Social Security Administration

Enterprise Roadmap

Fiscal Years 2017 - 2018
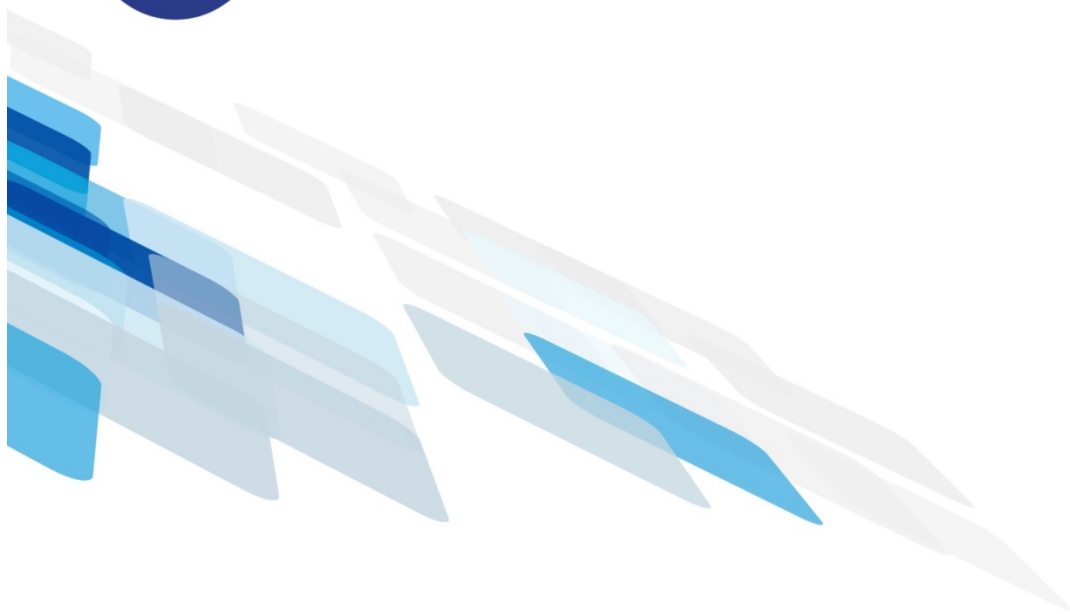
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Note: Review codes A1 – D1 inserted per 2016 OMB Guidance to Federal Agencies on the Preparation and Submission of Enterprise Roadmaps, dated July 7, 2016.

Introduction

We released our first Enterprise Roadmap in August 2012. The Enterprise Roadmap addresses federally mandated directives, policies, and guidance issued by the office of Management and Budget (OMB). The Roadmap is designed as described in the Guidance on 2013 Federal Agency Enterprise Roadmaps, dated March 29, 2013, and M-13-09 Fiscal Year PortfolioStat Guidance.

As is described in OMB M 13-09, the Enterprise Roadmap is an annual summary of information technology (IT) initiatives that implement the agency's Information Resources Management (IRM) Strategic Plan. We publish annual updates to reflect changes in strategic direction for a variety of reasons such as budget, technology, and the needs of our customers – the American public. This year, the format of the Enterprise Roadmap has changed significantly. In July 2016, OMB published updated guidance on the preparation and submission of the Enterprise Roadmaps. We publish annual updates to reflect changes in strategic direction for a variety of reasons such as budget, technology, and the needs of our customers – the American public.

The focus of our agency IRM Plan and Enterprise Roadmap is the digitization of mission and support functions. Digitization involves process re-engineering and the use of robust IT solutions that are based on cloud-enabled platforms and shared services whenever possible, with proper and effective security controls.

Based on OMB guidance, our Enterprise Roadmap format is as follows:

(A1) Overview – A non-technical narrative synopsis of the improvements to IT capabilities that will occur during fiscal years (FY) 2017 – 2018, consistent with our IRM Strategic Plan.

(B1) Sequencing – A consolidated timeline for the improvements described in the Overview section.

(C1) Digitization – List of IT Investments and Systems candidates for the following:

> (C1.1) Shared Services Opportunities – IT mission and support functions that can be better accomplished through shared services from within or outside of the agency

> (C1.2) Function Transfer Opportunities – IT mission and support functions that other agencies or commercial entities are doing as well or better and therefore are candidates for transfer or outsourcing

> (C1.3) Function Termination Opportunities – IT mission and support functions that the agency will stop doing, with a resulting termination of spending in those areas

(D1) Legacy Spending Reduction – List of IT Investments (by UII # reported in the IT Dashboard) and the associated Systems where operations and maintenance (O&M) spending will be reduced during FY 2017 – 2018 such that development, modernization and enhancements (DME) will be able to increase.

(A1) Overview

In this section we demonstrate 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. The topics addressed in this section support our IT strategic plan as outlined in our Information Resource Management (IRM) Strategic Plan.

APPLICATION MODERNIZATION

We plan modernization for line-of-business application systems at the enterprise-level to provide cohesive design and strategic growth. Our objective is to increase accuracy and reduce workloads for our service representatives by integrating of our lines of business, allowing service representatives to have immediate access to service transactions. We are modernizing our Retirement and Disability Benefit Management, Earnings and Wage Reporting, Health Information Technology, and Supplemental Security Income Management using new standards.

