

# Federal Data Strategy Practices

The Practices are intended to guide the development of a comprehensive data strategy that encompasses Federal and Federally-sponsored program, statistical, and mission support data. The FDS team developed the draft Practices by considering concepts reflected in the Fair Information Practice Principles and the statutory requirements in the Paperwork Reduction Act, the E-Government Act, the Privacy Act, the Federal Information Security Modernization Act, the Confidential Information Protection and Statistical Efficiency Act, the Freedom of Information Act, the Information Quality Act, the Federal Records Act, and the Foundations for Evidence-Based Policymaking Act.

## Contents

Mission.....	9
Values .....	9
<b>1. Culture.....</b>	<b>11</b>
<b>1.1. Questions.....</b>	<b>11</b>
<b>1.2. Needs.....</b>	<b>11</b>
<b>1.3. Usage.....</b>	<b>11</b>
<b>1.4. Decision-Making.....</b>	<b>11</b>
<b>1.5. Sharing .....</b>	<b>11</b>
<b>1.6. Insights .....</b>	<b>11</b>
<b>1.7. Spending.....</b>	<b>12</b>
<b>1.8. Perceptions .....</b>	<b>12</b>
<b>1.9. Connections .....</b>	<b>12</b>
<b>1.10. Resources .....</b>	<b>12</b>
<b>2. Governance, Management &amp; Protection .....</b>	<b>13</b>
<b>2.1. Governance.....</b>	<b>13</b>
<b>2.2. Confidentiality &amp; Privacy.....</b>	<b>13</b>
<b>2.3. Integrity .....</b>	<b>13</b>
<b>2.4. Authenticity .....</b>	<b>13</b>
<b>2.5. Maturity .....</b>	<b>13</b>
<b>2.6. Inventory .....</b>	<b>13</b>
<b>2.7. Value .....</b>	<b>14</b>
<b>2.8. Perspective .....</b>	<b>14</b>
<b>2.9. Documentation .....</b>	<b>14</b>
<b>2.10. Standards .....</b>	<b>14</b>
<b>2.11. Alignment.....</b>	<b>14</b>
<b>2.12. Obstacles .....</b>	<b>14</b>
<b>2.13. Amendment .....</b>	<b>14</b>
<b>2.14. Preservation.....</b>	<b>15</b>
<b>2.15. Coordination &amp; Sharing.....</b>	<b>15</b>
<b>2.16. Intergovernmental Sharing .....</b>	<b>15</b>
<b>3. Usage.....</b>	<b>16</b>
<b>3.1. Capacity.....</b>	<b>16</b>
<b>3.2. Quality.....</b>	<b>16</b>
<b>3.3. Re-Use.....</b>	<b>16</b>
<b>3.4. Uses .....</b>	<b>16</b>
<b>3.5. Allowable Usage .....</b>	<b>16</b>
<b>3.6. Safety.....</b>	<b>16</b>
<b>3.7. Access.....</b>	<b>17</b>
<b>3.8. Access Methods.....</b>	<b>17</b>
<b>3.9. Disclosure Risk.....</b>	<b>17</b>
<b>3.10. Partnerships .....</b>	<b>17</b>
<b>3.11. Buying Power .....</b>	<b>17</b>

**3.12.** Collaborative Computing .....17  
**3.13.** Federal Stakeholders .....17  
**3.14.** Non-Federal Stakeholders .....18

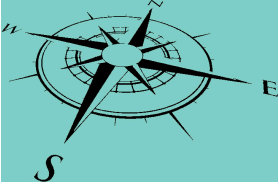
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## Office of Management and Budget (OMB)

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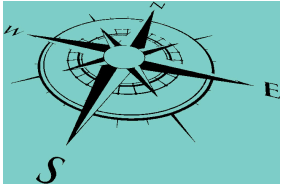
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**Office of Science and Technology  
Policy (OSTP)**

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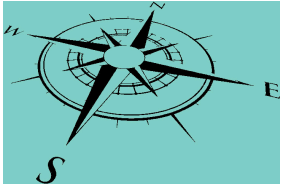
## Department of Commerce (DOC)

### Description:

On June 27, 2018, the Department of Commerce published a Request for Comments (RFC) in the Federal Register, which included a set of draft Principles for a comprehensive data strategy and asked the public to “review and provide feedback on their clarity, appropriateness, completeness, and potential duplications.” The public also submitted comments at [strategy.data.gov](http://strategy.data.gov), the FDS website. The RFC closed on July 27 and the website closed to comments on July 30. This process generated close to 100 comments related to the draft Principles. In response to these comments, the draft Principles were revised to reflect the recommendations and themes expressed in the public comments.

