Appendix C: Capital Project Summaries

<table>
<thead>
<tr>
<th>CAPITAL PROJECT: Business Intelligence Tools and Capability Enhancement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project name:</strong> Office of National Examination and Supervision (ONES) Business Intelligence (BI) Capability Enhancement and Data Structure is currently referred to as the <strong>ONES Loan Portfolio Analysis Tool.</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Strategic goal and objective link:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal 1:</strong> Ensure a Safe and Sound Credit Union System.</td>
</tr>
<tr>
<td>1.2 Provide high-quality and efficient supervision.</td>
</tr>
<tr>
<td><strong>Goal 3:</strong> Maximize organizational performance to enable mission success.</td>
</tr>
<tr>
<td>3.2 Deliver an efficient organizational design supported by improved business processes and innovation.</td>
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</tbody>
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<table>
<thead>
<tr>
<th><strong>Performance metrics:</strong></th>
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<tbody>
<tr>
<td>Expansion of ONES BI tools and data analytics to strengthen reporting services and risk monitoring.</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Project description, scope, and key deliverable:</strong></th>
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</thead>
<tbody>
<tr>
<td>The purpose of this project is the collection, centralization, organization and storage of ONES data so that analysis is more accurate and efficient. This accessibility will combine with BI tools to improve ONES’s overall reporting and data analysis capabilities.</td>
</tr>
<tr>
<td>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. In support of this objective, project deliverables anticipated for 2018 include:</td>
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<tr>
<td>- Continued refinement and buildout of the BI data warehouse architecture;</td>
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<tr>
<td>- Continued enhancements and buildout of the BI data warehouse environment;</td>
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<tr>
<td>- Continued refinement and new reporting functionality; and</td>
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<tr>
<td>- Continued refinement and new dashboards.</td>
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<table>
<thead>
<tr>
<th><strong>Project timeline and schedule:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The pilot created in 2017 began to address the initial backlog of reporting and dashboard needs (e.g. ONES Loan Portfolio Analysis Tool). The continued buildout of the data warehouse will allow the ONES team to enhance management reporting and support the ability of the National Lending Specialists (NLS) to prepare for and conduct risk-based credit union examinations. These new functions will improve management’s supervision of ONES activities as well as the NLS’s ability to prepare in advance for exams and quickly identify areas of risk. In 2018, the ONES Loan Portfolio Analysis Tool will become fully operational with continued improvements to include performance.</td>
</tr>
<tr>
<td><strong>Budget ($ thousands)</strong></td>
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<td>--------------------------</td>
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<tr>
<td>Acquisition cost:</td>
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<tr>
<td>Future year operations and maintenance:</td>
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**Business value and risk management:**
Initially, the ability to deliver accurate and timely reports for the ONES team is one of the key benefits of BI Data Reporting and Warehousing. This will allow the team to implement Data Driven Supervision which will improve overall understanding of material risks, regular and ad-hoc sensitivity testing, reverse stress testing, and focused risk testing.

**Benchmark and peer comparison:**
The 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 quickly create reports that are accurate and to pass the report generation onto end users, via reporting tools. The combination of these two benefits will lead to better analysis of trends and the ability to evaluate larger more complicated data. In addition, by establishing a warehouse for reporting and analytics, the ONES’ team will be able to view and analyze data more efficiently.
<table>
<thead>
<tr>
<th>CAPITAL PROJECT: AMAC Servicing System Solution</th>
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<tbody>
<tr>
<td><strong>Project name:</strong> AMAC Legacy System Enhancements and Servicing Solution</td>
</tr>
<tr>
<td>Stabilize/Upgrade AFTECH project is also currently referred to as AMAC Core Processor Replacement.</td>
</tr>
</tbody>
</table>

**Strategic goal and objective link:**

- **Goal 1:** Ensure a Safe and Sound Credit Union System.
  - 1.1 Maintain a strong Share Insurance Fund.
- **Goal 3:** Maximize organizational performance to enable mission success.
  - 3.2 Deliver an efficient organizational design supported by improved business processes and innovation.
  - 3.3 Ensure sound corporate governance.

**Performance metric:**

Successful completion of Phase I and Phase II of the project within planned budget and schedule.

**Project description, scope, and key deliverable:**

The purpose of this project is to enhance a number of AMAC legacy systems and to replace aging AMAC 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, the NCUA plans to research and procure solutions to replace the current set of 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. In addition, enhancements will be introduced to the other legacy AMAC core business systems.

