

# 2022 USDA EXPLANATORY NOTES – OFFICE OF THE CHIEF INFORMATION OFFICER

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**AGENCY-WIDE**

**PURPOSE STATEMENT**

The Clinger-Cohen Act of 1996 required the establishment of a Chief Information Officer (CIO) for all major Federal agencies. The Act requires USDA to maximize the value of information technology acquisitions to improve the efficiency and effectiveness of USDA programs. To meet the intent of the law and to provide a Departmental focus for information resources management issues, Secretary’s Memorandum 1030-30, dated August 8, 1996, established the Office of the Chief Information Officer (OCIO). The CIO serves as the primary advisor to the Secretary on Information Technology (IT) issues. OCIO provides leadership for the Department's information and IT management activities in support of USDA program delivery.

OCIO provides end-user support, data center operations, application development and wide-area network telecommunications services to USDA agencies and staff offices that are funded through the Working Capital Fund. These services are delivered by OCIO’s Client Experience Center, National Information Technology Center and the Enterprise Network Services, with large office locations in Ft. Collins, Colorado; Kansas City, Missouri; and Washington, D.C. USDA is implementing a new operating model that will make it the best managed agency in the Federal government, a model that is enabling the Department to transition to a facts-based, data-driven, and customer-focused organization. In the current operating and budget environment there is no choice but to modernize. OCIO’s ability to effectively manage and modernize IT systems will be a key factor in the Department achieving this vision.

To support this new approach, USDA has transitioned IT customer support services to enterprise services managed by the OCIO, providing cost-effective, high quality Department-wide helpdesk, desktop, voice, and mobile shared services. Additionally, OCIO has consolidated 39 USDA data centers to a single data center and back-up, while transitioning additional systems and applications to readily available cloud services. These moves will not only increase the strategic focus of IT leadership and staff in USDA's respective mission areas; they will also reduce the cost of providing these services and reduce our cybersecurity vulnerabilities. USDA will become a data-driven organization to ensure that leadership and employees have access to the data and analytical tools that support rapid and well-informed decisions. When data is not integrated, standardized, or of high quality and reliability, problems and opportunities remain obscured, impacting overall program performance. USDA has begun implementing executive dashboard solutions with USDA-wide data on human resources, information technology, finance, and other key administrative data to support USDA executive decision-making.

A customer-focused approach to USDA's digital services requires us to streamline the Department's complex network of online resources that must be navigated today to find or access services. Too often, customer data is not shared or integrated among similar programs. To improve in these areas, USDA will create online service portals that are easy-to-use, include additional self-service capabilities, and integrate data for common customers. Providing the best possible customer service on a consistent basis also means ensuring that USDA employees can access the network anywhere, anytime, regardless of agency, program, or location and that employees have the bandwidth necessary to fully utilize the technology. Over the next two years, we will also flatten the USDA local area networks to make this a reality. Managing 17 USDA networks contributes to our cybersecurity risks, is not cost effective, and is not conducive to providing USDA employees the access to shared information and bandwidth needed to improve customer service.

The OCIO Headquarters is in Washington, D.C. As of September 30, 2020, there were 1,358 full-time permanent employees funded by appropriated and Working Capital Funds. OCIO’s Full-Time Permanent Employees include, 54 in Headquarters, 62 in the Field, and 1,242 of Working Capital Fund for a total of 1,358.

**OIG AND GAO REPORTS**

*Table OCIO-1. Completed OIG Reports*

<b>ID</b>	<b>Date</b>	<b>Title</b>	<b>Results</b>
#50501-02-IT	11/2010	Fiscal Year 2010 Federal Information Security Management Act Report	This audit contained 19 recommendations. OCFO has granted final action on all.
#50501-01-IT	08/2011	USDA's Management and Security over Wireless Handheld Devices	The audit resulted in five recommendations. OIG has granted final action on all recommendations.

<b>ID</b>	<b>Date</b>	<b>Title</b>	<b>Results</b>
#88501-0002-12	08/2014	Management and Security over USDA's Universal Telecommunications Network Report	This audit contained 21 recommendations. OCFO has granted final action on all 21 recommendations.

*Table OCIO-2. In-Progress OIG Reports*

<b>ID</b>	<b>Date</b>	<b>Title</b>	<b>Results</b>
#50501-0015-FM	11/2009	Fiscal Year 2009 Federal Information Security Management Act Report	This audit contained 14 recommendations. OCFO has granted final action on 13. Closure on the last recommendation is dependent on final publication of the Privacy PII (Privacy Act) Departmental Regulation (DR). This policy document is being updated and prepared for internal protocol review. Virtual Student Federal Service interns through Department of State program have volunteered to assist the Privacy Office with policies, Revised estimated completion date September 2019.
#50501-0002-12	11/2011	Fiscal Year 2011 Federal Information Security Management Act Report	OCIO and OIG have reached Management Decision on all 10 recommendations from this audit. OCFO has granted final action on eight recommendations and remediation on the remaining two recommendations is ongoing. Estimated completion date is FY 2019.
#88401-0001-12	08/2012	OCIO FY'S 2010 and 2011 Funding Received for Security Enhancements Report	This audit contained 4 recommendations. CIO and OIG have reached Management Decision on all recommendations. OCFO has granted final action on two recommendations, remediation action on the remaining two is completed, and we are gathering appropriate documentation to support final action. Estimated completion date is FY 2019.
#50501-0003-12	11/2012	Fiscal Year 2012 Federal Information Security Management Act Report	This audit contained six recommendations. OCFO has granted final action on two recommendations. CIO and OIG have reached Management Decision on all recommendations and remediation action is completed. We are gathering appropriate documentation to support final action. Estimated completion date is FY 2019.
#50501-0004-12	11/2013	Fiscal Year 2013 Federal Information Security Management Act Report	This audit contained five recommendations. CIO and OIG have reached Management Decision on all recommendations. OCFO has granted final action on four recommendations. Remediation on the remaining one is dependent on final publication of Standard Operating Procedures and Departmental Regulation (Policy).
#50501-0005-12	09/2014	USDA's Implementation of Cloud Computing Services Report	This audit contained seven recommendations. CIO and OIG have reached Management Decision on all recommendations. OCFO has granted final action on six recommendations and a Request for Final Action (RFA) has been submitted to OCFO for final action on the remaining one. Estimated completion date is FY 2019.
#50501-0006-12	11/2014	Fiscal Year 2014 Federal Information Security Management Act Report	This audit contained two recommendations. OCIO and OIG have achieved Management Decision on both recommendations. OCFO has granted final action on one recommendation, and remediation for the remaining recommendation is dependent on the issuance of a Departmental Regulation. An RFA was submitted to OCFO for final action on the remaining recommendation.

