CAPITAL PROJECT: Examination and Supervision Solution

Project name: <u>Automated Integrated Regulatory Examination System (AIRES) Redesign</u> is currently referred to as Examination and Supervision Solution (ESS)

Strategic goal and objective link:

1.0 Ensure a Safe and Sound Credit Union System

1.2 Provide high-quality, effective, and efficient supervision that is agile and risk-based.

1.2.1 Implement market leading analytic tools to enable risk analysis, identify key trends and target examinations where most needed.

3.0 Cultivate an Inclusive, Collaborative Workplace at NCUA that Maximizes Productivity and Enhances Impact.

3.2 Deliver secure, reliable, and innovative technology solutions to support NCUA business imperatives.

3.2.2 Implement the Enterprise Business Information Technology Vision & Strategy to ensure technology investments are prioritized and focused on delivering the highest return to the mission of NCUA.

3.2.4 Increase virtual, remote and telework employee efficiency through the use of technology.

Performance metric:

Initiate acquisition and develop an actionable roadmap and plan for modernizing NCUA's examination system (i.e. AIRES).

Project description, scope, and key deliverable: By modernizing the current systems (with AIRES replacement at the center) the ESS effort will put access to the key examination and supervision capabilities into a streamlined toolset allowing Examiners and Supervisors to be more efficient, consistent and effective. Workflow, resource allocation, relationship, case and document management all comprise the examination and supervision support needs of NCUA.

The overarching ESS project scope is to implement a new, flexible, technical foundation to serve as the environment for all current and future NCUA business process modernization initiatives, and replace the NCUA's legacy exam system, AIRES, with a new Commercial-Off-The-Shelf (COTS) solution. This represents the first five iterations of the ESM Program and the focus of the first ESM contract award. The other applications that are part of the overarching examination suite of legacy systems are Time Management System (TMS), Management Automated Resource System (MARS), and National Supervision Policy Manual (NSPM) tools. Replacement of these legacy systems will be included in future procurement efforts under the ESM Program.

Additionally, this project includes the implementation of a Secure File Transfer Portal, which will enable the secure transfer of data between NCUA and third parties.

The **key deliverable** is a replacement examination management, resource management and time management system(s), delivery of a centralized user interface, and establishment of the technical foundation.

Project timeline and schedule*:

The key project milestones are as follows:

- 2017 Release Procurement Package to Industry and Begin Executing against ESS Acquisition Strategy
- 2018 Establish Technical Foundation, Release Central User Interface, and Release first iteration of new Examination Solution

Note: *Project timelines are estimates and subject to change.

Cost Estimates (\$ thousands)*	2017	2018	2019	2020	2021
Acquisition Cost	\$8,000	\$ 5,400			
Future year operations and maintenance			\$3,600	\$3,600	\$3,600

Note:

* This project receives multiyear funding; therefore, prior year funding is available to support the contract to be awarded in 2018.

Business value and risk management:

With this investment, NCUA will be able to increase the productivity and quality of its credit union examination and supervision process, key mission activities. After careful review by NCUA management, in consultation with independent contractors and vested stakeholders of the organizational and enterprise level needs of the agency, the project is well aligned with the agency's strategic plan. The focus is on upgrading technology, systems and processes to improve the quality of examinations, while reducing the onsite burden on credit unions and improving the efficiency of the examination process.

The key business value drivers are:

- Process Efficiency and Scalability To enable NCUA staff to effectively oversee all credit unions, from the smallest to the largest, with various types of examinations from a single platform;
- Process Flexibility and Adaptability To rapidly adjust to new regulatory processes, demands, and priorities to an increasingly sophisticated credit union industry;
- Improved Analytics To enhance the ability to effectively identify and evaluate risk in credit unions through deep, detailed, "vertical" and "horizontal" analysis of credit unions using various analytical techniques and tools;
- Robust and Flexible Data Collection To securely collect and share financial and nonfinancial data with flexible workflows to automate manual processes and efficiently route work assignments; and,
- Risk-based Examination Approach To focus examiner resources on credit unions and asset portfolios that pose the most risk to the credit union industry.

The strategic plan and business imperatives, combined with technical obsolescence and system maintenance and consolidation needs, serve as the guiding objectives for the ESS project.

Benchmark and peer comparison:

As a part of this initiative, NCUA is actively communicating with financial regulatory agencies who are or planning to modernize their examination systems. NCUA is leveraging lessons learned from these agencies as well as industry.

Results and technical benefits:

As the existing systems are replaced by the new system, technical benefits will be realized and reported. The new integration platform will support the environment for all of NCUA's future ESM solutions, not just ESS. This technology will provide timely data synchronization and sharing with internal and cloud-based systems. The solution will leverage NCUA's identity and access management solution to meet the agency's mandate for multi-factor authentication. The infrastructure/platform solution selected for this procurement will facilitate the agency's infrastructure vision including:

- Secure cloud infrastructure and platform services;
- Support for data integration across cloud and on premise business applications and infrastructure services;
- Bi-directional, database synchronization between cloud and on premise data repositories;
- Multi-factor authentication, provisioning and single sign-on, a self-service portal, and secure remote access; and
- Status monitoring and alerting

CAPITAL PROJECT: Data Collection Solution

Project name: <u>CU-online System replacement</u> is currently referred to as Data Collection and Sharing Solution (DCS)

Strategic goal and objective link:

1.0 Ensure a Safe and Sound Credit Union System

1.2 Provide high-quality, effective, and efficient supervision that is agile and risk-based.

1.2.1 Implement market leading analytic tools to enable risk analysis, identify key trends and target examinations where most needed.

