2020 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 funded through the USDA Working Capital Fund and appropriations to USDA agencies through the Client Experience Center, National Information Technology Center and the Enterprise Network Services with locations in Ft. Collins, Colorado; Kansas City, Missouri; and Washington, D.C. Direct Automated Data Processing services are provided to the Office of the Secretary, Office of the General Counsel, Office of Communications, and Departmental Administration.

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 will transition IT customer support services to enterprise services managed by the OCIO over the next two years, providing cost-effective, high quality Department-wide helpdesk, desktop, voice, and mobile shared services. Over the same period, we will also consolidate 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, 2018, there were 956 full-time permanent employees funded by appropriated and Working Capital Funds. OCIO's Full-Time Permanent includes, Direct and Reimbursable of 92 and WCF of 864 for a total of 956.

OIG and GAO Reports

Table OCIO-1. Completed OIG Reports

ID	Date	Title	Results
#50501-02-IT	11/2010	Fiscal Year 2010 Federal Information Security Management	This audit contained 19 recommendations. OCFO has granted final action on all.
#50501 01 IT	09/2011	Act Report USDA's Management and	The audit resulted in five recommendations, OIC has greated
#30301-01-11	08/2011	Security over Wireless Handheld Devices	The audit resulted in five recommendations. OIG has granted final action on all recommendations.
#88501-0002- 12	08/2014	Management and Security over USDA's Universal Tele- communications Network Report	This audit contained 21 recommendations. OCFO has granted final action on all 21 recommendations.

Table OCIO-2. In-Progress OIG Reports

ID	Date	Title	Results
#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.

ID	Date	Title	Results
#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.

Table OCIO-3. Completed GAO Reports

ID	Date	Title	Results
#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

ID	Date	Title	Results
#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.

ID	Date	Title	Results
#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.
#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))

T	2017		2018		2019		2020	
Item	Actual	\mathbf{SY}	Actual	\mathbf{SY}	Estimate	\mathbf{SY}	Budget	\mathbf{SY}
Salaries and Expenses:								
Discretionary Appropriations	\$49,538	93	\$58,950	89	\$58,950	89	\$101,400	98
Adjusted Appropriation	49,538	93	58,950	89	58,950	89	101,400	98
Lapsing Balances	-125	-	-132	-	-	-	-	-
Obligations	49,413	93	58,818	89	58,950	89	101,400	98
E-GOV Initiative.	7,888	-	8,098	-	8,262	-	6,977	-
Geospatial IS	6,109	-	-	-	-	-	-	-
NTIA Spectrum	2,075	-	1,989	-	2,140	-	2,140	-
EPMS	1,820	5	4,748	3	4,748	3	4,748	3
Project Definition	517	-	526	-	564	-	563	-
Other Activities	257	-	-	-	-	-	-	-
Total, Other USDA	18,666	5	15,361	3	15,714	3	14,428	3
Total, Agriculture Appropriations	68,079	98	74,179	92	74,664	92	115,828	101
Other Federal Fund (WCF)s:								
Information Technology	436,426	850	-	-	-	-	-	-
NITC (Non-USDA)	30,781	39	-	-	-	-	-	-
ASC - Office of the Chief Information Officer								
Oversight	-	-	1,019	5	1,463	7	1,479	7
Client Experience Center	-	-	307,078	652	326,957	707	328,167	707
Digital Infrastructure Services Center	-	-	161,797	183	208,025	268	208,024	268
Enterprise Network Services	-	-	28,828	24	78,005	83	89,764	83
Total, Other Federal (WCF)	467,207	889	498,722	864	614,450	1,066	627,435	1,065
Total, OCIO	535,286	987	572,901	956	614,450	1,157	627,435	1,166

PERMANENT POSITIONS BY GRADE AND STAFF YEARS

Table OCIO-6. Permanent Positions by Grade and Staff Years

Item			2017 Actual			2018 Actual			2019 Estimate			2020 Budget
	D.C.	Field	Total	D.C.	Field	Total	D.C.	Field	Total	D.C.	Field	Total
SES	8	-	8	7	-	7	7	-	7	7	-	7
GS-15	16	2	18	15	1	16	15	1	16	15	1	16
GS-14	37	9	46	29	14	43	29	14	43	38	14	52
GS-13	11	6	17	6	5	11	6	5	11	6	5	11
GS-12	7	3	10	5	4	9	5	4	9	5	4	9
GS-11	2	-	2	2	-	2	2	-	2	2	-	2
GS-9	5	-	5	4	-	4	4	-	4	4	-	4
GS-4	1	-	1	-	-	-	-	-	-	-	-	-
Total Permanent	87	20	107	68	24	92	68	24	92	77	24	101
Unfilled, EOY	9	-	9	-	-	-	-	-	-	-	-	-
Total Perm. FT EOY	78	20	98	68	24	92	68	24	92	77	24	101
Staff Year Est	78	20	98	65	27	92	65	27	92	65	36	101

a/ Positions shown are appropriated and reimbursement only. For WCF financed positions, refer to the WCF Explanatory Notes.

VEHICLE FLEET

Motor Vehicle Fleet

OCIO-Client Experience Center (CEC) is the in-house provider of information technology service and support for over 45,000 USDA Service Center Agency (SCA) employees at 3,400 field, State, and headquarters offices located across all 50 U.S. States. All CEC support offices are co-located with SCA's field offices. The SCAs consist of Farm Service Agency (FSA), Rural Development (RD) and the Natural Resources Conservation Service (NRCS). Our customers are FSA, NRCS, and RD and their respective partner organizations.

The current OCIO-CEC fleet consists of GSA leased vehicles. They are used 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. The agencies can then focus on supporting the efforts of the farmers, property owners, and rural communities. 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 other SCA locations and maintain a unified organization dedicated to supporting both the shared and diverse IT requirements of the SCAs and their partner organizations. CEC also use the fleet to address issues with malfunctioning IT equipment at these locations.

