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Corporation for National and Community Service

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March 11, 2016

Via email

Re: Freedom of Information Act Request # 2016-14

This letter is a response to the Freedom of Information Act (FOIA) request that the Corporation for National and Community Service (CNCS) received from you on March 1, 2016. You asked for “a copy of the CNCS Information Technology modernization plan.”

Your request is granted in full; I have attached a copy of the plan. Nothing has been withheld from the record, and there is no fee for this response.

If you have any questions, please feel free to contact me at (202) 606-6747.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Stephanie A. Soper'.

Stephanie A. Soper
FOIA Officer

Enclosure: CNCS IT Modernization Plan

INFORMATION TECHNOLOGY (IT) MODERNIZATION PLAN

**CORPORATION FOR NATIONAL AND COMMUNITY SERVICE
(THE CORPORATION)
OFFICE OF INFORMATION TECHNOLOGY**

FEBRUARY 11, 2013

FINAL

Executive Summary

Information Technology (IT) plays an integral part in achieving Agency mission. As the Corporation's mission, strategy, and business landscape evolve so must the supporting technology. New technology such as smart phones and tablets presents new opportunities to engage the public and improve staff productivity. Modern grants management systems enable faster response to changing business processes and improved access to quality data and analytics to support evidence-based decisions.

Since 2010, the Corporation has funded several IT investments (e.g., performance measures reporting, security enhancements, and infrastructure stabilization) to better support program requirements and meet expanding agency needs, including the 2009 Serve America Act (SAA) and objectives from the *CNCS 2011-2015 Strategic Plan*. These investments have resulted in a steady increase in operations and maintenance costs within a constrained IT budget leaving few resources available for modernization. As a result, program areas continue to experience operational challenges, including: poor data quality and limited accessibility, inadequate system usability, too many offline workarounds, limited ability to engage the public, and delays in responding to new business priorities or new technology. If left unaddressed, these challenges will limit the Corporation's ability to achieve its strategic priorities and provide 21st century services to citizens.

This IT Modernization Plan seeks to address these challenges and position the Corporation to use technology more effectively in promoting national service and volunteerism. The three year plan involves the implementation of projects aligned with four themes that, when executed collectively will provide the Corporation's stakeholders with powerful new tools and capabilities that facilitate public engagement, increase data quality and transparency, increase staff productivity, decrease burden on grantees, and increase grant program effectiveness. The IT modernization program themes are:

- ❖ **Modernize Grants Management Systems** — Re-architect systems and standardize databases for greater agility; Improve data quality and provide a better user experience through new data edits and validations, pre-populated forms, optimized navigation, and context driven screens; and maximize staff productivity by consolidating core staff functions currently in multiple systems into a common system (e.g., Staff Portal).
- ❖ **Improve Analytical Support** — Enable faster, more accurate, self-service agency reporting, thereby making staff more effective when explaining why service matters and maximize agency return on investment; Expand State Profiles concept; Provide better support for performance management and evidence-based decisions.
- ❖ **Enhanced Mobile Web and Information Sharing** — Optimize key CNCS information for mobile web viewing and develop new capabilities to accept grantee system information and share CNCS data with the public.
- ❖ **Mobile Applications** — Develop mobile apps to support public engagement and staff productivity.

Recognizing the current budget constrained environment, CNCS identified forty IT Modernization projects and developed three different three-year (i.e., Funding Years 2013-2015) modernization program implementation scenarios (i.e., \$6M, \$9M, \$15M) each of which will address key modernization objectives, address current challenges, and deliver benefits at varying levels. Table 1 summarizes the key projects that will be implemented under each funding scenario.

Table 1: Summary of IT Modernization Projects by Funding Scenarios

Scenario 1 (\$6M Total 3 year costs) — This scenario migrates eSPAN to the Staff Portal creating greater agility, implements enhancements including new GARP and Compliance/Monitoring functionality, and standardizes data bases (\$4.4M); implements new self-service analytics and reporting capability and two new analytical reports (\$1.2M); makes key information viewable via mobile devices and enables system to system communication with grantees (\$0.3M); and creates one mobile application and two mobile reports (\$0.4M).

Scenario 2 (\$9M Total 3 year costs) — Builds upon scenario 1 (\$6.0M) by migrating the Trust Calculator into the Staff Portal with enhancements (\$1.1M); implements two additional analytical self-service reports (\$1.2M); and two additional mobile applications and reports (\$0.8M).

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Scenario 3 (\$15M Total 3 year costs) — Builds upon scenario 2 (\$9.0M) by migrating eGrants Classic functionality into Staff Portal with enhancements and moving funds verification capability into the Staff Portal (\$3.9M); implements two additional self-service analytical reports (\$1.2M) ; and one additional mobile application and two additional mobile reports (\$0.4M).

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Purpose

The Corporation initiated an IT Modernization effort in 2010 to evaluate its current challenges and identify opportunities to support an agile, user focused environment that gives stakeholders new tools and capabilities to meet the mission of the Corporation. In 2012, CNCS refined its overall approach, defined boundaries, and set the scope for IT modernization. The following plan describes the strategic direction of the Corporation, and the challenges/business needs that IT must address to reach the target state. The plan defines IT Modernization goals, objectives, and specific projects that CNCS will implement across funding years 2013 – 2015.

Background

CNCS IT History

The current environment at the Corporation features a custom grant and member management system – some parts dating back over 15 years – coupled with complex business processes supporting multiple stakeholders. Since 2010, the Corporation has made a few major IT investments to position the Agency to meet the requirements of the 2009 Serve America Act (SAA) and to achieve some of the goals outlined in the *CNCS 2011-2015 Strategic Plan* (e.g., *Fortify management operation and sustain a capable, responsive and accountable organization - Strengthen IT systems to enhance efficiencies, enable program effectiveness and improve accountability*).

These investments have resulted in a steady increase in operations and maintenance costs within a constrained IT budget leaving limited resources available to support IT modernization. As a result, CNCS operations are supported by an aging IT environment that is expensive to maintain, with limited ability to quickly respond to changing business priorities and operational challenges.

Current Business Strategy / IT Drivers

In addition to *CNCS 2011-2015 Strategic Plan* which specifically outlines IT modernization objectives (e.g., enhanced data warehouse, modify public facing systems modernize infrastructure), in 2012, the CNCS Chief Executive Officer elaborated on the strategic plan with a set of strategic business priorities (i.e., EDGE) for the Agency. Many of these priorities cannot be optimally supported with current IT systems and infrastructure and therefore will require additional IT investment. The following table summarizes the current list of 2012 strategic business priorities driving CNCS IT Modernization strategy.

Table 2 –CNCS Strategic Priorities Driving IT Modernization

Business Priority	IT Drivers
Grow National Service and Volunteerism	<ul style="list-style-type: none"> Provide new methods of public engagement to foster national service
Drive Innovation and Impact	<ul style="list-style-type: none"> Create new capabilities to enable CNCS to invest in results and maximize return on investment.
Explain Why Service Matters	<ul style="list-style-type: none"> Develop capability that will allow CNCS to document and show the impact of national service on key National challenges.

Summary of Challenges / Business Needs

Summarized below are the key challenges associated with the current state that CNCS' IT Modernization Plan seeks to address.

