

DEPUTY DIRECTOR FOR MANAGEMENT

October 16, 2018

M-19-01

MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM:

Margaret Weichert Deputy Director for Management

Subject: Request for Agency Feedback on the Federal Data Strategy

The purpose of this memo is to provide an update on the development of the Federal Data Strategy and to solicit substantive feedback from agencies that are subject to the provisions of OMB Circular A-130, *Managing Federal Information as a Strategic Resource*. Agencies should forward this information to all bureaus that create, collect, acquire, process, disseminate, use, and store data and solicit feedback from personnel to maximize the usefulness of comments that OMB receives to this important strategy. Agencies should use the Federal Data Strategy website, <u>www.strategy.data.gov</u>, to provide feedback within 30 days of the date of this memo.

### Background

The President's Management Agenda lays out a long-term vision for modernizing the Federal Government in key areas that will improve the ability of agencies to deliver mission outcomes, provide excellent service, and effectively steward taxpayer dollars on behalf of the American people. Leveraging Data as a Strategic Asset is one of the 12 Cross-Agency Priority goals supporting this transformation. This Administration is committed to developing a long-term, comprehensive Federal Data Strategy supported by an action plan with appropriate performance measures.

The Federal Data Strategy will apply to agencies<sup>1</sup> responsible for data stewardship and information management. In general, these agencies are responsible for the following types of data:

- 1. Program data: Data generated in carrying out the administration of a government program or mission, such as processing benefit applications or tracking services received. These data can relate to individuals, businesses, and other institutions.
- 2. Statistical data: Data used to describe, estimate, or analyze the characteristics of groups, without identifying the individuals or organizations that constitute such groups, such as for research and evaluation.
- 3. Mission-support data: Program data focused on internal government operations that apply broadly across government, such as government spending, performance, or personnel.

<sup>&</sup>lt;sup>1</sup> "Agency" is defined in 44 U.S.C. §4502.

The Federal Data Strategy is currently under development and, by the spring of 2019, will set forth principles, practices, and a year-one action plan to deliver a more consistent approach to federal data stewardship, access, and use. The principles provide the foundation for agencies, while the practices are aspirational goals for a 5- to 10-year horizon to further the principles, and the action steps are agency activities to implement the practices in any given year. The action plan will begin next year, and will be relevant to agencies that create, collect, acquire, process, disseminate, use, and store data.

The third quarter deliverables for the Federal Data Strategy are the final principles (Attachment 1) and draft practices (Attachment 2) for the Federal Data Strategy. The principles reflect revisions based on comments received from stakeholders and the public on previously released draft principles. The draft practices were developed by the Federal Data Strategy Working Groups with membership from numerous federal agencies and will be revised based on comments received from federal agency personnel.

The principles and practices will be published in the Federal Register on behalf of the Federal Data Strategy development team by the Department of Commerce, as well as on the Federal Data Strategy website, <u>www.strategy.data.gov</u>. Agencies should submit comments on the draft practices through the website. Revised practices will be released in January, along with a draft year-one action plan and a request for comments on the action plan.

# Principles

On behalf of the Federal Data Strategy development team, the Department of Commerce published a Request for Comments in the Federal Register on June 27, 2018. The request included a set of 10 draft principles for a comprehensive data strategy, and asked the public to "review and provide feedback on their clarity, appropriateness, completeness, and potential duplications." Comments were also submitted through the Federal Data Strategy website. The request 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. Feedback on the draft principles was positive, and commenters offered many suggestions to improve the draft version, which have been incorporated in the 10 revised principles.

# **Draft Practices**

The draft practices are based on the work for the four Federal Data Strategy Working Groups, each centered on a specific strategic area: Enterprise Data Governance; Decision Making and Accountability; Access, Use, and Augmentation; and Commercialization, Innovation, and Public Use. The working groups are teams of Federal Data Fellows from across the Executive Branch, selected for their multidisciplinary experience and expertise in federal data. The working groups conducted research on practices, reviewed relevant federal policies such as OMB Circular A-130, *Managing Information as a Strategic Resource*, and incorporated comments from the public and federal agency personnel. The work of the separate groups was then synthesized into 47 draft practices.

