Data Sources

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Introduction

USAspending Data Sources

A journey through government spending data

USAspending.gov links data from many government systems, including agency financial systems and governmentwide award systems. Scroll below to learn more about these systems, as well as the context for this historic initiative to provide federal spending transparency.

History of the DATA Act

What is the DATA Act?

The Digital Accountability and Transparency Act (DATA Act) was signed into law in 2014, establishing federal standards for financial data and a new reporting process for agencies to improve data quality, transparency, and accountability.

The result is an ongoing partnership between the federal community and external stakeholders to create a standard data model and a publicly accessible and searchable website: USAspending.gov.

Today, more than 100 federal agencies submit financial data to USAspending.gov on a monthly basis, and thousands of public users visit the site every day to access data via visualizations, downloads, and open APIs.

Why was the DATA Act needed?

Before the DATA Act, many programs in the federal government had the same types of spending data about agency expenses and federal awards such as contracts, grants, and loans. However, they weren't all defining their data elements in the same way. These differences made it hard to share or compare data across agencies and programs.

In addition, agency financial systems were not linked to governmentwide award systems, so there was no way to follow the money from appropriated funds to award spending for recipients across the country and the world. As a result of the DATA Act, policies and mechanisms now exist for this linkage.

How is the DATA Act implemented?

The USAspending data model standardizes data elements and definitions, and the DATA Act Broker validates the data submitted and extracted from agency systems for quality, consistency, and accuracy.

USAspending.gov is built on principles of user-centered design and Agile software development, leveraging input from the public and federal stakeholders to iteratively release updates and enhancements many times per year.

USAspending Data Model

The USAspending data model is a collection of resources that explains the elements, relationships, and sources for the data on USAspending.gov. This Data Sources page is one such resource. Read about the other resources below.
[BUTTON: "Read More" – expands the card to show the following bullets]

- Glossary: a collection of plain-language and official definitions for commonly used terms
- About the Data: a collection of disclosures and background information
- Analyst Guide: a collection of frequently asked questions
- Data Dictionary: a crosswalk spreadsheet for data element names and definitions across USAspending downloads and source systems
- Dataset Metadata: documentation for all JSON objects accessible from downloads
- API Endpoints: documentation for all JSON objects accessible from API endpoints
- DATA Act Information Model Schema (DAIMS): technical documentation for the data submitted to, and extracted by, USAspending.gov (Files A, B, C, D1, D2, E, and F)

You can follow the money from the source systems through the submission and extraction process to see what is displayed on USAspending.gov.

Scroll down to get started.

Federal Spending Overview

How do federal dollars move from Congress to the American people?

Every year, the Treasury Department issues funds to federal agency spending accounts (known as Treasury Accounts) as a result of appropriations from Congress. Appropriations are one form of budgetary resource, and any given Treasury Account may include a variety of budgetary resources.

Agencies enter into binding agreements called obligations to spend the appropriated money for certain authorized purposes. These purposes could be for agency expenses or for federal awards such as contracts, grants, and loans. Obligations could commit the agency to spend money immediately or in the future.

Outlays occur when federal agencies authorize payments to individuals, businesses, or other organizations. Whereas an obligation is merely a promise to spend money, an outlay represents actual spending.

USAspending has data on both obligations and outlays, but in most cases, it is more common to measure spending by obligations rather than outlays.

Data Available on USAspending.gov

What kinds of data does USAspending.gov have?

Data Available on USAspending.gov

USAspending.gov receives over 400 data elements coming from various government systems. These data elements cover information about federal agencies, agency accounts, award types, prime award recipients, and subrecipients, as well as information such as Census data for additional context.

Data Not Available on USAspending.gov

Due to existing laws and regulations, some data are not published on USAspending.gov. These exceptions include:

- Personally identifiable information (PII);
- Information that may compromise national security;
- Proprietary information or documents from federal award recipients; and
- Tax expenditure data, including Economic Impact Payments (i.e., COVID stimulus checks)

While USAspending.gov does receive contract award data from the Department of Defense (DOD) and the U.S. Army Corps of Engineers (USACE), there is a 90-day delay in the submission of these data to the FPDS source system.