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 I: Requirements capture, market research, and acquisition packages.
- **2018/2019** – Phase II: Contract awards for the replacement core processor, enhanced content management system, and implementation vendors. This will be followed by implementation, data migration, testing and production deployment of the replacement core processor and content management systems.
### 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 will enable AMAC to perform its loan and member servicing duties more effectively, while continuing to fulfill its regulatory reporting responsibilities.

### Benchmark and peer comparison:
The NCUA is actively researching current credit union industry trends, technologies, and available core processing systems that not only meet AMAC’s business requirements, but also can be acquired and deployed within the aforementioned timeframe.

### Results and technical benefits:
AMAC assists the 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: Enterprise Data Analytics, Governance and Reporting Services

**Project name:** Enterprise Data Analytics, Governance and Reporting Services is currently referred to as the Data Strategy and Framework Initiative

### Strategic goal and objective link:

**Goal 1:** Ensure a Safe and Sound Credit Union System.

1.2 Provide high-quality and efficient supervision.

**Goal 3:** Maximize organizational performance to enable mission success.

3.2 Deliver an efficient organizational design supported by improved business processes and innovation.

3.3 Ensure sound corporate governance.

### Performance metric:

- Establish a data governance program comprised of policy, a central data governing body, and a data steward teams.
- Educate staff on roles and responsibilities of the central data governing body and data steward teams.
- Detail strategies for analytic data and legacy data.

### Project description, scope, and key deliverable:

The purpose of this project is the centralization, organization and storage of the NCUA data so analysis is more accurate, simple and easily distributed across the agency. This increased accessibility will combine with analytic tools to improve the NCUA’s overall reporting and data analysis capabilities.

The scope of this effort includes the existing (legacy) data supporting our current systems as well as the new or enhanced data associated with current and upcoming IT initiatives (e.g., Enterprise Solutions Modernization).

The primary goal for this project is to organize and govern data including clean and accurate data from legacy, enhanced, and new systems. This data will allow for timely, distributed reporting (BI tools) and can adapt to fluctuating market conditions. Deliverables for 2018 in support of this objective include:

- Training for members of the central data governing body and data steward teams;
- Definition of data domains beyond examination related data;
- Preparation of consistent data governance;
- Enterprise data analytic strategy; and
- Strategy for legacy data integration with new solutions.

### Project timeline and schedule*:

In 2017, Offices of the Chief Information Officer (OCIO) and the Executive Director (OED) completed a sixteen week study to identify data challenges and specify recommendations for the NCUA to manage data as an enterprise asset. In Phase I, the initiative will implement a
subset of recommendations approved by the Information Technology Policy Council (ITPC) in July 2017. By the end of the year, the initiative will produce a draft instruction to launch a Data Governance program with a central governing body. The initiative will propose exam data domains with two domains undergoing a data discovery process. The initiative will also prepare an analytic data strategy.

Once the central data governing body is launched in 2018, the initiative will educate participants on their expected roles and responsibilities to adopt data governance in their operational tasks. The initiative will also expand to identify other data domain groups (i.e., administrative) and underlying data domains. The initiative will continue to work on strategies for analytic data and legacy data and provide ongoing support to the data governance bodies as they grapple with the prioritization of data domains and overall agency data management.

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<thead>
<tr>
<th>Budget ($ thousands)*</th>
<th>2018</th>
<th>2019</th>
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<tbody>
<tr>
<td>Acquisition cost:</td>
<td>$600</td>
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<tr>
<td>Future year operations and maintenance:</td>
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<td>$150</td>
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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:
Accurate, clean, and accessible data where there is a clear understanding of the authoritative source mitigates many of the risks facing the current data environment.

Benchmark and peer comparison:
The initiative has stakeholders in OED, OCIO, and the Office of General Counsel (OGC) that meet bi-weekly to confirm project approaches meet the diverse business needs across the agency.

Results and technical benefits: The results of this effort will be the ability to create more accurate reports over time and to pass the report generation on to 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 efficient exploration within the data. By establishing a central repository for reporting purposes, the current systems will not be burdened by report generation.
<table>
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<tr>
<th>CAPITAL PROJECT: Assets and Liabilities Management Application</th>
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<tbody>
<tr>
<td><strong>Project name:</strong> Asset &amp; Liabilities Management (ALM) Application, Vendor Asset &amp; Liability Behavioral Models and Hosting is currently referred to as ONES Data Driven Supervision (DDS).</td>
</tr>
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</table>

**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.

      1.2.3 – Advance examiner specialization to effectively identify and evaluate risk in larger, more complex credit union portfolios.

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 metrics:**

The ONES team can perform internal stress testing and capital planning analysis by 2021 without utilizing any external services or resources.