The draft practices are intended to be consistent with the principles. These are practices that should occur on a regular basis and are continually relevant, are sufficiently general so as to be broadly applicable at most federal agencies, can gain broad consensus throughout the government, and are aspirational in the sense that they challenge federal agencies, practitioners,

and policymakers to improve. The practices are not characterized as "best practices," as the broad variety of types and nuances of federal data mean that the "best" determination must be made at the operational level.

The draft practices will be revised and further developed in response to comments. Specifically, comments are requested on the following questions:

- 1. What other framework(s) for organizing or classifying the practices would be most useful to Federal practitioners and other key stakeholders? For example, should they be classified according to whether they pertain to data creation or collection, processing, dissemination, use, storage, and disposition?
- 2. Are there any draft practices that should be omitted or modified?
- 3. Are there other practices, policies, or related conventions relevant to data creation or collection, processing, dissemination, use, storage, and disposition that are important to include among the draft practices?
- 4. Are the practices described so as to effectively identify objectives, outcomes, and goals?
- 5. Are the practices described so as to be helpful to a practitioners and data policymakers?
- 6. Propose recommended action steps that agencies should adopt or adapt over the next 5 to 10 years to implement each practice. For guidance in proposing action steps, use the following as examples of specific practices and associated action steps. These examples are provided for guidance only, and may not indicate year-one action steps.
  - *Practice*: Prioritize Data Security
     *Example Action Steps* 
     Leverage existing standards for comprehensive and high quality data management.
     Define, implement, and maintain formal expectations throughout government for data oversight and transparency.
  - *Practice*: Connect Federal Spending to Outcomes *Example Action Steps*

1. Publish interactive reports with spending, performance, and mission-support data that enables the public to interact with the data and create customizable tables and report. These interactive charts and graphics should be embedded in Federal websites such as USAspending.gov and performance.gov.

2. Standardize reporting data for federal grants to help make those data more accessible and useful.

Attachments: Attachment 1: Principles for Leveraging Data as a Strategic Asset Attachment 2: Draft Practices for Leveraging Data as a Strategic Asset

### Principles for Leveraging Data as a Strategic Asset

Federal data is both a strategic asset and a valuable national resource. It enables the government to carry out its mission and programs effectively. It provides the public with knowledge of the government, society, economy, and environment – past, present, and future. Federal data is also a means to ensure the accountability of government, to manage the government's operations, and to maintain and enhance the performance of the Nation's economy, public health, and welfare. Appropriate access to federal data significantly enhances its value and the return on the Nation's investment in its creation.

The following principles are intended to guide the development of a comprehensive data strategy that encompasses federal and federally sponsored program, statistical, and mission-support data. These principles include concepts reflected in existing principles, such as those for the protection of personal information, for the management of information as an asset, for federal statistical agencies, and for federal evidence building. These principles will inform the development of practices and action steps for the Federal Data Strategy throughout the data lifecycle.

**Mission Statement:** The mission of the Federal Data Strategy is to fully leverage the value of federal data for mission, service, and the public good by guiding the Federal Government in practicing ethical governance, conscious design, and learning culture.

#### **Ethical Governance**

- 1. **Uphold Ethics**: Monitor and assess the implications of federal data practices for the public. Design checks and balances to protect and serve the public good.
- 2. **Exercise Responsibility**: Practice effective data stewardship and governance. Employ sound data security practices, protect individual privacy, maintain promised confidentiality, and ensure appropriate access and use.
- 3. **Promote Transparency**: Articulate the purposes and uses of federal data to engender public trust. Comprehensively document processes and products to inform data providers and users.

#### **Conscious Design**

- 4. **Ensure Relevance**: Protect the quality and integrity of the data. Validate that data are appropriate, accurate, objective, accessible, useful, understandable, and timely.
- 5. **Harness Existing Data**: Identify data needs to inform priority research and policy questions; reuse data if possible and acquire additional data if needed.
- 6. **Anticipate Future Uses**: Create data thoughtfully, considering fitness for use by others; plan for reuse and build in interoperability from the start.

