Social Security Administration

Information
Resources
Management

Strategic Plan 2016 – 2019

socialsecurity.gov

ACTING COMMISSIONER'S MESSAGE

"Our challenge is to embrace technological enhancements to achieve efficieny without sacrficing the personal service for which we are known." Carolyn W. Colvin

I am pleased to present our Information Resources Management Strategic Plan (IRM Strategic Plan) for Fiscal Years 2016-2019. Our IRM Strategic Plan outlines how we plan to align our information technology infrastructure with customer service expectations. The plan underscores our Strategic goal to Ensure Reliable, Secure and Efficient Information Technology (IT) Services.

As Acting Commissioner of the Social Security Administration (SSA), I have made investing wisely in technology a priority as we work to increase citizen satisfaction and promote positive experiences with the federal government by delivering smarter, better, and more efficient service. Innovations in IT are changing the way people interact with the government and the public's expectations. Social Security reaches almost every family, and at some point, touches the lives of nearly all Americans. Our challenge is to improve services in a time of fiscal austerity. To improve customer experience and make it easier for people to do business with us, we will continue to expand our award-winning online services.

In March of 2015, I along with SSA's executive leadership established eight critical priorities to be accomplished by December 2016. "Transforming the Information Technology Investment Process," one of these eight priorities, is the initiative to help SSA select, develop, and deliver high quality IT services needed to create an innovative organization. The new IT Investment Process (ITIP) will transform the way we manage and invest in IT at SSA. We also established a complimentary organization to ITIP, our Enterprise Program Management Office (EPMO), to provide management oversight of mission-critical projects and initiatives. As a service organization, the EPMO will increase our ability to deliver projects on time, on budget, and with quality results. The EPMO will assist our employees in performing their work and increase our ability to optimize taxpayer dollars entrusted to our agency as well as help our agency make sound strategic decisions.

Throughout our IRM Strategic Plan, we share our technology-support approach by effectively prioritizing and managing our IT and Information Management (IM) investments to achieve our mission and business outcomes. Our approach is customer-centric. Personalized service continues to be the most important priority for the 64 million beneficiaries we serve. We are continuously working to improve both our online services and our internal IT processing systems so we can make it easier for the public to do business with us in the manner they prefer, whether it is online, in person or on the telephone.

We know that technology changes rapidly, therefore we made a commitment to improve our IT Investment program. We engage in a collaborative process that enables us to properly plan and construct our IT projects using the right technological solutions on time and within budget to provide the best possible service to the public and our employees. We are utilizing new technology and new methods to deliver technology faster such as employing Agile development and Cloud Computing.

We are firmly committed to protecting the public's data and identifying and preventing fraud within our programs. The daily efforts of our employees are vital in reducing fraud and abuse in our programs, while ensuring transparency, effectiveness, and accessibility to all. Our IRM Strategic Plan describes our commitment to continually develop and implement innovative IT solutions that support our mission to deliver services that meet the growing needs of the public.

Carolyn W. Colvin

Carolyn W. Colvin
Acting Commissioner of Social Security

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Note: Review codes AXXA – IXXC inserted per OMB Memorandum M-13-09 dated March 27, 2013.

CIO MESSAGE

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In September 2015, after serving as Chief Technology Officer for nine months, I was appointed Chief Information Officer of the Social Security Administration. When I arrived at the agency, I found that the agency has a committed workforce that over 30 years had built a computing environment that met our business needs with world-class availability. Our information systems support virtually every aspect of our business - during fiscal year (FY) 2015, the agency paid more than $932 billion to almost 65 million beneficiaries each month. To accomplish this, our total IT expenditure, including our staff, was about $1.8 billion. We accomplish a great deal with the resources we are provided.

When we first began using technology to support our business processes many years ago, we led the industry in the adoption of new technology, and in some areas, we drove the development of that technology. Over the years, however, the pace of adoption technology has accelerated so rapidly, that due to resource and budget constraints, we, like many federal agencies, have not been able to keep up. The challenge of accelerating our adoption of new technology and modernizing the systems that run our business will be our evolving focus over the next several years; equaling our established focus on maintaining the availability of world-class service to our customers.

In the late 1970's and early 1980's, because of the massive scale of our operations, we were aggressively developing systems and databases to store information about tens of millions of citizens. These systems pushed the state of the art. They represented Big Data in the 1980's. Today these legacy systems represent a significant technical debt. Their complexity makes it challenging to add the functionality required to meet the continually evolving requirements placed on us by the Administration, Congress and the people we serve. The mainframe languages, development and operating environment are no longer widely taught in our university systems and the Federal staffs who developed and maintained these systems are retiring. As a result, the interest payments on this 30-year-old technical debt are compounding, and in the next five years we could face a crisis keeping the systems that execute our mission running.

For several years, we have worked to reduce our accrued technical debt by chipping away at the legacy code base as we add new business functionality. This opportunistic approach worked well given the ebb and flow of annual funding. However, we are at a point where this approach no longer is viable; we have to undertake a larger, multiyear, effort. To that end, we are focusing our efforts in three primary broad areas: database modernization, code modernization, and infrastructure modernization.

Our first broad area of focus area is core database systems. Our current databases were designed before there were disk drives and therefore before there was direct access. Because of limitations of the technology available at that time, all updates were managed via a sequential, batch, process that applied updates queued during the day. We have begun several projects, including Enterprise Data Warehouse (EDW) and BORG, to build new databases that will overcome the challenges described above. We describe this work in the IRM Plan that follows.

Our second broad area of focus area is code modernization. These efforts are designed to address the complexity and pre-modern design of our oldest systems. We have begun to work with tools to analyze our legacy applications and provide design advice for the re-implementation of these systems with more modern programming languages and designs. These tools also have the potential to generate basic code in the new design, which we can then refine for our use. We currently have a dozen projects underway using Agile development methods. This approach enables us to more quickly roll out new functionality to users while reducing the risk that what we produce will not meet users' needs. We have also renewed focus on deploying common routines as enterprise, or application, services.

The third broad area of focus is modernization of our infrastructure. For the past 30 years, or more, we have been predominantly a user of mainframes for our core systems. For many years only mainframes could handle the volume of our workloads. Over the past several years options have emerged that could satisfy our computational requirements more flexibly and economically. To explore our opportunities to take advantage of this new technology, we have established a Modern Development Environment (MDE) in the Amazon Web Services cloud. MDE is a suite of industry standard tools and engineering practices for supporting modern development. We are also establishing an internal cloud environment that will enable us to evaluate and compare the functional and economic advantages of both external and internal cloud implementations.

With the idea of leveraging our new data capabilities, development techniques and infrastructure, we are beginning a fundamental re-look at how we engage our customers and our employees. Through a new Customer Connect initiative, we are considering how to meet customer expectations in 2020. We are identifying challenges to tackle in Systems infrastructure, data access and tools readily available in the industry along with possible policy and regulatory changes necessary for us to meet customer expectations. Equally important is to ensure we are empowering our employees to evolve at the same pace as the advancement of technology. Our new enterprise-wide IT Human Capital Operating Plan (HCOP) represents a shift toward a more strategic role for our IT human resources; one that recognizes that by strategically managing and investing in our IT staff we will increase the success of the agency. The IT-HCOP is designed to address challenges with an aging workforce to properly prepare for recruitment, hiring, developing and retaining the IT staff of tomorrow. In addition to hiring new staff, we must train our current Systems staff to develop new solutions to address the next generation of customers based on the opportunities identified by the Customer Connect initiative.

CIO MESSAGE

Information technology provides the fundamental operational capability of SSA, and we will continue to use technology to make a difference in people's lives. To support this endeavor, I am pleased to present the SSA Information Resources Management Strategic Plan (IRM Strategic Plan) for Fiscal Years 2016-2019.

Robert Klopp
Deputy Commissioner for Systems
and
Chief Information Officer
Social Security Administration

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EXECUTIVE SUMMARY

The Fiscal Year (FY) 2016-2019 IRM Strategic Plan describes our forward-looking approach using IT resources to support our mission goals and objectives. In FY 2015, we invested approximately $1.8 billion into IT resources. Following the guidance identified in this plan and detailed in the Social Security Administration (SSA) Enterprise Roadmap, will ensure that we invest each IT dollar in the most cost-effective way to improve our service to the public and our customers.

Our annual IT investment of $1.8 billion sustains the largest social insurance system in the world. In FY 2015, our mainframe and client-server data stores of 40 petabytes supported the processing of an average daily volume of approximately 185 million individual transactions. Our workforce of more than 80,000 Federal and State employees support these programs through a nationwide network of over 1,500 offices that includes our headquarters in Baltimore, Maryland, regional offices, field offices, card centers, teleservice centers, processing centers, State Disability Determination Services (DDS) offices, hearing offices, satellite offices, National Hearing Centers, and the Appeals Council. We also administer the Social Security programs to beneficiaries living outside the United States, and we implement international agreements, assisted by the Department of State's embassies and consulates throughout the world. The Department of Veterans Affairs (VA) Regional Office in Manila assists us in administering the Social Security programs in the Philippines

The strategies identified in this IRM Plan are derived from the goals and objectives defined in two major strategic documents; our Agency Strategic Plan (ASP) www.socialsecurity.gov/asp/plan-2014-2018.pdf and our Vision 2025 Plan www.ssa.gov/vision2025/.

Vision 2025 describes how we will serve our customers in the future. We must remain true to our core principles and continue to provide critical services to those who need us most. We are committed to serving all of our customers efficiently, effectively, and compassionately, and to preserving the integrity of our programs for future generations.

We have identified a number of critical areas of focus to enhance our service delivery to our customer base:

- Marketing Our Online Services - Our first communications priority is marketing our online services as a convenient option for those who prefer to conduct their business online;
- The Social Security Program - The second communications priority is educating the public about the Social Security program—especially the importance of planning carefully for retirement;
- Enhance Online Customer Service - We will prioritize our work efforts to ensure that our customers can access essential Social Security services whenever they want and wherever they want;

- Reduce the Wait for a Hearing Decision - The American public deserves timely, high quality hearing and appeal decisions;
- Educate the Public About Social Security Programs - Every individual has a stake in the Social Security program, including the 165 million workers who contribute to the program and the more than 65 million people who currently depend on monthly Social Security benefits. However, many remain uninformed or misinformed about the programs and services we offer;
- Transform the IT Investment Process - The demands for our services continue to grow at a rate that challenges our resources. Prioritizing our investments in new technologies will help us perform our jobs more efficiently and effectively;
- Establish a Program Management Office - We are establishing an Enterprise Program Management Office (EPMO) to provide management oversight of mission-critical projects and initiatives; and
- Accelerate the Use of Data-Driven Decision-Making - We will increase our reliance on data analytics to make more informed decisions to support our efforts to become a more innovative organization. We will develop new data analytics to analyze our current data differently, and use this analysis to better inform our decisions.

Each of these focus areas will use our IT resources to enhance their effectiveness and enable growth as our requirements for service and support continue to increase.

While the IRM Strategic Plan describes how IRM activities help to accomplish our mission and strategic goals, it also ensures that IRM decisions integrate with organizational planning, budget, procurement, financial management, human resources management and program decisions. The IRM Strategic Plan describes key IT goals and strategies for the following agency-wide IT functions: IT Workforce, Enterprise Architecture (EA), Capital Planning and Investment Control (CPIC), E-Government (E-Gov), Cyber Security, Telecommunications and Operations, and Information Management (IM).

Social Security programs touch the lives of nearly every American, including many living abroad. We run one of the nation's largest entitlement programs: the Old-Age, Survivors, and Disability Insurance (OASDI) program. Most people know OASDI as their Social Security retirement program. We also are responsible for two of the nation's largest federal disability programs – the Disability Insurance (DI) program and the Supplemental Security Income (SSI) program. In FY 2015, we paid benefits to approximately 65 million individuals on average each month during the year. Total Federal benefits paid during FY 2015 were about $931 billion. We provide substantial support to Medicare and Medicaid programs and critical support to several other important Federal programs.

We focus on enhancing our ability to meet business requirements and effectively carry out our mission while we continue as a leader in shaping the economic policies related to federal benefits. The Office of Systems (OS) provides effective and efficient support to our core programs. This IRM Strategic Plan articulates our IT goals and strategies to meet our business goals.

This FY 2016-2019 IRM Strategic Plan describes our approach to using our IT resources to enable and enhance each of the critical areas.

INFORMATION RESOURCES MANAGEMENT STRATEGIC PLAN

1.0 ABOUT OUR IRM STRATEGIC PLAN

Our IRM Strategic Plan describes our overall IT structure, recent accomplishment, and most importantly, current and planned activities and enhancements. The scope of these efforts includes all our IT and IM investments and is planned and carried out in accordance with Office of Management and Budget (OMB) published guidance (OMB Circular A-130) and applicable statutes. Our IRM Strategic Plan addresses the Government Performance and Results Act of 1993, (GPRA 1993) the Paperwork Reduction Act of 1995, the Clinger-Cohen Act of 1998 (CCA), the E-Government Act of 2002 (E-Gov), the Government Performance and Results Act Modernization Act of 2010 (GPRAMA 2010), the Federal Information Security Modernization Act of 2014 (FISMA 2014) and the Federal Information Technology Acquisition Reform Act (FITARA) enacted on December 19, 2014.

https://www.whitehouse.gov/sites/default/files/omb/memoranda/2013/m-13-09.pdf

https://www.whitehouse.gov/sites/default/files/omb/memoranda/2015/m-15-14.pdf

https://www.acus.gov/recommendation/gpra-modernization-act-2010-examining-constraints-and-providing-tools-cross-agency

https://www.whitehouse.gov/blog/2015/06/10/new-foundation-technology-management

We developed this plan in consultation with our stakeholders, and nationally recognized IT experts. We periodically revisit the plan as we continually adjust the balance between the changing service delivery needs of the public, rapidly advancing technology, and limited fiscal resources. Our IRM Strategic Plan also identifies our existing strengths, and addresses many of our risks and challenges

1.1 GUIDING PRINCIPLES   (AXXB)

Our IRM Strategic Plan directly supports our ASP. It reflects our principles, goals, and objectives in well-grounded, practical strategies that we will implement over the next two years and beyond.

PRIORITIZE SECURITY AND SYSTEM PERFORMANCE – We maintain personal information for nearly everyone in America and cannot accomplish our business goals without secure, reliable IT. Accordingly, security and performance concerns are top priorities in how we manage our IT resources. As we expand our online services, we will continue to invest in our IT infrastructure to ensure that we maintain the high performance standards and the reliability that the public and our workforce expect. We will maintain the privacy and protection of our data, systems, and business processes, and implement effective cyber security technologies to strengthen our information security program.

USE SOUND, VIABLE TECHNOLOGIES – We have an 80-year record of accomplishment in making successful transitions to new technologies, as they demonstrate appropriate return on investment (ROI) in the context of performance and meeting business needs.

We are attentive to emerging technology innovations and vet all new technologies before adoption, having learned that the costs of living with or abandoning poor technology choices are significant. These activities include monitoring technology trends and assessing:

- Alignment with our mission and our environment;
- Maturity and anticipated life expectancy of the technology in question; and
- Long-term viability of the technology vendor

REALIZE VALUE TIMELY – We recognize large, complex IT projects come with significant risks. We implement our IT projects incrementally and at the minimum viable level that provides business value. This approach helps to ensure that we realize value timely, and allows us to update our long-term plans to adapt to changing business and technology environments and resource levels.

MODERNIZE SSA SYSTEMS – Modernization of our systems is vital to our mission. We use innovative, adaptable, and reliable methods and technologies that enable us to achieve our mission objectives in a manner that best meets our customers' needs. We take a full, life-cycle view of costing application development from initial investment, to on-going operations and maintenance (O&M), and transition to retirement/disposal. IT modernization enhances our capabilities and helps make our workforce more productive.

INVEST IN OUR WORKFORCE – Our IT personnel have strong business and programmatic knowledge, possess excellent technical skills, share a common mission-based focus, and a strong public service ethic. We are committed to maintaining this workforce model through continued training, staff development, and a positive work environment that values diversity and encourages employee innovation and input.

2.0 PERFORMANCE MANAGEMENT FRAMEWORK

To ensure our IT investments align with our strategic business needs, we follow the performance management framework set forth in our ASP. This framework provides for appropriate oversight, monitoring, and assessment of our efforts to achieve short and long-term outcomes that support our strategic goals.

2.1 OUR AGENCY STRATEGIC PLAN   (AXXA, AXXB)

Our ASP for FY 2016–2019 defines our mission, long-term goals, strategies, and approaches we will use to address specific national needs, challenges, and opportunities related to our mission.

Our IT Investments Alignment

- The Agency Strategic Plan (ASP) drives all lower level planning

- Performance measures tie to the ASP

- CPIC Policies and Procedures ensure IT Investment decisions align to ASP Goals and Objectives

Figure 1: IT Planning Plays a Key Role in the Performance Management Framework

Our ASP defines five high-level Strategic Goals that drive planning and decision-making:

STRATEGIC GOAL 1: DELIVER INNOVATIVE QUALITY SERVICES

STRATEGIC GOAL 2: STRENGTHEN THE INTEGRITY OF OUR PROGRAMS

STRATEGIC GOAL 3: SERVE THE PUBLIC THROUGH A STRONGER, MORE RESPONSIVE DISABILITY PROGRAM

STRATEGIC GOAL 4: BUILD A MODEL WORKFORCE TO DELIVER HIGH QUALITY SERVICE

STRATEGIC GOAL 5: ENSURE RELIABLE, SECURE AND EFFICIENT INFORMATION TECHNOLOGY SERVICES

These goals describe the strategic outcomes we want to achieve by FY 2018. In order to reach these goals, we developed the IRM strategic plan to bridge the gaps between vision, mission and operational strategies. With a more detailed IT plan, we are able to effectively prioritize and manage our IT and IM investments.

Our IT management processes require all IT investments be evaluated against E-Gov, Enterprise Architecture, CPIC, Cyber Security, Telecommunication, Enterprise Operations, and IM guidelines to ensure compliance and alignment to our target architecture. In addition, we provide stakeholders with the strategic tools, processes, and feedback mechanisms they need to be effective stewards of information resources. With defined management processes and procedures, we measure performance and demonstrate results in managing IT investments, thus establishing a solid foundation for enterprise transformation.

An important focus of the ASP is leveraging technology to enable us to meet our goals and achieve the desired business outcomes. The ASP drives all lower level planning (see Figure 1 on prior page), including the objectives, priorities and constraints managers adopt in constructing more detailed supporting plans. It is a five-year roadmap for organizational management and operational performance based upon an analysis of customer and stakeholder needs and requirements. The ASP contains specific goals for core mission and support functions, including how we use information and systems technology to interact with people seeking or receiving social security benefits.

Aligned to our ASP is the Annual Performance Report (APR), which describes how we will achieve our goals, identify priorities among the goals, and monitor our progress. We describe strategies we will follow and identify performance targets and key milestones we will accomplish in the current and next FYs. Many of the expected business improvements or outcomes rely upon the enterprise availability of our IT services. When we publish our APR, we ensure our priorities and planning documents are consistent with achieving our goals.

2.2 STRATEGIC PORTFOLIOS   (AXXB)

Our Strategic Portfolios (SPs) are established and monitored through a formal investment review process, as well as the CPIC processes to ensure alignment with our strategic planning, performance plan goals, strategic IRM planning and the Enterprise Roadmap. Our CPIC process facilitates IT project oversight and the integration of OS processes for making budget, financial, acquisition, program management, and assessment decisions. The result is an Agency IT Systems Plan.

Our SPs are:

ADMINISTRATIVE AND MISSIONS SUPPORT PORTFOLIO – The Administrative and Missions Support portfolio develops solutions that support our core business functions. These solutions will improve our responsiveness to the American public through enhancing our services and programs, modernizing our information technology, and building a model workforce. The main initiatives in this portfolio span work in the areas of Human Resources, Business Data Analytics, Notice Improvement, Earnings, and Enumeration and Death reporting.

COMMISSIONER'S STRATEGIC INNOVATION PORTFOLIO – PORTFOLIO The Commissioner's Strategic Innovation Portfolio incubates large and small innovative and experimental projects. This portfolio prepares us for possible future conditions, with the understanding that some initiatives will not become a reality.

CORE SERVICES PORTFOLIO – The Core Services Portfolio strengthens the integrity of our major programs (Title II, Title XVI, and Title XVIII). We provide innovative quality service to the public by ensuring reliable, secure and efficient services, increasing the use of self-services options, and partnering with other agencies and organizations to improve customer experience and align with the administration's One-Government approach. We strive to transform service delivery to the public and enhance the customer experience by completing the customer's business at the first point of contact. Core Services Portfolio initiatives also include plans to modernize our legacy systems and streamline workloads for our frontline employees, maintain system performance, and continuously strengthen our Cyber Security Program and IT services.

DISABILITY AND APPEALS PORTFOLIO – TThe Disability and Appeals portfolio promotes IT systems that increase the quality, timeliness, and consistency of disability decisions and services. These systems will facilitate the accurate collection, processing, and flow of data and information that will allow our employees to provide quality service to disabled applicants and beneficiaries. The portfolio will help ensure we make the correct disability decision at the correct time and apply disability policy and procedures consistently across all adjudicative levels.

INFRASTRUCTURE PORTFOLIO – The Infrastructure Portfolio provides us the stability and flexibility we need to meet and sustain current operational requirements, adapt to changes in business operations, and plan for future growth and demand. Our reliance on electronic data increases with each new workload and each new service delivery channel. The portfolio seeks to address the rising demands on our infrastructure by instituting new and/or enhanced technologies, and continuing to deliver end-to-end availability, stability,

security, and performance. By anticipating technology demands, the portfolio strives to ensure a ready environment with each application delivery, as well as improvements and enhancements to application portfolios.

PROGRAM INTEGRITY PORTFOLIO – The Program Integrity Portfolio supports our goals to strengthen the integrity of the Social Security programs, deliver innovative quality services, and ensure reliable, secure, and efficient IT services. We continually improve our comprehensive quality review and financial management programs in accordance with all laws and regulations, which includes paying benefits accurately and on time to recipients and beneficiaries, detecting and preventing fraud wherever it may occur, and minimizing improper payments.

OUR STRATEGIC PORTFOLIOS ALIGN WITH OUR AGENCY STRATEGIC PLAN (ASP)					
OUR ASP GOALS					
Our Strategic Portfolios	**Goal 1** Deliver Innovative Quality Services	**Goal 2** Strengthen the Integrity of Our Programs	**Goal 3** Serve the Public through a Stronger, More Responsive Disability Program	**Goal 4** Build a Model Workforce to Deliver Quality Service	**Goal 5** Ensure Reliable, Secure, and Efficient Information Technology Services
Administrative and Missions Support		√		√	√
Commissioner's Strategic Innovation	√	√	√	√	√
Core Services	√	√			√
Disability and Appeals	√		√		√
Infrastructure	√	√	√	√	√
Program Integrity	√	√			√

Figure 2: Our Strategic Portfolios Align with our ASP

2.3 HOW WE ASSESS OUR PERFORMANCE

We rely on our IT infrastructure to support virtually all programmatic, administrative, and Management Information (MI) processes. In order to ensure a high level of performance across all domains, we rely on our strong governance model, robust internal controls, and a systematic approach to quality assurance. We regularly review and assess our performance at both the enterprise-level and the project level.

2.3.1 ENTERPRISE-LEVEL PERFORMANCE   (BXXA, BXXB, BXXC, IXXB)

(BXXB) Because IT underlies all Social Security activities, we assess enterprise-level IT performance based on our overall performance. We establish system availability goals in the Agency's Annual Performance Plan. We have a stated goal of 99.5% systems availability (the ability of our IT services to be there when people need it). We continually strive to meet or exceed the published goals and have a well-established record of doing so. Our system availability was 99.9% in FY 2015. In addition to system availability, we also consider the following when assessing enterprise-level performance:

- Trends in infrastructure usage and utilization;

- Cost, schedule, and functionality progress with our projects;

- Trends in help desk calls and trouble tickets;

- Results from extensive management controls, annual reviews, and audits;

- Continual feedback from our business partners;

- Impacts from external interfaces/systems;

- Public satisfaction scores with our direct service applications;

- Comparisons of benchmarks, particularly with costs such as software licensing;

- Our resource commitment to IT relative to our overall budget and peer organizations;

- Our technology posture relative to peer organizations in government and industry;

- Number and impact of security incidents;

- Workforce health indicators including resignation rates; and

- Results from our disaster recovery exercises

(BXXA) One example of how we assess how well we are meeting user expectations is our User Experience Group. We established the User Experience Group (UXG) as a resource and center of excellence for user-centered design. The UXG provides user-centered design and evaluation services to our Internet and Intranet project teams.

The UXG works with our software development teams to ensure efficient and effective user interfaces. User-centered design increases the accuracy of information provided to us by the public and our employees.

(IXXB, BXXB) We incorporate accessibility best practices for planning, design, development, coding, and Section 508 compliance testing for all customer facing electronic services. We continually update our best practices through participation in the Federal Chief Information Officer (CIO) Council's Accessibility Committee. We enforce best practices for application development through processes required and documented within our formalized Software Development Lifecycle. Additionally, we developed a reusable design pattern library known as the User Experience Framework (UEF). Patterns in this library undergo rigorous 508 compliance testing. Reusing code from library ensures 508 compliance and usability for people with disabilities. For more information on accessibility, see Section 6.13.

