

Agency Priority Goal Action Plan

Modernize IT- Modernize Data Analytics Capabilities

Goal Leaders:

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Mission Area Dashboards – Goal & Vision

<u>Goal Statement</u>- Modernize information technology and data analytics capabilities across the Department, resulting in a USDA that is customer-focused, evidence-based, and efficient in the use of American taxpayer's dollars.

<u>Impact Statement</u>- By September 30, 2019, provide USDA leadership with instant access to key data on program activities and trends, allowing the Department to make informed and data-driven decisions, and comply with White House and Congressional requirements to improve data use.

Challenges

- Decisions are frequently made with static, outdated, or limited information
- There is a lack of access to analytical tools supporting rapid and well-informed decisions
- Data is not integrated or standardized across agencies or business function
- The authoritative source of data elements are not clear
- The quality of data is often too low to support decision-making

Opportunities

- Develop a comprehensive approach to data management that significantly improves data quality and availability for all internal USDA stakeholders
- Extend to all mission areas analytical and visualization tools introduced to executive offices in FY18 that increase manager and employee capabilities to communicate information clearly and efficiently
- Support increased fact-based, data-driven decision-making that enables the department to better use taxpayer dollars and more efficiently support critical mission functions

Mission Area Dashboard - Conceptual Overview

Provide USDA leaders with instant access to key program data that will enable data-driven decisions

Fy19 Dashboard Concept



Farm Production & Conservation (FPAC):

Mitigates risks of farming (weather, market, etc.)



Rural Development (RD): Financial programs to support essential public facilities and services



Natural Resources and Environment (NRE): Supports sustainable land management



Food, Nutrition and Consumer Services (FNCS): Administers nutrition assistance and research



Marketing and Regulatory Programs (MRP): Facilitates marketing of U.S. agricultural products and ensures animal and plant health



Trade and Foreign Agricultural Affairs (TFAA): Provides U.S. producers opportunities to compete in the global marketplace



Research, Education and Economics (REE): Integrates research and education to support safe, competitive <u>agriculture production</u>



Food Safety: Ensures safety and properly labeling of U.S. commercial meat, poultry, and egg products

Dashboard Metrics:

- Program effectiveness
- Availability/expenditure of resources
- Customer distribution & needs
- Customer service
- Key indicators of risk



Users:

- Secretary & sub-cabinet
- USDA program administrators
- Mission area/agency business functions & staff
- State/regional directors

Mission Area Dashboard – Governance Structure

Dashboard Executive Leadership

- Executive Leaders
- Define Business
 Needs
- Data Owners

Data Advisory Board

- Data Identification
- Data Management
- Establish KPIs
- Data Quality
- Compliance

Dashboard Execution Team

- Coordinates
 between Storage &
 Visualization
- Deploy and Maintain

FY19 Dashboard Consumers

 Users of the Dashboards







- All CXO & Agency users
- Farm Production & Conservation
- Rural Development
- Natural Resources and Environment
- Food, Nutrition and Consumer Services
- Marketing and Regulatory Programs
- Trade and Foreign Agricultural Affairs

- Research, Education and Economics
- Food Safety

Key Milestones

The dashboards will be developed using agile methodology to enable rapid delivery of functionality to the leadership team.

Milestone Summary					
Key Milestones	Milestone Due	Milestone	Change from	Owner	Anticipated Barriers or other Issues
	Date	status	last month		Related to Milestone Completion
CXO Dashboard: OBPA	Q1FY19	Complete			N/A; milestone complete
Mission Area 1: FPAC	Q1/Q2FY19	Complete			N/A; milestone complete
Mission Area 2: RD	Q1/Q2FY19	Complete			N/A; milestone complete
Mission Area 3 NRE	Q3FY19	Under way			
Mission Area 4: FNCS	Q3FY19	Under way			
Mission Area 5: MRP	Q4FY19	Not started			
Mission Area 6: TFAA	Q4FY19	Not started			

Summary of Progress – FY19 Q1-2

During FY19 Q1-2, the project team continued the FY18 progress in support of USDA's Modernize Data Analytics Capability' Agency Priority Goal.