OCIO's current fleet is based on mission and geographic needs. As of September 30, 2018, CEC has 273 leased GSA vehicles and NITC has 1 leased GSA vehicle. CEC continues to lease vehicles from GSA to provide IT support to the SCAs within USDA.

Changes to the Motor Vehicle Fleet

No replacements of vehicles have been proposed for 2020.

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.

Table OCIO-7. Size, Composition, and Annual Costs of Motor Vehicle Fleet^a

Fiscal Year	Sedans and Station Wagons	Lt. Trucks, SUVs, and Vans (4x2)	Lt. Trucks, SUVs, and Vans (4x4)	Total Vehicles	Annual Operating Costs ^b
2017	222	31	17	270	\$914
Change	+2	-	-	+2	+32
2018	224	31	17	272	946
Change	+25	-25	+2	+2	+4
2019	249	6	19	274	950
Change	-	-	-	-	+14
2020	249	6	19	274	964

^a Vehicle count include those owned by agency and leased from commercial sources or GSA.

b 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)

Working Capital Fund:	Item	2017 Actual	2018 Actual	2019 Estimate	2020 Budget
Material Management Service \$115 \$43 \$56 \$76 Mail and Reproduction Services \$187 \$17 \$15 \$182 \$181 Integrated Procurement Systems \$443 \$446 \$344 \$410 Procurement Operations Services \$4,138 \$4,270 \$4,362 \$4,105 Human Resources Interprise Management Systems \$4,891 \$4,924 \$5,006 \$4,762 Communications Services \$4,891 \$4,924 \$5,006 \$4,762 Communications Services \$4,891 \$4,924 \$5,006 \$4,762 Communications Services \$23 \$55 \$58 \$58 Finance and Management Systems \$286 \$295 \$275 \$288 Financial Management Systems \$1,475 \$1,677 \$1,673 \$1	Working Capital Fund:	Actual	Actual	Estimate	Duuget
Material Management Services \$115 \$43 \$66 \$75 Mail and Reproduction Services 187 157 182 159 Integrated Procurement Systems 443 446 384 410 Procurement Operations Services 8 8 8 12 12 Subtotal 8 8 8 12 12 Subtotal 28 8 8 12 12 Communications: 28 8 8 12 12 Communications 2 28 295 275 28 88 18 12 <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>					
Mail and Reproduction Services 187 157 182 182 Integrated Procurement Systems 443 446 384 490 Homan Resources Enterprise Management Systems 4,138 4,270 4,362 4,105 Subtotal 4,891 4,924 4,500 4,762 Communications: 2 5 158 8 Creative Media & Broadcast Center 23 5 158 5 Finance and Management: 2 26 295 275 288 Financial Management Systems 1,475 1,675 1,673 1,673 1,673 1,673 1,673 1,673 1,673 1,673 1,673 1,673 1,673 1,672 1,673 1,6		\$115	\$43	\$66	\$76
Integrated Procurement Systems 443 444 and 384 410 384 410 436 410 Procurement Operations Services 4 8 8 12 12 12 22 30 50 500 4,702 4,06 4,702 4,06 4,702 4,00 4,702 4,00 4,702 4,00 </td <td></td> <td>•</td> <td></td> <td></td> <td>159</td>		•			159
Procurement Operations Services 4,138 4,270 4,362 4,105 Human Resources Enterprise Management Systems 8 8 12 12 Subtotal 4,891 4,924 5,006 4,762 Communications: 23 55 158 58 Finance and Management 2 26 295 275 288 Financial Management Systems 1,475 1,667 1,673 1,673 Internal Control Support Services 171 1,74 23 205 Subtotal 2,299 2,547 2,605 2,619 Information Technology: 367 421 454 455 Subtotal 2,299 2,547 2,605 2,619 Information Technology: 367 421 4,544 4,55 Client Experience Center 5,452 4,871 6,489 6,595 Enterprise Network Services 14,542 14,764 37,986 39,202 Subtotal 2,797 2,808 8,842	-		446	384	410
Human Resources Enterprise Management Systems			4.270		4.105
Subtotal 4,891 4,924 5,006 4,762 Communications: Creative Media & Broadcast Center 23 55 158 58 Finance and Management: 286 295 275 288 Financial Management Systems 1,475 1,667 1,673 1,673 Internal Control Supron Services 171 174 203 202 Financial Management Systems 1,475 1,667 1,673 1,674 Internal Control Supron Services 367 421 454 455 Subtotal 2,299 2,547 2,605 2,619 Information Fechnology: 1,642 1,4764 37,986 63,920 Cifient Experience Center 5,452 4,871 6,489 65,955 Enterprise Network Services 11,542 1,4764 37,986 39,202 Subtotal 279,27 2,8058 57,318 5,868 Circe Spondence Management 1,7 15 4 4 Orrespondence Management 1		,	_		12
Communications: 23 55 158 8 Finance and Management: 286 295 275 288 Finance and Management Systems 1,475 1,657 1,673 1,674 Infancial Management Systems 1,71 174 203 202 Financial Management Systems 367 421 454 455 Subtoal 2,299 2,547 2,605 2,619 Information Technology: 1 1,72 2,720 2,605 2,619 Digital Infrastructure Services Center 5,452 4,871 6,489 6,595 Enterprise Network Services 1,542 1,476 3,786 30,202 Subtotal 27,927 28,058 5,318 85,682 Correspondence Management 17 15 4 4 Total, Working Capital Fund 35,156 35,599 65,090 66,126 Department-Wide Shared Cost Programs: 4 1 2 1 2 1 4 4 7		4.891			
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Finance and Management 286 295 275 288 Financial Management Systems 1,475 1,657 1,673 1,674 Internal Control Support Services 171 174 203 202 203 202 203 202 203 202 203 202 203 202 203 202 203 202 203 202 203 202 203 202 203 202 203 202 203		23	55	158	58
National Finance Center		23	55	130	50
Financial Management Systems	č	286	295	275	288
Internal Control Support Services 171 174 203 202 Financial Management Support Services 367 421 454 455 Subtotal 2,299 2,547 2,605 2,619 Information Technology: 7,932 8,423 12,843 12,885 Digital Infrastructure Services Center 5,452 4,871 6,489 6,595 Client Experience Center 14,542 14,764 37,986 39,202 Subtotal 27,977 28,058 57,318 8,682 Correspondence Management 17 15 5 4 4 Total, Working Capital Fund 35,156 35,599 65,090 66,126 Department-Wide Shared Cost Programs: 18 4 - - 81 84 84 Agency Partnership Outreach 4 8 84 Classified National Security Information 16 - - - - - - - - - - - - - <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>					
