



United States Department of Agriculture

Fiscal Year 2015

Client Technology Services (CTS) Annual Performance Report

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ASSOCIATE CHIEF INFORMATION OFFICER (ACIO), CTS
OFFICE OF THE CHIEF INFORMATION OFFICER (OCIO)



As part of the OCIO team, CTS enables our customers' missions through innovative solutions, premier service delivery, and technical expertise at the best value.

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Keeping CTS Relevant to Our Customers

A Message from the ACIO



This is the first annual performance report for Client Technology Services (CTS). Throughout Fiscal Year (FY) 2015, CTS evolved from the merger of the former International Technology Services (ITS), the Washington Communications and Technology Services (WCTS), and the Identity, Credential, and Access Management (ICAM) function. As our organization grows, so do the services we provide.

As a result of this merger, the primary customer base has expanded beyond our Service Center Agencies (SCA's) to include the Office of the Secretary, Departmental Management, and others. The CTS customer reach also extends beyond the

Department to, for example, the White House's Executive Office of the President.

We have undertaken this organizational merger with one objective, and that is to remain relevant to our customers. Technology that's morphing at warp speed and the value system of the next generation are all factors that determine whether we will remain relevant. Not only are we committed to meeting customer needs, we are committed to understanding what motivates our customers. We are challenging ourselves every day to answer the questions:

- How does CTS fit into the customer's world?
- How do we step into the groove of momentum that aligns with the future of USDA?

CTS continues to implement and manage enterprise IT solutions for over 122,000 users Department-wide, offering large-scale benefits to all USDA agencies. These Enterprise Service offerings include robust cloud-based Messaging Services, Active Directory, Virtual Private Network (VPN), Mobility Management, Video Teleconferencing, Workstation Image Management, Managed Print Services, and Fax2Mail. Benefits include reduced overall IT expense, heightened security posture, and a robust and responsive infrastructure that continues to increase productivity and efficiencies.

You expect and deserve nothing less than the best support and services possible, and our workforce would offer nothing less. We in CTS take enormous pride in serving you. As one team, CTS is creating strategic value through exceptional customer service, quality of performance, and collaboration with our partners to efficiently deliver products and services at the best value.

Strategic Plan

In light of the merger and the creation of a new end-user support organization, Client Technology Services (CTS) developed a Strategic Plan. CTS made a concerted effort to identify strategic goals and objectives that met the following criteria:

1. Align with the OCIO and USDA Strategic Plans
2. Support customer mission objectives
3. Improve the quality of delivered services
4. Improve the efficiency of service delivery

The plan allowed for an opportunity to explore consolidation of services, alignment of objectives, and team-building. There are five primary goals and 21 supporting objectives that make up this plan. The goals are:

Goal #1: Attain operational excellence in the delivery of shared and client IT services; enable even more dependable, agile, and leading edge IT operations across USDA

Goal #2: Perform the mission at best value for USDA through an improved understanding of business requirements and challenges in order to deliver customer focused IT shared solutions that meet or exceed client expectations

Goal #3: Foster partnerships and new clients across USDA and beyond through simpler and streamlined access to client services and products

Goal #4: Drive innovation by rethinking technology and processes

Goal #5: Attract, develop, and retain an agile, highly capable workforce with relevant skills and competencies; supporting a high-performance workforce

We are achieving our objectives while addressing the needs of stringent cyber security requirements and the evolving USDA information technology environment. Moving customers from a decentralized to a centralized architecture provides added protections to secure confidence on the part of farmers and rural communities that USDA is trustworthy and here to serve their interests. Our Strategic Plan will evolve to ensure CTS continues to provide the latest in IT advances and services.

Profile: A Look Inside of CTS

Our Operations

CTS is a government fee-for-service organization committed to providing IT services and products for the USDA. CTS' leaders and IT specialists embody the diversity and expertise needed to manage such a complex organization. Together they deliver the most efficient and cost effective services and products to the enterprise activities of the Department and to the agencies that work to support the well-being of American agriculture, protect and conserve natural resources, facilitate rural development, and provide for a safe, sufficient, and nutritious food supply.

CTS has over 900 highly skilled IT specialists (both federal employees and contractors) providing service to approximately 35,800 customers in more than 3,000 field, state, and headquarters offices located across the United States and its territories and protectorates across the globe. Additionally, CTS provides enterprise-wide IT services that support over 120,000 employees and contractors in all 29 USDA agencies/offices and over half a million citizens that access USDA public services online.

CTS operates as a service activity under the USDA's Working Capital Fund (WCF). As such, CTS reviews customer demand and service requirements and develops a spend plan to cover those required service expenses. This is a full cost-recovery model, where there are no profits and no losses.

CTS uses an Activity-Based Costing (ABC) strategy to organize costs and formulate a budget. It adheres to SFFAS 4 – Managerial Cost Accounting Concepts and Standards for the Federal Government, and ensures distribution of expenses to an entire set of products and services.

As a service activity, we use IT Service Management (ITSM) as our approach for delivering, managing, and improving the way IT is used – ensuring the right processes, people, and technology are in place to meet our goals. Specifically, Information Technology Infrastructure Library (ITIL) is our framework that provides best practices for aligning IT with business or customer needs.

World Class Workforce

We consider the CTS federal government employees and contractor partners to be highly representative of a world class workforce. There are many descriptions of what a world class workforce looks like. Developing and sustaining a world class workforce is not done by chance – it takes leadership, sound policies, and best practices.