- 1. Data Quality and Transparency** – Data and information residing in older, 'legacy' technologies are not standardized and were input into the system with limited checks and validation creating both quality and access issues. As a modern grant-making agency, the Corporation must have near real-time access to the critical information of its grantees and programs to support evidence-based decisions and explain why service matters, however current system limitations make it difficult and time consuming to integrate data from multiple data sources and filter out data inaccuracies. For example, initiatives such as State Profiles Reporting cannot be executed easily, and require significant intervention by staff technical resources due to the disparate nature of current data and the lack of a self-service reporting capability in the underlying system.
- 2. Inadequate System Usability** – Core grants and member management systems and tools do not align with current business processes; lack data quality controls (e.g., validation, pre-populated data); require constant jumping from system to system to access data and functions needed to execute core transactions; and are difficult to use, all of which contribute to decreased staff productivity and efficiency. Internal staff currently have several tools to assist in grant and member management (e.g. eSPAN and eGrants Classic) however these tools are not optimized to fully support staff activities and business processes. Further, the user experience is not intuitive, often requiring a steep learning curve for new internal and external users.
- 3. Too Many Offline Workarounds / Limited Ability to Adapt New Business Priorities or New Technology:** Many of CNCS core grants/member management applications are built on outdated technology and have an overly complex architecture that has evolved from years and layers of add-on functionality. While the applications meet core business needs, they are not optimized to quickly and cost-effectively respond to changing business priorities. Often, many system changes that appear on the surface to be relatively minor enhancements, require complex and costly changes behind the scene, delaying implementation. This reality has created the need for staff to pursue alternative solutions/workarounds outside of the system to address business needs often resulting in data quality, accessibility, staff productivity, and in some cases information security issues. For example, there are number of external calculations or record-keeping functions such as scenario planning and financial management being executed outside the system. In such instances program staff must download data, enter it into a spreadsheet and perform calculations, then re-enter the same data back into the system of record, significantly increasing the likelihood of data entry errors. In addition to internal users of the Corporation's system, state commissions and grantee organizations are key partners in the grant-making process and face several challenges in the current environment. These organizations' systems and processes must align to the Corporations system and procedures, however the technologies used to exchange data between these systems has not been optimized resulting in additional manual processing by grantees and state organizations that leads to increased processing time and reporting errors.

- Limited Ability to Engage the Public** - There are few online channels and mobile mechanisms for engaging the general public, presenting programs with significant challenges in an era of outreach, and online collaboration and communication. The recent expansion of grant programs and initiatives is driving demand for new methods of public engagement at the Corporation designed to increase recruitment and volunteer participation. As citizens become more connected through mobile devices, tablets (e.g. iPads) and other emerging technologies, the ability for the Corporation to engage individuals and quickly ramp up recruitment and volunteer efforts is significantly constrained in the current IT environment. Social media and online collaboration technologies also present the Corporation with an opportunity to connect with citizens and partners. The current systems environment however lacks the scalability and technical capability to fully realize the value of these tools and technologies.

If left unaddressed, these challenges will limit the Corporation's ability to achieve its priorities by constraining the use of technology to grow volunteerism, demonstrate impact, and communicate value to citizens. A future IT environment that addresses the above challenges can improve the operational agility of the Corporation while optimizing existing resources – which in turn can help the Corporation meet its mission more effectively.

IT Modernization Overview

Vision

The future state IT environment for the Corporation is agile and user-focused, giving stakeholders powerful new tools and capabilities to meet the mission of the Corporation. Systems are integrated around a standard data model, enabling faster, more self-service reports and analytics while also streamlining the user experience. The wealth of data and information residing in the current state environment is easily accessible, using the latest communication tools and channels, to demonstrate impact and inform evidence-based decisions. Grantees and sponsors can easily exchange information and collaborate with their grant managers at the Corporation, who – thanks to increased automation and mobility – can dedicate their time and expertise to value-added activities supporting stakeholders and not fixing system issues and erroneous reports.

IT Modernization Objectives and Themes

The Corporation's desired future state cannot be achieved by maintaining status quo and making minor targeted enhancements. The current system and tools are limited in their ability to address challenges and achieve the broader IT modernization objectives to facilitate public engagement, increase agency transparency, increase staff productivity, decrease the burden on grantees, increase grant program effectiveness. In order to achieve the desired future state, a set of desired capability has been identified and grouped into four overarching themes that collectively represent CNCS target IT state. The following IT modernization themes— groupings of common capabilities—describe a modern CNCS IT environment:

- ❖ **Modernized Grants Management Systems:** The tools and technologies supporting grants and member management will be consolidated and optimized to be more responsive to changing business processes; streamline the user experience; improve data quality; and increase staff productivity.

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Screen navigation and the user interface will be updated to better align with business processes. Systems will be migrated to a common web-based platform which will prevent users from having to log in and out of multiple systems to accomplish core functions and ultimately, result in a more agile system architecture that is cost effective to maintain and adaptable to changing business needs. New data validation, error checks, and auto-population functions will be added, to improve data quality and reduce the need for redundant data entry. Current manual workarounds and offline tools will be replaced by new automated capabilities in the systems to enhance productivity and to take full advantage of paperless processing. Examples of these workarounds are forecasting/scenario planning tools and real-time financial management which are critical to the effective management of the Corporation's wide range of programs. Automating offline workarounds in the system will also reduce staff time spent on external data gathering, verifications and calculations.

Key Benefits: Faster response to changing business processes and reduced maintenance costs; improved data accuracy and reporting; and improved staff productivity.

Key Challenges Addressed: Inadequate system usability; too many offline workarounds; data quality and transparency, limited ability to adapt to new business priorities or new technology.

- ❖ **Improve Analytical Support:** The Corporation will increase data accessibility and utility for staff, grantees, volunteers, public officials and the general public through the use of enhanced analytical capability (historic, trend, and performance analysis) and self-service reporting. Expanded data sets demonstrating impact and return on investment will be consistently presented across programs, improving the ability to compare investments and explain why service matters. Reporting capabilities will be enhanced to ensure performance measures better support decisions and sufficiently demonstrate impact and value of national service and volunteerism. Staff and management will also gain broader access to information to aid internal decision-making for grant and member management activities. For example, staff will have self-service access to grantee performance data and tools to support analysis, and ultimately grantee/program portfolio management. Staff access to information will also expand to include integration of external data from agency partners (e.g. FEMA, Department of Commerce) for more comprehensive analytics.

Key Benefits: More evidence-based decision making; enhanced capability to explain why service matters; better stakeholder communication through faster response to external inquiries; improved grants portfolio management through new analytics; and increased staff productivity through self-service reports.

Key Challenges Addressed: Data Quality and transparency

- ❖ **Enhanced Mobile Web and Information Sharing:** The Corporation is also aware of the growing use of smartphones and tablet computers, and will ensure that public access to agency information is accessible by these devices. A mobile-friendly web platform will ensure a common user experience by external stakeholders across all their devices from PCs to smartphones. This platform, leveraging the Office of External Affairs (OEA) design and content management framework, will allow public users to easily access key information across programs and increase awareness of changing program initiatives and priorities. Agency partners, including grantee organizations, will be able to electronically send data to the Corporation, reducing the reliance on manual, labor intensive efforts

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for compliance reporting. These automated exchanges will increase data quality, improve reporting capabilities, and significantly shorten the timeframe for information collection.

Key Benefits: Increased citizen engagement and awareness through mobile devices; increased grantee and staff productivity through electronic data exchanges.

Key Challenges Addressed: Limited ability to engage the public, data quality and transparency, limited ability to adapt to new business priorities or new technology.