Note that some smaller executive branch agencies, as well as the entire legislative and judicial branches, are not required to report to USAspending.gov. The full list of reporting agencies can be found on our Agency Profile landing page.

Data Types

How can I understand all the data types on USAspending.gov?

Even though USAspending.gov has hundreds of data elements, you can think of them in three major categories: Account Data, Award Data, and Additional Data.

Account Data

Account data contain information about an agency's overall spending authority, obligations and outlays, including the subset of spending on federal awards. Account data provide the "big picture" of an agency's total spending. USAspending.gov receives account data from most federal agencies and supplements the data with authoritative agency budget execution data.

Award Data

Award data contain rich details about individual federal awards, such as who received the award, when obligations were made, where the money went, and what the award's purpose is. Award spending is a subset of an agency's total spending. USAspending.gov receives award data from agency financial systems as well as governmentwide award systems.

Additional Data

USAspending.gov extracts reference data from government sources to ensure consistency and provide additional context to the account data and award data.

Source Systems

What government data systems flow into USAspending.gov?

You can understand the USAspending source systems as grouped by the type of data they provide: Account Data, Award Data, and Additional Data.

Agency Budget Execution

Agency budget execution information (compiled in SF 133 reports) shows how agencies across the federal government spend their funding, as required by the Office of Management and Budget's Circular A-11. Some smaller agencies do not submit their account data to USAspending.gov but nonetheless submit budget execution data to a different system.

Agency Financial Systems

Federal agencies maintain business systems to track their own finances, such as for operational costs, employee salaries, and spending for federal awards. Data from these systems are submitted directly to USAspending.gov in accordance with the DATA Act and guidance from the Office of Management and Budget.

Governmentwide Award Systems

Agencies maintain detailed records of their federal awards in governmentwide award systems. These award systems track obligations for award transactions as well as related data about federal awards such as recipients, locations, and purposes. Any individual award is composed of one or more transactions with a common award ID.

Separate systems exist for contract awards, financial assistance awards, subawards, as well as recipient registration data.

Additional Government Data

Certain agencies are considered authoritative sources for information related to the spending data that USAspending.gov publishes. USAspending.gov draws from these agencies' systems as needed to provide standardized names, codes, and element relationships.

Account Data

What are the sources for account data on USAspending.gov?

GTAS

Agency budget execution information is submitted in a system called the Governmentwide Treasury Account Symbol Adjusted Trial Balance System (GTAS), and this information is used to generate authoritative Treasury Account balances. USAspending.gov extracts some data from GTAS for governmentwide spending figures and other purposes.

File A

File A (Account Balances) is part of the package of data submitted to USAspending.gov by federal agencies, as required by the DATA Act. It can be generated from data in GTAS, but agencies may also upload their own custom File A data. File A contains budgetary resources, obligation, and outlay data for all the relevant Treasury Accounts in a reporting agency. It includes both award and non-award spending (grouped together), and crosswalks with the SF 133 report.

File B

File B (Account Breakdown by Program Activity & Object Class) is part of the package of data submitted to USAspending.gov by federal agencies, as required by the DATA Act. It contains obligation and outlay data for all the relevant Treasury Accounts in a reporting agency, with a breakdown by the accounting categories Program Activity, Object Class, and Disaster Emergency Fund Code (DEFC, which is used to track spending from supplemental appropriation bills addressing topics such as COVID-19 relief and infrastructure investment). It includes both award and non-award spending (grouped together).

Award Data

What are the sources for award data on USAspending.gov?