Additionally, we need to understand the challenges facing today's IT workforce, in order to best plan for strengthening the workforce of the future. One of these challenges deals with the increasingly older workforce as baby boomers begin to age out of the workforce. Addressing the maintenance and sustainment of the CTS world class workforce is one of our five Strategic Plan Goals, specifically, we strive to *Attract, develop, and retain an agile, highly capable workforce with relevant skills and competencies; supporting a high-performance workforce.*

The CTS workforce today embodies the most important attributes to look for when building and sustaining a world class workforce. Our customers look for these attributes and truly appreciate the high performing caliber of the CTS workforce. To remain relevant to our customers, we consider these attributes essential in the CTS workforce:

Talent: CTS employees and contractors bring ideas, spontaneity, innovation, spark, and inspiration to their profession and commitment to customers. CTS' talented workforce is invaluable.

Passion: CTS employees and contractors are passionate. Their passion is contagious; we see this workforce going the extra mile and then some in support of CTS customers.

Attitude: CTS employees and contractors exhibit a positive, can-do attitude, day in and day out, no matter how many challenges arise throughout their work day.

Aptitude: CTS employees and contractors bring skills to the table that impact the bottom line success of not only CTS, but its customers. The CTS workforce works diligently to stay ahead of the game. It's a workforce infused with hands-on know-how and an ability to quickly master the newest technologies.

Fortitude: CTS employees and contractors are never quite satisfied; it's a workforce accustomed to delivering results, no matter the challenges.



Sam Ayers, IT Specialist in Tennessee, works on an office move

Looking at the level of service and the numerous accomplishments of CTS, you will find that its employees and contract partners are the driving force. Our federal employees are experienced, with more than two-thirds having at least 11 years of federal service, and educated, with almost two-thirds having at least two years of college. CTS leadership strives to hire people with these attributes and then empower them to evolve as part of a stellar-performing, world class workforce.



Georgia and South Carolina Group Meeting, Athens, GA – September 2015

Front Row Left to Right: Cheryl Walker, Tammy Ogle, Julie Paulk, Stacy Foltz, Trina Tuttle, Kathy Fields, Lena Allen, Vickie Harper.

Back Row Left to Right: Fred Copeland, D. L. Glover, Don Harris, Mike Taylor, Scott Hawkins, Randy Taylor, Ken Rhodes, Brian Copeland.

Operational Excellence

In FY 2015, as in previous years, CTS strived to meet its customers' needs, exceed its customers' expectations, and provide a growing suite of services at a reasonable cost. Operational excellence reflects an emphasis on improving service, saving money, and this year more than ever, keeping customers and the Department secure. The purpose of this report section is to highlight just a very few of these accomplishments that typify how CTS enhances its value to our customers and the Department.

Enterprise Active Directory

In FY 2015, CTS completed an upgrade of the Enterprise Active Directory (EAD) infrastructure to the most current operating systems and application versions. EAD is a consolidated directory service built on Microsoft's Active Directory Services and lightweight directory access protocol database technologies. It is a reference system with attribute information about end user accounts and networked devices and also provides policy enforcement for securing and managing client and server systems across the enterprise.

This is a Departmental initiative to facilitate efficiency, reduce cost of implementation for future enterprise application deployments, improve security, and facilitate cross agency communications and efficiencies. CTS has migrated 89.11% of all users, groups, and workstations and nearly all server objects into the EAD environment for supported agencies. That means more than 94,000 users and 120,000 computers now are supported through the consolidated EAD environment. With CTS' leadership and help, almost all USDA agencies and major offices have or are actively migrating into the EAD environment.

Benefits of consolidating to a single EAD environment include:

- Much greater flexibility for users by allowing them access to their resources from any USDA office. Significance of this enhancement is highlighted by incidents such as the extended power outage in the South Building in Washington DC and offices affected by Superstorm Sandy. Users under the EAD now can move to another USDA facility, connect to the network, and operate without any special arrangements being necessary.
- Ease in granting permissions to share services between agencies. Because all agencies are in a common Active Directory, it is now a simple matter to share such services. Smaller agencies can even leverage the common Active Directory for back-up administrative capabilities.

- Establishment of a common platform to simplify sharing of enterprise services such as the Enterprise Virtual Private Network (eVPN), which provides an approved, secure two-factor tool for accessing the network when users are not at the office, and the Enterprise Messaging Service – Cloud Services (EMS-CS), which is the common platform for email and Skype for Business.
- Other associated benefits, including enhanced security posture and integration with other OCIO services. Future benefits will be realized from the projects that are only currently being envisioned but can be deployed much more quickly and easily by using the centralized services through EAD.

To help customers make the most of EAD, CTS also:

- Added Active Directory Federation Services (ADFS) as a new service to the EAD environment. This service supports authentication with other associated directories and cloud services.
- Deployed an EAD and Integrated Services website accessible to all USDA agencies to provide automated notifications and alerts regarding EAD management. This SharePoint Online site provides a document repository of the EAD architecture documentation, standards, guidelines, and procedures for the consolidated infrastructure and services.