The eServices Governance Steering Committee, handles oversight of digital services. The committee is comprised of executive stakeholders and co-chaired by representatives from the Office of Operations, Office of Communications, and Office of Systems. This group governs standards, processes and procedures for our digital services. In addition, they formulate and document our eService strategy and oversee its implementation. All of these

entities have clear roles and responsibilities and follow the principles clearly stated in our ASP. This strong centralized digital IT governance committee has been in place for well over ten years, allowing us to continue to evolve our governance as we gain new insights.

2.3.2 PROJECT-LEVEL PERFORMANCE   (BXXA)

We assess our performance at the project level. These assessments include project management metrics for adherence to budget, schedule, and process, as well as higher-level investment reviews. Through our EA governance processes, we assess technical aspects of individual projects. We regularly review all our projects on a monthly basis. For our major IT investments, we report cost and schedule performance via the [Federal IT Dashboard](). The IT Dashboard is a website enabling federal agencies, industry, the general public and other stakeholders to view details of federal information technology investments.

One important tool for measuring and improving our online services is ForeSee. ForeSee is a company that specializes in satisfaction and customer experience surveys. We currently use a targeted approach, focusing on specific online applications so we are better able to assess both users' overall online experience and their transaction-specific experience. ForeSee survey questions are designed in a way that provides insights into key areas, such as, navigation, clarity of information, look and feel, functionality, overall satisfaction, likelihood of recommending or returning, etc. Each survey allows a project team (or component) to ask "custom questions" that are designed to gain insights that help us improve that application. The questions that ForeSee employs in their surveys enable us to effectively benchmark our online services throughout the federal government, spot problem areas, and identify opportunities for improvement. We also have access to several usability audit reviews each year. These reviews give us an additional assessment tool and enable us to do usability testing in specific online areas (e.g., to test for clarity of information, evaluate navigation and search capabilities, better understand authentication and reentry issues, etc.). Finally, the ForeSee surveys provide the survey taker with the opportunity to explain a problem or issue in the form of an "open-ended" comment.

The results of our efforts are evident in the performance of our systems, the performance of our staff, our strong security, our portfolio health, and our IT budget expenditures, as well as in our customer feedback, peer reviews, and audits.

3.0 ENTERPRISE IT OVERVIEW

3.1 IT ENVIRONMENT

The Office of Systems (OS) is our IT organization. OS designs, engineers, operates, maintains and secures the technology resources that support the business needs of our entire organization. The OS includes the Deputy Commissioner for Systems/Chief Information Officer (DCS/CIO), a Chief Technology Officer (CTO) and eleven Associate Commissioner (AC)-led offices. (See Appendix A for the CIO Authorities Implementation Plan.) Staffs in the DCS provide high-level oversight; leading our IT strategic planning, investment management, and CPIC activities. Three of our AC-led offices support the business community to capture business requirements and clearly describe what our Systems organization can do to support those requirements. Six of our AC-led offices support software engineering, focusing strictly on developing and providing software systems and services the business community required to provide first-class service to the American public. Two of our AC-led offices manage our 24/7 data operations, networks, and telecommunications.

3.2 IT WORKFORCE   (FXXA)

Our IT workforce includes approximately 3,800 IT specialists. These specialists have strong business and programmatic knowledge and share key organizational attributes, including a strong public service ethic. We are committed to maintaining our highly skilled workforce through continued training, staff development, and a positive work environment that values diversity and encourages employee innovation and input. We face an accelerated wave of retirements as the baby boomer generation ages. We use proven knowledge management strategies, comprehensive technology training programs, as well as recruitment and retention strategies, to mitigate any potential institutional knowledge loss and to maintain our highly competent IT workforce. Having the right people, with the right skills and experiences, in the right jobs is paramount to our continued success.

Based on results from the latest Federal Employee Viewpoint Survey, we continue to rank among the top 10 Best Places to Work among large agencies in the Federal Government. Our employees believe strongly in our mission and in the work that they do on behalf of the American people. To remain an employer of choice for current and future generations, we will use modernized recruitment strategies (such as social networking tools and virtual job fairs), and the full complement of human resources programs and flexibilities to compete for a diverse pool of top talent.

The Office of Systems IT human capital planning approach supports our critical mission to deliver high quality, citizen-centered services. This approach supports the ASP, aligns with our Human Capital Operating Plan (HCOP), and addresses specific requirements, opportunities, and challenges of the IT workforce. We are building a future-ready workforce equipped with the modern tools and technologies needed to best serve the American

people. To ensure we have the right talent we work closely with our Chief Human Capital Officer to integrate IT human capital management across the enterprise for use in talent identification, recruitment planning, training and development, and to foster a corporate culture that encourages a collaborative work environment across all components.

IT HUMAN CAPITAL — We must have a "future ready", 21st century, competent, agile, and adaptable IT workforce equipped with modern tools and technologies to effectively serve our constituents and respond quickly to changing business needs. Traditionally, we have addressed these challenges primarily through training and hiring. While this approach has served us well in the past, the fast pace of changing technology, increased workloads, and public demand for additional digital services requires broader strategic solutions.

Working in partnership with the Chief Human Capital Officer, we will execute the initiatives and activities needed to develop and carry out an integrated IT talent management model, and bring together a unified program that maximizes our investment in IT human capital. Ultimately, the success of the partnership depends on solid leadership, sound planning, adequate resources, and a continuing commitment to improving our business processes.

This initiative represents a shift toward a strategic role for our IT human capital function, one that recognizes we cannot succeed unless we strategically manage and invest in our IT staff.

KNOWLEDGE SHARING — We encourage and support employee-led organizations that promote knowledge sharing, mentoring, and networking. The Project Management Community of Practice (PMCoP) provides opportunities for project managers to share best practices and knowledge. The PMCoP also serves as a venue for developing mentoring relationships between certified project managers and those interested in obtaining professional certifications, such as the Project Management Professional (PMP) and Federal Acquisition Certification and Project Managers (FAC-P/PM) certification.

OS SKILLS INVENTORY OVERVIEW — OS supports the accomplishment of our mission by providing IT services and support. Ensuring superior IT services and support requires that our IT workforce be properly equipped with the skills and competencies needed to develop and maintain our IT investments. We conduct a biennial skills inventory to assess IT skills of our staff. Our next skills inventory is scheduled for the summer of FY 2016. Effective skills inventory management gives us the ability to meet our changing needs quickly and effectively. More importantly, the true value of our skills inventory comes from its ability to facilitate knowledge management and succession planning.

We recognize that our traditional model of training and hiring will no longer suffice given the fast pace of changing technology, increased workloads, and public demand for additional digital services. Therefore, we will broaden our strategic approach by expanding our use of contracted services as well as building a partnership across government to share needed skill sets.

Our skills inventory reveals current competency levels, future needs (which considers potential losses due to retirement eligibility), and the resulting competency gaps. Closing

skill gaps is a priority. Because we maintain a dynamic view of our workforce, we quickly respond to closing skill gaps by ensuring that our recruitment and training initiatives address the changing gaps. The Office of Personnel Management identified a list of competencies that provided us with a logical framework to use for developing our skills inventory. We have made adjustments and added new skills to reflect changes in our priorities. The biennial survey, last conducted in FY 2014, provided us with an opportunity to refresh the skills inventory. We are shifting to a more strategic, enterprise-wide approach to IT human capital management and this year the IT skills inventory survey was expanded to include all IT specialist positions. Two new skills – Agile Development and Data Analytics were added to the skills inventory.

Analyzing the skills inventory also lets us examine the connection between specific priority investments and any related competency needs and gaps. OS partners with the Office of Human Resources to execute the HCOP. An IT addendum to the HCOP is currently under development.

We use the following to verify the effectiveness of our IT human capital planning:

- Skills trend analysis;
- Manager feedback from assessment evaluations;
- Training and hiring results;
- Contractor acquisition;
- Timely completion of mission critical projects; and
- Employee retention.

See Appendix C for results of the FY 2014 IT Skills Inventory analysis. A new skills inventory will be conducted in FY 2016.

SSA'S DIVERSITY & INCLUSION STRATEGIC PLAN   IXXA

We strive to create a diverse environment where individuals of all abilities can work, interact, and develop their full potential. Our Workforce Diversity Goal is to recruit and hire a high-performing workforce drawn from all segments of American society. To accomplish this environment we:

- Integrate diversity into our workforce planning and address barriers that limit employment opportunities for members of a particular identified group;
- Ensure all recruiters are trained on reasonable accommodations and best practices;
- Provide outreach and recruitment consistent with the Employees with Disabilities plan;
- Use Schedule A hiring authority for individuals with disabilities; and
- Use Veteran Hiring authorities.

Our Workforce Inclusion Goal is to cultivate a culture that encourages collaboration, flexibility, and fairness to enable individuals to contribute to their full potential and further retention. To accomplish this goal we:

3.0 ENTERPRISE IT OVERVIEW

INFORMATION RESOURCES MANAGEMENT STRATEGIC PLAN

- Review leadership development programs, determine whether they draw from all segments of the workforce, and develop strategies to eliminate potential barriers;
- Enhance mentoring opportunities for employees at all levels;
- Conduct workforce planning and analysis to determine and address current and future leadership gaps;
- Offer leadership shadowing opportunities and rotational assignments; and
- Employ strategies to attract and retain a diverse and inclusive workforce.

DISABLED VETERANS AFFIRMATIVE ACTION PROGRAM, FY 2015 PLAN FOR SPECIAL RECRUITMENT – We engage in a collaborative approach that integrates our Disabled Veterans Affirmative Action Program (DVAAP) with our human resource policies and recruitment strategies. We recognize that diversity strengthens our public service commitment, providing insight into how to offer the best service to an increasingly diverse American public, and it is critical that we continue to strive toward promoting diversity.

Our FY 2015 plan highlights ongoing and new strategies, partnerships, and initiatives we will use to recruit, support, and retain disabled veterans. Veteran hiring has been a priority for us. In 2015, more than 39% of new hires were veterans. Of the veterans hired in 2015, more than 18% are disabled veterans.

Ongoing activities:

- Initiate Veteran employment marketing and outreach efforts that publicize us as an employer of choice;
- Maintain strong relationships with current stakeholders and forge new relationships with federal, state, local, and non-profit organizations that provide services and resources for veterans and disabled veterans;
- Attend veteran-focused career/job fairs, military Transitional Assistance Program (TAP) briefings, and Wounded Warrior Networking sessions as outreach to expand awareness of employment;
- Increase the number of Non-Paid Work Experience (NPWE) and Operation Warfighter (OWF) internship opportunities, marketing its value as an excellent transitional tool and secondary hiring strategy;
- Focus on marketing employee benefits and services to our veteran employees to provide them with needed support and improve overall veteran retention;
- Administer mandatory annual training to human resources personnel and managers on veterans' preferences, special hiring authorities, veterans' recruiting tools, volunteer internship programs, veteran-focused employee services and benefits, workplace sensitivity to veterans' issues, veteran-specific issues and resources, and reasonable accommodations;
- Collaborate with the VA on a streamlined process to expedite GI Bill Training and Education benefits for on-the-job training applications submitted by our veteran employees in front-line positions;

Social Security Administration | socialsecurity.gov

- Maintain collaborative relationships with internal partners to support hiring, training, and retention activities;
- Provide timely responses to requests for information from veteran employees and managers about veteran recruitment employment and opportunities;
- Collaborate with our national recruitment cadre;
- Monitor and track hires of disabled veterans on a monthly basis; and
- Include information on method of recruitment.

New activities:

- Develop employee orientation materials to inform new Veteran employees of available resources and services;
- Develop a comprehensive online resource to provide employees and managers with an overview of the GI Bill Education and Training benefit program to include step-by-step application guidance, links to the most current VA forms, and a Frequently Asked Questions (FAQ) feature;
- Develop information and resources to assist both supervisors and new Veteran employees;
- Develop and launch a marketing campaign for our Military Community Gateway website;
- Continue to expand the website to enhance information and resources to managers on hiring, retention, and reintegration;
- Establish an online Honor Wall that recognizes the achievements of Veteran employees;
- Develop and publicize the use of retention strategies such as employee recognition activities;
- Publicize and administer career development and mentoring workshops to all employees including veterans;
- Collaborate with the Military Affairs Advisory Council to provide career workshops for members;
- Publicize the availability of our Employee Assistance Program as a resource to all employees including Veterans;
- Publicize and administer disability support, including reasonable accommodation, for disabled veteran employees;
- Monitor and track hires of disabled veterans on a monthly basis;
- Include information on method of recruitment; and
- Analyze 2015 Federal Employee Viewpoint Survey data as it relates to recruitment, development, and retention of our female veterans.

3.3 IT BUDGET

Our annual IT budget of approximately $1.8 billion dollars covers spending associated with:

- Computing hardware;
- Hardware maintenance;
- Software development and software licensing;
- Security;
- Telecommunications infrastructure;
- Telecommunications usage;
- Contractor support; and
- Salary costs (approximately one-third of our IT budget).

Our IT spending has not grown substantially as a proportion of our administrative costs, and by common cost benchmarks, we are extremely thrifty. However, our overall IT spending has increased in recent years because of computing demand growth. This increased spending has focused investments on reducing risks, increasing overall productivity, and supporting strong service delivery. We are particularly proud of the fact that our total annual cost to support one beneficiary's full year of payments was only approximately $1.20. Prime examples of significant IT budget investments in recent years include:

- Migration of current data center IT services and operations from the National Computer Center (NCC) to the new NSC data center. Migration began in October 2014 and will conclude in August 2016.
- Significant expansion and quality improvement of our public Internet service channel, while at the same time providing an improved array of IT applications and services in our frontline offices. Our Internet services have enabled us to manage growing workloads while keeping overall administrative costs low.
- Extensive advances in disability IT systems. We have a fully electronic claims process, and now look to the IT budget as the funding vehicle to capture, move, track, organize, store, and access hundreds of millions of records associated with disability workloads. In recent years, we have also significantly added software functionality, greatly expanded video hearings, and greatly improved notices for visually impaired people.

For the most detailed and up-to-date budget information, please use the following links:

- https://www.socialsecurity.gov/budget/#&ht=0
- https://www.socialsecurity.gov/policy/docs/chartbooks/fast_facts/2015/index.html

3.4 IT GOVERNANCE

Our IT governance has two major components – Capital Planning and Investment Control (CPIC) and IT project execution. These processes ensure consistent enterprise-wide compliance with applicable guidance, policy and law including; our Annual Performance Plan (APP)/Annual Performance Report (APR), our business environment, Executive Branch policy and direction, legislative and other legal requirements, and audit findings and recommendations.

CPIC is a structured, integrated approach to selecting and managing investments. It supports alignment of IT investments to our mission and business needs while reducing risks and increasing returns throughout the investment's lifecycle. CPIC relies on well-defined, disciplined and systematic processes to ensure each investment's objectives are clearly stated and effectively executed.

The CPIC guide defines our IT governance and documents our overall process. The CPIC process addresses all IT investments through IT planning, budgeting, cost, and schedule oversight and system development life cycle management processes (including consideration of IT security and risk analysis). Collectively, CPIC addresses the initial conception and development of the investment, the selection of the investment from among competing investments, and the monitoring and evaluation of the investment for acceptable performance and progress against objectives. It documents our overall process and its major components including SITAR (Strategic Information Technology Assessment and Review), Special Expense Items (SEIs) and Enterprise Architecture (EA).

The Federal Information Technology Acquisition Reform Act (FITARA), in part, requires that the CIO have a significant role in the decision processes for IT Budget Formulation, and Planning and IT Acquisition and Execution and outlines specific requirements related to Enhanced Transparency and Improved Risk Management in IT Investments. The CPIC Guide addresses our implementation of applicable FITARA requirements, including implementation of the Common Baseline as required by OMB Memorandum M-15-14.

IT must increase the value of services through technology. We manage technology resources to accomplish our goals. Our Systems Development Lifecycle (SDLC) (CXXF, HXXA) guides IT project execution.

The SDLC includes best practices from the Capability Maturity Model Integration (CMMI) developed by Carnegie Mellon University's Software Engineering Institute. The office of Systems uses the CMMI development model to provide guidance for developing and improving processes that meet our business goals. We created the Project Resource Guide (PRIDE), a repository of best practices and guidance, for software development projects to follow. These best practices are the foundation for the Organizational Process Profile (OPP).

The Office of Systems OPP is a reference model used to guide project activity and evaluate compliance with standard processes and procedures. We developed the profile to map our SDLC processes to several associated models, standards, and regulations including:

- CMMI;
- Our EA;
- Executive Assurance; and
- Our Information Security Policy (ISP)

The profile also allows us to identify any lifecycle process gaps, strengths, or weaknesses in relation to new or modified standards and regulations. The profile mappings further help us to determine the focus of internal compliance reviews which, in turn, ensure that required lifecycle activities guide our IT projects.

We are committed to improving our system engineering practices to improve outcomes and reduce time-to-value. We are transitioning from traditional engineering practices to more modern, agile development. We are beginning with pilot projects to build institutional experience. In agile software development, requirements evolve and solutions are delivered continuously through collaboration of self-organizing, cross-functional teams. We are evaluating modern, cloud-based development environments, which allow new projects to be implemented at a fraction of the traditional costs.

Our SDLC is a hybrid iterative process. This process includes independent validation testing; independent integration and environmental testing; independent usability testing; user acceptance testing; and project scope agreements with all stakeholders. Explicit in our SDLC is a focus on quality and successfully deploying new applications. Progress of a software development project can be tracked using our Investment Management Tool (IMT), a project and portfolio management tool.

We have a mature process improvement program that includes best practices for software development and develops standardized processes and procedures for ensuring quality products. The program integrates EA activities and reflects our governance practices throughout the SDLC. The SDLC integrates industry models and best practices used by our project teams to develop standard processes and procedures that support all our software development projects. The SDLC establishes a framework for developing software, provides a common vocabulary, and describes all project activities and deliverables.

As part of our new development environment, we adopted Agile development principles where appropriate. Agile development enables us to deliver value continuously, primarily by more efficiently transitioning from development to deployment. We are retooling our current processes to support agile and cloud-based deployments.

In 2015 we established an Enterprise Program Management Office (EPMO) to provide management oversight of mission-critical projects and initiatives. The EPMO is an essential part of an Innovative Organization and a best practice across government and private industry.

The EPMO will use project management experts to help us manage our most critical projects. We will monitor and support the implementation of select projects and initiatives by tracking performance, evaluating risks, and assisting with corrective action plans. As a service organization, the EPMO will increase our ability to deliver projects on time, on budget, and with quality results.

The EPMO will assist our employees in performing their work and increase our ability to optimize taxpayer dollars entrusted to us as well as help us make good strategic decisions for major projects.

3.5 ENTERPRISE ARCHITECTURE   (CXXF)

The Clinger-Cohen Act of 1996 assigns the CIO the responsibility of developing, maintaining and facilitating the implementation of information technology architecture. The CIO has authorized the Chief Architect to manage the daily operations of our EA program. Based on OMB guidance, federal agencies are required to align their IT investments to the Federal Enterprise Architecture (FEA) and to their strategic business plans. The FEA framework describes the broad functions and capabilities provided by the federal government.

Our EA starts from the subset of those federal functions that we support. All of our IT investments, portfolios, projects, and applications align to these functions. We partition our EA into portfolios, consistent with the portfolios established and managed through our CPIC process. Each portfolio represents a major business area, and we assign each portfolio two executive leads, one from the line of business and one from the OS. Every project we start originates from one of our portfolios. This process ensures that our work has business value and appropriate oversight, and maps back to the core federal functions for which we are responsible.

In addition to ensuring that our IT projects align with our strategic objectives and the FEA, our EA program establishes technical standards for the hardware and software that we buy and build. We maintain a constantly evolving knowledge base of technical documentation allowing our project teams to access reusable components and supported solutions, thus avoiding excessive time in research and development.

To ensure compliance with, and to maximize the benefit of, our EA program, we rely on two integrated components: EA Control and Governance, and Application Portfolio Management (APM). We achieve EA control and governance through various governing bodies. The Architecture Review Board (ARB) is the overarching governing body responsible for ensuring that all our IT investments align with our EA practices, utilize standard architectures, and support our business objectives. The ARB consists of representatives from our major architectural functional areas and every business component. The ARB relies on subject matter experts to provide guidance and direction in the areas of application design and architecture, infrastructure, security, data, and other functional and programmatic areas as necessary. Most projects go through an assessment. However, the level and depth of that assessment is determined by the nature of the project work effort

Our EA Program Knowledge Base, in conjunction with our APM program, provides governance direction, and support to the various review boards, developers, and sponsors involved in the systems development and acquisition process. APM is a disciplined approach to monitoring the health of our almost 800 software applications and utilities. It also has a knowledge base, called our application inventory. The application inventory contains a

wealth of information about each application, including its criticality, dependencies, and technical characteristics. Through our APM process, we also provide the review boards, managers, and project teams with data about our applications to reduce overall IT costs.

INTRODUCING NEW TECHNOLOGIES – . Within our EA, we provide an organized and orderly migration path for adopting new technologies. We evaluate emerging disciplines and technologies to determine if they are appropriate for our development and deployment needs. We begin evaluating suggested changes to the architecture with our ARB. With ARB approval, we conduct Proofs-of-Concept (POCs) to evaluate proposed changes against defined performance criteria. Successful POCs advance to development projects. Upon successful completion and evaluation of the development projects, we adopt the changes into our EA.

3.6 IT INFRASTRUCTURE PERFORMANCE OBJECTIVES   (AXXB, BXXC)

All of our strategic goals have defined performance objectives and strategies, many of which rely on IT for their success. We need a strong IT Infrastructure to support the following objectives:

DEVELOP AND INCREASE THE USE OF SELF-SERVICE OPTIONS – Over the past few decades, technology has revolutionized the business world. Advances in communication and IT have changed the face and the pace of our business processes and our ability to offer quality innovative service options. The public expects to complete more business online, and we will increase the number and types of self-service solutions, paperless processes, and electronic workflows, thereby improving overall efficiency.

PARTNER WITH OTHER AGENCIES AND ORGANIZATIONS TO IMPROVE CUSTOMERS' EXPERIENCE AND ALIGN WITH THE ADMINISTRATION'S ONE-GOVERNMENT APPROACH – To improve our ability to serve the American public despite diminishing resources, we must continue to develop strong alliances with other government agencies, community-based organizations, tribal governments, and the private sector in areas that benefit our mutual customers and us. The relationships we develop will allow us to provide expanded and innovative options to access our services.

PROTECT THE PUBLIC'S DATA AND PROVIDE SECURE ONLINE SERVICES – Our customers increasingly embrace and expect to use online services. Online services save time and are critical to our ability to keep up with the increased number of claims we receive.

We are committed to maintaining the confidentiality and integrity of information in our records, both in our facilities and online. We take the public's trust seriously and take great pride in securing the sensitive data and personal information we maintain to administer our programs.

INCREASE PAYMENT ACCURACY – The American public expects us to be outstanding stewards of general revenues and the Social Security Trust Funds, and we are committed to protecting our programs from waste, fraud and abuse. To ensure we protect our programs against fraud and waste, we collaborate with other federal agencies to find innovative

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ways to prevent and reduce improper payments. We are enhancing predictive models and automation tools to help identify error-prone aspects of benefit eligibility. In addition, we are expanding the use of data analytics to reduce fraud and payment errors.

IMPROVE THE QUALITY, CONSISTENCY, AND TIMELINESS OF OUR DISABILITY DECISIONS – We will continue to improve the quality and consistency of our decisions. We need to balance the number of decisions we make with the assurance that we make our decisions accurately and consistently at the earliest possible point in our process.

MAXIMIZE EFFICIENCIES THROUGHOUT THE DISABILITY PROGRAM – We remain committed to meeting the public's needs by leveraging technology and using modern tools that are cost effective for the taxpayer and convenient for our customers. We have a history of finding smarter, more cost-effective ways of doing business. With workloads at an all-time high and a budget environment that is extremely constrained, we continue to capitalize on new technologies to help cut costs, operate more efficiently, and provide the service that Americans expect.

ATTRACT AND ACQUIRE A TALENTED AND DIVERSE WORKFORCE THAT REFLECTS THE PUBLIC WE SERVE – As the public we serve continues to grow more diverse, we must ensure that our employees have the tools enabling them to work effectively with people of all ages, educational levels, cultural backgrounds, and language preferences. We take pride in knowing we mirror the diversity of the people we serve. To remain an employer of choice for current and future generations, we will use modernized recruitment strategies and a full complement of human resources programs and flexibilities to compete for top talent and remove barriers to employment.

STRENGTHEN THE COMPETENCY, AGILITY, AND PERFORMANCE OF OUR WORKFORCE TO ALIGN WITH THE NEEDS OF THE PUBLIC – Identifying and reducing skill gaps at all levels of the organization, while promoting ways for employees to develop more flexible career paths, are key areas of focus as we prepare to meet customer service expectations.

MAINTAIN SYSTEM PERFORMANCE AND THE CONTINUITY OF IT SERVICES – Technology is essential to everything we do. If our systems are not functioning optimally, the productivity of our workforce immediately declines, resulting in diminished service. We must maintain strong IT performance, despite rising IT demands, increasing cyber security risks, and constant industry changes.