(A1.1) Disability Case Processing System (DCPS)

The Disability Case Processing System (DCPS) is a priority initiative to replace the 54 disparate Disability Determination Services' (DDS) systems, support, and maintenance processes with a modern, common, case-processing system.   The common system will use automated tools and leverage current technology. Replacing the current DDS systems with DCPS will create efficiencies that will further enable disability examiners to focus on making quality disability determinations and will reduce infrastructure costs associated with maintaining and upgrading the 54 different systems. The common system will use electronic case analysis to support disability examiners in making consistent decisions based on SSA disability policy, and leverage our investment in Intelligent Disability.

(A1.2) Earnings and Wage Reporting

Our strategic objectives is to strengthen the integrity of our programs by transforming the way we record earnings to enhance data accuracy. Our Earnings redesign will streamline the earnings collection and management processes to leverage current technology, and to automate or eliminate outdated manual processes. Our Earnings system includes the Annual Wage Reporting (AWR) System, the Electronic Wage Reporting (EWR) System and the Earnings Case Management System (ECMS).

(A1.3) Health Information Technology (HIT)

Each year, we request more than 15 million medical records from about 500,000 providers for approximately 3 million initial disability claims. Our primary goal is to increase the volume of medical evidence received via HIT by expanding services to our existing partners and by increasing our partnerships. We actively seek out new partnerships with healthcare organizations and vendors, as well as collaborate our onboarding activities with other federal agencies.   We work with the Office of the National Coordinator to ensure that our business needs are included in the national policies and standards.

(A1.4)   Supplemental Security Income (SSI)

In addition to the Retirement, Survivors, and Disability Insurance program under Title II of the Social Security Act, Social Security also administers the Supplemental Security Income (SSI) program under Title XVI of the Act. SSI provides a minimum level of support to qualified individuals on a needs basis for those who are blind, disabled or aged, and have limited income and resources. Over the past 5 years, the number of claims filed for SSI payments has increased dramatically. Because of economic conditions and the onset of the baby boomer generation as they age and enter the more disability prone years, we expect that trend to continue. The increase in claims is one of the many challenges the SSA Field Offices face along with complex rules and policies related to SSI eligibility and payment amounts, as well as limited SSA Field Office resources.

With the SSI Modernization program, we are focused on advancing software that it is responsive to future needs and serves the public accurately and efficiently. SSI Modernization includes reducing technical debt, increasing modifiability of software, improving software quality, and creating a consistent look-and-feel user-interface.

We will use modern technologies that leverage a Service Oriented Architecture (SOA) approach to promote reuse of software assets, increase responsiveness, improve interoperability, and simplify service delivery. Throughout the duration of the SSI Modernization program, collaborative exchanges will take place to identify opportunities to leverage shared enterprise services and data. These opportunities will help move SSA modernization efforts towards an enterprise vision that takes advantage of enhancements that benefit the agency as a whole.

BUSINESS INTELLIGENCE (BI)

Business Intelligence (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.

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. By providing BI to the decision makers we improve their ability to reassign work to other locations, identify backlog and broken processes, and move workloads that are portable to locations where capacity exists. We enhanr traditional reports and charts with Geographical Information Systems (GIS) strengthens decision making at the agency by bringing new insights through data visualization.

(A1.5)   Audit and Anti-Fraud

By coupling Big Data processing techniques with advanced predictive statistical models, we can revolutionize our audit and fraud detection capabilities. Gartner's definition for Big Data is, "high-volume, high-velocity and/or high-variety information assets that demand cost-effective, innovative forms of information processing that enable enhanced insight, decision making, and process automation".

Our current Audit Trail System (ATS) utilizes a Big Data approach. Hadoop[1] was recently accepted as the new target architecture to address data capture and storage issues facing the legacy ATS today. In addition, Hadoop will add value in developing and testing advanced statistical analytics for both external and internal security violations, fraud, intrusion, and audit investigation analysis.

We will implement an enterprise solution leveraging a Big Data approach to combat fraud across our programmatic applications through the Anti-Fraud Enterprise Solution (AFES) Project.   AFES will improve functionality to enable us to identify patterns of potential fraud, data-driven fraud triggers, and conduct real-time fraud risk analysis. We will integrate AFES technology into our anti-fraud business processes, and include a common platform for case information sharing, management, and workflow between SSA and our Office of the Inspector General.

(A1.6)   CUSTOMER CONNECT

Customer Connect is a cross-agency initiative that redefines the way we engage with our customers to deliver enhanced services today, tomorrow, and in the future. The initiative is a comprehensive shift in how we deliver Social Security services by integrating processes, policy, and systems to anticipate customers' needs, and to deliver the right benefits at the right time. The initiative will move us towards our goal of providing Superior Customer Experience, as defined in Vision 2025.

We started to shift our perspective to 'Think Like A Customer' by depicting the most common and critical moments in someone's life. The new perspective allows us to imagine how we can better serve our customers as they pass through each of their life events - from birth to death. To meet this rising customer expectation, we will develop new applications, establish a flexible infrastructure that will support relationships with new external partners, and empower our customers to be proactive and transparent throughout the transition.

