Leveraging Data as a Strategic Asset

Goal Leaders

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Overview

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 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 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:
Engaging the Public

82 speakers
47 events
601 comments

The process of developing the Federal Data Strategy has involved significant input from the Federal data community and the public.

Developing the Framework

In June 2019, OMB released the Federal Data Strategy, a foundational document for enabling agencies to use and manage Federal data to serve the American people.

10 Principles – timeless enduring guide for agencies.

40 Practices – inspirational goals for a 5- to 10- year horizon to further the principles.

Driving Actions

In December 2019, OMB released the Federal Data Strategy Action Plan for 2020 detailing a series of 20 initial actions for agencies and OMB that are essential for establishing processes, building capacity, and aligning existing efforts to better leverage data as a strategic asset.

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**Timeline:**

- **July 2018:** Draft Principles
- **October 2018:** Draft Best Practices, Practices
- **June 2019:** Federal Data Strategy (Principles + Practices), Draft Year 1 Action Plan
- **December 2019:** Year 1 Action Plan
Mission Statement
The mission of the Federal Data Strategy is to leverage the full value of Federal data for mission, service, and the public good by guiding the Federal Government in practicing ethical governance, conscious design, and a learning culture.

10 Principles
Timeless, enduring guide for agencies

40 Practices
Aspirational goals for a 5- to 10-year horizon to further the principles

20 Action Steps
Activities in the 2020 Action Plan chosen to implement the practices

New Laws and Executive Orders
Stakeholder Input and User Needs
New Technologies

Federal Data Strategy Principles and Practices
Statutory Requirements
OMG Guidance
Government-Wide Priorities

Annual Action Plan
Published 2020 Action Plan at strategy.data.gov/action-plan

Federal Data Strategy 2020 Action Plan

Federal Data Strategy 2020 Action Plan Milestones Timeline

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<tr>
<th>Agency Actions</th>
<th>JAN - MAR</th>
<th>APR - JUN</th>
<th>JUL - SEP</th>
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<tr>
<td>1. Identify Data Needs to Answer Priority Agency Questions</td>
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<td>2. Establish a Diverse Data Governance Body</td>
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<td>3. Assess Data and Related Infrastructure Maturity</td>
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<td>4. Identify Opportunities to Increase Staff Data Skills</td>
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<td>5. Identify Priority Data Assets for Agency Open Data Plans</td>
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<td>6. Publish and Update Data Inventories</td>
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<th>Community of Practice Actions</th>
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<td>7. Launch a Federal Chief Data Officer Council</td>
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<td>8. Improve Data and Model Resources for All Research and Development</td>
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<td>9. Improve Financial Management Data Standards</td>
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<td>10. Integrate Geospatial Data Practices into the Federal Data Enterprise</td>
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<th>Shared Solution Actions</th>
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<td>11. Develop a Repository of Federal Enterprise Data Resources</td>
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<td>12. Create an OMB Federal Data Policy Committee</td>
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<td>13. Develop a Curated Data Skills Catalog</td>
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<td>14. Develop a Data Ethics Framework</td>
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<td>16. Pilot a One-Stop Standard and Research Application</td>
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<td>17. Pilot an Automated Tool for Information Collection Reviews that Supports Data Inventory Creation and Updates</td>
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<td>18. Pilot Enhanced Data Management Tool for Federal Agencies</td>
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<td>19. Develop Data Quality Measuring and Reporting Guidance</td>
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<td>20. Develop a Data Standards Repository</td>
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Legend:
- Duration of Action
- Milestone Target Date

For more information or to report milestones, go to strategy.data.gov/action-plan
The Federal Government has made significant progress in meeting its Data Strategy agenda:

**Establishing Governance**
- 77 agencies have designated a Chief Data Officer (CDO), who oversees the generation, use, protection, and dissemination of Federal data at their agency and 33 agencies have published a Data Governance Body Charter.
- 36 agencies documented how their data governance bodies received their authority.

**Fostering Innovation**
- 19 CFO Act agencies took initial steps to identify the data needed to answer priority questions.
- 20 agencies have conducted and documented the outcome of their initial data maturity assessment.
- The Federal Technology Investment Management Community of Practice developed an IT spending transparency maturity assessment model.
- The Federal Committee on Statistical Methodology completed a report on best practices for reporting on data quality.
- Developed and published a Data Ethics Framework and Curated Data Skills Catalog.

**Developing Workforce**
- Presented the Federal Data Science Training Program to the CDO Council and successfully launched the program in September with 61 participants from the 24 CFO Act agencies.
- 32 agencies participated in trainings related to maturity assessments. An average of 17 staff per agency (including agency Chief Data Officer and other senior-level staff) have participated in such trainings.
2020 Action Plan- Accomplishments

- Established a Chief Data Officers Council (CDO Council)
- Established a Federal Data Policy Committee to enhance OMB’s coordination of Federal data policy, governance, and resource considerations
- Piloted a one-stop research application portal through the University of Michigan to improve and expand data access for evidence building while promoting transparency
- Published a playbook for improving agency data skills to assist federal agencies in meeting Action 4 “Identify Opportunities to Increase Staff Data Skills” on the Federal Data Strategy 2020 Action Plan
- Developed and published a Data Ethics Framework and Curated Data Skills Catalog

