



## Leveraging Data as a Strategic Asset

### Goal Leaders

**Pradeep Belur**, Chief of Staff, Small Business Administration

**Karen Dunn Kelley**, Under Secretary of Economic Affairs, performing the nonexclusive duties and functions of Deputy Secretary, Department of Commerce

**Jack Wilmer**, Senior Advisor for Cybersecurity and IT Modernization, Office of Science and Technology Policy

**Suzette Kent**, Federal Chief Information Officer, Office of Management and Budget

**Nancy Potok**, Chief Statistician of the United States, Office of Management and Budget



## Goal Statement

- Leverage data as a strategic asset to grow the economy, increase the effectiveness of the Federal Government, facilitate oversight, and promote transparency.



## Challenge

- The use of data is transforming society, business, and the economy. Data provided by the Federal Government have a unique place in society and maintaining trust in Federal data is pivotal to a democratic process. The Federal Government needs a robust, integrated approach to using data to deliver on mission, serve customers, and steward resources while respecting privacy and confidentiality.



## Opportunity

- Develop a long-term, enterprise-wide Federal Data Strategy to better govern and leverage the Federal Government's data.
- Enable government data to be accessible and useful for the American public, businesses, and researchers.
- Improve the use of data for decision-making and accountability for the Federal Government, including for policy-making, innovation, oversight, and learning.





The Federal Data Strategy is being developed by a team which includes representatives from the following organizations:

## Executive Office of the President Co-Leads:

### Office of Management and Budget

- Office of the Federal Chief Information Officer
- Office of Information and Regulatory Affairs

### Office of Science and Technology Policy

## Agency Co-Leads:

Department of Commerce

Small Business Administration





The Federal Data Strategy will be created with Federal data communities and stakeholders, including but not limited to:





## Developing the Strategy and Action Plan

Developing a long-term Data Strategy will take time, and will involve experts and thought leaders from across the Federal Government, private industry, and research institutions. Through this CAP Goal, we will track development and implementation of the strategy.

**Current Status:** With the release of this initial version of the Leveraging Data as a Strategic Asset CAP Goal, we are in the Strategy Development phase.

The CAP Goal will be updated with a Leveraging Data as a Strategic Asset *Action Plan*.



Develop an understanding of the as-is state, identify internal and external key stakeholder groups, and develop a problem statement.

Develop high-level strategies that address the problems identified.

Analyze options and develop specific actions and policies to address the problems identified. Set priorities and timelines.

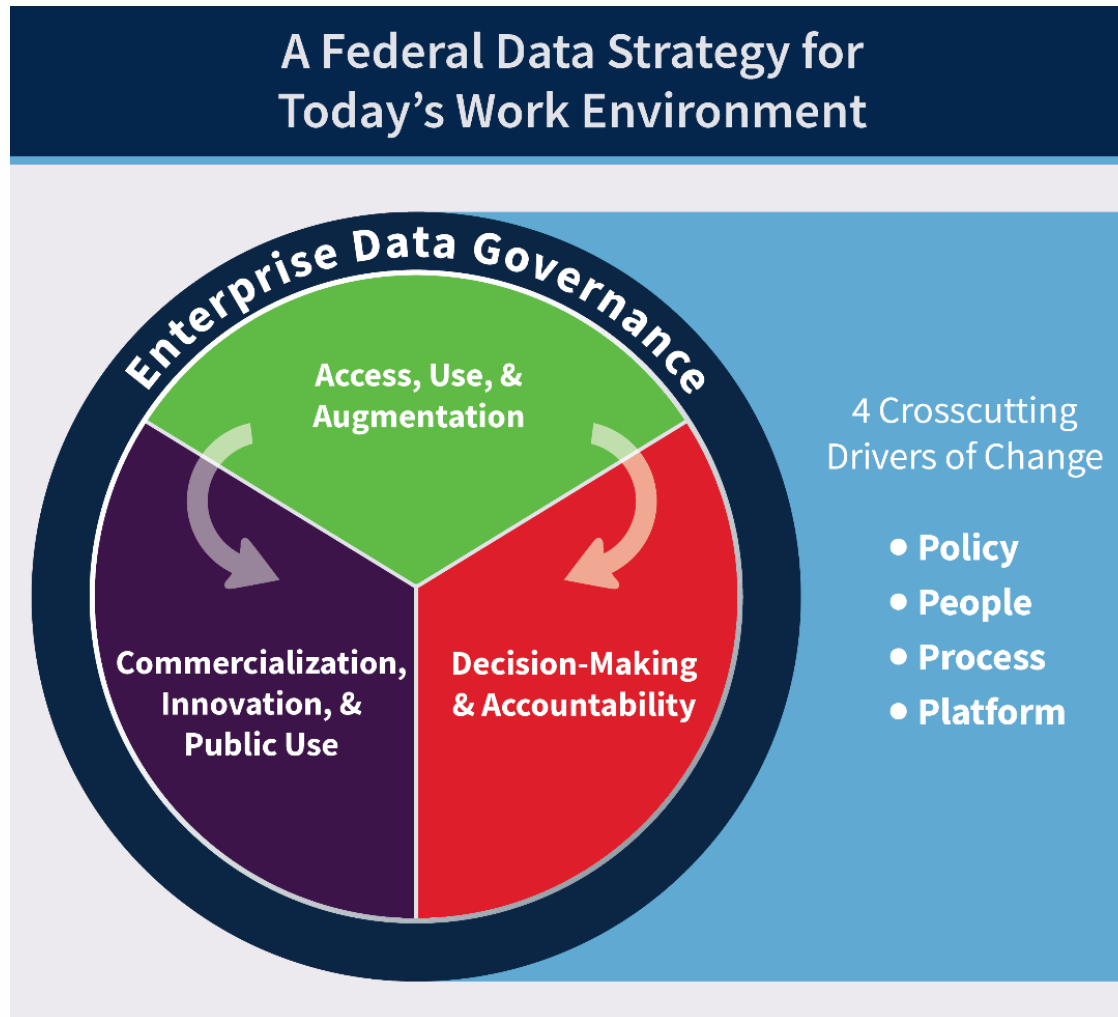
Publish a full Action Plan which identifies priorities and establishes key metrics and milestones.