Financial Management Support Services 367 421 454 455 Subtotal 2,299 2,547 2,605 2,619 Information Technology: Digital Infrastructure Services Center. 7,932 8,423 12,885 Client Experience Center 5,452 4,871 6,489 6,595 Enterprise Network Services 14,542 14,764 37,986 39,202 Subtotal 27,927 28,058 57,318 8,682 Correspondence Management 17 15 4 4 Total, Working Capital Fund 35,156 35,599 65,090 66,126 Department-Wide Shared Cost Programs: 41 - - - 1890's USDA Initiatives 41 - - - Agency Partnership Outreach 16 - - - Classified National Security Information 16 - - - Classified National Security Information 16 - - - Facility and Infrastructure Review and Assessment </td <td></td> <td>,</td> <td></td> <td>,</td> <td></td>		,		,	
Subtotal 2,299 2,547 2,605 2,619 Information Technology: Digital Infrastructure Services Center 7,932 8,423 12,843 12,883 Client Experience Center 5,452 4,871 6,489 6,595 Enterprise Network Services 14,542 14,764 37,986 39,202 Subtotal 27,927 28,058 57,318 58,682 Correspondence Management 17 15 4 4 Total, Working Capital Fund 35,156 35,599 65,090 66,126 Department-Wide Shared Cost Programs: 41 - - 1890's USDA Initiatives 41 - - Agency Partnership Outreach 16 - - - Classified National Scurity Information 16 - - - Classified National Scurity Information 16 - - - - Classified National Program 22 - - - - Faith Based Initiatives and Neighborhood Partn					
Information Technology: Digital Infrastructure Services Center	- · · · · · · · · · · · · · · · · · · ·				
Digital Infrastructure Services Center. 7,932 8,423 12,843 12,885 Client Experience Center. 5,452 4,871 6,489 6,595 Enterprise Network Services. 14,542 14,764 37,986 39,202 Subtotal. 27,927 28,058 57,318 58,682 Correspondence Management 35,156 35,599 65,090 66,126 Department-Wide Shared Cost Programs: 1 1 - - - 1890's USDA Initiatives. 41 - - - - - Agency Partnership Outreach - 81 84 84 Classified National Security Information 16 - - - - Continuity of Operations Planning 23 - - - - - Emergency Operations Center 26 - - - - - - - - - - - - - - - - - - <td></td> <td>2,299</td> <td>2,347</td> <td>2,003</td> <td>2,019</td>		2,299	2,347	2,003	2,019
Client Experience Center 5,452 4,871 6,489 6,595 Enterprise Network Services 14,542 14,764 37,986 39,202 Subtotal 27,927 28,058 57,318 58,682 Correspondence Management 17 15 4 4 Total, Working Capital Fund 35,156 35,599 65,090 66,126 Department-Wide Shared Cost Programs: 18908 USDA Initiatives 41 - - - 18908 USDA Initiatives 41 - - - - Agency Partarership Outreach 16 - - - Classified National Security Information 16 - - - Continuity of Operations Planning 23 - - - Emergency Operations Center 26 - - - Facility and Infrastructure Review and Assessment 5 - - - Facility and Infrastructure Review and Assessment 5 - - - Hispanic-Servin		7 022	9 122	12 9/12	12 005
Enterprise Network Services 14,542 14,764 37,988 39,202 Subtotal 27,927 28,058 57,318 58,682 Correspondence Management 17 15 4 4 Total, Working Capital Fund 35,156 35,599 65,090 66,126 Department-Wide Shared Cost Programs: 81 8 84 84 Agency Partnership Outreach 16 -			,	,	,
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Total, Working Capital Fund 35,156 35,599 65,090 66,126			,		58,682
Department-Wide Shared Cost Programs: 1890's USDA Initiatives. 41					4
1890's USDA Initiatives.		35,156	35,599	65,090	66,126
Agency Partnership Outreach - 81 84 84 Classified National Security Information 16 - - - Continuity of Operations Planning 23 - - - Emergency Operations Center 26 - - - Facility and Infrastructure Review and Assessment 5 - - - Faith-Based Initiatives and Neighborhood Partnerships 4 - - - - Hispanic-Serving Institutions National Program 22 -					
Classified National Security Information 16 - - - Continuity of Operations Planning 23 - - - Emergency Operations Center 26 - - - Facility and Infrastructure Review and Assessment 5 - - - Faith-Based Initiatives and Neighborhood Partnerships 4 - - - - Hispanic-Serving Institutions National Program 22 -	1890's USDA Initiatives	41	-	-	-
Continuity of Operations Planning	Agency Partnership Outreach	-	81	84	84
Emergency Operations Center 26 -	Classified National Security Information	16	-	-	-
Facility and Infrastructure Review and Assessment. 5 - 1 <t< td=""><td>Continuity of Operations Planning</td><td>23</td><td>-</td><td>-</td><td>-</td></t<>	Continuity of Operations Planning	23	-	-	-
Faith-Based Initiatives and Neighborhood Partnerships 4 -	Emergency Operations Center	26	-	-	-
Hispanic-Serving Institutions National Program 22	Facility and Infrastructure Review and Assessment	5	-	-	-
Honor Awards	Faith-Based Initiatives and Neighborhood Partnerships	4	-	-	-
Human Resources Self-Service Dashboard 6 6 6 7 Human Resources Transformation 18 10 - - Identity Access Management 74 - - - Medical Services 12	Hispanic-Serving Institutions National Program	22	-	-	-
Human Resources Transformation 18 10 - - Identity Access Management 74 - - - Medical Services 12	Honor Awards	-	-	1	1
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Agency Total	Total, E-Gov				
	Agency Total	35,554	35,990	65,469	66,570

ACCOUNT 1: SALARIES AND EXPENSES

APPROPRIATIONS LANGUAGE

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, \$101,400,000.