<b>ID</b>	<b>Date</b>	<b>Title</b>	<b>Results</b>
#50501-0008-12	11/2015	Fiscal Year 2015 Federal Information Security Management Act Report	This audit contained four recommendations. Management Decision has been reached on all recommendations. OCFO has granted final action on two recommendation and remediation is underway on the final two, with an RFA submitted for one. Estimated completion of the final recommendation is FY 2019.
#50501-0012-12	11/2016	Fiscal Year 2016 Federal Information Security Management Act Report.	This audit contained three recommendations. Remediation actions for the recommendations are underway. OCFO has granted final action on two recommendations and remediation is underway for the final one. Estimated completion date is FY 2019.
#50501-0012-12(2)	07/2016	FY 2016 Security Protocols Audit.	This audit contained three recommendations. OCFO has granted final action on one recommendation. Remediation actions for the remaining recommendations are underway. Estimated completion date FY 2019.
#50501-0015-12	11/2017	Fiscal Year 2017 Federal Information Security Modernization Act Report.	While this report had no formal recommendations, it did state that USDA needed to address all open audit recommendations from previous audits.
#50501-0020-12(1)	06/2018	Improper Usage of USDA's Information Technology Resources.	This audit report contained seven recommendations. Management decision has been achieved on all. Remediation actions are underway. Estimated completion date is FY 2018.
#50501-0017-12	09/2018	Fiscal Year 2018 Security Over Select USDA Agencies' Networks and Systems	This audit contained three recommendations. OCIO received the final report on September 2018. Management Decision has not been reached with OIG.
#50501-0023-12	09/2020	U.S. Department of Agriculture's 2020 Compliance with the Geospatial Data Act	OIG issued two recommendations to USDA for this audit. One recommendation has been implemented and the other is scheduled to be implemented at the end of this fiscal year.

**Table OCIO-3. Completed GAO Reports**

<b>ID</b>	<b>Date</b>	<b>Title</b>	<b>Results</b>
#13-524	06/2013	Information Technology: Additional Executive Review Sessions Needed to Address Troubled Projects	USDA has provided periodic updates to GAO on progress against the one recommendation. This recommendation was closed in FY 2018.
#14-413	05/2014	Federal Software Licenses: Better Management Needed to Achieve Significant Savings Government-Wide	GAO closed the final recommendation on 9/16/2018.
#14-753	09/2014	Cloud Computing: Additional Opportunities and Savings Need to Be Pursued	USDA developed a Statement of Action to address the two USDA recommendations. GAO closed the final recommendation in FY 2018.
#16-494	06/2016	IT Dashboard: Agencies Need to Fully Consider Risks When Rating Their Major Investments.	GAO closed the last recommendation in FY 2018.
#16-511	09/2016	Information Technology: Agencies Need to Improve Their Application Inventories to Achieve Additional Savings	GAO closed the recommendation in FY 2018.

*Table OCIO-4. In-Progress GAO Reports*

<b>ID</b>	<b>Date</b>	<b>Title</b>	<b>Results</b>
#12-791	09/2012	Organizational Transformation: Enterprise Architecture Value Needs to Be Measured and Reported	USDA worked closely with GAO on progress against the two recommendations. The artifacts to close both recommendations were submitted to GAO in December 2017.
#14-65	11/2013	Information Technology: Additional OMB and Agency Actions Are Needed to Achieve Portfolio Savings	USDA has provided periodic updates to GAO on progress against the four recommendations. Progress has been made in addressing the recommendations, but additional work needs to be completed to mature USDA's process to review Information Technology investment programs.
#14-44	02/2014	Computer Matching Act: OMB and Selected Agencies Need to Ensure Consistent Implementation	USDA has provided periodic updates to GAO on progress against the three recommendations. The Department Regulation, (Revised DR3450-001), "Computer Matching Program Involving Individual Privacy Data," continues to progress in the policy development process. Also, a Data Integrity Board Charter and a Membership memorandum have been submitted for review. GAO has accepted actions and closed two of the three recommendations. Remediation continues the last recommendation.
#14-713	09/2014	Data Center Consolidation: Reporting Can Be Improved to Reflect Substantial Planned Savings	USDA has provided periodic updates to GAO on progress against the one recommendation. The National Information Technology Center (NITC) continues to work with OMB to refine the methodology for tracking and reporting data center consolidation cost savings and avoidances to OMB in accordance with established guidance.
#15-617	09/2015	Information Technology Reform: Billions of Dollars in Savings Have Been Realized, but Agencies Need to Complete Reinvestment Plans	GAO issued one recommendation. Remediation is underway.
#16-323	03/2016	Data Center: Agencies Making Progress, but Planned Savings Goals Need to Be Established.	Statement of action has been submitted and remediation is underway.
#16-468	05/2016	Information Technology: Federal Agencies Need to Address Aging Legacy Systems	Statement of action has been submitted, and remediation action is underway. Estimated competition date is FY 2019.
#17-448	06/2017	Data Center Optimization: Agencies Need to Address Challenges and Improve Progress to Achieve Cost Savings Goal	The report had one recommendation, and remediation is underway.
#17-464	09/2017	Telecommunications: Agencies Need to Apply Transition Planning Practices to Reduce Potential Delays and Added Costs	This report has five recommendations. Remediation is underway.
#18-211	02/2018	Critical Infrastructure Protection: Additional Actions Are Essential for Assessing Cybersecurity Framework Adoption	GAO issued one recommendation to USDA in this report. Remediation is underway.
#18-93	08/2018	CIO Authorities: Critical Actions Needed to Address Shortcomings and Challenges in Implementing Responsibilities	The report had one recommendation. Remediation is underway.

ID	Date	Title	Results
#18-381	08/2018	Paperwork Burden: Agencies Could Better Leverage Review Processes and Public Outreach to Improve Burden Estimates	GAO issued two recommendations to USDA in this report. Remediation is underway.
#18-148	11/2017	Information Technology Reform: Agencies Need to Improve Certification of Incremental Development	GAO issued two recommendations to USDA in this report. Remediation is underway.
#18-42	01/2018	IT Investment: Agencies Need to Involve Chief Information Officers in Reviewing Billions of Dollars in Acquisitions	GAO issued three recommendations to USDA in this report. One recommendation was closed in FY 2018, and two remain under remediation.

**AVAILABLE FUNDS AND STAFF YEARS***Table OCIO-5. Available Funds and Staff Years (thousands of dollars, staff years (SY))*