- ❖ **Mobile Applications:** Mobile applications will become a key tool for public engagement and staff productivity. This will be especially relevant for AmeriCorps and NCCC members in the age 18-24 range. Prospective volunteers will stay connected to the agency through improved self-service functions on their mobile device (e.g. searching for volunteer opportunities). These mobile applications will also expand engagement to more volunteers earlier in the process and ultimately increase the probability of volunteer participation by having broader outreach to target demographics. The Corporation will also explore mobility solutions – such as mobile, field based reporting which will allow grantee organizations to send progress or results to the agency in a more accurate timely fashion to support agency oversight and program management responsibilities.

Key Benefits: More volunteers that are directly accessible through modern IT tools and channels; increased citizen satisfaction and awareness through mobile tools and apps.

Key Challenges Addressed: Limited ability to engage the public, inadequate system usability, too many offline workarounds.

The above IT modernization themes establish the foundational IT capabilities needed to address business needs and achieve CNCS' IT modernization objectives.

IT Modernization Plan

This section of the plan, describes the discrete set of IT projects that will be executed across a three year period (i.e., funding years 2013-2015) to deliver the target end state. This section is broken into four sub-sections: project constraints and assumptions, project overview, implementation scenarios, implementation roadmap, and rough order of magnitude funding estimate.

Recognizing the current budget constrained environment, the plan groups IT projects under each modernization theme and presents three different three-year modernization program implementation scenarios (e.g. Scenario 1: \$6M total three year cost, Scenario 2: \$9M, Scenario 3: \$15M). Each scenario addresses key modernization objectives, address current challenges, and deliver benefits at varying levels. The project's and implementation schedules presented under each implementation scenario were informed by the priorities of CNCS Programs and Offices (Table 3).

Constraints and Assumptions

This section presents the constraints and assumptions that were applied when developing the IT modernization plan.

Constraints

- Focus should be on IT projects and strategic initiatives that tend to be deferred in annual planning due to cost and time constraints
- Each project must be discrete, phased and less than 180-days in duration
- Benefits must be realized at the completion of each project, not at the end of modernization

Assumptions

- The plan should be based on a three-year funding cycle (funding year 2013 – 2015) with three different funding scenarios; (S1) Scenario 1- \$6M total three year costs, (S2) Scenario 2- \$9M, and (S3) Scenario 3- \$15M
- IT Modernization will reduce the amount of system maintenance required in future years as a result of system and data enhancements
- Agency-wide participation and commitment will be provided to support project-level planning and testing

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Table 3 – CNCS Program/Office Prioritization of IT Modernization Themes and Subthemes

Modernization Theme	Program Office										Total	
	CEO	S/N	OEA	ITA	OGPO	NCCC	COO	VISTA	SC	OHC		OFL
Modernize Grants Management System												42
Intuitive Workflow (Internally Focused)												27
<i>Complete migration of eSPAN to the Portal</i>							3					3
<i>Re-architect systems and infrastructure for greater agility</i>	2			2	3	2	3	3	3	3		21
<i>Create effective system-to-system interfaces for grantees</i>			1									1
<i>Standardize databases</i>		1						1				2
Better User Experience (Internally Focused)												15
<i>Update look-and-feel</i>												0
<i>Improve data input edit/validation</i>	3				2				2	2		9
<i>Leverage available technology</i>												0
<i>Automate off-line workarounds</i>							1					1
<i>Enhance support to GARP</i>				3				2				5
Improve Analytical Support (Externally Focused)												16
<i>More effective and nimble support for telling the CNCS story</i>		3										3
<i>Expand State Profiles concept</i>			3									3
<i>Faster, more accurate, self-service agency reports</i>	1	2		1	1	1	2		1	1		10
<i>Better support for performance management decisions</i>												0
Enhanced Mobile Web and Information Sharing (Externally Focused)												5
<i>Mobile-friendly web formats</i>			2	3								5
<i>Greater self-service public access to CNCS information</i>												0
Mobile Applications (Externally Focused)												3
<i>Develop mobile formats for public-facing information products</i>				2								2
<i>Develop mobile apps to support public engagement and staff productivity</i>			1									1

*** Top Priority = 3; Second Priority = 2; Third Priority = 1

Table 3 presents the results of an IT Modernization planning workshop held in September 2012 in which CNCS Program/Offices were asked to identify their top three IT Modernization theme and sub theme priorities to inform implementation planning. The results of this exercise informed the sequencing of modernization projects across themes (highest priorities addressed first) and the distribution of IT modernization resources (more resources are committed to addressing highest priorities).

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IT Modernization Themes and Projects

Table 4 provides an overview of IT Modernization project(s) categorized by their associated modernization theme. Included in the project table is a brief description of the groups of projects and the number of projects implemented under scenario 1, 2, and 3. [Note: Specific projects, descriptions, and costs are provided in Appendix B].

Table 4 – CNCS Program/Office Prioritization of IT Modernization Themes and Subthemes

	Scenario		
	S1 \$6M	S2 \$9M	S3 \$15M
Theme 1: Modernized Grant and Member Management Solution			
❖ eSPAN Modernization and Transition Projects – Transition from paper-form based solution to a single, web-based (i.e., Staff Portal) member management solution with improved data quality, streamlined user screen navigation, and improved support for member management business processes.	4 (\$2.46M)	4 (2.46M)	4 (2.46M)
❖ eGrants Classic Modernization and Enhancement Projects – Transition from paper-forms based to a single web-based solution (e.g., Staff Portal) including improved data quality, streamlined navigation, and better alignment with grant management business processes including new GARP processes and enhanced compliance and monitoring capabilities. [Note: Under Scenario 1, Scenario 2, GARP and Compliance and Monitoring functionality are enhanced within eGrants Classic. Under S3, all eGrants Classic functions are enhanced and migrated to Staff Portal.]	4 (\$1.59M)	4 (\$1.59M)	9 (\$4.37M)
❖ Incorporate Offline Workarounds – Automate and integrates grant program calculations and commitment processes (e.g., funds certification) currently handled manually outside of the systems to improve productivity and reduce error rates.	0 (\$0.00M)	2 (\$1.13M)	4 (\$2.26M)
❖ Data Taxonomy Project – Establish data standardization for Grants, Member and Financial Management to improve system agility and expanded reporting.	1 (\$0.30M)	1 (\$0.30M)	1 (\$0.30M)
Theme 2: Analytical Support	S1	S2	S3
❖ Analytics Projects – Develop self-service reporting modules that provide information in formats that inform agency decisions, increase the range and display of agency data for both standard and ad hoc reports, and provide structured agency information to the public rather than “data dumps.”	2 (\$1.15M)	4 (\$2.30M)	6 (\$3.44M)
Theme 3: Enhanced Mobile Web and Information Sharing	S1	S2	S3
❖ Mobile Web Enhancement Projects – Optimize key CNCS information products for mobile viewing.	1 (\$0.15M)	1 (\$0.15M)	1 (\$0.15M)
❖ Member Management API Projects – Implement an electronic data exchange (e.g. Application Programming Interface (API)) capability so that grantees and partner organizations can provide member information to the Corporation through a standard interface.	1 (\$0.13M)	1 (\$0.13M)	1 (\$0.13M)
Theme 4: Mobile Applications	S1	S2	S3
❖ Mobile Reports Projects – Make key reports available in mobile-friendly formats; aligns with Theme 2.	2 (\$0.06M)	4 (\$0.12M)	6 (\$0.18M)
❖ Mobile App Projects – Provide mobile apps to increase public engagement communication channels and increase staff productivity.	1 (\$0.36M)	3 (\$1.08M)	4 (\$1.44M)

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Implementation Scenarios

Three different implementation scenarios (i.e. Scenario 1: \$6M total three year cost, Scenario 2: \$9M, Scenario 3: \$15M) were developed based on a three-year funding strategy. Each of the implementation scenarios addresses the key modernization objectives and current challenges, and delivers benefits at varying levels and timelines. Table 5 provides an overview of what projects are delivered under each scenario and their accompanying benefit.