Regularly review the effectiveness of implementation and make course corrections as needed.





Achievement of the goal will leverage four high-level areas, supported by four cross-cutting drivers of change.





## Overview of Strategy:

Set priorities for managing government data as a strategic asset, including establishing data policies, specifying roles and responsibilities for data privacy, security, and confidentiality protection, and monitoring compliance with standards and policies throughout the information lifecycle.

## Problems Targeted Include:

- Inconsistent roles and responsibilities for data management and lack of a framework to coordinate disparate Federal data initiatives, leading to unclear priorities, lack of a consensus, and duplication of effort.
- Inconsistent governance processes to implement, update, and monitor established government-wide standards.
- Inconsistent or conflicting laws, policies, and procedures for data management and use, being mindful that different data assets may need different handling.

## Potential Drivers of Change Under Consideration Include:

- Policy** > Clarify, harmonize, and update existing laws, policies, and procedures related to data management and use and investment policy in modern technologies.
- People** > Clarify roles and responsibilities for data management within agencies; invest in staff expertise and capacity to implement policies and procedures; and promote data management culture at agencies that prioritizes data use and stewardship.
- Process** > Establish priority data projects across these strategies and develop a coordinated approach to managing communities of stakeholders in the Federal community and among external constituents.
- Platform** > Better coordinate existing governance bodies or creation of new bodies.





## Overview of Strategy:

Develop policies and procedures that enable stakeholders to effectively and efficiently access and use data assets by: (1) making data available more quickly and in more useful formats; (2) maximizing the amount of non-sensitive data shared with the public; (3) leveraging new technologies and best practices to increase access to sensitive or restricted data while protecting privacy, security, and confidentiality, and the interests of data providers.

## Problems Targeted Include:

- Incomplete data inventories, lack of common identifiers and data standards, barriers to sharing data across agencies and acquiring external data (including “big data”).
- Inconsistent or conflicting procedures and guidelines for appropriate release and use of Federal data assets, including guidance on best-practice information technology platforms.
- Inconsistent privacy, security, and confidentiality protection implementation practices.
- Limited workforce capacity and expertise in navigating data integration requirements, protecting confidential data, and providing for a high quality user experience.

## Potential Drivers of Change Under Consideration Include:

- Policy** > Promote interoperability, data standardization, and use of consensus standards, specifications, metadata, and consistent formats; prioritize data management in IT investments; require best-practice disclosure reviews; promote use of external data; develop quality standards for blended data and protecting privacy, security, and confidentiality.
- People** > Invest in data management and data transformation skills and training across government.
- Process** > Develop comprehensive data inventories and a Federal data management maturity model that promotes maturity across agencies over time.
- Platform** > Empower existing organizations or develop new organization to manage a suite of tools and applications available across agencies, serve the needs of diverse users, and facilitate data integration.







## Overview of Strategy:

Improve the use of data assets for decision-making and accountability for the Federal Government, including both internal and external uses. This includes: (1) providing high quality and timely information to inform evidence-based decision-making and learning; (2) facilitating external research on the effectiveness of government programs and policies which will inform future policymaking; and (3) fostering public accountability and transparency by providing accurate and timely spending information, performance metrics, and other administrative data.