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## Small Business Administration (SBA)

### Mission

To guide the development of a comprehensive data strategy that encompasses Federal and Federally-sponsored program, statistical, and mission support data.

### Values

**Stewardship:** Stewardship Principles -- • Commenters suggested that the label “stewardship” was not descriptive of the Principles included in that category. They noted that the term “stewardship” encompasses Principles listed both under the stewardship and quality categories and includes the responsible use of data. They suggested that the first category was better described as data governance. In response, the category “Stewardship” was changed to “Ethical Governance,” and a Mission Statement was added to keep stewardship as an important higher-order concept included in these Principles. • A commenter suggested that the Ethics Principle appear first in the list to highlight its importance, and another commenter suggested that this Principle should include the concept of the “public good.” In response, “Uphold Ethics” is listed as the first Principle, and “public interest” was changed to “public good.” • Because one commenter suggested alternative adjectives, the phrase “modern security practices,” was changed to “sound security practices.” • One commenter suggested linking the concept of transparency to public trust; in response, “to engender public trust” was clarified as the reason for transparency, and “acquiring, using, and disseminating” was simplified and broadened to “purposes and uses.”

**Quality:** Quality Principles -- • In response to comments noting that the stewardship concept was broader than data governance and management and included aspects of quality and responsible use, this category label was changed from “Quality” to “Conscious Design” to make it more descriptive of the Principles it encompasses. • Public comment revealed confusion about the intent and focus of the draft Principles on Value and Intentionality, particularly the meaning of “create value.” Also, several commenters noted the omission of “fitness for use” as a concept relevant to this category. In response, these two Principles were revised to reflect a focus on harnessing existing data and anticipating future uses, and the order of the Principles was changed to position complementary Principles together. In addition, “fitness for use” was incorporated into the concept of “anticipating future uses.” • Commenters noted that the Relevance Principle should encompass integrity, accuracy, and appropriateness (fitness for use). In response, the description of this Principle was revised to specifically address quality and integrity in the first sentence and add the concepts of “appropriate and accurate” in the second sentence.

**Continuous Improvement:** Continuous Improvement Principles -- • Commenters noted that the Responsiveness Principle should not be limited to data sharing and access. One commenter suggested it should include updating on an ongoing basis and another commenter suggested adding a statement about the cyclical nature of gathering and using stakeholder input. Also, a commenter suggested specifically mentioning state and local governments as stakeholders. In response, this Principle description was revised to more broadly encompass data collection, analysis, and dissemination, to include a statement about the cyclical nature of gathering and using stakeholder input, and to not specifically cite state and local governments as stakeholders. Moreover, “Federally-sponsored” was added to the types of data encompassed by the FDS to more specifically address the value of state-collected administrative data used for Federal programs. • Several commenters said the Best Practices Principle was vague and redundant, so that Principle was deleted. • One comment on the Learning Principle suggested that ongoing investment in technical infrastructure and human resources should be added to the Responsiveness Principle. Other commenters made general suggestions

about the need for resources to use data as an asset. In response, the descriptions were clarified to state that learning with and about data happens “through ongoing investment in data infrastructure and human resources.” • In response to a comment that “practice accountability” doesn’t go far enough and that it is important to assign accountability, “assign responsibility” was added to the description of the Accountability Principle.

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## 1. Culture

### *Build a Culture that Values Data and Promotes Public Use*

#### 1.1. Questions

##### *Identify Data Needs to Answer Key Agency Questions*

Use the learning agenda process to identify and prioritize the agency's key questions and the data needed to answer them.

#### 1.2. Needs

##### *Assess and Balance the Needs of Stakeholders*

Identify and engage stakeholders throughout the data lifecycle to identify stakeholder needs and to incorporate stakeholder feedback into government priorities to maximize entrepreneurship, innovation, scientific discovery, economic growth, and the public good.

