



Financial Data-Driven Decision Making

A survey of the tools and framing of financial data transparency:
A federal government perspective

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“We might hope to see the finances of the Union as clear and intelligible as a merchant's books, so that every member of Congress and every man of any mind in the Union should be able to comprehend them, investigate them, and consequently to control them.” Thomas Jefferson said this to his treasury secretary in 1802, and it's just as relevant today.

Transparency and trust are symbiotic concepts. The willingness and ability to be transparent about one's actions or intentions—or finances—creates trust. And one is trustworthy if their actions or intentions are clear and intelligible.

Article 1, Section 9 of the U.S. Constitution states that “a regular statement and account of the receipts and expenditures of all public money shall be published from time to time.” The federal government—specifically, the U.S. Treasury Department—has been issuing a monthly statement of receipts and expenditures since 1790, laying the foundation for what has

become a long-enduring conduit to a broad array of important government financial information. But the passage of landmark legislation, including the Chief Financial Officers (CFO) Act of 1990, the Government Management Reform Act (GMRA) of 1994, and the Digital Accountability and Transparency Act (DATA Act) in 2014, has been transformational, ushering in process and technology changes that have significantly enhanced the federal government's transparency, providing for the availability of financial information not just in static monthly or annual reports, but in more dynamic, customer-centric reports that can be accessed electronically in real time.

These innovations and evolutions in content and delivery engender trust with the government's many constituents: lawmakers, government leaders, industry, the media, and, most importantly, the general public. Specifically, policy, process, and technological innovations over the past 30 years have provided government leaders in all three branches with unprecedented access to information that is critical to policy deliberation and decision making.

Federal agency financial reports

The CFO Act of 1990, as amended, played a critical role in enhancing the accountability, transparency, and utility of federal financial information. Among other things, it established the chief financial officer function at federal agencies, required a select number of federal executive branch agencies to prepare annual financial statements in accordance with applicable accounting standards, and created an Office of Federal Financial Management at the Office of Management and Budget (OMB) to establish government-wide financial management policy and perform other critical oversight functions. Passage of the CFO Act and its reference to accounting standards also precipitated the formation of the Federal Accounting Standards Advisory Board (FASAB)—the entity that issues financial accounting standards and related guidance for the federal government.

The GMRA required that agencies specified in the CFO Act submit *audited* federal financial statements, integrating a critical assurance component with the enhanced transparency of the agency statements. In accordance with

federal financial policy, annual audited Agency Financial Reports (AFRs) are issued 45 days after the federal government's September 30 fiscal year-end.

Budgets were and continue to be the primary driver of government finance debate and policy. However, federal government financial statements are required to be prepared pursuant to federal accounting standards that are predominantly accrual-based, considering revenues when earned and costs when incurred. The implication of this requirement is that audited federal financial statements provide users, including federal government decision makers, with a perspective of the government's finances that is comparatively longer-term, particularly with respect to costs and liabilities, complementary to the budget's more largely cash-based, shorter-term perspective. Both budgetary and accrual-based financial information in tandem provides decision makers with an effective combined view of the nation's finances.

AFRs provide users with financial results and trends about the wide range of essential government functions and critical programs, from national security to health and scientific research, to commerce, housing, energy, agriculture, space exploration, and beyond. Agency financial reports also provide financial information about the federal government's loan, grant, and insurance programs, as well as Social Security, Medicare, and other important social insurance programs. The AFRs for the most financially significant agencies government-wide may be viewed through the agency websites or accessed directly through the Treasury's website at fiscal.treasury.gov/reports-statements/financial-report/related-resources.html.