7. **Demonstrate Responsiveness**: Improve data collection, analysis, and dissemination with ongoing input from users and stakeholders. The feedback process is cyclical; establish a baseline, gain support, collaborate, and refine continuously.

# **Learning Culture**

- 8. **Invest in Learning**: Promote a culture of continuous and collaborative learning with and about data through ongoing investment in data infrastructure and human resources.
- 9. **Develop Data Leaders**: Cultivate data leadership at all levels of the federal workforce by investing in training and development about the value of data for mission, service, and the public good.
- 10. **Practice Accountability**: Assign responsibility, audit data practices, document and learn from results, and make needed changes.

Attachment 2

# Draft Principles for Leveraging Data as a Strategic Asset

		Principle Category	Data Lifecycle
Go	vern and Manage Data as a Strategic Asset		
1	<b>Establish Data Governance Structures:</b> Prioritize data governance within federal agencies by establishing and supporting Data Councils/Boards to coordinate the effective development, management, compliance, and use, and to communicate the value of data assets.	Ethical Governance	Governance
2	<b>Inventory Data Assets:</b> Maintain an inventory of data assets with sufficient completeness, quality, and metadata to facilitate planning, discovery, access, and use.	Ethical Governance	Governance
3	<b>Identify High-Value and Authoritative Data Assets:</b> Assign value and cost to data assets based on usefulness, applicable law, regulation, policy, and operational guidance to appropriately prioritize and document stewardship and resource decisions.	Ethical Governance	Governance
4	Align Resources to Value and Authority: Periodically review the alignment of resources to the value and authority of datasets to promote consistency and fairness.	Ethical Governance	Governance
5	Manage High-Value and Authoritative Data Assets: Periodically review high-value and authoritative data assets to identify and document opportunities to improve data management systems and procedures and ensure quality and integrity.	Ethical Governance	Governance
6	<b>Publish Data Documentation:</b> Publish comprehensive data documentation in publicly accessible digital repositories to facilitate discovery, collaboration, access, and use, and to ensure traceability.	Conscious Design	Access
7	Assess Data Maturity: Conduct and publish periodic assessments of federal dataset and stewardship maturity to identify strategic opportunities to efficiently improve dataset quality and value.	Ethical Governance	Governance
8	<b>Manage with a Long View:</b> Include data investments in annual capital planning processes and associated guidance to ensure taxpayer dollars are being used efficiently to leverage data as a strategic long-term asset.	Ethical Governance	Governance
9	<b>Coordinate Federal Data Assets:</b> Coordinate data assets across federal agencies to fulfill broader federal information needs and reduce collection burden.	Ethical Governance	Governance

		Preserve Federal Data: Preserve federal data as a national asset by regularly reviewing the
	10	need for archiving and disposition and providing resources for preserving data in accordance Ethical Governance Disposition
1	10	with applicable law, regulation, policy, approved records retention or disposition schedules,
		and operational guidance.

		<b>Principle Category</b>	Data Lifecycle
Ρ	rotect and Secure Data		
1	<b>Define Responsibilities for Protecting Confidentiality:</b> Periodically review and revise roles and responsibilities for protecting confidential data and provide resources for training on best practice methods to protect data in order to maintain public trust and safeguard privacy.	Ethical Governance	Governance
1	<ul> <li>Review Data Releases for Disclosure Risk: Regularly conduct and periodically publish</li> <li>reviews of federal data released to the public to assess and minimize the risk of re-</li> <li>identification consistent with applicable laws and policies to promote transparency and public trust.</li> </ul>	Ethical Governance	Governance
1	<b>Diversify Data Access Methods:</b> Invest in the creation and usability of multiple tiers of access to federal data by committing federal resources to making data as open and accessible as possible while protecting confidentiality.	Conscious Design	Access
14 15	<ul> <li>Innovate to Enable Safe Use: Explore and periodically review methods and technologies</li> <li>that enable tiered access to safeguard data and promote accessibility to relevant stakeholders.</li> </ul>	Conscious Design	Access
	<b>Prioritize Data Security:</b> Establish priorities to weave data-centric security into every system that is refreshed, architected, or replaced to address current and emerging threats.	Ethical Governance	Governance
1	<b>Evolve Data Security:</b> Continually foster innovation in data security to ensure quality assurance, cost savings, and security optimization.	Ethical Governance	Governance
1	Preserve Data Integrity: Convey data such that their veracity is knowable to users wherever they are found.	Ethical Governance	Governance
1	Align Contracts with Data Management Requirements: Periodically review the terms and conditions of contracts and other agreements involving the processing, storage, access to, transmission, and disposition of federal data to ensure they are sufficient to meet policy and legal requirements.	Ethical Governance	Governance

