



# United States Department of Agriculture

Fiscal Year 2024-2026 Data Strategy



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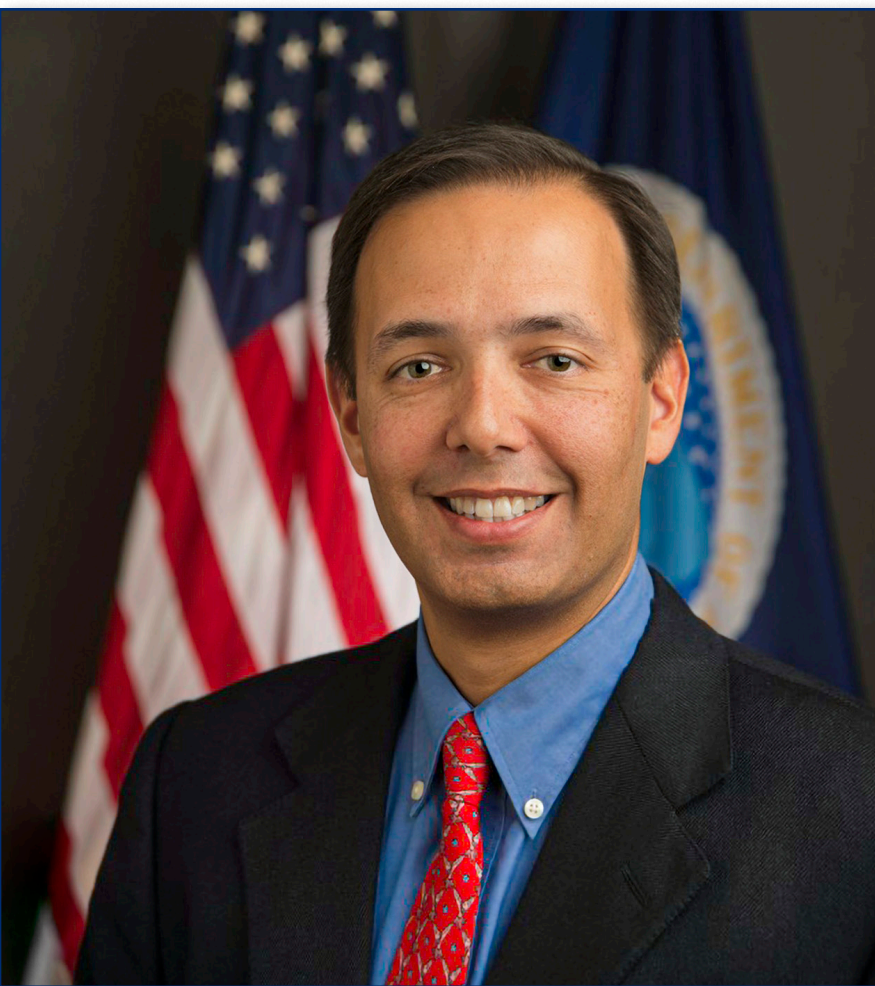
**“The power of data in shaping the future of food,** agriculture, natural resources, rural development, and nutrition cannot be overstated. Through robust data collection, analysis, and accessibility, we unlock the keys to a thriving agricultural sector and we ensure that our policies, programs, and investments are grounded in evidence and tailored to the needs of our farmers, ranchers, and consumers.

**Transparency and accountability are embedded in the DNA of USDA,** and data is the cornerstone of this commitment. I am proud to announce an updated and comprehensive USDA Data Strategy for fiscal years 2024 through 2026 that ensures our workforce, infrastructure, and policies enable a strong culture of data-informed decision-making and underpins our values and commitment to our constituents.”



**Thomas J. Vilsack**  
Secretary  
U.S. Department of Agriculture





**“We’ve made notable progress since the publication of the first USDA Data Strategy three years ago** to be a data-driven and evidence-based organization. Data is more important than ever for the success of USDA’s mission. Data enables us to measure USDA’s progress, assess the impact of our initiatives, and course-correct when needed. It ensures our actions are rooted in evidence and guided by the best interests of those we serve.

**Through the commitment and collaboration of Assistant Chief Data Officers (ACDOs)** representing every USDA Mission Area and Staff Office, as well as stakeholders across the Department, this document underpins the importance of using data effectively and continuing to grow as an organization over the next three years and onwards.”