LEAD-OFF TABULAR STATEMENT

Table OCIO-9. Lead-Off Tabular Statement

Item	Amount
2019 Annualized Continuing Resolution	\$58,950,000
Change in Appropriation	+42,450,000
Budget Estimate, 2020.	101,400,000

PROJECT STATEMENT

Table OCIO-10. Project Statement (thousands of dollars, staff years (SY))

2017		2018		2019		Inc or	Chg		2020	
Actual	SY	Actual	SY	Estimate	SY	Dec	Key	SY	Budget	SY
\$49,538	93	\$58,950	89	\$58,950	89	+\$42,450	(1)	+9	\$101,400	98
-125		-132								
49,413	93	58,818	89	58,950	89	42,450		9	101,400	98
	*49,538 -125	Actual SY \$49,538 93 -125	Actual SY Actual \$49,538 93 \$58,950 -125 -132	Actual SY Actual SY \$49,538 93 \$58,950 89 -125 -132 -132	Actual SY Actual SY Estimate \$49,538 93 \$58,950 89 \$58,950 -125 -132 -132 -132 -132	Actual SY Actual SY Estimate SY \$49,538 93 \$58,950 89 \$58,950 89 -125 -132	Actual SY Actual SY Estimate SY Dec \$49,538 93 \$58,950 89 \$58,950 89 +\$42,450 -125 -132 <	Actual SY Actual SY Estimate SY Dec Key \$49,538 93 \$58,950 89 \$58,950 89 +\$42,450 (1) -125 -132 <td< td=""><td>Actual SY Actual SY Estimate SY Dec Key SY \$49,538 93 \$58,950 89 \$58,950 89 +\$42,450 (1) +9 -125 -132 -13</td><td>Actual SY Actual SY Estimate SY Dec Key SY Budget \$49,538 93 \$58,950 89 \$58,950 89 \$42,450 (1) +9 \$101,400 -125 -132 <t< td=""></t<></td></td<>	Actual SY Actual SY Estimate SY Dec Key SY \$49,538 93 \$58,950 89 \$58,950 89 +\$42,450 (1) +9 -125 -132 -13	Actual SY Actual SY Estimate SY Dec Key SY Budget \$49,538 93 \$58,950 89 \$58,950 89 \$42,450 (1) +9 \$101,400 -125 -132 <t< td=""></t<>

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 \$42,450,000 and 9 staff years for the OCIO (\$58,950,000 and 89 staff years available in 2019).

The funding change is requested for the following items:

A) An increase of \$10,950,000 and 9 staff years for Continuous Diagnostics and Mitigation Phases 2 and 3 (\$28 million and 62 staff years available in 2019).

The proposed funding is critical in providing on-going support for the Information Security Center (ISC) Continuous Diagnostics and Mitigation (CDM) Phases 2 and 3.

CDM Phase 2: "Who is on the network?" requires the management and control of account, access, and managed privileges, trust determination for people granted access, credentials and authentication, and security-related behavioral training. The tools installed during Phase 2 will ensure that only people with valid credentials will have access to the vast USDA network.

CDM Phase 3: "What is happening on the network?" builds on the CDM capabilities provided by "what is on the network?" (Phase 1) and "who is on the network?" These CDM capabilities include network and perimeter components, host and device components, data at rest and in transit, and user behavior and activities. These capabilities move beyond asset management to more extensive and dynamic monitoring of security controls. This includes preparing for and responding to behavior incidents, ensuring that software and system quality is integrated into the network/infrastructure, detecting internal actions and behaviors to determine who is doing what, and mitigating security incidents to prevent propagation throughout the network/infrastructure. Because CDM is a government-wide mandate, lack of funding will mean that USDA offices and agencies will have to pick up the costs for these tools and capabilities or USDA will have an incomplete adoption of the required tools and capabilities, leading to security risks.

CDM is a government-wide program that provides Federal Agencies with capabilities and tools that identify cybersecurity risks on an ongoing basis. It prioritizes these risks based on potential impacts and enables cybersecurity personnel across government access to standardized tools and procedures to mitigate the most significant problems first. Congress established the CDM program to provide adequate, risk-based, and cost-effective cybersecurity; and to more efficiently allocate cybersecurity resources.

USDA requires funding to cover the license renewal, vendor maintenance and support cost of the five CDM Phase 2 and Phase 3 tools it is implementing. Funding will also be used to address CDM training, governance support, and additional human resources necessary for the CDM program to remain viable at USDA. This includes the expected surge in post-detection activities (Identify, Protect, Analyze, Respond, Recover) that the CDM solution is expected to generate on an enterprise-wide basis.

These tools assist ISC in ensuring that it has full visibility into our digital and physical assets (our data and our servers) and the ability to understand our current risks and exposure so that OCIO can put policies and procedures into place to manage those risks.

The adoption of CDM tools and processes will assist ISC in detecting unusual activity and other threats to the network. Continuous monitoring and threat hunting are very effective ways to analyze and prevent cyber incidents in USDA networks.

B) An increase of \$31,500,000 for transition to USDA's modernized enterprise network (USDANet).

