total Expenses, Total Assets, and Total Liabilities. It does not provide details about federal flows.

Step 3: Click on “View Financial Documents.”

Step 4: Click on “2014 Audit” (the user may be asked to provide your name and email address).

Step 5: This step brings up the Minneapolis 2014 CAFR (not the city’s most recent CAFR, but the site does provide CAFRs dating back to 2004).

Source: Authors’ analysis.

Local Budgets and Related Documents

Cities and other local governments pass an annual budget that outlines plans for spending obligations over the upcoming year. Sometimes budgets report past fiscal activity, but they mainly focus on projections for the future rather than current or past outlays. Budget documents include the amount of federal money the government expects to receive in the upcoming years (see box 7).

Many, but not all, local governments provide access to budgets on their website (see discussion of digital portals below). Budgets contain much useful information, but they may not be readily accessible for a novice user. Sometimes cities provide supplemental budget information that summarizes budget high points for readers, and some cities provide historical budget data on an easily accessible website. Budget data are generally released annually.

Data Strengths

QUALITY

Budgets contain high-quality information that helps a city plan its revenues and expenditures. Estimates of revenues and expenditures may vary in quality across cities, and some cities may have better estimating practices than others. Estimates of federal funding sources may be more reliable than estimates based on tax revenue because cities often try to carefully predict their expected level of federal funding from year to year, whereas tax revenue estimates may be more volatile and dependent on underlying regional economic conditions.

TIMELINESS

Budgets are released annually.

Data Weaknesses

COMPARABILITY

Although many local governments likely follow similar accounting principles in the preparation of their budgets, budgets are unique to each government. They are not easily comparable to other governments, and budget data (as they project future spending and revenues) are not comparable to data that report on actual spending and outlays (i.e., single audit reports and CAFRs). No central repository of local budget data is available for users to search. The data are highly decentralized.

LEVEL OF DETAIL

Budgets contain varying levels of detail. They may report on specific sources of federal funding or overall federal revenues expected to fund different programs. However, they may not always distinguish between federal pass-through funds and state direct assistance. A local government budget will typically be less detailed than its CAFR. Unlike many CAFRs, the budget has no table that details all federal receipts and their uses. Varying levels of detail may be lost in the budget document, and budgets are not expected to contain uniform detail across governments.

Nevertheless, the level of detail on the city's general budget and fiscal standing can be overwhelming for users, and many budgets require that users pore over many hundreds of pages of information to obtain the desired information on specific programs or federally funded items. Budgets

given as PDFs that contain unreadable text formats may cause challenges for users who do not have the time or resources to read through many hundreds of pages to find the desired information.

BOX 7

Step-by-Step User Case: Stockton, California

One of the best, most detailed, and city-specific ways to learn about a locality's fiscal behavior and to locate data on federal funding is to look directly at an individual city's budget. The steps below outline how a user can find and interpret budget information for Stockton, California.

Step 1: Download Stockton's most recently adopted budget (FY 2017–18) at <http://www.stocktongov.com/government/departments/adminservices/budCurYear.html>.

- Select "2017–18 Adopted Budget Book."
- Download the full PDF file.

Step 2: Use the "Ctrl F" keyboard function to search for "federal." Stockton's budget PDF illustrates several difficulties users may encounter when trying to do detailed searches in a PDF document:

- The document is nearly 400 pages long, and the keyboard search function may not work properly when viewing the document in a web browser. For Stockton, even the downloaded document does not return a "Ctrl F" search for all relevant sections.
- Users may have to scan each budget section of the document (these are available at separate links on the page referenced in step 1) to find full descriptions of federal funding sources. For example, extensive federal funding sources administered by Stockton's Housing Division do not appear in a keyboard search, but they can be found by downloading the Housing Division's separate budget section at http://www.stocktongov.com/files/Economic_Development_Compiled.pdf.
- For this case, users may additionally download the [2017–18 Proposed Budget Book](#) and use the functioning search feature in this PDF document to get a sense of Stockton's federal funding (discussed in the following section).

Findings: A "Ctrl F" search and a visual scan of Stockton's budget returns several findings on federal funding. One source of federal funding mentioned repeatedly, for example, is the federal COPS Hiring Grant, which the city is using to partially fund 15 entry-level police officer positions (D-16). The Police Department 2017–18 budget has a line for "Federal Grants" under both the revenues and expenditures sections (D-18). The document also mentions a grant from the Federal Emergency Management Agency

(FEMA) that was used to purchase a new Hazardous Material Emergency Response Vehicle (E-4). The FEMA grant involved a 25 percent local match.

The budget also references a loan agreement with HUD to complete redevelopment projects. The city will repay the \$1.9 million loan by using CDBG entitlement funds (p. I-8). The city's Housing Division receives Emergency Solutions Grants, Home Investment Partnership Funds, and CDBG entitlement funds (I-8 to I-17).

Later in the budget, there is a detailed table on the city's "Five Year Capital Improvement Program," which explains where capital improvement funds come from (M-14). The line for "Federal" grants under "General Government and Grants" indicates \$14.8 million of the city's \$20.5 million capital improvement fund budget came from federal grants in FY 2017–18 (M-15). The city has budgeted matching funds for numerous capital projects, including the federal Regional Surface Transportation Program street resurfacing project (F-12). Other sources of federal funding may be listed under specific agency budget sections.

Source: Authors' analysis.

City Budget Supplements

Many cities release supplemental budget documents to the public. The City of Detroit, for example, releases a "Budget in Brief" that highlights different areas of the city's budget, although it does not provide a breakdown of federal grants.¹⁰⁰ The city's Monthly Financial Reports contain data on combined federal and state grants to Detroit, however, and the city's four-year plan outlines possible risks to state and federal grant funding.

The City of San Francisco provides six- and nine-month budget reports, as well as a mayor's "Budget Book." The six- and nine-month reports are available on the Controller's Office website under "Find a Report" and then "City Reports."¹⁰¹ These reports identify federal and state intergovernmental revenues, but they do not explicitly identify how pass-through grants are classified.

The San Francisco mayor's budget book presents the proposed budget in a reader-friendly format.¹⁰² The document discusses the city's exposure to federal funding reductions. It also describes federal funding by department, but it does not clearly describe whether pass-through grants are counted under federal or state intergovernmental revenues.

Small cities may have documents that are not published but are available to the public upon request. The City of Falls Church, for example, keeps tracking charts.¹⁰³

Digital Portals: City-Specific Open Budget Websites

The civic tech community, in collaborations between public entities and tech talent, has produced several examples of cities communicating with residents about budgets through open source and open data projects, often including data visualization.¹⁰⁴ Not all of these platforms provide detailed information on federal funding flows, but they are examples of how cities can provide reliable and user-friendly information to the public and researchers. See some examples below:

- **Louisville Metro Government Open Data:** <https://data.louisvilleky.gov>
 - » Louisville Metro keeps an open data portal allowing access to an expenditure dataset that is detailed and breaks out various federal funding sources:
<https://data.louisvilleky.gov/dataset/expenditures-data>
- **Open Budget Oakland:** <http://openbudgetoakland.org/>
 - » In 2013 the civic tech group OpenOakland launched Open Budget Oakland, a dashboard that allows users to visualize and download a range of budget information for the City of Oakland.¹⁰⁵
- **Checkbook NYC:** <http://www.checkbooknyc.com/>
 - » In 2010 New York City launched Checkbook NYC, which it modeled after USA Spending.gov.¹⁰⁶
 - » Through its “Open Data” page, users can also download current and historical data on revenues and expenditures that include separate categories for state and federal categorical aid.¹⁰⁷
- **City of San Diego Financial Reporting Platform:**¹⁰⁸ <https://budget.sandiego.gov>
- **SF OpenBook:** <http://openbook.sfgov.org/>
 - » The City of San Francisco has SF OpenBook, which breaks out federal intergovernmental revenues among other revenue and spending variables. OpenBook is run out of the Office of the Controller.

WHEN TO USE

These portals are all unique and are best for users that want to draw down information for specific local governments at specific points in time. The degree to which they feature information on federal funds,

and whether they provide data over time, will vary by local government. Users are encouraged to explore portals for their city of interest.

The above list is not exhaustive, and it would take a user time and likely require some familiarity with public finance terminology to find data points of interest. However, the list illustrates the movement toward open budgets and data transparency happening at the local level, and it may provide some insight into where users can look for data in their own community.

EASE OF USE

Ease of use will vary with each portal and local government.

Bond Offering Statements and Electronic Municipal Market Access

Bond offering statements are another source of richly detailed information on local government fiscal conditions. In 1975, Congress created the Municipal Securities Rulemaking Board (MSRB) to create uniform standards and transparency requirements for the state and local bond market. The MSRB requires state and local entities issuing new municipal securities to publish a formal statement of the terms of the bond, risks to investors, and other detailed information about the bond offering. The intent is to provide accurate and detailed information to municipal bond investors interested in purchasing the securities.