**Chris Alvares**  
Chief Data Officer  
U.S. Department of Agriculture

# Vision, Goals, & Objectives:

To realize the full potential of USDA's data and workforce to make better decisions, maximize the impact of citizen-facing programs, and provide the public with easier access to data that can solve national problems and spark innovation.

## Goals

## Objectives

### 1 Data Governance & Leadership

- 1.1. Evolve the USDA data governance structure.
- 1.2. Measure and maximize the organizational value of data & analytics at USDA.
- 1.3. Mature the ACDO role.
- 1.4. Promote cross-departmental / government data & artificial intelligence collaboration.

### 2 Data & Analytics Workforce

- 2.1. Expand our ability to recruit & retain the USDA federal data workforce.
- 2.2. Promote USDA-wide workforce training & upskilling initiatives.
- 2.3. Support centralized analytics teams to handle future challenges.
- 2.4. Upskill USDA to support advanced analytics & artificial intelligence (AI).

### 3 Common Data & Analytics Toolset

- 3.1. Modernize EDAPT in a cost-effective manner.
- 3.2. Advance an enterprise data architecture that promotes data integration, standardization, & security.
- 3.3. Improve geospatial data capabilities & integrations.
- 3.4. Where applicable, reduce the cost & complexity of the data & analytics tool ecosystem.

### 4 Open Data

- 4.1. Centralize & catalog data assets.
- 4.2. Improve access to data across USDA.
- 4.3. Maintain transparent open data assets.
- 4.4. Identify data to bring into EDAPT.

### 5 Analytics for a Purpose

- 5.1. Further integrate data visualization & advanced analytics into USDA's culture of decision-making.
- 5.2. Standardize principles & best practices for analytics & artificial intelligence (AI).
- 5.3. Promote data & artificial intelligence (AI) ethics, responsible use, & transparency.
- 5.4. Increase number of enterprise analytics tools in EDAPT.

# Introduction

**The United States Department of Agriculture (USDA) works to promote agricultural production, preserve the nation’s natural resources, and expand economic opportunity through innovation, especially in rural communities. Data is a strategic asset that enables the Department to manage funds, inform policy and programs, and promote transparency, thereby better supporting American farmers, producers, and ranchers.**

The **FY (Fiscal Year) 21-23 USDA Data Strategy**, developed in 2019, set the initial strategic direction for the use and management of data across the Department with the advancement of data-related policies and initiatives. This new **FY24-26 USDA Data Strategy** will build upon the progress made over the past three years and push the Department forward in advancing data skills and enterprise tools, improving governance and policies, and expanding collaboration. The priorities included in this Strategy were developed through a collaborative approach with feedback from data stakeholders across the organization to ensure recommended actions are realistic, well-informed, and valuable to USDA and the communities we serve. In addition, USDA remains committed to achieving alignment with Federal-wide initiatives such as the Federal Data Strategy and the Foundations for Evidence-Based Policymaking Act, including making open government data assets machine-readable, developing and maintaining a comprehensive data inventory for all data assets, and designating a Chief Data Officer (CDO) to be responsible for lifecycle data management.

The **FY21-23 USDA Data Strategy** offered a framework for Mission Areas to pursue data excellence and drove widespread investment in analytics that had broad impact. Specifically, this led to the creation and adoption of the Enterprise Data Analytics Platform & Toolset

(EDAPT), the Assistant Chief Data Officer (ACDO) role at each Mission Area, and the Chief Data Officer Council (CDO Council). These investments in analytics and data governance enabled the Department to engage in a more data-driven response to our strategic priorities. In addition to the successes of new and enhanced analytical tools, the FY21-23 Data Strategy also expanded collaboration between Department leadership and Mission Areas. Following the release of the FY21-FY23 USDA Data Strategy, great strides have been made in Artificial Intelligence (AI), Machine Learning, and Automated Systems. USDA is taking steps to ensure this new technology is utilized in a way that is both ethical and efficient, including establishing an AI Center of Excellence. At the end of 2022, the White House released the Blueprint for an AI Bill of Rights which describes five principles for use of automated systems. The principles in the AI Bill of Rights aim to protect the American public from the dangers of AI and have been used to guide our strategic objectives.