The financial report of the U.S. Government

In addition to requiring annual audited agency financial statements, the GMRA also requires the Treasury Department, in coordination with OMB, to prepare "an [annual] audited financial statement... covering all accounts and associated activities of the executive branch of the [federal] government." This requirement precipitated the annual preparation of the Financial Report of the United States Government (FRUSG) (Exhibit 1). While executive branch entities are statutorily required to provide information for preparing the FRUSG, legislative and judicial branch entities also voluntarily provide information for the report, resulting in a truly comprehensive resource. First prepared under GMRA for FY 1997, the resulting FRUSG is a comprehensive reporting of the federal government's financial position and condition, covering more than 160 federal entities. It contains "traditional" financial information—what you would expect to find in financial reports of other sector entities—including costs, revenues, assets, liabilities, and other data. It also provides unique value by including "non-traditional" financial content pertaining to projected trends in (1) the federal government's social insurance programs (for example, Social Security, Medicare) and (2) the federal government's revenues, expenditures, deficits, and debt more broadly as the whole. (The Financial Report of the U.S. Government may be accessed online at fiscal.treasury.gov/reports-statements/financial-report/.)

As referenced earlier, the value to decision makers of federal financial reports, including the FRUSG, is the complementary perspective that financial reports provide—with their emphasis on

EXHIBIT 1 | 2023 U.S. Government financial report



accrual-based information—relative to the predominantly cash-based budget information. Exhibit 2 provides an excerpt from an FRUSG table, showing changes in (1) largely accrual-based costs and revenues,¹ culminating in a "bottom line" net operating cost, and (2) the largely cash-based budget deficit. Exhibit 2 shows that for FY 2023, the federal government's budget deficit increased while net operating cost decreased. These seemingly contradictory results are actually explained in the FRUSG as resulting from substantial changes in non-cash federal activity that affect the government's longer-term net cost, but not the budget deficit.

For example, federal accounting rules dictate that federal entities administering federal employee and veterans benefits programs employ a complex series of assumptions, including interest rates, beneficiary eligibility, life expectancy, and medical cost levels, to make

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EXHIBIT 2 | Financial report of the United States Government table excerpt

	2023	2022*	Increase / \$ (Decrease)	%
FINANCIAL MEASURES (Dollars in Billions)				
Gross Cost	\$ (7,661.7)	\$ (7,420.1)	\$ 241.6	3.3%
Less: Earned Revenue	\$ 539.5	\$ (531.1)	\$ 8.4	1.6%
Gain/(Loss) from Changes in Assumptions	\$ (760.6)	\$ (2,207.9)	\$ (1,447.3)	(65.6%)
Net Cost	\$ (7,882.8)	\$ (9,096.9)	\$ (1,214.1)	(13.3%)
Less: Total Tax and Other Unearned Revenues	\$ 4,465.6	\$ 4,925.9	\$ (460.3)	(9.3%)
Net Operating Cost	\$ (3,417.2)	\$ (4,171.0)	\$ (753.8)	(18.1%)
Budget Deficit	\$ (1,695.2)	\$ (1,375.5)	\$ 319.7	23.2%

EXHIBIT 3 | Financial report of the United States Government summary table

	2023	2022	Increase / \$ (Decrease)	%
Table 7: Social Insurance Future Expenditures in Excess of Future Revenues (Dollars in Trillions)				
Open Group (Net):				
Social Security (OASDI)	\$ (25.2)	\$ (23.3)	\$ 1.9	8.2%
Medicare (Parts A, B, & D)	\$ (53.1)	\$ (52.5)	\$ 0.6	1.1%
Other	\$ (0.1)	\$ (0.1)	\$ –	0.0%
Total Social Insurance Expenditures, Net (Open Group)	\$ (78.4)	\$ (75.9)	\$ 2.5	3.3%

actuarial projections of their long-term benefits and liabilities. Changes in these assumptions can result in either losses [net cost increases] or gains [net cost decreases]. Agencies record the long-term costs and liabilities for federal employee and veterans benefit programs. The changes in the federal government's long-term liabilities for these programs are recorded as gains or losses, which affect the government's costs. These assumed gains or losses, which can be significant (representing a \$1.4 trillion cost decrease in FY 2023), do not have a substantial effect on current year expenditures and therefore don't affect the budget deficit (which increased by \$319.7 billion during FY 2023). These competing dynamics do, however, illustrate the value in providing the public and decision makers with complementary

perspectives of both short-term and long-term financial results.