Table 5 – Overview of IT Modernization Implementation Scenarios

Scenario	IT Projects Implemented	Benefit
S1	Scenario 1 implements: <ul style="list-style-type: none"> ✓ Data standardization project ✓ Modernized eSPAN; single member mgt. web platform (i.e. Staff Portal) with improved data quality ✓ Enhanced eGrants Classic GARP and Monitoring modules within current platform ✓ 2 new self-service reports and analytical functionality including mobile viewing ✓ Key information products optimized for mobile viewing and basic data exchange tool ✓ 1 mobile app 	<ul style="list-style-type: none"> • Faster response to changing business process and reduced maintenance costs • Greater staff productivity • Better alignment to GARP and Compliance and Monitoring business processes • Higher quality data with expanded reporting and analytics; faster response time to external inquiries and requests • Improved self-service reporting and decision analytics • Expanded mobile access to Agency information and services • Increased grantee and staff productivity through electronic data exchanges
S2	Builds upon scenario 1 by implementing: <ul style="list-style-type: none"> ✓ 1 offline workaround (e.g., Calculator) within the existing eGrants Classic platform ✓ 2 additional analytical reports with mobile viewing ✓ 2 additional mobile apps 	<ul style="list-style-type: none"> • Fewer errors, improved data quality • Expanded access to Agency data through additional self-service reports and analytics • More evidence based decision making • Increased citizen and grantee interaction, and awareness through mobile apps
S3	Builds upon scenario 2 by implementing: <ul style="list-style-type: none"> ✓ Modernized eGrants Classic web platform (e.g., consolidated with Staff Portal) ✓ 1 additional offline workaround (e.g., Funds Verification) ✓ 2 additional analytical reports with mobile viewing ✓ 1 additional mobile app 	<ul style="list-style-type: none"> • More staff productivity – less need to switch from Portal to eGrants Classic and back to do work • Fewer errors and improved data quality • Maintenance of a single technology platform; higher cost savings and avoidance • Improved grants portfolio management through new analytics • Greater engagement with key demographic groups

IT Modernization Roadmap

The IT modernization projects and scenarios listed above are visually represented in the three-year (i.e. Funding year FY13 – FY15 or fiscal year FY13 Q3 – FY16 Q3) implementation plan below. Proper sequencing of projects is essential to the short- and long-term success of this strategic endeavor.

The following diagram provides a detail three-year project implementation plan for each scenario based on the projects listed above. Each project contains a unique identifier, total project cost, total project duration, and project name. The IT modernization projects and scenarios are visually represented across three years (i.e. Funding year FY13 – FY15 or fiscal year FY13 Q3 – FY16 Q2).