Item	2019		2020		2021		2022	
	Actual	FTE	Actual	FTE	Enacted Total	FTE	Budget	FTE
Salaries and Expenses:								
Discretionary Appropriations.....	\$55,630	78	\$66,580	68	\$66,814	82	\$101,001	86
Transfers In.....	-	-	-	-	20,000	-	-	-
Transfers Out.....	-175	-	-750	-	-	-	-	-
Total Adjusted Appropriation.....	55,455	78	65,830	68	86,814	82	101,001	86
Lapsing Balances.....	-230	-	-503	-	-	-	-	-
Total Obligations.....	55,225	78	65,327	68	86,814	82	101,001	86
E-GOV Initiative.....	7,794	-	7,794	-	6,977	-	6,977	-
NTIA Spectrum.....	2,141	-	2,029	-	2,140	-	2,140	-
EPMS.....	5,014	5	12,117	5	12,224	5	12,224	5
Project Definition.....	513	-	1,539	-	563	-	563	-
Information Security Center Transfer .....	-	-	7,303	39	10,893	78	10,893	78
Data Analytics.....	-	-	7,500	4	4,526	4	-	-
Total Appropriation, Other Funding .....	15,462	5	38,282	48	37,323	87	32,797	83
Total Obligations, OCIO.....	70,687	83	103,609	116	124,137	169	133,798	169
Other Federal Fund (WCF)s:								
ASC - Office of the Chief Information Officer Oversight.....	1,263	5	1,137	5	1,331	6	1,352	6
Client Experience Center.....	342,998	639	367,401	699	482,328	1,179	483,828	1,179
Department Administration Information Technology Office.....	-	-	9,167	19	20,140	31	15,048	31
Digital Infrastructure Service Center.....	148,223	166	203,052	184	242,308	146	259,572	146
Enterprise Network Services Center.....	48,387	23	61,871	19	103,142	45	114,436	60
Total, Other Federal WCF.....	540,871	833	642,628	926	849,249	1,407	874,236	1,422
Total, OCIO Available.....	611,788	916	746,740	1,042	973,386	1,576	1,008,034	1,591
Total, Non-Federal.....	-	-	-	-	-	-	-	-
Total Available, OCIO.....	611,788	916	746,740	1,042	973,386	1,576	1,008,034	1,591

**PERMANENT POSITIONS BY GRADE AND STAFF YEARS***Table OCIO-6. Permanent Positions by Grade and Staff Years*

Item	2019			2020			2021			2022		
	Actual			Actual			Enacted			Budget		
	D.C.	Field	Total	D.C.	Field	Total	D.C.	Field	Total	D.C.	Field	Total
SES.....	7	-	7	6	-	6	7	-	7	7	-	7
GS-15.....	12	-	12	11	2	13	14	2	16	14	2	16
GS-14.....	24	8	32	19	8	27	27	17	44	27	17	44
GS-13.....	10	6	16	8	27	35	15	31	46	15	31	46
GS-12.....	7	5	12	8	20	28	14	26	40	14	26	40
GS-11.....	2	-	2	1	4	5	3	7	10	3	7	10
GS-9.....	2	-	2	1	-	1	3	-	3	3	-	3
GS-8.....	-	-	-	-	-	-	1	-	1	1	-	1
GS-7.....	-	-	-	-	1	1	-	1	1	-	1	1
GS-5.....	-	-	-	-	-	-	-	1	1	-	1	1
Total Permanent.....	64	19	83	54	62	116	84	85	169	84	85	169
Total Perm. FT EOY.....	64	19	83	54	62	116	84	85	169	84	85	169
FTE.....	64	19	83	54	62	116	84	85	169	84	85	169

**VEHICLE FLEET****Motor Vehicle Fleet**

Client Experience Center's (CEC), under the Office of the Chief Information Officer (OCIO), mission is to support a global customer base and their respective business mission areas as their client IT service provider of choice. CEC works together to securely design, integrate, sustain, and optimize the combined information technologies that empower every aspect of their missions. As the client IT service provider CEC enables our customers' missions

through innovative solutions, premier service delivery, and technical expertise at the best value. To increase security, improve customer service, and drive cost savings across the entire Department, OCIO tasked CEC with developing and implementing a vision for consolidating end-user IT support services for all USDA. This effort, referred to as End User Consolidation (EUC), was completed at the end of FY 2020. As a part of EUC, IT services that fall under OCIO-CEC will include remote connectivity, workstation equipment, authentication, and communication and collaboration tools.

The current OCIO-CEC fleet consists of GSA leased vehicles. They are utilized by IT specialists and support teams to assist in keeping the computing environment operating and ensure that computers, applications, networks, and communication technologies are fully functional. CEC uses its fleet to support best industry practices, to organize IT resources and personnel efficiently, and to deploy them where and when they are needed. CEC fleet service allows its employees to travel to field locations and maintain a unified organization dedicated to supporting both the shared and diverse IT requirements. CEC also use the fleet to address issues with malfunctioning IT equipment at these locations. Vehicles are located across the country and Puerto Rico as the IT specialist drive to the many field offices and service centers for IT support, equipment deployments, replacing/disposal of equipment. OCIO’s current fleet is based on mission and geographic needs. As of September 30, 2020, CEC has 226 leased GSA vehicles and NITC has 1 leased GSA vehicle. CEC continues to lease vehicles from GSA to provide IT support within USDA. In Fiscal Year 2020 CEC entered a fleet sharing program with FPAC and RD which allowed CEC to reduce their fleet by 47 vehicles by the end of FY2020.

***Changes to the Motor Vehicle Fleet***

In FY20, 22 vehicles were replaced, and 47 vehicles were turned back to GSA.

In FY21, 27 vehicles are projected to be turned in to GSA and approximately 40 will be replaced.

***Replacement of Passenger Motor Vehicles***

The GSA leased vehicles are replaced based on the GSA regulations.

***Impediments to Managing the Motor Vehicle Fleet***

There are none currently.

<b>Fiscal Year</b>	<b>Sedans and Station Wagons</b>	<b>Lt. Trucks, SUVs, and Vans (4x2)</b>	<b>Lt. Trucks, SUVs, and Vans (4x4)</b>	<b>Total Vehicles</b>	<b>Annual Operating Costs</b>
2019	224	31	17	272	9,345
Change	+25	-25	+2	+2	-714
2020	249	6	19	274	8,631
Change	-69	15	7	-47	-851
2021	180	21	26	227	7,780

***Table OCIO-7. Size, Composition, and Annual Costs of Motor Vehicle Fleet<sup>a</sup>***

<sup>a</sup> Vehicle count include those owned by agency and leased from commercial sources or GSA.

<sup>b</sup> Excludes acquisition costs and gains from sale of vehicles as shown in FAST.



**SHARED FUNDING PROJECTS**

*Table OCIO-8. Shared Funding Projects (dollars in thousands)*

Item	2019 Actual	2020 Actual	2021 Estimate	2022 Budget
<b>Working Capital Fund:</b>				
Administrative Services:				
Material Management Service.....	\$62	\$72	\$243	\$70
Mail and Reproduction Services.....	175	180	-	169
Integrated Procurement Systems.....	384	347	-	-
Procurement Operations Services.....	4,187	4,627	-	-
Human Resources Enterprise Management Systems.....	12	12	-	-
Subtotal, Administrative Services.....	4,820	5,238	243	239
Communications:				
Creative Media & Broadcast Center.....	33	7	-	-
Executive Secretariat:				
Office of the Executive Secretariat.....	-	1,392	-	-
Finance and Management:				
National Finance Center.....	270	263	12	12
Financial Management Systems.....	1,641	1,064	2	2
Internal Control Support Services.....	150	266	-	-
Financial Management Support Services.....	454	434	-	-
Subtotal, Finance and Management.....	2,515	2,027	14	14
Information Technology:				
Client Experience Center.....	5,604	5,581	35	35
Department Administration Information Technology Office.....	9,440	725	21	21
Digital Infrastructure Services Center.....	-	10,417	2	2
Enterprise Network Services.....	18,407	27,797	8	8
Subtotal, Information Technology.....	33,451	44,520	66	66
Correspondence Management Services.....	971	-	1	1
Total, Working Capital Fund.....	41,790	51,792	324	320
<b>Department-Wide Shared Cost Programs:</b>				
Agency Partnership Outreach.....	82	87	81	-
Honor Awards.....	-	-	-	-
Human Resources Self-Service Dashboard.....	6	9	-	-
Medical Services.....	9	6	45	45
Office of Customer Experience.....	28	34	102	103
Personnel and Document Security Program.....	28	29	33	-
Physical Security.....	-	62	49	-
Security Detail.....	49	53	52	49
Security Operations Program.....	112	72	73	-
TARGET Center.....	13	13	13	-
TARGET Center NCR Interpreting Services.....	-	-	-	-
USDA Enterprise Data Analytics Services.....	-	62	56	-
Total, Department-Wide Reimbursable Programs.....	327	427	516	209
<b>E-Gov:</b>				
Budget Formulation and Execution Line of Business.....	1	1	1	1
Financial Management Line of Business.....	1	2	2	2
Geospatial Line of Business.....	13	13	13	13
Human Resources Line of Business.....	3	3	3	3
Integrated Acquisition Environment.....	-	17	-	-
Total, E-Gov.....	18	36	40	42
Agency Total.....	42,135	52,255	880	571