Enterprise Messaging System – Cloud Services

In September 2015, CTS, with the approval of the CIO Council, moved forward with the planning and implementation of Office 365 Enterprise E3 business software – a different enterprise licensing of the Microsoft email cloud services and the Office suite of products. Features address Native eDiscovery, Data Loss Prevention (DLP), Enhanced Voice Mail, Office 365 ProPlus, and more. Enterprise Messaging System – Cloud Services (EMS-CS) is an information technology communication service used by all USDA organizations. Microsoft provides and OCIO manages EMS-CS, which brings integrated, intuitive communications tools to USDA for more than 120,000 people using a centralized system of collaborative technologies. It includes Outlook/Exchange, Instant Messaging (Lync, now Skype for Business), SharePoint, Archiving, and Information Discovery and Litigation Support. CTS partners with Microsoft to deliver this service to all agencies and services in USDA, and was one of the first agencies in the US Government to complete such a transition.

Collaboration Service

CTS now provides for and offers two sets of collaboration service running on Microsoft SharePoint 2013 Technology: SharePoint-Cloud and SharePoint-On-Premises.

- *SharePoint-Cloud* – provides standard collaboration services out of the box, allowing agencies to share and collaborate within the USDA network. The

service also includes the OneDrive solution, allowing agencies to sync data between desktop/laptop and USDA OneDrive so that data can be accessible via the Enterprise Virtual Private Network (eVPN), Citrix, or mobile devices.

- *SharePoint-On-Premises* – provides customized sites utilizing the SharePoint engine, allowing agencies to integrate backend services such as data warehouse, Oracle financial database, or other data sources to be presented through SharePoint sites/services. The on-premises tool also hosts a Project Server solution for project portfolio management, allowing agencies to access projects/status/progress through a web app component.

In addition, the On-Premises solution provides Internet presence via eAuthentication (eAuth) for agencies who want to collaborate with entities such as universities or research institutes outside of the USDA network.

Optimized Computing Environment (OCE)

The OCE Investment is a modernization initiative focused on updating and streamlining the SCA computing environment. The focus of the OCE program is to update and replace the Common Computing Environment (CCE) that was put in place over a decade ago. The updates are required for continued operation and expanded support to meet the growing business needs of the SCA's.

Starting in Fiscal Year 2012, CTS worked to lay the infrastructure and standards for an optimized IT environment, supporting SCA modernization initiatives. The focus was on stabilizing and advancing the network infrastructure, enhancing monitoring, implementing modernized phone system infrastructure, researching virtualization options, and expanding mobility services. These activities formed the base for continued optimization efforts. Later emphasis was on re-architecture of the office environment.

The CTS FY 2015 OCE efforts included a set of infrastructure modernization projects designed to support technological growth and agency program modernization work. The primary focus was office re-architecture with supporting backend infrastructure. The goal was improved web security, full Wide Area Network (WAN) Optimization in the field, initial field server infrastructure upgrade/re-architecture for standard sites (including centralized storage and automated backups), and upgrade of the majority of field phone systems. OCE included the following:

- **Enterprise Web Security Solution:** The Cisco's Web Security Appliances (WSAs), within the SCA environment, were installed and brought in line for monitoring (passive mode) in April 2015. The End User (EU) environment was brought in line for monitoring starting in August 2015. The EU WSAs are currently monitoring approximately 160,000 transactions daily. The new tools actively blocked 1.5 million suspicious transactions and detected 30,300 malware transactions in

September 2015 alone. The threat types included malware, Adware, Trojans, Phishing and Spam.

- Field Server Infrastructure:** Outdated physical servers in the SCA field locations were replaced with virtual server technology. New equipment was deployed to approximately 2,000 Field Service Centers, replacing end of life file and print servers. As part of this deployment, enterprise infrastructure support was engineered and deployed, providing the framework for a centralized data protection solution within the SCA's. Storage was procured and installed within the CTS data center infrastructure in Kansas City and St. Louis. A full back-up solution is in place to protect customer data as the server refresh deployment continues into FY 2016.
- Network Optimization Deployment:** With previous years' investments, CTS has installed Wide Area Network (WAN) Optimizer appliances at all qualifying sites. As new connectivity options become available, additional locations are added for WAN optimization. The FY 2015 initiative also began the refresh cycle on the WAN Optimizer appliances that are reaching end of life. In FY 2015, CTS replaced WAN Optimizer appliances at 111 sites. This refresh will ensure that equipment is fully supported to reduce downtime and provide continued stabilization of the networking environment.
- eVoIP:** CTS utilized Voice over Internet Protocol (VoIP) technology to replace and modernize phone systems at 670 sites. This installation provides a common upgrade for all SCA users co-located in the field office and provides centralized management of the phone systems. In addition, CTS completed the final updates of the backend infrastructure to support the previous investments in eVoIP management, as well as the continued growth of the environment.



The OCE investment has laid the foundation for expansion of CTS service lines, including Unified Communications and Mobility.

Mobility

CTS continues to provide Mobile Device Management (MDM) centralized infrastructure for all agencies within USDA. The solution provides the following three main service areas:

- Device Management:** Allowing agency IT staffs to deploy, secure and manage mobile devices under a single common infrastructure.

- Secure Container Services: Secure space within mobile device (meet NIST FIPS-140-2 compliance) allowing users to access USDA applications and data on shared drives, SharePoint sites, or USDA OneDrive
- USDA App Store: Used to host and distribute USDA-developed mobile applications

In FY 2014, CTS expanded the system to increase availability and stability of mobility services. CTS migrated the mobility system to a new primary site (Kansas City Enterprise Data Center) and configured full redundancy with the prior site (St. Louis Enterprise Data Center). The prior site was set up as a secondary, failover site for service continuity.