To meet our service delivery challenges, we rely upon a large and complex technology infrastructure that includes two data centers, extensive national databases, hundreds of software applications, large supporting computing platforms, and thousands of networked computers, printers, telephones, and other devices.

ENHANCE AND EXECUTE PLANS TO MODERNIZE OUR SYSTEMS – Automation is the foundation for our business processes. We employ disciplined investment management processes to determine how best to use our limited IT resources. These processes and their resulting plans represent our IT vision, as well as our policies and procedures for the

selection, control, and evaluation of all IT initiatives and resources. They also detail our IT portfolio management approach that allows us to effectively prioritize and manage IT investments. We continually refresh our plans to maintain relevancy.

INCORPORATE INNOVATIVE ADVANCES IN SERVICE DELIVERY – Technology transforms how we conduct business. As the Federal Digital Government Strategy initiative points out, advances in computer technology, the increase of high-speed networks, and mobile innovation have introduced new products and reshaped existing service channels. Growing customer expectations drive us to consider an expanding number of service delivery channels.

CONTINUOUSLY STRENGTHEN OUR CYBERSECURITY PROGRAM – Given the sensitive nature of the highly personal information and data within our systems, data integrity and security, as well as the protection of individual privacy, are primary IT service imperatives. New services and delivery channels expose us to new threats. We must be vigilant and continue to strengthen our cyber security intelligence and protections.

We maintain a comprehensive information security program of controls that protect our information and communications assets. We continually review policies and processes and take appropriate corrective action to ensure adequate safeguards to prevent misuse and unauthorized access to assets and sensitive data, including Personally Identifiable Information (PII).

Figure 3 aligns the strategic objectives outlined above with the IT/IM domains described in Section 6 of this IRM. Achieving these strategic objectives depends on several external factors such as adequate funding, growth in workloads, and new legislation. Inadequate funding may limit the human and IT resources available to modernize our legacy systems and develop more robust service delivery options. Adverse economic conditions can result in increased disability application and appeals workloads. Legislative changes and other federal mandates often require reallocation of scarce resources.

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INFORMATION RESOURCES MANAGEMENT STRATEGIC PLAN

3.0 ENTERPRISE IT OVERVIEW

OUR IRM STRATEGIC PLAN ALIGNS WITH OUR AGENCY PERFORMANCE OBJECTIVES

STRATEGIC OBJECTIVES (SO)	3.2 IT Workforce	6.1 Data Mgmt	6.2 SW/Apps	6.3 Business Intelligence	6.4 Big Data	6.5 Computing Platforms	6.6 Network Infra/IPV6	6.7 Storage Infra	6.8 IT Ops/Data Centers	6.9 Information Security	6.10 Information Dissemination	6.11 Shared Services	6.12 Section 508
(SO1.1) Develop and increase the use of self-service options		■	■	■	■								
(SO 1.3) Partner with other agencies and organizations to improve customers' experience and align with the administration's one-government approach												■	
(SO 2.2) Protect the public's data and provide secure online service									■	■	■		
(SO 2.3) Increase payment accuracy				■	■							■	
(SO 3.1) Improve the quality, consistency and timeliness of our disability decisions			■		■								
(SO 3.2) Maximize efficiencies throughout the disability program			■	■		■							
(SO 4.1) Attract and acquire a talented and diverse workforce that reflects the public we serve	■												■
(SO 4.2) Strengthen the competency, agility and performance of our workforce to align with the needs of the public	■												
(SO 5.1) Maintain system performance and the continuity of IT services						■			■	■	■		
(SO 5.2) Enhance and execute plans to modernize our systems		■	■	■	■								
(SO 5.3) Incorporate innovative advances in service delivery		■					■					■	
(SO 5.4) Continuously strengthen our cyber security program					■						■		

Figure 3: Our ASP/APR Objectives Align with our IT Domains

When considering potential information technology (IT) projects, we group proposals into portfolios that align with our ASP objectives. We categorize our IT infrastructure that supports these projects into IT/IM domains, which include Data Management, Software/Applications, and Computing Platforms. These domains are foundational elements that support all ASP goals.

4.0 SERVICE DELIVERY (HXXA)

SSA CLAIMS REP WINS THE PRESIDENT'S AWARD FOR CUSTOMER SERVICE

On December 15, 2015, the White House announced the inaugural winners of the President's Award for Customer Service. These talented public servants led efforts to improve services for the public and positively impacted American lives. During the summer of 2015, Federal agencies nominated programs and employees that excelled in their fields to improve services to the public and exemplify how our government can deliver excellent service to our customers. Out of numerous nominations across the government, five awards were presented. One of only two individual award winners was our very own Shawn Lynch from the Dothan, Alabama Field Office.

Improving Customer Service across the Federal Government is one of 15 priorities President Obama included as focus areas in his second term management agenda. These focus areas are labeled "Cross-Agency Priority (CAP) Goals". An official from the Office of Management and Budget (OMB) and an agency senior executive co-lead each goal. Acting Commissioner Colvin was asked to co-lead the Customer Service CAP Goal given Social Security's reputation and her personal commitment to delivering outstanding customer service.

Figure 4: Stacy Rodgers, Chief of Staff; Shawn Lynch, Claims Representative; and Shannon Lynch

Figure 5: Wade Armstrong, District Manager; and Shawn Lynch.

One of the strategies of the Customer Service CAP Goal was to focus efforts and resources on the front line employees that serve the public daily. In December 2014, the President announced an annual Customer Service Awards Program that would recognize the most outstanding examples of service delivery across government.

Ms. Lynch personally promoted and educated clients in her local office area to inform them about the my Social Security portal and through her outreach efforts enrolled many new registrants. She also worked to reduce the time required for individuals to schedule appointments and have their disability claims taken. Many of these individuals had mental or physical impairments, which rendered them unable to work and without a source of income. Claimants expressed relief and gratitude for her extra efforts.

Since Ms. Lynch continued to carry her traditional workloads, she often came in early and worked late in order to handle these extra claims.

During the past year, she also played a key role in helping Dothan promote the use of self-help computers, also known as Self-Help PC (SHPC). As the Co-Captain of the 2015 SHPC Volunteer Team, Ms. Lynch helped the public learn how to use this new technology, often overcoming their fear of self-service channels. It is with great pride that we congratulate Shawn Lynch on her dedication to serving the public and on this most prestigious award.

Technology transforms how we conduct business. As the Federal Digital Government Strategy notes, advances in computer technology, the increase of high-speed networks, and mobile innovation have introduced new products and reshaped existing service channels. Growing customer expectations drive us to consider an expanding number of service delivery options.

We actively participate in the Federal CIO Council and leverage the expertise of industry IT experts and technical consultants. We also remain attentive to emerging technologies and benchmark with other public and private organizations that innovate through technology. We will harness appropriate innovations to create effective and efficient service delivery options, maximizing the return on our IT investments.

As staffing levels decreased and our workload volumes increased, our service to the public has suffered. It takes longer to issue decisions and process applications. The public faces longer lines and wait times in our field offices and increased telephone busy rates. The following sections summarize our strategic direction to improve our service delivery to the public.

Figure 6: Shawn Lynch and the President's Award for Customer Service

4.1 TELEPHONE SERVICES

We continue to improve the experience that customers have when contacting us by telephone. By consolidating two separate contracts into a single government-wide contract, the new General Service Administration (GSA) Networx Universal contract enhances our ability to support telephone service delivery. As a result, we have increased call capacity and improved our service to the public by reducing Busy Rates and increasing Answer Rates in our public facing offices (Field Offices, Card Centers, and National Hearing Centers).

We have implemented Network Skills-Based Routing (NSBR), which allows field offices (FOs) to provide assistance to each other by routing general inquiry phone calls to other offices in the region after callers have waited a certain number of minutes. Network Skills Based Routing also increases the number of answered general inquiry calls to the FOs by expanding FO answering resources within the district, area, and region. Management information (MI) is also available at the local office, area, and regional area level. MI enables managers to better match telephone workloads with answering resources. In the event of a natural disaster, critical workload need, or reduced resources, we can redirect

inbound FO general inquiry calls to the national toll free number. This ability to redirect calls eliminates the need for a FO to provide answering resources during these critical times.

In FY15, we completed the national rollout of our Call Flow Enhancement Project. This project focused on streamlining call flows and business processes to improve FO telephone service delivery and customer service nationwide. It also afforded us the opportunity to add, "Claim Status" as a new menu option. The "new enhanced" call flow is more efficient and effective. The change to the call flow makes it much easier for callers to navigate through menus and contributes to their overall satisfaction. Over time, we expect these changes will reduce caller frustration, increase automation usage (fewer callers wanting to speak to an agent), reduction in abandon and error rates, increased answer rates and a possible reduction in walk-in-traffic. These changes will contribute significantly to our goals and objectives and have a major impact on the telephone service delivery we provide to our customers nationwide.

In FY 2016, Field Office Call Survey (FOCS) initiative will improve quality and effectiveness of our Field Office telephone experience. FOCS will improve quality by obtaining direct, immediate, and ongoing feedback to FO management and supply timely data to pinpoint areas that require improvement. Ratings and key results from FOCS will benefit our strategic objective to increase public satisfaction with our telephone services.

Additionally, we will utilize Softphone technology for FO teleworkers in 2016. This strategy will allow FO representatives to have matching telephone capabilities of the Telephone System Replacement Project (TSRP) hard phone; therefore, they can answer the public's GI calls in their Alternate Duty Station (ADS). As a result, we can better utilize answering resources to improve our phone service to the public.

We are creating a strategy to integrate our telephone service channels with new web support technologies and contact channels. As the demand for web-based service continues to increase, we will work to ensure our other service channels are complementary. Using a Unified Communications (UC) framework, we plan to add technologies that support Click-to-Call, Web Chat, and Co-browsing to expand service options to our online customers.

4.2 ONLINE SERVICES

Our service delivery strategy includes enhancements to our services offered via the Internet. These enhancements will offer several mission-essential benefits, including increasing the efficiency and timeliness of claims processing. We expect more than 80 million computer-savvy baby boomers to retire over the next 20-years. Our strategy will encompass pre-claims, initial claims, and appeals, and will consist of three primary components: simplified enrollment, streamlined application, and expanded online services. Our website (www.socialsecurity.gov) was visited approximately 196 million times in FY 2015, making it one of the most visited government websites.

ForeSee E-GOVERNMENT SATISFACTION INDEX

"Once again, the Social Security Administration (SSA) leads the pack, grabbing the top four spots with scores of 90 and 89." ForeSee E-Government Satisfaction Index Q4 2015.

Our online services continue to deliver world-class service and obtain very high user satisfaction scores. ForeSee has determined that website satisfaction is a significant indicator of an organization's success with their online service offerings. For example, in the fourth quarter of FY 2015 they found that highly satisfied visitors were 84% more likely to use the website as a primary resource versus a more costly channel like a contact center, and 66% were more likely to trust the agency.

Satisfaction with e-government rivals many private-sector sites. Aggregate satisfaction with e-government is 75.1, while average satisfaction for e-business (portals, search engines, etc.) was 74.4 in 2015. While e-retail (79) outperforms e-gov in aggregate, the highest-scoring public-sector sites (89 and 90) are higher than the highest-scoring and most successful private-sector sites like Amazon.com (86), Vanguard.com (80), Google (78), Pinterest (78), Expedia (77), and NYTimes.com (76).

According to the ForeSee e-Government Satisfaction Index for the fourth quarter of CY15, we have seven e-Government services with an Excellent rating (80+). Only 36% of the 101 federal government websites on the list achieved this excellent rating. We claimed the top four spots with the Extra Help with Medicare Prescription Drug Plan Costs and the SSA Retirement Estimator tied for first place, each with a score of 90 for the quarter. iClaim and *my* Social Security tied for 2nd place with scores of 89 each. Business Services Online and iAppeals Disability also scored in the Excellent range (80+) with scores of 84 and 81, respectively.

Our top five sites outscored some of the top private sites. They are higher than the highest-scoring and most successful private-sector sites like Amazon.com (86), Apple-Personal Computers (84), Vanguard.com (80), Google (78), Pinterest (78), Expedia (77), and NYTimes.com (76).

Our goal is to pursue increased customer service and satisfaction through innovative online self-service options. Every year, we see a greater acceptance of and preference for transacting business online. In particular, Internet use by seniors continues to surge. To address this trend, we will increase the number of our services we offer online and will communicate more with our customers through the web. For the first time, we implemented a process through the *my* Social Security portal that allows SS beneficiaries to obtain a form 1099 online to assist them to file their tax returns.

In FY 2015, we added functionality allowing territorial users to file Forms W-2PR for Puerto Rico online, and electronically file Forms W2c, and 1099; an example of online service for Electronic Wage Reporting (EWR). We receive over 2.9 million paper wage reports from employers annually, containing over 27 million paper Forms W-2. Paper wage reports are more error-prone, labor intensive, and expensive to process. The rollout of this functionality completed a multiyear effort to expand our United States territorial customers' ability to submit wage reports electronically through the W-2 Online service. We also enhanced our W-2 Online service to make it easier for users to submit wage reports for prior-years.

SMART CLAIM

The number of disability claims we receive each year continues to increase. The SMART Claim initiative will streamline claims processing and expand the benefit options available to our online customers. We will offer several mission-essential benefits to support our Strategic Goal and Objective to deliver Innovative Quality Services and Develop and Increase the Use of Self-Service Options.

We are expanding the option to file online for Medicare, Retirement and/or Disability to include SSI. *my* Social Security authentication will allow us to provide claimants with a detailed status of their claims and/or appeals. Applicants can have either a single or multiple claim and/or appeal types pending at the same time.

The future direction of the SMART Claim initiative will expand options for authenticated benefit applications that will include the ability to upload documentation/medical evidence, customized benefit estimates, appeal filing, and other post entitlement actions such as Redeterminations, Medical Continuing Disability Reviews and Wage reporting.

APPLICATION FOR A REPLACEMENT SOCIAL SECURITY CARD.

We rolled out a new service that allows some of our customers to request a replacement Social Security card online.

The new online version of the Application for a Replacement Social Security Card allows people in some states to request a replacement card online through our secure *my* Social Security portal without traveling to a field office.

Currently available in the District of Columbia, Iowa, Kentucky, Michigan, Nebraska, New Mexico, Washington, and Wisconsin, it is an easy, convenient, and secure way to request a replacement card online. First, the client will need to create a secure *my* Social Security account. When they open a my Social Security account, we protect their information by using strict identity verification and security features. The application process has built-in features to detect fraud and confirm their identity. In certain cases, security experts at Social Security will contact them to ensure it is a legitimate application. We only issue a replacement card if there is no suspicion of fraud and then we only mail it to a verified address.

To take advantage of this new service option, the client must:

- Have or create a my Social Security account;
- Have a valid driver's license in a participating state or the District of Columbia (or a state-issued identification card in some states);
- Be age 18 or older and a United States citizen with a domestic U.S. mailing address (including APO, FPO, and DPO addresses); and
- Not be requesting a name change or any other changes to their card.

We plan to add more states later in the year.

4.3 MOBILE TECHNOLOGIES   (BXXB)

We released a new design for www.socialsecurity.gov. The impetus behind this design was a reflection of the growing use of mobile (i.e., phones and tablets) devices for browsing our website. We have seen a steady increase in mobile traffic. For example, in November 2014, we saw 30% of www.socialsecurity.gov traffic coming from mobile devices or tablets. Based on the increased use of mobile devices and tablets, www.socialsecurity.gov's new design laid the foundation for mobile technologies by using a technique called Responsive Web Design. The idea behind Responsive Web Design is simple - make it so that the content on your website can adapt to the various screen sizes of the devices people are using to browse the web today. These screen sizes include smartphones (3.5" - 6"), tablets (7" - 10.6"), laptops (11" - 15") or desktop/widescreen (21" - 32").

RESPONSIVE WEB DESIGN

Responsive Web Design is an approach aimed at designing websites that provide the optimal viewing and user experience across a wide range of devices and screen sizes. The goal is to build websites that have a positive user experience on devices ranging from mobile phones to desktop computers with full size monitors and to provide easy reading and navigation with a minimum of resizing, panning, and scrolling.

Mobile device visits to our websites continue to grow. By 2016, we expect more users will access socialsecurity.gov websites on mobile and or tablet than traditional desktop. It is important we provide them with sites that minimize resizing and scrolling. Industry data suggests that within the next few years there could be more smartphones in circulation than there are people on the planet. Research reveals that for certain segments of the population, the smart phone may be a user's only device for accessing the Internet.

To match these trends and to meet the needs of the American public accessing our websites, responsive web design allows rapid web development in a cost effective manner that results in an optimal viewing experience on all device platforms from desktops, tablets to smartphones.

SSI MOBILE WAGE REPORTING

In addition to mobile optimized websites, we released the SSI Mobile Wage Reporting http://www.usa.gov/mobileapps.shtml application for Android and IOS devices. The Supplemental Security Income (SSI) program http://www.ssa.gov/pubs/EN-05-11000.pdf pays benefits to disabled adults and children http://www.ssa.gov/pubs/EN-05-10026.pdf who have limited income and resources. SSI benefits are also payable to people 65 and older without disabilities who meet the financial limits. The application allows SSI recipients and their families to report their monthly wages to Social Security from their mobile devices. Consistent monthly wage reporting is a key aspect in preventing improper payments, which can lead to SSI overpayments and SSI underpayments. Wage reporting through these mobile applications has steadily increased since launching the applications in December 2012. In FY2015, over 450,000 users accessed the SSI Mobile Wage Reporting application to submit their wage information.

4.4 LIMITED ENGLISH PROFICIENCY (LEP)
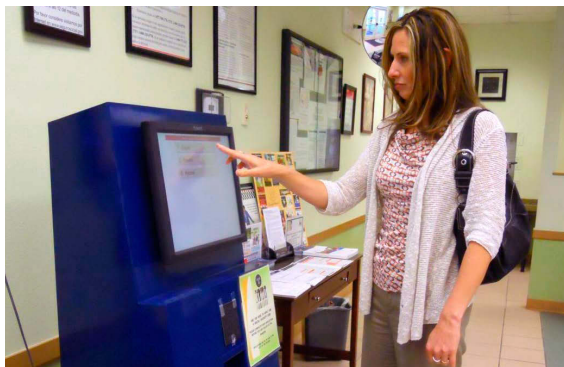
Figure 7: A Client uses the Vip/R Applicationt o Check in at a Field Office.

Many field offices have signage in multiple languages to assist our LEP visitors. Above is an example from the lobby in the Hollywood, California field office. The signage is in English, Armenian, Russian, Farsi, and Spanish.

To improve service delivery options to LEP individuals, we use an application called the "Visitor Intake Process" (VIP/r). Using VIP/r, allows an individual to select a language to conduct his or her business with us. Visitors can also select the accommodation required if they are deaf, hard of hearing, blind or have low vision.

The VIP/r system is in use in all field offices. Based on analysis of the respective office's demographics, the VIP/r intake screens can be customized to languages locally prevalent. The VIP/r introductory screen displays instructions in English, Spanish, and three of the following languages: Chinese-Mandarin, Creole-Haitian, Hmong, Korean, Polish, Portuguese, Russian, Somali, Vietnamese, Arabic, Cambodian, Farsi, Gujarati, Hindi, Punjabi, and Tagalog.

In addition to in-office language services, we offer robust web-based service in Spanish including our retirement estimator, the Medicare Part D low-income subsidy application, and our Social Security benefit application.

Our website also features a multi-language gateway. The most popular pamphlets are translated in 17 different languages. A video is also available in American Sign Language to explain essential information about our benefits and programs.

4.5 IN-PERSON FIELD SUPPORT

Regardless of technology advancements, we are committed to providing exemplary service to customers that choose or need to do business in-person. We continue to enhance our systems and processes that support our field offices. We are implementing enhancements to VIP/r, which tracks all field office appointments, monitors visitor information, tracks employee availability, and provides day-to-day field office workload MI.

Strategic use of our physical space ensures we will be able to uphold our mission to provide an excellent customer experience. As more people are able to take advantage of our online options, fewer people will need to visit an office.

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We are expanding our service delivery methods by using field offices and third party sites such as: Self-Help PC (SHPC), SSA Express, and Video Service Delivery (VSD). In order to manage staff workloads it is important to capture MI data from these new service delivery channels/contact types. Future enhancements allow offices to share workloads by transferring appointments from one office to another, which is critical to providing quality service to the public.

4.6 VIDEO SERVICES

We use video technology to deliver timely and efficient service to the public. Video Service Delivery (VSD) is an innovative and cost-effective way to provide Social Security services to the American public. VSD helps us balance workloads across the country, serve people in remote areas, and reduce time and travel costs. In Hanepolei, Hawaii, and our Denver and Seattle Regions, VSD allows us to effectively serve the public in remote areas.

In Hawaii, VSD provides Social Security services to members of the public waiting in other Social Security offices or non-SSA locations (video partner sites) via video conference equipment. VSD is

Figure 8: Social Security Video Service

particularly effective in providing service to people on the Big Island of Hawaii, who would otherwise have to travel 2 to 3 hours to visit their local office.

The Denver region utilizes 12 VSD units to assist tribal communities in connecting with local Social Security offices. Each unit is located on or near Native American reservations throughout four states and provides the public with a direct on-screen video connection to Social Security personnel. Community locations for VSD include Bureau of Indian Affairs, Indian Health Services, hospitals and tribal clinics. Business services we offer include retirement and disability appointments, virtual reception, and Social Security card replacements. Tribal residents often face poverty, high rates of unemployment, lack of transportation, and limited methods for communication. VSD enables us to address some of their service needs.

The Denver Region produced the webcast "Tribal Communities & Social Security - Working Together". This presentation explains programs and services of particular interest to benefit coordinators, those who assist American Indian populations, and the VSD options available to tribal communities.

The Seattle Region provides VSD in several locations that serve significant American Indian and Alaskan Native populations. There was an overall increase in usage for FY 2014. VSD locations include:

- Warm Springs, OR (Bureau of Indian Affairs);

- Kodiak, Alaska (Kodiak Job Center);

- Ketchikan, Alaska (Ketchikan Job Center); and

- Kenai, Alaska (Kenai Senior Center).

VSD provides Alaskan residents with a direct video connection to Social Security personnel. Business services offered include retirement and disability claims, Social Security card replacements, and virtual reception. The Warm Springs location is on tribal land representing the Confederated Tribes of Warm Springs. They have had 130 VSD connections so far this FY with the Bend, Oregon, Field Office. The Anchorage, Alaska Field Office has had 1,206 VSD connections with Kodiak, Ketchikan and Kenai so far this FY. Although these external sites are not on tribal land, they are located in areas where the Alaskan Native population is 10% or higher. Alaska residents face many transportation and communication challenges due to the remoteness of the service area. To address these challenges at the hearings level, we collaborated with Alaska Online with Libraries to provide video hearing service to 125 locations across remote Alaska, eliminating time-consuming long distance travel for claimants and representatives to appear at a hearing before an ALJ. VSD enables us to address many of Alaska's service needs.

Expanding the use of video hearings – one of our key initiatives – will help increase efficiency and improve customer service. Specifically, it will enable us to balance workloads across the country; reduce the need for (and the costs of) our ALJs and other hearing office staff to travel between offices and to remote sites to hold hearings; and reduce the need for claimants to travel long distances to our hearing offices. We are expanding the footprint and increasing the likelihood that we will conduct more video hearings by building more Claimant Only Video (COV) and Judge Only Video (JOV) sites. The COV and JOV models allow a video hearing to take place without occupying more than one hearing room at the same time. Optimally, this technology will allow video hearings to take place without occupying a hearing room. Minimizing the use of hearing rooms is a cost-effective and productive model, leaving more hearing rooms available to hold in-person hearings. We have opened over 170 COV sites and have installed, or will install, video in 57 additional shared services sites by the end of November 2015. Our total video inventory, including the units at these shared service sites, totals nearly 1,500 units. We are also working to expand video hearing participation more broadly to allow more attorneys and non-attorney representatives to install and use their own SSA-certified video equipment to attend hearings with their clients from their own offices. To date, we have established 71 such Representative Video Project sites across the country.

VIDEO HEARINGS

Future video hearing growth will come from improvements in bandwidth, replacement of aging equipment, and increased acceptance by Administrative Law Judges (ALJs), representatives, and claimants. In 2015, we developed a Global Agency Video Service Delivery Strategy. Our strategy helped us define the current "as-is" business model for conducting video hearings. We are currently in the process of developing a "to-be" strategy to expand video over the next several years. The strategy will help us develop a plan to accelerate bandwidth analysis and upgrade bandwidth for many of our hearing sites. We continue to replace aging video equipment and installing new equipment using IT funding. We continue to collaborate with our stakeholders in the claimant representative community to promote video as a way to provide flexible customer service to the millions of claimants we serve.

In addition to using video to conduct hearings with the public, we are looking at ways to enhance day-to-day collaboration among employees using video. High quality hearing decisions require a close and integrated team effort by ALJs and all support staff. Addressing hearing workload imbalances through temporary transfer of decision writing between our offices can make this collaboration a challenge. We are piloting MS Lync Video with an Administrative Law Judge and decision writers from different offices to demonstrate a proof of concept (Virtual Hallway) using single device setup with a webcam. This approach may be an effective and useful way for an ALJ and decision writers to discuss instructions on drafting a hearing decision and we expect to see improvement in reduced draft revisions, resulting in expedited quality decisions.