Our goals for Customer Connect are to:

- 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 comprised of cross-agency representatives from our components. We asked Workgroup members to develop a shared understanding of today's customer's journey, areas of opportunities, and transformative ways of engaging with customers in the future. The Customer Connect Workgroup reports to a Core Team of Executives providing oversight and direction. Additionally, we engaged personnel from other federal agencies and external subject matter experts to evaluate and identify the best ways to interact with our customers in the future. We have been investigating industry and other government best practices to help us broaden our awareness in providing superior customer experience. Once funding is secure, the Customer Connect initiative will begin to build

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[1] Hadoop is an open-source software framework written in Java for distributed storage and distributed processing of very large data sets on computer clusters built from commodity hardware.

and create new ways to engage with our customers at critical points in their lives, leveraging both new technology and business process re-engineering.

Our plans for FY 2017 and FY 2018 include transforming two customer pain points into areas of superior customer experience. Our approach will be iterative and include regular coordination with ongoing IT Modernization efforts. We will build new services with the latest technology, in service of our customers. Furthermore, through our stakeholder engagement, we plan to align current and planned projects to support the cross-agency initiative of advancing customer engagement.

(A1.7)   DIGITAL GOVERNMENT STRATEGY

On May 23, 2012, President Barak Obama issued a directive entitled "Building a 21st Century Digital Government". It launched a comprehensive Digital Government Strategy (DGS) aimed at delivering better digital services to the American people. The directive laid out ten milestones for Agencies to comply with to support the goals of DGS. We delivered all ten agency milestones in the time allotted and continue to work towards the tenets expressed under the directive.

Our planned work towards the DGS directive includes the continued development of an enterprise-wide inventory of mobile devices and wireless service contracts and the full deployment of Mobile Device Management (MDM) software. Our effort will ensure that we capitalize on economies of scale when re-competing our mobile device and wireless contracts.

We plan to complete the transition of all mobile service plans to a government-wide blanket purchase agreement (BPA), allowing us to terminate all other contract vehicles and fully centralize mobile provisioning and management across the enterprise. We are also completing the deployment of the enterprise MDM and mobility management capabilities that will enable us to securely manage and control an increasingly diverse array of mobile devices.

We are deploying a role-based, self-service portal through which our workforce will be able to access the Enterprise Mobile Provisioning Service (EMPS), and electronically request a mobile service plan and choose their preferred mobile device. We are also developing robust reporting for executive decision making for future mobile device strategies.

(A1.8)   INFORMATION / CYBER SECURITY

The Federal Information Security Modernization Act (FISMA) of 2015 mandates that we implement an effective information security program that requires us to regularly assess our information security risks 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.

<u>Cyber Security</u>

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 and other cyber risks to our information technology assets.

1. **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. We are expanding our ISCM capabilities in collaboration with the Department of Homeland Security to strengthen how we protect our information security assets.

2. ***Continuous Diagnostic and Mitigation (CDM):*** We continue to deploy measures to prevent the network breaches while simultaneously deliver a continuous-monitoring solution. Our CDM solution will prioritize threats and focus on mitigating and limiting damage from attacks.

   We continue to implement the Department of Homeland Security's (DHS) Continuous Diagnostics and Mitigation program. As we mature and expand our ISCM capabilities we partner with DHS's implementation of the Phase 1, Asset Management capabilities as part of the Continuous Monitoring as a Service program. We are deploying DHS's Phase 2 capabilities, which centers around identity management, credentialing, and privilege management, and will continue to deploy them in through FY 2018. We are reviewing DHS's Phase 3 capabilities in incident response and event management and will continue to mature and align our processes and capabilities with those provided in late FY 2017 and early FY 2018 from DHS.

3. ***Re-engineered Comprehensive Integrity Review Process (RCIRP):*** We continue to evolve and mature the CIRP business process. Our new process will utilize innovative technologies such as big data and predictive analytic tools to proactively detect and stop potentially fraudulent employee programmatic transactions before they occur.

   In the initial release of the Reengineered CIRP project in December 2016, four of the existing 13 Title 2 scenarios related to possible fraudulent activity will be included in the new platform.   In FY 2017, the RCIRP project will continue to incorporate the remaining nine Title 2 scenarios, which require investigation and investigators to be trained on processing alerts generated from these scenarios. Processing the alerts, involves obtaining additional data from the legacy CIRP system and migrating it to new data structures while designing and implementing new workflows and user interfaces to allow investigation of the alerts. At the same time, we will be leveraging the capabilities of the commercial-of-the-shelf (COTS) software platform to revise and enhance the workflows of the four scenarios included in the initial release. The revisions potentially include bringing in data from additional sources and using the COTS tools to provide analysis to assist the investigators in their determinations of potential fraud or security violations.

These updates will also use the advanced analytical capabilities of the COTS software to more accurately identify data patterns that represent possible fraudulent activity. In FY 2017, we also expect to implement additional management information (MI) reporting.