Bond statements often disclose details about city finances that may be of interest to users. For example, they may contain information about federal funding sources for specific bond-funded projects or total federal funding to the local government as part of the report on the government's overall fiscal condition. The local government may disclose sources of city revenues, including federal and state categorical grants,¹⁰⁹ or portions of a project that the city anticipates will be federally financed. Cities may also report on risks from changes in federal policy, such as President Trump's executive order on immigration and sanctuary cities that he signed in January 2017.¹¹⁰

However, the level of detail on federal funding is not consistent across statements, and the statements may be difficult to read and understand for users not familiar with public finance terminology. Bond offering statements can be accessed through the Electronic Municipal Market Access (EMMA) site (discussed below).

Data Strengths

TIMELINESS

Local governments report their bond offering statements and disclosure documents to EMMA upon issuance.

QUALITY

The entries in EMMA are copies of official legal documentation provided to MSRB and bond investors, and as such they are expected to be reliable and accurate. However, we were unable to locate research auditing EMMA's bond offering statements and certifying their accuracy.

Data Weaknesses

LEVEL OF DETAIL

Although individual bond offering statements may identify important sources of federal funding or identify potential vulnerabilities to federal funding reductions, the statements do not necessarily contain amounts of federal funding or detailed financial information.¹¹¹

COMPARABILITY

Each bond and offering statement will be unique, depending on the project and what is required by MSRB. The data are neither aggregated nor standardized (Chung 2013), which makes it difficult to compare across governments or to compare bond-offering data to other sources.

Digital Portal: Electronic Municipal Market Access

The MSRB provides local bond offering statements through EMMA, a searchable database of government bonds designed to make the bond market more transparent and provide information to the public and potential investors. The site houses approximately 350,000 official statements and market documents from states, cities, counties, and other municipal securities issuers.¹¹²

- **EMMA:** <https://emma.msrb.org/>

WHEN TO USE

Users should go to EMMA to look up bond offering statements

- **At a single point in time or over time.** EMMA data are not complete; some disclosure documents prior to 2009 may not be available, nor are all securities subject to MSRB reporting requirements.¹¹³
- **For a single specific government or multiple governments.** EMMA is good for users that want to examine bond offering statements for specific cities. However, users should be aware that not all municipal securities issuers are required to submit statements to MSRB, and those documents will not be included in EMMA.¹¹⁴
- **That report federally funded programs, projects, or overall federal funding;** various assistance types, including grants, contracts, loans, or other; primary or indirect funding; or federal dollars spent or received. Not all bond offering statements will contain this level of detailed information, but users can examine specific statements to find out more.
- **That report general information on government debt issuance,** credit ratings, and other fiscal variables for specific issuers.

EASE OF USE

EMMA is widely considered a successful effort to improve municipal bond transparency (Pope 2013). Researchers have used EMMA to collect data on credit ratings on tax-secured bonds (Matkin 2010), to evaluate the financial performance of safety net hospitals (Sommers, Stone, and Kane 2016), and to analyze local government decisions to refinance debt (Moldogaziev and Luby 2012).

To use the search function on EMMA and select relevant fields, users must demonstrate a high level of literacy in government bonds. Moreover, the search function returns pages of individual bond offering statements that may overwhelm users. Once an individual bond offering statement is selected, the user must have the patience and knowledge to comb through sometimes hundreds of pages of legal bond-offering language.

Box 8 offers some tips for reading a city's bond offering statement.

BOX 8

Step-by-Step User Case: Reading a Bond Offering Statement for Falls Church, Virginia

The steps below show how EMMA can be used to locate federal funding data or other municipal fiscal information in a bond offering statement from Falls Church.

Step 1: Go to <https://emma.msrb.org/>.

- Click “Browse Issuers.”
- The user may encounter the “Municipal Securities Rulemaking Board’s EMMA Website Terms of Use” agreement on the following page. If so, scroll to the bottom of the page and click “Accept.”

Step 2: Click on the state of Virginia in the map that appears on the next page and type “Falls Church” into the “Filter results” box.

- Select the “Falls Church VA” record that appears in the search results.

Step 3: Click on the most recent statement of issuance, “General Obligation Public Improvement Bonds, Series 2014.”

- Select the “Official Statement” tab and open the PDF that has been posted to the page.

Step 4: Use the “Ctrl F” keyboard search function to search for “federal.”

Findings: Results from step 2 show that the City of Falls Church has issued eight rounds of bonds since 2000. Looking through the most recent statement of issuance in 2014 (step 3) reveals that Falls Church issued \$11,740,000 in Series 2014 General Obligation Public Improvement Bonds. The proceeds from the bond issuance are to be used to pay for renovation, construction, and equipment costs for changes made to Mount Daniel Elementary School in Falls Church. The bonds will mature in 2030. This is the type of information that can primarily be gathered from the EMMA database and bond offering statements.

A search for “federal” (step 4) primarily returns legal statements on federal income taxes, but page 36 shows the city’s “General Government Revenues by Source,” including federal funds. However, the statement does not break out by federal funding either by function or object of expense, and it does not explicitly distinguish between direct federal funding and pass-through funding.

Source: Authors’ analysis.

Catalog of Federal Domestic Assistance

The CFDA is a government-wide compendium of federally funded financial and nonfinancial assistance programs. The primary purpose of the catalog is to help potential grant applicants identify programs in certain areas (such as housing, transportation, or economic development) and improve coordination between the federal government and state and local governments. In 2017, CFDA contained information on 2,320 federal assistance programs (GAO 2017b).

CFDA is a helpful, if imperfect, compendium of federally funded programs. It is useful as a resource on what local governments can apply for and to obtain a breakdown of types of federal grants and assistance that are available to different types of entities. But it does not provide the funding or recipient information necessary to track funding to local governments. We include it in this guide because it provides an important piece of contextual information for understanding federal program classifications. CFDA program codes are used in a wide variety of data sources and portals, including data that feed into USAspending.gov and single audit reports.

Data Strengths

COMPARABILITY

The CFDA program number provides a helpful convention to track funding by program and federal agency across different types of grant recipients, including local governments. CFDA descriptions and classifications thus aid in the comparability of data across different sources as well as across local governments.

TIMELINESS

Electronic data on the CFDA website are updated daily and weekly.¹¹⁵

QUALITY

Audits have shown the data to be largely accurate, with some sources of error or confusion. Each program entry is self-reported by the federal grantmaking agency responsible for administering the program. In the seven days prior to the catalog's annual publication, OMB reviews the CFDA content for accuracy (GSA 2017). The GSA will automatically publish the catalog if no changes are suggested by OMB during this review period. In 2012, GAO found three sources of error in CFDA: single CFDA entries often corresponded to multiple programs administered by the agency; CFDA contained entries for programs that were not currently funded; and agencies decided on CFDA descriptions

independently, so long as they adhered to basic guidelines for specific fields, which created inconsistencies in reporting across agencies. In 2017, GAO found that it was difficult to match CFDA programs to line items in the corresponding agency's budget, largely due to different naming conventions and because a single CFDA entry may correspond to multiple programs (GAO 2017b). Internal agency audits have occasionally identified and reported on inaccurate program information in CFDA.¹¹⁶

Data Weaknesses

LEVEL OF DETAIL.

In addition to the sources of error noted above, CFDA does not provide information on specific award recipients or amounts awarded. The catalog doesn't record real transactions, but rather provides information on potential grants that governments may apply for. It is a reliable source of information on the eligibility requirements for grants and nonfinancial assistance awards, their administration, functional use, and tenure of program, but it can't answer the question, "How much federal funding does my local government receive?"

Although some governments have adopted CFDA numbers in their internal financial management and accounting systems, not all local government budget staff are familiar with CFDA and not all local governments use its numbering system for internal grant accounting purposes.¹¹⁷ Although CFDA may not be relevant for drawing down numbers, it is relevant for ensuring consistent classification across grant recipients and federal agencies.¹¹⁸

Data Portal

The catalog is an online, searchable database that classifies federal award programs by several criteria, including agency and assistance type. Federal grantmaking agencies enter their program data directly into the digital catalog under GSA supervision.