Since 2007, the percentage of hearings conducted by video increased from 11 percent to 27 percent. A public dataset showing the use of video hearings is available at https://www.ssa.gov/appeals/DataSets/06_Hearings_Held_InPerson_Video_Report.html.

TWO-YEAR PLANS

- Complete video expansion (JOV/COV);
- Develop and prototype software-based video/Virtual Meeting Room; and
- Prototype video reporting and analytics solutions.

OUTYEAR PLANS

- Capability to scale video bandwidth up and down to match demand; and
- Capability for town halls, Video on Demand, and video collaboration.

SSA EXPRESS CUSTOMER SERVICE STATIONS – NEW TECHNOLOGY

Figure 9: CSS at Maryland Center for Veterans Education Training.

We continue to seek ways to serve our customers using new technology. The SSA Express Customer Service Station (CSS) pilot at the Maryland Center for Veterans Education Training is one way we offer our customers quick access to some of our eServices. The CSS at this location assists homeless veterans and brings our services to the Center, saving veterans a trip to a field office. We continue to collaborate with outside organizations that share customers with us by introducing a new way of delivering our world-class service to them where they are.

4.7 ACCESSIBILITY AND ASSISTIVE TECHNOLOGY

We are committed to making our programs, benefits, services and facilities, and information and communications technology accessible to everyone, in accordance with Section 504 of the Rehabilitation Act of 1973, Section 508 of the Rehabilitation Act (29 U.S.C. 794d), and relevant implementing regulations. Specifically, Section 508, as

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amended in 1998, is a federal law that requires all federal agencies to provide individuals with disabilities equal access to electronic information and data. We are committed to meeting or exceeding the requirements of Section 508. Section 504 prohibits discrimination against individuals with disabilities and requires Federal agencies to provide meaningful access to their programs and activities. The spirit of this Act is: "Service not accessible is service denied". We have employed a number of assistive devices in our operations, some examples are below.
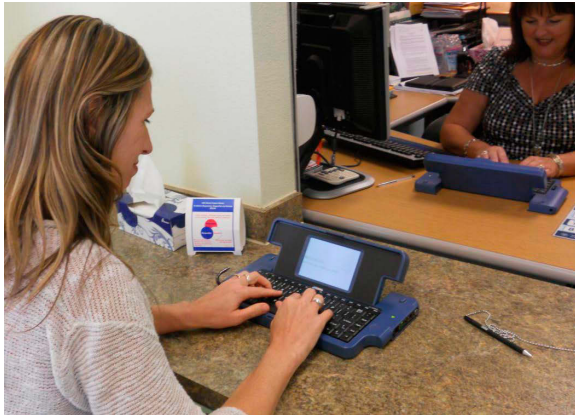
Figure 10: A Beneficiary uses an UbiDuo to Communicate with a Claims Representative.

UBIDUO – All field offices are equipped with a UbiDuo device as a service alternative to individuals with hearing or vocal impairments. The UbiDuo fosters face-to-face communication in real time through typing, using a portable device. Field offices continue to offer in-person sign language interpreters upon request. With Video Remote Interpreting, field offices with video teleconferencing equipment are able to connect to live, on-demand sign language interpreters, without having to schedule appointments.

BROWSEALOUD – BrowseAloud is a free web browser plug-in that can help people with dyslexia, learning disabilities, limited English proficiency, and mild visual impairments by allowing them to listen to our webpages at www.socialsecurity.gov. BrowseAloud is available for download from our webpage. BrowseAloud reads text aloud on our website and highlights the words as they are spoken. We offer BrowseAloud on our website to reduce barriers to Internet access to those who find it difficult to read online.

iACCOMMODATE – iAccommodate is an Intranet web-based application used by field office workers, the 504 Center, and administrative resources to select and schedule accommodations for individuals with disabilities, ensuring they have access to our Social Security programs, services, and facilities.

4.8 OPEN GOVERNMENT

We support the principles of open government and released our refreshed Open Government Plan 3.0 in June 2014. It describes our flagship and major initiatives that support transparency, participation, and collaboration. The plan reflects our progress toward institutionalizing the principles of open government.

Ongoing activities include:

- Release of information to Data.gov, expanding public access to our data http://catalog.data.gov/organization/ssa-gov;
- Create videos on open government topics and on other information on our social security programs of value to the public;
- Expand the use of social media tools to support transparency, participation, and collaboration; and

- Hold public engagements to solicit ideas and feedback from the public and employees for developing strategic vision documents, using crowd-sourcing tools as well as traditional methods such as individual and group meetings.

Progress with our flagship and major milestones include:

- Provide new services available behind *my* Social Security including access to the Social Security Statement, allowing beneficiaries to check their benefits, obtain a benefit verification letter and change their address or direct deposit information; and

- Increased the exchange of medical records with medical networks and providers through the use of Health Information Technology.

- The public can request records from any federal agency through the Freedom of Information Act (FOIA). We are ranked number one among large federal agencies in our efficient processing of FOIA requests.

In FY2016–2019, we will:

- Refresh and publish our Open Government Plans;

- Continue publishing our open government goals and our progress meeting commitments made in our Open Government Plan 3.0 and post them on our Open Government portal at https://www.ssa.gov/open/plan-progress-2014.html#&a0=0;

- Expand access to information and data;

- Hold additional engagements on other potential areas for regulations changes to gather public preferences from groups such as the National Disability Coalition, a forum to engage disability advocates and stakeholders on key policies;

- Engage in outreach and liaison activities with our federal partners to discuss ongoing, new, and oversight of data exchanges; and

- Develop Public-Facing Geospatial Maps to show the impact of our programs.

4.9 ELECTRONIC DATA EXCHANGE

We have over 4,500 electronic exchanges and estimated 3,000 agreements with Federal, State, Local, and Foreign governmental entities as well as some private sector companies. Efficient, accurate, and timely exchanges of data promote good stewardship for all parties involved. Our Information exchanges involve both data we provide to our data exchange partners (i.e., state and Federal agencies that use the data in various programs), and data it receives from those partners in order to administer Social Security programs.

4.10 CUSTOMER CONNECT

Customer Connect is a transformational initiative that will better prepare SSA to meet the emerging needs and expectations of tomorrow's customers. It will redefine how we engage the public in order to bring the most value to our customers with each experience. To meet rising public expectations, we must develop new applications, establish an infrastructure that will support relationships with new external partners, and empower the customer to be proactive and transparent throughout the transition. When implemented, it will:

- Simplify how our customers connect with our employees;
- Connect the public with the agency using new technologies; and
- Move us into a position of leadership regarding customer engagement.

We convened a Customer Connect Workgroup made up of a cross section of representative employees. We asked the workgroup members to participate based on their abilities to build a shared current and future state model from a customer's viewpoint. The Customer Connect Workgroup reports to a Core Team of Executives providing oversight and direction:

- The Chief Information Officer
- The Assistant Deputy Commissioner for Systems
- The Assistant Deputy Commissioner for Operations
- A Regional Deputy Commissioner for Operations
- Associate Commissioner for Systems
- CIO's Executive Director

In FY 2016, we will have a series of awareness-building sessions with subject matter experts. We will meet with expert vendors who will impart their knowledge of industry best practices of customer engagement and help us broaden our awareness. We will also bring in a subject matter expert on customer engagement who will advise us what future direction might look like related to technology and customer engagement. These presenters will advise us on potential pitfalls before we begin our own design.

We engaged personnel from across our components, other federal agencies, and external subject matter experts to evaluate and identify the best ways to interact with our customers in the future.

Our FY' 16 goals are to:

- Secure funding for planned efforts in Q2 of 2016;
- Finalize an implementation plan in Q3 of 2016; and
- Begin implementation in Q4 of 2016.

Once funding is secure, the Customer Connect initiative will begin to build a new way to engage the customer at critical points in their lives.

WHAT & WHEN: MILESTONES FOR CUSTOMER CONNECT

FY 2016 Q4
Begin implementation

FY 2016 Q3
Finalized implementation plan

FY 2016 Q2
Funding for the effort

FY 2016 Q1
A decision on the path forward
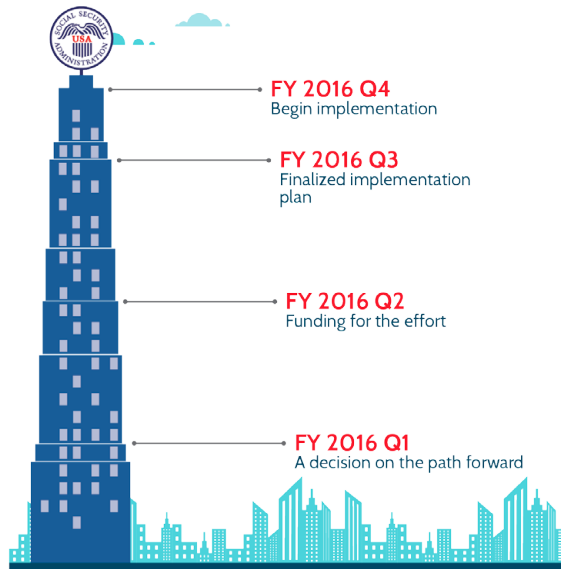
Figure 11: Milestones, Customer Connect

Marriage
Leave Workforce
Widowed
Birth
First Job
Child
Re-enter Workforce
Death
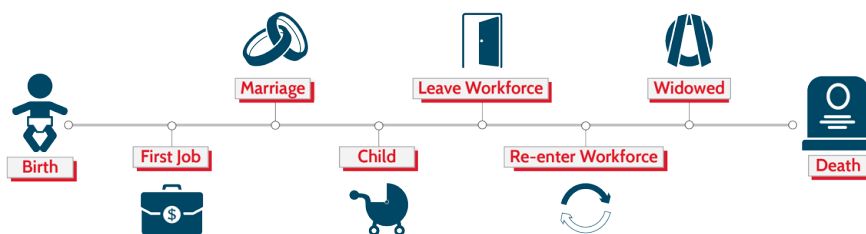
Figure 12: Life Events for Customer Connect

VERIFICATION AND DATA EXCHANGE

We verify and exchange programmatic information with many federal, state, and local government agencies. These exchanges help us to improve programs, reduce administrative costs, improve public service by obtaining information we need to serve our customers, maintain up-to-date and accurate records, and support our program integrity efforts.

To improve these services, we are redesigning and integrating existing processes; replacing our existing verification and data exchange methods with integrated software and an architecture that is secure, flexible, and scalable. We will re-engineer legacy applications to provide parameter-driven software that is reusable, flexible, and business-centric, using contemporary programming languages and data structures. By modernizing our verification and data exchange services, we will be able to process these growing workloads more efficiently and effectively, and position ourselves to expand real-time services.

5.0 MODERNIZATION EFFORTS (HXXA)

We are advancing the technical foundations that support our ability to serve the public. We are adopting strategies that position us to provide better service through integrated capabilities, to save costs by eliminating duplication, and to reduce risks by retiring outdated technologies. The following sections summarize our strategic direction to transform our databases, applications and infrastructure. Additional detail is available in the accompanying Enterprise Roadmap.

5.1 DATABASE MODERNIZATION (AND CONSOLIDATION)

Our master data stores are the foundation of our public service programs. To ensure that we are able to take advantage of current and future advances in IT, we are executing a two-part strategy designed to connect the master data directly with contemporary technologies. First, we will relocate master data from legacy storage systems to a standard database platform in a way that minimizes impact to our legacy software. Second, we will examine the structure of our master data, recognizing that its value will be optimized when it exists in the relational form most used by contemporary application development tools and database products. Modernizing our master data in this way will yield dramatic advantages in our ability to bring new capabilities online.

Our strategy includes continuing to enhance our Enterprise Data Management (EDM) and Enterprise-level database architecture. Enhancement to our EDM includes constructing an enterprise-level data architecture that promotes reusable and shareable data entities across applications. This strategy also incorporates the use of the Enterprise Metadata Repository (EMR), which describes the Enterprise Data Architecture to assist in data analytics to provide consistency and accuracy of data interpretation.

5.2 APPLICATION MODERNIZATION (INCLUDING SERVICE-ORIENTED ARCHITECTURE (SOA))

We use modern programming languages to advance our application development practice, emphasizing interoperable services and adopting a common integration architecture for all new or modernized applications. We will evaluate several approaches for application integration, including the use of commercially available customer service and support systems. This strategy will lead to increased productivity, greater interoperability, reduced time to value, and better customer service.

We plan modernization for line-of-business application systems at the enterprise-level to provide cohesive design, good systems integration, consistency, and strategic growth. Earnings and Wage Reporting, Retirement and Disability Benefit Management, Representative Payee, and Supplemental Security Income Management are a few systems being modernized using new standards. These modernized applications will integrate with our online and mobile services, allowing service representatives to have immediate access to service transactions that customers have conducted through those channels. The goal is to provide an integrated view of our lines of business, regardless of service channel, so that we increase accuracy and reduce workloads for our service representatives.

SERVICE-ORIENTED ARCHITECTURE – Our software development strategy is to build applications on a base of freestanding, shared, interoperable services that model our business information and operations – SOA and development. We are moving away from developing monolithic, single-use applications, which have higher costs and lower flexibilityy.

5.3 INFRASTRUCTURE (PRODUCT AND PLATFORM)

To simplify operations and reduce costs, we are expanding our disciplined use of application and IT asset management tools to analyze relationships between our applications, services, products, and platforms.

In 2015, we completed a Pilot of the Managed Enterprise Linux Environment residing on the x86 server platform. The pilot identified and created processes and infrastructure enhancements needed to support the long-term operation and success of the Managed Enterprise Linux Environment. We now support new enterprise applications and tools in this environment. This initiative represents the beginning of a multi-year project to migrate away from, and ultimately retire, our proprietary mid-tier UNIX environments.

We consider cloud-computing an effective, evolving platform for enhancing and extending the information and IT services delivered to end-users, business partners, and customers. Our strategy is to continue implementing a private cloud computing model consistent with our mission and business operations models. We will leverage cloud computing to extend service capabilities. The use of the cloud computing model is enforced within the framework of our centrally managed EA governance as well as our IT service acquisition and source selection processes.

Tablet

Smart Phone

Desktop
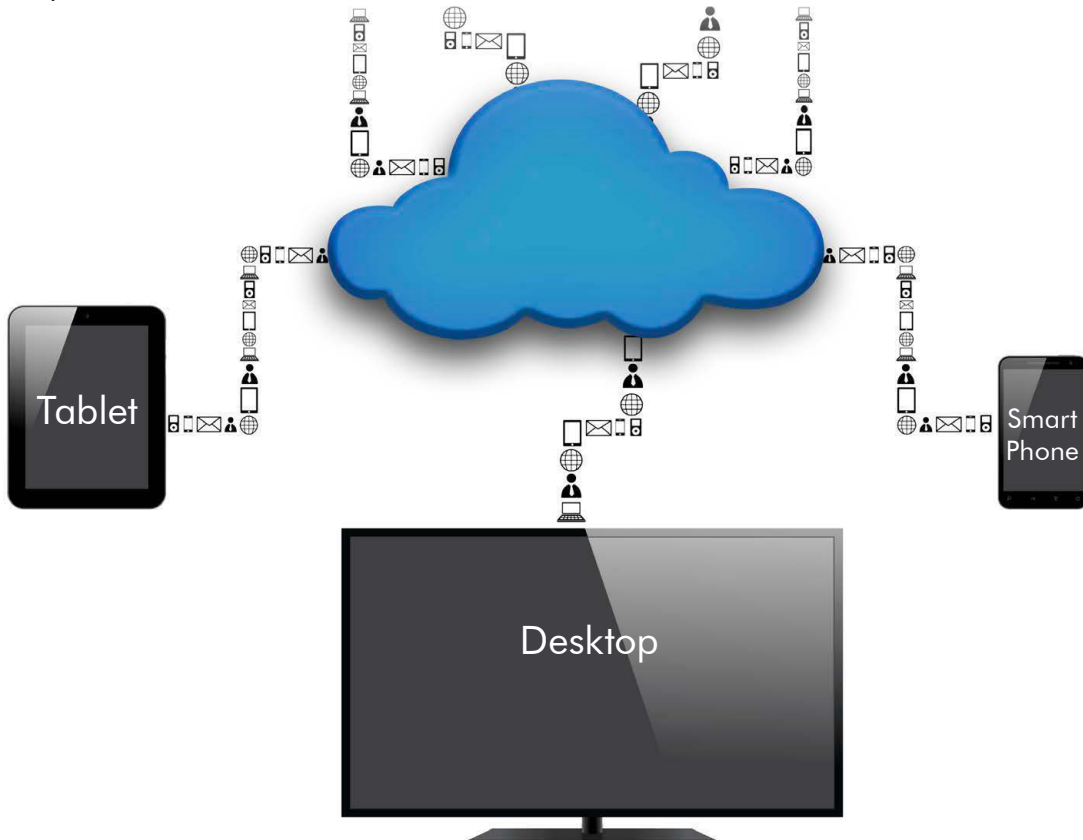
6.0 OUR IT/IM PLANS BY DOMAIN (AXXB)

For a comprehensive, in-depth, discussion of our IT/IM plans and mapping to our IT Domains, please see Social Security's Enterprise Roadmap. This section provides an overview of our strategic plans to expand and modernize each of our IT Domains as identified by OMB.

6.1 DATA MANAGEMENT

Our databases operate on a variety of commercial database management systems (DBMS), including IBM DB2, Integrated Database Management System (IDMS), Microsoft Structured Query Language (SQL) Server, and Oracle, as well as the internally developed Master Data Access Method (MADAM) file management system. We store key programmatic data (e.g., Enumeration, Earnings, Retirement, Supplemental Security, Disability, and Medicare) in four master files that are at the heart of our IT operations: the Master Beneficiary Record (MBR), Supplemental Security Record (SSR), Numerical Identification File (NUMIDENT), and the Master Earnings File (MEF).

At a high level, our data and database strategies are designed to:

- Preserve and protect our national data assets.

- Ensure data access and availability.

- Improve technical responsiveness and agility.

- Promote standards based interoperability.

- Sustain modernization.

TWO-YEAR PLANS

- Complete migration of master files from MADAM to DB2 by the end of FY 2017;
- Continue supporting and optimizing the Windows Production Environment enterprise-level SQL Server infrastructure; and
- Research and benchmark data management best practices.

OUT-YEAR PLANS

- Expand data access to master files; and
- Migrate the remaining IDMS database to DB2.

6.2 SOFTWARE/APPLICATIONS   (BXXB)

Our OS is organized in offices that roughly correspond to major business functions, which enables us to maximize our use of institutional and program knowledge and to sustain effective working relationships with our customers. As described in the EA section, we employ several practices to ensure that these individual offices all reflect a single approach to software development across the OS. These practices include design, architectural, and investment reviews, and several repositories of information to assist our project teams and executive leadership.

We release hundreds of software modifications and implementations each year. We build all of our enterprise software in designated development environments using approved tools, and maintain our source code and key project artifacts in enterprise repositories. We track all known software defects in an enterprise system and continue to test open-source software solutions. We also incorporate open-source business rules engines in several production applications.

REUSABLE CODE – The reuse of existing code, applications, and utilities is a key element in the success of our IT enterprise. SOA is an IT architectural approach that uses reusable components or services and works in conjunction with our WebSphere/CICS architectural model and the OS Framework. Our WebSphere/CICS model supports WebSphere application design and its interface with CICS, allowing us to leverage decades of proven, optimized software while modernizing the user interfaces from outdated "green screens" to web-based designs. The OS Framework is a set of services that supports the architectural model by providing common application functionality, avoiding duplication of effort in application development.

DIRECT SERVICE APPLICATIONS – The public can go to www.socialsecurity.gov to apply for retirement, disability, survivor, and Medicare benefits over the Internet. They can also request a replacement Medicare card, request a replacement form 1099, and use our retirement estimator to help determine the benefits they might receive in retirement.

With a personalized, online *my* Social Security account, Social Security beneficiaries and SSI recipients can access their benefit verification letter, payment history, and earnings record instantly. Most account holders 18 or older who are not receiving benefits can also access a personalized online *Social Security Statement*.

USING CASE ANALYSIS TOOLS TO IMPROVE THE DISABILITY PROCESS

Case analysis tools support three of our strategic goals: Deliver Innovative, Quality Services; Strengthen the Integrity of our Programs; and Serve the Public through a Stronger, More Responsive Disability Program. Electronic Case Analysis Tool (eCAT) and Electronic Bench Book (eBB) are policy compliant web-based applications designed to assist the user throughout the sequential evaluation process. The eCAT and eBB policy tools aid in documenting, analyzing, and adjudicating the disability claim in accordance with our regulations. eCAT targets initial and reconsideration level claims.

IMPROVE EXISTING APPLICATIONS TO REDUCE THE HEARINGS BACKLOG

As the way we do business evolves, so must the software that supports these missions. In order to better meet the needs of the American public we must take a look at how to best improve our existing systems to increase efficiencies and accuracy.

Two initiatives planned are jurisdictional changes to the Case Processing Management System (CPMS) and the addition of an ALJ Homepage. The jurisdictional changes will allow temporary office users to perform additional functions such as adding developments, updating scheduling information, and other functions. These initiatives will provide ODAR offices with the support needed to help reduce the Hearing Backlog because their workload can be more efficiently distributed and worked. The addition of an ALJ homepage seeks to provide the ALJs with a personalized Dashboard that allows them to easily see their cases and action items for the day when they log into the system. The purpose of this functionality is to provide consolidated information that the ALJs need to manage their work in a user-friendly format.

TWO-YEAR PLANS

- Continue to rely on our business partners' priority needs, and our APM process to identify priority software development projects;
- Build all new software following our EA plan;
- Continue to focus on the most effective language/execution environment combinations for our business needs;
- Complete active software modernization projects, including earnings redesign, SSI Modernization, data exchanges and verifications, the Representative Payee System, the Registration Appointment and Services for Representatives (RASR) , Title II Automated Job Streams, the SSR Spread, and the redesign of our death report processing system;
- Stay current with operating systems and software versioning throughout the enterprise;
- Continue to enhance the protection of our Internet applications and the users by providing the best in class authentication system;
- Bring our existing public-use Internet applications under a common portal;
- Use more open source software where appropriate, most notably with our largest active development project (the Disability Case Processing System (DCPS));
- Modernize the Intranet tool we use to track and communicate software development project progress;
- Deploy better and more uniform interface standards for the software we build for our line employees; and
- Build additional transactional mobile applications.

OUT-YEAR PLANS

- Develop a more systematic schedule for refreshing the look and feel of our public use Internet applications;
- Continue to reduce use of ALC code in our enterprise;
- Continue to expand our SOA position;
- Enhance our enterprise test data;
- Launch more structured modernization of core Title II and Title XVI software;
- Pursue enterprise notice processing improvements; and
- Enhance and expand the External Testing Environment.

PERFORMANCE MEASURES

- Improve customer service and convenience by increasing online transactions by 25 million each year (Agency Priority Goal, PM 1.1b).

	FY2016	FY2017
Target	102.8 million transactions	127.8 million transactions

- Average Processing Time for Initial Disability Claims (Budgeted Workload Measure)

	FY2016	FY2017
Target	112 days	111 days

COLLABORATION WITH DEPARTMENTS OF DEFENSE AND VETERANS AFFAIRS

We are dedicated to honoring the service of veterans and current service members. Military service members receive expedited processing of disability claims from Social Security. We work closely with both Department of Defense (DoD) and VA to obtain service member and veteran medical records through Health IT, thereby reducing the time to assist those who have served our country. In collaboration with DoD and VA, we are using semi-automated exchanges that support timely exchange of individual information. By adopting health IT, we provide service members and veterans a high level of service and improved case processing times.

USING HEALTH INFORMATION TECHNOLOGY (HEALTH IT) TO EXPEDITE DISABILITY DECISIONS

Obtaining medical records electronically from health care organizations increases efficiencies in our disability determination process and dramatically improves service to the public by:

- Reducing the time to obtain medical records;
- Decreasing the time to complete a disability claim;
- Helping offset increasing workloads and staffing constraints; and
- Enabling computerized decision support.

We request more than 15 million medical records from about 500,000 providers for approximately 3 million initial disability claims annually. Our primary goal is to increase the volume of medical evidence received via health IT by expanding existing partnerships and adding new partners. We actively discuss partnering with numerous healthcare organizations and vendors, and collaborate our onboarding activities with other Federal agencies. Additionally, we work with the Office of the National Coordinator to ensure that SSA's business needs are included in the national policies and standards.

In FY 2015, 6.1% of initial-level disability cases adjudicated contained health IT medical evidence, which exceeded our goal of 6%. In FY 2016, we expect to improve the disability determination process by increasing the percentage of initial disability cases with health IT medical evidence records for 8% of initial disability cases and 11% in FY 2017.

TWO-YEAR PLANS

- Outreach to and partner with additional healthcare organizations;
- Enhance MEGAHIT and eHealth Exchange gateway;
- Continue involvement with industry policies and standards to ensure our business needs are identified; and
- Enhance health IT forms and management information.