The **FY24-26 USDA Data Strategy** aims to build on the successes of the existing data strategy and update our data-related goals and objectives to meet evolving needs and expectations for Departmental data. The FY24-26 USDA Data Strategy will help our Mission Areas meet new expectations for oversight and transparency through a data-driven approach, clear governance structures, and the use of more advanced analytical techniques.

Thus, this Strategy is the product of our commitment to data-driven excellence and our belief that buy-in across the organization is key to developing and implementing an effective data strategy. Through our FY24-26 Data Strategy, we aim to promote a shared understanding and ownership of data, invest in our data workforce and analytics, promote consistent practices, align data objectives, and ensure adaptability to meet evolving challenges and requirements.



# Goal 1: Data Governance & Leadership

USDA will strengthen enterprise data governance and data leadership to coordinate and enhance data and analytics development, management, infrastructure, and tools.



Investing in data governance is key to navigate the increasing volume and complexity of data that USDA collects and shares. This investment will be driven by data leaders, especially the Assistant Chief Data Officers (ACDOs) at each Mission Area and Staff Office. These data leaders will promote best practices and frameworks across the Department to ensure USDA manages data effectively.

Data governance processes driven by our data leaders will benefit USDA's stakeholders by supporting the preparation, integration, analysis, and sharing of data. Specifically, accurate and high-quality data supports better resource allocation and strategic planning and enables data analytics. Data governance also promotes transparency by identifying clear data-related roles, responsibilities, and processes, while helping our organization comply with federal regulations and laws, including those related to data security.

We aim to increase our support for data governance over the next three years by evolving the ACDO role in partnership with the Chief Data Officer (CDO), communicating the value of our data investment, and working with groups within USDA and across Government to strengthen the data program.

## FY21-23 Data Governance & Leadership Successes



Established the role of the Assistant Chief Data Officer (ACDO) at each USDA Mission Area & representative Department Administration & Staff Offices



Launched the USDA Data Governance Advisory Board (DGAB) in 2019



Developed governance bodies at the Mission Area-level



Created race and ethnicity data standards for statistical agencies



Chartered USDA-wide Communities of Practice in areas such as advanced analytics, data visualization, data stewardship, and Artificial Intelligence

# Goal 1: Data Governance & Leadership

USDA will strengthen enterprise data governance and data leadership to coordinate and enhance data and analytics development, management, infrastructure, and tools.

## **OBJECTIVE 1.1.**

**Evolve the USDA data governance structure.**

We will continue maturing the data governance function at USDA by establishing department-wide data governance priorities, including mapping governance groups, responsibilities, and leadership. We will conduct data maturity assessments to continuously identify both targeted and enterprise-wide opportunities to improve the quality of data and analytics. We will also develop Mission Area-specific data & analytics modernization plans covering the next five years to ensure strategic alignment.

## **OBJECTIVE 1.3.**

**Mature the ACDO role.**

We will work to further define the role and core responsibilities of Assistant Chief Data Officers (ACDOs) to help ensure they have access to the resources to continue to meet Mission Area needs for data, analytics, and governance. We will also mature and launch an ACDO Scorecard to provide a holistic view of strategic data priorities and ensure that the role is properly aligned to agency and Department needs.

## **OBJECTIVE 1.2.**

**Measure and maximize the organizational value of data analytics at USDA.**

We will measure and communicate the value of USDA's data investment. To measure the value that data and analytics add to USDA mission delivery, we will develop suitable metrics to quantify the value of datasets and data products, consistently track data quality, and report progress on these metrics as they relate to performance, evaluation, and risk. We will also collect and share success stories to find additional ways to share value and promote transparency and accountability.

## **OBJECTIVE 1.4.**

**Promote cross-departmental & cross-government data & artificial intelligence collaboration.**

We will continue to invest in partnerships both within USDA and with other agencies across the Federal Government. Internally, we will continue to work with our staff offices, IT, evidence, performance, and customer experience counterparts to find additional opportunities to work together and further the goals of data programs across USDA. We will expand collaboration and partnerships with Geospatial leaders and the C-suite via progress reports on data strategy implementation and align our data priorities to Cloud policy. We will also continue our participation in the Federal CDO Council and related work, and participate in other cross-government councils such as the White House Office of Science and Technology Policy (OSTP) and working groups to further data and AI at USDA.