File C

File C (Account Breakdown by Award) is part of the package of data submitted to USAspending.gov by federal agencies, as required by the DATA Act. It contains obligation and outlay data for all awards issued by a reporting agency, covering both contract and financial assistance awards over the lifetime of those awards.
File C is a further breakdown of File B, showing award spending broken down by Treasury Account, Program Activity, Object Class, and Disaster Emergency Fund Code (DEFC, which is used to track spending from supplemental appropriation bills addressing topics such as COVID-19 relief and infrastructure investment).
Note that File C represents only the financial aspect of awards (e.g., Treasury Account, Program Activity, and Object Class information), whereas Files D1 and D2 provide both financial information and other non-financial details (e.g., recipient name, recipient location, and place of performance).

FPDS (File D1)

The Federal Procurement Data System (FPDS) is the database where federal contracting officials submit transaction-level data for contracts and contract indefinite delivery vehicles (IDV). It contains information about award transaction obligation, award transaction description, action date, awarding agency, recipient code, recipient location, place of performance, industry (NAICS), product or service (PSC), and type of set aside, among other details.

The collection of data in FPDS that USAspending.gov extracts is known as File D1.

FABS (File D2)

The Financial Assistance Broker Submission (FABS) is how federal agencies submit transaction-level data for financial assistance awards to USAspending.gov. It contains information about award transaction obligation, award transaction description, action date, awarding agency, recipient code, recipient location, place of performance, and assistance listing, among other details.

The collection of data in FABS that USAspending.gov receives is known as File D2.

Linked Awards

While File C provides data over the lifetime of individual awards from agency financial systems, Files D1 and D2 provide data from award transactions in governmentwide award systems. USAspending.gov links these two sources of award data. However, due to different policies and reporting requirements for these separate systems, not all award data can be linked across both sources. Awards can only be linked through a shared award ID.

An award in File C that is missing in Files D1 and D2 will lack non-financial details such as recipient or location information. An award in Files D1 or D2 that is missing in File C will lack financial details such as the Treasury Account that funded the award.

You can see statistics about unlinked contract awards and unlinked assistance awards in the Agency Submission Statistics page. More information about linked awards is available in the Data Sources and Methodology page for these statistics.

SAM.gov (File E)

SAM.gov is the "System for Award Management" where potential recipients must register if they want to be eligible to receive federal prime awards. USAspending.gov uses SAM.gov as the source of authoritative recipient name, code, and executive compensation data.

The collection of executive compensation data in SAM.gov that USAspending.gov extracts is known as File E.

FSRS (File F)

The FFATA Subaward Reporting System (FSRS) is where prime recipients submit information about their subawards. This information includes data about both the prime award and the subaward, such as their respective action dates, recipient codes, recipient locations, places of performance, award descriptions, and executive compensation data.

The collection of data in FSRS that USAspending.gov extracts is known as File F.

Additional Data

What are the sources for additional data on USAspending.gov?

USAspending.gov uses information from authoritative government systems to provide additional context to account data and award data. Some examples of these additional data are below.

Location Data

USAspending.gov standardizes the location elements in its award data by using authoritative names and codes from government systems. For example, U.S. Postal Code data are used for zip codes, and Census Bureau data are used for congressional districts.

Federal Hierarchy Data

There are two federal hierarchies that relate agencies to their subcomponents. USAspending.gov draws from the Office of Management and Budget's hierarchy for account data, and from the General Services Administration's hierarchy for award data. You can see these two hierarchies in any of the [Agency Profile pages](#).

Data Submission and Extraction

What data are submitted directly to USAspending.gov, and what data are extracted by USAspending.gov?

Data from government systems flow into USAspending.gov in one of two ways: they are either submitted directly or extracted.

Data Submitted

Files A, B, and C, as well as FABS data, are all sent directly from federal agencies to USAspending.gov. For more information about what is included in these submissions, please consult the Reporting Submission Specification (RSS) spreadsheet in the [DATA Act Information Model Schema (DAIMS)](#) page.

Data Extracted

Data in Files D1, E, and F, as well as all reference data, are extracted by USAspending.gov from government sources. For more information about what is included in these extractions, please consult the Interface Definition Document (IDD) spreadsheet in the [DATA Act Information Model Schema (DAIMS)](#) page.