OUT-YEAR PLANS

- Fully develop and incorporate use of Natural Language Processing;
- Implementation of health IT repository;
- Incorporate a new medical records viewer;
- Re-engineer additional legacy verification and exchange applications into DEVO; and
- Enhance EPA functionality and rollout enterprise wide.

PERFORMANCE MEASURES

- Minimize the average response time to deliver medical evidence to the Veteran Affairs (VA) for wounded warriors and veterans (APR PM SO 1.3a).

	FY2016	FY2017
Target	Continue to deliver medical evidence to the VA within an average of 5 business days	Continue to deliver medical evidence to the VA within an average of 5 business days

- Improve the disability determination process by increasing the percentage of initial disability claims with health IT medical evidence (PM 3.2b).

	FY2016	FY2017
Target	8%	11%

6.3 BUSINESS INTELLIGENCE (BI)   (BXXA)

BI is a set of people, processes, applications and tools we use to organize, analyze, and access information in order to improve decisions and manage performance. We leverage our data, modern analytical tools, and data warehousing technologies in our BI architecture to support data-driven decision making. The foundation of our architecture is the combined SSA Unified Measurement System and Managerial Cost Accountability System (SUMS/MCAS). SUMS/MCAS consists of interrelated applications and data that we use to produce consistent measures of workload volumes and other performance measures. SUMS provides workload counts and performance measures, while MCAS addresses work power and budget support.

We recently purchased new BI tools to enhance our existing BI process, and are currently evaluating them. The BI architecture has improved the quality, consistency, and access to information for executives, managers, and analysts throughout our organization. The BI architecture provides user-friendly access to standard reports and ad hoc query tools that support analysis, customer service monitoring, resource allocation, and strategic decision-making.

HOW WE EVALUATE AND IMPROVE CUSTOMER EXPERIENCE WITH INTEGRATED BI

We built our integrated BI architecture on the principal of data as a service (DaaS). Executives, managers, and analysts have the ability to access and analyze information using common querying tools and ad hoc methods. Putting BI into the hands of the decision makers improves their ability to reassign work to other locations, identify backlog and broken processes, and move workloads that are portable to locations where capacity exists. Enhancing traditional reports and charts with Geographical Information Systems (GIS) strengthens decision making by bringing new insights through data visualization.

Our BI Architecture enables consistent, accurate, and integrated information collection, and includes:

DATA SOURCES/SUBJECT AREA INTEGRATION – This data includes programmatic source systems, various workloads and administrative systems.

OPERATIONAL DATA STORES – Detail data is primarily stored in DB2. This data supports tactical and operational needs, is specifically structured for query and reporting purposes, and preserves the performance levels of our transactional systems.

DATA WAREHOUSE – Ab Initio and custom-coded Procedural Language/Structured Query Language (PL/SQL) brings data into the data warehouse. The warehouse, an Oracle database with over 12 terabytes of data, supports strategic decision-making.

MASTER DATA MANAGEMENT – GRTs, integration tables, and master data tables help with data integration across subject areas, enhancing uniformity and consistency in reporting.

PRESENTATION LAYER – Our BI delivery has MI Central, an internally developed, intranet web application using ColdFusion and Asynchronous JavaScript and XML (AJAX) to generate recurring listings and reports. Oracle's Enterprise Performance Management (EPM) and Information Builder's WebFocus provide direct access to the information, dashboards, analytics and ad hoc reporting.

COST AND BUDGET SYSTEMS – The information that we use operationally to manage the workloads is key to our stewardship, budget formulation, and cost accounting activities.

TWO-YEAR PLANS

- Focus on moving hearings-related workload information into the BI architecture;
- Improve performance measurement for our eServices; and
- Redesign the Cost Analysis System by incorporating automated interfaces to systems that supply workload and payroll data.

OUT-YEAR PLANS

- Integrate disability workload information into the SUMS structure as part of DCPS;
- Standardize timely information on pending overpayments across multiple components;
- Redesign the analytical systems that track representative payees;
- Continuously evaluate emerging technology to improve our BI with the use of analytical tools such as, geographical user interfaces and enhanced self-service options; and
- Deploy additional Audit and Integrity System Applications utilizing the high-availability distributed object-oriented system (Hadoop) platform.

The efforts undertaken within BI will affect a broad spectrum of projects, and O&M investments. Since the impact of these efforts will be unique to each investment, it is not practical to measure performance at the domain level.

6.4 BIG DATA

We are implementing a new target architecture for our Audit Trail System that utilizes a Big Data approach. As part of the migration to the new architecture, we carried out a proof of concept (POC) that focused on the benefits and risks associated with the incorporation of the open source Apache Hadoop framework into our data architecture. This POC successfully substantiated Hadoop as a feasible component for use in the replacement of the legacy Audit Trail System (ATS). By coupling Big Data processing techniques with advanced predictive statistical models, we seek to revolutionize our audit and fraud detection capabilities.

TWO-YEAR PLANS

- Expand the scope of predictive analytics to enhance audit and fraud detection capabilities, as well as assess emerging technologies, program evaluations, behavioral Management Information, and policy evaluations; and

- Continue to enhance the Enterprise Metadata Repository (EMR) to support ongoing Big Data initiatives.

OUT-YEAR PLANS

- Deploy additional Audit and Integrity System Applications utilizing the Hadoop platform.

INNOVATION – USING HADOOP, BIG DATA, AND DATA MINING TO REDUCE FRAUD

Reducing fraud and saving the American taxpayer money is an important mission of our IT. Millions of Americans interact with us at claims offices and through *my* Social Security, the online source for personal benefit information. We have thousands of employees dealing with terabytes of data. We have the ability to analyze this data for the signs of fraud by using Apache Hadoop, an open source platform that supports massive data mining and analysis. Leveraging Hadoop, we expect to create sophisticated algorithms to detect and prevent internal and external fraud.

6.5 COMPUTING PLATFORMS

We define our computing services platforms as a managed configuration of IT systems components – including hardware, software, operating systems, and related user interfaces – that provide users and customers the ability to enter and manipulate data, execute tasks, or perform various electronic or digital functions. Conceptually, we view our computing services platforms in two groups:

- Server Platforms (mainframe, mid-range, and commodity x86 servers); and
- End-User Interface Platforms (desktop and mobile).

We engineer these platforms to provide the security, flexibility, and agility needed to support our legacy programmatic processing requirements as well as rapidly evolving web-based and collaborative processing requirements. A broad range of technological developments and service delivery requirements also drive the evolution of our computing services platforms. Our broad goals are to:

- Improve the performance, availability, reliability, security, agility and scalability of our computing services IT infrastructure;
- Improve the cost-efficiency of our computing services IT infrastructure;
- Leverage the cloud-computing model to enhance our computing services capabilities; and
- Facilitate the migration of our computing services infrastructure to the NSC.

MAINFRAME ARCHITECTURE

Our mainframe architecture includes eight IBM z-Series processors, four in each data center. These are IBM's newest EC12 and z196 processors. The eight processors are configured into multiple logical partitions (LPARs) that make up several system complexes. Logically, the mainframe architecture includes the following environments, each serving a specific function for a particular target audience.

Our mainframe platform is specifically geared toward high-speed, concurrent processing of massive volumes of data requiring very high input/output activity and concurrent access to huge numbers of record systems. Mainframes are also highly efficient in their ability to support thousands of concurrent users and application programs – each of which is accessing and manipulating multiple data resources and systems.

We find mainframes to be the most cost-effective platform to meet our expanding workloads. The total cost of ownership – including the costs of hardware, software, power and cooling, facilities, and staffing resources – is substantially lower for a mainframe platform as compared with other possible alternatives. Consequently, our mainframe ROI continues to be favorable:

- The Communication Management Facility (CMF) is a cluster of LPARs at each datacenter that hosts the network functionality;

- The Document Management Facility (DMF) supports the electronic disability Document Management Architecture;

- The Document Management Facility 2 (DMF2) is a cluster of LPARs that supports Paperless and DCPS applications;

- The Enterprise Software Facility (ESEF) is the development environment where we develop and test mainframe code before releasing it into production. ESEF mirrors the Production Processing Facility (PPF) where possible;

- The High Availability Facility (HAF) is a cluster of LPARs at the SSC that hosts SSN Verification applications;

- The Management Information Service Facility (MISF) supports administrative and MI, Program Service Center, and Office of Child Support Enforcement workloads;

- The PPF is a cluster of LPARs that hosts production interactive processing and batch work;

- There are also various Data Center Services Facilities, which are collections of LPARs dedicated to testing functions within the mainframe architecture. Examples include Pre-production, Disaster Recovery, System Software and Network Facilities; and

- Mainframes will continue to play a central role in our Infrastructure operations. The inherent reliability and stability of the Mainframe combined with its security, scalability, and reliability, allows us to process millions of transactions a month on behalf of the public.

The mainframe platform is specifically geared toward high-speed, concurrent processing of massive volumes of data requiring very high input/output activity and concurrent access to huge numbers of record systems. The mainframe is also highly efficient in its ability

to support thousands of concurrent users and application programs – each of which is accessing and manipulating multiple data resources and systems.

Just like banks and investment brokerages, we have found the mainframe to be the most cost-effective platform to meet our ongoing and ever-expanding workloads. The total cost of ownership – including the costs of hardware, software, power and cooling, facilities, and staffing resources – is substantially lower for the mainframe platform as compared with other possible alternatives. Consequently, our mainframe ROI continues to be favorable.

OPEN/DISTRIBUTED SYSTEMS ARCHITECTURE

Our open/distributed architecture includes UNIX, System i/Power Series (formerly known as iSeries), and Windows environments. We divide our UNIX environment into three sectors:

- Socialsecurity.gov sector refers to the UNIX servers that host our Internet sites.
- UNIX Heavy sector refers to UNIX Web Servers that house WebSphere Application Server (WAS) software. WebSphere is our standard development tool. The UNIX Heavy environment houses various program-level customer support systems. On the backend, UNIX Heavy applications connect to the Mainframe CICS, DB, and FOCUS data.
- UNIX Flex sector is the environment that supports all web applications and content developed under COTS packages, such as the Benefits Estimate Calculator and PolicyNet. Some of these applications have back-end connections to Oracle databases.

GREEN TECHNOLOGY

We created a new energy efficient data center, the NSC, in Urbana, Maryland, which was completed in September 2014. This new facility replaces the existing computer center in Woodlawn, Maryland, constructed in 1979, and uses the latest energy efficient technologies. The new NSC dramatically increases our computing power while reducing energy consumption and power costs.

Figure 13: Aerial Rendering of The National Support Center.

The building is Leadership in Energy and Environmental Design (LEED) Gold Certified by the U.S. Green Building Council. The LEED rating system is the global standard for rating the design, construction, operation, and maintenance of green buildings.

The NSC will also be a "Dark Data Center", a stand-alone facility with minimal staffing. Most areas of the data center will not be lighted, unless there is a need for physical service, and administration of the infrastructure will be primarily remote. Innovative cooling systems will be implemented to reduce cooling requirements including hot-aisle containment systems, hot-air separation, and chimney cabinets that optimize airflow for maximum cooling at the least cost. The NSC uses white space heat recovery to capture heat generated by computer servers to heat the building.

The NSC incorporates sustainable features throughout its design, such as, parking lots with pervious pavement that allows water to pass through, reducing runoff and allowing the groundwater to recharge; 190,000 gallons of rainwater storage for cooling towers and irrigation; and a four acre photovoltaic (solar) cell field that generates a megawatt of power.

Along with LEED Gold Certification, we aim to achieve a power usage effectiveness (PUE) rating of 1.3 or better in the NSC. A PUE rating is the ratio of the total energy used by a computer data center divided by the total energy delivered to the computer hardware. The lower the ratio, the more efficient the data center is at effectively using energy to deliver computing power. A rating of 1.3 is excellent. Using advanced technologies, we will reduce our carbon footprint while reducing costs.

TWO-YEAR PLANS

- Evaluate the available options for extending the Compute Services Platform to provide a production-grade, enterprise-level solution that supports our business uses for big data analytics tools;
- Maintain the mainframe as a cost-effective and secure platform by optimizing our associated software costs;
- Virtualize and consolidate our mid-range and commodity x86 server environments to increase utilization and cost-efficiency;
- Engineer the Open/Distributed environment to support greater use of commodity devices;
- Engineer the computing services platform to support open source operating systems and applications;
- Establish consideration of public vs. private vs. hybrid cloud options as part of hosting and/or acquisition strategy decision-making processes; and
- Establish better policies and governance mechanisms for the selection of public cloud solutions.

OUT-YEAR PLANS

- Reduce the number of operating systems we support;

- Virtualize and consolidate our computing infrastructure wherever it is technically feasible and cost-effective;

- Configure our computing services platforms according to a tiered architecture such that we host applications on the most cost-effective level that will securely support their performance requirements;

- Manage IT by increasing the flexibility of our computing services platform to securely support a broader range of end-user mobile devices; and

- Enhance the security, flexibility, and agility of our existing, cloud-based computing services platforms.

PERFORMANCE MEASURES

- Provide uninterrupted access to our systems during scheduled times of operation (PM 5.1a).

	FY2016	FY2017
Target	99.5% availability	99.5% availability

6.6 NETWORK INFRASTRUCTURE/IPV6

Our network and telecommunications infrastructure, inclusive of its messaging and collaboration services, is a critical resource in helping us complete our mission and represents a significant investment in technology. We have been, and continue to be, a leader in the deployment of telecommunications and networking technology solutions to meet our mission and business operations requirements. Continued investments in these projects and initiatives will ensure our position among Federal agencies and provides the necessary foundation for meeting the increasing service demands and expectations of the public and our business partners.

Because of planned initiatives and projects, the networking and telecommunications services infrastructure will be extended to deliver new capabilities and services to meet expanding our business needs and will be optimized to accomplish those needs in an efficient manner resulting in improved availability, sustainability, and reliability.

FIELD OFFICE NETWORK ENTERPRISE (FONE) – FONE operates more than 93,000 telephones and handles more than 8 million calls monthly. FONE, which carries telephone services across our internal voice and data network circuits, reduces our cost for phone service and the cost and complexity of maintaining the physical telecommunications infrastructure.

NSC SIMULATION ENVIRONMENT – The NSC Simulation Environment is an isolated network laboratory configured with routers, switches, isolated Wide-Area Network (WAN)

access, computer platforms, advanced storage, and other resources to mirror our private network, SSANet. Development and testing of proposed architectures in the NSC simulated network will help ensure that investments in the build-out of the NSC network infrastructure support us in a way that efficiently leverages the final network design and facilitates a streamlined transition to the new data center.

We will conduct planning, design, and execution activities in this environment to understand the requirements of a multicarrier high-speed data connection between the NSC, Second Support Center (SSC), and Headquarters. We will revisit the existing data replication architecture to include incorporation of the NSC, and determine potential for synchronization of information between data centers. Finally, to ensure a successful migration, we will activate the applications at the NSC on a sequential basis while deactivating them on the same schedule at the NCC.

INTERNET PROTOCOL VERSION 6 (IPV6) – A memorandum issued by OMB and dated September 28, 2010 states, "The Federal government is committed to the operational deployment and use of IPv6". To support this effort, we implemented a transition plan that includes documenting Internet facing applications and preparing our testing environment to test IPv6 client connectivity for all Internet facing applications. The testing environment allows us to perform a final IPv6 pre-production test of existing and future Internet facing applications and infrastructure components.

TWO-YEAR PLANS

- Explore feasibility of expanding wireless device support to include multiple carriers and devices protected by a mobile device management-security solution;
- Explore the transformation of all data, voice, and video services to IPv6, including mainframe communications;
- Conduct a POC/Pilot for Interactive Video Teletraining Redesign to update the delivery of Online Training;
- Provide continued refreshment of our installed video teleconferencing equipment nationwide in support of our Video Teleconferencing Strategy;
- Continue to optimize our network to reduce cost, improve bandwidth, enhance network resiliency, and support increasing workloads; and
- Execute the NSC migration.

OUT-YEAR PLANS

- Implement network infrastructure to allow virtual machines to move to any data center.

PERFORMANCE MEASURES

- Enhance our IT infrastructure by implementing innovative systems accessibility and performance capabilities (PM 5.3a).

	FY2016	**FY2017**
Target	Deploy new applications with a modern look and feel, accessible from the web or over mobile devices	Develop and implement our plan (strategy, policy, business model, and security requirements) for the establishment of an agency cloud service

• Provide uninterrupted access to our systems during scheduled times of operation (PM 5.1a).

	FY2016	**FY2017**
Target	99.5% availability	99.5% availability

6.7 STORAGE INFRASTRUCTURE

We depend on computer storage to house and safeguard our business data. Our storage efforts over the last 30 months laid the foundation for data replication between the NCC and SSC; an essential component for IT Operations Assurance (ITOA) and disaster recovery efforts. We transitioned tape datasets to virtual tape disk resources, implemented data de-duplication to reduce backup storage requirements, started thin-provisioning, and laid the foundational elements for automated storage tiering. We are planning to automate manual tasks, continue technology modernization, improve cost controls, strengthen business partnerships, and improve future planning.

In FY 2015 we:

• Virtualized 5.9 Petabytes of open systems storage. This project will continue into FY 2016.

• Began the build of the Electronic Vault in Lakewood, CO. This project will continue into FY 2016.

• Designed and tested the open systems and mainframe storage plans to migrate all data to the NSC in FY 2015–2016.

TWO-YEAR PLANS

• Relocate all NCC storage to the NSC and refresh the SSC storage;

• Complete the build of the E-Vault and bring it online to production; and

• Enhance the operations and business resilience through automation and improvements to backup approaches, switching, and data replication.

OUT-YEAR PLANS

- Reduce energy consumption, HVAC, and space for storage;
- Prepare for the next generation of storage managers by acquiring software tools to manage our evolving storage infrastructure more effectively;
- Better integrate our infrastructure planning with application development and operational plans;
- Eliminate unneeded or obsolete data; and
- Exploit rapidly evolving storage technologies.

PERFORMANCE MEASURES

- Provide uninterrupted access to our systems during scheduled times of operation (PM 5.1a).

	FY2016	FY2017
Target	99.5% availability	99.5% availability

CONTINUITY OF OPERATIONS AND DISASTER RECOVERY CAPABILITIES (EXXB)

Currently we have three fully functional co-processing data centers, the NCC, the NSC, and the SSC, to ensure the ability to provide rapid response in the event of catastrophic conditions, eliminate single points of failure for communications capabilities (i.e. email, Internet, Intranet, etc.), and increase coverage for many of our monitoring functions through a planned splitting of staff and facilities. The data centers process our workloads and each back up the data assets of the other. Both data centers' configurations are designed for failover so that in the event of a disaster at one facility, the critical workloads will be automatically assumed by the other. Non-critical workloads will be deferred until the impacted data center is restored to full operations or the capacity of the unaffected data center can be expanded.

The NCC is reaching its end-of-life and the American Recovery and Reinvestment Act (ARRA) in 2009 appropriated $500 million to fund the modern data center. It also partially funded our migration of current data center IT services and operations from the NCC to the new data center, the NSC. The IT Migration began in October 2014 and will conclude in August 2016.

6.8 IT OPERATIONS/DATA CENTERS (EXXB)

Operating our IT infrastructure is an all-day, every-day responsibility. Our data centers secure and maintain demographic, wage, and benefit information on nearly all American citizens, providing for prompt and accurate benefits payments. We operate two data centers. The NCC is our current primary data center, which opened in 1980, and has been in continuous operation for more than 30 years. The SSC, which opened in 2009, is a co-processing facility built to share our day-to-day workloads and facilitate disaster recovery efforts in the event of an NCC failure.

The SSC is a fully functional, co-processing data center operating in concert with the NCC to provide world-class services for the American public. The SSC ensures the ability to provide rapid response in the event of catastrophic conditions, eliminates single points of failure for communications capabilities (i.e. email, Internet, Intranet, etc.), and increases coverage for many of our monitoring functions through a planned splitting of staff and facilities. Like the NCC, it is staffed 24/7/365 with a mix of federal employees and contractors.

We operate a national IT help desk that provides hardware and software support services to all of our employees, responding to over 120,000 service requests each year. Our Network Operations Center monitors our entire network, providing connectivity to over 200,000 devices at over 1,800 sites worldwide. We also monitor critical devices in the infrastructure, as well as all site servers. Our onsite data center teams monitor and maintain our mainframe and storage environment hardware and all online and batch application software at the NCC and SSC. Our Security Operations Center monitors our IT network for security events, then detects and remediates computer security threats.

We support over 10,000 changes annually, including hardware refreshes and systems related configuration and architecture changes. In addition, we test and migrate over 1,200 online / workstation changes and 1,500 batch application changes annually.

6.9 INFORMATION SECURITY   (EXXA)

The Federal Information Security Management Act (FISMA) mandates that we implement an effective information security program that requires us to regularly assess our major IT systems through a security authorization process and report the assessment results in an annual FISMA report to OMB and Congress. The National Institute of Standards and Technology (NIST) provides the framework for implementing an effective information security program. The NIST guidance provides a security authorization process that includes performing risk-based reviews of our systems, developing/updating System Security Plans, and assessing and testing our security controls. We maintain an enhanced cyber security program as directed by OMB Memorandum 14-03 to ensure information security risk is managed on a continuous basis.

CYBER SECURITY – We are committed to improving cyber security performance through ongoing awareness of information security vulnerabilities and threats. We ensure only authorized users have access to resources and information, and implement technologies and processes that reduce the risk of malware.

Information Security Continuous Monitoring (ISCM) - We developed a robust monitoring process that includes submitting monthly data feeds to the DHS using their CyberScope reporting tool. Along with our monitoring and analysis tools, the data feeds provide visibility into our IT assets, their configurations and associated vulnerabilities.

Identity, Credential, And Access Management (ICAM) Homeland Security Presidential Drective (HSPD)-12 - In compliance with Homeland Security Presidential Directive (HSPD)-12 and OMB Memorandum M-14-04, 87.03% of our employees and contractors are

using the Federal Personal Identity Verification (PIV) credential as the primary means of authenticating to our networks. We continue progress on the implementation of HSPD-12 and our goal of 100 percent of our employees and contractors using PIV credentials as the primary solution for internal user access to facilities and networks. We also implemented the Security Access Management (SAM) intranet security portal to strengthen the system access control process. We plan to automate additional access management tools behind the SAM portal.

Remote Access - A secure virtual private network (VPN) controls remote network access and currently meets 100 percent of the FISMA requirements.

Trusted Internet Connection (TIC) - According to DHS' FY 2014 Cybersecurity Compliance Validation (CCV) Report, we fully meet 100 percent of the Internet traffic consolidation Cross-Agency Priority (CAP) goal capabilities. The purpose of the TIC Initiative, as outlined in OMB Memorandum M-08-05, is to optimize and standardize the security of multiple external network connections currently used by federal agencies, including connections to the Internet.

Public Facing Integrity Review (PFIR) - System As we add more online services, we will remain alert to fraudulent and malicious acts against our systems. Our Public Facing Integrity Review (PFIR) system identifies unusual and potentially fraudulent activity in our Internet applications. PFIR supports the safeguarding of the data entrusted to us by the public.

In FY 2016, we plan to replace the PFIR system with Phase One of an Anti-Fraud Enterprise Solution (AFES). Phase One of AFES will provide an environment that consolidates existing anti-fraud initiatives, continuously develops and improves mitigation solutions, and supports advanced predictive analytics capabilities. We plan to incorporate additional AFES functionality over the next several years, specifics to be determined following the contract award.

WE DETER AND PREVENT FRAUD IN OUR PUBLIC FACING APPLICATIONS

Our entitlement programs become even more vulnerable and at risk for malicious activity from the public use of our online services. As a result, we strengthened our integrity review processes and developed a system that supports the review and audit of data collected from the public.

We implemented an automated system that successfully identifies unusual and potentially fraudulent Internet activity. We receive alerts on curious activity taken by the public when using our public facing applications. We continue to enhance our integrity review and fraud prevention processes.

ENTERPRISE PENETRATION TESTING – Penetration testing is the method of evaluating the security of a computer system or network by simulating an attack from malicious outsiders (who do not have an authorized means of accessing the agency's systems) and insiders (who have some level of authorized access). The process involves analyzing the system for potential vulnerabilities that result from system misconfigurations and known or unknown software flaws. Penetration testing allows us to:

- Identify threats and vulnerabilities;

- Analyze controls planned or already in place;

- Determine the likelihood that identified vulnerabilities may be exploited; and

Provide analysis which includes recommended remediation strategies for comprehensive security program improvements.

CONTROLLING ACCESS TO PERSONALLY IDENTIFIABLE INFORMATION (PII) AND SENSITIVE BUT UNCLASSIFIED (SBU) INFORMATION (GXXB)

We have invested in technology, processes, and procedures to ensure logical access to all information, including PII and CUI information. Access is controlled based on the principles of "Least Privileged" and "Need to Know." We manage initial access by using automated access control technologies that provide role-based access control capabilities. We manage technical and administrative controls to ensure user accounts are terminated or de-provisioned timely. In addition, access privileges are reviewed annually and re-certified triennially through our Triennial Certification (TEC) and Profile Content Analysis & Review Programs (PCAR).