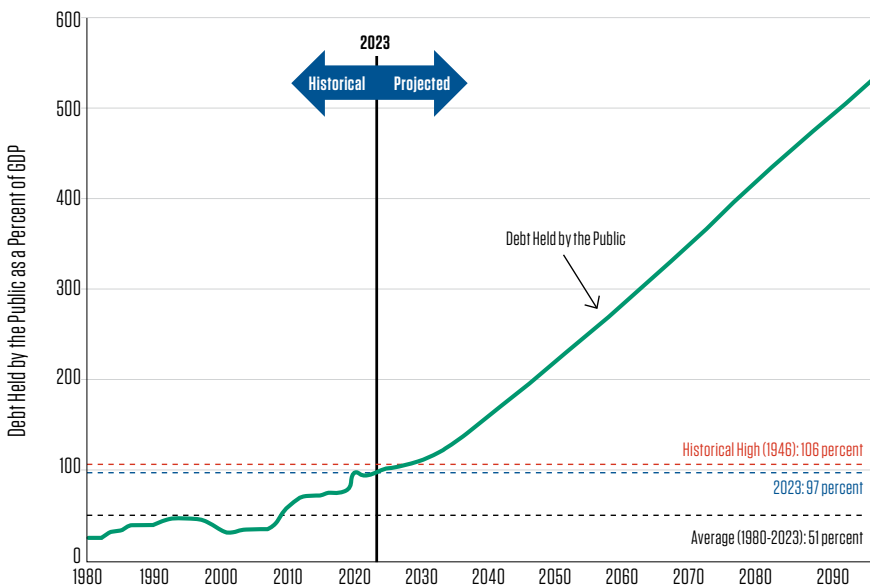
While much of the FRUSG focuses on the “traditional” financial information (such as revenues, costs, assets, and liabilities), it is the “non-traditional” information that makes these reports truly distinctive. Under federal accounting standards, agencies that administer key social insurance programs, including Social Security, Medicare, and others, include a separate and distinct Statement of Social Insurance (SOSI) in their Agency Financial Reports. The data presented in SOSI is compiled and consolidated into a government-wide presentation in the FRUSG (see summary table FRUSG excerpt in Exhibit 3).

The SOSI presents the net present value of projected long-term receipts and expenditures for four federal social insurance programs: Social Security,

Medicare (Parts A, B, and D), Railroad Retirement, and Black Lung. These projections are based on current law assumptions, meaning that the legal landscape is not held constant, but instead permitted to “run its course” with current laws expiring (or sustaining) as scheduled. The implication is that the amounts presented in the SOSI are projections or mathematical extrapolations of current trends rather than predictions of what will occur. The amounts presented for Social Security and Medicare are consistent with and have their origins in the Social Security and Medicare Trustees Reports. The SOSI amounts from the FRUSG in Exhibit 3 show that the present value of projected expenditures significantly exceed the present value of projected receipts over the projection period. Both agency reports and the FRUSG go on to discuss

EXHIBIT 4 | Policy projections for public-held debt as a percentage of GDP

Chart 6: Historical and Current Policy Projections for Debt Held by the Public, 1980-2098



the implications of these trends on the status of the trust funds. Such information—both at the individual agency and the government-wide levels—provides insight into and can be a significant contributor to policy discussions concerning the sustainability of these programs.

The FRUSG takes the discussion of sustainability a step further by including analysis prepared by OMB that provides a broader perspective to consider the comparative present value of projected receipts and expenditures for the federal government as a whole—not just the SOSI programs. This analysis is presented in combination as (1) a Statement of Long-Term Fiscal Projections (SLTFP) and (2) a discussion of the related projected effects on deficits and public debt as a percent of gross domestic product (GDP). The analysis, unique to the FRUSG, culminates in a presentation of historical and current policy projections for debt held by the public as a percentage of GDP (see Exhibit 4).