3.0 Cultivate an Inclusive, Collaborative Workplace at NCUA that Maximizes Productivity and Enhances Impact.

3.2 Deliver secure, reliable and innovative technology solutions to support NCUA business imperatives.

3.2.2 Implement the Enterprise Business Information Technology Vision & Strategy to ensure technology investments are prioritized and focused on delivering the highest return to the mission of NCUA.

Performance metric:

Conduct Market Research, initiate acquisition and develop an actionable roadmap and plan for modernizing NCUA's Call Report system (i.e. CUOnline).

Project description, scope, and key deliverable:

The purpose of the Data Collection and Sharing Solution is to replace NCUA's current disparate systems used to collect information from credit unions and to introduce a common, centralized platform to securely collect and share financial and non-financial data. The replacement of CUOnline, the system used to collect credit union call reports or financial information, is at the center of this effort along with the creation of a 360 degree view of the credit union (provides NCUA with a single, integrated view of all interactions and information associated with a given credit union).

The **scope** of this project includes the replacement or integration of systems that collect information for the following purposes:

- Credit Union Call Report
- Credit Union Service Organizations (CUSO) Registry
- Grant and Loan Applications
- Charter Requests
- Credit Union Conversions
- Credit Union Mergers
- Field of Membership Expansions
- Low Income Designation

The **key deliverable** is the implementation and rollout of the Data Collection and Sharing Solution.

Project timeline and schedule*:

The key project milestones have been updated based on recent decision and are as follows:

- 2017 Complete market research report and develop acquisition strategy
- 2018 Develop procurement package

Note: *Project timelines are estimates and subject to change.

Cost Estimates (\$ thousands)**	2017	2018	2019	2020	2021
Acquisition cost:	\$700	\$2,100			
Future year operations and maintenance:			\$640	\$640	\$640

Note:

* This project receives multiyear funding; therefore, prior year funding is available to help support a future contract.

Business value and risk management:

To regulate, charter and supervise credit unions, NCUA relies heavily on the timeliness, accessibility and accuracy of data. Currently, data is collected from various third parties via a wide variety of collection mechanisms and processes. NCUA's current environment consists of many outdated, legacy data collection systems used in combination with manual processes.

The goal of the DCS project is to drive the following business value:

- 1. Enhance the examination and supervision of credit unions for all stakeholders (credit unions, NCUA staff, state partners, other regulators) by providing more accurate and timely credit union data;
- 2. Enhance the Credit Union (and other third parties such as CUSOs) user experience by providing a one-stop-shop for submitting data to NCUA, eliminating redundant data entry and facilitating secure data sharing and use; and
- 3. Improve the efficiency with which NCUA designs data capture methods (i.e. Call Report questions, loan applications, etc.) and validates and processes data submissions.

The new solution also will address deficiencies associated with the existing systems, several of which rely on 20-year-old technology.

Benchmark and peer comparison:

As a part of this initiative, NCUA is actively communicating with other financial regulators who are currently or planning to collect and share data from and with their constituents. NCUA is leveraging lessons learned from these agencies as well as industry, as provided by industry analysts.

Results and technical benefits:

The DCS project will result in a secure and centralized data entry point for entities (credit unions, states, etc.) with a need to provide and/or exchange data with NCUA through the provision of the following

- A portal that provides credit unions with a single point of entry to all interactions NCUA
- An activity center where credit unions and other third parties will receive custom alerts and be able to securely submit data to NCUA (i.e. Call Reports, Mergers, Loan Applications, CUSO Registrations, etc.)
- A 360 degree of all interactions and information related to a given credit union
- An activity center for NCUA staff to design data collection methods, validate credit union and third party data and process submissions

The outcome of the project will be a more streamlined and automated means of capturing information required for the examination and supervision program.

CAPITAL PROJECT: Business Intelligence Tools and Analytics

Project name: <u>Business Intelligence Tools and Data Analytics</u> is currently referred to as Enterprise Data Reporting & Warehousing

Strategic goal and objective link:

1.0 Ensure a Safe and Sound Credit Union System

1.2 Provide high-quality, effective, and efficient supervision that is agile and risk-based.

1.2.1 Implement market leading analytic tools to enable risk analysis, identify key trends and target examinations where most needed.

3.0 Cultivate an Inclusive, Collaborative Workplace at NCUA that Maximizes Productivity and Enhances Impact

3.2 Deliver secure, reliable and innovative technology solutions to support NCUA business imperatives.

3.2.3 Raise the minimum standards for our data to increase the completeness and accuracy of our information, while still accommodating new data points.

Performance metrics:

Expansion of business intelligence (BI) tools and data analytics to strengthen reporting services and risk monitoring.

Project description, scope, and key deliverable:

The purpose of this project is the collection, centralization, organization and storage of NCUA data so that analysis is more accurate, simple and can be distributed across the agency. This accessibility will combine with BI tools to improve NCUA's overall reporting and data analysis capabilities.

