Agency Priority Goal Action Plan

Modernize IT- Modernize Data Analytics Capabilities

Goal Leaders:

Gary Washington, Chief Information Officer

Francisco Salguero, Deputy Chief Information Officer
Goal Statement: 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.

Impact Statement: 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• Decisions are frequently made with static, outdated, or limited information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 agriculture production

### 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
- 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

### Office of the Secretary

### Assistant Secretary for Administration

### Chief Information Officer
- Executive Sponsor
- APG Project Management

### Office of the Secretary
- Deputy Secretary

### Budget

### Agency
- Agriculture

### Program
- Food, Nutrition and Consumer Services
- Rural Development
- Natural Resources and Environment
- Marketing and Regulatory Programs
- Trade and Foreign Agricultural Affairs

### Project Teams
- Farm Production & Conservation (FPAC)
- Rural Development (RD)
- Natural Resources and Environment (NRE)
- Food, Nutrition and Consumer Services (FNCS)
- Marketing and Regulatory Programs (MRP)
- Trade and Foreign Agricultural Affairs (TFAA)
- Research, Education and Economics (REE)
- Food Safety

### Team
- IT Security
- Privacy
- Enterprise Architecture

### Executive Sponsor

### Chief Information Officer
- Data Management Lead
The dashboards will be developed using agile methodology to enable rapid delivery of functionality to the leadership team.

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<th>Key Milestones</th>
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During FY19 Q4, the project team continued the progress in support of USDA’s Modernize Data Analytics Capability’ Agency Priority Goal. Highlights of the capabilities made available throughout the 2 year APG are below:

**FARM PRODUCTION & CONSERVATION (FPAC)**

- State Conservationists at FPAC have access to a real-time scorecard with more than a dozen key metrics spanning both program outcomes & operational management to help more efficiently administer government resources in support of conservation.

- Operational leadership across FPAC has access to a suite of intelligence tools that provide real-time data on how FPAC customers are being impacted by natural disasters, such as hurricanes and drought.

**RURAL DEVELOPMENT (RD)**

- RD State Directors have access to workforce data and analysis that makes visible how staff are spending their time between loan processing, outreach and other activities, enabling them to identify to deliver loan services in a timely manner.

- Leadership in Rural Development can easily identify patterns of their borrower delinquency: number of borrowers in delinquency, how long they are in delinquency, and how many times individual borrowers were delinquent.
NATURAL RESOURCES & ENVIRONMENT (NRE)

- Forest Supervisors in the Forest Service have access to an integrated view of timber sales, fuels treatments, budget, fleet, and HR data for each individual forest to help them better manage our natural and government resources sustainably and efficiently.

- Program leadership in State and Private Forestry can monitor hazardous fuel treatment activities compared to the wildfire risk of the underlying landscape to prioritize treatments in the areas that need it most.

FOOD, NUTRITION AND CONSUMER SERVICES (FNCS)

- Regional Administrators at FNCS have visibility into all the waivers granted and can evaluate new waiver requests more effectively by considering the waivers that have been granted by other regional directors.

RESEARCH, EDUCATION AND ECONOMICS (REE)

- Program leadership at research agencies have access to the USDA public policy monitor, which allows them to understand the impact of their research via citations in key public policy literature including the Federal Register, the Congressional Research Service, and the Government Accountability Office.
TRADE AND FOREIGN AGRICULTURAL AFFAIRS (TFAA)

• TFAA budget analysts have access to financial and budget data which enables them to better understand how funds are being distributed and used in foreign posts across the globe.

MARKETING & REGULATORY PROGRAMS (MRP)

• Leadership at APHIS have access to Pest Interception data, which allows them to understand the risk to US agriculture from imports and to inform regulatory decisions and prioritize activities across US ports.

• AMS program leadership have access to commodity procurement information, which enables them to understand their commodity purchases including the commodity, the dollar value, the source location, and the distribution location. While this information was previously available, the dashboard dramatically reduces the time-to-insight.

OFFICE OF FOOD SAFETY (OFS)

• Scientists & Operational Field leaders across OFS have access to more timely data around the status of laboratory sampling as well as key public health indicators for every food processing establishment OFS regulates.

• The Applied Epidemiology Staff at OFS has access to a view that consolidates information on current disease outbreaks, enabling them to better understand the status of disease outbreaks and their epidemiological impact.
CXO

- Cybersecurity specialists in OCIO have access to a suite of tools that enable rapid analysis of security vulnerabilities and malicious software as well as monitoring of ATOs and POA&Ms.

- Fleet Managers across the department have access to more timely data on their Fleet Utilization, enabling them to better manage their fleet and assure that vehicles meet their utilization targets.

- Financial and budget officers have access to a high-level view of USDA finances across the agencies, which helps them determine how money is allocated and spent at the USDA more efficiently.

- Hiring Managers & HR Specialists across USDA will gain access to critical hiring information, with the ability to drill down into specific requests, enabling them to understand bottlenecks in the hiring process and more efficiently manage their hiring activities.
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 8 mission areas completed.

• 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, 40 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. Usage exceeded goals with a high of 26,000 views in September 2019.
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.