Exhibit 4 shows (and the FRUSG discusses) that, without policy change, and using similar assumptions as

the SOSI analysis,² public debt as a percentage of GDP (debt/GDP) would grow significantly over the 75-year projection period, to as much as five times the current debt/GDP reported in the FY 2023 FRUSG. Based on this analysis, the FRUSG goes on to conclude that:

“...current policy is not sustainable and must ultimately change. If policy changes are not so abrupt as to slow economic growth, then the sooner policy changes are adopted to avert these trends, the smaller the changes to revenue and/or spending that would be required to achieve sustainability over the long term.”

The SOSI and sustainability analyses are both important contributors to policy discussions about the sustainability of social insurance programs and the federal government's fiscal path as a whole. The candor with which these conclusions are expressed is a significant source of transparency and trust, as are the underlying charts and tables. So too is the assurance conveyed by the audit process.

Assurance, transparency, and trust through audit

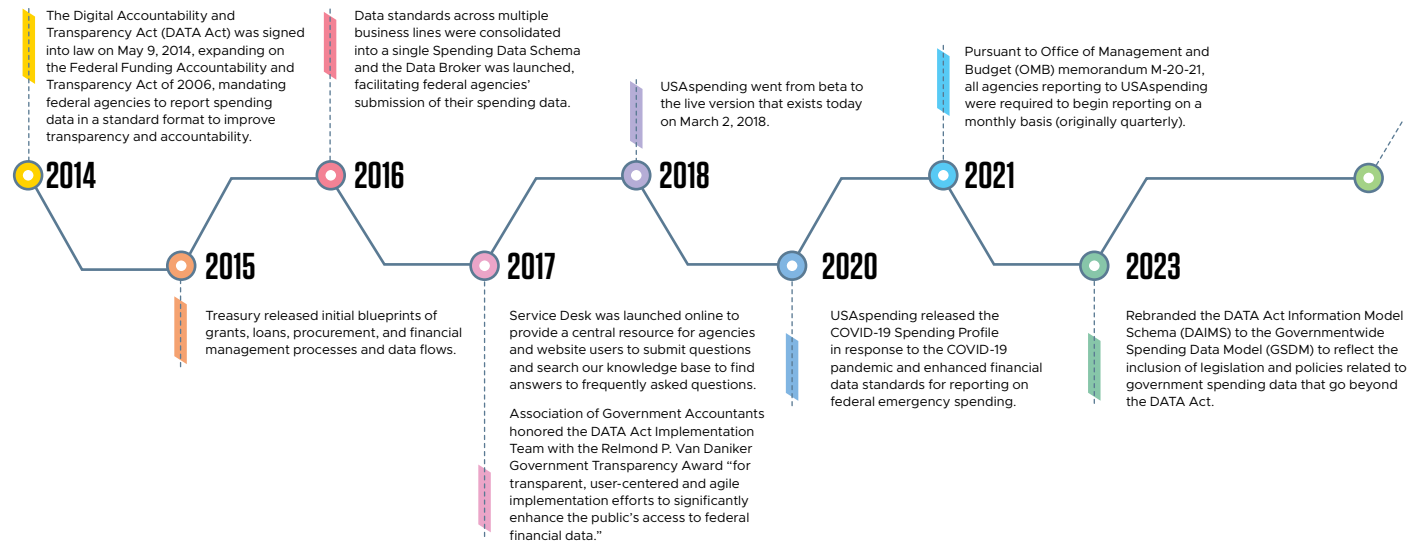
It was noted earlier that the GMRA required audits of the financial statements prepared by the agencies enumerated in the CFO Act as well as the FRUSG. Through subsequent legislation, this requirement has been extended to the more than 160 entities with financial data consolidated into the FRUSG. While the FRUSG receives a disclaimer of audit opinion, the majority of the significant entities' AFRs have earned unmodified opinions. Further, the FRUSG—the audit option, in particular—discusses the significant progress that has been made, particularly in recent years, toward resolving the material weaknesses that contribute to the disclaimer. While audit challenges remain, users of AFRs and the FRUSG can be assured that the information provided has been subjected to robust audit procedures, which is critical to conveying trust.