IT MODERNIZATION OVERVIEW AND STRATEGIC ROADMAP

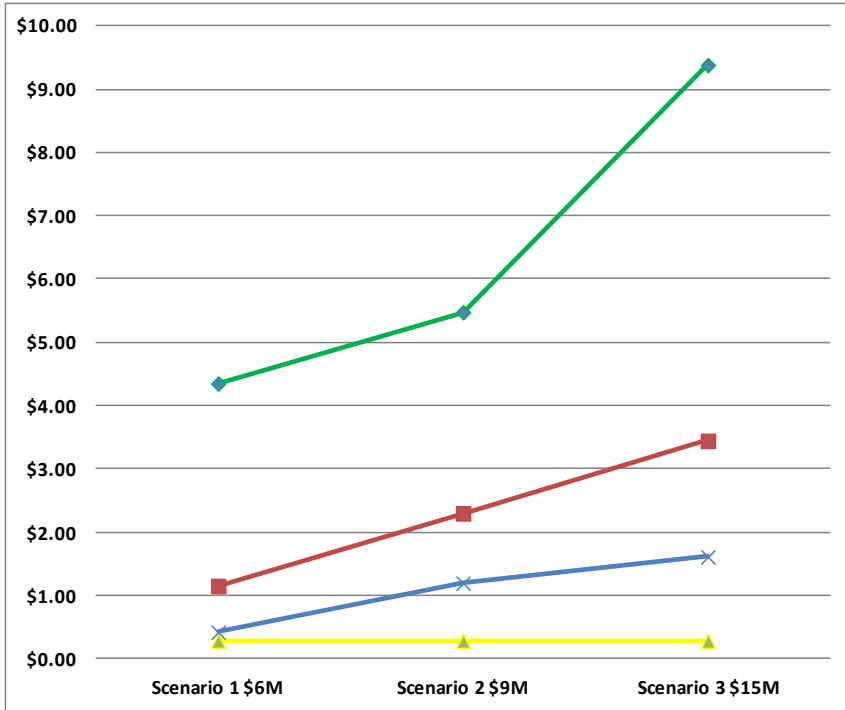
Fiscal Year	2013	2014		2015		2016	
Funding Year	FY13	FY13	FY14	FY14	FY15	FY15	
Modernize Grants and Member Mgmt. Systems	<p>1 \$656 K (6 months) eSPAN Migration (Enroll and Correct Member Info)</p> <p>2 \$656 K (6 months) eSPAN Migration (Payroll / Treasury Info & Momentum Interface)</p> <p>22 \$304 K (6 months) Grants and Member Mgmt Data Taxonomy</p>	<p>1 \$656 K (6 months) eSPAN Migration (Enroll and Correct Member Info)</p> <p>3 \$572 K (6 months) eSPAN Migration (Correct Program Info and Ref.tables)</p> <p>4 \$572 K (6 months) eSPAN Migration (Reporting)</p> <p>22 \$304 K (6 months) Grants and Member Mgmt Data Taxonomy</p>	<p>3 \$572 K (6 months) eSPAN Migration (Correct Program Info and Ref.tables)</p> <p>2 \$656 K (6 months) eSPAN Migration (Payroll / Treasury Info & Momentum Interface)</p> <p>4 \$572 K (6 months) eSPAN Migration (Reporting)</p> <p>2 \$656 K (6 months) eSPAN Migration (Payroll / Treasury Info & Momentum Interface)</p>	<p>10 \$397 K (4.5 months) eGrants Classic Migration; Application Phase 2 - Verification</p> <p>15 \$397 K (4.5 months) eGrants Classic Migration: Award Phase 1 - Establish Award</p> <p>16 \$397 K (4.5 months) eGrants Classic Migration: Award Phase 2 - Funds Control</p> <p>9 \$524 K (4.5 months) eGrants Migration; Application Phase 1 - Submission</p> <p>17 \$397 K (4.5 months) eGrants Classic Migration: Closeout</p>	<p>5 \$524 K (6 months) eGrants Classic Enhancement: Application Review Phase 1 - Review</p> <p>6 \$397 K (4.5 months) eGrants Classic Enhancement: Application Review (GARP) Phase 2 - Scoring</p> <p>8 \$564 K (4.5 months) eGrants Classic Enhancement and Migration: Application Review (GARP) Phase 2 - Scoring</p> <p>17 \$397 K (4.5 months) eGrants Classic Migration: Closeout</p>	<p>6 \$524 K (6 months) eGrants Classic Enhancement: Application Review Phase 1 - Review</p> <p>7 \$564 K (4.5 months) eGrants Classic Enhancement and Migration: Application Review (GARP) Phase 1 - Review</p> <p>14 \$564 K (4.5 months) eGrants Classic Enhancement and Migration: Compliance and Monitoring Phase 2 - Report</p> <p>26 \$536 K (6 months) Analytics 4 - Expand State Profiles</p>	<p>18 \$564 K (6 months) Offline Workaround Phase 1: Calculator</p> <p>19 \$564 K (6 months) Offline Workaround Phase 2: Calculator</p> <p>12 \$397 K (4.5 months) eGrants Classic Enhancement: Compliance and Monitoring Phase 2 - Report</p> <p>11 \$397 K (4.5 months) eGrants Classic Enhancement: Compliance and Monitoring Phase 1 - Monitor</p> <p>19 \$564 K (6 months) Offline Workaround Phase 2: Calculator</p> <p>27 \$524 K (6 months) Analytics 5 - Expanded Transparency/ Impact Results</p>
	Improved Analytical Support	<p>24 \$536 K (6 months) Analytics 2 - Decisional Info & Impact Results</p>	<p>24 \$574 K (6 months) Analytics 2 - Decisional Info & Impact Results</p> <p>23 \$574 K (6 months) Analytics 1 - Transparency & Decisional Info</p>	<p>26 \$574 K (6 months) Analytics 4 - Expand State Profiles</p> <p>24 \$574 K (6 months) Analytics 2 - Decisional Info & Impact Results</p> <p>25 \$536 K (6 months) Analytics 3 - Impact Results & Expand State Profiles</p>	<p>25 \$574 K (6 months) Analytics 3 - Impact Results & Expand State Profiles</p> <p>23 \$574 K (6 months) Analytics 1 - Transparency & Decisional Info</p>	<p>25 \$574 K (6 months) Analytics 3 - Impact Results & Expand State Profiles</p> <p>25 \$536 K (6 months) Analytics 3 - Impact Results & Expand State Profiles</p>	<p>29 \$150 K (6 months) Mobile Viewing</p> <p>30 \$130 K (6 months) External API</p> <p>28 \$536 K (6 months) Analytics 6 - Expanded Transparency/ Impact Results</p>
	Enhanced Mobile Web and Information						<p>29 \$150 K (6 months) Mobile Viewing</p> <p>30 \$130 K (3 months) External API</p>
	Mobile Applications		<p>32 \$28 K (1.5 months) Mobile Reports - Analytics 2</p> <p>31 \$28 K (1.5 months) Mobile Reports - Analytics 1</p>	<p>32 \$28 K (1.5 months) Mobile Reports - Analytics 2</p> <p>33 \$28 K (1.5 months) Mobile Reports - Analytics 3</p> <p>34 \$360 K (6 months) Mobile App 1</p> <p>34 \$360 K (6 months) Mobile App 1</p>	<p>33 \$28 K (1.5 months) Mobile Reports - Analytics 4</p> <p>34 \$360 K (6 months) Mobile App 1</p> <p>34 \$360 K (6 months) Mobile App 1</p>	<p>33 \$28 K (1.5 months) Mobile Reports - Analytics 3</p> <p>31 \$28 K (1.5 months) Mobile Reports - Analytics 1</p> <p>36 \$360 K (6 months) Mobile App 2</p> <p>35 \$28 K (1.5 months) Mobile Reports - Analytics 4</p> <p>37 \$360 K (6 months) Mobile App 3</p> <p>36 \$360 K (6 months) Mobile App 2</p>	<p>29 \$150 K (6 months) Mobile Viewing</p> <p>30 \$130 K (6 months) External API</p> <p>39 \$28 K (1.5 months) Mobile Reports - Analytics 6</p> <p>37 \$360 K (6 months) Mobile App 3</p> <p>40 \$360 K (6 months) Mobile App 4</p> <p>38 \$28 K (1.5 months) Mobile Reports - Analytics 5</p>
<p>Scenario 1 \$6M Scenario 2- \$9M Scenario 3- \$15M</p>							

Rough Order of Magnitude Funding Estimate

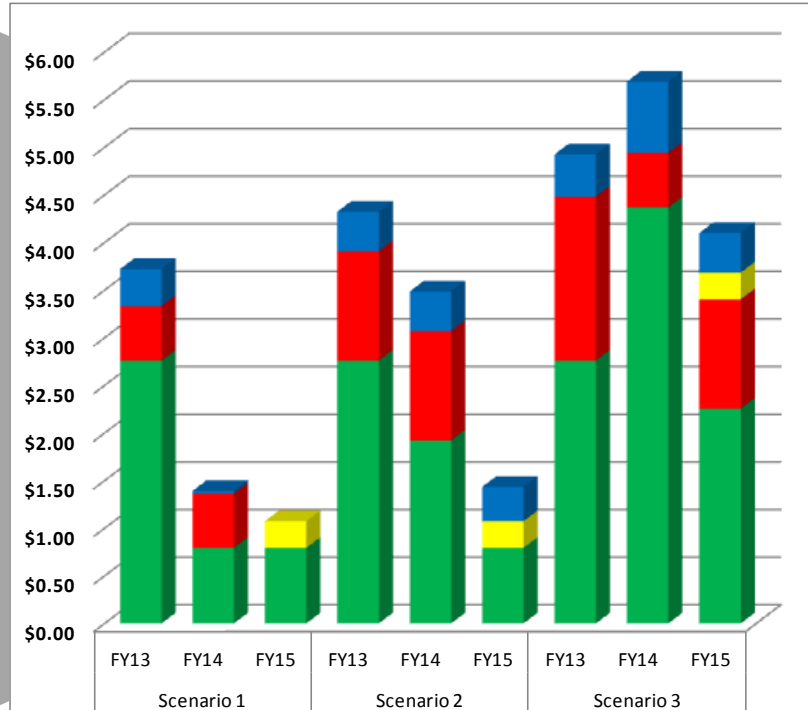
The following diagram provides three-year funding estimates for each scenario based on the four modernization themes. Highlights include: 1) All modernization themes are addressed at some level under each funding scenario; 2) Proposed funding levels and timing in which funds are obligated directly align with Agency Program/Office priorities (see table 3); 3) Grants system modernization drives the cost of IT Modernization; and 4) Increased funding accelerates IT Modernization project execution and enables more extensive grant system improvements.

IT MODERNIZATION OVERVIEW AND STRATEGIC ROADMAP

Total Scenario Funding By Theme



FY Scenario Funding By Theme



\$ in millions

Modernization Themes

- Modernize Grants Management Systems
- Enhanced Mobile Web and Info Sharing
- Improved Analytical Support
- Mobile Apps

Appendix A: FY13 Strategic Work Plan

The Corporation has also developed a strategic work plan that starts in FY 2013 with business and IT working together to refine plans, define requirements for near-term priority Modernization projects, and execute the first round of strategic modernization activities. Delaying these strategic activities will result in the Corporation not being able to effectively execute the implementation of its IT modernization plan, and introduces risks such as limited ability to support changing priorities, inability to achieve cost efficiency gains, reduced staff productivity, and inability to effectively engage the volunteer community.