By the end of FY 2015, the CTS-managed mobility system supported over 23,000 mobile devices (Android, iOS, and Windows). This was an increase of almost 15,000 devices from FY 2013. CTS continued coordination and collaboration with agency mobility support staff to ensure the system met their business needs and any changes and updates were clearly communicated through monthly MDM User Group meetings.

In addition, throughout FY 2015, CTS worked closely with various agencies to switch all Blackberry devices to the Department MDM solution using either IOS or Android devices to eliminate the support of multiple mobile device platforms. By the end of FY 2015, we were nearing completion of the effort to decommission all infrastructure and devices related to Blackberry, allowing agencies to continue receiving the benefit of economy of scale by consolidating all mobile devices under an MDM solution.

Enterprise Virtual Private Network

In FY 2015, CTS completed deployment of the eVPN for core customers and worked with several other Department agencies on piloting its use. This service offers remote users a secure telecommunication connection back to the USDA network from the Internet. The “virtual network” established for end user workstations via this service is commonly used by teleworkers. This system provides USDA users improved endpoint security through the use of machine health checks to validate government furnished equipment as well as up-to-date anti-virus and machine patch levels. The system also provides for two-factor authentication using USDA PIV (LincPass) cards as well as alternate two-factor authentication for all remote access clients accessing the USDA network. Throughout the year, CTS continued to improve the service by adding technical capabilities such as Global Load Balancing and increased WAN optimization.

FY 2015 saw a 59% increase in eVPN users. Further expansion is likely; at fiscal year's end, CTS was working with four other Department agencies in various stages of testing the service.

Citrix

CTS provided oversight, leadership, and support to the rollout of 30 sites by utilizing full Citrix as a business productivity solution replacing localized file/print services. CTS deployed an architecture for virtual offices and expanded use of desktop virtualization to facilitate the removal of end-of-life file and print servers in sites deemed capable of supporting remote desktop technologies.

CTS is actively consolidating disparate Virtual Desktop Infrastructure (VDI)/Citrix farms into the new Enterprise Citrix farm, which was deployed in FY 2015. The Enterprise Citrix farm is hosted out of the Kansas City and St. Louis Enterprise data centers. In the Enterprise Citrix environment, CTS provides Virtual Desktops and Published Applications to support a variety of internal and customer requirements:

- Telework/Office Automation
- SCA Geographic Information System and special use applications
- Access for external Helpdesk and contract staff
- Enclaved System Administrative functions (e.g., Tivoli EndPoint, Security Center)
- User acceptance testing

The current infrastructure capacity ranges from 1200-2500 users depending on the allocation of desktops types and assigned usage, which can be dynamic due to cyclic Agency business needs and shifting demand.

Network Modernization and Standardization

Based on SCA user experience and site analysis, CTS determined that the existing telecommunications infrastructure did not meet the current and projected business needs of the SCA's. Network congestion at a number of sites caused performance issues and prevented the adoption of new business technologies. In addition to performance and compatibility issues, this older technology did not allow taking full advantage of advances in technology that provide cost savings through consolidation and optimization.

To modernize the current telecommunications architecture and provide an overall reduction of telecommunications costs, CTS proposed a re-architecture of the telecommunications environment. This re-architecture includes increasing bandwidth (up to 567%) at critical locations and consolidating business traffic for service optimization. CTS has identified 1035 sites that require increased bandwidth for current and future needs.

- Phase 1: No-Cost Sites - CTS previously completed upgrades at 120 sites at no additional cost.

- Phase 2: \$1.65M (FY 2015) - Through FY 2015, CTS completed an additional 180 sites through already-approved core budget funding. These sites have been successfully ordered and installed with the upgraded bandwidth.

These upgrades reduce the localized congestion, thus speeding file transfer times and increasing office productivity.

Communications and Connectivity

CTS Unified Communications as a Service (UCaaS) – UC-VOICE: UC-VOICE functions as a delivery platform that provides an adaptable suite of communication and collaboration capabilities under a single service framework. The platform allows CTS to provide carrier class communication networks that deliver different feature sets for each customer. The CTS UCaaS offering is inclusive of the primary Cisco UC technologies, including VoIP, Voicemail, and Integrated Messaging, as well as optional add-on services such as Contact Center, Web Collaboration, and Video Conferencing, to facilitate reliable and scalable business communication.

CTS made significant progress in improving voice communications throughout the environment. In addition to the field office phone system and backend infrastructure upgrades conducted as a part of OCE, CTS completed the following major projects in FY 2015:

- Installed CTS eVoIP service at two USDA Risk Management Agency Regional Offices
- Transitioned the SCA customer base at South and Whitten Building in WDC to CTS eVoIP (1300 Phones)
- Completed Session Initiated Protocol (SIP) architecture and design to allow for UC-VOICE service subscribers to be transitioned to a true VoIP solution in FY 2016
- Initiated a Session Initiation Protocol (SIP) Proof of Concept at 27 eVoIP locations within the SCA footprint
- Negotiated service agreements with the USDA National Agricultural Statistics Service (NASS) to provide Contact Center as a Service at five NASS Data Collection Centers. Service will begin in FY16.
- Negotiated service agreements with the USDA Office of General Counsel (OGC) to provide Unified Communications as a service to all OGC Regional Offices. Services will begin in FY16.
- Implemented Multi-Factor Authentication (MFA) on all UC-VOICE systems to meet USDA departmental mandates
- Implemented AT&T cloud-based voice services in Washington DC facilities
- Continued to migrate agencies from legacy analog lines to digital phone lines in the Washington Metropolitan area

CTS Unified Communications as a Service –VIDEO (UC-VTC): UC-VTC is a fully managed Video Teleconferencing (VTC) service that is interoperable with existing customer-

owned endpoints (multi-vendor, multi-device), easy-to-use, scalable (multi-party), and secure. UC-VTC provides back office infrastructure that allows for visual and audio communication between compatible customer-owned devices.