**ACCOUNT 1: SALARIES AND EXPENSES**

**APPROPRIATIONS LANGUAGE AND EXPLANATION OF CHANGES**

The appropriations language follows (new language underscored; deleted matter enclosed in brackets):

**Office of the Chief Information Officer**

For necessary expenses of the Office of the Chief Information Officer, [\$66,814,000] \$101,001,000.

**LEAD-OFF TABULAR STATEMENT**

*Table OCIO-9. Lead-Off Tabular Statement*

Item	Amount
2021 Enacted.....	\$66,814,000
Change in Appropriation.....	+ 34,187,000
Budget Estimate, 2022.....	<u>101,001,000</u>

**PROJECT STATEMENT**

*Table OCIO-10. Project Statement (thousands of dollars, FTEs)*

Item	2019		2020		2021		Inc. or Dec.	Chg FTE Key	2022	
	Actual	FTE	Actual	FTE	Enacted	FTE			Budget	FTE
Discretionary Appropriations:										
Office of the Chief Information Officer.....	\$55,630	78	\$66,580	68	\$66,814	82	\$34,187	- (1)	\$101,001	86
Transfers In:										
Goodfellow Federal Center.....	-	-	-	-	20,000	-	-\$20,000	-	-	-
Transfers Out:										
Working Capital Fund.....	-175	-	-750	-	-	-	-	-	-	-
Total Available.....	55,455	78	65,830	68	86,814	82	-	-	101,001	86
Lapsing Balances.....	-230	-	-503	-	-	-	-	-	-	-
Total Obligations.....	<u>55,225</u>	<u>78</u>	<u>65,327</u>	<u>68</u>	<u>86,814</u>	<u>82</u>	<u>\$14,187</u>	<u>+4</u>	<u>101,001</u>	<u>86</u>

**PROJECT STATEMENT**

*Table OCIO-11. Project Statement (thousands of dollars, FTEs)*

Item	2019		2020		2021		Inc. or Dec.	Chg Key FTE	2022	
	Actual	FTE	Actual	FTE	Enacted	FTE			Budget	FTE
Discretionary Obligations:										
Office of the Chief Information Officer.....	\$55,225	78	\$65,327	68	\$66,814	82	\$34,187	(1) +4	\$101,001	86
Goodfellow Federal Center.....	-	-	-	-	20,000	-	-20,000	-	-	-
Total Obligations.....	55,225	78	65,327	68	86,814	82	14,187	- 4	101,001	86
Add back:										
Lapsing Balances.....	230	-	503	-	-	-	-	-	-	-
Total Available.....	55,455	78	65,830	68	86,814	82	14,187	- 4	101,001	86
Transfer Out:										
Working Capital Funds.....	175	-	750	-	-	-	-	-	-	-
Total Appropriation.....	<u>55,630</u>	<u>78</u>	<u>66,580</u>	<u>68</u>	<u>86,814</u>	<u>82</u>	<u>14,187</u>	<u>- 4</u>	<u>101,001</u>	<u>86</u>

**JUSTIFICATIONS**

Base funds will allow the OCIO to continue to provide guidance, leadership and coordination for the Department’s information management, technology investment and cyber security activities in support of USDA program delivery. In addition to Departmental Administration funding used for human resources operational services, current year and budget year base funds may also be used to support expedited and enhanced classification, staffing and processing efforts.

- (1) A net increase of \$34,187,000 and 4 additional FTEs for the OCIO (\$66,814,000 and 82 FTEs available in 2021).

The funding change is requested for the following items:

- A) An increase of \$459,000, which includes \$326,000 for pay inflation and \$133,000 for FERS.

This increase will support a 2.7 percent cost of living pay increases for civilian employees, and a 1.1 percent increase to cover the expenses for the mandated increase of USDA’s contribution to FERS.

This increase will support the pay increase for civilian employees. This increase will allow the OCIO to continue to maximize the value of information technology acquisitions to improve the efficiency and effectiveness of USDA program. This critical increase is needed to support and maintain current staffing levels to meet the program demands and statutory requirements imposed on OCIO. Elimination of the pay cost increase means the OCIO would be forced to decrease funding for staffing and mission critical contracts. Approximately 24 percent of our budget supports personnel compensation and benefits. Failure to receive this increase would prevent us from fully performing our mission, which is necessary to ensure continued IT support for all areas of the Department as well as meeting the needs of the Executive Office of the President and members of Congress.

- B) An increase of \$17,473,000 for Cyber Security Continuous Diagnostics Monitoring Phases 1-3.

OCIO, Information Security Center (ISC), Continuous Diagnostics Monitoring (CDM) Program provides information security, continuous monitoring, and risk analysis, prioritization, and mitigation capabilities to improve cyber security of USDA IT assets and strengthen the security posture of USDA agency and office networks. USDA centrally manages and coordinates procurement, installation, training, architecture alignment, security analysis, operation, and maintenance of the Department of Homeland Security (DHS) CDM-recommended security diagnostics, sensors, and tools deployed at USDA. Using data gathered and reported by sensors, tools, and USDA-level CDM dashboard, USDA security and IT management and staff identify risks and vulnerabilities affecting IT assets to fix first and remediate in a timely manner.

The additional funding request for \$17.473 million to the FY 2022 budget will support CDM Phases 1-3. This increase will support CDM by allowing for inflationary costs and increases in Program and Project Management support, and related training. In addition, USDA CDM will be responsible for multiple software licenses, beginning in FY21:

- Hardware Asset Management (HWAM) – ForeScout CounterACT
- Software Asset Management (SWAM) – CarbonBlack Protection
- Security Information and Event Management (SIEM) – Splunk
- Dashboard – RSA Archer
- Privilege Management (PRIVMGMT) – CyberArk
- Credential Management (CREDMGMT) – Centrify and SailPoint

If the CDM program is unfunded, OCIO’s ability to operate and maintain and update CDM tools, the CDM Dashboard, and ancillary hardware and software will be further degraded and additional recommended hardware, software will not be purchased, thereby increasing USDA’s overall cyberthreat footprint. This will affect purchasing network infrastructure, firewall, virtual machines, etc.) that run and support the CDM solutions that automatically/continuously collect data on the identification of hardware, software,

configuration characteristics and known security vulnerabilities; on the insider threat and ensuring the user population, including privileged users, have the right access, need to know, and exhibit the appropriate behavior while operating in the infrastructure; and analyzes events/incidents, identifies and prioritizes cyber security risks on an ongoing basis will be further degraded and additional recommended hardware, software will not be purchased, thereby increasing USDA's overall threat footprint.