In Q2 of FY 2013, OIT will engage key stakeholder to further define the scope and requirements for priority IT Modernization projects. In Q3, OIT will work with the CNCS IT Executive Review Board to identify funding strategies, and select specific projects for execution as funding becomes available.

Appendix B: Project Details

Project Definitions

Project Category	Project Name	Project Description
<i>Modernize Grants and Member Management Systems</i>		
eSPAN Modernization Projects	Enroll and Correct Member Info (ID 1) - \$0.656M	<p>Transition the remaining member management functionality present in eSPAN into the web-based Staff Portal. The remaining eSPAN functionality is as follows:</p> <ul style="list-style-type: none"> • Enroll and Correct Members (Function 1) • Interest in education award and Payroll/Treasury and Momentum interfaces (Function 2) • Correct Program Information and Update Reference Tables (Function 3) • Reporting (Function 4) <p>Each of these four functional areas will involve a detailed planning effort followed by the design and develop of the targeted eSPAN functionality into the Portal. Planning includes requirements, establishing functional dependencies (e.g., what users/programs correct member information), and targeted database optimization. This development effectively consolidates the member management functionality into a single web platform.</p>
	Interest in Education Award and Payroll/Treasury and Momentum Interfaces (ID 2) - \$0.656M	
	Correct Program Information and Update Reference Tables (ID 3) - \$0.572M	
	Reporting (ID 4) - \$0.572M	
eGrants Classic Modernization Projects	*eGrants Classic Enhancement: Application Review (GARP) - Review (ID 5) \$0.397 M	<p>Transition the eGrants Classic functionality to web based Staff Portal. The eGrants functionality is divided into five functional grants modules:</p> <ul style="list-style-type: none"> • Compliance and Monitoring* • Application • Application Review* • Award • Closeout <p>Each module can take place independently and involves requirements gathering, design, development, and testing. The development of these functions focuses on transitioning the existing grants processes from Oracle Forms to a web platform with targeted database optimization based on the grants management data taxonomy. Whenever possible, system improvements will be developed to a more configurable, intelligent workflow based on previous and existing BPRs. For example, streamlining the Prime and Sub-Grantee functionality will make the process less cumbersome and increase participation for these stakeholders.</p>
	*eGrants Classic Enhancement: Application Review (GARP) - Scoring (ID 6) \$0.397 M	
	Enhancement and Migration: Application Review (GARP) - Review (ID 7) \$0.564 M	
	Enhancement and Migration: Application Review (GARP) - Scoring (ID 8) \$0.564 M	
	Application: Submission (ID 9) - \$0.524M	

IT MODERNIZATION OVERVIEW AND STRATEGIC ROADMAP

Project Category	Project Name	Project Description
	Application: App. Verification (ID 10) - \$0.397M	<p>* Under the \$6M-\$9M scenarios, these functions will be enhanced within the eGrants Classic Application rather than migrating them to the Staff Portal. Application review will automate the review and scoring process associated with the GARP process. Compliance and Monitoring will expand the current functionality set to include remote monitoring.</p>
	*eGrants Classic Enhancement -Compliance and Monitoring Phase 1: Monitoring (ID 11) - \$0.397M	
	*eGrants Classic Enhancement - Compliance and Monitoring Phase 2: Reporting (ID 12) - \$0.397M	
	Migration and Enhancement - Compliance and Monitoring Phase 1: Monitoring (ID 13) - \$0.564M	
	Migration and Enhancement Compliance and Monitoring Phase 2: Reporting (ID 14) - \$0.564M	
	Award: Establish Award (ID 15) - \$0.397M	
	Award: Funds Control (ID 16) - \$0.397M	
	Closeout (ID 17) - \$0.397M	
Offline Workaround Projects	Calculator Phase 1 (ID 18) - \$0.564M	<p>To support end-to-end Grants and Member management business processing, the program staff employs numerous offline activities in addition to the capabilities provided in the current system. These workarounds include calculation tools, manual review spreadsheets and compiling reports for data requests. The manual nature of these activities decreases staff productivity and also leads to an element of risk due to data errors. For example, the program staff enters data from the system into a spreadsheet, performs calculations and then re-enters this data back into the system, producing two chances for data entry errors. The following identifies a list of known offline workarounds:</p>
	Calculator Phase 2 (ID 19) - \$0.564M	
	Funds Verification Phase 1 (ID 20) - \$0.564M	

IT MODERNIZATION OVERVIEW AND STRATEGIC ROADMAP

Project Category	Project Name	Project Description
	Funds Verification Phase 2 (ID 21) - \$0.564M	<ul style="list-style-type: none"> • Calculator: The Corporation uses the calculator as a tool that provides assistance in funding stream planning and portfolio balancing. The current calculator functionality does not effectively support these planning activities. As an example, the calculator lacks forecasting capabilities and data integration with the budget office for allocations. This tool also raises potential data entry issues, requiring staff to manually re-enter data for calculations that is readily available in the system and to enter financial amounts calculated in the spreadsheet back into the system. • Funds Verification: The Corporation currently uses the funds verification process to determine the allotment of funds for a given project. The manual nature of the process and the lack of integration between the financial system and the grants system has resulted in funds verification inaccuracies. The pre-commitment verification functionality present in the financial system is not available during the certification process via the grants system and consequently, certification packages can be approved before the actual funds availability is confirmed. Staff productivity is also affected due to the fact that the funding package also requires manual signatures, increasing the time to capture this confirmation outside the system.
Data Taxonomy Project	Grants and Member Management Data Taxonomy (ID 22) - \$0.304M	<p>Standardize data and establish data taxonomy for the functional areas of Member Management, Grants Management, and Financial Management. For each functional area, the following activities will take place:</p> <ul style="list-style-type: none"> • Common data dictionary—Establish a standard set of terminology and data definitions (e.g., ensuring that program ID is clearly defined and duplicate identifiers are eliminated) • Common data model—Provide a logical data model that is defined consistently across the agency. For example, there would be a common set of grant tables and the adherence to this model maintains the data standards, improves data integrity, and increases the ease of reporting. <p>Data Analysis—Assess the existing data to determine inconsistencies and opportunities for optimization. Also, define data dependencies and create standard data mappings for the common data model (e.g., establish a roadmap of the current data that represents program ID).</p>
Improved Analytical Support		
Analytics Projects	Analytics 1 (ID 23) - \$0.574M	For each Analytics project is broken into a requirements, design, and development phase. This complete lifecycle ensures that the Analytical data required is readily available and accessible. Activities include creating datasets, manipulating data, and establishing database views and report standards. For example, a database view is established to support summary reports consolidating
	Analytics 2 (ID 24) - \$0.574M	