## **Data Spotlight – Assistant Chief Data Officers**

As part of our implementation of the FY21-23 Data Strategy, USDA formally established the role of Assistant Chief Data Officer (ACDO) at each Mission Area (MA) and Departmental and Staff Office (DASO). The responsibilities of an ACDO include data stewardship, setting performance indicators, and serving as an advocate for data for the Mission Area. Our ACDOs sit on a Data Governance Advisory Board (DGAB) at the USDA-level and serve as the senior data leadership across the Department. ACDOs are important to USDA because we have eight Mission Areas with vastly different missions. Our ACDOs help ensure that mission-specific data and analytics priorities are represented at the Department-level. The ACDO model has been replicated in other federal agencies that wish to employ a similar federated model at their agency.



# Goal 2: Data & Analytics Workforce

USDA will strengthen data fluency across the Department, understand key drivers for data workplace retention, and hire for the future to build a strong, data-informed workforce.



The USDA workforce is our most important asset. Without a diverse and data-informed workforce, USDA cannot deliver on its various missions. USDA must continue investing in recruitment, retention, and upskilling efforts and make USDA the best place to work in the public sector for data scientists, data analysts, geographic information system (GIS) analysts, and the data workforce at large.

Our planned investments in the data and analytics workforce include formal training events, but also inclusion in various Communities of Practice, participating in our annual Ag Data Viz Day and GeoSymposium, competing in various data challenges and hackathons, and more. We must also strengthen our data workforce to handle new and emerging tools and techniques to keep their skills relevant to what's needed for USDA. Lastly, we will continue to make USDA a magnet for bright talent looking to serve and find ways to recruit top talent more efficiently.

Agency leaders across USDA will play a crucial role in recruiting and retaining the data workforce. We will work over the next three years to build and keep a strong, data-informed workforce.

## FY21-23 Data Workforce Successes



Established Centralized Analytics Teams in most Mission Areas



Launched the Food and Nutrition Service (FNS) Data Science Training Program



Hosted Ag Data Viz Day, an annual event to inspire and educate all USDA data practitioners



Conducted the Inaugural Data Skills Assessment Survey



The Enterprise Geospatial Management Office (EGMO) established the annual GeoSymposium, an event that focuses on the Geographic Information Services' impact on the USDA mission and other geospatial priorities

## Goal 2: Data & Analytics Workforce

USDA will strengthen data fluency across the Department, understand key drivers for data workplace retention, and hire for the future to build a strong, data-informed workforce.

### OBJECTIVE 2.1.

**Expand our ability to recruit and retain the USDA federal data workforce.**

We will continue to make USDA the best place to work for our data workforce. We will facilitate a conversation with stakeholders to share best practices for recruitment initiatives and retention of data practitioners across the Department. Additionally, USDA will leverage Department and Federal-wide hiring actions and explore rapid-hire options for data scientists. These efforts will allow USDA to recruit top candidates more efficiently. We will also explore developing a human capital plan, in partnership with the Chief Human Capital Officer (CHCO), that defines and maps steps to strengthen the data workforce.

### OBJECTIVE 2.3.

**Support centralized analytics teams to handle future challenges.**

We will outline responsibilities for centralized analytics teams and identify the minimum viable resources needed by ACDOs to oversee centralized analytics priorities within their Mission Area. We will share best practices for establishing Mission Area-level communities of practice and promote existing USDA-wide communities of practice to ensure collaboration, innovation, and coordination across the Department. We will provide capacity where program areas are not resourced to stand up their own analytics teams and enable them to address cross-cutting analytics issues in the organization.

### OBJECTIVE 2.2.

**Promote USDA-wide workforce training & upskilling initiatives.**

We will continue promoting workforce training and upskilling initiatives by scaling and transitioning the Food and Nutrition Service's (FNS) Data Science Training Program pilot to a USDA-wide program. We will conduct a follow-up skills assessment survey to understand growth and changes to our data workforce and help us prioritize future initiatives. We will also partner with the USDA Digital Service to align data and IT workforce strategies for mutual benefit.

### OBJECTIVE 2.4.

**Upskill USDA to support advanced analytics and artificial intelligence (AI).**

We will work with stakeholders across the Department to support the training of the data workforce on advanced analytics and AI, including ethical and responsible use of data as well as avoidance of risk and bias. We will also coordinate across data and research communities to identify how we can build comprehensive training capabilities that include the proper use of artificial intelligence.