Over the past decade, the Department has matured its network requirements and changed its telecommunications traffic patterns to accommodate USDA's rapid expansion in the use of telecommunication services, including increased voice, video and data usage. However, the current network infrastructure faces challenges in keeping up with expanded requirements for bandwidth and security in a rapidly evolving technological landscape. Network capacity, within the current architecture, is stretched to its limits and some components on the core or "backbone" network are reaching the end of their respective product life cycles. The Department is currently faced with addressing its network challenges by either incorporating additional improvements to the existing network in-kind, or by instituting new and innovative solutions that may provide greater cost dividends and better preparedness in the future. The result will mean that the Department will be undergoing a paradigm shift from multiple agency-provided and managed networks to a single Department provided enterprise network.

The timing for the network modernization initiative is advantageous for USDA because the General Services Administration (GSA) has awarded the re-compete of its Networx Universal Government-Wide Acquisition Contracts set to expire in 2023. Currently, Networx is the contracting vehicle USDA uses to acquire its network services. GSA awarded its successor, Enterprise Infrastructure Solutions (EIS), in the spring of 2017. EIS is intended to make it easier for federal agencies to economically obtain telecommunication services and equipment. USDA will use this new vehicle to acquire its future enterprise-wide network services.

USDA intends to release a Statement of Objectives to vendors by March 2019, which will ensure a best-of-breed network solution as well as promote fair opportunity. USDA will evaluate vendors' proposals for network modernization and make its determination as to what vendor(s) offer the best technical solution at the most reasonable price. The Network Modernization award is planned for November 2019. USDA's timeline for network modernization and transition to the new GSA network services is 2020-2023.

The new GSAEIS Contract affords USDA a unique opportunity to shift from a "buy, build, maintain, operate, and repeat" culture, to a "utility" model, where a monthly bill is paid for commercially available network services. With few exceptions, agency/mission area-owned and operated networks currently do not function at service levels required for a modern, managed network infrastructure that is required for the USDA Enterprise (i.e. high-availability "always up", 7/24/365 service desk, rapid service restoration, integrated security and analytics). This modernization initiative will address that deficiency.

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND STAFF YEARS

Table OCIO-11. Geographic Breakdown of Obligations and Staff Years (thousands of dollars, staff years (SY))

State/Towntown/Country	2017		2018		2019		2020	
State/Territory/Country	Actual	\mathbf{SY}	Actual	\mathbf{SY}	Estimate	\mathbf{SY}	Budget	\mathbf{SY}
District of Columbia	\$46,881	73	\$56,188	69	\$56,260	69	\$98,698	78
Missouri	2,532	20	2,630	20	2,690	20	2,702	20
Obligations	49,413	93	58,818	89	58,950	89	101,400	98
Total, Available	49,413	93	58,818	89	58,950	89	101,400	98

CLASSIFICATION BY OBJECTS

Table OCIO-12 Classification by Objects (thousands of dollars)

Item No.	Item	2017 Actual	2018 Actual	2019 Estimate	2020 Budget
	Personnel Compensation:				
	Washington D.C	\$10,684	\$8,751	\$9,063	\$10,332
	Personnel Compensation, Field	1,961	2,630	2,630	3,016
11	Total personnel compensation	12,645	11,381	11,693	13,348
12	Personnel benefits	3,700	3,341	3,435	3,465
13.0	Benefits for former personnel	3	-	-	-
	Total, personnel comp. and benefits	16,348	14,722	15,128	16,813
	Other Objects:				
21.0	Travel and transportation of persons	196	165	165	165
22.0	Transportation of things	1	-	-	-
23.1	Rental payments to GSA	472	152	155	159
23.3	Communications, utilities, and misc. charges	615	446	446	446
24.0	Printing and reproduction	115	105	105	105
25.2	Other services from non-Federal sources	19,268	26,332	26,055	35,475
25.3	Other goods and services from Federal sources	10,006	14,615	14,615	45,956
26.0	Supplies and materials	1,127	725	725	725
31.0	Equipment	1,260	1,556	1,556	1,556
42.0	Insurance Claims	5	-	-	-
	Total, Other Objects	33,065	44,096	43,822	84,587
99.9	Total, new obligations	49,413	58,818	58,950	101,400
	DHS Building Security Payments (included in 25.3)	\$472	\$83	\$83	\$83
	Position Data:				
	Average Salary (dollars), ES Position	\$173,215	\$182,110	\$185,570	\$185,570
	Average Salary (dollars), GS Position	\$113,216	\$124,219	\$126,578	\$126,578
	Average Grade, GS Position	13.9	13.10	13.10	13.10

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

Implementation of FITARA requires USDA to update policy and guidance related to other modern IT practices, and the communication, collaboration and cooperation of a diverse group of stakeholders, including the Chief Financial Officer (CFO), Chief Human Capital Officer, Senior Procurement Officer (SPA), Assistant Secretary for Administration/Chief Acquisition Officer, Chief Operating Officer, and IT and business communities.

USDA Centers of Excellence (CoE): In FY 2018, the Department partnered with the Office of American Innovation (OAI) to serve as the lighthouse agency for GSA's IT Modernization CoEs. Working as one team, USDA and the CoEs are working to modernize IT across the Department. Phase 1 was a comprehensive Department-wide assessment and planning effort. The purpose of Phase 1 was to determine how to radically improve the way in which USDA designs services and interacts with the American citizens it serves.

Current Activities

USDA Initiatives:

This COEs transformation is supported by changes in the underlying technology to deliver increased operational efficiency. Phase 2, (FY 2019) the implementation/execution phase, will implement the agreed approaches defined in Phase 1 (established in 2018).

Customer Experience

A customer-focused approach to digital services using industries best practices in human centered design and capturing the voice of the customer by observing and understanding employee and customer needs. These steps will ultimately provide improvements and efficiencies in quality of in-person service delivery, while developing high quality online/self-service delivery options using agile and human centered design approaches.

Voice of the Customer Tool

The Voice of the Customer tool will pilot listening to customers in a strategic feedback loop that increases self-service transactions and reduces the need for high touch, high cost transactions.