IT MODERNIZATION OVERVIEW AND STRATEGIC ROADMAP

Project Category	Project Name	Project Description
	Analytics 3 (ID 25) - \$0.574M	<p>data across multiple tables. The development of each Analytics phase will leverage the Analytics requirements and develop the defined reports and data access.</p> <p>Analytics reports focuses on the following:</p> <ul style="list-style-type: none"> • Data Transparency—Make high-value data and reports more available to the public. • Internal Decisional Information—Providing information that assists management in decision making and supports grant and CNCS Program portfolio management. Capability will take advantage of existing and new data sets (e.g., performance measures) and make the data available via self-service reports with new analytical features. Examples of target capability include: <ul style="list-style-type: none"> • Ability to run time-series reports and present information on bar, line, bubble charts and heat-maps • View data on vital statistics such as economic levels, income levels, and the identification of economic redevelopment areas. Provide the ability to overlay this data to make informed decisions for grant applications • Automate the update of Beale codes (geographic classifications) • Expand the ability to compare information by integrating data from disparate data sources (e.g., Department of Commerce, Department of Education, Veteran Affairs). Support data mashups overlaying external data with agency data for more comprehensive analytics. • Impact Results Reporting—Providing public users (Congress, external agencies) and internal access to view results based on existing and newly defined measures such as national performance measures. These reports will demonstrate impact for program-level and agency-wide initiatives. For example, these reports can track ROI for grant funding to assess whether value is received and to identify better grantee candidates. • Expand State Profiles (Phase III)—Extend State Profiles reporting with localized performance measures (non-national) and make data meaningful to show potential and actual project impact. For example, align the state profile results to community initiatives to provide more tailored results such as the growth of local community priorities
	Analytics 4 (ID 26) - \$0.574M	
	Analytics 5 (ID 27) - \$0.574M	
	Analytics 6 (ID 28) - \$0.574M	
<i>Enhanced Mobile Web and Information Sharing</i>		
Mobile Access to Information	Identify and optimize key information products for mobile viewing (ID 29) - \$0.150M	Identify and transform key information products (e.g., staff handbooks, guidance/technical assistance) for viewing on smartphones and tablet computers.

IT MODERNIZATION OVERVIEW AND STRATEGIC ROADMAP

Project Category	Project Name	Project Description
External Member Management API	Standard Member Management API (ID 30) - \$0.130M	Establishes a standard interface for external stakeholders (e.g., grantees, sponsors) to member management data. This member management API assists in improving data exchange (batch), especially for grantees with in-house systems who were required to enter the same data into two systems. Specifically, larger national grantees (e.g., Teach America) could send enrollment and verification data to the agency quickly rather than entering each member's data in another system.
Mobile Applications		
Mobile Reporting Projects	Mobile Reports 1 (ID 31) - \$0.028M	<p>Identify key existing data reports requiring mobile access and develop corresponding mobile reports. Report examples include providing mobile reports for State Profiles such as project and service location reports.</p> <p>For each analytics phase (1-6), identify and create mobile reports based on the analytical reports. These mobile reports shall be presented in a simplified form and tailored to the mobile device (i.e., tablets, smartphones) user experience.</p>
	Mobile Reports 2 (ID 32) - \$0.028M	
	Mobile Reports 3 (ID 33) - \$0.028M	
	Mobile Reports 4 (ID 35) - \$0.028M	
	Mobile Reports 5 (ID 38) - \$0.028M	
	Mobile Reports 6 (ID 39) - \$0.028M	
Mobile App Projects	Mobile Application 1 (ID 34) - \$0.360M	<p>Develop a suite of mobile applications. Example mobile applications include:</p> <ul style="list-style-type: none"> • A mobile application that would allow users to access a map with of all CNCS funded service projects providing key information including project point of contact and even performance information. • A mobile application for serve.gov. This would allow a prospective applicant to submit specific member criteria such as work skills and receive a listing of current volunteer opportunities that provide the best fit. • A mobile application to allow a potential member to submit a defined set of information and receive an preliminary screening of suitability for participation, maintaining program interest with tailored results in a matter of minutes. • A mobile application to demonstrate program impact by capturing human interest stories through video, pictures, and brief web postings. These stories will illustrate the program's objectives and challenges and communicate them in a timely fashion including integration with social media (e.g., Facebook, Twitter).
	Mobile Application 2 (ID 36) - \$0.360M	
	Mobile Application 3 (ID 37) - \$0.360M	
	Mobile Application 4 (ID 40) - \$0.360M	

IT MODERNIZATION OVERVIEW AND STRATEGIC ROADMAP

Appendix C - Rough Order of Magnitude (ROM) Funding Profile

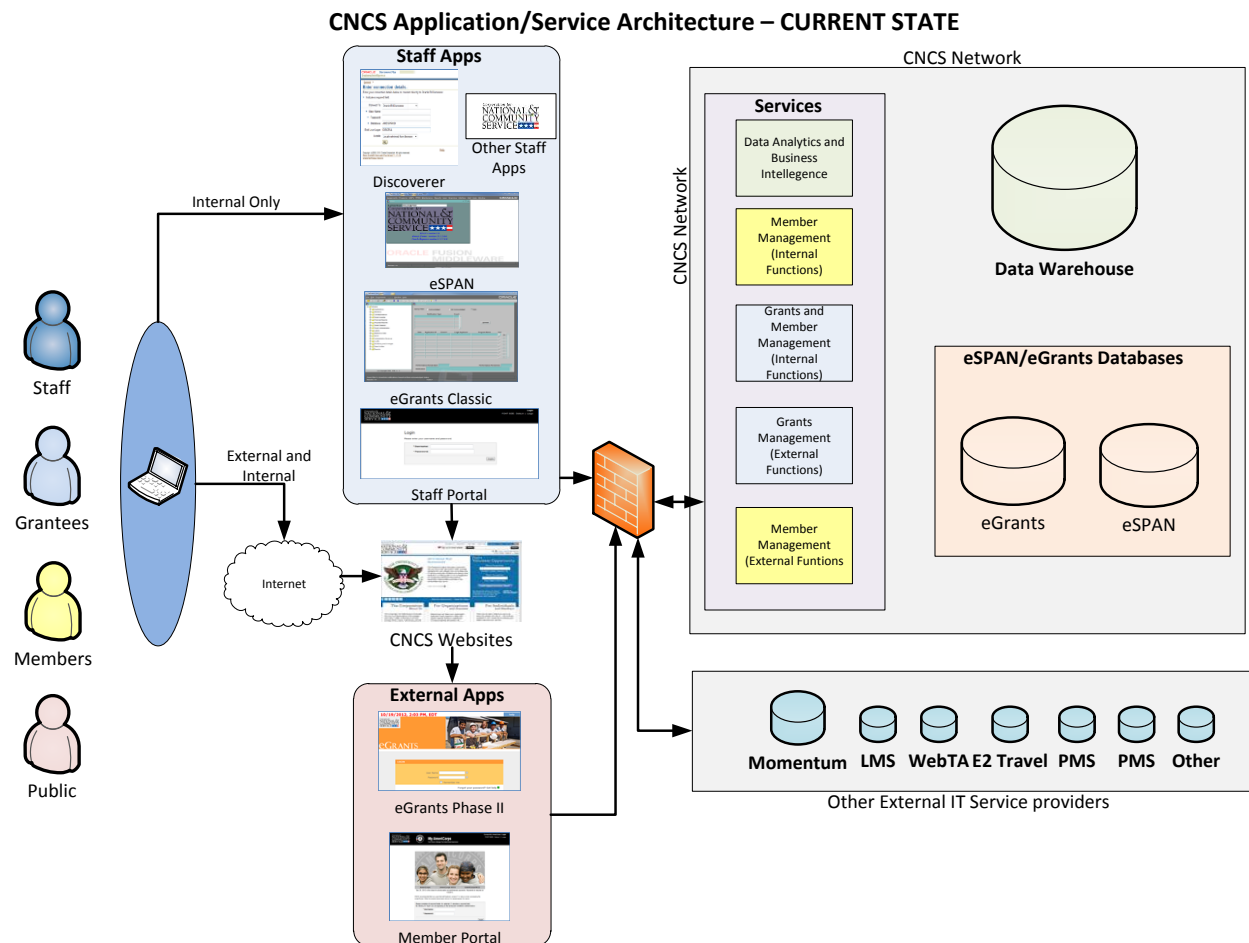
The table below provides a funding breakdown for each scenario across three years. Funding levels are then broken down per modernization theme for comparison purposes. For clarity, the Modernize Grant Management Systems theme is further broken down into sub-themes to help distinguish funding levels. The difference in funding levels demonstrates how many projects are implemented under each modernization theme. For example, eSPAN implements the same four projects across all three scenarios but there is a drastic difference in eGrants Classic implementation.

