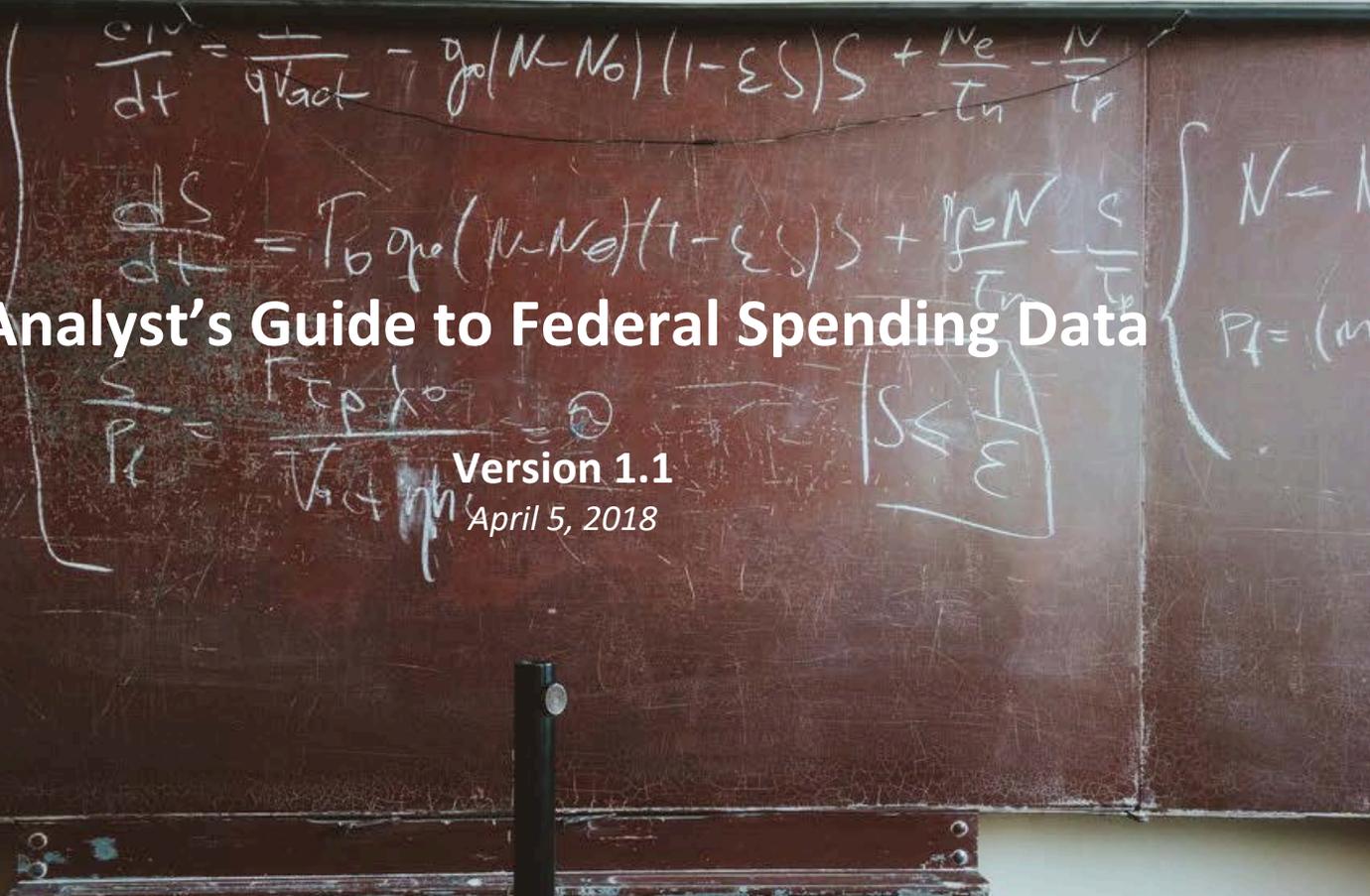


Analyst's Guide to Federal Spending Data

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Welcome to the Analyst's Guide to Federal Spending Data. Here, you'll find guidance on effectively using USAspending.gov data, making it easier for you to conduct analyses and develop tools using federal spending data.

If you'd like to recommend a question to be added to this guide, please share it on USAspending.gov's [Community page](#).

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General questions

What is the difference between a contract and a grant? Also, what is the difference between the data structure?

A contract is an agreement between the federal government and a recipient to provide goods and services to the government for a fee. Grants are a form of financial assistance, where a federal agency transfers a thing of value (either money or in kind) to the recipient in order for the recipient to carry out activities or projects to benefit the public.

Because of these differences, contract and financial assistance data have different structures, fields, and categorization systems. For example, financial assistance awards are categorized by the Catalogue of Federal Domestic Assistance (CFDA) tags, where contracts are categorized with Product and Service Codes. Furthermore, contract and financial assistance data are provided to USAspending.gov from two distinct feeder systems. Contract data is entered into a system called the Federal Procurement Data System (FPDS), which is managed by GSA, while financial assistance data is entered directly into a Treasury-managed system called the Broker.

What's the difference between an obligation and an outlay?

An obligation is a promise made by the government to spend funds immediately or at a later date as a result of a series of actions. An outlay takes place when those funds are actually spent, or paid out. For example, when the government enters into a contract or grant, typically, the entire value of the contract or grant is obligated. This is done because the government expects to make payments totaling that amount, so long as the agreed-to actions take place. When the government actually makes payments to a contractor or grantee, then the obligation to pay becomes an outlay.

What are negative obligations?

Negative obligations, or de-obligations, occur when agencies decrease previous obligations to correct errors or to reflect new information (for example, that the price of a project was lower than expected).

De-obligations are common in instances where the scope of a project changes. For example, if the government awards a contract for \$1 million, but later decides that it only requires work totaling \$400,000, it would de-obligate \$600,000, which would show up as negative \$600,000 in USAspending data.

How do I find the meanings of particular terms and field names?

There are a number of sources you can use to find definitions of terms and field names. Our Glossary (linked in the top navigation of USAspending.gov) lists plain-language definitions of terms used throughout the site. To learn more about contract data, you can reference the [FPDS data dictionary \(PDF\)](#), which details the structures of different fields. You can find more information about financial assistance award data in [the Data Dictionary](#).

Are outlays included in awards data?

Outlays are not included in awards data provided to USAspending by FPDS (see “What is the difference between a contract and a grant” above). However, Treasury has given federal agencies the opportunity to report outlays related to contracts and financial assistance on an optional basis. This data is not currently available for download, but we are working to make it available in the coming months.

Is there a data dictionary, glossary of terms, or other meta information on the fields available for download? How can I get agency data?

USAspending offers resources to help you get the most out of using the site. The [Data Dictionary](#) contains definitions of the hundreds of different data elements used in the DATA Act schema.

The Glossary contains definitions of technical terminology used on [USAspending.gov](#). The Glossary is linked in the top navigation and the site’s footer.

Metadata for USAspending.gov is available on [GitHub](#).

Finally, USAspending’s [FAQ page](#) provides additional advice for getting the most out of the site.

I’d like to use the API — where can I learn more about it?

The [API page](#) on USAspending.gov offers general API guidance, tutorials, request recipes, and more; it also [links to the most current API documentation](#).

How can I access the database?

To access the database, click on [Database Snapshots](#) in the Download Center drop-down (top nav).

How can I use the bulk download?

To perform bulk downloads, visit the [Custom Award Data page](#) (Download Center drop-down in the top

nav) or the [Award Data Archive](#). You may also be interested in downloading the [raw agency submission files](#), which require a greater degree of data manipulation to format into a dataset.

Classifications/hierarchies/schema questions

What are Product and Service Codes and where is the taxonomy located?

Product and Service Codes (PSC) are a system that describes the type of product or service that's being purchased with a contract. You can find a list of Product Service Codes at [acquisition.gov](#). PSCs are only applicable to contracts.

How can I find funds related to a particular disaster or national event?

Each contract has a data element called the National Interest Action, and the values in this element are codes that identify the designated disaster that a contract is associated with. To learn more about which disaster or national event a contract is associated with, use this code.

Currently, financial assistance records — those for loans, grants, direct payments, insurance, and other types of assistance — do **not** have National Interest Actions, although there are discussions ongoing about whether to include them.

Agency-related questions

How can I track funds from a funding agency to a different awarding agency and finally to the recipient?

Contract and financial assistance data both include fields for funding and awarding agencies. This information is relevant when the funding agency is different from the awarding agency. In certain cases, one federal agency may provide money to fund a contract or a grant, which is administered by another agency.

Note: Some contracts have multiple funding agencies, if the activities provided are of interest to multiple agencies, but it can only have one awarding agency. Contract data only has the capacity to list one funding agency; if a contract is funded by multiple agencies, the document will list the agency that provides the most funding.

While contract and grant data does not reflect multiple funding sources, this information can be found through the financial side of the data, which shows all of the funding agencies (not just the predominant one) per transaction. You can use award identifiers (the FAIN for grants and the PIID for contracts) to link details in the award world (recipient information, awarding agency, etc.) to the financial side, where you can find more information about the funding agency.

What is the difference between an awarding agency and a funding agency?

The awarding agency is the agency that creates and administers a contract, while the funding pays for the underlying goods and services provided. In most cases, the awarding and funding agency are the same.

The division of funding and awarding agencies benefits many smaller agencies, who may not have the staff available to execute contracts.

Where is the full list of sub-tier agencies? How are sub-tier agencies managed over time?

Sub-tier agencies are the bureaus or divisions of larger federal agencies. For example the IRS is a sub-tier component of Treasury, as the FBI is for the Department of Justice. In June 2016, OMB posted an authoritative list of sub-tier agencies on MAX.gov; USAspending.gov made a copy of this list, adding historical sub-tier codes and names to ensure backwards compatibility and to allow the data to display properly on USAspending.gov.

Currently, the [list](#) of sub-tier agencies is static, and it will remain static until GSA launches a tool called Federal Hierarchy on beta.sam.gov, which is expected in the coming months.

Federal agencies will be responsible for using this tool to manage their agency structure (including Sub-Tier and Office). This tool will provide a comprehensive and up-to-date list of all Sub-Tiers and Offices, which USAspending.gov will access via API or daily data download.

Help! Why are there so many agency fields? Which one do I use?

Different fields are available for contracts and other types for financial assistance. To find what you're looking for, it's important to note the distinction between **funding agencies** and **awarding agencies**. Funding agencies are those that actually provide funding for awards, while awarding agencies are those that administer the awards; in most cases, the funding agency and the awarding agency are the same entity.

There are additional layers of hierarchy within funding and awarding agencies, which are represented by different organizational identifiers. These additional identifiers may or may not be completed for a given record, depending on the record type. They include the following:

- Awarding agency
 - Awarding sub-tier agency
 - Awarding office
- Funding agency
 - Funding sub-tier agency
 - Funding office

In summary, if you're interested in learning who funded various awards, refer to funding agency fields. If you want to know who's managing those awards, refer to awarding agency fields.

Loan-related questions

How is federal spending on loans/loan guarantees ("loan," for short) captured? These awards don't appear to use the Federal Action Obligation field that other award types do.

In the federal award landscape, spending is captured by the Federal Action Obligation field—**except in the case of loans**.

There are two data elements particular to loans: the Face Value and the Subsidy Cost. Because federal loans are expected to be repaid, the amount loaned out (the principal or Face Value) is not considered

federal spending. It only becomes federal spending if and when the loan becomes unrecoverable in whole or part (through default, bankruptcy, loan forgiveness, and so on). This is where subsidy cost comes in. Subsidy cost is an estimation, made by the government, of what the loan will cost it over time; it's calculated based on a credit model particular to the program and, in some cases, the recipient's characteristics or credit history. Subsidy cost allows the government to budget for potential defaults on loans. It is the loan equivalent of federal spending, and when estimated accurately (especially if eventually updated based on the real-world performance of the loan), amounts to the same thing.

How do I understand spending on loans? What is a subsidy cost of zero?

When an agency reports a loan subsidy cost of zero, it means that the government agency has assessed a zero probability of the loan not being repaid — in effect, the loan won't cost the government any money. Note that subsidy cost only takes into account the loan itself and does not include administrative costs.

Do agencies update an award's subsidy cost if a recipient defaults? Can I see what the ultimate cost to the government was?

Currently, it's uncommon for agencies to update subsidy cost data on USAspending, even if new information comes to light or a loan recipient defaults; this means that loan spending data is generally less accurate than that of other award types.

Because of this, we've identified loans as an area of data quality concern. We are taking steps, through agency outreach and seeking policy change, to improve the accuracy of this data as a measure of federal spending.

Questions about contract awards and transactions

How do I uniquely identify contracts, since there are several modifications?

You can use a few data elements to help you identify contracts. These are the Procurement Instrument Identifier (PIID), the Parent Award Identifier (PAID), and the awarding sub-tier agency. All contracts have a PIID. If a given PIID has been reused (used by multiple agencies), you'll need to use both the PIID and the PAID to identify a contract. (Note: To uniquely identify a transaction, you'll need the PIID, Parent PIID, awarding sub-tier agency, modification, and transaction number.)

It's important to keep in mind that one record in USAspending.gov does not necessarily equal one contract; rather, one record equals one action taken on a contract (be that the creation of a contract or the modification to an existing contract).

How do I view all contracts under a given recipient for a particular time frame?

Each contract recipient has a recipient identifier known as a DUNS number. For most recipients, viewing all contracts is as simple as identifying and filtering by that DUNS number.

Larger entities with multiple locations or departments may have multiple DUNS numbers, which makes it complicated to use this identifier alone to view all the contracts associated with a particular recipient (and within a particular timeframe). Viewing by Global Parent DUNS Number can be a good alternative for these recipients. You can also filter or subset contract data by: `AwardeeOrRecipientLegalEntityName`, or `Vendor Doing As Business Name` and grant data by: `UltimateParentLegalEntityName`.

Recipient Profiles, which are coming soon to USAspending.gov, will compile all the contracts for a given

recipient, making the data easier to navigate and use.

What is the definition of PIID and PAID and when do I need to use them?

A PIID is a unique identifier assigned to a federal contract, purchase order, basic ordering agreement, basic agreement, and/or blanket purchase agreement. It's used to track the contract and any modifications or transactions related to it. Per the FAR, starting in October 2017 PIIDs for new contracts are unique across government; the new PIID format includes the Office Code, which renders it unique from all other PIIDs.

The PAID is the Parent Award Identifier (PAID). Not all PIIDs have PAIDs. If a given PIID has been reused (used by multiple agencies), you'll need to use both the PIID and the PAID to identify a contract.

What are the cases for when they'll be complete/empty?

The PIID field should never be blank — all awards have PIIDs. The PAID field might be blank, and this is nothing to be concerned about; the PAID field will be blank if the award has a unique PIID (in other words, one that hasn't been reused). Keep in mind that if an award does not have a unique PIID, you'll need to use the PAID to differentiate it from other awards.

What are IDVs? Do they involve double-counting with contracts under them?

Indefinite Delivery Vehicles (IDVs) are vehicles that facilitate the delivery of supply and service orders. Types of IDVs include:

- Blanket Purchase Agreement (BPA)
- Basic Ordering Agreement (BOA)
- Government-Wide Acquisition Contract (GWAC)
- Multi-Agency Contract
- Indefinite Delivery Contract (IDC)
- Federal Supply Schedule (FSS)
- Other Transaction (OT) Indefinite Delivery Vehicle (IDV)

Which fields of transactions should be summed up to find the current value of a contract?

As we stated previously, a record doesn't necessarily represent a single contract; rather, one record represents one action taken on a contract.

If a contract is represented by a single record (that is, if it has no modifications), you can look at that record to determine its current value (the action obligation elements).

If a contract is represented by several records (that is, if it has modifications), you'll need the total action obligations for the original contract plus all of the modifications to determine the current value.

Finally, it's worth noting that if all initially obligated money isn't used, the last modification will display a negative amount. For example, if an initial contract was made for \$10,000 and an agency only used \$9,000 of that initial obligation, the last record would display an amount of -\$1,000.

Questions about financial assistance awards and transactions

How do I view all grants under a unique recipient in a given time period?

To view all the grants under a unique recipient within a given time period, you can use the same method provided for viewing unique contracts for a given recipient.

What is a FAIN and what is a URI and how do I know when to use them?

FAINs and URIs are types of unique identifiers — unique (within a given agency) sequences of characters that are tied to each financial assistance award throughout its lifespan.

The FAIN (Federal Award Identification Number) is an identification code assigned to a specific financial assistance award by an agency for tracking purposes. The FAIN is tied to that award (and all future modifications to that award) throughout the award's life, which allows users to track all the spending made on a single award. Within an agency, FAINs are unique; a new award must be issued a new FAIN. The FAIN may contain both numbers and letters.

The URI is similar to the FAIN, but its **only** intended use is as a unique identifier for an aggregate record. Aggregate records display awards made to individual recipients by county, state, or foreign country in order to protect the recipients' personally identifiable information. Because they are themselves aggregations covering a particular time period, aggregate awards are typically not modified with future transactions. As such, URIs (in their capacity as the unique award identifier of aggregate records) are generally only used once.