The scope of this effort includes the existing (legacy) data that supports our current systems as well as the new or enhanced data that will be associated with current and upcoming IT initiatives (e.g., Examination and Supervision Solution and Data Collection and Sharing Solution).

The primary goal for this project is an organized and governed data warehouse that hosts clean and accurate data from legacy, enhanced and new systems in a manner that allows for timely, distributed reporting (BI tools) and can adapt to fluctuating market conditions. Deliverables expected in 2017 to support this objective include:

- Data Governance Strategy and Framework
- Enterprise Data Warehouse Architecture
- Enterprise Data Warehouse Environment
- ONES Loan Portfolio Analysis Tool
- Taxi Data Reporting

Project timeline and schedule: An initial backlog of reporting needs is being addressed (e.g. ONES Loan Portfolio Analysis Tool) simultaneously with the governance and strategic planning that will allow the data warehouse to efficiently support other IT projects. By 2018, the ONES Loan Portfolio Analysis Tool will be transitioned to an operational mode. The Enterprise Data Management Program is a multi-phase, multi-year program that will enable accurate data-driven analytics and decision making.

Cost Estimates (\$ thousands)*	2017	2018	2019	2020	2021
Acquisition cost:	\$1,705				
Future year operations and maintenance:		\$1,562	\$1,738	\$1,773	\$1,808

Note: *Costs are estimates and subject to change. The cost of implementing the entire Data Management Program is not reflected in the above table.*

Business value and risk management:

The ability to deliver accurate and timely reports across the agency for existing and future systems is the primary benefit of Enterprise Data Reporting & Warehousing. Accurate and clean data that is centrally stored where there is a clear understanding of the authoritative source manages many of the risks facing the current data environment.

Benchmark and peer comparison:

NCUA plans to communicate with financial regulatory agencies and leverage lessons learned from these agencies as well as industry.

Results and technical benefits:

The results of this effort will be the ability to create reports that are accurate over time and to pass the report generation onto end-users via reporting tools. This project will result in one authoritative source of data and the source will be understood. The combination of these two benefits will lead to better analysis of trends and more exploration within the data. By establishing a warehouse for reporting purposes, the current systems will not be burdened by report generation.

CAPITAL PROJECT: Enterprise Records Management Solution

Project name: Enterprise Records Management Solution

Strategic goal and objective link:

3.0 Cultivate an Inclusive, Collaborative Workplace at NCUA that Maximizes Productivity and Enhances Impact.

3.2 Deliver secure, reliable and innovative technology solutions to support NCUA business imperatives.

3.2.3 Raise the minimum standards for our data to increase the completeness and accuracy of our information, while still accommodating new data points.

Performance metric:

Complete alternatives analysis and roadmap for implementing policy, processes, and technology for managing all permanent records in an accessible, electronic format per National Archives and Records Administration (NARA) directives.

Project description, scope, and key deliverable: NARA compliance motivates the needs for Records Management. The deadline of proving record management capability by the end of 2019 requires that the organizing and process establishment begin now. This effort will leverage an enterprise document management solution that will be implemented later.

The scope of this project in 2017 is the Records Management alternatives analysis. This alternatives analysis will include an assessment of NCUA's enterprise document management needs. The deliverable of this project in 2017 is the Records Management alternatives analysis.

Project timeline and schedule: The Records Management initiative for NCUA will be a set of multi-year, incremental activities that will run through the year 2021. Records Management is closely linked to Document Management and there will be a combined analysis of alternatives in 2017 to set strategy. Activity resumes in earnest in 2019 as there is a need to show specific, NARA approved records management capability by the end of 2019. Following proof of the capability will be the incremental rollout across NCUA.

Cost Estimates (\$ thousands)*	2017	2018	2019	2020	2021
Acquisition cost:	\$241	TBD	TBD	TBD	TBD
Future year operations and maintenance:		\$60			

Note: *Costs are estimates and subject to change. Future year cost estimates will be revised in 2018 after completion of the alternatives analysis.

Business value and risk management:

Records Management is a compliance driven set of activities to meet NCUA's legal obligation as a federal agency. It is also recognized that additional guidelines may be introduced and provided over time. Aligning with the NARA guidelines avoids the risk of being in violation of a federal law. It is the complementary activity associated with document management that introduces a direct business value to NCUA.

Benchmark and peer comparison:

NCUA will reach out to other federal agencies to understand how they are complying with their legal requirements and what their timeline is to completion. The current system of records management that includes boxes of documents will be assessed as a benchmark to which future solutions will be compared. Much of the actual benchmarking and comparison will be done around the document management initiative.

Results and technical benefits:

The technical benefits driven by Records Management will all be in the document management area. Along with the benefit of being able to prove alignment with the NARA directives, increased efficiency of retention and retrieval, system led archiving of outdated material, improved search-ability and simplified storage will all result from the combined Records/Document Management efforts.

CAPITAL PROJECT: AMAC Servicing Systems

Project name: <u>Financial Asset Management - AMAC Servicing Solution</u> is currently referred to as AMAC Core Processor Replacement.

Strategic goal and objective link:

1.0 Ensure a Safe and Sound Credit Union System

- 1.1 Identify, measure, monitor, and promptly responds to risks in the credit union industry to mitigate loss to the NCUSIF.
 - 1.1.4 Conduct credit union resolutions effectively and efficiently.