Executive Dashboards and Service Delivery Analytics

Provides USDA leadership with the data tools necessary to make rapid and data-driven decisions in real-time. The data tools will provide information that enable leadership to monitor and meet program goals, communicate progress, identify challenges, and address strengths, threats, and opportunities.

Cloud Adoption and Data Center Consolidation

Moves data center operations to cloud services and consolidates 39 data centers into a single data center and one backup to improve data integrity, security, and accessibility. This will provide cost savings to customers as data center utilization increases. Closure of data centers will reduce USDA's physical footprint and decrease security vulnerabilities

Contact Center

Provides a one-stop shop for USDA customers and is positioned to be the "front door" to USDA. The center will leverage emerging technologies to lower costs and enable high-value service for complex customer inquiries using a centralized knowledge base.

Electronic Government

USDA participates in six 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. The E-Government program fosters relationships with Federal Agency Leads and USDA E-Government Program Officers. By participating in the E-Government Initiatives and LoBs, USDA has improved its business processes and program delivery to its customers, employees, and partners. Through these efforts, USDA has been able to work with other Federal agencies to streamline common areas of business delivery (e.g. rulemaking, payroll, and grants management) and learn from best practices throughout the government. The Department will continue to implement these initiatives and LoBs to achieve further benefits for its customers

OCIO-Funded E-Government Presidential Initiatives

- Disaster Assistance Improvement Plan
- Enterprise Human Resources Integration (EHRI)
- E-Rulemaking
- Benefits.gov
- Integrated Acquisitions Environment (IAE)
- Grants.gov
- USAJOBS
- Federal PKI Bridge
- Freedom of Information Act Portal

OCIO-Funded E-Government

- Lines of Business (LoB)
- Budget Formulation and Execution LoB
- Financial Management LoB
- Geospatial LoB
- Human Resources Management LoB
- Performance Management LoB

Enterprise Architecture Division

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 developed and deployed to USDA's agencies and staff offices new guidance for reporting IT assets, which resulted in the identification of more than 500 applications that had previously gone unreported at the department-level. EAD's application inventory served as a foundational component to the Phase 1 assessment performed by the Cloud Strategy Center of Excellence. From March 2018 through the end of September 2018, EAD collaborated with the Cloud CoE to enhance the department's application inventory and identify candidate applications for a migration to the cloud.

EAD coordinated an intra-Agency initiative to develop and pilot a business-capability driven approach to enterprise application rationalization. The application rationalization initiative resulted in the development of an application rationalization model that enables organizations to assess the technical vitality and business value of their

applications, identify redundancies, and detect opportunities for consolidation, cost savings and cost avoidance. The model was adopted by USDA's Infrastructure Optimization Center of Excellence and piloted in several agencies, such as Forest Service, Animal and Plant Health Inspection Service, and the Agricultural Marketing Service.

EAD deployed a new EAR in a Microsoft Dynamic cloud hosting environment, prepared and delivered in-person training, training videos, and training guides. EAD coordinated with Microsoft, Client Experience Center (CEC), and the Office of the Executive Secretariat (OES) to reduce the number of MS Dynamic instances within USDA and successfully migrated to one MS Dynamic platform.

Federal Information Technology Acquisition Reform Act (FITARA) Operations

USDA's efforts in FITARA and the Information Technology Management Maturity Model (ITMMM) implementation contributed to improving the House Oversight Government Reform (HOGR) FITARA Scorecard and the ITMMM. The FITARA team prepared the USDA Deputy Assistant Secretary for Administration, Chief Information Officer, and Deputy Chief Financial Officer for a successful appearance and testimony to the HOGR Subcommittee on 23 May 2018 addressing USDA's implementation of FITARA. Progress with the implementation of ITMMM, moved the Department from a level 0 to a 1.8 by coordinating and facilitating 18 engagements with all appropriate stakeholders, including the USDA Chief Executive Officers.

Capital Planning and IT Governance (CPITG)

CPITG's governs and oversees 225 total IT investments (39 Major and 186 Non-Major Investments), managing USDA's \$2.2 billion IT investment portfolio is CPITG'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 Capital Planning and IT Governance Division 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 the Office of Management and Budget (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, quarterly integrated data collections, and bi-annual OMB Portfolio-Stat. Additionally, quarterly Portfolio Reviews, 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 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.

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.

Freedom of Information Act (FOIA)

In accordance with the FOIA, 5 U.S.C § 552, as amended by the 2016 FOIA Improvement Act, the USDA must promptly disclose agency records to requesters unless withholding is permissible under one of the nine FOIA exemptions or three statutory exclusions. To accommodate the continued increase in FOIA requests, Information Resources Management Center (IRMC) continued its execution of a plan to streamline processing procedures, increase productivity, and reduce backlog across the Department. This plan resulted in a reduction of processing times for simple requests that were well below the 20-working day statutory time frame for responses, and an approximate 3 percent decrease in the Department's overall backlog.

Cybersecurity

The Information Security Center (ISC) provides a centralized managed Department-level IT security program. ISC is actively monitoring a rapidly growing volume of IT threat vector data for USDA. ISC continues to evolve the capabilities of the tools used to detect cyber incidents

ISC actively manages system security compliance activities across all USDA information systems, develops cybersecurity policy to maintain compliance with existing Federal Information Security Management Act of 2014 (FISMA) law and other mandates (OMB, Executive Orders) and provides support for managing audit-related activities.

In FY 2018, ISC managed several initiatives to enhance Cybersecurity compliance within USDA. ISC continued to generate Biweekly Cybersecurity Scorecards, which are now factored in ACIOs performance ratings. This helped in establishing an incentive to comply with Cybersecurity compliance requirements and initiatives. The Cybersecurity Scorecards were enhanced in FY 2018 to provide scorecard-actionable reports consumable at every level, from management down to the operational teams resolving security risk. The scorecards are also taken into consideration during the review of acquisition approval requests.