The 1990s ushered in a renaissance in federal financial reporting and accountability. Agency Financial Reports and the Financial Report of the U.S. Government provide valuable insight into the federal government's financial position and condition as well as perspective on key financial trends that is complementary to the budget. However, the full utility of this reporting is limited by the fact that AFRs and the FRUSG are prepared annually. So, while the annual data is informative, it is of limited utility, particularly in an age driven by nearly continuous technological innovation. The demand from the public and decision makers for more timely and functional information has driven more recent innovations in federal data transparency.

Transparency of federal spending arms policymakers with valuable insights

Data transparency is a cornerstone in the government's commitment to empower the American public. Financial data transparency, in particular, is the focal point of two website products developed and maintained at the Department of the Treasury: USAspending (usaspending.gov) which is the official source for federal spending data traced down to specific federal awards;

EXHIBIT 5 | Digital Accountability and Transparency Act of 2014 milestones



and FiscalData [fiscaldata.treasury.gov] which is a one-stop-shop for many other federal financial data resources. The Treasury's mission is to provide accessible, easy-to-use financial data and resources to inform the American public, inspire trust in government, and help drive good decisions and strong policies.

USAspending was enacted through the Federal Funding Accountability and Transparency Act of 2006 (FFATA) and later expanded by the Digital Accountability and Transparency Act of 2014 (DATA Act). FFATA required federal contract, grant, loan, and other financial assistance awards to be displayed on a publicly accessible and searchable website to give the American public access to information on how their tax dollars are being spent. The DATA Act amended and expanded FFATA by:

- Disclosing direct agency expenditures and linking federal contract, loan, and grant spending information to federal agency programs;
- Establishing government-wide data standards for financial data and providing consistent, reliable, and searchable data that is displayed accurately on USAspending.gov;

USAspending.gov has more than **1.9 million users** and **9.7 million page views** annually

- Simplifying reporting, streamlining reporting requirements, reducing compliance costs, while improving transparency; and
- Improving the quality of data submitted to USAspending.gov by holding agencies accountable.

In implementing these two foundational pieces of legislation, the Treasury developed a comprehensive and inclusive reporting framework that collects more than standardized data elements from various government systems. With a nightly data pipeline, USAspending ensures timely updates of available data, providing the public with current insights into federal spending trends.

USAspending.gov has more than 1.9 million users and 9.7 million page views annually, highlighting its significance as a resource for the American public, including lawmakers and key decision makers. As 2024 marked the ten-year

anniversary of the DATA Act, Exhibit 5 notes these significant milestones in the journey to implement and enhance the transparency of federal financial data.

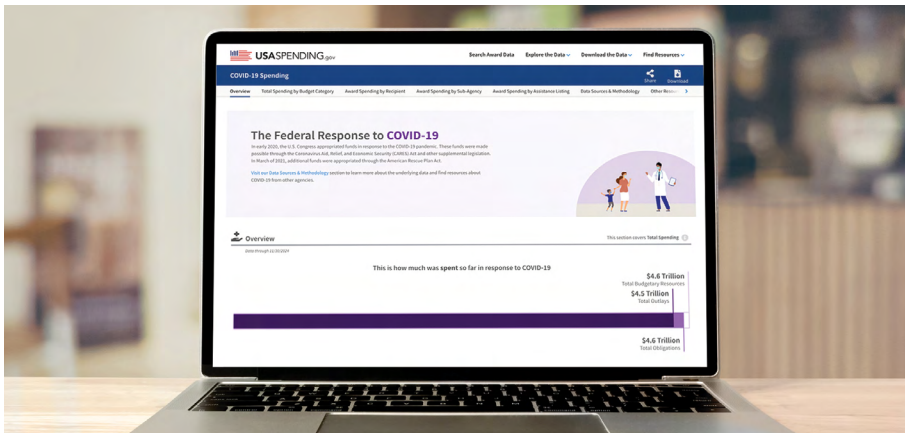
Continued growth and expansion on transparency foundations

In being responsive to new emerging policies, as well as expanding operational needs, Treasury applied agile principles that allowed flexibility in adjusting priorities that were often time sensitive.