In FY 2018, the RCIRP project will continue incorporating existing scenarios, focusing on adding all of the scenarios related to employee queries. As in FY 2017, this will require additional analyst training, data migration, and user interface updates to allow for processing of these new types of cases. During this time, we will continue revising the existing scenarios related to Title 2 transactions that were incorporated in FY 2017, requiring a similar analytical and developmental effort to fully utilize the capabilities of the COTS software.

4. ***U.S. Homeland Security Presidential Directive 12 (HSPD-12) Card Initiatives****:* Through SSA Smart-card implementations in compliance with HSPD-12, we will continue to improve workflow and provisioning for physical and logical network access, as well as improve authentication strength. We will continue to implement strong identity verification processes and Smart-card-based identity credentials for all SSA employees and contractors. We strive to achieve the end goals of HSPD-12 , which is full interoperability between agencies.

We are completing the implementation of HSPD-12 and our goal of finalizing 100 percent of our employees and contractors using Personal Identity Verification (PIV) credentials as the primary solution for internal user access to facilities and networks by FY 2017, Q2. We continue the implementation of the Systems Access Management (SAM) intranet security portal to strengthen the system access control process. Through FY 2018, we will continue the automation of additional access management tools for systematically integrating all systems platforms through the SAM portal.

5. ***Privileged User Programs****:* Establishing controls around privileged access continues to be a priority. We continue to deploy tools and processes to secure, manage, and monitor privileged accounts with access to SSA systems. Prevention of both breaches and insider attacks, in addition to compliance and operational efficiency is a major driver for the adoption of our privileged access management (PAM) solutions.

As part of our proactive approach, we have accelerated our Privilege Access Security System (PASS). Implementation of PASS will protect our High Value Assets by providing additional security through privilege account management. The PASS tool manages privileged access to critical infrastructure devices by enforcing least privilege throughout the agency through consolidating privileged access on multiple platforms into one solution.

Phase 1 - implement within the Active Directory environment and integrate Enterprise Admins will continue through FY 2017 Q1. Phase 2 - integrate Domain Admins; Phase 3 - integrate Global Admins; and Phase 4 - implement in Open Systems (Solaris, Linux, Other Unix Platforms, Other Managed Platforms) will continue through FY 2018.

IT MODERNIZATION

We are embarking on IT modernization to transform our IT infrastructure into a set of digital services. Our focus is on three areas: infrastructure modernization, data modernization, and code modernization. To meet these goals, we are replacing our aging infrastructure and providing for a modern, robust environment, which allows us to improve our services to the public more quickly and efficiently than we are able to with our aging systems and infrastructure. We will modernize critical applications and the data infrastructure under them, as well as extend our data centers into the public cloud, develop an on-premise cloud capability, and then tie them together into a hybrid cloud. We will develop these new digital services with a customer focus based on the principles of user-centric design.

(A1.9) Agency Cloud Infrastructure (ACI)

The ACI incorporates cloud services into our current infrastructure with the goal of building a cloud architecture with both off-premises and on-premises capabilities, a hybrid cloud, to modernize the SSA infrastructure. We are transitioning from a managed Amazon Web Services (AWS) cloud capability to an SSA managed external cloud instance. We are building an on-premises cloud instance. We will tie the two cloud instances together under a single management umbrella to build a hybrid solution enabling SSA to meet our infrastructure needs more quickly, flexibly, and agilely.

During the pilot with the managed AWS cloud instance, we built infrastructure to support the Modern Development Environment (MDE), the Enterprise Data Warehouse (EDW), and other projects. We will continue to use the compute, storage, and network resources available through the hybrid cloud to support these and new efforts.

Cloud services support a consistent infrastructure built in a more automated fashion, allowing developers and support personnel to try new ideas and to meet increased demand for our products more easily and quickly. Using a hybrid cloud model, we will be able to use both existing on-premises resources and cloud resources for new or expanded products when appropriate.

(A1.10) Consolidated Enterprise Database

Our data modernization effort will establish a consolidated relational database centered on a person rather than programmatic silos. Our effort will simplify the current enterprise data architecture by rationalizing and relating varying data sources into a person centric design using a common key. The common key will create the ability to relate data across the enterprise without the need to join data programmatically.

The phase 1 focuses on enumeration data. The focus is on establishing the Person subject area containing data from Numident. The database has been implemented in the development environment and we are running the conversion process to load the information. The new person centric process will run in parallel with the old to prevent impact to the public, external data exchanges, and our application areas. Over the course of FY 2017, we will implement the code and database in production, then validate and convert applications to use the new person centric database. Once all applications are converted, we will retire the old Numident data structure.

Phase 2 of the project will involve the Customer Interaction subject area. We will coordinate an effort to consolidate multiple data structures into a central storage location affecting multiple applications. To reduce affect on the existing architecture, we will identify a way to decouple the data from the application areas through services allowing a smoother transition to use the new data source.

(A1.11)   Enterprise Data Warehouse (EDW)

We are creating a new EDW that will give end users in our business components access to more data, faster. 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 with data that has been only minimally transformed. We have completed the build out of the ecosystem and have trained 70 end users.   Our goal is to release the EDW for General Availability in FY 2017, allowing users access to 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 the authoritative source into a staging area in the EDW. We created a new metadata repository for the EDW using ASG Rochade. End users will use a new BI tool, Tableau, to access the data in the Greenplum database to conduct data analysis and create reports and dashboards to display their results. 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.