OCIO would also be unable to develop, operate, and maintain the CDM Test Lab which will simulate the USDA network and IT environment and enable security engineers and analysts to safely test CDM tools upgrades, patches and functional and operational updates for readiness and compatibility before implementation in the USDA's CDM production environment.

The requested funding would also support delivery of hundreds of data products to USDA leadership and staff; enable more advanced analytics and support USDA's data strategy to solve key challenges with integrating USDA data and other agricultural data to provide better data to decision makers, researchers, and farmers; and would include an enterprise data catalog. Staffing levels would remain unchanged from FY21 levels. The impacts are that USDA will be able to realize efficiencies and cost avoidance through a shared platform with flexibility to meet USDA's current and future needs.

Additionally, this will hinder OCIO's ability to provide adequate Program and Project Management support for CDM Phases 1-4.

C) An increase of \$12,000,000 for the relocation Enterprise Data Center (EDC) operations from the Goodfellow Federal Center facility, including the staff.

The Goodfellow Federal Complex currently located at 4300 Goodfellow Blvd in St. Louis, Missouri has been the subject of numerous environmental concerns over the past several years. On Friday, March 8, 2019, GSA announced the results of a cost-of-ownership analysis on the Goodfellow Federal Center. The study results indicated that the taxpayer investment needed to keep the complex functional, exceeds the costs to house federal tenants elsewhere. Therefore, GSA has determined that retaining ownership of the Goodfellow Federal Center is not in the long-term best interests of the Federal Government. GSA will begin working with Federal agencies to define projected space requirements and transition from the location. GSA has begun developing recommendations to dispose of the Goodfellow Federal Center (GFC) by 2026.

In light of GSA's decision, USDA will relocate all staff and Enterprise Data Center (EDC) operations from the GFC facility to another location by the end of FY 2021. While administrative offices are easier to relocate; the relocation of the Department's High Value Asset – the Enterprise Disaster Recovery Data Center has significant investment requirements, in order to provide continuous and seamless disaster recovery services for the USDA's portfolio of Mission Critical applications. These Mission Critical applications currently support the Department, its Mission Areas, and USDA services to our citizens throughout rural America – including life and limb, food safety, food supply, and food nutrition related services. Significant planning and funding availability will be required to successfully relocate the Disaster Recovery Data Center, while employing a risk managed approach.

This request will fully fund the migration to a new USDA Tier 3 commercial data center within the vicinity of St. Louis, Missouri and build out the disaster recovery IT infrastructure and support systems.

D) An increase of \$4,255,000 and 4 FTEs to streamline the Enterprise Data Analytics Program from the Shared Costs Program.

An increase of \$4.3 million and FTEs to facilitate the realignment the Enterprise Data Analytics Services (EDAS) program contained within the Shared Cost Portfolio to the Office of the Chief Information Officer appropriation. After analysis conducted by the USDA’s Advisory Committee of the Shared Costs portfolio, USDA determined that the realignment of resources associated with this program to the servicing organizations would better serve and meet the needs of the Department by improving oversight, transparency, and accountability, in addition to a realization in management efficiencies by reducing workload and administrative expenses.

The EDAS program utilizes USDA’s Enterprise Data Analytics Platform and Toolset (EDAPT) to deliver data and analytics solutions for the enterprise. This platform delivers a cost effective and integrated solution for sharing, analyzing, and reporting on the department’s priority administrative and programmatic data. The services program delivers core platform management functions including engineering support for access and enhancements to connected data sources, operations and maintenance support, and coordination across USDA on access management and site utilization. If appropriated funds are not enacted, the SCP will continue as we have funded them in the past.

**GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND FTEs**

*Table OCIO-12. Geographic Breakdown of Obligations and FTEs (thousands of dollars, FTEs )*

State/Territory/Country	2019		2020		2021		2022	
	Actual	FTE	Actual	FTE	Enacted	FTE	Budget	FTE
Arkansas.....			\$1,896	2	\$1,959	2	\$2,844	2
California.....			1,896	2	1,959	2	3,175	2
Colorado.....			3,818	4	7,751	8	8,610	8
Connecticut.....			935	1	-			
District of Columbia.....	\$52,530	64	18,736	19	35,353	33	36,212	37
Florida.....			1,896	2				
Georgia.....			-		1,024	1	1,883	1
Iowa.....			4,779	5	-			
Illinois.....			935	1	-			
Kansas.....			-		1,024	1	1,883	1
Louisiana.....			5,740	6	5,803	6	7,117	6
Maryland.....			3,818	4	3,881	4	4,864	4
Missouri.....	2,695	19	11,506	12	19,993	17	21,200	17
Nebraska.....			-		1,024	1	1,883	1
New Mexico.....			935	1	2,946	3	3,805	3
New York.....			935	1	-			
North Carolina.....			935	1	-			
North Dakota.....			935	1	1,024	1	1,883	1
Ohio.....			935	1	-			
Oklahoma.....			1,896	2	-			
Oregon.....			935	1	1,024	1	1,883	1
Palmyra Atoll.....			-		-			
Pennsylvania.....			935	1	1,024	1	1,883	1
Tennessee.....			-		1,024	1	1,883	1
Washington.....			935	1	-			
Obligations.....	55,225	83	65,327	68	86,814	82	101,001	86
Lapsing Balances	230	-	503	-	-	-	-	-
Total, Available.....	55,455	83	65,830	68	86,814	82	101,001	86