Dashboarding

- Completed FPAC dashboards in Q1: includes Farm Loan Programs, Acreage Reporting, Conservation Contracts, and Disaster Recovery.
- Completed RD dashboards in Q2: includes funding and loan programs for Pipeline, Obligation, Loan Portfolio, and Delinquency, as well as views for Broadband, Workforce Activity, and Distressed Communities.
- Worked with OBPA in Q1 and Q2 to develop a dashboard to support the Deputy Secretary's Quarterly Strategic Review (QSR) process. Dashboard has been used for all Q2 QSRs.
- Launched dashboard program for NRE in Q2: encompasses the Forest Service and includes dashboards on Hazardous Fuels treatments and Permit Expirations, and Timber Sales.
- Launched dashboard program for FNCS in Q2: dashboards include Stewardship by State, Program Waivers, Disaster Response, and USDA Foods.

Data Management

- Working with the CXOs and Mission Areas to ensure data management practices are at a level necessary for rapid advances in analytics.
- Applying CMMI model widely accepted in government and industry
- Conducting interviews and workshops with data stewards and other staff to ensure their organizations' staffing and skills, funding, processes, and infrastructure are optimized to best support the data analytics effort

Summary of Progress – FY19 Q1-2

Upskilling/training

- Introduced throughout Q1 and Q2 to executive offices and mission areas with active dashboard programs to expand user knowledge of the dashboarding tools and best practices
- Multiple levels of training, such dashboard viewers, creators, and administrators
- Multiple delivery methods to meet all learning styles and provide schedule flexibility
- Numerous training materials and recorded webinars are being made available on AgLearn for future use as the data analytics and dashboarding expands throughout the Department.

Adoption

- Establishing communities of practice (CoPs) for Open Data Stewards and Dashboard Champions.
- Achieved key milestones in the increased participation among community members and the identification and oversight of USDA co-leads in place of the initial project team facilitators.
- Develop and began distribution of USDA Insight of the Month email newsletter for the USDA dashboard community to provide information, generate interest, and drive users to the dashboards

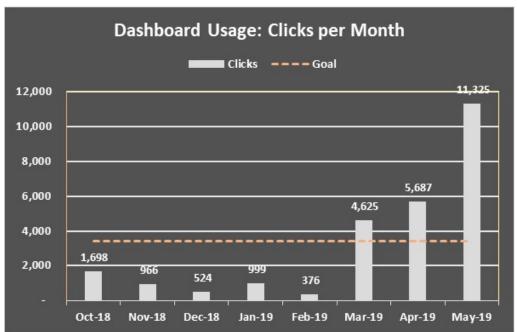
Data Portal

- Delivered plan and initiated development of an internal data portal in Q2
- Allows USDA stakeholders to develop and share data relevant to interagency teams
- Portal will:
 - Feature interfaces to datasets for retrieval from the data lake
 - Enable deep-dive analyses into visualizations, allowing stakeholder to interact with data.

Operational Performance Indicators

Accessibility and adoption are the key indicators. They are measured by 3 key performance indicators:

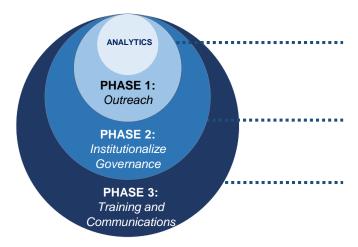
- Develop and launch mission area dashboards. Goal was 6 mission areas by the end of the FY. Currently there are 2 mission areas completed and 2 in development.
- Develop and publish success stories about how USDA data is being used to create public or private sector value. Goal was 3 success stories per mission area. Currently, 10 success stories have been compiled and metrics are being collected for them.
- Double usage of the dashboards as measured by click per month. Baseline was 1,700, goals was 3,400. Chart below shows the usage trend vs. the goal.



Communications Plan

Our Change Approach is a three-phased approach to activate various stakeholder groups across the organization.

- Initiate communications with leadership buy-in from USDA and mission area leadership
- Develop campaign to spread awareness of the analytics project, such as CoPs and electronic newsletters
- Create and distribute training and communications



Phase 1: Outreach

Socialize purpose and goals of the analytics project by conducting a stakeholder assessment. Create a logo and mission statement and deploy multi-staged campaign to attract and spread awareness of the dashboards. Channels include emails, newsletters, boards, etc.

Phase 2: Institutionalize Governance

Design and invite members to join the new Analytics Governance Board, equip leaders with the steps to deal with and address change across agencies, stand up CoPs to increase interest and investment of subject matter experts

Phase 3: Training and Communications

Create training material (FAQs, User Guides) and communications (Implementation Playbook) to help deploy and support analytics. Create change measurement and tracking through adoption rates on dashboards, development of success stories.