(A1.12)   Enterprise Service Oriented Architecture (ESOA)

ESOA continues to strategically identify and implement business and data services for consumption by the Agency business aligned applications, business partners, and other governmental agencies. The objective for this effort is to focus on the development and implementation of dependable and scalable services that enable projects to build and reuse code, eliminating duplicate sources of information. Our effort moves us closer to a portable platform for managing enterprise level data and allows us to reduce latency affecting service delivery timeframe. We will continue to expand our enterprise service repository, while maintaining the current services over the next several fiscal years.

When complete, we are in a better position to retire legacy architecture components in favor of flexible solutions, capable of moving easily between hardware and software platforms in a more cost effective and timely manner. As we move to extend the current z/OS infrastructure; whether it is to z/OS cloud infrastructure, more LINUX infrastructure, LINUX cloud infrastructure, or new infrastructures yet to be developed, we will build and deploy software that is written once and used across infrastructure boundaries. We will develop an enterprise services program to convert existing business logic and propriety data objects into enterprise level services operating within a services oriented architecture, utilizing more modern technologies and person-centered approaches such as the Consolidated Enterprise Database.

(A1.13)   Legacy Database Conversion

Our data stores are the foundation for our public service programs. In the 1980s, we developed our proprietary Master Data Access Method (MADAM), a data storage and access facility designed to support high-performance data access for COBOL programs running on mainframe systems. In the intervening years, the IT industry universally adopted the relational data model as the standard technology underlying almost every advancement in productivity tools, application design, and programming language support. To ensure that we are able to take advantage of current and future advances in IT and to mitigate the risk associated with being reliant on antiquated technology, we are relocating data from legacy storage systems to a standard database platform in a way that minimizes impact to our legacy software. In addition to our proprietary system MADAM, we have some legacy Integrated Database Management Systems (IDMS) that we built years ago. For similar reasons, we are relocating the data from IDMS to a standard database platform.

(A1.14)   Modern Development Environment (MDE)

MDE is our new software application development environment that will facilitate modern principles and allow for the implementation of proven concepts and practices such as test-driven development, automation, continuous integration, and continuous delivery. The MDE is a key component of the our implementation of Agile practices and DevOps. In order too improve agility in our IT service delivery, the DevOps movement emphasizes communication, collaboration, and integration between software developers and IT operations. 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 for faster feedback related to software development and deployment, allowing staff to collaborate and respond as soon as issues are introduced; Which 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.

(A1.15)   OPEN GOVERNMENT

We are committed to creating an open and transparent government that supports the principles of open government. Our Open Government Plan 4.0, published in September 2016, describes our flagship and major initiatives that support transparency, participation, and collaboration throughout our agency. Our plan provides governance structures to oversee these new approaches and plans for the changing culture of our agency. Our goal is to internalize open government principles throughout our workforce.

Throughout FY 2017 and FY 2018, we will continue to identify and release data that our customers want and need for their lives and businesses. To learn about information our customers would like to have, we will continue to reach out to representatives, advocates, researchers and others who use our data. We will use their input and to help to prioritize future data releases.

1. We are identifying public Social Security data that can be adapted and visualized through geospatial maps and Application Programming Interfaces (API). Our goal is to provide the public with a deeper understanding of our programs through geographic representations and APIs.

Examples of the types of maps and APIs we are creating include our research data and data on our public services. We will make these maps and APIs available at SSA.gov, Data.gov, and GeoPlatform.gov, as appropriate. Our plans for future maps include data on public service locations.

2. We share certain electronic information through agreements with federal, foreign, state, local, and private organizations. The data typically contains personal information. Agencies disclose the data in accordance with the Privacy Act of 1974 and specific legal authorities, using secure transmission methods to protect the information. We share our information to eliminate manual processes and to reduce the burden on citizens in obtaining benefits across agencies. Data exchanges also reduce improper payments, enhance the administration of our programs and other public programs and support research. We plan to continue our leadership in the federal data exchange area by coordinating and helping grow the Federal Data Exchange Community of Practice and the State Community of Excellence. We will also continue to partner with and support data exchange agreements.

3. We will gather public input about program policies and other issues through various channels and using new tools and technologies. For example, the National Disability Forum provides participation opportunities for advocates and stakeholders on disability program policies and solicits input in person and using crowdsourcing engagements.

4. The Customer Engagement Tools (CET) is a part of our strategy to provide superior customer services. The CET program supports transparency through innovative projects for our registered my Social Security users to assist them in managing their personal information and benefits. We plan to expand the services and improve the user experience over the next two years.

5. The Analytics Center of Excellence (ACE) will operate through FY 2017 and FY2018 to help us derive value-added insights from its vast information assets and promote innovation through advanced analytics. ACE supports the open government principle of transparency.