DATA LOSS PREVENTION (DLP) – We designed and implemented a DLP solution that identifies PII, both in real time and with cyclical, network-based scanning. This strategy enables us to protect data in process, data in transit, and data at rest. Our DLP solution is a core program initiative that protects us against PII loss and disclosure. The DLP initiative meets this goal by improving our visibility, understanding, and ability to control business data. We minimize loss by improving our policies and procedures, promoting security awareness and training, and advancing security architecture and design. Our implementation identifies, monitors, and protects our sensitive data from unauthorized use or transmission.

TWO-YEAR PLANS

- Ensure adequate resources are invested in IT security;

- Institutionalize our security business processes to ensure they meet current and future needs;

- Continue expanded implementation of a data-loss prevention system to deter PII loss;

- Continue to mature our ISCM program;

- Strengthen our management of security profiles through the development of new policies, procedures, and software to automate the process of reviewing profile access privileges;

- Improve malware analysis, incident response support and emerging threat identification and prevention;

- Ensure that any cloud choices implemented strongly consider security controls and standards;

- Enhance our audit trail and integrity review processes to ensure they evolve to meet our changing business processes and data storage needs;
- Identify and document core technologies and segment solutions in order to ensure alignment of our information security architecture with our EA;
- Promote software assurance in the SDLC by equipping developers with the necessary tools and training to design software that protects and secures our information;
- Develop additional enhanced role-based security training for our employees throughout the enterprise;
- Complete implementation of HSPD-12 for logical access;
- Develop enhanced role-based security training for our employees and contractors with specialized security responsibilities; and
- Continue testing for the effectiveness of implemented security controls.

OUT-YEAR PLANS

- Formalize our IT security risk-assessment approach;
- Improve our oversight of organizations and partners requesting or currently receiving information from us;
- Continue to support mobile computing and prepare for further use of technology and security; and
- Develop and implement a FICAM compliant identity and management process, which will also enhance SAM.

PERFORMANCE MEASURES

- Provide secure and effective services to the public by improving cyber security performance (PM 5.4a).

	FY2016	FY2017
Target	Achieve an average of 97% for the following Cyber Security Cross-Agency Priority Goals: Automated configuration management; Automated software asset management; PIV card use by unprivileged users; and Malware defenses	Achieve an average of 99% for the following Cyber Security Cross-Agency Priority Goals: Automated configuration management; Automated software asset management; PIV card use by unprivileged users; and Malware defenses

- Enhance our security features and business processes to prevent and detect fraud (PM 2.2a).

	FY2016	FY2017
Target	Identify and investigate at least 500 claims presenting characteristics indicative of fraud	Identify and investigate at least 750 claims presenting characteristics indicative of fraud

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6.10 INFORMATION DISSEMINATION, PRIVACY, & DISCLOSURE

We distribute publications using the following Federal Citizen Information Center resources: Consumer Information Catalog, Spanish Bulk Distribution Project, Asian Bulk Distribution Project, and the Financial Literacy & Education Commission - My Money Toolkit.

We continue to offer various channels that help us reach a broader audience and engage citizens, including webinars and Social Media Channels. We will continue to develop social media policies and institute practices to use new technologies to support participation and collaboration, both with the public and with our own employees. For example, we provide the public with an opportunity to comment on our proposed regulations at www.regulations.gov, our eRulemaking initiative.

We use focus groups for public input and employ usability testing with members of the public before launching online services. In addition, we gather and incorporate public input on our plans to revise outdated medical listings. We are creating the necessary infrastructure to encourage employee collaboration and innovation, and to support existing and emerging web technologies.

To comply with Section 207(f) (2) of the E-Government Act of 2002 (E-Gov Act), we make our Web Content Inventory available online for public review and comment. Additional evaluation sources include feedback from callers to our 800-number, visitors to field offices, letters to the Office of Public Inquiries, and emails from the public. We also use GovDelivery to send subscribers E-mails or SMS/Text messages when content is updated on popular socialsecurity.gov web pages.

Additionally, and in compliance with Section 207(f)(1)(A)(ii) of the E-Gov Act, our websites include links to publicly available information, as outlined in the Freedom of Information Act (FOIA).

As stewards of PII, we have an extremely high awareness of privacy and a duty to maintain the trust of the American public in our delivery of Social Security programs. As a result, we developed a PTA template to guide the assessment of privacy risks in new or revised systems and to determine the need for a new or updated PIA or a SORN. The PTA ensures that privacy issues are considered early in the system development process. We also use the PTA as a tool to assist in implementing privacy controls in NIST Special Publication (SP) 800-53 Revision 4, Appendix J. We implement these privacy controls in Appendix J to satisfy the privacy requirements set forth in the Privacy Act of 1974 and any privacy-related policies published by Office of Management and Budget. This review will ensure appropriate assessment of privacy controls and embed privacy into the Risk Management process. The Senior Agency Official for Privacy approves controls implemented for our information systems as a precondition to granting an Authority to Operate.

We are maintaining a consistently high level of administrative, technical, and physical safeguards to insure the protection and confidentiality of our data. This challenge is even more important as state and federal agencies increasingly request access to our data, and we share more of our data electronically.

As part of our disclosure program, we provide our employees in-depth training on the interface between the Privacy Act and FOIA. Our key privacy experts attend professional conferences to remain current in the field.

TWO-YEAR PLANS

- Continue to explore innovative ways to increase utilization of our online services and disseminate information;
- Update the disclosure policy section of our Program Operations Manual;
- Deploy a more robust system to manage FOIA requests, thereby ensuring we can proactively disclose information, when appropriate;
- Incorporate data transparency considerations into the Systems Development Life Cycle (SDLC) so we can release data in standard formats, and in a more efficient and automated way;
- Continue to explore strategies for making efficient business use of social media technologies in order to increase the reach of key messaging, improve web and other services, and allow for greater collaboration and participation by the public in our policy and decision-making; and.

OUT-YEAR PLANS

- Increase the use of enterprise-wide privacy compliance tools to examine our Internet and Intranet web pages for privacy compliance.

The efforts undertaken within this domain will affect a broad spectrum of projects and O&M investments. Since the impact of these efforts will be unique to each investment, it is not practical to measure performance at the domain level.

6.11 SHARED SERVICES

On May 2, 2012, OMB released the Federal Information Technology Shared Services Strategy, providing organizations in the Executive Branch with policy guidance on the full range and lifecycle of intra-agency and inter-agency IT shared services. This strategy supports mission, administrative, and infrastructure-related IT functions. We currently provide many externally facing services for Federal and State agencies.

We have over 4,500 electronic exchanges and an estimated 3,000 agreements with Federal, State, Local, and Foreign governmental entities as well as some private sector companies. Efficient, accurate, and timely exchanges of data promote good stewardship for all parties involved. Our Information exchanges involve both data we provide to our data exchange partners (i.e., state and Federal agencies that use the data in various programs), and data it receives from those partners in order to administer Social Security programs.

We verify and exchange programmatic information with many federal, state, and local government agencies. These exchanges help us to improve programs, reduce administrative costs, improve public service by obtaining information we need to serve our customers, maintain up-to-date and accurate records, and support our program integrity efforts.

IMPLEMENTING THE PATIENT PROTECTION AND AFFORDABLE CARE ACT

We help the Centers for Medicare & Medicaid Services (CMS) administer the Patient Protection and Affordable Care Act (ACA) by providing data it uses to make eligibility determinations. The information we provide CMS under this data exchange streamlines the application process for the healthcare insurance marketplaces, and thus reduces the burden to the American public. Under this agreement, we disclose real time information to CMS for use in determining whether an applicant's attestation concerning name, SSN, date of birth, and allegation of U.S. citizenship is consistent with our records. We may also disclose certain other data, such as monthly or annual Social Security benefit information under Title II, quarters of coverage, and prisoner data, to assist CMS in determining eligibility.

6.12 SECTION 508 OF THE REHABILITATION ACT (IXXA, IXXB, IXXC)

We aspire to be a leader in providing accessible information and communications technology. Our comprehensive approach to Section 508 compliance ensures people with disabilities have access comparable to those who do not have disabilities. To achieve these objectives, we:

- Have a comprehensive Section 508 program staffed by over 20 government employees and contractors.
- Include Section 508 standards and requirements in our development, implementation and maintenance processes.
  - We design using standards based on universal design principles.
  - We include people with disabilities in usability testing.
  - We develop technology using accessibility coding best practices.
  - We perform Section 508 compliance testing using automated tools, code reviews, and manual user testing with assistive technologies.
- Include Section 508 standards and requirements in our procurement processes, including:
  - how we conduct market research;
  - how we create solicitations;
  - how we evaluate and validate contractor Section 508 compliance claims; and
  - how we decide to make purchase awards to contractors.
- Develop and provide technical guidance, tools and resources to assist with Section 508 compliance.

We are also building workforce skills to support an environment where Section 508 requirements and responsibilities are well understood, communicated, implemented, and enforced. Specifically, we:

- Conduct communications and awareness initiatives;
- Provide training to employees on the Section 508 standards, and how to develop and buy accessible technology;

- Participate as a recognized accessible technology leader in federal government forums; and
- Track Section 508 compliance.

TWO-YEAR PLANS

- Enhance Section 508 Governance through 508 policy, broader inclusion of 508 activities in SDLC activities and stage gates, adoption of consistent design and testing standards, incorporation of 508 tools in development environments, and increased compliance tracking, monitoring and reporting across components;
- Continue to provide high-quality consulting and testing services to support component Section 508 compliance activities; and
- Expand Section 508 communications, online training, and outreach activities to increase workforce knowledge of 508 compliance activities.

OUT-YEAR PLANS

- Under the coordination of the Federal CIO Council Accessibility Community of Practice, continue to focus on developing and implementing accessible design and testing best practices.

PERFORMANCE MEASURE

- Achieve the target On-Board Representation of Employees with Targeted Disabilities (PM 4.1b).

	FY2016	FY2017
Target	2.00%	2.00%

7.0 EMERGING TECHNOLOGIES

In order to ensure the best service to our customers, we are identifying and embracing the latest emerging technology resources when appropriate. This approach enables us to make the best use of our current technology investments and develop the most effective strategies for IT resource management going into the future.

7.1 DIGITAL GOVERNMENT STRATEGY (DGS)   (GXXA)

Digital government is a core tenet in our plan for continuous improvement in service delivery to the public. For over 10 years, we have made portions of our data available on-line, offering many electronic services to third parties who do business with us. They include private service providers, U.S. military, federal, state, and foreign agencies and the public. We provide data and services through several digital service channels including telephone, online, formal data exchanges, Web services (machine to machine), and mobile.

The White House DGS vision for federal government agencies calls for increased use of technology to lower costs and enable citizens to securely access high quality government information, data and services "anywhere, anytime, on any device." Government information is managed as an asset throughout its life cycle to promote interoperability and openness and, whenever possible and legally permissible, to ensure that data is released to the public in ways that make it easy to find, accessible and usable. The core principles of DGS focus on:

- Using an information-centric approach to presenting information and data;
- Collaborating on a shared platform across government agencies;
- Providing customer-centric data allowing people to shape, share and consume information; and
- Protecting privacy through a secure platform.

We are currently taking the following steps:

- Ensure all new it systems follow the open data, content, and web application programming Interface (API) POLICY (DGS SECTION 1.2) (GXXA); and
- Evaluate government-wide contract vehicles in the alternatives analysis for all new mobile-related procurements (DGS SECTION 5.3)

TWO-YEAR PLANS

- Complete the transition of all mobile service plans to these BPAs, allowing us to terminate all other contract vehicles and fully centralize mobile provisioning and management across the enterprise – as mandated by DGS Section 5.3;
- Deploy a robust Mobile Device Management (MDM) and Enterprise Mobility Management (EMM) capability that will enable us to securely manage and control an increasingly diverse array of mobile devices; and
- Deploy a modernized Mobile Expense Management System (MEMS) that will enable us to:

- Validate and manage our mobile spending;
- Identify and resolve invoice charges and/or discrepancies;
- Monitor, track and control mobile asset inventories; and
- Support better, data-based decision making.
- Deploy a role-based, self-service portal through which our workforce will be able to access the EMPS service, and electronically request a mobile service plan and choose their preferred mobile device.
- Streamline, automate and integrate the processes associated with approving mobile service and device requests and placing orders with our mobile service carriers.
- Establish effective query and data reporting capabilities through which our managers and executives will have a clearer view on the deployment of mobile technologies across the enterprise. This capability will facilitate data-based decision making with respect to planning and budget requirements in near-real-time.

In addition, the MEMS will play a critical role in the development of an automated and integrated electronic order processing capability.

The purpose of the MDM/EMM platform will be to enforce policies and maintain an appropriate level of device security as well as technical, administrative, governance and internal management controls across multiple mobile platforms.

The MDM/EMM platform will provide real-time visibility into all mobile devices that are connected to our network systems as well as the ability to effectively, efficiently, and consistently update and secure them. Through the MDM/EMM platform, we will provide our workforce with the mobile technologies they require while protecting the security of our network systems and the integrity of its information and data assets. This MDM/EMM capability will enable.

- Over-the-air management of device configurations and security policies;

- More secure management of applications and content on our mobile devices – significantly improving our overall security profile;

- Securely manage mobile users' access to our internal network systems and IT resources;

- Improve the monitoring and tracking of our mobile assets across the enterprise and throughout their respective lifecycles.

The deployment of the EMPS service in FY 2016 will establish a modernized, digital service that is centrally managed and deployed across the enterprise – as mandated by the Federal Digital Government Strategy.

1. ENSURE ALL NEW DIGITAL SERVICES FOLLOW DIGITAL SERVICES AND CUSTOMER EXPERIENCE IMPROVEMENT GUIDELINES (DGS SECTION 6.3) – The Digital Government Strategy Advisory group works with the Federal Web Managers

Council to establish guidelines to improve digital services and customer experience. We are committed to incorporating all appropriate guidance from this activity into established processes to select digital service projects.

2. **PUBLISH A PLAN FOR OPTIMIZING EXISTING PRIORITY CUSTOMER-FACING SERVICES FOR MOBILE USE AND IMPROVING SERVICES (DGS SECTION 7.2)** – Several recent developments demonstrate our commitment to mobile technologies. We initially offered a mobile optimized website, specifically aimed at smartphone users across the country. People visiting our website, www.socialsecurity.gov, via smartphone (Android, Blackberry, iPhone, and Windows devices) were redirected to a mobile-friendly version of the site. We subsequently applied a responsive design theme to configure the display of our informational web-based content in a manner appropriate for the user's device – whether desktop, tablet or smartphone.

OPEN DATA AT SSA

Open Data is the concept that government data, where possible, should be made open to the public and accessible in machine-readable formats to foster entrepreneurship, innovation, and scientific discovery. This concept was articulated in the Executive Order of May 9, 2013, Making Open and Machine Readable the New Default for Government Information and the OMB memorandum, Open Data Policy – Managing Information as an Asset. As part of this initiative, we there are about 1,400 publicly available data assets in our Enterprise Data Inventory located at www.socialsecurity.gov/data. We continue to build out the enterprise data inventory and the public data listing and work to release public data assets.

An important aspect of Open Data is communicating and collaborating with the public. To achieve success, we developed a customer engagement site on Ideascale at ssa-ideas.ideascale.com to solicit ideas. These ideas are turned into themes showing how public feedback has affected our priorities. They are documented on our Open Data Themes web page located at www.socialsecurity.gov/open/customer-feedback.html. Public feedback also helps us prioritize release of public data assets.

7.2 DIGITAL GOVERNMENT PLAYBOOK

Released in August of 2014, the Digital Government Playbook (DGP) outlines 13 key plays to help agencies achieve their digital service mission. www.playbook.cio.gov. – The DGP plays draw upon the best practices from both the private and government sectors and offer tactics to aid in the successful delivery of digital service. We recognize the American people use various digital channels such as websites, email, and mobile applications to interact with government, and we have several digital services in place to meet the needs of people who interact with us. Many of the recommended DGP plays have long been standard and successful practices within our organization. We continue to leverage and expand the digital playbook strategies as we continue toward the goal of harnessing the power of technology to serve the American people better.

7.3 DIGITAL SERVICE TEAM

The success rate of government digital services improves when agencies have subject matter experts with modern design, software engineering, and product management skills. To ensure we build and deliver innovative digital services, we established a Digital Service Team, which focuses on transforming our high-impact digital services, making them easier to use and more cost-effective to build and maintain.

7.4 CLOUD COMPUTING

We can use cloud computing services to consider information technology in new ways to deliver better value in an agile, scalable and reliable manner. Instead of capital expenditures, we can use an operational model with utility-based pricing for services. Whether we use an external cloud provider, implement cloud services on premises or use a hybrid model where we combine external and on premises services we can shorten the time to acquire, install and setup information technology services. With cloud computing services, we can respond to changes in user demand dynamically, only paying for the services we use.

To ensure that we realize the benefits of cloud computing, we completed a cloud computing strategy and began a cloud services pilot in FY 2016. The cloud computing strategy establishes guidelines for defining cloud efforts and the steps that projects must consider before using cloud services, including security, inventory and integration with existing services. We also began a cloud services pilot to learn administration, security, management, integration with existing services and procurement models to most effectively use cloud services.

We will use the lessons learned from the pilot to develop a long-term cloud services acquisition strategy and build upon the pilot implementation. We will use the strategy to obtain cloud services to support appropriate projects, considering benefits and risks. The strategy will provide a full range of services and support models depending upon project requirements, including infrastructure, platform, integration, database, and security services.

TWO-YEAR PLANS

- We will build, test, and deploy at least two applications in our pilot environment.

OUT-YEAR PLANS

- Continue efforts begun under the pilot implementation; and
- Expand to bring the benefits of cloud computing services to other projects.

The hybrid cloud based services model will provide a secure, robust, agile, scalable IT architecture that will enable us to serve the public and our internal customers in an efficient, cost effective and secure way.

7.5 IT TRANSFORMATION

A new position was established in our IT governance area during FY 2015; the Chief Technology Officer (CTO). As part of the CTO's responsibilities, new and innovative technology solutions are identified and their implementation into our IT environment is explored. This section identifies some of those opportunities that we are pursuing to improve our IT service and infrastructure.

AGENCY CLOUD INFRASTRUCTURE (ACI) – The ACI is the foundation of an overall architecture and plan to enable us to enhance our current infrastructure with cloud services. As part of this pilot, we will be using Amazon Web Services (AWS) for the cloud capability. AWS is already a leading cloud service provider and they are FedRAMP certified, meaning they have passed vigorous federal security testing.

Using the ACI, we will provision resources to support the Modern Development Environment (MDE), BORG Consolidated Enterprise Database (CED), and the Enterprise Data Warehouse (EDW) to support our product development. We will use the compute, storage, and network resources to install software and establish processes supporting development of applications and lifecycle deployment through production.

MODERN DEVELOPMENT ENVIRONMENT (MDE) – MDE is our new software application development environment that will facilitate Agile principles and DevOps concepts such as test-driven development, automation, continuous integration, and continuous delivery. Born of the need to improve agility in IT service delivery, the DevOps movement emphasizes communication, collaboration, and integration between software developers and IT operations. Rather than seeing these two groups as silos who pass things along but don't really work together, DevOps recognizes the interdependence of software development and IT operations and helps an organization produce software and IT services more rapidly, with frequent iterations. Shifting to MDE allows us more flexibility in software deployment so that we can better deliver the "product" rather than the "project". That flexibility will allow developers to build innovative applications quickly while incorporating the operations side and streamlining the development process, allowing the team to be more responsive to the ever-changing environment.

ENTERPRISE DATA WAREHOUSE (EDW) – We are creating a new EDW that will give users access to more data, faster. The new EDW will give our field office employees access to more data faster and accurately, which will expedite the processing and adjudicating of claims. EDW will allow us to make data-driven decisions to support our goals and mission. The new EDW will also replace our legacy database ecosystem and provide modern reports that contain data that are more accurate. We are in the initial stages of creating the EDW, and are currently staging data to be loaded into the database. Our goal is to have the EDW ecosystem in production by September 2016 with users accessing data to create their own reports and conduct BI analysis to support component-specific needs.

In building the new EDW, we are taking advantage of a number of new technologies and software capabilities. The database will be built using EMC Greenplum, and the new Informatica ETL (extract, transform, load) tool will pull data from our Hadoop data lake into the EDW. We plan to obtain new software to assist with metadata and are in the process of procuring a new BI visualization tool for end-users to access the data. These are all new technology products for us, and we are excited to see what their potential holds as we transition from descriptive, diagnostic analytics based on intelligent people, to one centered around predictive, prescriptive analytics based on intelligent systems that enable people to make data-driven decisions.

AGILE – The common thread that runs through many of our new initiatives is our Agile software development methodology. In industry, the term "Agile" refers to a collection of methodologies, all which emphasize close customer collaboration, teamwork, the ability to respond quickly to change and frequent deliveries of working software. Based on our needs we have established the Agile Lifecycle (ALC), which is a lightweight hybrid of the best of Agile practices.

Changing our mindset from a project focus to a product focus is at the center of our Agile effort, allowing us to deliver high value results sooner to our customers. The activities that are considered top priority to enable a product focus are:

- Having a Product Owner at the center of the effort;
- Team collaboration; and
- Working software.

Instead of typically long development timelines, Agile projects implement a short, incremental development cycles called "Sprints", that establish a pattern of frequent delivery of working software. This incremental approach allows teams to demonstrate to the customer the capabilities of the emerging product, as well as the capabilities of the team to reliably produce that product on an on-going basis. We have a support team comprised of Agile Coaches that integrate with project teams, providing the guidance they need to be successful.

While only certain projects will be selected for full Agile support, any team can apply aspects of Agile methodology to their project, where/when it makes sense, to more fully engage their business sponsor, to encourage more team collaboration, to work iteratively, and to lower project risk.
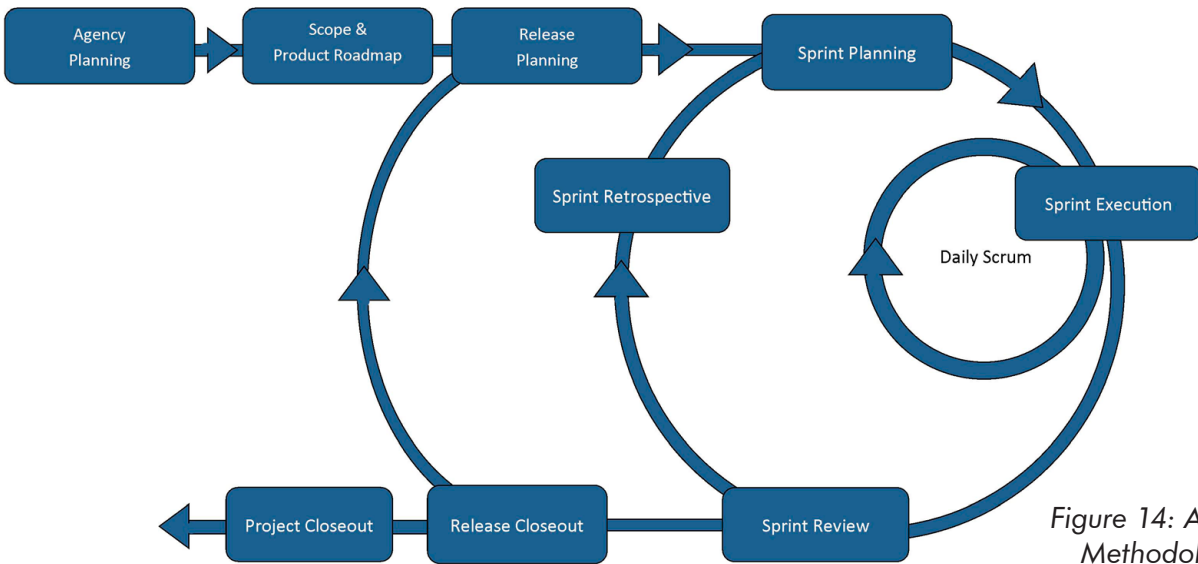
Figure 14: Agile Methodology

BORG – BORG establishes a consolidated relational database centered on person rather than programmatic silos and supports customer engagement initiatives running in the ACI. To date we have initiated the logical data model and the mapping of the first subject area: person.

Phase 1 of the new enterprise model is complete. It focuses on establishing the Person subject area containing data from the Client (PCLNT), iAccommodate (PACOMM), Numident (PNUMI), Wounded Warrior, and Language Preferences datasets. The database has been implemented in the development environment and we are running the ETL rules to load the information.

The Phase 2 model, involving the Earnings subject area containing data from the Master Earnings File (PMEF), is also complete. We are working through the ETL rules to transform the data into the new structure. As we progress, additional subject areas will be added to the model with data related to benefits and customer relationships.

We will perform adequate validation in the next 6 months to make sure our new data matches the legacy sources before any production application uses this data. Eventually, the Customer Engagement Tools (CET) Application Suite will be one of the key target consumers of the BORG database.

SOFTPHONE – With increasing telework and the implementation of SDS, we are piloting a new telephone solution called SoftPhone. SoftPhone is designed to behave like a traditional telephone, enabling users to make and receive phone calls over the internet using a computer instead of a telephone. As the user logs into their laptop, SoftPhone will automatically recognize them and will load all relevant information necessary for placing and receiving calls. The implementation of SoftPhone reduces hardware and therefore hardware acquisition and maintenance costs. We anticipate the adoption of SoftPhone technology will be relatively seamless for most, as the software integrates with users' existing OS, and many users are already familiar with online voice communication technology. We are currently running two pilots; Phase 1 to test the functionality, and Phase 2, full implementation of SoftPhone.