		Principle Category	Data Lifecycle		
Pro	Promote Efficient Use of Data Assets				
19	<b>Prepare to Share:</b> Provide encouragement and incentives for agencies to develop a culture in which they are predisposed to share data within and across federal agencies, as well as with external partners, with proper protections and where relevant and appropriate. Such a culture entails not only an attitudinal shift, but a proactive effort to plan for data sharing throughout every stage of the data lifecycle.	Conscious Design	All		
20	<b>Share Data Across Agencies:</b> Facilitate data sharing across federal agencies to efficiently generate more comprehensive data for improved decision-making.	Conscious Design	Use		
21	<b>Share Data Between State and Local Governments and Federal Agencies:</b> Facilitate data sharing between state and local governments and the Federal Government, particularly for programs which are federally-funded and locally-administered, to enable richer analyses for more informed decision-making.	Conscious Design	Use		
22	<b>Explicitly Communicate Allowable Use:</b> Regularly employ, and periodically review mechanisms (such as data licenses applied to federally-hosted data) to provide clarity about appropriate or inappropriate use, explicitly recognize any applicable intellectual property rights, convey attribution as appropriate or necessary, optimize potential value to industry, and encourage the maximum legal use of all federally-hosted data, including both protected and open data.	Ethical Governance	Create or Collect		
23	<b>Leverage Buying Power:</b> Monitor needs and systematically leverage buying power for private-sector data assets and services to promote efficiency and reduce federal costs.	Conscious Design	Create or Collect		
24	<b>Connect Data Functions Across Agencies:</b> Identify, establish, and connect a network of offices responsible for data functions (e.g. data management, analytics, informatics, and user support) to ensure prioritization of effective management and customer service governing the use of federal data.	Ethical Governance	Use		
25	<b>Increase Staff Capacity for Data Analysis:</b> Enhance the analytic capacity of the federal workforce by investing in mechanisms to expand staff capacity in data science, program evaluation, and other analytic fields.	Learning Culture	Use		
26	<b>Plan Ahead with Informed Consent:</b> Periodically review data collection procedures for opportunities to improve user understanding of potential future uses of data and promote public trust.	Conscious Design	Use		

		Principle Category	Data Lifecycle
Pro	mote Efficient Use of Data AssetsCont.		
27	<b>Promote Wide Access:</b> Promote fair and equitable public access to federal data through the facilitation and periodic review of many access and dissemination mechanisms and sites, including from both federal and non-federal providers, to maximize opportunities to use federal data.	Conscious Design	Dissemination
28	<b>Maximize economic value through open access</b> : Promote open access to appropriate machine-readable public data and related descriptive information to enable new economic opportunities for the Nation through entrepreneurship, innovation, and scientific discovery.	Conscious Design	Dissemination
29	<b>Enable use through data platforms:</b> Facilitate the collaborative use of federal data on modern cloud computing platforms.	Conscious Design	Use
30	<b>Prevent Monopolization of Federal Data:</b> Periodically evaluate and regularly monitor how data are released to the public with an eye towards preventing monopolization, to ensure public data is as accessible and usable to as many members of the public as practicable.	Ethical Governance	Dissemination
31	<b>Leverage Data Standards:</b> Periodically review and optimize the use, adoption, and creation of data standards within relevant communities of interest to identify opportunities to maximize federal data use, access, sharing, and interoperability.	Conscious Design	Processing
32	<b>Improve Secure Data Linkage:</b> Regularly review and adopt evolving capabilities for linking data so that qualified researchers with relevant research questions can access linked data in support of national priorities and agency learning agendas.	Conscious Design	Use
33	<b>Recover Allowable Costs:</b> Periodically review federal data operations costs and user demand to identify cost recovery, shared service, partnership and tiered cost opportunities to support the marginal costs of dissemination, the provision of federal labor expertise, and/or enhancement of data services to ensure taxpayer funds are appropriately and strategically invested in support of federal data.	Ethical Governance	Governance