3.0 Cultivate an Inclusive, Collaborative Workplace at NCUA that Maximizes Productivity and Enhances Impact.

3.2 Deliver secure, reliable and innovative technology solutions to support NCUA business imperatives.

3.2.1 Replace end-of-life technology with a modern, robust platform to address technical risk and provide a foundation for future expansion of capabilities.

Performance metric:

To be determined

Project description, scope, and key deliverables: The purpose of this project is to replace the aging AMAC servicing systems with modern servicing, document management, customer relationship management (CRM), case management, business intelligence (BI) and analytics capabilities. AMAC conducts credit union liquidations and performs management and recovery of assets. Using a phased approach, NCUA plans to research and procure solutions to replace the current set of separate systems that support AMAC.

The initial scope of the project entails identifying, acquiring, and implementing replacement solutions for AMAC's aging core data processor and its out-of-support content management system.

The **key project deliverables** are the acquisition and deployment of a replacement core processing system and an enhanced content management system.

Project timeline and schedule:

The key project milestones are as follows:

- 2017 Phase 1: Requirements capture, market research, and solicitation packages.
- 2018-2019 Phase 2: Contract awards for the replacement core processor, enhanced content management system, and implementing vendors. Then, implementation, testing and production deployment of the replacement core processor and content management systems.

Cost Estimates (\$ thousands)*	2017	2018	2019	2020	2021
Acquisition cost:	\$700	\$3,500	\$8,100		
Future year operations and maintenance:			\$650	\$2,600	\$2,652

Note: *Costs are estimates and subject to change. Costs presented here for operations and maintenance are subject to change after contract award when a specific solution is known. The remaining \$220,000 in 2017 will be carried forward to complete Phase 1 of the project in 2018.

Business value and risk management: The AMAC Core Processor Replacement project will provide the following business benefits/risk management:

- Address operational risks posed by an aging, core processing system.
- A more modern, vendor-supported core processing system that will enable AMAC to more effectively perform its loan and member servicing duties, while also continuing to fulfill its regulatory / compliance reporting responsibilities.

Benchmark and peer comparison:

NCUA is actively researching current credit union industry trends, technologies, and available core processing systems that not only meet AMAC's business requirements, but can be acquired and deployed within the aforementioned timeframe as well.

Results and technical benefits:

In addition to the benefits listed above in the "Business value and risk management" section, AMAC strives to maximize the recovery of assets in liquidations where fraud occurred. AMAC assists NCUA regional offices with the review of large, complex loan portfolios and actual or potential bond claims. It also participates extensively in the operational phases of conservatorships and records reconstruction. The purpose of AMAC is to minimize costs to the Share Insurance Fund and credit union members.

CAPITAL PROJECT: Human Resource Systems

Project name: <u>HR IT Transition to Transformation (HRT2T)</u>

Strategic goal and objective link:

- 3.0 Cultivate an Inclusive, Collaborative Workplace at NCUA that Maximizes Productivity and Enhances Impact
- 3.1 Deliver secure, reliable and innovative technology solutions to support NCUA business imperatives

3.2.1 Replace end-of-life technology with a modern, robust platform to address technical risk and provide a foundation for future expansion of capabilities

Performance metric:

Integrate and rollout General Service Administration's replacement to the Comprehensive Human Resources Integrated System (CHRIS) and the Electronic Time and Attendance System (ETAMS). GSA is migrating to an externally hosted HR and T&A systems, which are an OPM- and OMB-approved private SSC contractor-managed shared services solution, This solution will integrate with the current GSA Payroll Accounting and Reporting System (PAR).

Project description, scope, and key deliverable:

The purpose of this GSA driven Line of Business Transition project is to replace NCUA's existing HR system, CHRIS, and the Time and Attendance (T&A) system, ETAMS, with an externally hosted HR and T&A system. CHRIS is an automated tool used by HR professionals to document employment (i.e., changes in salary, position, benefits, etc.), which in turn creates a comprehensive employment history. The Electronic Time and Attendance System (ETAMS), is a GSA-developed T&A system. Employees input T&A data into ETAMS, and then ETAMS then submits the data to the Payroll Accounting and Reporting (PAR) system electronically. GSA performs the necessary operational reviews of the employee pay and leave information for the current pay period and initiates the final payroll calculation process for that pay period. This project is scheduled to be completed in 2018. Although GSA should support most transition costs, there will be associated costs related to support for the effort, potential NCUA specific requirements requiring additional configuration and/or customizations and other activities that need to take place prior to transition. Once the HR and T&A system migration and payroll integration is complete, GSA will begin an upgrade to a new Payroll system and integrate it with the new HR and T&A systems and any other required systems.

The scope of the project is replacement of NCUA's current CHRIS, to include time and attendance and the integration to the PAR system.

The **key deliverable** will be the integration and rollout of the externally hosted HR and T&A systems.

Project timeline and schedule*:

The integration of an externally hosted HR and Time and Attendance systems is scheduled for May 2018.

Note: *Milestones are estimates and subject to change.

Cost Estimates (\$ thousands)**	2017	2018	2019	2020	2021
Acquisition cost:	\$400	\$350			
Future year operations and maintenance:		\$132			

Note: **Costs are estimates and subject to change.