#### 1.3. Usage

##### *Champion Data Use*

Leaders set an example, incorporating data in decision-making and targeting resources to maximize the value of data for decision making, accountability, and the public good.

#### 1.4. Decision-Making

##### *Use Data to Guide Decision-Making*

Effectively, routinely, transparently, and appropriately use data in policy, planning, and operations to guide decision making; share the data and analyses behind those decisions.

#### 1.5. Sharing

##### *Prepare to Share*

Assess and proactively address the procedural, regulatory, legal, and cultural barriers to sharing data within and across Federal agencies, as well as with external partners.

#### 1.6. Insights

##### *Convey Insights from Data*

Use a range of communication tools and techniques to effectively present insights from data to a broad set of audiences.

## 1.7. Spending

### *Increase Accountability of Federal Spending*

Align Federal spending data with performance data to enable the public to understand the results of Federal investments and to support informed decision making.

## 1.8. Perceptions

### *Monitor and Address Public Perceptions*

Regularly assess and address public confidence in the value, accuracy, objectivity, and privacy protection of Federal data to make strategic improvements, advance agency missions, and improve public messages about planned and potential uses of Federal data.

#### **Stakeholder(s):**

The Public

## 1.9. Connections

### *Connect Data Functions Across Agencies*

Establish Communities of Practice for common agency data functions (e.g., data management, access, analytics, informatics, user support) to promote efficiency, collaboration, and coordination.

## 1.10. Resources

### *Provide Resources to Explicitly Leverage Data Assets*

Ensure that sufficient human and fiscal resources are available to support using data for agency decision making and accountability and to spur commercialization, innovation, and public use.

## 2. Governance, Management & Protection

### *Govern, Manage, and Protect Data*

#### 2.1. Governance

##### *Prioritize Data Governance*

Ensure there are sufficient authorities, roles, organizational structures, policies, and resources in place to transparently support the management, maintenance, and use of strategic data assets.

#### 2.2. Confidentiality & Privacy

##### *Govern Data to Protect Confidentiality and Privacy*

Ensure there are sufficient authorities, roles, organizational structures, policies, and resources in place to provide appropriate access to confidential data and maintain public trust and safeguard privacy.

#### 2.3. Integrity

##### *Protect Data Integrity*

Emphasize state-of-the-art data security in Information Technology security practices for every system that is refreshed, architected, or replaced to address current and emerging threats; foster innovation and leverage new technologies to maintain protection.

#### 2.4. Authenticity

##### *Convey Data Authenticity*

Disseminate data sets such that their authenticity is discoverable and verifiable by users throughout the information lifecycle, consistent with open data practice, and encourage appropriate attribution from users.

#### 2.5. Maturity

##### *Assess Maturity*

Evaluate the maturity of all aspects of agency data capabilities to inform priorities for strategic resource investment.

#### 2.6. Inventory

##### *Inventory Data Assets*

Maintain an inventory of data assets with sufficient completeness, quality, and metadata to facilitate discovery and collaboration in support of informing key agency questions and meeting stakeholder needs.

## 2.7. Value

### *Recognize the Value of Data Assets*

Assign value to data assets based on maturity, key agency questions, stakeholder feedback, and applicable law and regulation to appropriately prioritize and document resource decisions.

## 2.8. Perspective

### *Manage with a Long View*

Include data investments in annual capital planning processes and associated guidance to ensure appropriated funds are being used efficiently to leverage data as a strategic long-term asset.

## 2.9. Documentation

### *Maintain Data Documentation*

Store up-to-date and comprehensive data documentation in accessible repositories to facilitate use and document quality, utility, and provenance in support of informing key agency questions and meeting stakeholder needs.

## 2.10. Standards

### *Leverage Data Standards*

Adopt or adapt, create if needed, and implement data standards within relevant communities of interest to maximize data quality and facilitate use, access, sharing, and interoperability.

## 2.11. Alignment

### *Align Agreements with Data Management Requirements*

Establish terms and conditions for contracts, grants, cooperative agreements, and other agreements that meet data management requirements for processing, storage, access, transmission, and disposition.

## 2.12. Obstacles

### *Identify Opportunities to Overcome Resource Obstacles*

Coordinate with stakeholders to identify mutually acceptable cost recovery, shared service, or partnership opportunities to enable data access while conserving available resources to meet user demand.