## Data Spotlight – FNS Data Science Training Program

In the summer of 2021, Food and Nutrition Service (FNS) launched an annual data science training program for new and seasoned data scientists to improve their skills, work on a capstone project, and build new connections. Since the initial launch of the program, the class size has grown across multiple USDA Mission Areas from word of mouth alone. As the program enters its third iteration starting July 2023, FNS has partnered with the Chief Data Officer to deliver the program across all USDA Mission Areas.

# Goal 3: Common Data & Analytics Toolset

USDA will expand and mature EDAPT, while also exploring new enterprise architecture, infrastructure, and analytics tools to enable shared access and use of data to achieve our mission and drive innovation.



USDA invests in shared data platforms and analytics tools to eliminate data silos, promote enterprise data integrity and governance, enhance decision-making, and drive innovation.

Shared data and analytics infrastructure helps ensure we proactively manage data as we collect it and make the best use of the data we collect and generate. Launched in 2017, the Enterprise Data Analytics Platform & Toolset (EDAPT) serves as USDA's centralized hub for storing, sharing, analyzing, and visualizing Departmental data. The deployment of EDAPT was central to USDA's first data strategy, since it provided a common platform for data analytics and data management. More recently, USDA launched the Open Data Platform (ODP), a common way to share data visualizations with the public.

More opportunities remain to identify and deliver common enterprise services across USDA at an overall better value. Over the next three years, USDA will continue to scale and mature EDAPT while identifying additional tools, products, processes, and service offerings to help the Department improve operational efficiency.

## FY21-23 Common Data & Analytics Toolset Successes



Deployed the USDA Enterprise Data Analytics Platform & Toolset (EDAPT) with priority departmental datasets & key data management tools for shared use



Developed a suite of USDA-wide and Mission Area-specific dashboards to drive decision-making and reporting at all levels



Increased data shared with the public following the launch of the Open Data Platform



Developed the Data Science Workbench to allow analytics teams the tools to collaborate and perform complex analytics

## Goal 3: Common Data & Analytics Toolset

USDA will expand and mature EDAPT, while also exploring new enterprise architecture, infrastructure, and analytics tools to enable shared access and use of data to achieve our mission and drive innovation.

### OBJECTIVE 3.1.

#### Modernize Enterprise Data Analytics Platform & Toolset (EDAPT) in a cost-effective manner.

We will continue to mature the EDAPT cost model and communicate the current and expected business value. We will look at ways to deliver a cost-effective enterprise data analytics infrastructure to USDA through partnership with the USDA Chief Technology Officer, OCIO's Digital Infrastructure Service Center (DISC), the Cloud Working Group, and by evaluating proofs-of-concept and opportunities to continuously improve EDAPT's existing processes, capabilities, and cost model.

### OBJECTIVE 3.3.

#### Improve geospatial data capabilities and integrations.

We will continue to integrate the Enterprise Geospatial Management Office (EGMO) into the Office of the Chief Data Officer. We will align initiatives, investments, and knowledge management with the USDA Geospatial Strategy, including initiatives for the improved integration of geospatial data and products with EDAPT and other tools.

### OBJECTIVE 3.2.

#### Advance an enterprise data architecture that promotes data integration, standardization, & security.

We will continue to promote data integration, standardization, and security, including exploring additional standardized data sharing agreements, standard operating procedures (SOPs), and training on enterprise platform usage and connectivity. We will map how EDAPT will interface with select emerging technologies and promote, when appropriate, conducting "analysis of alternatives" assessments to compare existing tools with alternatives to ensure USDA is using the best available tools for its needs. We will also work closely with the USDA Chief Privacy Officer to strengthen data privacy and with the Chief Information Security Officer (CISO) to promote zero trust principles across the data analytics portfolio. We will also work with the USDA Geospatial Information Officer (GIO) to improve EDAPT's geospatial capabilities and improve geospatial data integration across USDA.