Business value and risk management:

By adopting an externally hosted HR and Time and Attendance systems, NCUA will benefit both from the efficiencies gained through outsourcing a shared solution as well as the automation of additional routine HR tasks and the time and attendance functionality.

Benchmark and peer comparison:

A key driver behind NCUA's decision to adopt an externally hosted HR and Time and Attendance systems is because many Federal agencies, NCUA's peers, are planning to adopt the new system.

Results and technical benefits:

With the integration and rollout of the an externally hosted HR and Time and Attendance systems, NCUA anticipates that it will be able to more efficiently operate and maintain its HR system. Additionally, by providing expanded online, self-service, and time and attendance for employees, both HR staff and employees will save time on managing day-to-day administrative tasks.

By sharing with other federal agencies in the cost to operate and maintain an externally hosted HR and Time and Attendance systems NCUA anticipates enjoying a lower total cost of ownership for the capability over managing an HR and T&A system on its own.

CAPITAL PROJECT: Legacy Infrastructure and Security Technology Update

Project name: Legacy Infrastructure and Security Technology Refresh and Expansion

Strategic goal and objective link:

3.0 Cultivate an Inclusive, Collaborative Workplace at NCUA that Maximizes Productivity and Enhances Impact

3.2 Deliver secure, reliable and innovative technology solutions to support NCUA business imperatives.

3.2.2 Implement the Enterprise Business Information Technology Vision & Strategy to ensure technology investments are prioritized and focused on delivering the highest return to the mission of NCUA.

3.2.4 Increase virtual, remote and telework employee efficiency through the use of technology.

3.4 Ensure a secure environment that protects the safety of our staff and security of our facilities.

3.4.1 Strengthen the security program in the areas of personnel, facilities, continuity of operations and secure communications.

Performance metric:

To be determined

Project description, scope, and key deliverable: Legacy Infrastructure and Security Technology Refresh and Expansion is a series of IT efforts to Refresh and Upgrade existing services: Windows 10 Server, Security Architecture and Analysis for the Disaster Recovery effort scheduled for 2018.

The scope is systems and services that are within OCIO control and improvements to them.

The four **key deliverables** are:

- Increased security protection for NCUA systems
- Improved Disaster Recovery
- Web Conferencing expansion across the enterprise
- Upgrades to Windows servers

Project timeline and schedule: This project is actually several smaller effort within OCIO.

Quarter 1 2017 - Security Architecture Refresh

Quarter 1 2017 - Business Process Analysis for Disaster Recovery

Quarter 2 2017 - Enterprise Web Conferencing

Quarter 2 2017 - Server OS Upgrade

Cost Estimates (\$ thousands)*	2017	2018	2019	2020	2021
Acquisition cost:	\$460				

Future year operations and maintenance:			
Note: *Costs are estimates and subject to c	hange.		

Business value and risk management: The security architecture refresh and server operating system upgrade protect NCUA and its partners against technological risks and cyber-attacks. The business process analysis for disaster recovery effort allows for redundancy and timely recovery in the event that a service interruption takes place. In addition, the enterprise web conferencing improves communication within the agency (between regions, the central office and the mobile workforce as well as offering increased opportunities for partners to interface with NCUA remotely.)

Benchmark and peer comparison:

NCUA plans to communicate with financial regulatory agencies and leverage lessons learned from these agencies as well as industry.

Results and technical benefits: The technical benefits and results will be in the continuous availability of NCUA services to its staff and partners as well as increased productivity and decreased travel. In addition, a complete plan for the disaster recovery project set for 2018 will be a benefit of 2017 activities.

CAPITAL PROJECT: Laptop Lease

Project name: <u>NCUA Laptop lease (3-year agreement)</u>

Strategic goal and objective link:

3.0 Cultivate an Inclusive, Collaborative Workplace at NCUA that Maximizes Productivity and Enhances Impact

3.2 Deliver secure, reliable and innovative technology solutions to support NCUA business imperatives.

3.2.1 Replace end-of-life technology with a modern, robust platform to address technical risk and provide a foundation for future expansion of capabilities.

Performance metric:

To be determined

Project description, scope, and key deliverable:

Upgrade laptops that are three years old including newer operating system. This project includes the selection of new laptops, testing and acquisition, the rollout of the new laptops running Windows 10 to NCUA staff and the return of the current laptops to the leasing agent.

The **scope** includes everyone that uses an NCUA provided and supported laptop to do their job (mobile staff, regional and office staff, contractors and some state representatives).

The **key deliverable** is new laptops across NCUA.

Project timeline and schedule:

The planning and preparation will all take place in 2017 and the rollout to all staff will start and end within the first two quarters of 2018.

Cost Estimates (\$ thousands)*	2017	2018	2019	2020	2021
Acquisition cost:	\$915	\$1,000	\$1,000	\$1,000	
Future year operations and maintenance:	n/a	n/a	n/a	n/a	n/a

Note: *Costs are estimates and subject to change.

Business value and risk management:

Previous studies showed a cost and performance benefit to leasing laptops instead of buying them. By including hardware support and the operating system into the contract, response time for support was improved. A replacement timeline of every three years avoids where there is an increase in hardware related issues and coincides well with the Microsoft schedule of operating system rollouts.