The most significant example is the quick reaction to provide financial information about the COVID-19 pandemic response. Treasury already had a sound financial reporting infrastructure and agile operating model in place that allowed for quick implementation of a new data element to capture disaster funding.

To better help lawmakers, oversight bodies, federal agencies, and the public access and understand COVID-19 spending data, the team quickly developed a web

EXHIBIT 6 | Treasury's COVID-19 web page



page (Exhibit 6) to capture the journey of COVID-19 dollars from appropriation to obligation and outlay by federal agencies, allowing users to see who received funding, which agencies spent the funds, which programs were funded, and more.

More recently, Treasury is redesigning the USAspending advanced search function to make it more intuitive, accessible, and customer-centric, based upon extensive user research and feedback. These changes will make it even easier to find summary statistics and specific federal awards.

Given the importance of USAspending to Congressional stakeholders, a significant improvement within the advanced search function is the update of all features across the site to reflect the new Congressional districts while ensuring that all data is backwards-compatible with previous Congressional districts (see Exhibit 7). This helps the Congressional stakeholders better understand the financial impact of their actions and any ties to federal funding or spending over time, even when district lines are redrawn.

Another improvement currently in development pertains to scenarios where the Federal government makes an award to a state agency, and the state agency will often use that money to fund local projects through sub-awards. USAspending actively engages with partners in government and civil society to improve the quality and availability of this data. This

initiative will allow the public to better track spending in their communities.

This will be particularly useful for state or local lawmakers who want to trace the federal funding provided to their locality and constituents and will provide them insights on how they are succeeding in their role as stewards of public finances.

Use cases that demonstrate the value of financial data in policymaking

The Puerto Rico federal funding dashboard (see Exhibit 8) is one example of how USAspending data was used to provide policymakers with high-quality, disaggregated data for understanding the distribution of federal funding from a geospatial perspective. Using USAspending data, the team was able to track funding at a municipal (county-equivalent) level and allowed policymakers supporting the Puerto Rico Economic Dialogues in 2023 to conduct research on where the administration's funding related to the recovery from Hurricane Maria, COVID-19, and the Bipartisan Infrastructure Law were being distributed. With the place-based approach, the team was able to overlay equity indicators and provide decision makers with better information about where opportunities for more targeted outreach and engagement existed.

While this dashboard was initially built on a platform intended for use by

EXHIBIT 7 | USAspending advanced search function

Advanced Search

Place of Performance

Recipient Location

COUNTRY

UNITED STATES

STATE (US ONLY)

Virginia

COUNTY (US ONLY)

Select a county

CITY

Enter a City

CONGRESSIONAL DISTRICT (US ONLY)

Current Congressional Districts (based on 2023 redistricting)

Select a congressional district

Original Congressional Districts (as reported by federal agencies)

Select a congressional district

federal employees, it was clear during the roadshow demos that policymakers and other external organizations found it valuable, and they approached the USAspending team to integrate it on to Treasury's public website. This initiative is currently underway, with adjustments to broaden the scope to any state or territory through the USAspending profile pages with iterative improvements.

The Committee for a Responsible Federal Budget (CRFB) developed a COVID Money Tracker (see Exhibit 9) that provides a comprehensive analysis of how the U.S. government has allocated funds in response to the COVID-19 pandemic. It presents data on relief programs like Economic Impact Payments and allows users to search for information by state, legislation, and recipient with real time tracing from USAspending.gov. This site aims to promote transparency and accountability by making the financial data easily accessible to the public. It also offers interactive tools and visualizations to help users understand the distribution of funds and track how the money has been used.