Frequency of Data Updates

How often are data updated on USAspending.gov?

The data on USAspending.gov are updated every day after the nightly data pipeline runs. However, USAspending source systems have different requirements for the frequency of their data updates.

Files A, B, and C

Files A, B, and C are submitted by federal agencies to USAspending.gov on a monthly basis, as required by the DATA Act. You can see specific DATA Act reporting submission dates in the spreadsheets available in the resources page for the DATA Act Information Model Schema (DAIMS).

You can see publication and certification dates for agency submissions in the "Most Recent Update" column of the Agency Submission Statistics page.

FPDS (File D1)

Federal agencies must submit contract data to FPDS within three days of the award transaction. The day after submission, these data are made available to USAspending.gov. On the following day, these data are automatically published on USAspending.gov.

- Example 1: A contract transaction is made on a given Thursday. The award is reported to FPDS three business days later, on the following Tuesday. It is then made available to USAspending.gov on Wednesday morning and published to the site on Thursday.
- Example 2: A contract transaction is made on a given Tuesday. The award is reported to FPDS three business days later, on Friday. It is then made available to USAspending.gov on Saturday morning and published to the site on Sunday.

Note that the submission of data to FPDS is delayed by 90 days for the Department of Defense (DOD) and the U.S. Army Corps of Engineers (USACE).

FABS (File D2)

Federal agencies must submit financial assistance data to FABS within two weeks of the award transaction. This requirement applies to all financial assistance awards except loans, which are required to be reported within 30 days of the award transaction.

- Grant Example: A grant transaction is issued on September 8. It must be reported to FABS within 14 days, by September 22. If submitted on September 22, the new data are published on USAspending.gov on September 23.
- Loan Example: A loan transaction is issued on September 8. It must be reported to FABS by October 8. If submitted on October 8, the new data are published on USAspending.gov on October 9.

FSRS (File F)

Prime recipients must report any subaward greater or equal to $30,000 to FSRS by the end of the month following the month the subaward was made.

- Example 1: A subaward is issued on September 1. It must be reported to FSRS by October 31. If submitted on October 31, the new data are available to USAspending.gov on November 1 and published to the site on November 2.
- Example 2: A subaward is issued on September 30. It must be reported to FSRS by October 31. If submitted on October 31, the new data are available to USAspending.gov on November 1 and published to the site on November 2.

You can read more about subaward reporting requirements on this FSRS informational page.

Reference Data

All reference data (such as location data) are extracted by USAspending.gov on a daily basis. In addition, data from SAM.gov (such as executive compensation data, also known as File E) and GTAS are also extracted daily (although GTAS data are only published once a month along with data from Files A, B, and C).

Data Validation

How does the DATA Act Broker validate data before they are accessible to the public?

DATA Act Broker Practices

The DATA Act Broker is the system that collects and validates federal spending data from source systems before they are ultimately published on USAspending.gov. It receives data through two processes: one process is for FABS (i.e., transaction-level financial assistance data) and one process is for monthly compilations and quarterly certifications of Files A, B, C, D1, D2, E, and F. Data from the FABS process generates File D2. Both processes involve data validation checks within the DATA Act Broker. The results of some validation checks prevent publication of data, while others raise warnings without preventing publication. Auditors can review these results to monitor agency submissions.

System Validations

The DATA Act Broker validates the data it receives from agency financial systems (Files A, B, and C) as well as FABS. These validations are based on business rules (such as for award linkage between File C and Files D1 and D2) and checks against authoritative sources such as GTAS. Agency financial systems are subject to other data quality assurance measures, such as review by Offices of Inspector General (OIG) and the Government Accountability Office (GAO) for reports as required by the DATA Act.

USAspending.gov relies on internal validations of data within source systems outside of the Treasury Department (such as FPDS, FSRS, and SAM.gov). The data extracted from these systems may not always align with the data standards, definitions, and requirements established in guidance from the Office of Management and Budget (OMB) and Treasury Department.

Read below for examples of the DATA Act Broker's validation measures.