Benchmark and peer comparison:

Establishing a benchmark and researching what other similar organizations are doing is part of the alternatives analysis scheduled for first two quarters 2017.

Results and technical benefits:

The technical benefits are a staff that is leveraging current, stable and secure systems to do their jobs. Minimizing hardware related issues by replacing laptops that are three years old avoids the increase in issues associated with laptops that have been in use longer than three years.

CAPITAL PROJECT: Consumer Lending Software

Project name: <u>Consumer Lending Software, APRWIN and APYWIN</u>, are now referred to as Federal Disclosure Computation Tool

Strategic goal and objective link:

2.0 Promote Consumer Protection and Financial Literacy

2.1 Effectively enforce federal consumer financial laws and regulations in federal credit unions.

2.1.1 Administer the risk-based fair lending exam program to identify compliance issues and required corrective actions.

2.1.2 Ensure consistency with other regulators on consumer issues to safeguard member interests.

3.0 Cultivate an Inclusive, Collaborative Workplace at NCUA that Maximizes Productivity and Enhances Impact

3.2 Deliver secure, reliable and innovative technology solutions to support NCUA business imperatives.

3.2.1 Replace end-of-life technology with a modern, robust platform to address technical risk and provide a foundation for future expansion of capabilities.

Performance metric:

Implementation and rollout of the cross-agency-developed APR and APY replacement applications.

Project description, scope, and key deliverable:

The purpose of this project is to replace NCUA's consumer lending applications, which calculate annual percentage rate (APR) and annual percentage yield (APY). NCUA is participating in an interagency working group to replace its consumer lending applications, APRWIN and APYWIN, with a shared solution. APRWIN and APYWIN are legacy applications developed by the Office of the Comptroller of the Currency and used by federal and state regulators – including NCUA, Consumer Financial Protection Bureau, Federal Deposit Insurance Corporation, Federal Reserve Board, Office of the Comptroller of the Currency (OCC), and the Conference of State Banking Supervisors – to calculate APR and APY in limited settings. The applications were last updated in 2008 by OCC. APRWIN calculates APR according to methods prescribed in the Truth in Lending Act (TILA) and Regulation Z, but only for certain types of credit transactions; APYWIN calculates yield for deposit products. Examiners use the programs to determine the accuracy of disclosures required under TILA/Regulation Z, for the types of credit supported, and the Truth in Savings Act (implemented by NCUA regulation).

The **scope** of the project is to replace the APRWIN and APYWIN applications.

The **key deliverable** is the implementation and rollout of the replacement consumer lending software.

Project timeline and schedule:

The interagency working group that is leading the development of the replacement applications. The draft MOU making its way through participating agencies, with OCFPA leading its coordination. Development and Operations and Maintenance costs are planned to be shared amongst agencies. Based on our mid-year review of the project, we are anticipating spending \$50,000 in 2017 and the remaining \$50,000 in 2018.

Cost Estimates (\$ thousands)*	2017	2018	2019	2020	2021
Acquisition cost:	\$35				
Future year operations and maintenance:		\$4	\$4	\$4	\$4

Note:

*Costs are estimates and subject to change. The remaining \$50,000 in 2017 will be carried forward to complete this portion of the project in 2018.

Business value and risk management:

This project is designed to improve the efficiency and quality of the examination process with regulations involving APR and APY. The key business value drivers of replacing APR and APY are :

- Provide all NCUA staff with a single tool with which to calculate APR and APY
- Permit NCUA staff to make APR calculations for virtually all credit products, including a variety of adjustable rate mortgages
- Provide NCUA examiners a tool by which to determine compliance with the 36 percent MAPR under the revised MLA (although not by the October 3, 2016, compliance date)
- Create consistency among the financial regulators when examining for compliance with regulations involving APR and APY
- Provide a tool with which calculation results can be integrated into reports and other systems
- If made available to credit unions, the replacement will enhance compliance by enabling credit unions to calculate APR and APY with the same tool used by their regulator

By sharing with other federal agencies in the cost to develop and maintain the APR and APY replacement applications, NCUA anticipates enjoying a lower total cost of ownership and lower risk associated with developing the applications. However, attention needs to be given to the potential scope and schedule risks associated with jointly developed and maintained applications.

Benchmark and peer comparison:

As NCUA is participating in an interagency working group to replace its consumer lending applications with a shared solution, leveraging best practices of NCUA's peer group will be integral to the project.

Results and technical benefits:

NCUA anticipates that the replacement systems will expand the scope of products for which staff can determine APR and APY using the same tool for both calculations. The replacement applications will allow examination staff and others to more easily use data obtained from use of the tools, thereby increasing productivity and eliminating manual functions currently used. Additionally, the updated and enhanced tools will allow the NCUA to overcome external risks with greater customer service and internal risk associated with the obsolete operating system, which the current applications use.

CAPITAL PROJECT: Home Mortgage Disclosure Act (HMDA) System Development

Project name: <u>Home Mortgage Disclosure Act System Development</u> (HMDA) cost sharing

Strategic goal and objective link:

2.0 Promote Consumer Protection and Financial Literacy

2.1 Effectively enforce federal consumer financial laws and regulations in federal

credit unions.