- **CFDA:** <https://www.cfda.gov/> (query system)
- **CFDA Electronic Download (2009 – 2017):**
<https://www.cfda.gov/?s=generalinfo&mode=list&tab=list&tabmode=list&static=download>
(CSV download)

WHEN TO USE

Use CFDA to search for federal, grant, loan, or other assistance opportunities (procurement activities are not included):

- **At a single point in time or over time.** Users can download data from 2009 to 2017 in machine-readable form and sort by different fields.¹¹⁹ For years prior to 2009, data are available in the archived section of the website.
- **By type of recipient or other variables.** Users can search by agency, assistance type, use, and eligible beneficiaries, for example. The database does not contain data on specific local governments or specific recipients.
- **By program.**¹²⁰ CFDA program numbers are a helpful classification tool. Entities subject to the single audit requirement must use the CFDA number to report spending. Some local governments have also adopted the CFDA codes to track federal assistance internally.¹²¹
- **Provided either directly or as pass-through grants.** The database includes programs flow from primary to subrecipients.

EASE OF USE

GSA publishes the catalog in print and PDF form annually and updates the electronic data available online daily or weekly. On the website, users can access the catalog entries as a PDF, CSV download, or online table. Each award entry includes the program name, authorizing statute, objectives, uses, restrictions, and application details (e.g., eligibility, application process, deadlines, and award procedure). Search functions are difficult to use and the site relies heavily on federal grant jargon. First-time users unfamiliar with government grantmaking may have trouble using the site. More sophisticated users may wish to download the electronic data in CSV format.

Additional Resources

This guide attempts to illustrate the universe of available data sources on federal transfers to local governments. It describes the data sources that we have become familiar with through discussions with practitioners, literature review, and our own experience. However, because local data are varied and decentralized, the guide may not be fully comprehensive. Below, please find references and links to other miscellaneous sources of data that we encountered in our search. Most of them are limited in

detail or availability, but they potentially offer an additional resource and layer of understanding to federal grantmaking.

Additional Data Sources

OFFICE OF MANAGEMENT AND BUDGET HISTORICAL TABLES

The OMB produces tables with data on budget receipts, outlays, surpluses or deficits, federal debt, and federal employment. Many of the tables have information dating back to 1940 and are part of a historical dataset that is available on the White House OMB webpage. The tables provide detailed information on federal outlays, including state and local grants. However, they only provide combined totals for federal grants to state and localities and do not disaggregate state and local assistance or pass-through grants. The purpose of the data is to present a broad reference source on federal budgetary outlays over time.

- **OMB Historic Tables:** <https://www.whitehouse.gov/omb/historical-tables/>

Use the OMB tables to see federal outlays by

- » **Federal agency:** table 4.1
- » **Function and subfunction:** tables 3.1 and 3.2
- » **Grants to state and local governments** at various levels of detail: tables 12.1–12.3, including percentage of gross domestic product, by subfunction and group, agency, and program.

The OMB tables only provide a broad overview of federal grants to state and local governments. They do not allow users to isolate funding by jurisdiction or type of government. The OMB adjusts historical data to account for changes in federal budgeting practices over time.¹²² Therefore, the data can be used for a high-level check of other data sources, but not to confirm details.

It is easy for users to identify specific tables and download machine-readable data. However, understanding and working with the data require some level of literacy with public finance and federal grants, and the user needs patience to identify the tables and variables of interest. The OMB tables are released and updated annually with the federal budget.

LOCAL GRANT REPORTING DOCUMENTS

Some federal grants require recipients to submit thorough reports on how and where grant money has been expended. In a prime example, HUD grantees are required to create and submit a Consolidated Action Plan to HUD that analyzes community housing and infrastructure needs and makes a plan for targeting grants funds toward those neighborhoods.¹²³ As a follow-up, every year grantees must submit a Consolidated Annual Performance and Evaluation Report describing progress toward the goals outlined in the plan.¹²⁴ These reports are a source of local data for users who are interested in how their local government is spending federal housing and infrastructure funding at a neighborhood level. However, they are granular, and there is no large database that compiles all this information for each city.

Although examining specific grant-reporting requirements for numerous federal grant programs is outside the scope of this guide, users who are interested in program funding streams may wish to inquire with their local budget or grants management office whether grant compliance reports or other similar resources are available. Users can also look to specific federal agency websites (see below) to learn more about what is required of grant recipients for reporting purposes for different federal grant programs.

OFFICES OF THE STATE CONTROLLER

Depending on the state and its reporting practices, the state controller's office may have data on federal pass-through funding to local governments. Carol Lu (City and County of San Francisco), for example, recommended that users interested in pass-through funding in California speak with the state controller about data it collects on federal grant subrecipients. The California Controller's Office manages a data portal called "By the Numbers" that provides data on city revenues, including intergovernmental revenues. Stephen D. Owens of the US Census also recommended contacting the state controller's office directly and asking for internal records on federal subrecipients, with the caveat that some states have more detailed reporting practices than others.

- **By the Numbers, California State Controller's Office:** <https://bythenumbers.sco.ca.gov/> (query system)

Additional Data Portals

FEDERAL AGENCY WEBSITES

In 2013, the Obama White House issued an executive order directing agencies to improve their data collection, management, and dissemination as part of the White House's Project Open Data.¹²⁵ Federal agencies have since taken steps either to improve their existing data interface or create new hubs and places where users can download and interact with federal data. Users can thus look directly to federal agencies if they are interested in exploring a program or funding stream. These types of portals can be powerful resources for users who want spending information on specific programs.

Users can search for agency-managed datasets (as well as data managed by participating nonfederal entities like cities, counties, and state governments) on the federal government's data portal.

- **Data.gov:** <https://www.data.gov/> (query system for metadata)

Several agencies currently have well-developed data hubs, some of which include data on spending and grants to local governments. For example, HUD maintains detailed financial award data on CDBG entitlement communities, as well as state-level CDBG awards, and provides them in easily downloadable formats on its website "HUD Exchange." Another example is the National Center for Education Statistics, which maintains detailed records on school spending. See below for some examples of federal agencies that provide easy-to-access federal grants data to the public.

- **Environmental Protection Agency Environmental Dataset Gateway:** <https://edg.epa.gov> (query system for metadata)
 - » Go to "Browse" and then select "Catalog." From there, select "Data Categories" and finally "Grants" from the dropdown folders on the left.
- **OpenFEMA:** <https://www.fema.gov/data-feeds> (query system for metadata)
 - » Provides several datasets on various FEMA grant programs for state and local governments, including emergency management performance grants, the hazard mitigation grant program, and public assistance grant awards activity, among others.
- **HUD Exchange:** <https://www.hudexchange.info/> (info page)
 - » **CDBG Expenditure Reports:** <https://www.hudexchange.info/programs/cdbg/cdbg-expenditure-reports/> (Excel files and PDFs)

- » **Allocations and Awards:** (variety of programs)
<https://www.hudexchange.info/grantees/allocations-awards/> (query system)
- **National Center for Education Statistics:** <https://nces.ed.gov/ccd/stfis.asp> (query system)
 - » Data on school expenditures and federal funding to schools

This list is by no means exhaustive and is only intended to illustrate some of the resources available from important federal agencies and programs that users may wish to examine. Other agencies may also have relevant datasets available via their open-data portals.

GOVERNMENT TECHNOLOGY COMPANIES

A variety of technology companies, such as Socrata, Carto, and eCivis, have developed products to help governments improve their grants and financial management practices. eCivis, for example, recently launched a beta site called “Grants Intelligence” that allows users to navigate single audit files, USAspending.gov data, and CFDA data in one platform. The site was one of several beta products developed as part of the Opportunity Sprint program, which Treasury and Census run together to pair tech companies with data users to help create innovative platforms for federal data access.

- **eCivis Grants Intelligence:** <https://intel.ecivis.com>

RECOVERY.GOV

Recovery.gov, an archived website from the Obama Administration, displays information about the distribution and spending of the American Recovery and Reinvestment Act’s stimulus package and Hurricane Sandy relief funds. The site previously displayed data on the geographic and programmatic distribution of recovery dollars. The site has since been archived and is now only accessible through the Library of Congress.

- **Recovery.gov:** <https://www.loc.gov/item/lcwa00092851/>

TREASURY RECOVERY ACT DATA

Treasury also maintains some state-level information on bond allocation, tax credits, and other assistance disbursed related to the American Recovery and Reinvestment Act.

- **Treasury Recovery Act Data:** <https://www.treasury.gov/resource-center/data-chart-center/recovery-act/Pages/Recovery-Act-Data-Visualization.aspx>

Conclusion and Recommendations

Recent policy flashpoints over issues such as immigration, justice policy, the environment, and the federal tax code suggest that the need for reliable and accessible information on the federal-local relationship is greater than ever. To respond effectively to state and federal policy changes, city leaders, local advocates, and researchers all need access to accurate data on how federal funds flow to local governments. Unfortunately, those data are spread across multiple sources that are often indecipherable or inaccessible to key stakeholders.