EXHIBIT 8 | Puerto Rico federal funding dashboard

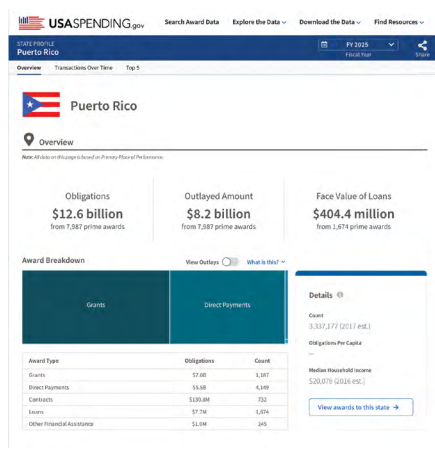


EXHIBIT 9 | The COVID Money Tracker page

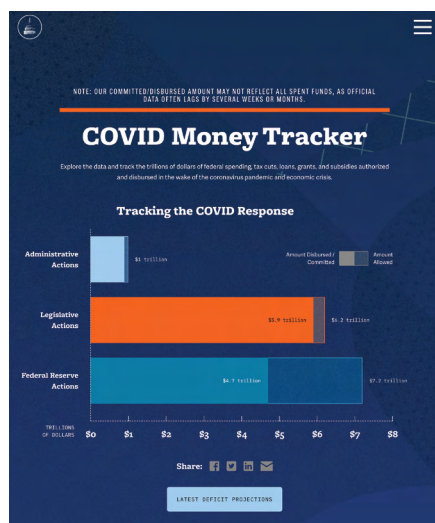


EXHIBIT 10 | Fiscal Data



Increasing use of and access to federal financial data through new, innovative tools fosters trust through transparency and enables the public as well as policymakers to be informed decision makers.

Another transparency product the Treasury developed for the purpose of providing a one-stop-shop of consolidated federal financial data is fiscaldata.treasury.gov (see Exhibit 10). With 61 datasets and 165 data tables, Fiscal Data offers a comprehensive view of federal financial operations, catering to the needs of diverse users.

FiscalData.treasury.gov engages over 2.5 million users with 3.6 million page views annually, demonstrating its significance as a trusted resource for understanding federal finances.

Examples of the wealth of financial data on this site that can help inform policies include:

- The monthly Treasury statement, which provides the official summary report of receipts, outlays, and the surplus/deficit.
- The daily Treasury statement, which provides the daily cash and debt operations of the U.S. Treasury.
- Your Guide to America's Finances, which provides a comprehensive overview of the trillions of dollars processed by the federal government each year, with easily searchable topic pages on revenue, spending, deficit, and debt.
- Treasury securities auctions.
- Delinquent debt information.

Conclusion

These use cases and examples demonstrate that there is dedicated interest and value in understanding financial data and the impact past decisions have had, which will help inform and influence future decisions and policymaking.

Whether the focus is on legacy reporting processes through monthly or annual reports—which are useful vehicles for understanding the “big picture” (for example, risks, financial health)—or on more dynamic, web-based, real-time information—which are useful for analyzing ad-hoc or specific policy issues—both resources benefit from the important audit and assurance process and can serve multiple purposes and audiences simultaneously. Especially when combined with the legacy financial reporting tools such as annual audited financial reports and other resources, increasing use of and access to federal financial data through new, innovative tools, fosters trust through transparency and enables the public as well as policymakers to be informed decision makers.

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¹ Non-exchange revenue, including taxes, duties, fines, and penalties, are recognized when collected and adjusted for the change in amounts receivable (modified cash basis). Related refunds and other offsets, including those that are measurable and legally payable, are netted against non-exchange revenue.

² The 2023 and 2022 Statements of Long-Term Fiscal Projections and related analysis are based on assumptions of current policy without change. Current policy is based on current law but includes several adjustments. In the SLTFP, notable adjustments to current law are: 1) projected spending, receipts, and borrowing levels assume raising or suspending the current statutory limit on federal debt; 2) continued discretionary appropriations are assumed throughout the projections period; 3) scheduled Social Security and Medicare Part A benefit payments are assumed to occur beyond the projected point of trust fund depletion; and 4) many mandatory programs with expiration dates prior to the end of the 75-year projection period are assumed to be reauthorized.