ISC completed an initiative that assisted system owners in addressing their high number of delayed Plans of Action and Milestones (POA&Ms); this resulted in the closing of 1600 POA&Ms. POA&Ms are tracking mechanisms used to identify, assess, prioritize, and monitor agencies' progress towards correcting security deficiencies and/or vulnerabilities. This effort, along with the Cybersecurity Scorecard resulted in USDA moving from "At Risk" to "Managing Risk" in the FISMA Risk Management Assessment rating.

ISC continues to participate in the Department of Justice's (DOJ's) Cyber Security Assessment and Management (CSAM) Executive Advisory Board, providing input and guidance to refine the CSAM tool to meet FISMA requirements and the Presidential Cybersecurity Executive Order. USDA has been a very active partner working with the DOJ CSAM Information Systems Security Line of Business (ISSLOB). Based on a continuous Assessment and Authorization Process Streamlining effort in FY 2018, ISC completely phased out the manual and paper-based Assessment and Authorization (A&A) packages submission processes and implemented a transparent workflow within CSAM. The new process was well received by the USDA stakeholders and has resulted in the elimination of over 400 paper-based memos through an automated process workflow. The A&A Process Streamlining effort also continues to evolve and produce data quality checklists that are now available the agencies to guide them on better documenting the System Security Plans (SSPs) prior to submission to the review process.

The FY 2018 FISMA Audit activities were completed on time. The Information Security Center (ISC) is working in conjunction with the Office of the Chief Financial Officer (OCFO) and the Office of the Inspector General (OIG) audit representative to remediate and close outstanding audit recommendations. In FY 2018, ISC closed 17 past IT Security related audit recommendations. ISC also achieved closure of two past audits, FY 2010 FISMA and FY 2011 Security Over Wireless Handheld Devices.

The dramatic growth in the volume of USDA IT system-generated data created the risk that malicious activity was not being detected due to the limitations of current security solutions. In FY 2018, additional hardware was purchased and used to upgrade the tool cluster and it is now processing over 160,000 events per second during core working hours. Most of this processing is performed using open source technologies. OCIO is continuing to upgrade the technology solutions and increase data storage capacity, processing power capability to improve IT security and agency program operations.

ISC continues to focus on improving USDA's Incident Handling and Incident Response capabilities. This includes the implementation of USDA Incident Handling Best Practices and Guides, integrated Department and Agency Incident Response Plans (per OMB and FISMA Requirements), and modernization of the USDA Incident Handling policies and standards. The Incident Response Security Operations Center (SOC) performs monthly phishing tests, quarterly Incident Response testing with the agencies and High Value Asset assessments with the Department of Homeland Security (DHS). The SOC has grown to include Threat Hunting and Cyber Intel personnel to expand detection capabilities inside and outside the USDA enterprise. These efforts target improvements to the Department's situational awareness through collaboration and communication within the USDA, US-CERT, and other Government Agencies.

ISC continues to implement Big Data architecture tools at an enterprise level, to collect and process security related data (attacks, vulnerabilities) across the USDA for the purpose of conducting behavioral analysis, malicious pattern identification, deep forensic analysis for incidents that potentially span multiple months, long-term security metrics and trends, and providing a scalable and adaptable data repository (to allow for rapid cyber incidents detection and responses, like black listing and emergency blocks). The Big Data tools allow ISC to apply predictive analytics to USDA network traffic to create a unique real-time profile of the network, monitor it against up-to-date government /

commercial cyber intelligence threats and act accordingly. Big Data employs heuristic analytics and reporting designed to spot anomalous traffic patterns when this data is combined with more traditional cybersecurity methods. Big Data tools enable the analysts to have additional insight, allows an enhanced ability to monitor / deflect rogue activities aimed at high value information and assets, and enables ISC to alert the appropriate Agencies to take steps to identify, deflect and protect these high value assets.

ISC is deploying the DHS Continuous Diagnostics and Monitoring (CDM) Phase 1 and 2 security tools which provide USDA with capabilities and tools that identify cybersecurity risks on an ongoing basis, prioritize these risks based upon potential impacts, and enable cybersecurity personnel to mitigate the most significant problems first. Congress established the CDM program to provide adequate, risk-based and cost-effective cybersecurity and more efficiently allocate cybersecurity resources.

ISC Operational Security Assessment and Penetration Testing programs are comprehensive security assessment programs that support the Department's goal of improving the overall security posture of the USDA enterprise. Both programs examine and evaluate Agency's information technology systems and the supporting operational policies and procedures. They provide USDA agencies with timely, real, actionable intelligence to assist in defending valuable agency business and mission assets against current and future cyber-threats and/or attacks. The programs enable USDA agencies to prioritize and remediate vulnerabilities in a timely manner, improve their security posture, and strengthen the protection of USDA information and associated assets overall.

In FY 2018, ISC conducted penetration testing on all 29 USDA Agencies and offices. Agency out-briefs provided upon completion of each test allowed agency technical staff an opportunity to further address a specific exploit used by the penetration testers. Additionally, the penetration test team conducted one Red Team assessment of the National Finance Center in New Orleans, LA as well as one internal Operational Security Assessment of the National Institute of Food and Agriculture.

Shaping the Cybersecurity Environment - Planning, Policy Development, Workforce Training, and Force Management

ISC worked with an independent vendor to identify gaps, streamline existing processes and improve stakeholder communication. The following areas are being evaluated:

Streamline Compliance Process – Conducted pilots of A&A process improvements, accomplishing 5 Authorities to Operate (ATOs) in 90 days. The pilots went so well, the same methodology has been applied to achieve ATOs for other high-priority systems including the secretaries CXO dashboard and the OES Correspondence Management system (CMS- ABE system)

Cybersecurity Policy Reform – Developing and updating IT security policy is a continuous, ongoing endeavor, which requires additional cybersecurity policy resources and expertise to properly meet USDA IT security needs.