This guide outlines the patchwork of federal and local data sources on federal transfers and catalogs the digital portals that present those data in more user-friendly and digestible manners. Digital portals like USAspending.gov and FAC, as well as SLF-DQS and FiSC (both derived from US Census of Governments data) offer promising pieces of the puzzle for stakeholders who want to understand how federal funding flows to their community. Other source like CAFRs, local budgets, bond offering statements, and CFDA, among others, can help provide the context and additional information necessary to understand the landscape of federal funding and its relationship to local municipal fiscal health.

However, as our scan of the literature and interviews with federal and local staff have illustrated, the quality, comparability, and usability of data could be improved. Decentralized grants and financial management systems within local governments, inconsistency in the level of reporting detail required across different grant programs and federal agencies, and poor user interfaces all make it difficult for stakeholders to obtain accurate and accessible information. We recommend the five actions described below to improve the quality, comparability, and usability of federal-local data.

QUALITY

Data quality can be improved by streamlining reporting requirements and the usability of data management systems on the data-collection side. Improving data quality will involve efforts from federal agencies as well as state and local governments to improve their reporting and data management systems.

1. Local governments: Centralize grants and financial management systems within a single citywide or countywide office. This office would be responsible for coordinating grant, financial, and data reporting efforts across all departments.

Cities can improve both operational efficiency and data quality by centralizing their grants and financial management systems in a single department. Kiran Bawa, who now works for Falls Church but previously was the budget director for the City of Oakland, said that Oakland transitioned to a centralized grants office system with representatives from each department during her tenure there.¹²⁶ Having a centralized system allowed the city to research, apply for, and administer grants more effectively and gave central budget authorities and policymakers better information about how federal funds were coming into the city.

In Detroit, which moved to a centralized grants management system in 2014, the grants office serves as the “air traffic controller” for individual departments, helping them to research and apply for grants together, so that no one department searches for funding on its own.¹²⁷ Financial and grants management software, such as that developed by eCivis, allows for multiple data fields and users across departments, assisting in communication and coordination.¹²⁸ Detroit staff said that the city’s grants office was modeled after some of the best practices gleaned from Offices for Strategic Partnerships and similar entities in Denver, Colorado; Los Angeles, California; Newark, New Jersey; Oakland, California; Philadelphia, Pennsylvania; and San Francisco, California.¹²⁹

Trade-offs associated with centralization may include the labor and resources required to implement an organizational restructure, investments in software platforms to help ease the transition, and some loss of autonomy from grants management teams within specific departments. However, a central support system will provide both relief and assistance to grants management teams in separate departments and opportunities for collaboration among teams when pursuing additional funding or when implementing different programs.

2. Federal government: Improve USAspending.gov by reducing the reporting burden on federal agencies, as well as state and local assistance recipients, that have assistance reporting requirements under the federal Funding Accountability and Transparency Act and DATA Act. Streamlining the reporting process will reduce the time and labor required to provide the data and will encourage more complete and accurate reporting.

The federal government can relieve the reporting burden on grantmaking as well as receiving entities by reducing the number of forms or portals entities are required to fill out and report to (i.e., centralize reporting portals, when possible); allowing more fields to autopopulate across forms and portals (reducing the number of fields agencies or recipients must repeatedly fill out across grant-reporting portals); and automatically cross-validating data fields against outside sources (e.g., allowing the CFDA program description to autopopulate, as Treasury has done, rather than having the grant

recipient fill out the field). The less time and labor federal agencies and their grant recipients must expend to report and provide data, the higher compliance and accuracy will likely be.

COMPARABILITY

Data across various sources, platforms, and levels of government can be more easily linked and compared if we standardize the level of reporting detail. Moreover, such improvements would allow users to more easily compare across cities and compare themselves to peer cities on uniform variables. At least a few local budget officials said they would welcome an easier system for comparing data across cities.¹³⁰

3. Federal, state, and local governments: Collaborate to standardize the level of reporting detail within governments, across levels of governments, across grants, and across federal agencies. If reporting elements are standardized, linking platforms and having a common point of entry for state and local governments and federal agencies will be easier.¹³¹ Standardizing reporting on subgrants and subrecipients will allow a fuller picture of how federal funding contributes to local municipal fiscal health.

For example, the federal government could require its grantmaking agencies to keep records and report on direct grants and subgrants in a uniform manner. These requirements would likely ripple through state and local governments, as agencies would likely require their grantees to report that level of detail back to them.¹³² The federal government may be the ideal level at which to adopt standards, given it would allow for a uniform accounting not only by type of revenue, but by CFDA number and federal agency.¹³³

However, states may also choose to standardize reporting across their own agencies or across their own grant subrecipients. And local governments can choose to ask their own departments to report on federal direct and pass-through grants in a uniform manner, especially if those efforts are being managed through a centralized grants and financial management system.

For many local governments, complying with additional reporting standards will be difficult given limited staff capacity.¹³⁴ Before imposing additional standards, the federal government should invest in reducing the reporting burden, so that improvements are made by encouraging compliance rather than simply imposing additional standards that agencies or local governments may not be able to meet. The federal government may want to perform interviews and do a cost-benefit analysis to determine the costs to federal, state, and local agencies of complying with more rigorous record-keeping and reporting standards.

USABILITY

Finally, the federal government can improve usability for the end user by investing in user experience improvements and data dissemination. Improving usability is key because it allows the data to get into the hands of the decisionmakers who need good data to understand how federal funding affects local communities, make trade-offs about services and public investments, and be responsible stewards of public dollars.

4. Federal government: Strengthen and improve the end user interface for sites such as USAspending.gov. In recent years, Treasury has significantly improved the usability of USAspending.gov for the end data user, as shown by the improvements visible on the beta site beta.usaspending.gov. We recommend that Treasury and federal government continue to strengthen the end user interface by investing in user experience research, taking feedback, and enrolling the open data community and civic tech partners in designing user-friendly platforms.

5. Federal government: Invest in data dissemination and effective marketing for USAspending.gov. Informing local policymakers, civil society organizations, and researchers about the resources that are available and increasing the volume of visitors and site users will get data into the hands of the people who need them and will allow for more frequent and robust user experience feedback.

Data on federal-local transfers can be used to improve decisionmaking at all levels of government and support robust public engagement in fiscal policies. Just as each level of government works with the others to finance and administer critical programs for their residents, improving the quality, comparability and usability of data will likewise require collaboration across federal, state, and local levels of government.

Appendix A. Using the Census of Governments Individual Unit File

The US Census of Governments releases an annual individual unit file that provides data on debt, revenues, and expenditures for specific local governments. The Census of Governments individual unit file has the same strengths and weaknesses as the overall dataset, as described in Part III of this report. Its added strength is the additional level of detail it can provide on specific governments. Its largest weakness is that it is difficult to access and work with.

WHEN TO USE

Users should access the individual unit file to

- **Conduct sophisticated data analysis on individual governments over time.** The Census does not provide the data on an easy-to-access platform, and users must have proficiency in statistical analysis software (e.g., Stata, SAS, or other) to use the data.

As with the Census of Governments data generally, the single-year individual unit files and IndFin dataset (which contains local government data from 1967 to 2012) provide information on the specific functional categories that federal dollars go toward, but they do not describe where the funding comes from. That is, the data may report how much direct federal funding went toward local spending on public welfare, for example, but they cannot tell which federal agency provided those funds or which federal programs (e.g., Medicaid, Temporary Assistance for Needy Families, State Supplemental Security Income) made up the bulk of the spending.

The IndFin and annual individual unit file contain data on federal intergovernmental revenues for 13 functional spending categories, as well as total federal intergovernmental revenue.¹³⁵ The data cannot distinguish state pass-through grants. Federally funded pass-through grants are counted under state funding to local governments.

ANNUAL DATA

Data from 1992–2015 are available as annual single-year files (individual downloads) on the Survey of State and Local Government Finance website.

- **Single-year data (1992–2015):** <https://www.census.gov/govs/local/> (text file for each year, individual download)

HISTORICAL DATA

The IndFin file contains local-level government data for individual cities, towns, counties, and special districts from 1967 to 2012. It is available as a download in the “special 60” folder on the Census’ archived page.

- **Historical data (i.e., “IndFin” file, 1967–2012):**
<https://www2.census.gov/pub/outgoing/govs/special60/> (250-MB text files may take time to download)

The number of records available each year varies, with quinquennial years (every five years ending in 7 or 2) having the most records, as this is when the Census Bureau performs its full Census of Governments. The User Guide Excel file that comes with the special 60 “IndFin” folder download contains the number of government records available each year by level of government. Users who want a more complete illustration of government finances may choose to only use files from the quinquennial years.

Within the IndFin file, variable classifications remain constant over time. However, the Census stopped updating the file in 2012. Beginning with 2013, users must use the individual unit files from the Census of Governments website to update any time-series dataset. However, these individual unit files are single-year files, and the user must use statistical analysis software to summarize the new item codes to correspond to the previous codes used in the IndFin data (steps described below).