6. The Work Incentives Planning and Assistance Program (WIPA) projects provide transparency about benefits and services to current disability beneficiaries. The projects use extensive collaboration to deliver a full range of direct and indirect services to disability beneficiaries who are working, about to work, or are serious about employment. The WIPA projects are grants awarded by us and, along with other programs, provide support to disability beneficiaries for returning to work.

7. Health IT fully automates the process for obtaining medical evidence. The time it takes us to complete a disability claim decreases as the number of treating sources using health IT increases. As of July 2016, we had partnerships with various medical networks and providers in 49 states and the District of Columbia, Guam, and Puerto Rico. We plan to continue our outreach efforts in fiscal years 2017 and 2018 to include additional medical providers and the Department of Veterans Affairs. We will also expand connections on the eHealth Exchange. We will collaborate with the Office of the National Coordinator's Federal Health Architecture Boards. We will also

participate on government-wide health IT policy and standards setting advisory panels, workgroups and task forces.

8. We are implementing the Federal Source Code policy provided in Executive Memorandum M-16-21, which was released in August 2016. We are reviewing and adjusting, as necessary, our policies and practices dealing with contractual agreements with third-party vendors, promoting the use of open source code, and the process for sharing our code as open source with the public and other federal agencies.

We will continue to support federal open government initiatives throughout the next two fiscal years. These initiatives include Data.gov, Analytics.usa.gov, eRulemaking, Information Technology (IT) Dashboard, DATA Act implementation, Catalog of Federal Domestic Assistance - CFDA.gov, USAspending.gov, transparency of contract data and federal financial assistance data, open procurement and vendor outreach, and access to scientific data and publications.

(A1.16)   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.

We plan to expand the SMART Claim initiative options for authenticated benefit applications which 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.

As *my* Social Security incorporates a Product Management Process, the specific functionality will be continuously reassessed based on information learned from each release. That monitoring may change priorities or change order of new service offerings.

(A1.17) SOFT PHONE

With the increasing telework and the implementation of SDS, we are piloting a new telephone solution called Soft Phone. Soft Phone 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, Soft Phone will automatically recognize them and will load all relevant information necessary for placing and receiving calls. The implementation of Soft Phone reduces hardware and therefore hardware acquisition and maintenance costs. We anticipate the adoption of Soft Phone 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 Soft Phone.

(B1) Sequencing

The following table, Table 1: Consolidated Timeline, outlines the planned activities for Fiscal Years (FY) 2017 – 2018 that support the strategies described in the section above. The item # corresponds to the A1 category (i.e. A1.1.n supports Application Modernization – DCPS).

Table 1: Consolidated Timeline

Item #	FY17 Q1	FY17 Q2	FY17 Q3	FY17 Q4	FY18 Q1	FY18 Q2	FY18 Q3	FY18 Q4	Comments (text)
A1.1.1	X	X	X	X	X	X	X	X	DCPS: Replacement of 54 disability systems with a common case processing system
A1.2.1	X	X							Earnings: Electronic Wage Reporting web services expansion
A1.2.2	X	X	X	X	X	X	X	X	Earnings: Modernize Master Earnings and Suspense File systems to support future year constraints and improve integrity
A1.3.1	X	X	X	X	X	X	X	X	HIT: - Onboard Department of Veterans Affairs - Maintain and enhance MEGAHIT system - Begin implementation of Natural Language Processing - Research and evaluate medical record viewer technologies - Continue collaboration with Office of National Coordinator Federal Health Architecture Board - Continue participation on government-wide health IT policy and standards setting advisory panels, workgroups and task forces - Onboard additional health IT partners
A1.4.1	X	X	X	X	X	X	X	X	SSI: Incrementally migrate SSI claims taking process to a web-based data collection process.

Item #	FY17 Q1	FY17 Q2	FY17 Q3	FY17 Q4	FY18 Q1	FY18 Q2	FY18 Q3	FY18 Q4	Comments (text)
A1.5.1	X	X	X	X	X	X	X	X	Business Intelligence: Audit Trail System enhancements: • Evaluate new data service channels • Additional queries and user interfaces • Modernize legacy batch processing
A1.5.2	X	X	X	X	X	X	X	X	Business Intelligence: AFES – Use of data analytic tools against our master files to identify and manage suspected fraudulent activity – Enterprise Solution
A1.5.3	X	X	X	X	X	X	X	X	Business Intelligence: Evaluation of end user query tools (to replace FOCUS, WebFocus, and Oracle EMP)
A1.6.1	X	X	X	X					Customer Connect: Identify key customer pain points to transform
A1.6.2	X	X	X	X	X	X	X	X	Customer Connect: Secure funding for planned efforts
A1.6.3	X	X	X	X	X	X	X	X	Customer Connect: Finalize an implementation plan
A1.6.4	X	X	X	X	X	X	X	X	Customer Connect: Begin implementation
A1.7.1	X	X	X	X					Digital Government: Complete the transition of all mobile service plans to government-wide BPAs
A1.7.2	X	X	X	X					Digital Government: Complete the deployment of the enterprise MDM
A1.7.3	X	X	X	X					Digital Government: Develop a self-service portal for employees to request mobile devices and service plans
A1.7.4	X	X	X	X					Digital Government: Develop robust query and reporting capabilities to manage mobile technologies across the enterprise
A1.8.1	X	X	X	X	X	X	X	X	Info/Cyber Security: Continue rollout of Continuous Diagnostic and Mitigation (CDM) capabilities
A1.8.2	X	X	X	X	X	X	X	X	Info/Cyber Security: Continue evolution and maturity of Re-engineered Comprehensive Integrity Review Process (RCIRP)
A1.8.3	X	X							Info/Cyber Security: Expand HSPD-12 credentials to support physical and logical access