## Problems Targeted Include:

- Limited understanding and priority among policy makers about the value of using data in decision-making, and lack of coordination to identify high priority data needs for decision-making and accountability.
- Inconsistent or conflicting laws, policies, and procedures for data sharing across agencies and with public stakeholders and researchers.
- Limited analytical and technical capacity and expertise to manage data, evaluate programs, and communicate results to decision makers.

## Potential Drivers of Change Under Consideration Include:

- Policy** > Develop and refine current legal and procedural mechanisms for secure data access for decision-making; and invest in high priority data assets and modern analytical technologies (e.g., predictive analytics, artificial intelligence, “big data” analysis).
- People** > Invest in data science, program evaluation, and analytical capabilities and training.
- Process** > Establish agency “learning agendas” that prioritize the development and use of data and other evidence for decision-making; create streamlined secure pathways for academic researchers to use sensitive government data to perform research for government.
- Platform** > Establish a data service program to facilitate secure data access and analysis capability, potentially by leveraging existing capacity within statistical agencies.





## Overview of Strategy:

Facilitate the use of Federal Government data assets by external stakeholders at the forefront of making government data accessible and useful through commercial ventures, innovation, or for other public uses. This includes use by the private sector and scientific and research communities, by state and local governments for public policy purposes, for education, and in enabling civic engagement. Enabling external users to access and use government data for commercial and other public purposes spurs innovative technological solutions and fills gaps in government capacity and knowledge. Supporting the production and dissemination of comprehensive, accurate, and objective statistics on the state of the nation helps businesses and markets operate more efficiently.

## Problems Targeted Include:

- Lack of attention to the data needs of external customers to spur commercialization and innovation, and for research and other public uses, including the problems of fragmented platforms and inconsistent standards and lack of interoperability of existing data assets.
- Limited legal or policy structures for providing data for commercialization or other public uses in a fair and equitable manner.

## Potential Drivers of Change Under Consideration Include:

- |                 |   |  |
|-----------------|---|--|
| <b>Policy</b>   | > | Develop policy promoting consideration of public data use in data collection and management and minimizing barriers to access and use.   |
| <b>People</b>   | > | Identify liaisons with key industries and research communities to champion data release by agencies.   |
| <b>Process</b>  | > | Collaborate with industries, research institutions, and non-governmental organizations to establish priorities for data release.   |
| <b>Platform</b> | > | Develop programs to facilitate commercialization, civic engagement, and other public uses by providing Federal data, including release of less sensitive versions of confidential data assets. |





The *Leveraging Data as a Strategic Asset* CAP Goal will deliver a Comprehensive Federal Data Strategy through two parallel and iterative work streams. These coordinated work streams will work hand in hand to provide a long-term strategic plan for data management across the Federal Government.

## Federal Data Strategy Development: Principles, Practices, and Action Plan

### WORK STREAM 1



July 2018

- Draft Principles
- Call for Best Practices



October 2018

- Principles
- Draft Practices



January 2019

- Federal Data Strategy (Principles and Practices)
- Draft Year 1 Action Plan



April 2019

- Year 1 Action Plan



## The Data Incubator Project: Use Cases and Playbook

### WORK STREAM 2



July 2018

- Call for Use Cases



Incubation of Selected Use Cases

October 2018

January 2019



April 2019

- Data Incubator Playbook





For additional information and ways to engage follow updates on [strategy.data.gov](https://strategy.data.gov)

## Federal Data Strategy Development

### WORK STREAM 1



July 2018

- Draft Principles
- Call for Best Practices

- ✓ Investigated data management principles from governments, academia, and the private sector
- ✓ **Developed *Draft Principles*** and a **Call for Best Practices** for publication and feedback on [strategy.data.gov](https://strategy.data.gov)



## The Data Incubator Project

### WORK STREAM 2



July 2018

- Call for Use Cases

- ✓ **Established Multi-Agency Project Management Team and Operational Structure** w/ co-leads
- ✓ **Developed FY18/19 Quarterly Deliverables** (see slide 11)
- ✓ **Hosted first Federal Data Strategy Roundtable** w/ 80 thought leaders representing multiple levels of government, industry, and academia.
- ✓ **Presented the Federal Data Strategy goals** to 5 interagency councils and 5 conferences
- ✓ Developed a **Call for Stakeholder Feedback** for publication and feedback on [strategy.data.gov](https://strategy.data.gov)

- ✓ Investigated data use case criteria best practices and gathered initial use case examples from the Federal Government
- ✓ Developed a **Call for Use Cases** for publication and feedback on [strategy.data.gov](https://strategy.data.gov)