**Project description, scope, and key deliverable:**

This effort will allow NCUA ONES to build internal analytical capabilities to run supervisory stress testing in house and conduct regular quantitative risk assessment. This effort will include implementing off-the-shelf analytical tools, models and softwares that are commonly used in stress testing and other risk management activities. This effort will also allow NCUA to reduce BlackRock’s role to only consultation.

This effort will deliver a complete solution that will focus on modernizing NCUA’s supervision tools and approaches, identifying material risks facing the covered credit unions, and tailoring resources to the material risks and virtual exams.

**Project timeline and schedule:**

This effort will require a new acquisition to procure tools, models, software and infrastructure to support the ONES internal Data Analytics and Stress Testing Capability. Work will continue based upon research, requirements and industry understanding that have already been developed by the ONES organization. In addition to this procurement, ONES will need to hire additional government full time staff to run in-house supervisory stress testing and regular risk
analytics using the internal system, perform quantitative analysis and modeling, and establish governance.

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<th>Budget ($ thousands):</th>
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<td>Future year operations and maintenance:</td>
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<td>$3,600</td>
<td>$3,600</td>
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**Business value and risk management:**
The ONES teams anticipates the following business values being obtained over the next five years:

- Heightened understanding of material risks (regular and ad-hoc sensitivity testing, reverse stress testing, focused risk testing)
- Ability to assess aggregate risk to the Share Insurance Fund
- Ability to analyze impact of policy developments (i.e., FASB’s (CECL))
- Support analytical risk assessments for non-ONES credit unions
- Facilitate industry-wide research on products, business strategies, and regions to reveal emerging risks

**Benchmark and peer comparison:**
ONES plans to validate its internal stress testing methodology with a third-party vendor.

**Results and technical benefits:**
The results of this effort will be for NCUA to perform data-driven supervision and to eliminate reliance on a third-party vendor to perform annual stress testing. The expectation is to reduce costs associated and to better understand the data and methodology with the stress testing. Furthermore, data-driven supervision is anticipated to reduce travel time to identify risks ahead of a field visit.
CAPITAL PROJECT: Human Resource Business Solution

**Project name:** Migrate to New Line of Business HR System – Program Management Support is currently referred to as HR IT Transition to Transformation (HRT2T)

**Strategic goal and objective link:**

*Goal: 3: Maximize organizational performance to enable mission success.*

1. *Attract, engage and retain a highly-skilled, diverse workforce and cultivate an inclusive environment.*
2. *Deliver an efficient organizational design supported by improved business processes and innovation.*

**Performance metric:**

Integrate and rollout General Service Administration’s (GSA’s) replacement to the Comprehensive Human Resources Integrated System (CHRIS) and the Electronic Time and Attendance System (ETAMS). GSA is migrating to externally-hosted human resources (HR) and Time and Attendance (T&A) systems, which are OPM- and OMB-approved private Shared Service Center contractor-managed shared services solutions. This 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 the NCUA’s existing HR system, CHRIS, and the T&A system, ETAMS, with externally-hosted HR and T&A systems. 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 enter 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 deployed June 4, 2018. Although GSA will support most transition costs, there will be associated costs related to support for the effort. For example, the NCUA had specific requirements resulting in additional configuration, customizations and other activities that needed to take place prior to deployment. In addition, there are costs associated for the Help Desk to be provided by IBM. At some point in the future, GSA will migrate to a new payroll system and integrate it with HRLinks and any other required systems.

The scope of the project is replacement of the NCUA’s current CHRIS, to include T&A and the integration to the PAR system.

The key deliverables will be the integration and rollout of the externally-hosted HR and T&A systems.
Project timeline and schedule*:
The integration of externally hosted HR and T&A systems is scheduled for deployment on June 4, 2018. There will be costs associated with project support through July 31, 2108.

Note: *Milestones are estimates and subject to change.

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<thead>
<tr>
<th>Budget ($ thousands)**</th>
<th>2018</th>
<th>2019</th>
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<th>2022</th>
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<tr>
<td>Acquisition cost:</td>
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<tr>
<td>Future year operations and maintenance:</td>
<td></td>
<td></td>
<td>$327***</td>
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Note: **Costs are estimates and subject to change.

Note: ***Costs are estimates. The remainder of the 2018 operations and maintenance (O&M) costs will be in OCFO and OHR budgets, and will continue in future years.

Business value and risk management:
By adopting externally-hosted HR and T&A systems, the 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 the NCUA’s decision to adopt externally-hosted HR and T&A systems is because many Federal agencies, the NCUA’s peers, are planning to adopt the new system.