Item #	FY17 Q1	FY17 Q2	FY17 Q3	FY17 Q4	FY18 Q1	FY18 Q2	FY18 Q3	FY18 Q4	Comments (text)
A1.8.4	X	X	X	X	X	X	X	X	Info/Cyber Security: Continue expanding the Systems Access Management (SAM) portal to implement workflows into Identity Manager tool; support certification of profiles and systematically integrating all systems platforms
A1.8.5	X	X	X	X	X	X	X	X	Info/Cyber Security: Continue the deployment of Privileged User Programs: Privileged Access Security System (PASS)
A1.9.1			X	X	X	X			ACI: Establish competitive Cloud Service Provider acquisition vehicle
A1.9.2			X	X	X				ACI: Complete on-premise private cloud proof of concept
A1.9.3						X	X	X	ACI: Design FedRAMP for Hybrid cloud architecture
A1.9.4				X	X	X	X	X	ACI: Develop cloud services catalog with chargeback
A1.10.1	X	X							Consolidated Enterprise Database: Implement Person Centric Data Store
A1.10.2		X	X	X	X	X			Consolidated Enterprise Database: Validate and convert Applications to Person Centric Data Store
A1.10.3	X	X	X	X	X	X	X	X	Consolidated Enterprise Database: Planning, modeling, and implementation for Customer Interaction Data
A1.11.1	X	X	X	X	X	X	X	X	EDW: Training, Marketing & Communication
A1.11.2	X	X	X	X	X	X	X	X	EDW: Data Acquisition – Acquire and Stage Data, Maintenance
A1.11.3	X	X	X	X	X	X	X	X	EDW: Data Warehouse – Design and Mapping, Maintenance
A1.11.4	X	X	X	X	X	X	X	X	EDW: BI Delivery – Training and Support, Customer and Engineering Liaison
A1.12.1	X	X	X	X					ESOA: Person Info Web Service
A1.12.2	X	X							ESOA: Publish and Subscribe Service
A1.12.3		X	X						ESOA: Disability Data Service
A1.12.4		X	X	X					ESOA: Employer Address Service
A1.12.5		X	X	X					ESOA: T2 Data Service

Item #	FY17 Q1	FY17 Q2	FY17 Q3	FY17 Q4	FY18 Q1	FY18 Q2	FY18 Q3	FY18 Q4	Comments (text)
A1.12.6					X	X	X	X	ESOA: T16 Data Service
A1.13.1	X	X							Legacy Database Conversion: MADAM to DB2 Conversion – Master Beneficiary Record
A1.13.2	X	X	X	X	X	X	X	X	Legacy Database Conversion: IDMS to DB2 Conversion: • National 800 Number Appointments • National 800 Number Leads • Office of Hearings & Appeals • Title II Initial Claims
A1.14.1	X	X	X	X					MDE: Conduct test driven development (TDD) training
A1.14.2	X	X							MDE: Conduct behavior driven development (BDD) training for trainers
A1.14.3	X	X	X	X	X	X	X	X	MDE: Migrate applications to GIT repository
A1.14.4	X	X	X	X	X	X	X	X	MDE: Automate testing, build process, and Cloud deployment for projects
A1.15.1	X	X	X	X	X	X	X	X	Open Government: Expand access to agency information and data, using input from the public to prioritize data releases
A1.15.2	X	X	X	X	X	X	X	X	Open Government: Hold additional engagements on potential areas for regulations changes to gather public preferences from groups, such as the National Disability Forum, which engage disability advocates and stakeholders on key policies
A1.15.3	X	X	X	X	X	X	X	X	Open Government: Engage in outreach and liaison activities with our federal partners to discuss ongoing, new, and oversight of data exchanges using the Federal Community of Practice and the State Community of Excellence
A1.15.4	X	X	X	X	X	X	X	X	Open Government: Develop Public-Facing Geospatial Maps to provide the public with a deeper understanding of our programs through geographic representations and APIs
A1.16.1					X	X	X	X	SMART Claim: Provide a version of iClaim for authenticated users within *my* Social Security portal.
A1.16.2			X	X	X	X	X	X	SMART Claim: Incorporate SSI online application into iClaim