Performance metric: Ensure consistency with other regulators in enforcing HMDA compliance to safeguard member interests. Use data from the system to detect trends and increase guidance to the credit union system to improve compliance with consumer protection laws.

Project description, scope, and key deliverable: HMDA requires most mortgage lenders located in metropolitan areas to collect data about their housing-related lending activity, report the data annually to the government, and make the data publicly available. NCUA enforces compliance with HMDA requirements in all federally insured credit unions. Historically, NCUA, as a Federal Financial Institutions Examination Council (FFIEC) member agency, has contributed to the costs of HMDA data collection and processing.

The HMDA operations were moved from the Federal Reserve Board to the Consumer Financial Protection Bureau (CFPB) to comply with the Dodd-Frank Wall Street Reform and Consumer Protection Act (DFA). Implementation of the DFA changes to HMDA, including additional data element requirements, provide an opportunity to streamline and modernize the HMDA data collection and processing system. The goal of the new system is to allow for more efficient submissions by reporting financial institutions, processing for FFIEC member agencies and HUD, and quicker release of the data.

Project timeline and schedule: The project is expected to be completed and implemented in 2018. Operations and maintenance (O&M) cost will be provided by CFPB.

Cost Estimates (\$ thousands)	2017	2018	2019	2020	2021
Acquisition cost:	\$750	\$750	\$0	\$0	\$0
Future year operations and maintenance:		TBD	TBD	TBD	TBD

Business value and risk management:

The system will be designed in a manner that makes best use of limited government funds and, where possible, leverages CFPB's already developed capabilities. The CFPB is committed to protecting and ensuring the security of HMDA data. The CFPB's information security practices will adhere to the requirements of the Federal Information Security Management Act of 2002 (FISMA), based on guidance and standards provided by the National Institute of Standards and Technology (NIST).

The CFPB has carefully considered the potential risks for the HMDA system development and has proposed several mitigation factors so these risks never become issues. As they continue development on the HMDA collection, processing and reporting system, they will continuously assess, prioritize, monitor and control for risks and uncertainty with the success of the project.

Benchmark and peer comparison: The CFPB proposes an "even split" of the Capital budget between all of the FFIEC agencies and HUD, as this new system build benefits all agencies, as well as their reporting institutions. The CFPB has a goal of maintaining the ongoing O&M budget constant upon transition to the Bureau.

Results and technical benefits: The system was pilot tested with financial institutions and received several improvements over the current process. They gave the pilot a four out of five rating. Some of the enhanced features included a simple, online design; export feature to allow for machine readable reports, and an edit process done prior to submission that eliminated back and forth or scanning/emailing.

Operational drivers include:

- 1) Cost avoidance: Develop ongoing staffing structure changes from more efficient data reporting, less manual processes, and improved compliance structures.
- 2) Productivity gains: Mitigate the manual burden of HMDA data collection and reporting and increase the efficiency of HMDA data collection, processing, and publication through automated, open systems.
- 3) Returns to the public: make improvements to timeliness, accuracy, utility and availability of data to allow for timelier and data-driven decision-making and reporting.

CAPITAL PROJECT: Central Office Building Improvements and Repairs

Projects: <u>Central Office Facilities – Elevator Replacement (\$1,250,000); Building</u> <u>Renovations (\$400,000) and Improvements (\$170,000)</u>.

Strategic goal and objective link:

3.0 Cultivate an Inclusive, Collaborative Workplace at NCUA that Maximizes Productivity and Enhances Impact

3.4 Ensure a secure environment that protects the safety of our staff and security of our

facilities

- To upkeep and maintain current facility infrastructure to include life cycle and replacement of critical components.
- To upgrade obsolete and outdated facility infrastructure.
- To install facility infrastructure that will meet all current codes for life safety, accessibility, security, and increased energy and operational efficiency.
- To maximize the space usage by integrating smart density principles that allow the maximum and best use of available space.
- To introduce the best use of current government assets.
- To better align NCUA space allocation with federal targets for space utilization.

Performance metric: To be determined

Project description, scope, and key deliverable:

- A. Replace four traction elevators, including the machine room equipment, new call buttons and software. Elevator floors and walls will be preserved to save money. The current elevators are original to the facility, 23 years old, and obsolete; parts are no longer available. In accordance with the National Elevator Code, American Society of Mechanical Engineers, A17.1 (ASME A17.1), it is recommended elevators be replaced every 20 years. Despite a strict maintenance program, age has become apparent by the vibration and slower response time of the equipment, not to mention the increasing maintenance and operating cost for the elevators with more recurrent service calls, which are clear signs of decreased reliability. In the last 23 years, technology and codes governing elevator systems have dramatically changed; a modern reliable elevator will not only meet all current codes for life safety, accessibility and security, but will increase energy and operational efficiency.
- B. The central office renovations will accommodate staff at the central office while consolidating Region 2 space. This renovation will allow for increased number of work stations, and personnel in the same amount of allotted existing central office gross square footage. A modernized and updated design that allows better use of the space, while setting pleasant aesthetics will have positive effects on productivity and the general appearance of the facility. Some of the areas have remained untouched from major upgrades since the building construction over 23 years ago. A modernized space will take advantage of the latest technological construction options that will increase

productivity and efficiency while reducing operating cost. Renovations will include offices, cubicles, and conference (meeting) room space.