CTS assumed ownership of the UC-VTC environment from the National Information Technology Center at the start of FY 2015. During FY 2015, CTS made significant progress in improving UC-VTC services throughout the environment. CTS:

- Implemented improved access controls to better assure service delivery for UC-VTC service subscribers
- Executed a procurement to expand the VTC infrastructure and replace legacy VTC services, such as the management and recording systems, with more current VTC technologies
- Provided VTC consulting services to USDA Rural Development (RD) for new VTC technology, which resulted in the deployment of:
 - Increased bandwidth at specified RD locations within and outside CONUS
 - 192 standardized Cisco video teleconferencing endpoints to locations within and outside CONUS
- Upgraded firmware on 738 CTS-managed SCA and Non-SCA VTC endpoints to mitigate vulnerabilities and implement common standards-based management
- Implemented Multi-Factor Authentication on all UC-VTC systems to meet USDA departmental mandates

Expansion of VTC devices enabled our customers to consistently meet the organizational needs of their individual mission areas with significantly reduced travel budgets. In addition to reduced travel costs, customer feedback has attested to an improvement in hiring and retention of talent. With the highly dispersed workforce, candidates are often located in other cities. It has often been feasible to conduct the interview processes over VTC technology.

Expansion of end user video conferencing support with Cisco Jabber resulted in customers citing an increase in productivity and employee empowerment. Customers also are using the services to meet with potential partner entities for growth and new business.

Ethernet Services: CTS provided oversight and leadership for several marketing and educational documents for the release of new Ethernet services that are now being offered by AT&T to field sites across the country. This will bring 5 and 10MBs circuit speed to approved SCA locations across the country.

Voice Systems Support: With an increase in the number of these enhancements made to the infrastructure came an increase in the demand for the support of the technology. Traditionally, reprogramming requests of voice systems were contracted out, often resulting in expenses to the agencies. Instead, CTS formed a collaborative effort to design a comprehensive training manual and readily enable over 500 skilled

USDA professionals to support the changes to the infrastructure. The benefits resulted in a potential cost avoidance of \$75 per hour for any programming request on any system across the infrastructure as required for legacy phone system support. In addition to the achievements in deployment and support, we also established an internal process that enabled CTS staff to procure eVoIP devices for the agencies upon request. This resulted in:

- A substantially quicker turnaround time in the receipt of the devices when requested
- A potential cost avoidance on all future requests as we now have a vehicle to buy directly

CTS also provided wireless access to all CTS-supported sites nationwide to include separate visitor and staff networks.

Improving Service

During FY 2015, CTS encountered numerous challenges and obstacles that worked against operational excellence but through innovation, spontaneity, and old-fashioned roll-up-your-sleeves hard work, CTS employees delivered. A few examples are highlighted:

Consolidated Tier 1 Help Desk (CHD): CTS transitioned to a new Tier 1 contractor through the America Source contracting vehicle at the end of April 2015. The contractor hires veterans and other individuals with disabilities as support agents. Support to customers remains 24x7x365. CTS per ticket costs were 8% lower after the transition in FY 2015 and are projected to be 9% lower at FY 2016 year-end due to the transition from the previous contractor. CTS ticket volume is trending upward. Customer satisfaction has increased with the new Tier 1 CHD contractor. In support of CTS' customers, Knowledge Articles are developed for both customer self-service and to assist CTS support specialists; Knowledge Articles that were published in FY 2015 increased eight fold over FY 2014.

CTS Responsiveness: In FY 2015, CTS handled 242,372 incidents, 73,153 deployments, and 147,639 change requests on behalf of the customer base. This is a 10.18% increase over FY 2014. CTS continues to make improvements in backroom preventive maintenance mitigation, as evidenced by the increase in capturing vulnerability scanning Incidents, increasing the health of the workstation. A total of 19,582 workstations and 4,429 non workstations were added to the asset inventory. Additionally, over 14,377 monitors were deployed.

Customer Satisfaction: 9,560 customers completed customer satisfaction surveys in FY 2015. This was a significant response increase over FY 2014.

- 92.6% are “Satisfied, More Than Satisfied, or Completely Satisfied” with our services and support.
- CTS reviewed the remaining 7.4% of surveys and followed up with customers, making improvements where possible.



Nancy Reeves-Flores, ACIO CTS, officiating the Walk-In Service Center Grand Opening Ribbon-Cutting Ceremony. The Center was established to meet the evolving needs of the customer workforce in the National Capital Region.

Service Strategy: CTS re-envisioned an approach for Service Strategy. Major customers were polled for business needs. Customer profiles with service usage information were compiled and reviewed. New customers were added due to the ITS/WCTS merger. The combined data was fed into the CTS Budget Process and this led to a much improved Business Service Catalog.