Results and technical benefits:
With the integration and rollout of the externally-hosted HR and T&A systems, the NCUA anticipates that it will be able to more efficiently operate and maintain its HR system. Additionally, by providing expanded online, self-service, and T&A 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 externally hosted HR and T&A systems, the NCUA anticipates a lower total cost of ownership over managing its own HR and T&A systems.
CAPITAL PROJECT:  Enterprise Learning Management System Replacement

**Project name:** Learning Management System (LMS) Replacement – Program Management Support

**Strategic goal and objective link:**

*Goal 3: Maximize organizational performance to enable mission success.*

3.1 *Attract, engage and retain a highly-skilled, diverse workforce and cultivate an inclusive environment.*

3.2 *Deliver an efficient organizational design supported by improved business processes and innovation.*

**Performance metric:**

Conduct market research, initiate acquisition, create a project management plan, and execute production implementation of the new Learning Management System (LMS) in calendar year 2019.

**Project description, scope, and key deliverable:**

The Learn Center is a Learning Management System (LMS) that serves as the NCUA’s primary system for hosting and delivering eLearning courses to its employees. The Learn Center is currently nine years old and as such is restricted in its content delivery and management capabilities. Given the increase of eLearning courses being developed and purchased for deployment, the increase in regulatory training and reporting requirements, there is a growing need for users to have mobile access to training content. The NCUA must acquire and implement a next generation LMS to meet its expanding training requirements.

**Key deliverable:** The acquisition and implementation of a cost-effective, cloud-based solution that provides the NCUA with the full-range of eLearning functionality associated with a modern LMS.

**Project timeline and schedule:**

The key 2017/2018 project milestones are as follows:

- Requirements capture, market research, and solicitation package.
- Contract award for new LMS and implementing vendor.
- Implementation, testing and production deployment of the new LMS solution.

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<thead>
<tr>
<th>Budget ($ thousands):</th>
<th>2018</th>
<th>2019</th>
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<tr>
<td>Acquisition cost:</td>
<td>$250</td>
<td>$350</td>
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<tr>
<td>Future year operations and maintenance:</td>
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<td>$112</td>
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</table>
**Business value and risk management:**

By selecting a modern, feature-rich LMS, the NCUA will be able to provide its employees with required training more efficiently, increase users’ self-service options, and allow administrators to manage the system and course content more easily.

**System security risk reduction:** Security risk lessened with single-sign-on and username/password capabilities for internal and state users.

**Information security enhancement:** Integration of LMS with Active Directory to communicate contractor/state examiner information to ensure users who are inactive are not in the LMS.

**Benchmark and peer comparison:**

As a part of this initiative, the NCUA will actively research industry trends, technologies, and the available LMS solutions. In addition, the NCUA will consult with other federal agencies who have recently modernized or are planning to replace their LMS solutions to leverage their experiences and lessons learned.

**Results and technical benefits:**

Enhanced examiner utilization and accessibility driven by quality content, ease of use and system reliability.

Role-based interface: ability to view personalized pages by role (course administrator, manager, user, etc.).
- Supervisors can more easily view or manage employee learning; and
- Page views can be adapted to benefit the learner category (i.e. CORE/SME training track)

Automated IDP and SME training tracks: clearly defined training plans significantly streamlined review process.

Centralized content: course resources to include podcasts, recorded webinars and job aids.

Mobile functionality: for iPhone/tablet to access courses and learning history.

Federal reporting mandates: Adherence to federally-mandated reporting requirements.
- OPM requirement: requirement to track and report mission-specific training; and
- Enterprise Human Resources Information (EHRI): Integration of LMS with CHRIS to communicate data such as OPM’s EHRI and employee information,

Records management adherence:
- Government Form SF-182 to request external training;
- Enrollment rosters could be deleted; and
- Continuing Professional Education data could be captured appropriately
## CAPITAL PROJECT: Enterprise Laptop Refresh

<table>
<thead>
<tr>
<th>Project name:</th>
<th>Enterprise Laptop Refresh</th>
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### Strategic goal and objective link:

**Goal 3:** Maximize organizational performance to enable mission success.

3.2 Deliver an efficient organizational design supported by improved business processes and innovation.

### Performance metric:

Acquire the goods and services required to provide new laptops to all appropriate NCUA stakeholders before the end of October 2018.

### Project description, scope, and key deliverable:

The NCUA’s current workstations are all nearing the end of a three-year leasing agreement. In addition, these machines run on the Windows 7 operating system (OS), which goes out-of-support in early 2020. Consequently, the NCUA needs to replace its entire fleet of aging laptops with modern devices that run on the Windows 10 OS. The updated workstations and OS will provide staff with new functionality and improved security features.