To examine specific local governments over time, users must create a time-series dataset from the individual unit files and the historical archive (IndFin) file. Users must take careful steps to process and append individual unit files to the archived data when doing time-series analysis, including recoding some of the variables so the two types of data can be merged.

STEP 1: DOWNLOAD ARCHIVED INDFIN DATA (1967 THROUGH 2012)

- Historical time-series data for individual governments from 1967 through 2012 are available from the Census FTP special 60 site (file name: `_IndFin_1967-2012.zip`).
 - » **Census FTP Site:** <https://www2.census.gov/pub/outgoing/govs/special60/>
- Data come in three text files (wide format) for each year starting in 1967 and annually from 1970 to 2012.

- The download comes with a User Guide Excel file and a “readme” text file with information on data availability and variables. See the “CoG_methodology_for_summary_tabulations” and “2006_CoG_govfin_classification_manual” PDFs on the Census’ website for information on which codes make up different revenue and expenditure categories.

STEP 2: CREATE A PANEL DATASET FROM 1967 THROUGH 2012 FROM THE INDFIN TEXT FILES

- Using statistical programming software (like Stata), users can create a panel dataset from the three respective IndFin text files from each year (e.g., IndFin12a, IndFin12b, IndFin12c). For each year of data, users can merge the three files by ID, and then append the merged files to create a panel dataset from 1967 through 2012.
- Depending on the statistical software used, this step may require the user to convert the IndFin files from text format to another data format (e.g., CSV format).

STEP 3: DOWNLOAD ANNUAL INDIVIDUAL UNIT FILE DATA (2012 THROUGH THE PRESENT)

- Single-year text files are available from the Census State and Local Government Finance site and can be accessed by navigating to the Historical Data page and downloading “Individual Unit File—Public Use Format” for years 2012 through 2015 (or current year). Historical files from the Census of State and Local Governments are also available back to 1992.
 - » **Census State and Local Government Finance site:** <https://www.census.gov/govs/local/>
 - » **Historical Data page:** https://www.census.gov/govs/local/historical_data.html
- Each individual unit file is accompanied by its own technical documentation file that contains information on the file layout and variable codes.
- The following example shows how to access the 2015 Individual Unit File. When the user downloads the 2015 Individual Unit File from the Census of Governments website, the zipped folder comes with a technical document and two zipped subfolders.
 - » The “S&L Individual File Tech Doc” PDF contains helpful information on every file in the download.
 - » The first zipped subfolder, Fin_Data_2015.zip, and the TXT file within it contain the public finance data.
 - » The second zipped subfolder, Fin_GID_2015.zip, contains helpful identifying information for each government, as contained in the Governments Integrated Directory. It includes

important ID codes for each government, as well as population, school enrollment data, and several other accompanying variables.

- The user should ensure the data files are readable by the statistical programming software of choice.
- The IndFin files and single-year text files overlap in year 2012. Although it may seem redundant to download the same year from two separate files, the overlapping year provides a means to check that the recoded and reshaped single-year files match and can be merged with the IndFin files (as described in Step 4).

STEP 4: RESHAPE AND RECODE ANNUAL FILES TO MERGE WITH INDFIN PANEL DATA

- The variable classifications and file format of the archived IndFin files (1967–2012) differ from the those in the individual unit files from the Census.
- Use statistical programming software to take the single-year files for 2012 onward and rename and reshape the variables so that they can be merged with the IndFin panel dataset created previously. Users will need to write statistical programming code to
 - » Reshape annual files from long to wide (to match the IndFin wide format)
 - » Import the Governments Integrated Directory text files and merge them with the IndFin files for 2013 onward
 - » Create a panel dataset from the merged files
 - » Match IndFin functions and categories to the new item codes in the annual files. IndFin variable names are descriptive, but a crosswalk to all their relevant item codes can be found in the Census Bureau’s “Methodology for Summary Tabulation.”¹³⁶
- Check the recoded data in the 2012 single-year file (downloaded from the Census’ website) against the 2012 data in the IndFin file. The data should match.

Appendix B. Interview Methods

We conducted eight key informant interviews with ten informants: seven city grant or budget staff, one current federal employee, one former federal employee (currently in the private sector), and one university researcher. During interviews, we explored the following issues with our informants:

- share of local budget(s) received directly from the federal government
- how funds are used; programs they support
- important sources of federal funds
- how to quantify and monitor federal funds that a local government receives
- how a local government compares to comparable communities in terms of federal funding
- challenges experienced in understanding and tracking the flow of federal funds
- information sharing across departments within a city regarding federal funds
- information sharing across jurisdictions within a community regarding federal funds
- quantifying and understanding pass-through grants that flow through states to localities
- preparing for and monitoring lapses in federal funding
- resources that would be helpful in quantifying and understanding federal funding flows
- recommended practices to help other cities or counties to quantify federal funds
- federal or state resources helpful in quantifying and understanding federal flows of funding
- helpful federal data resources

Recruitment was done through Urban Institute staff contacts at local governments, membership organizations such as the National League of Cities, peer research organizations such as the Pew Charitable Trusts, and funders such as the Lincoln Institute of Land Policy. Within cities, senior staff at the budget office either directly participated in an interview or recruited additional team members to participate. One additional key informant (not cited in this report) provided background information off-the-record, and we reached out to three additional contacts who were unable to participate.

The interviews were conducted by two Urban Institute researchers over the phone, with one staff member leading the interview and the other taking notes. All interviews were audio-recorded with the authorization of the interviewees. Any direct quotations attributed to key informants are published here with prior review and permission from the informant. All the interviews were guided by a prepared set of topics and questions that was sufficiently flexible to allow for a fluid conversation. The interviews informed our understanding of the issues more deeply and helped to flesh out our data descriptions, selections, and policy recommendations. Before starting the conversations, key informants were informed of the main purpose of the study and of the interview. They were also able to ask the moderators questions regarding the informed consent policy and use of the interview material.

Notes

1. Federally recognized American Indian or Alaska Native tribal entities have a government-to-government relationship with the United States and retain certain inherent rights of self-government. Tribal governments receive federal assistance but are often classified separately from local governments for data purposes because of their legal status as sovereign governments. Some of the data sources in this guide include tribal entities, but others do not. For more information on the federal-tribal relationship, see US Department of the Interior Indian Affairs, “Frequently Asked Questions,” US Department of the Interior Indian Affairs, accessed January 26, 2018, <https://www.bia.gov/frequently-asked-questions>.
2. The federal government also provides direct payments to individuals, contracts, loans, and tax expenditures that benefit local communities. See Office of Management and Budget, *Analytical Perspectives: Budget of the U.S. Government Fiscal Year 2018*, 2017, <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/budget/fy2018/spec.pdf>.
3. The count of federal grantmaking entities in FY 2017 as reported on the USAspending.gov beta site, accessed November 17, 2017, <https://beta.usaspending.gov/#/explorer/agency>. The count of local governments is from the 2012 US Census of Governments, <https://www.census.gov/govs/cog/>.
4. Many of the sources described above also contain information on federal grants to states, and states themselves often act as resource on the distribution of pass-through grants to local governments. Our focus throughout this guide is on grants and loans to local governments, but we also touch on federal procurement and contracting activities.
5. See, for example, Bitler and Hoynes (2016)
6. See Robert P. Hay, “A federal era ends. For 14 years federal revenue-sharing has helped big cities and tiny communities across the nation. Now it is over, the victim of a huge US deficit and redefined federalism,” *Christian Science Monitor*, October 6, 1986, <https://www.csmonitor.com/1986/1006/arev.html>.
7. See James M. Cannon, “Federal Revenue-Sharing: Born 1972. Died 1986. R.I.P.,” *New York Times*, October 10, 1986, <http://www.nytimes.com/1986/10/10/opinion/federal-revenue-sharing-born-1972-died-1986-rip.html>.
8. United States Office of Management and Budget, *Budget of the United States Government, Fiscal Year 2018, Analytical Perspectives*, Table 13.1. Estimates of Total Income Tax Expenditures for Fiscal Years 2016–2026, accessed December 21, 2017, <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/budget/fy2018/spec.pdf>.
9. See “Conference Report to Accompany H.R. 1—Tax Cuts and Jobs Act [Senate amendment to the House bill as passed on 12/20/17],” US House of Representatives, report 115-466, printed December 15, 2017, <https://rules.house.gov/conference-report/hr-1>.
10. For example, see the Environmental Protection Agency, “Clean Water State Revolving Loan Fund (CWSRF),” Environmental Protection Agency, May 18, 2013, <https://www.epa.gov/cwsrf>.
11. Office of Elementary and Secondary Education, “About Impact Aid,” US Department of Education, May 18, 2013; and Stephen D. Owens (US Census Bureau), phone interview by Megan Randall and Erin Huffer, November 3, 2017 [hereafter Stephen D. Owens (US Census Bureau)].
12. See also Wallis and Oates (1998) for a discussion of how federalism evolved during the New Deal.
13. Since 2009, the TIGER grant program has provided a combined \$5.1 billion to 421 projects in all 50 states, the District of Columbia, Puerto Rico, Guam, the Virgin Islands, and tribal communities.