New Business: A CTS New Business Process was created. The New Business Process covers how CTS would work with both new customers and new business services. CTS revised its Information Technology Service Management program and made Service Strategy one of the 3 main pillars of the efforts toward Information Technology Infrastructure Library (ITIL) process improvement implementation.

End User Activity Budget Center: CTS completed the merger of finances and personnel of the ITS and WCTS organizations. This effort included merging separate working capital fund activity centers, with various levels of service at varying price points. As a result of those efforts, one CTS/End User activity center budget was submitted to the CFO WCF Executive Board for approval. This included the coordination, review, and analysis of cost models across multiple legacy business units to a new consolidated funding recovery model, universal to all supported customers. It also included the consolidated submission of FY 2016 and FY 2017 budgets and business plans for the newly merged CTS entity, incorporating the legacy services and business lines of ITS, WCTS, and ICAM.

Office of the Secretary (OSEC) and Departmental Management (DM) Customer Support: As part of the merger of the ITS and WCTS into a single entity, CTS has been integrating and merging our like end user IT support services across USDA to include those in the National Capital Region (NCR), standardizing processes and procedures to take advantage of efficiencies and optimize customer experience. The CTS team has worked hard to integrate the support activities of both operations. Now that these customers are in a single EAD environment, it does not matter if customers are working from their desk or visiting San Juan, Puerto Rico; our IT Support Professionals are enabled to provide a full range of support as though the customers never left their home office.

Customer Agreement Tracking: We implemented a new agreement tracking system across CTS and our customers. This new software tool allows for the preparing, signing, and tracking of all reimbursable agreements where CTS is the service provider. CTS processes over 300 agreements per fiscal year—this new tool saves labor hours by allowing for a much more efficient signing process. In addition, the agreements are stored in a repository that can be easily accessed to respond to data calls and audits.

Service Management: CTS worked hands-on with process owners and managers to integrate activities across processes, functions, and project management, and led the collaborative development and implementation of service management processes across all of CTS. Through these efforts, efficiencies were gained in the workflow and the seamless hand-off of work products across organizational lines was improved. Four new baseline guidance documents were issued: the Change Management Process Guide, Incident Management Process Guide, Knowledge Management Process Guide, and Problem Management Process Guide.

Project Document Web Portal: CTS successfully enhanced and implemented a project document web portal to house and organize all Enterprise and major projects into a single repository. Centralized project management increases the ability to effectively oversee and monitor the largest investments. In addition, enhancements included implementation of standardized project templates to align projects to hardware, software, or business/organizational categories for increased project reporting and monitoring by customer service line.

Section 508: CTS developed a Section 508 Testing and Remediation Workflow to assist document developers with ensuring documents are Section 508 accessible prior to distribution to customers and employees. The improved process ensures that all customers have ready access to documentation to take full advantage of the CTS services. Accessibility Standards and Section 508 tenets require that all Electronic Information and Technologies (EIT) are as accessible to Federal employees and members of the public with disabilities using assistive technology as they are to those without disabilities.

New Customers: While we continued to focus on our core and enterprise customers in FY 2015, we were also asked to help others. For example, we:

- Provided oversight and leadership for Point to Point VPN tunnels for the Aerial Photography Field Office (APFO), Department of Housing and Urban Development (HUD) to CTS, Renewable Portfolio Standard (RPS) to EAD in support of the Economic Research Service (ERS), and the Department of Treasury Bureau of the Fiscal Service VPN tunnel in support of HR Connect
- Onboarded a Grain Inspection, Packers and Stockyards Administration site for Network as a Service (NaaS)
- Rolled out eVoIP for the National Agricultural Statistics Service (NASS) and the Office of the General Counsel (OGC); this involved identifying costs and analyzing and reviewing cost models
- Worked with multiple agencies outside USDA to provide IT service delivery and support various initiatives, including the White House, U.S. Environmental Protection Agency, Department of Health and Human Services, and Small Business Administration
- Coordinated with the Forest Service on Bring Your Own Device and telecommunication initiatives

These efforts benefit both the core and new customers. They enable CTS to drive down costs for all customers and explore innovations that may have use to others.

Saving Money

Speaking of driving down costs, CTS, as a fee-for-service organization, must spend customers' money wisely. Superior service is not enough; CTS also must deliver value. In FY 2015, CTS did just that. For example,

Strategic Sourcing: CTS has been a very active participant in working to meet the Secretary's announced goal of achieving \$100M in savings through Strategic Sourcing in a number of key areas, one of which is IT. The Senior Overarching Planning Group for IT created subcategory teams that have continued to make progress toward identifying strategies to achieve savings in certain identified opportunities to help meet the \$100 million goal and align with the Blueprint for Stronger Services. CTS resources

are currently supporting three opportunities: 1) End-User Devices, 2) Collaboration Tools and Wireless, and 3) Purchasing—CTS has been working to provide recommendations like reducing the number of purchasing vehicles, standardizing on device offerings within vehicles, promoting volume purchasing, exploring technologies to reduce demand, and aligning policy to support strategic sourcing behaviors. CTS has volunteered to engage in the Software Category Management initiatives. As OMB continues to mature their Category Management initiatives, CTS strives to ensure we remain in alignment and offer a leadership role for the Department.