Fiscal Year:		2013	2014	2015	2016	Total Per Theme
Modernization Theme	Funding Year:	FY13	FY14	FY15		
Scenario 1	Modernize Grant Management Systems	\$2.76	\$1.59	\$0.00		\$4.35
	<i>eSPAN</i>	\$2.46	\$0.00	-		\$2.46
	<i>eGrants</i>	-	\$1.59	\$0.00		\$1.59
	<i>Offline Workarounds</i>	-	-	-		\$0.00
	<i>Data Taxonomy</i>	\$0.30	-	-		\$0.30
	Improved Analytical Support	\$0.57	\$0.57	\$0.00		\$1.15
	Enhanced Mobile Web and Info Sharing	\$0.00	\$0.00	\$0.28		\$0.28
	Mobile Applications	\$0.39	\$0.03	\$0.00		\$0.42
	Total Investment (per Funding Year)	\$3.72	\$2.19	\$0.28		\$6.19
Scenario 2	Modernize Grant Management Systems	\$2.76	\$1.92	\$0.79		\$5.48
	<i>eSPAN</i>	\$2.46				\$2.46
	<i>eGrants</i>		\$0.79	\$0.79		\$1.59
	<i>Offline Workarounds</i>		\$1.13			\$1.13
	<i>Data Taxonomy</i>	\$0.30	-	-		\$0.30
	Improved Analytical Support	\$1.15	\$1.15			\$2.30
	Enhanced Mobile Web and Info Sharing	\$0.00	\$0.00	\$0.28		\$0.28
	Mobile Applications	\$0.42	\$0.42	\$0.36		\$1.19
	Total Investment (per Funding Year)	\$4.32	\$3.49	\$1.43		\$9.24
Scenario 3	Modernize Grant Management Systems	\$2.76	\$4.37	\$2.26		\$9.38
	<i>eSPAN</i>	\$2.46	-	-		\$2.46
	<i>eGrants</i>	\$0.00	\$4.37	\$0.00		\$4.37
	<i>Offline Workarounds</i>	-	\$0.00	\$2.26		\$2.26
	<i>Data Taxonomy</i>	\$0.30	-	-		\$0.30
	Improved Analytical Support	\$1.72	\$0.57	\$1.15		\$3.44
	Enhanced Mobile Web and Info Sharing	\$0.00	\$0.00	\$0.28		\$0.28
	Mobile Applications	\$0.44	\$0.75	\$0.42		\$1.61
	Total Investment (per Funding Year)	\$4.93	\$5.69	\$4.10		\$14.71

\$ in millions

Appendix D: Architecture Views

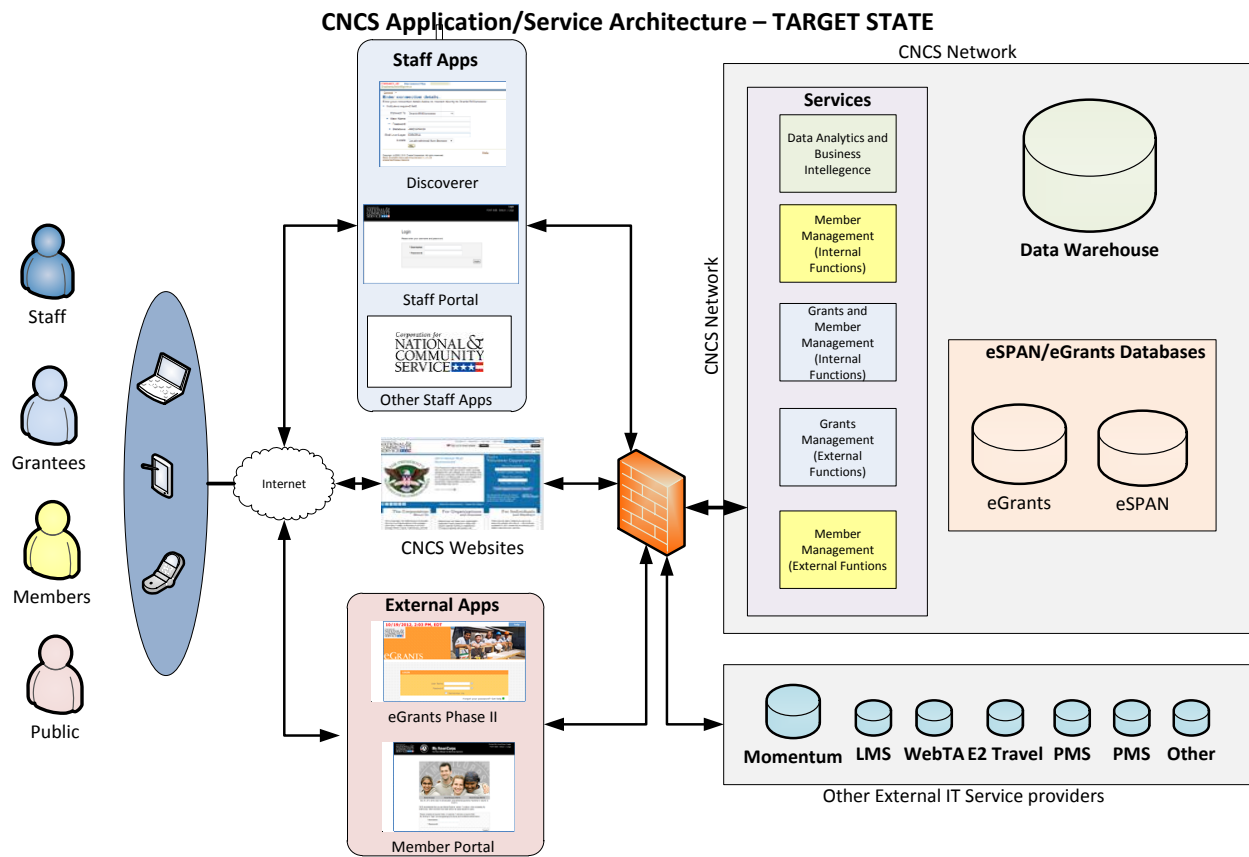
Current State Architecture View



Current State - Architecture Challenges

- Multiple staff applications for managing member and grant information on multiple technology platforms. Staff must constantly switch between applications to execute functions.
- Some applications rely on old “forms” based technology which is has limited functionality and costly to maintain.
- 15 Years of piece meal add-ons have created a complex underlying architecture with limited data standards and quality controls making it difficult to rapidly respond to changing business priorities.
- Websites and systems aren’t oriented for viewing on mobile devices.

Target State Architecture View



Target State - Architecture Highlights

- Simplified set of web-based staff applications operating on a common, integrated platform allowing staff to execute functions in a limited set of applications.
- Data is mapped to a common data model and software is modular allowing systems to more rapidly and cost-effectively respond to changing business priorities.
- Web sites and systems are mobile device friendly and mobile applications are available to support public engagement and field based operations.