**CLASSIFICATION BY OBJECTS**

*Table OCIO-13 Classification by Objects (thousands of dollars)*

Item No.	Item	2019 Actual	2020 Actual	2021 Enacted	2022 Budget
Personnel Compensation:					
	Washington D.C.....	\$7,829	\$2,732	\$3,000	\$5,870
	Personnel Compensation, Field.....	2,353	6,689	14,600	13,000
11	Total personnel compensation.....	10,182	9,421	17,600	18,870
12	Personal benefits.....	2,994	3,021	4,886	5,124
13.0	Benefits for former personnel.....	8	9	15	15
	Total, personnel comp. and benefits.....	13,184	12,451	22,501	24,009
Other Objects:					
21.0	Travel and transportation of persons.....	109	52	1,000	1,100
22.0	Transportation of things.....	-	-	243	244
23.1	Rental payments to GSA.....	230	230	70	70
23.2	Rental payments to others.....	-	-	165	165
23.3	Communications, utilities, and misc. charges.....	415	374	2,596	2,653
24.0	Printing and reproduction.....	15	67	158	159
25	Other contractual services.....	-	-	-	-
25.1	Advisory and assistance services.....	-	8,730	8,219	17,800
25.2	Other services from non-Federal sources.....	21,597	220	1,000	10,901
25.3	Other goods and services from Federal sources.....	18,536	1,176	1,000	1,000
25.4	Operation and maintenance of facilities.....	-	26,465	1,000	1,200
25.5	Research and development contracts.....	-	36	7,350	1,000
25.6	Medical Care.....	-	10,196	-	-
25.7	Operation and maintenance of equipment.....	-	3	1,000	1,020
26.0	Supplies and materials.....	644	4,061	660	683
31.0	Equipment.....	495	1,000	2,013	800
33.0	Investments and loans.....	-	-	50	50
41.0	Grants, subsidies, and contributions.....	-	-	37,189	37,547
42.0	Insurance Claims and Indemnities.....	-	239	600	600
43.0	Interest and Dividends.....	-	27	-	-
	Total, Other Objects.....	42,041	52,876	64,313	76,992
99.9	Total, new obligations.....	55,225	65,327	86,814	101,001
	DHS Building Security Payments (included in 25.3).....	\$83	\$83	\$83	\$83
Information Technology Investments:					
	Name of Major Investment.....	SO-OCIO-DISC-AgLearn			
11	Internal Labor.....	-	\$572	\$532	\$641
	External Labor (Contractors).....	-	2,514	2,691	4,388
25.2	Outside Services (Consulting).....	-	68	1	-
Information Technology Investments:					
	Name of Major Investment.....	SO-OCIO-DISC-Robotics Process Automation (RPA)			
11	Internal Labor.....	-	146	300	146
	External Labor (Contractors).....	-	382	1,311	691
25.2	Outside Services (Consulting).....	-	1,198	0	1,198
Information Technology Investments:					
	Name of Major Investment.....	SO-OCIO-Enterprise Data Analytics Platform and Toolset (EDAPT)			
25.2	Outside Services (Consulting).....	-	7,438	18,180	5,000
Information Technology Investments:					
	Name of Major Investment.....	SO-OCIO-IT Infrastructure Investments			
11	Internal Labor.....	-	143,293	194,656	165,406
	External Labor (Contractors).....	-	155,869	242,020	340,603
25.2	Outside Services (Consulting).....	-	21,843	21,558	64,584
Position Data:					
	Average Salary (dollars), ES Position.....	\$182,110	\$182,110	\$184,842	\$187,614
	Average Salary (dollars), GS Position.....	\$126,578	\$126,578	\$37,668	\$38,233
	Average Grade, GS Position.....	13.1	13.1	10.2	10.0

## **STATUS OF PROGRAMS**

The Clinger-Cohen Act of 1996 required the establishment of a Chief Information Officer (CIO) for all major Federal agencies. The Act requires USDA to maximize the value of information technology acquisitions to improve the efficiency and effectiveness of USDA programs. To meet the intent of the law and to provide a Departmental focus for information resources management issues, USDA Secretary’s Memorandum 1030-30, dated August 8, 1996, established the Office of the Chief Information Officer (OCIO). The CIO serves as the primary advisor to the Secretary on Information Technology (IT) issues. OCIO provides leadership for the Department's information and IT management activities in support of USDA program delivery.

Additionally, the Federal Information Technology Acquisition Reform Act (FITARA), enacted on December 19, 2014, augments the Clinger-Cohen Act and strengthens the role of the CIO. FITARA outlines specific requirements related to:

- Agency Chief Information Officer (ACIO) Authority Enhancements
- Enhanced Transparency and Improved Risk Management in IT Investments
- Portfolio Review
- Federal Data Center Consolidation Initiative
- Expansion of Training and Use of IT Cadres
- Maximizing the Benefit of the Federal Strategic Sourcing Initiative
- Government-wide Software Purchasing Program

## **Current Activities**

### **Federal Information Technology Acquisition Reform Act (FITARA)**

The USDA Common Baseline Plan establishes a framework for USDA to implement the specific authorities that FITARA gives to the Chief Information Officer (CIO), Mission Area Assistant CIOs (ACIOs), and builds upon the responsibilities outlined in the Clinger-Cohen Act of 1996. USDA provides an update on the actions and milestones in the plan quarterly and a FITARA Self-assessment annually. The update and self-assessment require the cooperation and collaboration between the USDA CIO, Chief Financial Officer (CFO), Chief Human Capital Officer, Office of Budget and Program Analysis (OBPA) Director, and Senior Procurement Officers (henceforth call the CXOs).

FITARA is focused on improving the management of IT across the Department and improving the scores on the Biannual House of Representative’s Committee on Oversight and Reform’s (COR) FITARA Scorecard. The tenth iteration of the FITARA Scorecard, released August 2020, continued to grade the agency’s implementation of:

1. Federal Information Technology Acquisition Reform (FITARA) provisions);
2. Making Electronic Government Accountable by Yielding Tangible Efficiencies Act of 2016 (MEGABYTE);
3. Modernizing Government Technology (MGT) Act; and
4. Federal Information Security Modernization Act of 2014 (FISMA).

USDA moved from a D- to a B+ on the tenth iteration of the FITARA Scorecard and was recognized as one of the most improved. The Director of FITARA developed a plan to achieve an A on the FITARA Scorecard in FY 2021. The plan is designed to address each of the metrics on the FITARA Scorecard--Incremental Development, Transparency and Risk Management, Portfolio Management, Federal Data Center Optimization Initiative (DCOI), Modernizing Government Technology Act (MGT), and FISMA. The eleventh iteration of the Biannual FITARA Scorecard (11.0) will also see the removal of Software Licensing MEGABYTE and the possible addition of Transition Off, GSA’s Expiring Telecommunications Contracts. Improvement in these areas will have USDA on the path to an A+.

**USDA Centers of Excellence (CoE)**

In FY 2020, the Department completed the Centers of Excellence activities and initiatives were aligned to various CXO offices within the Department to continue modernization efforts.

**IT Infrastructure Optimization – Data Center Consolidation Initiative**

The Digital Infrastructure Services Center (DISC) successfully achieved objectives established by the Deputy Secretary in 2017. DISC was charged with closing 37 USDA data centers and migrating all computing from these facilities to one Enterprise Data Center in Kansas City with a backup facility in St. Louis, no later than the end of FY 2020. This objective was accomplished in the third quarter of FY 2020, producing an A rating in Data Center Optimization on the FITARA scorecard with over \$61 million in net cost savings.

**End User Consolidation (EUC)**

The End User Consolidation (EUC) program began in FY 2018 with a goal to consolidate over 70,000 end users from Mission Area (MA) separate end-user support services into a single entity. Less than three years later, the Client Experience Center (CEC) has accomplished this major consolidation effort ahead of schedule and exceeded goals set by the Secretary and OCIO to optimize the value of IT services. As a result, the EUC program took CEC from supporting roughly 37,000 users to supporting approximately 102,000 users.