Hardware Blanket Purchase Agreements (BPAs): CTS published three hardware BPAs during FY 2015: Category 1 – Desktop and Geospatial Workstations (\$12,000,000 ceiling), Category 2 – Laptops and Notebooks (\$75,000,000 ceiling), and Category 3 – Tablets (\$24,900,000 ceiling). The catalogs are three-year contracts with a combined ceiling of \$111,900,000. CTS led in the development of the requirements for the BPAs in coordination with our customer agencies. Customer agency feedback was incorporated into the requirements guiding the final product. CTS also redesigned the Product Catalog web site, the Product Catalog documents, and the Shipping/Ordering Templates in order to make them easier to use for its customers.

Fax2Mail: CTS also fully implemented Fax2Mail for all three SCA's at all state and field offices. Fax2Mail service increases efficiency by allowing USDA staff to securely send and receive fax messages as pdf documents from any location, including telework locations. By the end of FY 2015, this initiative allowed CTS to disconnect 3,130 analog fax lines and decommission 2,996 fax machines for the SCA's. The FY 2015 SCA cost reduction was \$1,673,000, in addition to lowered print costs and for fax messages that do not need to be printed. CTS also completed Service Level Agreements in FY 2015 to provide Fax2Mail service to several other USDA Agencies and Departmental offices. The combined contract Fax2Mail monthly usage for all USDA agencies reached 388,621 pages during FY 2015. Fax2Mail combines the benefits of email, while providing the user with a secure method to communicate with customers or colleagues by fax. In addition, the reduction of fax machine paper and power from running fax machines supports USDA Green IT initiatives. The Fax2Mail service has enjoyed very positive feedback by customers and holds opportunity for expanded use across the Department.

Cost Savings and Avoidance Actions: CTS looks for opportunities to improve the financial posture of the Department and its customers. Throughout this report, fiscal prudence and responsibility are at the forefront of our decision making. As just a few other examples of what occurred in FY 2015, CTS:

- Identified issues where Technical Support Division (TSD) staff members were being required to re-image hundreds of machines every year, even for low-level infections such as adware and toolbar installations. The cost of re-imaging machines results in at least three hours of TSD labor per incident and the loss of productivity of the impacted user. CTS identified the Malwarebytes Remote

Remediation tool as a low cost solution (about \$2.00 per seat) that allows us to scan and remediate these low-level infections remotely, reducing impacts to the end user and saving TSD an estimated 1,575 labor hours and \$126,000 in associated labor costs per year.

- Saved about \$1,600 per month by working with the SCA's on identifying "non-usage" devices and having services canceled
- Identified as unused and deleted 700 WITS CENTREX lines for the Forest Service. This saved the customer about \$11,000 per month.

Keeping Customers Secure



No topic is more important to CTS and our customers than security. CTS led the Department's effort as part of the OMB Cybersprint directives to ensure users authenticated to the network using approved credentials. Under our leadership, USDA met the Presidential goal of 85% of users logging into the network using their LincPass credentials by September 30, 2015. Below are a few examples of our attention to security and identity management in FY 2015.

HSPD-12: CTS led the implementation of HSPD-12 enforcement for IT system access across the Department, particularly with regard to technical mandatory implementation of workstation log-in using LincPass and the CyberSprint activities dealing with privileged users. USDA's LincPass card is designed to link a person's identity to an ID credential and the credential to a person's ability to physically and logically access federally controlled buildings and information systems. Challenges with the rapidity of new and replacement card processing require the use of active directory exemption groups to allow user access. In addition to directly implementing technical controls for CTS-serviced agencies and offices, CTS also plays a facilitation and compliance reporting role for all USDA agencies and offices. CTS continues to research and develop Personal Identify Verification (PIV) alternatives for users without physical cards (LincPass) and devices that cannot support use of a physical card. CTS developed a solution that uses credentials compliant with HSPD-12. These credentials are derived from a validated PIV source. CTS executed a successful proof of concept for the use of PIV-Derived (PIV-D) credentials. This access method uses a combination of access and security tools to integrate with existing access control systems and provide secure authentication. The testing validated use to access resources on mobile devices and using PIV-D on a mobile device to access resources on workstations. It tested application of PIV-D to log into a protected site, the e-mail system, a custom mobile application, and the VPN. The proof of concept included Android, iOS, Windows, and Mac OS devices.

Identity Lifecycle Management: With the organizational merger and integration activities, CTS assumed leadership of the ICAM Program services to centrally manage

the identity, entitlements, and roles of all USDA “persons” (including employees, contractors, partners, affiliates, and customers). ICAM manages access control policies and provides automated provisioning, management, and de-provisioning of both identities and access entitlements across USDA enterprise and agency IT systems. ICAM services provide a repository of identity data, roles, and entitlements to make access decisions accurately and consistently and simplify management of user identities and entitlements, including the automation of provisioning and de-provisioning. ICAM also enables crucial A-123 and FISMA auditing, reporting, and regulatory compliance. It:

- Supports all 29 USDA agencies and staff offices 24x7x365
 - Over 450 web applications use eAuth
 - 50+ data connections for Identity Lifecycle Management
 - Over 5 million logons per month to eAuth
- Is piloting eAuth as a government-wide shared service
- Is facilitating full implementation of HSPD-12 across all agencies/offices for both privileged and non-privileged users

By improving the speed, efficiency, and accuracy of identity management, ICAM provides cost savings by automating what have been historically manual processes and reduces the business risk exposure of USDA networks and data.