C. Once the agency reform plan is approved by the NCUA Board, clearer direction will be available to determine the updated space planning and any needed renovations.

Project timeline and schedule: 12 months

Cost Estimates (\$ thousands)	2017	2018	2019	2020	2021
Acquisition cost:	\$1.820	\$.500	TBD	TBD	TBD
Future year operations and maintenance:		TBD	\$20	\$20	\$20

Business value and risk management:

This is a capital improvement required in order for the facility to continue normal elevator operation and it is associated with the life cycle replacement required for critical infrastructure. Due to the age of the equipment there are opportunities for significant gains to energy efficiency and reliability simply because of the technological advancements that have taken place since the original installation. Aging equipment is a large contributor to less sustainable facilities and higher operating cost. Modernized equipment will bring considerable savings and ensure another 15-20 years of high reliability elevator operation.

The implementation of smart design practices in the office renovation will result in a more productive and sustainable office space. The incorporation of design principles that are specifically applied to enhance the productivity of employees and conservation of resources brings tremendous benefits and long term cost saving to the organization. Incorporating design methods that can be implemented to drastically improve the performance and flexibility of office space in terms of space, energy consumption or the lifecycle of materials used, will provide a functional workplace that will meet the needs of employees for years to come without any unnecessary reconfigurations or modifications. Additionally, by relocating Region 2 to the central office facility there will be future savings of approximately \$350,000 annually from leasing and operating cost.

Benchmark and peer comparison:

NCUA is taking on this renovation in order to make more efficient use of our space. Some areas will have offices smaller than current size; for example, some cubicle sizes will decrease.

Results and technical benefits:

Elevator operating cost are estimated to be approximately 5 percent of NCUA's facility energy operating cost or approximately \$15,000 - 27,000 annually. New energy efficient elevator equipment can represent up to 40 percent savings compared to old equipment. Not only are these savings represented on energy usage but also in efficiency in terms of time and heat

generation, as equipment will operate for shorter periods of time compared to the old equipment.

Increasing the functionality and usefulness of workspace allows employees to best perform their daily tasks. An attractive, modern renovation that incorporates smart design and space planning can greatly increase the efficiency of output by an individual and, in turn, provides a more economically viable and productive solution.

CAPITAL PROJECT: Asset Management and Assistance Center

Projects: Construction and relocation project (\$250,000)

Strategic goal and objective link:

- 3.0 Cultivate an Inclusive, Collaborative Workplace at NCUA that Maximizes Productivity and Enhances Impact.
 - 3.4 Ensure a secure environment that protects the safety of our staff and security of our facilities:
 - To upkeep and maintain current facility infrastructure to include life cycle and replacement of critical components.
 - To upgrade obsolete and outdated facility infrastructure.
 - To install facility infrastructure that will meet all current codes for life safety, accessibility, security, and increased energy and operational efficiency.
 - To maximize the space usage by integrating smart density principles that allow the maximum and best use of available space.
 - To introduce the best use of current government assets.
 - To better align NCUA space allocation with federal targets for space utilization.

Performance metric: To be determined

Project description, scope, and key deliverable:

- A. Renovate the first floor of Building 5 to accommodate a total of 22 offices and 23 cubicle spaces. This renovation includes the installation of new LED exit lights and necessary IT infrastructure to support the necessary consolidation of assets to include: installing approximately 1,600 square feet of new walls with approximately 3,200 square feet of new drywall and 3,000 square feet of insulation in existing office locations; removing/installating 9 existing doors and hardware; installing new electrical outlets and data boxes; balancing the HVAC system and installing a new mini-split for the IT area; relocating ducts as required in new areas; removing existing built in furniture and shelves; removing/installing approximately 300 square feet of ceiling tile and replacing when completed; accounting for protection and safety of the existing area; working nights and/or weekends for the least amount of disruption to the work area; removing, replacing and/or protecting 300 square feet of carpet.
- B. Remove, reconfigure, re-install and dispose of, as necessary, all furnishings and

property from Building 3.

C. Relocate all NCUA personnel from Building 3 into Building 5.

Project timeline and schedule: 3 monthsCost Estimates (\$ thousands)20172018201920202021Acquisition cost:\$250\$\$\$\$\$Future year operations and maintenance:---\$0\$0\$0\$0

Business value and risk management:

The \$250,000 allocation will be offset by the nonrenewal of the AMAC Building 3 lease, which costs approximately \$325,000 annually. Thus, this project delivers a return on investment of less than 12 months.

Time constraints require an aggressive construction schedule to finish before the lease expiration. There is moderate risk that if any unforeseen site conditions are encountered during construction the schedule deadline may not be met.

Concerning future year operations and maintenance, there may be some small marginal utility expense. However, the difference is not significant given that Region IV already is incurring operational costs for the same space.

Benchmark and peer comparison:

The renovation will result in a total of 45 first floor offices. GSA recommends 150 rentable square fee per employee, per GAO's report on real property. Although this space is owned and not leased, the renovated space will result in 32 offices and cubicles, each at or below 150 square feet. The remaining offices are not part of the renovation. Thus, overall space efficiency is improved and comparable to GSA recommended rentable square footage per employee.

Results and technical benefits:

In addition to cost saving and space efficiencies, the renovation cost includes improvements to life, safety and telecommunications infrastructure.