**E-Government**

USDA participates in nine E-Government Presidential Initiatives and five Lines of Business (LoB), each fulfilling the requirements under the E-Government Act of 2002 (Section 206), the Clinger-Cohen Act, and the Government Paperwork Elimination Act, as well as furthering the effectiveness and efficiency of government. These initiatives involve Mission Area, agency, and staff office collaboration through support of pilot projects and the use of innovative technologies in which USDA typically contributes a share of operational costs based on a combination of service usage metrics.

<b>OCIO-Funded E-Government Presidential Initiatives and Lines of Business</b>	
<b>Initiatives</b>	<b>Lines of Business (LoB)</b>
Benefits.gov	Budget Formulation and Execution LoB
Disaster Assistance Improvement Plan	Financial Management LoB
E-Rulemaking	Geospatial LoB
Grants.gov	Human Resources Management LoB
Federal PKI Bridge	Performance Management LoB
Freedom of Information Act Portal	
Integrated Acquisitions Environment (IAE)	
USAJOBS	

**Enterprise Architecture**

The Enterprise Architecture Division (EAD) provides a planning concept and delivery process designed to help translate business strategies into mission results. We leverage data as a strategic asset so that architecture becomes a tool to make data-driven decisions that optimize resources and identify duplication and cost saving opportunities. The EAD team supports the creation of an integrated, tiered Enterprise Architecture (EA) that supports improved planning and risk management at both the agency and Department levels. Additionally, the team supports standardization on common computing platforms to enhance interoperability and reduce cost of ownership; and improves the USDA’s planning and decision-making by more closely aligning EA activities to the IT Capital Planning processes.

- The EAD team worked with the Capital Planning team to integrate AgMax Enterprise Architecture Visioning Environment (EAVE) Data Integration effort in support of Department Application Rationalization initiative. This effort will continue in FY 2021 to provide cost information at the application level.



- The EAD team engaged in a collaborative effort with the Information Security Center (ISC) to develop a Security Architecture and held discussions with Mission Areas on integrating the security architecture into the EAVE. In FY 2021, EAD will continue to work with ISC to integrate the security architecture and framework into EAVE. Additionally, EAD will work with the Office of the Chief Financial Officer (OCFO) to integrate new financial management regulations and requirements.
- The EAD team is working with the Mission Areas to update the USDA Level 1 and 2 Business capabilities in support of the Department Application Rationalization initiative. In FY 2020, EAD worked with Mission Area to identify several hundred new applications within the USDA portfolio. In FY 2021, the EAD will work with Mission Areas to continue validating their respective application inventories and look for opportunities to reduce and/or streamline USDA application footprint across the business capabilities.

### **Capital Planning and IT Governance (CPITG)**

CPITG governs and oversees 209 total IT investments (42 Major, 49 Non-Major Investments, 73 Standards, 45 IT Funding Transfers), managing USDA's \$2.52 billion IT investment portfolio is CPITGD's primary mission.

CPITG is responsible for ensuring that the Department's IT investments deliver products that result in business value to the agencies, while providing a positive return on the IT investments for taxpayers. The CPITG ensures the establishment and implementation of IT Governance through strategic initiatives, sound structure, oversight, regulatory compliance, accountability, transparency, and the fiscal responsibility of IT decisions.

A focus of the program is to reinforce the requirements from the Secretary, the CIO and OMB to the Mission Areas regarding ensuring the transparency, accountability and alignment of Agency IT portfolio of investments and USDA strategic priorities throughout the investment life cycle. Verification and validation of these requirements are done through monthly, quarterly and annual investment reporting to the USDA and OMB, which includes CIO investment evaluations, and quarterly integrated data collections. Additionally, monthly Governance Board Reviews and ad-hoc Program Reviews and Tech-Stat Reviews are conducted with the USDA Senior Leaders.

CPIC and IT Governance aide USDA in addressing transparency and accountability through the Department-wide implementation of an industry best practice and OMB adopted taxonomy known as Technology Business Management (TBM), which is the sharing of information at the lowest level that reduces silos, enables cost transparency, supports data-driven decisions across lines of businesses (IT, Finance, Budget, Acquisition and HR) and improves customer service and accountability. Capital planning is working with the Office of Procurement and Contracting to automate acquisition approval requests (AAR) and contract information data exchange to strengthen and streamline the IT acquisition process.

The Department's Executive IT Investment Review Board (E-Board) serves as the USDA senior authoritative body charged with the oversight of IT investments with consideration to government "best practices", as well as OMB's Federal Acquisition Regulation and USDA official guidance.

### **Cybersecurity (USDA Chief Information Security Officer)**

The Information Security Center (ISC), formerly the Agriculture Security Operations Center, or ASOC, was funded by Congress in 2009 and mandated by the Office of Management and Budget (OMB) M-19-2, "Fiscal Year 2018-2019 Guidance on Federal Information Security and Privacy Management Requirements Purpose," to serve as a focal point for addressing cybersecurity incidents within all agencies, offices, branches and entities of the United States Department of Agriculture (USDA). ISC's mission is to increase the Department's awareness of cyber threats and vulnerabilities while enhancing readiness in preparing for and responding to attacks involving USDA's computer systems and networks, as well as a complete Assessment and Authorization (A&A) via the Risk Management Framework (RMF) process for all USDA systems.

In accordance with FISMA and other mandates (OMB, Executive Orders), ISC diligently manages system security compliance activities across all USDA information systems, develops cybersecurity policy and supports audit-related activities. All USDA FISMA audit activities during FY 2020 were completed on time. During FY 2020, ISC successfully closed six outstanding Office of Inspector General (OIG) audit recommendations, significantly reducing risks to the Information Technology (IT) enterprise. Two audit recommendations remain open and are expected to be closed in FY 2021.

During FY 2020, ISC continued to streamline the USDA A&A process in accordance with National Institutes of Standards and Technology (NIST) Special Publication (SP) 800-53 Revision 4, and maintained the overall time for System Owners to gain an Authority to Operate (ATO) to an average of 90 days. In addition to maintaining specific standards, ISC began the process of establishing the foundational work for USDA to transition to NIST SP 800-37 Revision 2, that will greatly increase the risk management ability of USDA systems.

During FY 2020, ISC met OMB's goal of 100% of USDA systems with a current ATO. Additionally, ISC increased, by 62%, the number of systems having Business Impact Analysis (BIA) in place thereby achieving an overall 95% across the enterprise. By the end of FY 2020, 100% of high-impact systems and nearly all High-Value Assets (HVAs) have BIAs in place with the remainder being actively addressed. In compliance with FISMA and applicable OMB and USDA directives, ISC facilitated closure of over 1,190 Plans of Action and Milestones (POA&Ms), more than 390 of which were delayed and 25% aged 2-5 years. In addition, POA&Ms were tracked to identify, assess, prioritize, and monitor agencies' progress towards correcting security deficiencies and/or vulnerabilities.

ISC Operational Security Assessment and Penetration Testing Programs were comprehensive security assessment mechanisms that supported the Department's goal of improving the overall security posture. This was in accordance with NIST 800-37 and NIST 800-53 requirements. Both programs examined and evaluated agency's information technology systems and the supporting operational policies and procedures. The programs provided USDA agencies with timely and actionable intelligence to assist in defending valuable business and mission assets against cyber threats. The programs enabled agencies to prioritize and remediate vulnerabilities in a timely manner, improve security posture, and strengthen the protection of information and associated assets.