eAuth Service: The eAuth team completed a multi-year modernization initiative to further secure the system and access processes, integrate with the USDA identity management system, reduce operational costs, adopt advanced technologies, and streamline the authentication process. Furthermore, the eAuth team is currently implementing a federated authentication capability for the National Finance Center (NFC). This capability will enable the NFC to enforce PIV authentication for sensitive web-based applications and provide secure system access for NFC's non-USDA customer base while eliminating the need for multiple usernames and passwords. The eAuth service:

- Provides secure access to USDA resources through centralized credentialing, multi-factor authentication, and single sign-on and authorization services for both internet and intranet applications
- Supports both internal employee-facing applications as well as external public-facing applications that service USDA customers and partners
- Supports federated authentication, allowing non-USDA federal agencies and other external partners to access USDA applications and data sources

Focus on Security Newsletter: CTS continued issuing and improving the USDA-wide Focus on Security Newsletter in FY 2015. This newsletter maintains ongoing security awareness among end users in all CTS-managed environments by addressing such topics as spear phishing, browsing security, personally identifiable information, and wireless security. The newsletter has been very well received and is now sent to all USDA Information Systems Security Program Managers (ISSPMs).

Moving Forward

Our extensive portfolio of experience, services, and products and our intense customer focus will keep CTS relevant to our customers. We don't just focus on providing the same high level of service year after year, though this is important. Every year, we in CTS also look to provide new and improved services to keep pace with the quickly evolving IT environment. There are a number of initiatives outlined in this report that remain in progress, and we will undertake new ones. Here are just a few examples of what's to come.

What's Ahead in FY 2016

Mobility: Currently, CTS is working on a couple of key initiatives to enhance Mobile Device Management (MDM) capabilities to better serve customers' business and security needs: 1) PIV-D initiative – CTS is working to pilot the use of PIV-D on mobile devices, eventually eliminating the needs of user ID/password credentials on mobile devices, and 2) Microsoft Office Integration – CTS is working with a mobility vendor to integrate Office productivity tools such as Word, Excel, PowerPoint, Outlook, and Skype for Business into the secure container.

OCE: The Optimized Computing Environment (OCE) Investment is a modernization initiative focused on updating and streamlining the SCA computing environment. OCE worked to set the foundational architecture for high-availability, security, and flexibility of data. FY 2016 completes the proposed deployment projects and marks the transition into supporting the hardware refresh cycle. This part of the investment lifecycle allows for continued stability and support of the environment.

Network Modernization and Standardization: To modernize the telecommunications architecture and provide an overall reduction of telecommunications costs, CTS will continue to increase bandwidth at critical locations and consolidate business traffic for service optimization.

OSEC and DM Customers: To further expand standardization efforts and in support of the Department's efforts to achieve a better security posture, CTS will undertake a workstation reimage initiative. CTS has been working with each agency's mission areas to address a host of cyber security and LincPass or PIV compliance concerns. This new image on the OSEC and DM workstations will standardize the look and feel of all the workstations, making troubleshooting easier and quicker. It also will "catch up" all workstations on patch compliance, improving the Department's workstation security posture.

Closing

As we share our collective accomplishments during FY 2015, CTS' innovation, solutions, service, and delivery make a statement – we are keeping CTS relevant to our customers. What CTS has accomplished in field level support, the optimization and modernization of the computing and infrastructure environments, cyber security, identity and access management, mobility, and unified communications brings value to the customer and enables their success.

CTS continues to work on organizational integration throughout FY 2016, and during this time we will persist in optimizing spending and streamlining processes with the goal of reducing customer costs. CTS will deliver the highest quality services and products; if we ever fall short of your expectations, please let us know. Likewise, we value your comments and suggestions, so please do not hesitate to contact anyone of the CTS Leadership Team highlighted at the end of this report.

Our vision and mission statements summarize well our focus in FY 2015 and our way ahead for FY 2016 and beyond:

Vision Statement

As the client IT service provider of choice, enable our customers' missions through innovative solutions, premier service delivery and technical expertise at the best value.

Mission Statement

CTS' mission is to support our global customer base and their respective business mission areas as their client IT service provider of choice; we work together to securely design, integrate, sustain, and optimize the combined information technologies that empower every aspect of their missions.

CTS Leadership Team

Title	Name	Telephone
ACIO	Nancy Reeves-Flores	202-690-2252
Deputy ACIO	Clint Swett	816-926-1588
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Director, Technical Support Division	Linda Lewis	301-504-5358
Director, Business Services Division	Lisa Keeter	202-720-4109
Client Executive Manager	Rory Schultz	202-260-9219
ISSPM	Nancy Herbert	816-926-3836
Acting Special Assistant to the ACIO	Scott Hawkins	202-720-2813



Front row from left to right:
Nancy Reeves-Flores, Clint Swett

Second row from left to right:
Rory Schultz, Lena Allen (Deputy
Director, Technical Support Division)

Third row from left to right:
Lisa Keeter, Innocent Lau (Acting
Deputy Director, Infrastructure
Operations Division), Scott Hawkins

Fourth row from left to right:
Janell Duke, Phillip Rendina
Linda Lewis
Not pictured: Nancy Herbert

Our Relevance – Your Success

Client Technology Services (CTS)

For more information about CTS and its services please visit:

[Information about CTS Services](#)