### OBJECTIVE 3.4.

#### Monitor and, where applicable, reduce the cost and complexity of the data and analytics tool ecosystem.

We will promote rationalization and standardization of analytics tools and award blanket purchase agreements (BPAs) to decrease license costs, eliminate barriers to access, and make the use of enterprise tools more efficient. We will continue to assess the data and analytics tool ecosystem to ensure maximum efficiency and value. USDA will also explore tools to help us understand tool capabilities and better predict and plan costs and to proactively incorporate requirements into our budget planning cycle.

## Data Spotlight – USDA Open Data Platform

The USDA Open Data Platform (ODP) was developed to provide a common way to share USDA data visualizations with the public. Since the launch of ODP, over 200 public dashboards and products have been launched, providing more information and insights on various USDA programs for public use. Having a common platform to share data visualizations and products with the public has made it easier and more cost-effective compared to having multiple methods and data visualization standards.

# Goal 4: Open Data

USDA will enable effective data sharing, underpinned by the FAIR principles, to provide internal and external stakeholders with deeper insights, value, and transparency.



Open data that is findable, accessible, interoperable, and reusable (FAIR) reduces barriers to collaboration, innovation, and transparency. Open data allows USDA employees and stakeholders to answer questions, perform analyses and evaluations, and promote visibility of program operations and successes.

Enabling open data internally will reduce the time USDA Mission Areas spend performing ad hoc reporting requests to respond to data calls. Making priority data open across the Department will promote visibility into ongoing data-related initiatives, reduce duplicative efforts, and identify opportunities for collaboration.

Externally, increasing public access to USDA's data will help promote transparency and accountability, ensure organizations and researchers have the data they need to make informed decisions, and spur research innovation and collaboration between USDA and the public that will further our mission.

For both internal and external data sharing, we will work to strike the right balance between privacy, security, and openness. In this way, committing to open data will unlock new transformative insights, not only for USDA, but for external stakeholders and the public at large.

## FY21-23 Open Data Successes



Achieved widespread adoption of the Open Data Platform with over 200 public dashboards available on the platform and over 600,000 views



Established the USDA All Access site for internal data sharing across USDA without requiring licenses



Launched the USDA Data Catalog to increase data reusability and visibility



Launched the Rural Data Gateway



Launched a public-facing data visualizations page on the FNS website to host all public dashboards



Utilized CXO dashboards and data to track COVID-19 trends to determine the best course for Return to Office and Federal Employee Viewpoint Survey (FEVS) scores to address changes and make workplace improvements

## Goal 4: Open Data

USDA will enable effective data sharing, underpinned by the FAIR principles, to provide internal and external stakeholders with deeper insights, value, and transparency.

### OBJECTIVE 4.1.

#### Centralize and catalog data assets.

We will continue to centralize and catalog data assets by domain areas to make sharing data with internal and external stakeholders more efficient. USDA will prioritize the entry of key metadata from across every Mission Area and Departmental Administration / Staff Office in the USDA Data Catalog and create a review process to allow key datasets to be shared department-wide. Lastly, USDA will implement data quality tools and processes that improve data quality for our most critical datasets.

### OBJECTIVE 4.3.

#### USDA will ensure assets are regularly reviewed by creating a process for updating metadata and fixing broken links, prioritizing key public data assets.

We will maintain and ensure the accuracy and quality of open data assets, including USDA data in data.gov, the Open Data Platform, and other public data assets. USDA will ensure assets are regularly reviewed by creating a process for updating data and links that are broken/out-of-date prioritizing key public data assets. USDA will assess processes for soliciting public commentary and requests for additional data access. USDA will promote external data sharing and explore potential partnership with privacy groups and the Chief Information Security Officer to ensure data privacy and protection of our open data assets.

### OBJECTIVE 4.2.

#### Improve access to data across USDA.

We will improve the data access experience by collaborating with stakeholders to develop a comprehensive tracker and toolkit to facilitate faster and more streamlined access to data, including template data sharing agreements, material transfer agreements and memorandums of understanding (MOUs). We will also increase awareness of open data assets for use by our federal, state, and local government partners, civic tech, public policy organizations, and other external organizations. We will also promote the use of multiple data sharing formats where appropriate, such as the use of Application Programming Interfaces (APIs).

### OBJECTIVE 4.4.

#### Identify data to bring into EDAPT.

We will work to identify key data sources not in EDAPT, including those aligned to the Quarterly Strategic Review (QSR), and develop a plan to bring that data into EDAPT, with the goal of improving access to data, taking advantage of economies of scale, and make analytics work more efficient. We will work with data domain executive sponsors to develop a template for and publish a data management plan.