- Published a data governance playbook to support agencies in meeting the requirement for Action 2 “Constitute a Diverse Governance Body” on the Federal Data Strategy 2020 Action Plan
- Piloted an enhanced data management tool on inventory.data.gov to provide agencies with a cost-effective option to increase data use and improve public and agency user experiences
- Realigned and incorporated the IT Spending Transparency CAP Goal under Federal Data Strategy Action 9 “Improve Financial Data Standards” to improve processes for IT budgeting and procurement to provide visibility and traceability
- Launched the Federal Data Science Training Program in September with 61 participants representing the 24 CFO Act agencies
Supportive Resources

185 *Use Cases* – publicly-solicited hypotheses of how data can be used to improve outcomes

18 *Proof Points* – case studies on emergent data methods

3 *Playbooks* – operational checklists and question sets that help agencies achieve data-related functions

1 *Repository* – a one-stop shop for resources related to Federal data management and use
How the FDS Team Engaged Stakeholders

**Phase 1**
- **Request for Comments:** 218 submissions
- **Federal Forum:** 18 speakers, 158 attendees  |  **Public Forum:** 11 speakers, 58 attendees

**Phase 2**
- **Request for Comments:** 198 submissions
- **Federal Forum:** 24 speakers, 188 attendees  |  **Public Forum:** 28 speakers, 133 attendees

**Phase 3**
- **Request for Comments:** 185 submissions
- **Federal Forum:** 23 speakers, 220 attendees  |  **Public Forum:** 43 speakers, 165 attendees

**Ongoing**
- **2020 Action Plan**
  - **Strategy.data.gov**
    - 159,000 sessions
    - 327,190 page views
  - **Newsletter**
    - 36 issues
    - 57,802 recipients
  - **Events**
    - 110 attended

*Metrics last updated on 11/17/20.*
Leveraging Data as a Strategic Asset: Long-term Vision

The Federal Data Strategy and 2020 Action Plan generated by this CAP Goal are working toward a future in which:

Public Outcomes
- Implement a long-term, enterprise-wide Federal Data Strategy to better govern and leverage the Federal Government’s data through 10 annual action plans.
- American public, business, and research satisfaction with Federal Government data access and quality is among the best in the world.
- At least 80% of legislation proposals and budgets cite Federal Government evidence-based planning instruments.

Federal Operations
By prioritizing data uses, the Federal Government can derive more value from otherwise unanticipated or secondary uses of data assets, and more strategically execute data management improvements. Specifically, by 2030 the Federal Government will:

- **Build a Culture that Values Data and Promotes Public Use** by implementing the Federal Data Strategy practices 1-10: *e.g. enabling external users to access and use government data for commercial and other public purposes spurs innovative technological solutions and fill gaps in government capacity and knowledge; increasing the sharing and use of data for Federal decision-making and operational uses.*
- **Govern, Manage, and Protect Data** by implementing the Federal Data Strategy practices 11-26: *e.g. providing data management tools, protocols, and sharing; providing secure data sharing solutions for Federal data sharing; providing secure data access for state/local governments; and providing accessible high performance computer environments.*
- **Promote Efficient and Appropriate Data Use** by implementing the Federal Data Strategy practices 27-39: *e.g. planning from the outset for secondary data uses through stakeholder engagement and sufficient information to assess fitness for use; and utilizing data and operational maturity models and evidence-based planning assessments.*
Leveraging Data as a Strategic Asset: Long-term Vision

Critical Milestones and Capabilities

Agencies will implement the Federal Data Strategy 2030 Vision through annual action plans, see: strategy.data.gov/action-plan. Specifically, agencies in 2020 will:

- **Build a Culture that Values Data and Promotes Public Use** by implementing the Federal Data Strategy practices 1-10 by:
  - Identifying Data Needs to Answer Priority Agency Questions (Action 1)
  - Identifying Priority Data Assets for Agency Open Data Plans (Action 5)
  - Improving Data and Model Resources for AI Research and Development (Action 8)
  - Piloting a One-stop Standard Research Application (Action 16)

- **Govern, Manage, and Protect Data** by implementing the Federal Data Strategy practices 11-26 by:
  - Constituting Diverse Data Governance Bodies (Action 2)
  - Publishing and Updating Data Inventories (Action 6)
  - Launching a Federal Chief Data Officer Council (Action 7)
  - Improving Financial Management Data Standards (Action 9)
  - Integrating Geospatial Data Practices into the Federal Data Enterprise (Action 10)
  - Developing a Repository of Federal Enterprise Data Resources (Action 11)
  - Creating OMB Federal Data Policy Committee (Action 12)
  - Developing a Data Protection Toolkit (Action 15)
  - Piloting an Automated Tool for Information Collection Reviews that Supports Data Inventory Creation and Updates (Action 17)
  - Piloting Enhanced Data Management Tool for Federal Agencies (Action 18)
  - Developing a Data Standards Repository (Action 20)

- **Promote Efficient and Appropriate Data Use** by implementing the Federal Data Strategy practices 27-39 by:
  - Assessing Data and Related Infrastructure Maturity (Action 3)
  - Identifying Opportunities to Increase Staff Data Skills (Action 4)
  - Developing a Curated Data Skills Catalog (Action 13)
  - Developing a Data Ethics Framework (Action 14)
  - Developing Data Quality Measuring and Reporting Guidance (Action 19)