8.0 CONCLUSION

We develop and follow several plans and processes as required by statute and OMB. One of these required plans is the Information Resources Management Strategic Plan. We use this plan to describe our short-term (two-year) and mid-term (five-year) strategies for acquiring, developing, and implementing our IT resources. The IRM Strategic Plan describes what we will do to use IT to support our mission objectives. The companion document, the Enterprise Roadmap, describes how we will accomplish it. In addition, we develop and manage our own IT plans and processes to help us meet our goals and challenges. These IT activities contribute to our overarching strategy to manage technology wisely and efficiently in support of our mission.

APPENDICES

APPENDIX A – CIO AUTHORITIES IMPLEMENTATION ASSESSMENT PLAN (CXXA, CXXB, CXXG, DXXA, HXXB, HXXC)

BACKGROUND

This plan details the extent to which we currently comply with OMB CIO authority directives (principally OMB Memorandum M-11-29) and related statutes (such as the Clinger-Cohen Act). The appendix also identifies areas in need of improvement and an implementation plan. The Federal Information Technology Acquisition Reform Act (FITARA), enacted December 2014, includes enhancements to CIO Authorities previously established in these CIO authority directives and related statutes. In June 2015, OMB issued Memorandum M-15-14 to provide agencies with FITARA implementation guidance, including a Common Baseline outlining CIO roles and responsibilities.

The current role of the Deputy Commissioner of Systems/Chief Information Officer (DCS/CIO) aligns with OMB and statutory requirements. Our IT operating environment allows for effective CIO governance of the entire IT budget and portfolio with few, if any, bureaucratic impediments. Our already centralized organization functions within stated objectives, as does the consolidation of all IT budgets and oversight within the OS.

The plan communicates our commitment to ensure our IT receives a top down enterprise wide approach emphasizing secure, reliable, and modern applications and infrastructure governed through sound and disciplined processes and standards.

Guidance for plan content was included within the 2014 Budget Passback language and the draft PortfolioStat requirements memorandum, and is included below for reference:

CIO Authorities

Provide an implementation plan which details how we will fully implement CIO authorities, consistent with OMB Memorandum M-11-29, "Chief Information Officer Authorities," and as directed by this and subsequent guidance. This plan should include:

- *A gap analysis between CIO IT authorities and authorities consistent with OMB policy and statute;*

- *A plan of action and milestones to close identified gaps and achieve full compliance with OMB policy and legislation within three years;*

- *A proposal describing how we can realign and improve funding requests, budget execution and financial reporting for IT expenditures, to better track planned and expended resources for IT goods and services, and to ensure CIOs have both direct control over all commodity IT spending, and appropriate oversight of all IT-related funding requests and budget execution; and*

- *Current formal policies covering the roles and responsibilities of our CIO.*

Should legal obstacles exist to implementing CIO authorities in accordance with this guidance, the implementation plan should include specific legislative proposals to address these obstacles.

FEDERAL INFORMATION TECHNOLOGY ACQUISITION REFORM ACT (FITARA) COMMON BASELINE IMPLEMENTATION PLAN

The FITARA plan details the extent to which we currently comply with the CIO and CXO roles and responsibilities outlined in the Common Baseline for IT Management within OMB Memorandum M-15-14. The Common Baseline provides a framework for agencies to implement the specific authorities that FITARA provides CIOs, and builds upon their responsibilities as outlined in the Clinger-Cohen Act of 1996. The Common Baseline also speaks to the roles and responsibilities of other Senior Agency Officials, as it is critical that these officials are engaged in the oversight of IT investments.

The Common Baseline provides a framework for CIO and CXO roles and responsibilities in the areas of IT Budget Formulation, Budget Execution, Acquisition, and Organization & Workforce. In our Implementation Plan, we address the four FITARA Common Baseline functional areas in three sections: 1) Budget Formulation, 2) Budget Execution and Acquisition, and 3) Organization & Workforce. Within each section, we define current supporting processes, provide our self-assessment, and outline detailed plans for implementing partially addressed elements.

Our IRM Strategic plan outlines our plan for aligning IT infrastructure with customer service expectations. Within the plan, the processes described in Performance Management and Enterprise IT sections provide an overview of several processes that support FITARA Common Baseline elements as described in our Implementation Plan. We must ensure that the processes and policies guiding our IT investment decisions not only align with customer service expectations as outlined in the IRM plan, but also comply with the requirements as defined in FITARA and other legislative mandates such as Clinger-Cohen.

Once approved by OMB, we will publish the Common Baseline Implementation Plan to our digital strategy page as a downloadable dataset, as described in M-15-14

IT OPERATING MODEL

A Commissioner heads our organization, which employs over 65,000 workers. Our central office is located in Baltimore, Maryland. The field organization provides services at the local level, and includes regional offices, processing centers, and nation-wide network of field offices. Below our Commissioner are four offices (Actuary, General Counsel, Inspector General, and Chief Strategic Officer) and eight components headed by Deputy Commissioners:

- Budget, Finance, Quality and Management
- Communications
- Disability Adjudication and Review
- Human Resources
- Legislation and Congressional Affairs

- Operations
- Retirement and Disability Policy
- Systems

The OS provides IT support for approximately 16,000 state DDS employees. OS, functionally organized into two main categories, consists of eight Associate Commissioner (AC)-led components.

- Business Process Components
  - Applications & SSI Systems
  - Disability Systems
  - Earnings, Enumeration & Administrative Systems
  - Retirement & Survivors Insurance Systems
- Infrastructure/Service Components
  - Enterprise Support, Architecture & Engineering
  - Information Security
  - Systems Electronic Services
  - Telecommunications & Systems Operations

We perform the vast majority of IT work in-house employing approximately 3,900 2210-series federal employees. We have over seven hundred software applications and two data centers. Federal employees design, develop, integrate, maintain and manage IT programs and projects. We utilize IT contractors mainly to fill positions and skills required to complete federal workforce teams.

We own and provide centralized management of our Enterprise Wide Mainframe & Distributed Network Telecommunications Services (EWANS) IT environment. The centrally managed EWANS infrastructure provides a certified and accredited General Support System (GSS) infrastructure, consisting of several sub-systems. This infrastructure, in its turn, supports the production-grade platforms that manage our programmatic support systems and deliver our major (programmatic) applications and their various subsystems. Through this consolidated, centrally managed, cloud-based system, all of our applications are processed or supported (e.g., Federal Old-Age, Survivors, and Disability Insurance Benefits (Title II) and SSI (Title XVI) programmatic applications such as initial and post-entitlement claims processing, etc.; enumeration; earnings record maintenance; financial; and administrative applications).

The OS provides a computing platform as a service (PaaS) to our end-users and customers through a managed configuration of IT components that includes hardware, software, operating systems, and related user interfaces. Users are able to enter and manipulate data, execute tasks, or perform various electronic or digital functions. This platform is a highly integrated, highly scalable, and highly resilient general-purpose computing infrastructure with very high and rapidly scalable service delivery capacity, security, and high-speed network connectivity.

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Enterprise Architecture (EA) establishes the plan to implement IT to achieve mission, goals and objectives through the integration of strategic planning, performance planning, budgeting, CPIC, security and privacy, acquisition, and other related IT and management processes. Our EA is a blueprint for defining the organization's current (baseline) and desired (target) environment and is essential for modifying existing information systems and developing new systems in ways that maximize their effectiveness and mission value.

COMPARATIVE ANALYSIS BETWEEN SSA AND REQUIREMENTS

The Comparative Analysis section examines and compares our CIO role to two complementary sets of CIO requirements; the requirements cited in OMB Memorandum M-11-29 issued August 8, 2011 by Director Jacob Lew, and the requirements statutorily mandated through The Clinger-Cohen Act of 1996 (CCA). Though other guidance (Capital Planning Guide, various OMB circulars and memoranda) and legislation (GPRA/GPRAMA, for example) exist pertaining to the responsibilities of Federal CIOs, we have limited our comparison to OMB Memorandum M-11-29 and Clinger-Cohen because of their direct applicability to CIO authorities. FITARA builds upon the CIO roles and responsibilities within the Common Baseline, as defined in OMB Memorandum M-15-14. It extends the CIO authorities outlined in this comparison. Our Common Baseline Implementation Plan describes current processes that support these roles and responsibilities as well as plans for implementing additional processes and policies.

OMB Memorandum M-11-29 lists four areas for which CIOs have the lead role and responsibility. These areas were also included in the 25 Point Implementation Plan to Reform Federal Information Technology Management issued by Vivek Kundra on December 9, 2010, and are as follows.

1. GOVERNANCE (CXXA,CXXB)

CIOs must drive the investment review process for IT investments and have responsibility over the entire IT portfolio for the agency. Further, agency CIOs must lead actionable meetings such as TechStats designed to improve line-of-sight between project teams and senior executives.

The DCS/CIO has consolidated authority over IT both organizationally within the Office of Systems (OS) and through formal delegation of authority.

Our IT Investment Review Board (IRB) is the SITAR. The Board is comprised of deputy commissioners including business/sponsor units and supporting units such as financial management. The SITAR Board performs enterprise-wide IT planning and prioritization using established evaluation criteria. The Board helps ensure proposed IT projects: (1) achieve the goals of the ASP; (2) meet our business needs; (3) employ sound IT investment methodologies; (4) comply with our EA; (5) and consider risk assessment.

More specifically, the SITAR Board:

- Acts as the executive body for our initiatives and projects, with a focus on enterprise-wide investments. The SITAR Board members, with the support of the Portfolio Executives, inform the DCS/CIO of IT requirements originating in their respective components and offices;

- Provides leadership and direction to ensure that the business drivers guide our IT budget, operations, and development;

- Operates within the framework of our EA, acquisition management requirements, capital planning requirements, and other administrative regulations; and

- Promotes integrated planning and collaboration among our programs, IT systems, and business processes.

The DCS/CIO Chairs the SITAR Board and:

- Works with the Deputy Commissioner for Budget, Finance, Quality, and Management (DCBFQM)/Chief Financial Officer (CFO) and the DCBFQM/Chief Acquisition Officer (CAO) to ensure IT portfolio analysis is an integral part of the yearly budget process for the agency;

- Convenes the SITAR Board on a quarterly basis and provides the SITAR Board members with necessary IT investment and project information in advance of meetings;

- Directs Post Implementation Reviews (PIR) and other project and program analysis; and

- Directs IT Project Review sessions (including TechStats) to improve line-of-sight between project teams and Deputy Commissioners/Senior Executives.

In addition to the SITAR, the DCS/CIO directly manages and controls all other primary IT governance processes including CPIC, Special Expense Items (SEIs) and EA. Included within these processes are all forms of IT investment information exchange, review, analysis, compliance and reporting. See Appendix B for additional information on these processes.

As a part of continuing to improve on our Capital Planning and Investment Control process, we are implementing a new process for the selection and review of IT Investments. The Information Technology Investment Review Process (ITIP), once implemented, will establish a five member board consisting of the Chief Information Officer (CIO), the Chief Financial Officer (CFO), the Chief Strategic Officer (CSO) and two commissioner delegates. The Information Technology Investment Review Board (IT IRB) will be responsible for the reviewing and approving funding for IT investments that further advance the agency's goals.

As part of the initial planning process, an investment proposal will be developed by all stakeholders to outline the investment idea along with supporting documentation such as: alternative analysis and solutions, cost/benefit analysis, ROI investment and plans for

benefit realization. As part of this process, the investment proposal will outline how the investment will operate within the framework of our Enterprise Architecture (EA), meet acquisition management requirements, further capital planning requirements, and confirm to other administrative regulations.

Investment proposals will be submitted on a continuous base. The IT IRB will meet monthly to review new IT investment proposals and to re-evaluate current IT investments to determine if the project still meets the requirements for strategic investments.

Ongoing IT projects will be reviewed and monitored to ensure that the project remains in scope, on time and within the costs projected. If a variance of 10% or more occurs, the IT IRB will review and evaluate the continuing to fund the investment.

In addition, Investments will continue to be reviewed and evaluated annually throughout the life of the investment. With this process in place, SSA will be able to that we are making the most effective and strategic IT investments for the Agency.

Through this process, ITIP ensures accountability, promotes transparency, provides a holistic view of IT investments, provides simplicity and allows the IT IRB to prioritize investments strategically, aligning with the OMB reporting requirements.

2. COMMODITY IT (CXXG, HXXB, HXXC)

Agency CIOs must focus on eliminating duplication and rationalize their agency's IT investments. The CIO shall pool their agency's purchasing power across their entire organization to drive down costs and improve service for commodity IT.

Commodity IT is defined as including services such as, "IT infrastructure (data centers, networks, desktop computers and mobile devices); enterprise IT systems (e-mail, collaboration tools, identity and access management, security, and web infrastructure); and business systems (finance, human resources, and other administrative functions). The OS provides an enterprise-wide computing PaaS to our end-users and customers through a managed configuration of IT components – including hardware, software, operating systems, and related user interfaces – that provide users and customers the ability to enter and manipulate data, execute tasks, or perform various electronic or digital functions.

Unlike other agencies that have bureaus or divisions that may make IT purchases specific to the bureau/division, we have a very centralized acquisition approach for our commodity IT purchases. Most IT-related purchases that use IT funds originate in our OS. In those instances when they do not, the purchases are routed through OS for review and approval before being submitted to the Office of Acquisition and Grants (OAG), our centralized contracting office. Working with OS, OAG has historically established Enterprise Blanket Purchase Agreements for commodity IT infrastructure such as desktop computers, printers, servers, and laptops. We often secure substantial discounts from vendors for these items due to the anticipated purchase quantity. Our enterprise wide management of IT purchases benefits us in a number of ways in addition to quantity discounts and consolidation efficiencies. Standard equipment and configurations save a great deal in asset management and maintenance. Standard configurations across the enterprise ensure our applications run uniformly.

3. PROGRAM MANAGEMENT

Agency CIOs shall improve the overall management of large Federal IT projects by identifying, recruiting, and hiring top IT program management talent. CIOs will also train and provide annual performance reviews for those leading major IT programs.

It is from within our federal employee workforce that we cultivate and develop IT program and project managers. Employees interested in a program management career must complete a progression of experience, training, and core competencies in order to advance:

- Entry-Level Project Manager – Gain experience by shadowing certified Project Managers and successfully completing assignment(s) as a Task Lead/Release/Implementation Manager or Backup Project Manager for a low risk project(s). While gaining experience, individuals complete fundamental acquisition and project management coursework and attend leadership training in areas including: coaching and mentoring, customer service, coping with change, effective staff meetings, winning relationships, problem solving, goal setting, strategic planning, successful negotiating and team building. Successful outcomes from initial assignments lead to increasingly complex project management assignments for low-risk projects.

- Mid-Level to Senior-Level Project Manager – Continue gaining experience with higher risk, more complex projects. Additional training is needed at this level to ensure that individuals are able to manage projects or program segments with little or no supervision. Proficiency is expected in leading Integrated Project Teams (IPTs), performing market research and analysis, developing risk and opportunity management plans, developing and applying technical processes and technical management processes, performing or participating in source selection, planning and preparing acquisition strategies, applying performance-based business processes, developing, managing a project budget and preparing a business case and contributing to program strategic planning. Individuals managing major program segments as defined in OMB Exhibit 53/300 submission require FAC-P/PM mid-level certification.

- Program Manager – The best and brightest Individuals from the Senior-Level Project Manager pool are selected to lead programs and must meet two OMB qualifications: (1) have adequate skills and training to fulfill CIO Council IT PM Guidance and (2) earn FAC-P/PM senior-level certification.

The Federal Acquisition Certification for Program and Project Managers (FAC P/PM) certification process requires that once all coursework and experience requirements are met, candidates must establish a Federal Acquisition Institute Training Application System (FAITAS) account, prepare an application package with supporting artifacts and submit the package to a compliance/approval panel. Our Acquisition Career Manager (ACM) receives recommendations from the panel for final approval. The process is formal, applications are scrutinized in detail and waivers are not granted. Rejected candidates receive a personalized development plan.

In addition to the support provided to develop IT project/program managers, we established the Enterprise Program Management Office (EPMO). The EPMO will serve and support IT and non-IT projects by:

- Facilitating delivery of successful, mission-critical projects through a dynamic service model;
- Building project/program professionalism within the organization and raising awareness of the value of strong P/PM practices;
- Keeping executives, stakeholders, and the P/PM community informed through transparent, accurate reporting of project status and health;
- Serving as the authority on the P/PM practice by consolidating best practices and standards for enterprise use; and
- Establishing a program/project management Center of Excellence.

4. INFORMATION SECURITY

CIOs shall have the authority and primary responsibility to implement an agency-wide information security program and to provide information security for both the information collected and maintained by the agency, or on behalf of the agency, and for the information systems that support the operations, assets, and missions of the agency.

The Office of Information Security (OIS) and the Chief Information Security Officer (CISO) are under direct authority of the DCS/CIO, and have responsibility to oversee the implementation and operation of a comprehensive information security program. As part of the IS program, security controls must be implemented to protect our information assets, including hardware, systems, software and data. All of the established security controls must be designed to ensure regulatory compliance with all federal legislation, policies and standards by managing risk, continuous monitoring, assessing security controls and infrastructure, managing the remediation process, facilitating change control, reporting compliance and progress, responding to security incidents and violations, and formulating security wise contracts.

In achieving its goals and objectives, OIS works closely with DHS and other agencies in managing security risk. For an example, in support of HSPD 23 directive and the TIC initiative, we established ourselves as a single service Trusted Internet Connection Access Provider (TICAP) and participated in the National Cyber Protection System (formerly known as Einstein). As such, we are subject to regular assessments of our capabilities to meet the requirements established by DHS for TIC. DHS performs annual Cybersecurity Compliance Validation (CCV) of our TICAP capabilities, and requests quarterly Plan of Action and Milestones reporting on the latest status as required by memorandum M-09-32. Our goal is to cooperate with the DHS in complying with the TIC initiative by continuously improving our TICAP capabilities outlined in various memorandums.

We strive to evolve our information security program. As part of our Risk Management process, OIS has developed a comprehensive Continuous Monitoring program. This program is an integral part of the Risk Management Framework as described in NIST SP800-37.

The implementation of the Continuous Monitoring program helps enable us to maintain an accurate overview of our risk posture, provide visibility into our assets, and quantify risk. Continuous Monitoring will measure and ensure continued effectiveness of security controls, inform automated or human-assisted implementation of remedies, and enable prioritization of remedies. The measurement of risk will enable us to make continual improvements to our security program.

CyberStat reports have allowed us to raise awareness on what we are doing well (e.g. 100% TIC compliance, Domain Name System (DNS) Security) and prioritize areas of improvement (e.g. additional automation for Continuous Monitoring feeds, enhanced asset management, better software assurance, and additional implementation of HSPD-12 credentials for logical access).

IMPROVEMENT OPPORTUNITIES

As described in section 3 above, we have implemented and are compliant with CIO authorities detailed in both OMB M-11-29 and the primary applicable statutes contained within the CCA. In addition to the IRM Guide and the Enterprise Roadmap, additional applicable information is contained in our CPIC Guide, and SITAR and SEI documentation.

Organizational changes, new policy, restructured command chains, or other fundamental changes are therefore not required in our case. We do recognize, however, that improvement opportunity always exists and identify key examples in this section of the plan. The examples below include internally derived improvement opportunities, those identified within the draft 2013 Appendix A PortfolioStat Guidance, and recommendations from outside entities like the Government Accountability Office (GAO) and our Office of the Inspector General (OIG).

REALIGN AND IMPROVE FUNDING REQUESTS – Our centralized organization and existing processes enable efficient funding requests.

BUDGET EXECUTION – By far, the single biggest factor in improved budget execution would be a stable, fully funded budget. Recent continuing resolutions, reduced funding and debt ceiling issues have made planning and execution very challenging.

BETTER TRACK PLANNED AND EXPENDED RESOURCES FOR IT GOODS AND SERVICES – We are in the process of integrating various project and portfolio management tools into one centralized system. The new PPM tool will streamline the project management process by providing one centralized repository for proposal and project data, reduce the number of applications and forms needed for project management, and reduce the amount of data redundancy currently maintained by disparate systems. The PPM tool will also allow us to track proposals through the investment lifecycle (from idea to implementation) which will provide better oversight of our investments. We currently plan, evaluate, and manage IT investment projects and programs by using multiple functionally dedicated support tools focusing on three IT business areas:

- Planning/Governance
- Resources and Budget
- System Development Activity

Currently, Project Managers, Sponsors, Customer Relationship Representatives, Component Systems Process Improvement Representatives, Quality Assurance Representatives, Project Support Areas, and many others involved in software development are required to use various tools and applications to enter and access project data causing issues with data accuracy, consistency, and timing. The IMT project implementation provides a solution to these issues by providing a framework and tool in which one application provides access to the data to define and track every aspect of proposed work, active and completed projects, programs and/or portfolios. IMT consists of the integration of CA Clarity PPM off-the-shelf software, associated CA supported PPM tools, internally developed Web Services, and external applications or organizational support tools. As IMT is implemented, each external application and support tool will be considered for integration through either an external web service or reconfiguration as part of the IMT logic. Evaluation criteria include; business needs, data needs, specific application logic, and the IT Investment Planning cycle timeline.

MATURE IT IRB – We strive to continually improve and mature our IRB. Recent improvements include:

- The SITAR Board's functions have been updated to reflect evolving roles and responsibilities related to our IT priorities, review of the Annual IT Plan, identifying requirements, funding request review, alignment with ASP, compliance with guidelines and policies, resource management, initiative performance, and retrospective project analysis;

- Portfolios have been realigned to more directly reflect the ASP objectives and our business organization and processes;

- Portfolios use consistent select criteria, along with the SITAR Board guidance on our priorities to determine which proposals are selected for final approval; and

- The Portfolio Executive Board (PEB) consisting of Systems and business sponsor executives, evaluates and prioritizes initiatives based on their relative benefits, costs, risks, and ROI.

IMPROVE POST IMPLEMENTATION REVIEW (PIR) AND RETROSPECTIVE ANALYSIS PROCESSES AND FREQUENCY – PIRs are assessments that help determine whether an IT investment has achieved its objectives. Overall, a PIR is essential to determine:

- an IT investment's impact on mission performance, stakeholders and customers;
- the investment's ability to deliver results and meet baseline goals and performance measures; and
- whether any investment or project modifications are needed.

The results of the PIR provide the DCS/CIO and SITAR Board a better understanding of the investment's performance, help determine whether any actions need to be taken based on the results of the PIR, and whether the CPIC process needs to be revised based on lessons learned. Our PIR process:

- Provides independent retrospective analysis;

- Accurately depicts how well an investment achieved its objectives;

- Focuses on Business investment;

- Focuses on management aspects but provides technical details;

- Targets program managers and executives;

- Identifies investment challenges;

- Includes the following measurement criteria: business assumption analysis, cost analysis, benefit analysis, ROI, EA impact, schedule analysis, mission impact analysis, functional requirements analysis and risk management and mitigation analysis; and

- Provides appropriate level of analysis for level of investment.

The first PIR employing the enhanced processes was conducted on the Telephone System Replacement Program (TSRP). Subsequent PIRs were completed on the Access to Financial Institutions (AFI) project, the Automated Scheduling Application (ASA), Visitor Intake Process-Rewrite (VIP/r), and iClaim Marriage. The Citizen Access Routing Enterprise 2020 (CARE 2020) PIR began second quarter of FY 2015.

EXPAND PROJECT AND PROGRAM MANAGEMENT TRAINING – Create a comprehensive training program to develop program management talent and address OMB certification requirements for project and program management.

LEGAL OBSTACLES TO IMPLEMENTING CIO AUTHORITIES

To the best of our knowledge no legal obstacles exist involving the implementation of our CIO authorities.
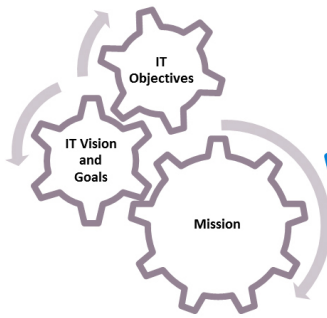
APPENDIX B – SSA'S CPIC PROCESS
(CXXB, CXXC, CXXD, CXXE, CXXF, HXXB)

The CPIC process addresses all IT investments through IT planning, budgeting, cost, and schedule oversight and system development life cycle management processes (including consideration of IT security and risk analysis). Collectively, CPIC addresses the initial conception and development of the investment, the selection of the investment from among competing investments, and the monitoring and evaluation of the investment for acceptable performance and progress against objectives. It documents our overall process and its major components including SITAR (Strategic Information Technology Assessment and Review), Special Expense Items (SEIs) and Enterprise Architecture (EA). These processes ensure consistent enterprise-wide compliance with applicable guidance, policy and law including: the Annual Performance Report (APR), our business environment, Executive Branch policy and direction, legislative and other legal requirements, and audit findings and recommendations.