Item #	FY17 Q1	FY17 Q2	FY17 Q3	FY17 Q4	FY18 Q1	FY18 Q2	FY18 Q3	FY18 Q4	Comments (text)
A1.16.3							X	X	SMART Claim: Develop real-time interface with Treasury's Fiscal Service to collect International and Canadian direct deposit banking information and transfer the data directly to ITS.gov website.
A1.16.4	X	X	X	X	X	X	X	X	SMART Claim: Provide critical enhancements to the *my* Social Security portal to support future eService applications, and support for mobile devices.
A1.17.1	X	X	X	X					Soft Phone: Rollout 25,000 Soft Phones to our Field Offices
A1.17.2					X	X	X	X	Soft Phone: Rollout 35,000 additional Soft Phones to our Field Offices
A1.17.3	X								Soft Phone: Rollout 1,000 Soft Phones to our Tele Service Centers
A1.17.4		X	X	X					Soft Phone: Rollout 1,000 additional Soft Phones to our Tele Service Centers
A1.17.5		X	X	X					Soft Phone: Begin rollout of Soft Phones to Headquarters offices

(C1) Digitization

According to the Enterprise Roadmap Guidance, OMB will provide a list of candidate functions to comment on with regard to moving to a shared service approach, transferring functions to other agencies or outsourcing, or terminating functions resulting in reduction in spending.   We have not received that list from OMB yet. However, we did review our IT Portfolio internally and determined that none of our current functions are candidates for transfer or termination. As is the case with most federal agencies, there is the potential that some of our back office functions may be candidates for shared services. However, at this time we have no plans to pursue those opportunities.

(C1.1) Shared Services Opportunities

OMB Item #	Program Name (text)	Function (BRM Code)	Shared Service Description (text)	Potential Service Provider (text)
C1.1.1				
C1.1.x				

(C1.2) Function Transfer Opportunities

OMB Item #	Program Name (text)	Function (BRM Code)	Function Description (text)	Potential New Provider (text)
C1.2.1				
C1.2.x				

(C1.3) Function Termination Opportunities

OMB Item #	Program Name (text)	Function (BRM Code)	Function Description (text)	Potential New Provider (text)
C1.3.1				
C1.3.x				

(D1) Legacy Spending Reduction

OMB is requesting information regarding IT investments and the associated systems where O&M spending will be reduced during FY 2017 – 2018 such that DME will be able to increase for the same or a different IT investment.

We acknowledge that IT modernization is a critical priority for the following reasons:

- The IT staff who developed these legacy systems are retiring and we must retire the systems with the staff by retooling to ensure that we can continue to provide service to our customers;
- We cannot significantly reduce either IT costs or staff costs without modernization. In today's fiscal environment we need an investment to provide a return; and
- We need to retool and use technology to better serve the public. The modern tech expected by the public cannot be embedded into 25-year-old legacy systems.

We develop an IT modernization plan to reduce legacy spending. However, we currently do not have sustained funding to execute that plan at this time.

UII #	Investment Name (text)	Function (BRM Code)	Associated Legacy System Name(s) (text)	FY17 O&M Decrease ($xxx)	FY17 DME Increase ($xxx)	FY18 O&M Increase ($xxx)	FY18 DME Increase ($xxx)	UII of other Investments gaining DME

Appendix A: Acronym List

Acronym	Refers to
ACE	Analytics Center of Excellence
ACI	Agency Cloud Infrastructure
AFES	Anti-Fraud Enterprise Solution
API	Application Program Interface
ATS	Audit Trail System
AWR	Annual Wage Reporting
AWS	Amazon Web Services
BDD	Behavior Driven Development
BI	Business Intelligence
BPA	Blanket Purchase Agreement
BRM	Business Reference Model
CDM	Continuous Diagnostic and Mitigation
CET	Customer Engagement Tools
CFDA	Catalog of Federal Domestic Assistance
COBOL	Common Business-Oriented Language
COTS	Commercial-off-the-shelf
DCPS	Disability Case Processing System
DD	Disability Determination
DGS	Digital Government Strategy
DHS	Department of Homeland Security
DME	Development Modernization and Enhancement
ECMS	Earnings Case Management System
EDW	Enterprise Data Warehouse
EMC	Encapsulated Logic for Line-AFP Encoded Notices
EMPS	Enterprise Mobile Provisioning Service
ESOA	Enterprise Service Oriented Architecture
ETL	Extract, Load, Translate
EWR	Electronic Wage Reporting
FISMA	Federal Information Security Modernization Act
FY	Fiscal Year
GIS	Geospatial Information System
GIT	A software version control system
HIT	Health Information Technology
HSPD	Homeland Security Presidential Directive
IDMS	Integrated Database Management System
IRM	Infrastructure Reference Model
ISCM	Information Security Continuous Monitoring

Acronym	Refers to
ITS	IT Operations Assurance
MADAM	Master Data Access Method
MDE	Modern Development Environment
MDM	Mobile Device Management
MI	Management Information
NIST	National Institute of Standards and Technology
OIG	Office of the Inspector General
OMB	Office of Management and Budget
OS	Office of Systems
PAM	Privileged Access Management
PASS	Privileged Access Security System
PIV	Personal Identity Verification
RCIRP	Re-engineered Comprehensive Integrity Review Process
SAM	Systems Access Management
SDS	Single Device Strategy
SSA	Social Security Administration
SSI	Supplemental Security Income
TDD	Test Driven Development
TIC	Trusted Internet Connection
UII	Unique Investment Identifier
WIPA	Work Incentives Planning and Assistance Program