## Data Spotlight – Rural Data Getaway

In February 2023, USDA's Rural Development (RD) deployed the Rural Data Gateway - a new resource to make the agency's data for rural projects easier to access for partners and for people living in rural communities. The Rural Data Gateway leverages the Open Data Platform, a USDA-wide data visualization platform designed to share data visualizations with the public. The Rural Data Gateway strengthens USDA Rural Development partnerships with rural people, entrepreneurs, government officials and Congress by making RD's data more available and easier to access. It features Rural Investments Dashboards that significantly expand access to RD financial data through an easy-to-use interface that allows data from more than 65 RD programs to be viewed and downloaded. The Gateway and dashboards will help USDA get more resources to the people who need them in rural places.

# Goal 5: Analytics for a Purpose

USDA will intentionally adapt to and invest in analytics processes, techniques, and products to inform decision-making for key business questions.



The ability to use data to draw insights and inform decision-making underpins all of our investments in governance, workforce, tools and platforms, and open data. This new Goal 5 was added to the USDA Data Strategy to recognize that data has long played an important role in achieving USDA's mission.

Analytics and data visualizations help USDA practitioners and leaders quickly digest complex datasets through key trends, patterns, and relationships. Advanced analytics (including, but not limited to, artificial intelligence and machine learning) can generate useful insights and also help decision-makers identify process improvements or risks to mitigate.

USDA will continue to analyze different options available for gaining insights from data and selecting the right analytical approach for the business needs at hand. We commit to extracting meaningful insights from organizational data through analytics in order to support mission delivery.



## FY21-23 Analytics Successes



Research, Education and Economics (REE) used data analytics to automate repair expenditure saving hundreds of labor hours.



Food and Nutrition Service (FNS) invested in creating an interactive R markdown report that consolidates data from multiple SNAP data systems to identify areas of SNAP support for states transitioning out of the public health emergency.



Natural Resources and Environment (NRE) developed the BIL and IRA Investments by State Dashboard, which provides data on BIL, IRA, and other funding to each U.S state, promoting accountability and transparency in Forest Service use of funds and collaboration with state partners.



Food Safety and Inspection Service (FSIS) developed a Recruitment Dashboard that provides executives the ability to view how recruitment efforts differ across districts, states, role type, etc., and allows them to identify the greatest challenges to recruitment efforts and respond to them.



Rural Development (RD) developed a dashboard that provides real time data to all RD staff which demonstrates their impact on tribal communities and tribal members.



Farm Production and Conservation (FPAC) Farm Service Agency developed over 20 new dashboards. The new Crop Acreage Reporting Dashboard helped leadership track more than 700 million acres reported on 2.4 million farms and helped county offices track year-to-year comparisons of percentage of crop records reported.



Marketing and Regulatory Programs (MRP) developed the Avian Flu Dashboard and set a new path for outbreak information delivery moving forward, which quickly received over 300,000 views.



Trade and Foreign Agricultural Affairs (TFAA) developed a dashboard that demonstrates the scope of Black Sea grain and oilseed trade. Millions of tons of grain are shipped through these international waters each year, making the Black Sea region a major supplier of agricultural commodities worldwide.

## Goal 5: Analytics for a Purpose

USDA will intentionally adapt to and invest in analytics processes, techniques, and products to inform decision-making for key business questions.

### OBJECTIVE 5.1.

Further integrate data visualization and advanced analytics into USDA's culture of decision-making.

We will prioritize collaboration with stakeholders such as the evidence/evaluation community and research community to further integrate data visualization and analytics into USDA's decision-making. We will ensure that consistent and accurate data is at the forefront of USDA's processes to evaluate performance and plan for the future.

### OBJECTIVE 5.3.

Promote data and artificial intelligence (AI) ethics, responsible use, and transparency.

We will continue to promote tracking data and AI projects/products through the AI Use Case Inventory and help data practitioners understand requirements for the responsible use of data and AI. USDA will prioritize training on data and AI ethics and bias through active investments such as the USDA Data Science Training Program and the AgLearn platform, as well as new programs.

### OBJECTIVE 5.2.

Standardize principles and best practices for analytics and artificial intelligence (AI).