14. Christina Ho (PolicyInsights, Inc.), phone interview by Megan Randall and Erin Huffer, December 4, 2017 [hereafter Christina Ho (PolicyInsights, Inc.)]. See also GAO (2017a) for a recent review of DATA Act implementation and material weaknesses in agencies' financial audits, as well as other elements of compliance.
15. HHS and Treasury are both responsible for implementing other parts of the DATA Act. HHS ran a pilot program aimed at improving reporting on federal grants, and Treasury oversees the implementation of USAspending.gov. Therefore, it is perhaps unsurprising that these two agencies have made significant strides in DATA Act compliance.
16. The 2017 HHS Office of the Inspector General report stated that HHS met the requirements of the DATA Act in 2017, although it still recommended areas of improvement. See Ernst and Young (2017); for the Treasury Office of the Inspector General report, see Office of the Inspector General, US Department of the Treasury (2017).
17. See Office of the Inspector General, US Department of Housing and Urban Development, "DATA Act Compliance Audit of the U.S. Department of Housing and Urban Development," Washington, DC: US Department of Housing and Urban Development, November 3, 2017, https://www.hudoint.gov/sites/default/files/documents/2018_FO-0001.pdf.
18. Jeff Barton and Rick Freas (City of Phoenix), phone interview by Megan Randall and Erin Huffer, October 19, 2017 [hereafter Jeff Barton and Rick Freas (City of Phoenix)].
19. As Carol Lu (Citywide Revenue Manager, Controller's Office, City and County of San Francisco) reported, "Things happen in a decentralized way, and then get checked (at a high level) centrally. But if you really want to know what's happening at the ground level, you have to go to the grant manager." Phone interview by Megan Randall and Erin Huffer, October 17, 2017 [hereafter Carol Lu (City and County of San Francisco)].
20. Kurt Wilson (City of Stockton), phone interview by Megan Randall and Erin Huffer, October 20, 2017 [hereafter Kurt Wilson (City of Stockton)].
21. Jeff Barton and Rick Freas (City of Phoenix).
22. Ryan Friedrichs and Katerli Bounds (City of Detroit), phone interview by Megan Randall and Erin Huffer, December 1, 2017, [hereafter Ryan Friedrichs and Katerli Bounds (City of Detroit)].
23. Ibid.
24. Carol Lu said, "Our financial system does have coding for pass-through grants from the federal government. It's coded as federal funding, and then there's a code to indicate it's a pass-through, and which agency or entity it comes through" (Carol Lu, City and County of San Francisco). We also heard feedback from Kurt Wilson (City of Stockton).
25. Kiran Bawa (City of Falls Church), phone interview by Megan Randall and Erin Huffer, October 30, 2017 [hereafter Kiran Bawa (City of Falls Church)].
26. Jeff Barton said, "As a matter of budget management, it's not that important as to whether the funds come from the federal or state government. We focus on the programmatic aspect of it, making sure the money is being used the way it was prescribed to be used" (Jeff Barton and Rick Freas, City of Phoenix).
27. Jeff Barton said, "Departments that have good accounting and fiscal staff, they know and can distinguish between pass-through federal grant funds and state direct grants" (Jeff Barton and Rick Freas, City of Phoenix).
28. Kurt Wilson said, "The tracking component [in Stockton] works well. And, because of the single audit that we do, it sort of has to. Through the audit, we have to be sure that we're tracking everything" (Kurt Wilson, City of Stockton).

29. See Rob Dolan, “Welcome to the Era of Open Data in Government (Industry Perspective),” *GovTech*, accessed November 30, 2017, <http://www.govtech.com/opinion/Welcome-to-the-Era-Open-Data-in-Government-Industry-Perspective.html>.
30. Christina Ho (PolicyInsights, Inc.); Carol Lu (City and County of San Francisco); and Stephen D. Owens (US Census Bureau). When asked about his staff’s experience with various federal data portals, Kurt Wilson, City Manager of Stockton, described them as “clumsy and hard to use” (Kurt Wilson, City of Stockton).
31. Jeff Barton and Rick Freas (City of Phoenix) and Carol Lu (City and County of San Francisco).
32. Stephen D. Owens (US Census Bureau).
33. Single Audit Act of 1984, Pub. L. No. 98-502, 98 Stat. 2327 (1984).
34. Stephen D. Owens (US Census Bureau).
35. Ibid.
36. Carol Lu (City and County of San Francisco).
37. See Audit requirements, 2 CFR 200.501—, <https://www.law.cornell.edu/cfr/text/2/200.501>.
38. The Government Finance Officers Association gives an annual Certificate of Achievement for Excellence in Financial Reporting Program (CAFR Program) for going above and beyond the reporting standards found in the Governmental Accounting Standards Board (<http://www.gfoa.org/cafr>). For more information on what a CAFR is, the Texas Comptroller’s Office has a helpful guide; see <https://comptroller.texas.gov/transparency/budget/cafr-faq.php>.
39. For example, Kiran Bawa (City of Falls Church); Jeff Barton and Rick Freas (City of Phoenix); Katerli Bounds and Ryan Friedrichs (City of Detroit); and Kurt Wilson (City of Stockton).
40. See Fiscally Standardized Cities Database, <http://datatoolkits.lincolnst.edu/subcenters/fiscally-standardized-cities>.
41. See more about USAspending.gov at <https://www.usaspending.gov/about/usaspending/Pages/default.aspx>.
42. See Consolidated Federal Funds Report Act of 1982, Pub. L. No. 97-326, 31 USC 6102(a) (n.d.) at <http://uscode.house.gov/statutes/pl/97/326.pdf>; also see Lecy and Thornton (2016).
43. Established in 1970, CFDA is a comprehensive catalog of all federal programs, their scope, and potential assistance recipients. It classifies federal award programs by several criteria and awards them a number and description. See US Census Bureau, “Federal Assistance Awards Data System,” US Census Bureau, accessed January 6, 2018, <https://www.census.gov/econ/overview/go1200.html>. For a detailed description of CFDA, see the subsection “Catalog of Federal Domestic Assistance” below.
44. For more information on FAADS data, see Office of Management and Budget, “Federal Assistance Award Data System (FAADS) Users’ Guide for Federal Fiscal Year 2010,” Washington, DC: Office of Management and Budget, August 2011, <https://catalog.archives.gov/OpaAPI/media/6113175/content/electronic-records/rg-029/faads/guide2010.pdf>.
45. See US Census Bureau, “Federal Assistance Awards Data System,” US Census Bureau, accessed January 6, 2018, <https://www.census.gov/econ/overview/go1200.html>; and Office of Management and Budget, “Federal Assistance Award Data System (FAADS) Users’ Guide for Federal Fiscal Year 2010,” Washington, DC: Office of Management and Budget, August 2011, <https://catalog.archives.gov/OpaAPI/media/6113175/content/electronic-records/rg-029/faads/guide2010.pdf?download=true>.