		<b>Principle Category</b>	Data Lifecycle
Bui	Id a Culture that Values Data as an Asset		
34	<b>Promote a Culture that Values Data as an Asset:</b> Conduct routine assessments of current organizational practices to identify opportunities to improve the agency's ability to acquire, use, and disseminate data for program, statistical, and mission-support purposes to improve data use and value.	Ethical Governance	All
35	<b>Plan for Evidence-Building:</b> Develop and publish learning agendas to strategically plan research, evaluation, and other evidence-building activities over a multi-year period.	Learning Culture	Use
36	<b>Incorporate Data into Decision-Making:</b> As part of budget, operational, policy, and management processes, identify opportunities to effectively and routinely use data for decision-making and to create a bridge between evaluation, performance, and other activities within agencies.	Ethical Governance	Use
37	<b>Communicate Insights from Data:</b> Adopt a range of innovative communication tools and techniques to effectively transmit insights from data to a broad set of consumers, both internal and external to the agency.	Learning Culture	Use
38	<b>Connect Federal Spending to Outcomes:</b> Analyze spending data to align resources with strategic priorities and desired outcomes to enable the public to understand the results of federal investments and to support informed decision-making regarding future investments.	Learning Culture	Use
39	<b>Focus on End Uses of Data:</b> Design new data collections with the end uses in mind to ensure that the data collected will be of appropriately high quality and meet internal and external stakeholder expectations and needs.	Conscious Design	Create or Collect

_		Principle Category	Data Lifecycle
Но	nor Stakeholder Input and Leverage Partners		
40	Assess the Needs of Stakeholders: Routinely engage both internal and external stakeholders throughout the data lifecycle to assess the needs of data consumers and the utility of existing data assets to inform action, drive impact, respond to changing customer needs, advance innovation and commercialization, and meet the needs of the public.	Conscious Design	All
41	<b>Balance Stakeholder Needs:</b> Review stakeholder feedback as part of the process for making annual and multiyear planning, programming, budgeting, and execution decisions related to data stewardship and management to incorporate stakeholder needs into government priorities when appropriate and practicable.	Conscious Design	All
42	<b>Allow Amendment:</b> Establish and maintain a process for 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 promote transparency and to help ensure the integrity of federal data.	Ethical Governance	Governance
43	<b>Monitor and Address Public Perceptions:</b> Regularly assess public perceptions, monitoring views of the value, accuracy, and objectivity of federal data to make strategic improvements and ensure transparency about information policies and practices.	Conscious Design	All
44	<b>Leverage Partnerships:</b> Establish and periodically review public private partnerships, procurement authorities, open data practices, and workforce strategies that facilitate collaboration and innovation with the private sector to maximize economic opportunities and intellectual value from federal data.	Ethical Governance	Governance
45	<b>Engage Federal Experts:</b> Establish and periodically review mechanisms for the sharing federal data expertise (including labor, code, and data assets) with industrial, academic, and other data users to promote wider use of federal data and identify usability improvements to ensure federal data is serving the public interest to the maximum extent practical.	Ethical Governance	Governance
46	<b>Innovate with Partners:</b> Periodically conduct and review the results of competitions and collaborations with commercial, academic, and other partners to create innovative new insights, products and services based on federal data.	Conscious Design	Use
47	<b>Honor Propriety Interests:</b> Protect proprietary interests related to commercially-licensed information and data to honor business investments and promote economic growth.	Ethical Governance	Governance