## 2.13. Amendment

### *Allow Amendment*

Establish clear procedures to allow members of the public to access and amend Federal data about themselves, as appropriate and in accordance with Federal laws, regulations, and policies, in order to safeguard privacy, reduce potential harm from inaccurate data, and promote transparency.

## 2.14. Preservation

### *Enhance Data Preservation*

Preserve Federal data in accordance with applicable law, regulation, policy, approved schedules, and mission relevance.

## 2.15. Coordination & Sharing

### *Coordinate Federal Data Assets*

Coordinate and share data assets across Federal agencies to advance progress on shared and similar objectives, fulfill broader Federal information needs, and reduce collection burden.

## 2.16. Intergovernmental Sharing

### *Share Data Between State, Local, and Tribal Governments and Federal Agencies*

Facilitate data sharing between state, local, and tribal governments and the Federal Government, where relevant and appropriate and with proper protections, particularly for programs that are Federally funded and locally administered, to enable richer analyses for more informed decision making.

#### **Stakeholder(s):**

State Agencies

Tribal Governments

Local Agencies

Federal Agencies

### 3. Usage

#### *Promote Efficient and Appropriate Data Use*

##### 3.1. Capacity

###### *Increase Capacity for Data Management and Analysis*

Educate and empower the Federal workforce by investing in training, tools, communities, and other opportunities to expand capacity for critical data-related activities such as analysis and evaluation, data management, and privacy protection.

###### **Stakeholder(s):**

Federal Workforce

##### 3.2. Quality

###### *Align Quality with Intended Use*

Data likely to inform important public policy or private sector decisions must be of appropriate utility, integrity, and objectivity.

##### 3.3. Re-Use

###### *Design Data for Use and Re-Use*

Design new data collections with the end uses and users in mind to ensure that data are necessary and of high enough quality to meet planned and future agency and stakeholder needs.

##### 3.4. Uses

###### *Communicate Planned and Potential Uses of Data*

Review data collection procedures to update and improve how planned and future uses of data are communicated, promoting public trust through transparency.

##### 3.5. Allowable Usage

###### *Explicitly Communicate Allowable Use*

Regularly employ descriptive metadata that provides clarity about access and use restrictions for Federal data, explicitly recognizes and safeguards applicable intellectual property rights, conveys attribution as needed, and optimizes potential value to stakeholders to maximize appropriate legal use.

##### 3.6. Safety

###### *Harness Safe Data Linkage*

Test, review, and deploy data linkage and analysis tools that use secure and privacy-protective technologies to address key agency questions and meet stakeholder needs while protecting privacy.



### 3.7. Access

#### *Promote Wide Access*

Promote equitable and appropriate access to data in open, machine-readable form and through multiple mechanisms, including through both Federal and non-Federal providers, to meet stakeholder needs while protecting privacy, confidentiality, and proprietary interests.

### 3.8. Access Methods

#### *Diversify Data Access Methods*

Invest in the creation and usability of multiple tiers of access to make data as accessible as possible while minimizing privacy risk and protecting confidentiality.

### 3.9. Disclosure Risk

#### *Review Data Releases for Disclosure Risk*

Review Federal data releases to the public to assess and minimize the risk of reidentification, consistent with applicable laws and policies, and publish reviews to promote transparency and public trust.

### 3.10. Partnerships

#### *Leverage Partnerships*

Create and sustain partnerships that facilitate innovation with commercial, academic, and other partners to advance agency mission and maximize economic opportunities, intellectual value, and the public good.

### 3.11. Buying Power

#### *Leverage Buying Power*

Monitor needs and systematically leverage buying power for private-sector data assets, services, and infrastructure to promote efficiency and reduce Federal costs.

### 3.12. Collaborative Computing

#### *Leverage Collaborative Computing Platforms*

Periodically review and optimize the use of modern collaborative computing platforms to minimize costs, improve performance, and increase use.

### 3.13. Federal Stakeholders

#### *Support Federal Stakeholders*

Engage with relevant agencies to share expert knowledge of data assets, promote wider use, improve usability and quality, and meet mission goals.

### 3.14. Non-Federal Stakeholders

#### *Support Non-Federal Stakeholders*

Engage with industry, academic, and other non-Federal users of data to share expert knowledge of data assets, promote wider use, improve usability and quality, and advance innovation and commercialization.

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