In FY 2020, ISC conducted penetration testing on 23 Mission Areas and offices. Each Mission Area, and/or headquarter office tested was provided an out-briefing which allowed the technical staff an opportunity to address specific exploitations. Additionally, the penetration test team conducted one component level operational security assessment for the Foreign Agricultural Service. In FY 2021 additional penetration will be conducted during FY 2020, ISC also completed 12 phishing exercises.

ISC has implemented and is working to mature several security tools and capabilities. Microsoft Defender for Endpoint covers all end users and provides analyses for security related events across the Department, identifies malicious activity, and supplies a forensic analysis capability. With the recent consolidated Splunk capability, Splunk Enterprise Security is used as a Security Information and Event Management System (SIEM) to collect all server logs. Also, Tanium, a software tool, monitors hardware and software assets and allows for rapid cyber incidents detection and responses, like immediate device isolation, live response forensics, and antivirus scanning. These tools have broadened ISC's visibility, allowing ISC to rapidly respond to security events and protect USDA's IT assets.

ISC continues to improve its HVA Program by working with the Department of Homeland Security (DHS) Cybersecurity and Infrastructure Security Agency (CISA) to assess the HVA overlay controls in compliance with OMB Memorandum 19-03 "Strengthening the Cybersecurity of Federal Agencies by enhancing the High Value Asset Program." In FY 2020, CISA assessed six of USDA's 16 Tier 1 HVA systems and USDA resolved the resulting POA&M's with 100% compliance.

ISC has implemented and continues to mature Big Data architecture tools at an enterprise level to collect and process security related data (attacks, vulnerabilities). The information collected is used to conduct behavioral analyses, identify malicious pattern identification, and perform deep forensic analyses for incidents that potentially span multiple months thereby providing long-term security metrics and trends. Big Data provides a scalable and adaptable data repository to allow for rapid cyber incidents detection and responses like Blacklisting and Emergency Blocks. The Big Data tools allow ISC to apply predictive analytics to network traffic and create a unique real-time profile of the network, monitor it against up-to-date government / commercial cyber intelligence threats and act accordingly.

In accordance with Executive Order 13800 (Strengthening the Cybersecurity of Federal Networks and Critical Infrastructure) and OMB 17-25 "Reporting Guidance for Executive Order on Strengthening the Cybersecurity of Federal Networks and Critical Infrastructure", the USDA ISC Security Operations Consolidation (SecOps) ISC consolidated 87 software and hardware tools to 11 tools; transitioned 56 personnel and 4 vacancies from the Mission Areas into the ISC organization; and, unified 57 disparate processes including revising the Incident Response

Process that addressed gaps in the process. In addition, ISC increased USDA’s cybersecurity FITARA score from a D to a C, which contributed to USDA’s overall FITARA score increase to a B.

ISC continues to act as an early adopter for the DHS Continuous Diagnostics and Mitigation (CDM) Program in compliance with OMB Memorandum 14-03, “Enhancing the Security of Federal Information and Information Systems”, which established requirements for Information Security Continuous Monitoring (ISCM). In FY 2020, USDA piloted the FISMA containerization feature within the Hardware Asset Management (HWAM) tool to scan for vulnerabilities. Two Mission Areas participated in the pilot and 20 containers were created and scanned. USDA continues to mature HWAM tools and has implemented Software Asset Management (SWAM) tools with 126,423 software agents running daily to capture authorized and unauthorized applications running on the network and endpoints within the environment.

In support of the USDA FY 2018-2022 Strategic Plan and CIO goals and objectives, ISC plans to focus on four key areas: Zero Trust; Risk Management Framework (RMF) 2.0; 21st Century Workforce Initiative; and Artificial Intelligence/Robotic Process Automation (AI/RPA). Zero Trust will focus on evolving the cybersecurity paradigms that move defenses from static, network-based perimeters to focus on the users, assets and resources. RMF 2.0 will align USDA with the next generation risk management framework, incorporating privacy and supply chain risk management into our assessment and authorization processes. The ISC 21st Century Workforce Initiative will ensure the USDA cybersecurity workforce aligns with the National Initiative for Cybersecurity Education (NICE) Framework. Finally, ISC will focus on maturing AI/RPA to increase productivity throughout USDA.

### **Chief Data Officer and Enterprise Analytics**

USDA has an opportunity to harness its vast data assets strategically to improve internal decision-making and efficient use of resources, maximize the impact of citizen-facing programs, and provide the public and private industry with easy access to data that can solve public problems and drive commercial innovation. The USDA Chief Data Officer in the Office of the CIO develops and implements the USDA data and workforce strategy to deliver on this promise by:

- **Data Governance:** Overseeing the USDA data governance board and the work of Mission Area Assistant Chief Data Officers and their teams to implement the Federal data strategy and to set and enforce priorities and policies that promote data sharing, advanced analytics, efficient use of resources, and public access to data;
- **Enterprise Data & Analytics Infrastructure:** Managing the USDA’s enterprise dashboards, data analytics infrastructure and toolsets, assessing USDA’s data and analytics infrastructure and lifecycle, and creating and implementing a USDA data and analytics infrastructure and tools roadmap for USDA’s internal and open data platforms;
- **Enterprise Data Analytics Solutions:** Developing cross-cutting Departmental analytics solutions with Enterprise Data and Analytics Services (EDAS) that reduce manual collection of data, provide more timely access to information, and provide more insight into voluminous data; to date, USDA created over 500 dashboard views that provide USDA leadership and workforce with information for decision making on USDA’s seven main administrative functions and each of 8 USDA’s Mission Area programs. Dashboard usage has grown from about 1,500 views per month in 2018 to 50,000 views per month in 2020 with a spike up to 90,000 views in June 2020 due to the release of COVID-19 reopening dashboards; and
- **Data Workforce and Training:** Developing USDA data workforce strategies to identify critical data skills, assess capacity, and close skills gaps.

### **Strategic Sourcing Category Management Office (CMO)**

During FY 2020, the Category Management Office (CMO) implemented several new Standard Operating Procedures (SOP) and Quick Reference Guides to support USDA’s strategic sourcing strategy. The development of the SOPs allowed the OCIO to respond to FISMA Audits, thereby quickly satisfying audit requirements.

The CMO was instrumental in activating several option-year contracts to support the USDA’s mission. Among those activated included Adobe Software, Cisco, MIR3, Splunk, and SAS, and applied category management principles and techniques to renew both the IMPLAN and Survey Tools contracts.

*Category Management (CM) was instrumental in establishing the Granicus/GovDelivery BPA and performed licenses true-ups for the Enterprise Microsoft contract. This effort served as the precursor for establishing a new multi-year contract supporting the Department's Enterprise Business Solution service requirements. The award is set to occur in the second quarter FY 2021. The CMO maintains an "A" on the GAO FITARA "Scorecard 10" dated July 2020 for Software Licensing/MEGABYTE ACT.*