We will establish AI Principles and ensure organizational commitment to the ethical and responsible use of AI. USDA will explore creating AI code repositories, developing shared models, and creating a library of use cases and tool descriptions. Additionally, USDA will consider standing up a community forum for discussion of advanced analytics techniques and developing a governing body for AI in consultation with USDA stakeholders.

### OBJECTIVE 5.4.

Increase number of enterprise analytics tools in EDAPT.

We will increase the enterprise analytics tools and capabilities within EDAPT to ensure practitioners have access to the tools they need to utilize data. We will research analytics tools and sandboxes for experimentation and collaboration within EDAPT. We will also assess architecture which allows the greatest access to data to the lowest appropriate level, with the goal of promoting data transparency and autonomy and the democratization of data.

## Data Spotlight – Avian Flu Dashboard

In 2022, the Marketing and Regulatory Program developed the Avian Flu Dashboard and set a new path for outbreak information delivery moving forward. This publicly accessible dashboard received 300,000+ views and was developed for disseminating situational awareness information regarding the Avian Flu outbreak impacting the domestic poultry food sector. The dashboard provides a daily updated overview of number of birds, flocks, and states affected by the outbreak along with a timeline of its progress, a map showing impacts on states by birds or flock types, and a table that can be searched by state, month/year, or production type. The dashboard eliminates many hours of manual work by Public Affairs, the Center for Informatics, and other organizations, which allows personnel to instead respond to other needs supporting the Avian Flu outbreak. The dashboard also ensures consistent information is provided to all stakeholders.



## Conclusion

The first USDA Data Strategy set the vision to strengthen USDA's data posture to achieve its strategic goals. The updated Data Strategy builds on those successes so that USDA can continue supporting the American public. In the coming months, USDA will translate these goals and objectives into an implementation plan and roadmap. We will also implement a monitoring system to drive accountability and ensure USDA moves towards our strategic goals. Throughout the next three years, we will continue to ensure alignment with the USDA Strategic Plan and the Federal Data Strategy and adjust as necessary.



# Overview of our Data Strategy Framework

The content of this Strategy was shaped in conversation with dozens of data leaders across USDA whose inputs were invaluable in shaping recommended actions that will have a measurable impact on our service delivery and data capabilities. **Specifically, four key activities underpin the goals and objectives in this document:**

- 1.** Conducted a retrospective on the successes and areas for improvement coming from the FY21-23 USDA Data Strategy. Administered a current state assessment by collecting survey responses from around 100 data stakeholders and identifying common themes in conversation with critical data representatives.
- 2.** Engaged in a benchmarking assessment to review the Federal Data Strategy and peer Agencies' data strategies and discuss effective actions with Chief Data Officers.
- 3.** Reviewed the Federal Data Strategy, the Evidence Act, Executive Orders, the USDA Strategic Plan, and internal plans and strategies to refine potential goals and objectives.
- 4.** Held a data leaders onsite meeting focusing on future state visioning to outline data-related actions and discuss shared opportunities to improve our data capacity.

The **FY24-26 USDA Data Strategy** provides a framework that will support our 29 agencies and offices to leverage their data to: inform policy, resource allocation, and risk management; improve service delivery and innovation; expand transparency and enable us to meet legislative requirements more easily; streamline performance management; and facilitate inter- and intra-agency collaboration and data sharing. This framework draws on peer Agency data strategies, an analysis of our Departmental strategic goals and current state of our data capabilities, and recommendations from our data leaders.

**Beginning in January 2023, the USDA Chief Data Officer (CDO) met with CDOs (or CDO-appointed representatives) from six federal agencies to discuss organizational challenges and successes related to data, construction of their enterprise data strategy and CDO priorities and advice. These interviews led us to identify five key enablers for a successful data strategy:**

- ▶ Involve leaders throughout the process to ensure buy-in,
- ▶ Include data stakeholders from across the Department to foster collaboration and ensure strategy priorities are well-informed and achievable,
- ▶ Define a roadmap and reporting structure to measure, track, and monitor completion of strategic objectives,
- ▶ Align to the mission, vision, and strategy of the entire organization, without viewing "data" in a silo,
- ▶ Follow federal best practices and write objectives to meet the needs of federal laws and regulations such as the Evidence Act.

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