Privacy Office

The Privacy Act of 1974, 5 U.S.C. § 552a, Public Law No. 93-579, (Dec. 31, 1974) established a Code of Fair Information Practice that governs the collection, maintenance, use, and dissemination of Personally Identifiable Information (PII) about individuals that is maintained in systems of record by Federal agencies. In FY 2018, the Privacy Office, in collaboration with the Privacy Council, continued updating processes and forms based on recent OMB Memoranda. Public Law No, 93-579 can be viewed at http://en.wikisource.org/wiki/Public_Law_93-579.

Data Management (USDA Chief Data Officer)

Over the course of FY 2018, UDA created over 120 dashboard views that provide USDA leadership with information for decision making on USDA's seven main administrative functions: IT, human resources, finance, property and fleet, contracting and procurement, homeland security and operations. What's most innovative about the dashboards is their ability to bring together a multitude of data sources into a single USDA analytics platform. With it, leaders are reducing the time and effort it takes to unlock key insights and make better decisions. The information they need is living in one place and providing them with a single, trusted version of the truth.

USDA is already reaping the benefits of easily accessible data made possible by the Chief Executive Officer (CXO) dashboards. Manual processes that increase the probability of error and risk are being reduced or eliminated. Historical data and current trends are being combined to enable leaders to identify areas of risk and opportunity. The dashboard project is also serving as a catalyst for creating a more comprehensive approach to data management across the Department, which is now focused on improving data integrity and availability for all USDA stakeholders.

Strategic Souring

The Category Management Office (CMO) implemented several new process and procedures to improve USDA's ability to manage its hardware and software. For example:

The CMO established the policy and procedures to begin capturing line Item pricing for all software purchases. Having the line item pricing will allow us to determine when one agency is paying a higher price for the same product and to establish enterprise agreements when it is in the best interest of the Government. USDA is the only Department that has implemented this process which is critical to the success of any Category Management/Strategic Sourcing function.

The CMO maintained an "A" on the GAO FITARA "Scorecard 6" dated May 2018 for Software Licensing/MEGABYTE ACT. For "Scorecard 5", OCIO was the only USDA agency to receive an "A" on the scorecard and one of only six agencies across the Federal Government to receive an "A" for Software Licensing/MEGABYTE ACT.

Cybersecurity

The Office of Information Security continues to make process improvements which resulted in the following accomplishments in FY 2018:

Since November 2017, decreased the number of critical vulnerabilities department-wide by 85 percent.

Modernized the USDA Risk Management Framework Guide to include Cloud Adoption and FedRAMP Guidance.

Improved overall OMB Risk Management Assessment Scorecard rating from "At Risk" to "Managed Risk" in third quarter of 2018.

For the first time since the cybersecurity program was established, sustained a month-to-month "green" rating for investment health.

Achieved USDA's goal of at least 96 percent of production systems having ATOs in place (only 4.1percent lack an ATO); 96 percent of systems are in the on-going A&A program. This is an increase from 74 percent in FY 2017.

Worked with agencies and liaisons to complete business impact analyses (BIAs) for all USDA systems categorized as High. Currently 80 percent of USDA systems have a BIA versus only 33 percent at the start of this effort.

Implemented an Enterprise-wide anti-phishing program to educate USDA employees on email vulnerabilities. The program provides end-user testing that measures employee's ability to identify and report phishing attempts. This has resulted in an increased user community awareness and helped reduced the number of phishing exploits.

AGENCY-WIDE PERFORMANCE

SUMMARY OF PERFORMANCE

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 funded through the USDA Working Capital Fund and appropriations to USDA agencies through the Client Experience Center, National Information Technology Center and the Enterprise Network Services.

The USDA has partnered with the Office of American Innovation (OAI) and serves as the lighthouse agency for the General Services Administration (GSA) Information Technology (IT) Modernization Centers of Excellence (CoE) Initiatives. During Phase 1 of these IT Modernization efforts, 5 main areas were identified and analyzed: Contact Centers, Customer Experience, Data Analytics, Cloud Adoption, and Infrastructure Optimization. Each area conducted a comprehensive Department-wide assessment and planning effort to accelerate transforming USDA into a data-driven, customer-centric Department to improve how USDA designs services and interacts with the public agriculture community it serves.

Phase 2, which launched in October 2018, focuses on implementation and execution of approved recommendations and institutionalization of CoE initiatives. It additionally includes a focus on creating a Business Modernization Office (BMO) to serve as an oversight body for program management of the CoEs, before transitioning to a permanent, customer-centric, governance role within OCIO. With support of the BMO, the CoEs are working collaboratively to align their mission, vision, and activities to overarching USDA and OCIO strategic priorities through creation of OCIO-wide enterprise governance, key performance indicators, reporting updates in CoE dashboards, workforce development, and sustainable, customer-centric solutions.

The OCIO has one key performance indicator that contributes to one strategic objective within one of the Department's Strategic Goals. The following table summarizes the results for the Departmental Key Performance Indicators (KPIs) for which OCIO is responsible.

Table OCIO KPI-Data Center Closures

KPI	2017 Actual	2018 Actual	2018 Target	2018 Result	2019 Target	2020 Target
Reduce the number of data centers across the Department (data shows the						
number of data centers remaining).	39	18	21	Exceeded	4	2

SELECTED PAST ACCOMPLISHMENTS TOWARD THE ACHIEVEMENT OF THE KPI OUTCOMES

During FY 2018, the USDA closed 21 of its 39 data centers - exceeding the closure target by 3. To date, USDA has closed 3 data centers in FY 2019 with 13 data centers remaining to close.

SELECTED ACCOMPLISHMENTS EXPECTED AT THE 2020 PROPOSED RESOURCE LEVEL

In FY 2020, USDA will have 2 enterprise data centers remaining, which include the Kansas City production data center and the St. Louis backup disaster recovery data center. At this point, this measure will be considered complete. OCIO will continue to maintain these two data centers for the Department.