46. See US Census Bureau, “Federal, State, and Local Governments Federal Assistance Award Data System,” <https://www.census.gov/govs/www/faads.html>.
47. The federal government works with a private contractor to aggregate, process, and publish FAADS-Plus data on USAspending.gov. See “USAspending.Gov,” REI Systems, 2018, <https://www.reisystems.com/usaspending-gov/>.
48. See the Collaboration Space page on DATA Act implementation at “Element: Funding Agency Name, Funding Agency Code, Awarding Agency Name, and Awarding Agency Code,” Federal Spending Transparency: DATA Act Collaboration Space, 2017, <https://fedspendingtransparency.github.io/whitepapers/fundingagency/>; also see the USAspending.gov data page, “The Data,” USAspending.gov, 2018, <https://www.usaspending.gov/about/Pages/TheData.aspx>.
49. Ibid.
50. See General Services Administration, “Federal Procurement Data System,” <https://www.gsa.gov/tools/supply-procurement-ertools/federal-procurement-data-system>.
51. See “FPDS-NG FAQ,” https://www.fpds.gov/wiki/index.php/FPDS-NG_FAQ.
52. Ibid.
53. For example, the FY 2016 single audit report for Arizona concluded that state “agencies did not properly identify subrecipients in the state-wide general ledger and incorrectly included payments to vendors and other agencies as subrecipients.” The state corrected the errors that the auditor identified. See Arizona Office of the Auditor General (2017).
54. Stephen D. Owens said, “Not all agencies put in equal amounts of effort. I can easily tell what departments were putting in good faith effort and which weren’t.” (Stephen D. Owens, US Census Bureau).
55. There is a possibility that record consistency is as low as 56 percent. When GAO performed a more extensive comparison using 26 award data elements and subelements, they found that less than 1 percent of all USAspending.gov transactions were fully consistent with agency records. The 7 budgetary data elements included the appropriations account, object class, obligation, outlay, program activity, Treasury account symbol, and unobligated balance of the transaction. The 26 award elements included awardee information and funding agency information, as well as the action date, type, description, identification number, and CFDA number of the award. A full list of the data elements in question can be found in table 1 of GAO (2017c).
56. Treasury developed the Data Act Information Model, which contains over 400 data elements showing all the characteristics of the data entry. For example, Treasury used to obtain the congressional district from the agency, but the quality was poor. Now, Treasury derives congressional district from the zip code, which it can then validate against the postal service data, a practice that significantly improved the data quality. Christina Ho said, “There were a lot of validations that weren’t being done consistently. The quality of the data improved because Treasury implemented a lot more validation, and required data standards to be put in place. So, the data quality improved, and has continued to improve, and will continue to improve over time, but the historical data will not change” (Christina Ho, PolicyInsights, Inc.).
57. High levels of misreporting can be attributed to inconsistent, confusing, and potentially contradictory guidance from OMB on how those fields should be defined (GAO 2017c).
58. Christina Ho said, “It’s no secret that the data quality of a subaward is worse than the prime award. That is something that really needs to be improved” (Christina Ho, PolicyInsights, Inc.).
59. Lecy and Thornton (2016), for example.
60. Recent academic research that uses USAspending.gov focuses on federal contracts. Hayden, Campbell, and Cummins (2010), for example, used USAspending.gov to identify companies that have the largest contracts

with the Department of Defense. The researchers sorted data by federal agency and contract size. FY 2017 defense contracts, for example, are accessible on the current USAspending.gov page “Agency Profile: Department of Defense,”

<https://www.usaspending.gov/Transparency/Pages/AgencyContracts.aspx?agencycode=9700>. In another example, Hiltonsmith and Daley (2014) used USAspending.gov to locate data on federal contracts for their analysis of federally supported employment in the private economy. Using the site, they obtained data on firms’ federal contract revenue, total annual revenue, and employment. Other data sources included earnings and/or employment numbers from the Bureau of Labor Statistics and health expenditures by service category and/or source of funds from the Centers for Medicare and Medicaid Services.

61. To provide this comprehensive level of information, the site compiles source data from three federal data reporting systems: FPDS-NG, FAADS-Plus, and FSRS. FAADS-Plus data are collected through the Award Submission Portal. The site also incorporates data from Smart Pay, which contains data for micropurchases from a federal credit card collected by GSA. See USAspending.gov, “The Data,” <https://www.usaspending.gov/about/Pages/TheData.aspx>.
62. Stephen D. Owens (US Census Bureau).
63. The federal government’s standards for data transparency define “primary place of performance” as the address where the predominant performance of the award will take place. If no address is given, USAspending.gov uses the address of the awardee or subawardee. This definition has been criticized for being too narrow, ignoring potential economic effects like job creation that could spill over into other geographies. It is also important to note that although Place of Performance is a helpful data field for users seeking to understand where federal dollars are ultimately spent, it is one of the most problematic data fields on USAspending.gov due to reporting inconsistencies and unclear guidelines about its use (GAO 2017c).
64. Carol Lu (City and County of San Francisco); Christina Ho (PolicyInsights, Inc.); Stephen D. Owens (US Census Bureau). In 2014, Congress directed Treasury to overhaul USAspending.gov to make it more user friendly, accessible, and accurate.
65. Treasury includes user feedback mechanisms on the beta site, allowing users to report their experience and suggest improvements (GAO 2017c). Treasury has made several improvements based on this feedback, including the addition of a per capita spending metric and the ability to sort by data subfunctions, such as air versus ground transportation (GAO 2017c).
66. See “Audit Requirements,” 2 CFR 200.501 (2014) <https://www.gpo.gov/fdsys/granule/CFR-2014-title2-vol1/CFR-2014-title2-vol1-sec200-501>; Single Audit Act of 1984, Pub. L. No. 98-502, 98 Stat. 2327 (1984); and OMB Guidance, <https://www.gpo.gov/fdsys/pkg/CFR-2014-title2-vol1/pdf/CFR-2014-title2-vol1-sec200-501.pdf>.
67. The schedule of federal award expenditures is required by Title 2 US CFR 200. It is derived from the underlying accounting and other records used to produce basic financial statements. Organizations subject to audit requirements include states, local governments, Indian Tribes or Tribal Organizations, institutions of higher learning, and nonprofit organizations. A 2014 rule change raised the spending threshold from \$500,000 to \$750,000, reducing the number of annual single audits by about 5,000. See Office of Management and Budget, “Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards,” <https://www.federalregister.gov/documents/2013/12/26/2013-30465/uniform-administrative-requirements-cost-principles-and-audit-requirements-for-federal-awards>.
68. Carol Lu (City and County of San Francisco); Stephen D. Owens (US Census Bureau); Kurt Wilson (City of Stockton).
69. Ibid.
70. See, for example, the single audit report for the City and County of San Francisco in 2016.

71. Stephen D. Owens (US Census Bureau).
72. Stephen D. Owens (US Census Bureau). See, for example, the State of Arizona's single audit report for FY 2016.
73. Stephen D. Owens (US Census Bureau); Carol Lu (City and County of San Francisco); Kurt Wilson (City of Stockton).
74. See Federal Audit Clearinghouse, "Image Management System," <https://harvester.census.gov/facdissem/Main.aspx>. Prior to 2014, audits were not available for public use, but now they are fully publicly available (Marc Joffe, "OpenGov voices: Making the federal government's secret trove of local government data public," *Sunlight Foundation* (blog), September 26, 2014, <https://sunlightfoundation.com/2014/09/26/opengov-voices-making-the-federal-governments-secret-trove-of-local-government-data-public/>).
75. The FAC has other duties in addition to running the database, such as distributing audit reporting packages to federal agencies, supporting the assessment of federal audit requirements, and helping auditors and auditees minimize the audit reporting burden.
76. Prior to 2014, audits were not available for public use, but now they are fully publicly available (Marc Joffe, "OpenGov voices: Making the federal government's secret trove of local government data public," *Sunlight Foundation* (blog), September 26, 2014, <https://sunlightfoundation.com/2014/09/26/opengov-voices-making-the-federal-governments-secret-trove-of-local-government-data-public/>).
77. See Federal Audit Clearinghouse, "Image Management System," <https://harvester.census.gov/facdissem/Main.aspx>.
78. *Ibid.*
79. They must also include full financial statements, a summary schedule of prior audit findings, auditor's reports of compliance and opinion on the financial statements, and a corrective action plan. See Office of Management and Budget (1990).
80. See "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards," 78 Fed. Reg. 78590 (December 26, 2013).
81. See Federal Audit Clearinghouse, *Image Management System Public User's Manual*, June 2017, <https://harvester.census.gov/facdissem/Documents/PublicUserManual.pdf>.
82. Recent research has assessed the impact of federal contracts on nonprofit relocations (Never and Westberg 2017), the relationship between municipal management disclosures and report delays (Rich, Roberts, and Zhang 2016), the relationship between municipal audit committees and fiscal policies (Zhang and Rich 2016), and the move to regional and local auditing firms (Deis and Byus 2016). The FAC data have also been used to assess the effects of local government financial oversight committees (Matkin 2010).
83. The full census is conducted every five years for years ending in 2 and 7. For the annual survey, sampled units are stratified by state and government type. All state governments are included in the sample. The survey criteria for local governments include all school districts, county governments with a 2012 population of 500,00 or more, cities with a population of 200,000 or more, all local government units in Hawaii and the District of Columbia, and special districts in California that collected sales tax in 2012. For more information on survey methodology, see US Census Bureau, "2015 Annual Survey of Local Government Finances," https://www2.census.gov/govs/local/2015_local_finance_methodology.pdf.
84. Stephen D. Owens (US Census Bureau); Michael Pagano, University of Illinois at Chicago, phone interview by Megan Randall and Erin Huffer, November 6, 2017 [hereafter Michael Pagano (University of Illinois at Chicago)].