CAPITAL PLANNING AND INVESTMENT CONTROL (CPIC)

STRATEGIC INFORMATION TECHNOLOGY ANALYSIS AND REVIEW

SSA's Enterprise-Wide Integrated CPIC Approach – Investment Management

IT Objectives

IT Vision and Goals

Mission

Enterprise Architecture (EA)
EA provides a framework for describing and documenting the current and desired relationships among the business and management processes, patterns, and information technology

INPUTS
ASP, APP
- SSA Business Environment
- Outside Influences
- EA and IRM
- Information Security, Privacy
- Budget Cycles

PRE-SELECT · SELECT · CONTROL · EVALUATE

SOCIAL SECURITY ENTERPRISE

SECURITY

Strategic Drivers
Programs/LOBs
Customers
Business Service Channels
Data/Information
Applications/Systems
Infrastructure
Data Center Facilities

IRM Strategic Plan
The IRM Strategic Plan provides a roadmap for the Agency's use of technology to meet mission needs

Capital Planning and Investment Control (CPIC)
CPIC is a systematic process for managing risk and returns associated with IT initiatives

Legislative Drivers

1990	Chief Financial Officers (CFO) Act
1993	Government Performance and Results Act (GPRA)
1994	Financial Acquisition Streamlining Act (FASA)
1995	Paperwork Reduction Act
1996	Information Technology Management Reform Act (Clinger Cohen Act)
2002	Federal Information Security Management Act (FISMA)
2010	Government Performance and Results Act

Figure 15: Our SITAR Process

The DCS/CIO has enterprise-wide consolidated authority over IT through formal delegation of authority. As a result, the DCS/CIO chairs the SITAR Board, which performs enterprise-

wide IT planning and prioritization using established evaluation criteria. The Board helps ensure proposed IT projects: (1) achieve the goals of the ASP; (2) meet our business needs; (3) employ sound IT investment methodologies; (4) comply with our enterprise architectures; and (5) receive and react to IT security and other risk assessments.

The SITAR Board, convenes quarterly and acts as the executive body for our initiatives and projects, with a focus on enterprise-wide investments. The Board members, with the support of the Portfolio Executives, inform the DCS/CIO of IT requirements originating in their respective components and offices. They provide leadership and direction to ensure that the business drivers guide our IT budget, operations, and development. As the chair, the DCS/CIO works with the DCBFQM/CFO and the DCBFQM/CAO to ensure IT portfolio analysis is an integral part of the yearly budget process.

We review all new and re-evaluate all on-going investments as part of an annual IT planning process to ensure proposed initiatives presented to the SITAR Board for review and approval are providing the greatest value and align with our mission. During this initial CPIC phase, the business sponsor identifies a business or mission need, its relationship to our strategic planning efforts, associated capabilities, risk, benefits, and urgency of implementation. In addition, ongoing projects require annual review to re-evaluate the business need and urgency to continue. This pre-selection concludes with the decision whether or not to proceed with further evaluation.

VALUATION METHODOLOGY   (CXXC)

Our IT Investment valuation processes ensure selection of highest value and lowest risk technical solutions to requirements. Primary valuation methodology is the combination of Cost Benefit Analysis (CBA) including return on investment (ROI) and benefit value scores (BVS) inclusive of risk factors. An analysis of costs and benefits is prepared for each IT proposal and updated throughout its lifecycle. This analysis provides a level of detail appropriate for the size of the investment; addresses all investment costs and measures of performance; and is consistent with OMB Circular No. A-94:

- A comprehensive CBA or Alternatives Analysis is required annually for major IT initiatives.
- A ROI analysis is required for all other proposals/projects.

CBA, a systematic approach, follows the premise that there are alternative ways of reaching an objective and that each alternative requires certain resources and produces specific results. The analysis examines and compares the costs, benefits, and uncertainties of each alternative to determine the best cost beneficial means of meeting the objectives. CBAs are required for all new and revisited IT proposals (and for amended CBAs for carryover proposals with a scope change) to determine whether the proposals are cost-beneficial. BVS complements the current CBA process by providing a method for considering issues/benefits not addressed in the development of a stand-alone CBA. BVS documentation of intangible benefits is required for Planning & Analysis proposals and other proposals with a low or negative ROI. Overall, CBA/ROI and BVS data provide the SITAR Board with information necessary to evaluate a proposal before inclusion in our IT Plan.

Risk assessment is part of every capital investment. The identification and associated analysis is a continuing process performed periodically throughout the investment lifecycle. Risk identification consists of determining and documenting to what extent types of risks may affect the investment.

AGENCY STAKEHOLDERS   (CXXB, CXXE)

Our executives and other key stakeholders are engaged in our IT planning and operations in a variety of ways. The SITAR Board is comprised of our deputy commissioners, including business/sponsor units and supporting units such as financial management. The supporting SITAR PEB is comprised of business portfolio executives and Office of System's ACs.

IT program and project status is available via our internal IT data dashboard, IMT, which provides senior management, sponsors, and other key stakeholder groups with an overview of a project within several Key Performance Indicators (KPIs). These KPIs include Status, Schedule, Resources, and Risks. Our executives and key IT stakeholders are further engaged in IT governance processes via multiple forums and regular meetings. For example,

- Commissioner-led weekly Executive Staff Meeting addresses IT issues as required; and
- The Competition Advocacy Review Board consists of executives who meet as required to discuss IT acquisition strategies.

SELECT PHASE   (CXXD)

Within the Select phase, our business components and OS submit proposed IT projects through the SITAR process. Each proposal contains a description of the project, its relationship to the ASP, including the business case, expected benefits, and an estimate of all resource costs. We group these projects into Strategic Portfolios (SPs) that align to our ASP. Integration and collaboration are facilitated through the SITAR portfolio executives and Office of Systems' ACs, who together form the PEB. The PEB reviews all IT investments from an enterprise-wide perspective, prioritizes IT investment requests based on expected benefits, strategic alignment, mission effectiveness, legislative mandates, high ROI, risk, administrative savings, maintaining systems, EA alignment, and organizational impact. The prioritized list becomes our IT Plan that we present to the SITAR Board for review. The SITAR Board reviews and decides the prioritization of the proposed projects using the established criteria and the DCS/CIO presents the IT Plan for the Commissioner's final approval. The SITAR Board reviews and modifies the IT Plan quarterly or as required. Simultaneously, our IT budget staff evaluates non-staff IT resource needs. Key elements of that process are:

IT BUDGET CALL – The annual "call" instructs components to submit justified business cases for funding our priority projects and workloads for the upcoming FY and the next five years.

DCS RECOMMENDATION – IT funding requests are reviewed by OS Budget Staff analysts, management, and technical reviewers, and are evaluated against agency guidance. Analysis includes the assessment of need, appropriateness, reasonableness, and alignment with our priorities, EA and IT security.

COMPONENT RESPONSE – After assessment and review by the OS Budget Staff and approval of recommended funding levels by the DCS/CIO, the OS Budget Staff issues the funding recommendations to the components for review and revision.

FINAL DCS/CIO FUNDING – Based on component responses and other funding revisions, our President's Budget Request and SEI funding amounts are approved by the DCS/CIO and submitted to OMB in September. The result of this process is our IT Plan, which guides our OS in assigning work to our IT staff and allocating IT resources. As we execute the IT Plan, we manage our IT acquisitions to optimize flexibility and value. Our IT staff works with our acquisition staff to ensure that we take advantage of the full range of acquisition options while addressing government-wide contracting priorities. Our process incorporates specific review steps to ensure that acquisitions follow our high-level technology strategies and are consistent with our approved investment plans.

During the budget execution processes, we perform savings scrubs and remove excess. This excess is often due to lower than anticipated awards. The excess goes into our central IT account for requirements adjudicated through appropriate justification and approval governance and processes.

CONTROL PHASE   (HXXB)

During the Control phase, our executives and managers monitor the progress of our ongoing IT projects against projected cost, schedule, and performance (including delivered benefits). These measures provide constructive information on progress through a project's baseline performance plan. The key elements of this process are:

SEI SPENDING OVERSIGHT – Component-developed acquisition plans are used to monitor DCS/CIO approved funding for the upcoming FY. A Budget Execution Report tracks current year spending.

SUPPLEMENTAL FUNDING – Components may request additional ITS funding throughout the year based on changing requirements or new funding. Requests for additional funding are prioritized by the DCS/CIO against the total ITS needs and strategy.

MONTHLY EARNED VALUE MANAGEMENT (EVM) – We perform EVM on major IT Investments that are in either Development or Mixed Lifecycle phases.

INTEGRATED BASELINE REVIEW (IBR) – An IBR measures the accuracy, completeness, and validity of the major IT program's baseline and therefore will accurately depict the health of a project from cost, schedule, management process, resource, and technical perspectives during execution.

IMT – The IMT dashboard provides OS senior management, sponsors, and other key stakeholder groups with an overview of a project within several Key Performance Indicators (e.g., Status, Schedule, Resources, and Risks).

SITAR PROJECT HEALTH – Project sponsors meet quarterly to document project issues related to design, scope, schedule, risk, functionality, and acceptance. Portfolio executives meet with the Office of Systems' ACs supporting the portfolio to review and address any health issues.

FEDERAL INFORMATION TECHNOLOGY DASHBOARD (ITDB) – The IT Dashboard is a website Federal agencies, industry, the general public, and other stakeholders use to view details of major federal IT investments. The purpose of the Dashboard is to provide information on the effectiveness of government IT programs and to support decisions regarding the investment and management of resources. It is also used by the Administration and Congress to make budget and policy decisions. It includes Exhibit 53 and Major IT Business Case/Detail (Exhibit 300) data.

TECHSTAT – When it is determined that a project is underperforming, a face-to-face, evidence-based review of an IT investment is triggered. Any project that is not performing as expected can be selected for review. The DCS/CIO leads a team in a review of the management of the investment, which includes examining program performance data, and exploring opportunities for corrective action. These sessions result in a concrete action plan to address issues and to turn around, suspend, or terminate troubled or failing programs.

MANAGEMENT STEERING COMMITTEE (MSC) – Comprised of the DCS/CIO, the Assistant Deputy Commissioner for Systems, the ACs in the Office of Systems and the Software Process Improvement Director, the MSC meets bimonthly to define, update, and improve the policies and procedures regarding project management, software engineering, product development, and infrastructure support.

ENTERPRISE ARCHITECTURE   (CXXF)

All IT investments must be consistent with our EA. The EA program describes our current and future systems, information, and technology environment based on the Federal Enterprise Architecture (FEA) Framework in use at many agencies. Our program ensures alignment of IT investments and strategic and business plans to the FEA. The framework facilitates investment analysis and selection by identifying areas of duplication, gaps in IT support for business processes, and opportunities to innovate and optimize our existing systems and infrastructure to support transition to our target architecture.

SECURITY

The Office of Information Security (OIS) and the CISO, are under direct authority of the DCS/CIO, and have responsibility to oversee the implementation and operation of our comprehensive information security program to protect our information assets, including hardware, systems, software and data. All of the established security controls have been designed to ensure regulatory compliance with all federal legislation, policies and standards by managing risk, continuous monitoring, assessing security controls and infrastructure, managing the remediation process, facilitating change control, reporting compliance and progress, responding to security incidents and violations, and formulating security wise contracts.

EVALUATION PHASE

OMB Circular A-123 emphasizes effectiveness and efficiency of operations as one of three core objectives. Collecting and analyzing performance data, including customer satisfaction, is essential to ensuring that programs continue to deliver value to the organization and the public. The investment's line of sight determines customers for the particular investment and how results and benefits for those customers are measured. Our Evaluation phase includes annual Operational Analysis (OA) performed on major IT investments with significant steady state (i.e., O&M) activities, Release Success Verification (RSV), ongoing performance measurement, and in-depth PIR.

OPERATIONAL ANALYSIS

OA is a method of examining the current and historical performance of the O&M investments and measuring that performance against an established set of cost, schedule, and performance parameters. OA triggers considerations of how to better meet objectives, save costs, provide alternative methods of achieving the same results, and determine whether the organization should perform a particular function.

RELEASE SUCCESS VERIFICATION & POST-IMPLEMENTATION REVIEW (CXXD)

Upon completion of a project, we perform a RSV to confirm that the project successfully delivered promised functionality before we remove the project from the list of oversight projects.

We also perform a PIR on CIO-selected projects. During a PIR, business assumptions, costs, benefits, ROI, schedule, mission impact (including performance metrics and stakeholder satisfaction), functional requirements, risk management and EA are compared to the original project plans and estimates to assess the IT investment's performance and achievement of mission objectives. It determines: (1) an IT investment's impact on mission performance, stakeholders and customers; (2) the investment's ability to deliver results and meet baseline goals and performance measures, (3) whether any investment or project modifications are needed, and (4) whether our CPIC Select and Control phases need to be revised based on lessons learned. These results provide the DCS/CIO and SITAR Board a better understanding of the investment's performance.

In the following year, we revisit the portfolios to evaluate their alignment with the next year's goals, objectives, and measures. We use these processes to make adjustments each year based upon the current set of goals, objectives, and measures. Additionally, we make quarterly updates based upon changing priorities, legislation, court decisions and evolving external mandates.

APPENDIX C – IT SKILLS INVENTORY ANALYSIS OF FY2014 RESULTS (FXXA)

The Office of Systems conducts a biennial IT Skills Inventory. We last assessed IT skills in FY 2014. Listed below are the Top 10 Gaps based on that survey. Agile Development and Data Analytics were new skills in the FY 2014 Skills Inventory Survey.

Since the FY 2014 survey, we have closed all gaps through FY 2015 hiring, training and the use of contractors. We will conduct our next IT Skills Inventory assessment in FY 2016.

OFFICE OF SYSTEMS 2014 TOP 10 GAP REPORT		
Competency	**Category**	**Skill Gap Focus Level**
Agile Development	Analysis and Design	Novice, Intermediate, Advanced & Expert
Oral Communications	Organizational Support	Advanced & Expert
Written Communications	Organizational Support	Advanced & Expert
Web Technology	Web Development Technology	Intermediate, Advanced & Expert
Data Analytics	Analysis and Design	Novice, Intermediate, Advanced & Expert
Technical Writing	Organizational Support	Advanced & Expert
Peer Review	Program/Project/Contract Management	Intermediate, Advanced & Expert
Object Oriented Application Development	Systems/Software Development	Intermediate, Advanced & Expert
Planning	Program/Project/Contract Management	Intermediate, Advanced & Expert
Computer Languages – JAVA	Systems/Software Development	Intermediate, Advanced & Expert

Figure 16: IT Skills Inventory Analysis

APPENDIX D – RELATED DOCUMENTS

Our IRM Strategic Plan does not stand-alone. It is supported by the following documents and resources:

AGENCY STRATEGIC PLAN (ASP)

Our ASP, www.socialsecurity.gov/agency/asp/, describes our strategic goals and objectives as required by the Government Performance and Result Act Modernization Act 2010. We use our Strategic Plan to guide IRM development, and inform our decision-making processes concerning new acquisitions, IT approaches, human capital development, and program evaluations.

ANNUAL PERFORMANCE REPORT (APR)

Our APR, www.socialsecurity.gov/agency/performance/, establishes enterprise performance measures in support of our Agency Strategic Plan and reports our performance results.

AGENCY FINANCIAL REPORT (AFR)

Our AFR, www.socialsecurity.gov/finance/, provides information enabling the Congress, the President, and the public to assess our stewardship over the financial resources entrusted to us and our performance as an organization.

HUMAN CAPITAL PLAN

Our Human Capital Operating Plan demonstrates how we will use human capital to meet our mission and goals, and informs and supports our IT workforce planning.

PROJECT RESOURCE GUIDE (PRIDE)

Our PRIDE describes our System Development LifeCycle (SDLC) and includes the resources our project managers need to manage our IT projects.

ENTERPRISE ARCHITECTURE (EA) PROGRAM PLAN

Our EA Program Plan describes various aspects of our EA program such as its framework, methodologies, governance, and how it supports the Federal Enterprise Architecture.

ENTERPRISE ROADMAP (ROADMAP)

The SSA Enterprise Roadmap (Roadmap) provides an overview of the governance processes that support our EA program. It describes how our EA program supports the Federal Government CPIC process, and aligns with the Common Approach to Federal Enterprise Architecture. The Roadmap also includes views of our current business and IT architectures, and our plans for maturing those architectures to support our strategic business plans.

Capital Planning and Investment Control (CPIC) Guide

Our CPIC Guide describes our CPIC process in detail.

Major IT Business Cases

Our Major IT Business Cases (previously referred to as Exhibit 300s) describe the business case for our Major IT Investments, and are submitted to OMB annually. Details of how we plan to execute these Major IT Investments are included with the annual submission. Updates to the performance of these Major IT Investments including actual costs, schedule, risks and operational performance metrics are submitted to OMB monthly for posting to the Federal IT Dashboard. An overall assessment of the performance of these investments by the CIO is also available on Federal IT Dashboard.

An assessment of the performance of these investments is available on ITDashboard.gov.

Agency IT Plan

Our IT Plan is a two-year tactical plan that lays out the projects we will pursue in support of our ASP and IRM goals. We review and update this plan quarterly or as needed, based on available resources, SITAR Board decisions, and evolving goals and objectives.

OPEN GOVERNMENT PLAN 3.0

Our Open Government Plan 3.0 lays out steps and commitments to increase transparency, participation, and collaboration at Social Security, and to internalize the principles of open government. Our Open Government Plan 3.0 is available at: https://www.ssa.gov/open/story-2014-06-01-open-government-plan3.html.

Our Open Government Plan 3.0 Plan Milestones and Completion Report is available at: https://www.ssa.gov/open/plan-progress-2014.html.

VISION 2025

Vision 2025 is our picture of the future and our call to action to preserve and fulfill our social contract, which was signed into law more than 80 years ago. It remains a motivating force for us today and is a critical first step in planning how we will serve our customers in the future. https://www.ssa.gov/vision2025/ Vision 2025 has three priorities:

- Superior Customer Service
- Exceptional Employees; and,
- Innovative Organization

APPENDIX E – LIST OF ACRONYMS

Acronym	Refers to
AC	Associate Commissioner
ACM	Acquisition Career Manager
AFI	Access to Financial Institutions
AJAX	Asynchronous JavaScript and XML
ALC	Assembler Language Code
ALJ	Administrative Law Judge
APM	Application Portfolio Management
APR	Annual Performance Report
ARB	Architecture Review Board
ARRA	American Recovery and Reinvestment Act
ASA	Automated Scheduling Application
ASP	Agency Strategic Plan
ATS	Audit Trail System
BI	Business Intelligence
BVS	Benefit Value Scores
CAO	Chief Acquisition Officer
CAP	Cross-Agency Priority
CARE 2020	Citizen Access Routing Enterprise Through 2020
CBA	Cost Benefit Analysis
CCA	Clinger-Cohen Act
CCV	Cybersecurity Compliance Validation
CDM	Continuous Diagnostics and Mitigation
CFO	Chief Financial Officer
CICS	Customer Information Control System
CIO	Chief Information Officer
CISO	Chief Information Security Officer
CMF	Communication Management Facility
CMMI	Capability Maturity Model Integration
CMS	Centers for Medicare & Medicaid Services
COBOL	Common Business Oriented Language
COTS	Commercial-Off-The-Shelf
CPIC	Capital Planning and Investment Control
CPMS	Case Processing Management System
CUI	Controlled Unclassified Information
DaaS	Data as a Service

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Acronym	Refers to
DB2	IBM Database 2
DBMS	Database Management System
DCBFQM	Deputy Commissioner for Budget, Finance, Quality, and Management
DCPS	Disability Case Processing System
DCS	Deputy Commissioner for Systems
DDS	Disability Determination Service
DEVO	Data Exchange and Verification Online
DGS	Digital Government Strategy
DHS	Department of Homeland Security
DI	Disability Insurance
DMF	Document Management Facility
DNS	Domain Name System
DoD	Department of Defense
DOI/IBC	Department of the Interior's Interior Business Center
DRB	Design Review Board
EA	Enterprise Architecture
eBB	Electronic Bench Book
eCAT	Electronic Case Analysis Tool
EDM	Enterprise Data Management
EDR	Electronic Death Registration
E-Gov	Office of Electronic Government and Information Technology
EMR	Enterprise Metadata Repository
EPM	Enterprise Performance Management
ePMO	Enterprise Project Management Office
ESEF	Enterprise Software Engineering Facility
EUC	End User Computing
EVM	Earned Value Management
EWANS	Enterprise Wide Mainframe & Distributed Network Telecommunications Services
EWR	Electronic Wage Reporting
FAC-P/PM	Federal Acquisition Certification for Program and Project Managers
FAQ	Frequently Asked Questions
FEA	Federal Enterprise Architecture
FICAM	Federal, Identity, Credential, and Access Management
FISMA	Federal Information Security Management Act of 2014
FITARA	Federal Information Technology Acquisition Reform Act
FOIA	Freedom of Information Act
FY	Fiscal Year

Acronym	Refers to
GAO	Government Accountability Office
GIS	Geographical Information Systems
GPRA	Government Performance and Results Act of 1993
GPRAMA	Government Performance and Results Act Modernization Act of 2010
GRT	Global Reference Table
GSA	General Services Administration
GSS	General Support System
HADOOP	High-Availability Distributed Object-Oriented Platform
HAF	High Availability Facility
HCOP	Human Capital Operating Plan
HIT	Health Information Technology
HRLoB	Human Resources Line of Business
HSPD	Homeland Security Presidential Directive
IBR	Integrated Baseline Review
IDMS	Integrated Database Management System
IM	Information Management
IMT	Investment Management Tool
IPv6	Internet Protocol version 6
IRB	Investment Review Board
IRM	Information Resources Management
ISCM	Information Security Continuous Monitoring
ISP	Information Security Policy
IT	Information Technology
ITDB	Federal Information Technology Dashboard
ITIP	Information Technology Investment Process
ITOA	IT Operations Assurance
KPI	Key Performance Indicator
LEED	Leadership in Energy and Environmental Design
LEP	Limited English Proficiency
LPAR	Logical Partition
MADAM	Master Data Access Method
MBR	Master Beneficiary Record
MCAS	Managerial Cost Accountability System
MEF	Master Earnings File
MI	Management Information
MISF	Management Information Service Facility
MSC	Management Steering Committee
NCC	National Computer Center

Acronym	Refers to
NIST	National Institute of Standards and Technology
NPWE	Network Protocol Workstation Environment
NSC	National Support Center
NTIS	Department of Commerce National Technical Information Service
NUMIDENT	Numerical Identification File
O&M	Operations and Maintenance
OA	Operational Analysis
OAG	Office of Acquisition and Grants
OASDI	Old-Age, Survivors, and Disability Insurance
OIG	Office of the Inspector General
OIS	Office of Information Security
OMB	Office of Management and Budget
OPP	Organizational Process Profile
OS	Office of Systems
PaaS	Platform as a Service
PCAR	Profile Content Analysis & Review Programs
PEB	Portfolio Executive Board
PFIR	Public Facing Integrity Review
PIA	Privacy Impact Assessment
PII	Personally-Identifiable Information
PIR	Post Implementation Review
PL/SQL	Procedural Language/Structured Query Language
PMCoP	Project Management Community of Practice
PMO	Project Management Office
PMP	Project Management Professional
POC	Proof-of-Concept
PPF	Production Processing Facility
PRIDE	Project Resource Guide
PTA	Privacy Threshold Analysis
PUE	Power Usage Effectiveness
ROI	Return on Investment
RSV	Release Success Verification
SAM	Security Access Management
SDLC	System Development Lifecycle
SEI	Special Expense Item
SHPC	Self-Help PC
SITAR	Strategic IT Assessment and Review
SOA	Service-Oriented Architecture

Acronym	Refers to
SORN	Privacy Act System of Records Notice
SP	Strategic Portfolio
SQL	Structured Query Language
SSA	Social Security Administration
SSANET	SSA Network
SSC	Second Support Center
SSI	Supplemental Security Income
SSN	Social Security Number
SSR	Supplemental Security Record
SUMS	SSA Unified Measurement System
TEC	Triennial Certification
TIC	Trusted Internet Connections
TICAP	Trusted Internet Connection Access Provider
TSRP	Telephone System Replacement Project
UEF	User Experience Framework
UXG	User Experience Group
VIP/r	Visitor In-Take Process
VPN	Virtual Private Network
VSD	Video Service Delivery
WAN	Wide-Area Network
WAS	WebSphere Application Server
WDPE	Windows Development and Production Environment
XML	Extensible Markup Language
SOA	Service-Oriented Architecture
SORN	Privacy Act System of Records Notice
SP	Strategic Portfolio
SQL	Structured Query Language
SSA	Social Security Administration
SSANET	SSA Network
SSC	Second Support Center
SSI	Supplemental Security Income
SSN	Social Security Number
SSR	Supplemental Security Record
SUMS	SSA Unified Measurement System
TEC	Triennial Certification
TIC	Trusted Internet Connections
TICAP	Trusted Internet Connection Access Provider
TSRP	Telephone Services Replacement Project

Acronym	Refers to
UEF	User Experience Framework
UXG	User Experience Group
VA	Department of Veteran Affairs
VIP/r	Visitor In-Take Process
VOIP	Voice over IP
VPN	Virtual Private Network
VSD	Video Service Delivery
WAN	Wide-Area Network
WAS	WebSphere Application Server
WDPE	Windows Development and Production Environment
XML	Extensible Markup Language