Treasury Account Validations

The DATA Act Broker checks that Treasury Accounts submitted to GTAS for any given reporting period are also submitted to File A, and vice versa. It also checks that Treasury Accounts submitted to File A for any given reporting period are also submitted to File B, and vice versa.

Zip Code Validations

The DATA Act Broker checks that all financial assistance recipient zip codes are valid five-digit U.S. Postal Service zip codes. It also checks that these zip codes are provided for all domestic financial assistance award recipients (excluding aggregated and redacted records).

Unique Entity Identifier (UEI) Validations

The DATA Act Broker checks that financial assistance award recipients with a unique entity identifier (UEI) are registered in SAM.gov as of the date of the award transaction. Some exceptions apply, such as if the date is before October 1, 2010.

Award Linkage Validation

The DATA Act Broker warns agencies about award IDs (i.e., PIID, FAIN, and URI) in File C that don't exist in Files D1 and D2, and vice versa, for the same reporting period. This check only applies for award transactions where the obligation amount is not zero.

You can see statistics about unlinked contract awards and unlinked assistance awards in the Agency Submission Statistics page. More information about linked awards is available in the Data Sources and Methodology page for these statistics.

Features on USAspending.gov

Where can I find data on USAspending.gov from these sources?

Features for Account Data

If you are looking for account data, you can use the following features:

- Spending Explorer lets you drill down from larger budget categories to smaller ones
- Agency Profiles show you account spending (and award spending) summaries for specific agencies and fiscal years
- Federal Account Profiles show you account spending (and award spending) summaries for specific federal accounts in the current fiscal year

Features for Award Data

If you are looking for award data (both prime award and subaward), you should go directly to Advanced Search. This feature has many filters to help narrow your search, such as by:

- Action Date
- Award Type
- Awarding Agency
- Place of Performance
- Recipient Name or Code
- Assistance Listing (CFDA Program)
- Industry (NAICS)

Features for COVID-19 and Infrastructure Spending Data

The Disaster Emergency Fund Code (DEFC) data element tracks spending from supplemental appropriation bills addressing topics such as COVID-19 relief and infrastructure investment. These data elements are found in File B and File C (i.e., in submissions from agency financial systems). You can find DEFC spending data in the following features:

- COVID-19 Spending Profile (with more information available in the Data Sources and Methodology page)
- Advanced Search (using the DEFC filter)
- Custom Account Data Download (using the DEFC filter)

Features for Downloads and APIs

If you just want to access the data for your own purposes, you can use our various download and API features:

- Award data can be accessed as pre-generated files in the Award Data Archive, or as customized downloads in the Custom Award Data Download
- Account data can be accessed as customized downloads in the Custom Account Data Download
- The USAspending database can be accessed in the Database Download
- Results from Advanced Search can be downloaded from the top right of the page
- Data from individual Award Summary Profile pages (accessed from the "Award ID" column in Advanced Search results) can be downloaded from the top right of the page
- The USAspending API documentation includes a list of API Endpoints as well as an API Tutorial

Use Cases

What can I do with the data on USAspending.gov?

The wealth of data on USAspending.gov allows for many use cases by users of diverse backgrounds, from citizens and taxpayers to researchers, journalists, small business owners, public servants, government watchdogs, and more. Read about some of these use cases below.

Federal Spending Transparency and Accountability

Congressional staffers and researchers use USAspending.gov to identify award recipients and spending amounts to states and congressional districts.

Market Research

Small business owners use USAspending.gov to perform market research for particular locations, industries, and set asides.

Grant Opportunities and Compliance

State and local government agencies use USAspending.gov to research potential grant opportunities and monitor their own grants for compliance purposes.

Federal Spending Trends and Stories

Journalists use USAspending.gov to find noteworthy trends or stories about federal spending.

We hope you find your own way to use USAspending data. You can reach us at USAspending.help@fiscal.treasury.gov to give feedback or ask questions about the data or the website. We look forward to hearing from you!