85. See US Census of Governments, “2012 Census of Governments: Finance Methodology,” https://www2.census.gov/govs/local/2012_local_finance_methodology.pdf.
86. See US Census of Governments, “State, and Local Governments State and Local Government Finances Technical Documentation,” <https://www2.census.gov/govs/local/estimatetechdoc.pdf>.
87. See US Census of Governments, “State, and Local Governments State and Local Government Finances Technical Documentation,” <https://www2.census.gov/govs/local/estimatetechdoc.pdf>; and US Census of Governments, “2015 Annual Survey of Local Government Finances Methodology,” https://www2.census.gov/govs/local/2015_local_finance_methodology.pdf.
88. Michael Pagano (University of Illinois at Chicago) discussed the limitations of the US Census of Governments data and its inability to shed light on whether federal funds are fungible for local governments and what requirements they must meet when spending those funds. The aggregate data presented by the Census of Governments blur the distinctions among the many funds within a city’s budget. Such requirements may influence local spending decisions in a manner not apparent in the straight Census of Governments data.
89. Stephen D. Owens (US Census Bureau).
90. Lincoln Institute of Land Policy, “Fiscally Standardized Cities,” accessed December 11, 2017, <http://datatoolkits.lincolninst.edu/subcenters/fiscally-standardized-cities>.
91. See USAFacts, “Sources,” <https://usafacts.org/sources>.
92. See USAFacts, “Missions,” <https://usafacts.org/>.
93. USAFacts, “Spending by Mission,” USAFacts Beta, 2017, https://usafacts.org/government-finances/spending?comparison=by_government_type&government_type=combined&table=spending--by-mission&year=2014.
94. Stanford Institute for Economic Policy Research, U.S. Pension Tracker, “Data & Methodology,” http://us.pensiontracker.org/data_method.php.
95. Michael Pagano (University of Illinois at Chicago).
96. Ibid.
97. Stephen D. Owens (US Census Bureau); Michael Pagano (University of Illinois at Chicago).
98. See United States Common Sense, “About GovRank,” http://govrank.org/#about_this_project.
99. See United States Common Sense, “Government Rankings,” <https://govrank.org/rankings>.
100. See City of Detroit, “Budget, Audit, and Other Financial Reports,” <http://www.detroitmi.gov/How-Do-I/View-City-of-Detroit-Reports/Budget-Audit-and-other-Financial-Reports>.
101. See City and County of San Francisco, “Office of the Controller,” <http://sfcontroller.org/>.
102. See the proposed budget for each fiscal year at City and County of San Francisco, Office of the Mayor, “Budget Documents,” <http://sfmayor.org/budget-documents>.
103. Kiran Bawa said, “We maintain grants tracking by program and project, and I think those work really well. Because the funding flows through so many bodies, the pathway can get confusing. So, we track grants along with local match funds (which are designed for internal use). But I think any layperson could understand where our money is flowing” (Kiran Bawa, City of Falls Church).
104. See Stephen Goldsmith, “City Finances and the Problem of Data Visualization,” *Governing*, August 20, 2014, <http://www.governing.com/blogs/bfc/gov-city-finances-data-visualization.html>.

105. See Sarah Lai Stirland, "Oakland Gets New Data Visualization Site for Its Budget," *Tech President*, August 17, 2013, <http://techpresident.com/news/23749/oakland-gets-new-data-visualization-site-its-budget>.
106. See Nick Judd, "A New York City Transparency Project Will Open-Source a Look Inside the City's Checkbook," *Tech President*, February 9, 2012, <http://techpresident.com/news/21754/new-york-city-transparency-project-will-open-source-look-inside-citys-checkbook>.
107. See NYC Open Data, "NYC Independent Budget Office (IBO) Revenue and Spending Summary FY 1980–FY 2013," <https://data.cityofnewyork.us/City-Government/NYC-Independent-Budget-Office-IBO-Revenue-And-Spen/7zhs-43jt>.
108. See City of San Diego, "OpenGov Budget Visualization Tool FAQ," https://www.sandiego.gov/mayor/onesandiego/budget_visualization_faq.
109. See, for example, "The City of New York General Obligation Bonds, Fiscal 2018 Series C and D," December 6, 2017, <https://emma.msrb.org/ER1105455-ER864520-ER1265223.pdf>.
110. Ibid.
111. Michael Pagano said, "Another document is the official statement of governments when they're issuing bonds. However, issuing those statements is not mandatory, so the quality is not consistent. But I find them to be one of the most interesting historical sources of data" (Michael Pagano, University of Illinois at Chicago).
112. See MSRB, "Getting to Know EMMA: An Introductory Guide for Investors," 2017, <http://www.msrb.org/msrb1/EMMA/pdfs/EMMA-Guide-for-Investors.pdf>.
113. Ibid.
114. See EMMA, "Frequently Asked Questions," <https://emma.msrb.org/EmmaHelp/FAQs.aspx>.
115. See Catalog of Federal Domestic Assistance, "Electronic Download," <https://www.cfda.gov/?s=generalinfo&mode=list&tab=list&tabmode=list&static=download>.
116. See, for example, a letter from the Office of the Inspector General in the Department of Education addressed to the Office of the Secretary identifying errors in program requirements and descriptions in the CFDA: Keith West, Alert Memorandum, "Corrections Needed to Information about Department of Education Programs Included in the Catalog of Federal Domestic Assistance Control No. ED-OIG/L16J0075," October 13, 2009, <https://www2.ed.gov/about/offices/list/oig/auditreports/AlertMemorandums/l16j0075.doc>.
117. Jeff Barton and Rick Freas (City of Phoenix), for example.
118. Christina Ho (PolicyInsights, Inc.).
119. See Catalog of Federal Domestic Assistance, "Electronic Download," <https://www.cfda.gov/?s=generalinfo&mode=list&tab=list&tabmode=list&static=download>.
120. In 1970, the federal government began to assign CFDA numbers to each award program.
121. Carol Lu (City and County of San Francisco).
122. See "Introduction to the Historical Tables: Structure, Coverage, and Concepts," <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/budget/fy2018/hist.pdf>.
123. See HUD Exchange, "Consolidated Plan," <https://www.hudexchange.info/programs/consolidated-plan/>.
124. See HUD Exchange, "Consolidated Plan Process, Grant Programs, and Related HUD Programs," <https://www.hudexchange.info/programs/consolidated-plan/consolidated-plan-process-grant-programs-and-related-hud-programs/>.

125. See Sylvia M. Burwell, Steven VanRoekel, Todd Park, and Dominic J. Mancini, “Open Data Policy—Managing Information as an Asset,” M-13-13 – Memorandum for the Heads of Executive Departments and Agencies, <https://project-open-data.cio.gov/policy-memo/>.
126. Kiran Bawa (City of Falls Church).
127. Katerli Bounds said, “We’ll help with writing grants, but the subject matter expertise is in the departments. So, they do a lot of the project content part of the grant writing. We serve more as the ‘air traffic controller’ in that sense, helping with technical submission details, ensuring coordination and helping to de-conflict opportunities between departments” (Ryan Friedrichs and Katerli Bounds, City of Detroit).
128. Ryan Friedrichs and Katerli Bounds (City of Detroit).
129. See Ferris and Williams (2014).
130. Ryan Friedrichs, Chief Development Officer for the City of Detroit commented, “If you’re talking about putting forward a more visible process to compare cities to one another, we’d be supportive of that” (Ryan Friedrichs and Katerli Bounds, City of Detroit).
131. Christina Ho said, “It doesn’t make sense to have all these different requirements. If all the data elements are standardized, Grants.gov can be the entry point, and then all that information can automatically flow into the agency system, then finally usaspending.gov for public consumption” (Christina Ho, PolicyInsights, Inc.).
132. Stephen D. Owens (US Census).
133. Stephen D. Owens said, “If all federal agencies to report at a predetermined level of granularity, then you’ll get some level of standardization. Then, those practices could trickle down to the state/local level...If one agency instates requirements and another agency doesn’t, then you lose some standardization. A lot of it really comes down to the state record-keeping structure. That’s the real key to all of this. And, if you were a state, would you spend extra money doing extra tracking? No. Some states are proactive, but many aren’t” (Stephen D. Owens, US Census).
134. Stephen D. Owens said, “It really comes down to cost-benefit. In a lot of grants there are administrative costs. And any amount of administrative expense means that there’s less money for the programmatic benefit. It’s a tradeoff. When you’re asking someone to do something that they don’t have the tools to do, is it even accurate or worthwhile at that point?” (Stephen D. Owens, US Census).
135. Relevant census variables for federal intergovernmental revenues include C 139 (intergovernmental revenue from federal government), B01 (air transportation), B21 (education), B22 (employment security and social insurance administration), B27 (general revenue sharing; obsolete after FY 1987), B30 (other general support), B42 (health and hospitals), B46 (highways), B47 (transit subsidies; includes B94), B50 (housing and community development), B59 (natural resources; includes B54), B79 (public welfare), B80 (sewerage), and B89 (other; includes B91, B92, and B93).
136. US Bureau of the Census, “Methodology for Summary Tabulation,” last revised October 31, 2011, https://www.census.gov/govs/www/ch_13.html.

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