The project scope includes: (1) the selection of new, standard laptop configurations; (2) image and compatibility testing; (3) device acquisition; and (4) the managed deployment of the new devices to end users. All stakeholders who use the NCUA-provided and supported laptops to perform their work will receive the new laptops.

The key deliverable will be upgraded laptops to all authorized recipients.

### Project timeline and schedule:

The key 2017 to 2018 project milestones are as follows:

- Requirements capture; market research; and an acquisition package.
- Contract award for new laptops and integration vendor.
- Image and compatibility testing; and new laptops to end users.

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<thead>
<tr>
<th>Budget ($ thousands):</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
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<th>2022</th>
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<tbody>
<tr>
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<td>$1,000</td>
<td>$2,035**</td>
<td>$1,100</td>
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<tr>
<td>Future year operations and maintenance:</td>
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*Compatibility and infrastructure issues delayed the project which required $651,000 in repurposed Capital funding from the Information Technology (IT) Infrastructure, Platform and Security Refresh project.

**The laptop refresh budget above assumes the devices will be acquired by way of a 3-year lease. Consequently, the refresh cycle is anticipated to begin again in 2021.
<table>
<thead>
<tr>
<th><strong>Business value and risk management:</strong></th>
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<tbody>
<tr>
<td>By replacing its aging workstations that run on an eight-year-old OS with new laptops that leverage improved hardware specifications and that run on the Windows 10 OS, the NCUA will enhance user productivity by way of improved boot and wake speeds and by increased mobile functionality. The updated workstations will lower IT administrative costs due to a decreased need for Service Desk support services. Previous studies demonstrated that the NCUA would likely reap a cost and performance benefit by leasing laptops instead of buying them. By including hardware and OS support into the lease agreement contract, and following a three-year replacement lifecycle, the NCUA will be able to keep pace with changes in workstation and OS technology in a cost effective manner.</td>
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<thead>
<tr>
<th><strong>Benchmark and peer comparison:</strong></th>
</tr>
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<tbody>
<tr>
<td>The NCUA business requirements will be compared to device performance benchmarks to determine the necessary standard workstation configurations. The NCUA will follow the Office of Management and Budget’s (OMB’s) Category Management Policy guidance pertaining to the acquisition of desktops and laptops as applicable.</td>
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<table>
<thead>
<tr>
<th><strong>Results and technical benefits:</strong></th>
</tr>
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<tbody>
<tr>
<td>The overarching benefit of the Enterprise Laptop Refresh project is that it will provide the NCUA stakeholders with a more efficient, mobile friendly, and secure tool to help them better perform their jobs at a reasonable cost.</td>
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</table>
### CAPITAL PROJECT: Information Technology Infrastructure, Platform and Security Refresh

<table>
<thead>
<tr>
<th><strong>Project name:</strong></th>
<th>Information Technology (IT) Infrastructure, Platform and Security Refresh</th>
</tr>
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#### Strategic goal and objective link:

*Goal 3: Maximize organizational performance to enable mission success.*

- 3.2 Deliver an efficient organizational design supported by improved business processes and innovation.
- 3.3 Ensure sound corporate governance.

#### Performance metric:


#### Project description, scope, and key deliverable:

OCIO will refresh and/or replace the following Infrastructure, Platform and Security technology to achieve the cited performance metrics:

- a. **Infrastructure and Platform** with an emphasis on Co-Location (COLO) and Regional routers, switches, virtual servers, wireless, virtual privacy network end-of-life and end-of-service components; $651,000 repurposed for Laptop Refresh efforts and will be requested as part of 2019 budget planning to put original project back on track.
- b. **Voice over Internet Protocol (VoIP) (deferred until 1st QTR 2019)** to replace the end-of-life infrastructure, platform and endpoints fully to ensure voice communications capabilities via the a FedRAMP’d cloud solution;
- c. **Disaster Recovery (deferred until 1st QTR 2019)** infrastructure and platform to align with the COLO for continuity of operations and backup and recovery capabilities for Mission Essential Function (MEF) and Essential Supporting Activity (ESA) resilience and security;
- d. **(2019) Security Event and Incident Management (SEIM)** to optimize event collection, monitoring and response capabilities for InfoSec and IT Operations; and
- e. **(2019) Patch & Vulnerability Management** upgrade to adhere to the DHS Continuous Diagnostics and Mitigation (CDM) Federal requirements for effective IT Service Management.

#### Project timeline and schedule:

- Quarter 4 2018 – Infrastructure and Platform COLO/Regions
- Quarter 1 2019 – VoIP
- Quarter 1 2019 – Disaster Recovery site planning and implementation
- Quarter 1 2019 – