

# Assessment of Federal and State Agreements with Data Organizations

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# INTRODUCTION

The Internet of Water (IoW) seeks to develop an interconnected network of open water data hubs, defined as organizations providing a formalized, structured source of open water data. Hubs frequently produce data themselves but also act as gateways 1) for water data producers who have data to offer and 2) for water data users looking to find and use water data to build vital water information apps, maps, dashboards, and other water data decision-support tools. As such, these hubs are the primary building blocks of the Internet of Water.<sup>1</sup>

The IoW start-up team at Duke University seeks to identify and cultivate water data hubs and connect them in a community of practice that involves the adoption of common data standards, metadata standards, and API standards. In addition, the IoW seeks to provide these emerging hubs with “non-technical” organizational assistance concerning how to finance their operations and how to create collaborative agreements with public agencies and with one another.

To support this goal, the IoW team has developed the following guide to various types of agreements for use between federal and state agencies and data organizations. Ideally, emerging IoW hubs will be able to use this text as a guide for navigating the task of developing such agreements with partner agencies and organizations.

Where applicable, examples of a selection of agreements are included as appendices.

**Disclaimer:** *This analysis represents the opinions of its authors. Nothing in this analysis should be construed as legal advice regarding the formation of agreements with public agencies. Nor does the presence of any particular type of agreement on this list constitute an endorsement by Duke University or by any public agency as a preferred method for entering an agreement with a data organization. This analysis should be reviewed by contracted legal counsel before publication. The IoW Advisory Board will be invited to consider the appropriateness and priority of such a publication.*

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1 Currently, the IoW is working with three existing Federal hubs housed at the U.S. EPA and the U.S. Geological Survey, and two existing regional thematic hubs, one at the Western States Water Council and another at the Consortium of Universities for the Advancement of Hydrologic Sciences Inc (CUAHSI).

# ASSESSMENT OF AGREEMENTS

The following assessment of agreements provides a summary of the most common agreements, emphasizing those with Federal partners. For the purposes of this report, six types of agreements were assessed, grouped in two categories as follows:

1. Funding agreements, such as a grant, contract, or cooperative agreement;
2. Collaboration agreements such as a memorandum of understanding, technical assistance agreement, or statement of intent.

For each agreement type, a description is provided as well as an analysis of the benefits and challenges for entering such an agreement.

## FUNDING AGREEMENTS: CONTRACTS, GRANTS, & COOPERATIVE AGREEMENTS

In Federal law, contracts are awarded when a Federal agency is acquiring something – a service, for example. Both grants and cooperative agreements are awarded when a Federal agency is providing assistance – the latter occurring when substantial involvement by the agency is anticipated.<sup>2</sup> This is the central distinction between contracts and grants in Federal law, and most state laws observe a similar distinction. A cooperative agreement is a form of grant.

### CONTRACT AGREEMENTS

A common type of relationship between a data organization and a public agency can take the form of a contract agreement. According to the Federal Acquisitions Regulation, a contract is defined as follows:

*“Contract” means a mutually binding legal relationship obligating the seller to furnish the supplies or services (including construction) and the buyer to pay for them. It includes all types of commitments that obligate the Government to an expenditure of appropriated funds and that, except as otherwise authorized, are in writing. In addition to bilateral instruments, contracts include (but are not limited to) awards and notices of awards; job orders or task letters issued under basic ordering agreements; letter contracts; orders, such as purchase orders, under which the contract becomes effective by written acceptance or performance; and bilateral contract modifications. Contracts do not include grants and cooperative agreements covered by [31 U.S.C.6301](#)<sup>3</sup>*

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<sup>2</sup> [Grants.gov](#)

<sup>3</sup> [Code of Federal Regulations, Title 48, Federal Acquisition Regulation \(FAR\), Part 2, Subpart 2.101 Definitions](#)



State laws relating to contracts vary, but the spirit of those laws follows the Federal code. A data organization can enter into a contract relationship with any Federal, state, or local agency to carry out data management activities as a direct benefit to the agency. Both private sector companies and non-profit organizations engage in contractual relationships with public organizations.

The benefit of a contract relationship is that, like grants, it is a straightforward way to receive funding from public sources, and often requires lower transaction costs in bidding and reporting versus grant application and reporting. The downside is that contracts represent a direct service to the government and are less flexible than grants. Like grants, they are generally time-limited to one year with no guarantee of renewal. Federal contracting activities are also sometimes viewed in a negative light by some stakeholders as being profit-driven, rather than public-good driven, and this can raise reputational issues.

## GRANT AGREEMENT

A second common form of relationship between a public agency and a data organization is a grant agreement, where substantial involvement from the public agency is not expected. According to the U.S. Federal code, a Federal grant is defined as follows:

*“...legal instrument reflecting the relationship between the United States Government and a State, a local government, or other entity when 1) the principal purpose of the relationship is to transfer a thing of value to the State or local government or other recipient to carry out a public purpose of support or stimulation authorized by a law of the United States instead of acquiring (by purchase, lease, or barter) property or services for the direct benefit or use of the United States Government; and 2) substantial involvement is not expected between the executive agency and the State, local government, or other recipient when carrying out the activity contemplated in the agreement.”<sup>4</sup>*

State laws relating to grants vary, but the spirit of those laws follows the Federal code. A data organization can enter into a grant relationship with any Federal, state, or local agency to carry out data management activities as an extension of the public mission of that agency in a manner that supports a public purpose but does not benefit the agency directly. State agencies routinely apply for grants from the Federal government, and non-profit organizations routinely apply for grants from Federal agencies.

The benefit of a grant relationship is that it is a straightforward way to receive funding from public sources and there are many grant programs to which data organizations

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<sup>4</sup> [See U.S. Code Title 31 § 6304](#), emphasis added

may apply. A detailed analysis of all federal and state grant opportunities for water data is beyond the scope of this analysis but could be a valuable next step. The downside is that grants are generally time-limited to one to 3 years, with no guarantee of renewal, and often require extensive documentation and reporting. (See Appendix A)

## COOPERATIVE AGREEMENT

A cooperative agreement is a special form of grant agreement with a Federal agency, in which Federally agency staff are “substantially involved” in the work of the grant, working side-by-side with grant recipients:

*(1) the principal purpose of the relationship is to transfer a thing of value to the State, local government, or other recipient to carry out a public purpose of support or stimulation authorized by a law of the United States instead of acquiring (by purchase, lease, or barter) property or services for the direct benefit or use of the United States Government; and (2) substantial involvement is expected between the executive agency and the State, local government, or other recipient when carrying out the activity contemplated in the agreement.*

As an example, CUAHSI holds a cooperative agreement with the National Science Foundation to advance water data science, and University Corporation for Atmospheric Research (UCAR) holds numerous cooperative agreements with federal agencies for advancing earth-system science, including with the Department of Energy (DOE), the National Oceanic and Atmospheric Administration (NOAA) and the National Aeronautics and Space Administration (NASA). The benefit of a cooperative agreement is that it is a way to maintain an ongoing relationship and funding agreement with a Federal agency, generally secured for 5 years. The downside is that such agreements can take months to years to put in place, and Federal agencies are reluctant to pursue them unless the partner has unique capabilities to support the agency’s public mission. While creating a new independent cooperative agreement with a Federal agency can be challenging, it is possible to pursue sub-award agreements with organizations that have existing cooperative agreements with a Federal agency.

## LIKELY COMPONENTS OF FUNDING AGREEMENTS

Per our assessment, the following constitutes some (but not all) of the typical components of funding agreements.

- **Statement of Work (SOW):** A SOW is a document within an agreement that describes the work requirements for a specific project. Its purpose is to define the liabilities, responsibilities, and work agreements between two entities. SOWs should be written in precise language to prevent misinterpretation, defining the scope of the project as well as key performance indicators.

- **Principal Investigator (PI):** The Principal Investigator (PI) has primary responsibility for achieving the success of the project. The PI is responsible for complying with all financial and administrative policies and regulations associated with the agreement. The ultimate responsibility for the management of the project rests with the PI.
- **Term:** The term outlines how and when the activities in the agreement will be accomplished.
- **Funding or Budget Narrative:** The funding section or budget narrative outlines the financial resources needed for the success of the project, including funds from outside entities that will contribute to the success of the project.
- **Termination:** The termination statement indicates the protocol guiding the termination of the agreement.
- **Publications/Reports:** The publications and/or reports specify the protocol governing how information about the project will be published and disseminated.
- **Governing Law/Liability:** This section specifies law or rules that govern any aspect of the project as well as how the entity intends to comply with the rule or law.

While this is not an exhaustive list of components, those defined above represent the more common components present in agreements. It is important that entities seeking an agreement investigate and adhere to the guidelines set forth by the specific agency from which they seek an agreement. These components can vary significantly between agencies.

## DIFFERENCES BETWEEN CONTRACTS, GRANTS, & COOPERATIVE AGREEMENTS

Table 1: Contract, Grant, and Cooperative Agreement Comparison

	CONTRACT	GRANT	COOPERATIVE AGREEMENT
	Funding agreement	Funding agreement	Funding agreement
Definition	A contract is a mutually binding legal relationship obligating the seller to furnish supplies or services and the buyer to pay for them.	A grant is a legal instrument reflecting the relationship between the agency and other entity when the principal purpose is to transfer a thing of value to carry out a public purpose.	A cooperative agreement is a special form of grant agreement in which federal agency staff are substantially involved in the work of the grant, working side-by-side with grant recipients.
Relationship to Agency	Carries out activities that directly benefit the agency	Carries out activities that are an extension of the public agency but may not benefit the agency directly	Maintains an ongoing relationship and funding agreement with a federal agency, with collaborators working closely, often side-by-side, with Federal employees
Funding Relationship to Agency	Direct funding received from agency: A straightforward way to receive funding from public sources	Direct funding received from agency: A straightforward way to receive funding from public sources	Direct or indirect funding from agency: Possible to pursue sub-award agreements with organization that have existing cooperative agreements with Federal agencies
Organizational Effort	Lower transaction costs in bidding and reporting	Time-intensive for grant proposal process and grant reporting	Time-intensive exercise to put in place; often taking months to years to finalize
Time of Agreement	Time-limited normally to one year with no guarantee of renewal	Time-limited normally one to three years with no guarantee of renewal	Generally secured for five years
Flexibility of Agreement	Least flexible of options with high level of responsibility for the conduct of the project and production of results	PI (Principal Investigator) has more freedom to adapt the project and less responsibility to produce results	PI (Principal Investigator) has more freedom to adapt the project and less responsibility to produce results
Other Considerations	May be viewed by stakeholders in negative light as being profit-driven rather than public-good driven		



## COLLABORATION AGREEMENTS: MEMORANDA OF UNDERSTANDING, TECHNICAL ASSISTANCE AGREEMENTS, STATEMENTS OF INTENT

In addition to funding arrangements, data organizations may enter collaboration agreements with public agencies that are designed to exchange technical know-how. A distinction between the funding agreements outlined in the previous section and collaboration agreements is that collaboration agreements often do not include funding; however, there are situations in which collaboration agreements are the precursor to funding agreements, establishing terms around issues (like intellectual property) that make securing a funding agreement easier. The following are examples provided by the US Geological Survey:

### MEMORANDUM OF UNDERSTANDING

The following is a description of an MoU from the USGS:

*An MOU usually describes, in broad general terms, an area of mutual interest or concern that may be addressed cooperatively by two or more agencies or entities. MOUs generally do not include specific information regarding detailed scope of work or the exchange of funds or human resources. An MOU may address cooperation that ranges from a single State to activities at multi-State, regional, multi-regional, national, or international levels.<sup>5</sup>*

The benefit of an MOU is that it is a way to maintain and demonstrate an ongoing relationship with a federal agency, which gives Federal employees permission to routinely cooperate with the organization. The downside of an MoU is that they do not necessarily specify any transfer of funds (and can sometimes prohibit funds transfer), are often agreed at very high levels of government, and are closely scrutinized by agency legal counsel in ways that often raise intellectual property issues between federal and non-federal parties that are often difficult to resolve. (See Appendix B)

### TECHNICAL ASSISTANCE AGREEMENT

Under the Stevenson-Wydler Act, the USGS is authorized:

*to perform technical assistance with other Federal agencies, units of State or local government, industrial organizations, private corporations, public and private foundations, and nonprofit organizations (including universities).<sup>6</sup>*

Such agreements allow data organizations to collaborate directly with the USGS and

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<sup>5</sup> <https://www.usgs.gov/about/organization/science-support/mou/domestic-mou>

<sup>6</sup> 15 U.S.C. § 3710a(b)(3)(A), as amended

benefit from the agency's expertise. The benefit of these agreements is that they allow direct collaboration, are easily negotiated, and are approved at lower levels of government. The downside of these agreements is that while they allow the collaborator to transfer funds to the USGS, it is not common for the USGS to use these agreements to transfer funds to the collaborator. (See Appendix C)

## STATEMENT OF INTENT OR LETTER OF INTENT TO COLLABORATE

A final form of collaboration agreement is a "statement of intent" or "letter of intent" to collaborate. This is not to be confused with a "statement of intent" to submit a grant proposal or a contract bid, but rather is a document designed to spell out the specific responsibilities between two collaborating parties. The benefit of these agreements is that they make roles and responsibilities clear and help to move from informal to formal collaboration and are often easy to negotiate. The downside of these agreements is that they are purely voluntary and broadly unenforceable, and therefore not as reliable as other forms of agreement. (See Appendix D)

## DIFFERENCES BETWEEN MEMORANDUM OF UNDERSTANDING, TECHNICAL ASSISTANCE AGREEMENTS, & STATEMENTS OR LETTERS OF INTENT

Table 2: MOU, Technical Assistance Agreement, & Statements of Letters of Intent Comparison

	MEMORANDUM OF UNDERSTANDING (MOU)	TECHNICAL ASSISTANCE AGREEMENT	STATEMENT OR LETTER OF INTENT
	Non-funding agreement	Non-funding agreement	Non-funding agreement
Definition	A memorandum of understanding describes in broad, general terms an area of mutual interest or concern to be addressed cooperatively by two or more agencies or entities.	A technical assistance agreement is a formal agreement that allows entities to benefit from the agency's expertise.	A statement or letter of intent is a document designed to specify responsibilities between two collaborating parties.
Relationship to Agency	Represents an ongoing, cooperative relationship with the agency.	Allows direct collaboration with the agency.	Makes roles and responsibilities clear and helps move from informal to formal collaboration with the agency.
Funding Relationship to Agency	Does not specify any transfer of funds.	A transfer of funds from the entity to the agency is allowed; however, the transfer of funds from the agency to the entity is not common.	Does not involve a transfer of funds.
Organizational Effort	Agreed to at high levels of government and closely scrutinized by agency legal counsel. Key sticking point is intellectual property issues that are often difficult to resolve.	Easily negotiated and approved at lower levels of government.	Easy to negotiate as they are voluntary and broadly unenforceable; therefore, not as reliable as other forms of agreement.

## DATA USE OR DATA SHARING AGREEMENTS

A data use or data sharing agreement is a type of agreement that is used to outline the conditions around the transfer of data from one entity to another, particularly in circumstances in which the data are not public data or the data require some kind of restriction, such as the protection of identities. Data agreements address issues such as limitations on use of the data, obligations to safeguard the data, liability for harm arising from use of the data, and publication and privacy rights that are associated with data transfers. Often a data agreement establishes who is permitted to use and receive data, and the permitted uses and disclosures of information, in addition to outlining that the recipient will:

- Not use or disclose the data in a way not permitted in the data agreement.
- Use appropriate safeguards to prevent disclosures not permitted in the agreement.
- Report any violations to the agreement.
- Ensure that anyone with access to the data adheres to the restrictions set forth in the agreement.

Establishing a data agreement can help avoid issues later by clearly establishing expectations and restrictions around data transfer and use. (See Appendix E)

## LIKELY COMPONENTS OF A DATA AGREEMENT

Likely components of a data agreement are (but are not limited to) as follows:

- **Identification of entities receiving and providing data:** This identification information includes the name and title of the contact person for each entity, address, phone number, email, and fax number (where applicable).
- **Purpose, Authority, and Term of Agreement:** The statement of purpose is a simple statement that specifies the intended use of the data. The legal authority specifies and describes the organization that will be responsible for adhering to the data agreement. The term of agreement specifies the period of the agreement.
- **Description of data workplan:** The data workplan is a detailed list of specific data items and agreed parameters as well as a statement on the approval process for dissemination.
- **Method of access and transfers:** These methods outline how the data will be obtained and transferred between entities.
- **Persons having access to data:** This contains a list of all persons, staff members, researchers, who will have access to the data.
- **Security of data:** The security parameters outline measures taken to secure the data from individuals who do not specifically have authorized access; data storage



measures to ensure the protection of data; and the access protocols for those with authorized access.

- **Confidentiality:** This is a summary of regulations covering the confidentiality of the data.
- **Data use and ownership:** Use and ownership guidelines outline the protocols around the production of reports, proposals, analysis, writings, or any product that use the data as well as outlining the citation protocol for these publications and products.
- **Termination of agreement:** A termination statement specifies the terms under which either entity may terminate the agreement and the required means of termination (e.g. 30 days prior to termination with written notification).

## WHAT IS A LIMITED DATA SET (LDS)?

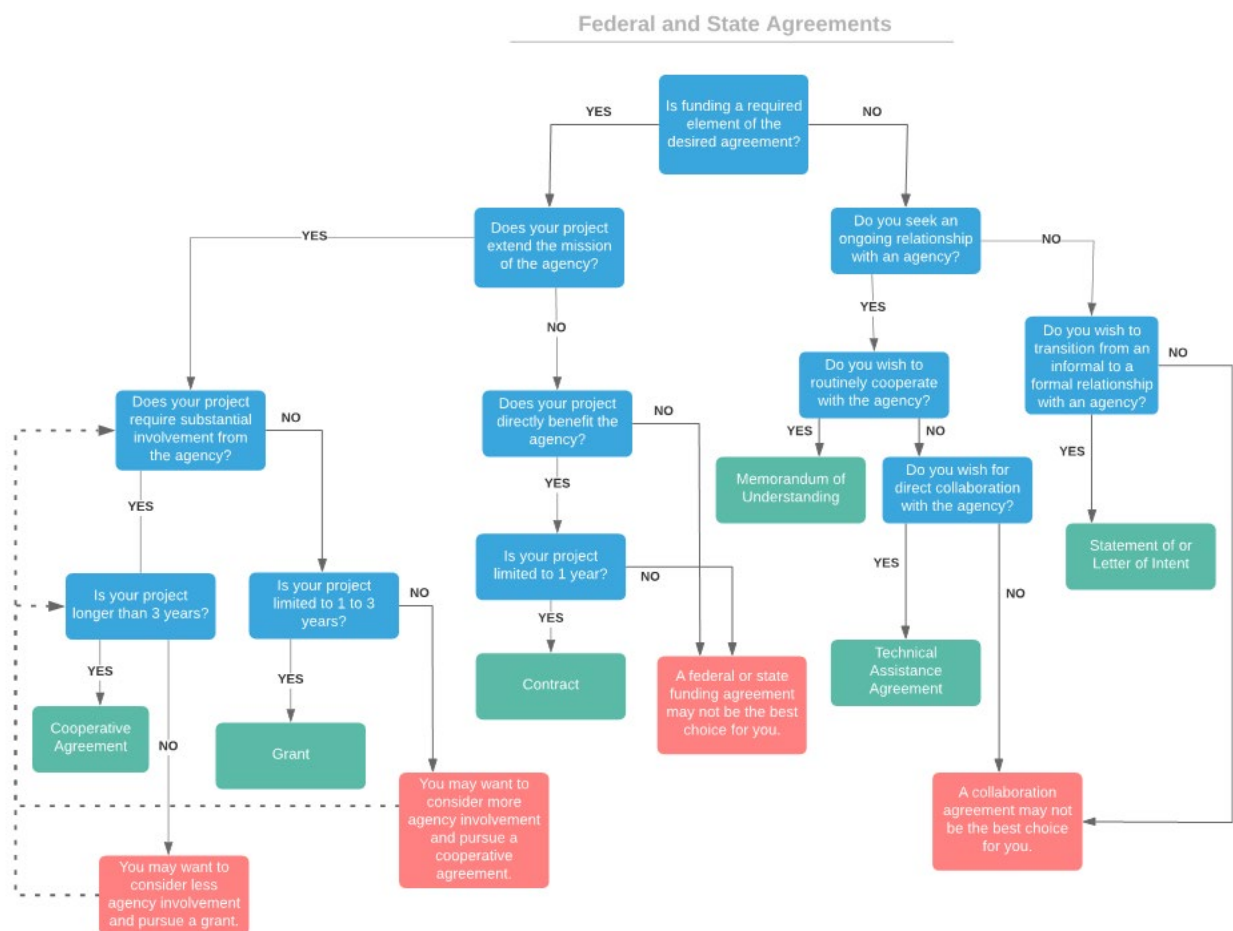
Limited Data Sets (LDS) are part of HIPAA (Health Insurance Portability and Accountability Act) requirements for health data; however, understanding the concept behind LDS is helpful for those outside of health fields who may be working with data that contains private information or identifying information. HIPAA is a regulation protecting the privacy and security of health information. HIPAA sets provisions requiring the removal of direct identifiers, applying to information about an individual or household. To qualify as an LDS, the following identifiers must be removed from the data set (excluding specific health or medical identifiers):

- Name
- Postal address other than town or city, state, and zip code
- Telephone number
- Fax number
- E-mail addresses
- Social Security numbers
- Account numbers
- Certificate or license numbers
- Vehicle identifiers and serial numbers (including license plate numbers)
- Device identifiers and serial numbers
- URLs (Web universal resource locators)
- IP Addresses (internet protocol)
- Full-face photographic images and any comparable images
- Medical record number (not likely to apply outside of the health field)
- Health plan beneficiary numbers (not likely to apply outside of the health field)

# DECISION TREE: SELECTING THE TYPE OF FEDERAL OR STATE AGREEMENT TO PURSUE

This decision tree can be used to determine which type of federal or state agreement should be pursued. A decision tree is a decision-support tool that outlines possible outcomes based on a series of decisions and represents alternatives to those decisions. To use the decision tree, begin at the top of the tree and follow the branches of the tree, based upon your responses to the prompts in the blue boxes. The types of agreements (indicated in green) are the six types discussed in this guide including contract, grant, cooperative, memorandum of understanding, technical assistance, and statement or letter of intent. Red boxes indicate circumstances in which no agreement is recommended.

Figure 1: Decision Tree



# CONCLUSION

There are a range of agreements that are available for data organizations that wish to pursue relationships with federal and state organizations. In each case, it is important that the data organization first determine:

- the funding requirements necessary as part of the agreement and
- the timeframe of the work proposed.

While each individual agreement between a data organization and a federal or state organization will likely be specific to that organization and the statement of work, there are common components for such agreements that can serve as a starting point. We have defined these common components, though it is important to note that this summary of components is not an exhaustive summary. There are likely additional components required depending upon the agency; therefore, it is important to consult the agency regarding their required components for agreements.

We have provided Appendices that include a selection of example agreements described in this assessment. When creating or entering into an agreement with another organization, first request or seek any template agreements specific to that organization. If the organization does not have standard agreements, and you use language in the example agreements provided here, the language should be customized to the purposes and components appropriate to the targeted agency and your organization with the guidance of legal counsel.

For more information, visit [internetofwater.org](https://internetofwater.org), or follow us on Facebook at [www.facebook.com/internetofwater/](https://www.facebook.com/internetofwater/) or on Twitter at @internetofh2o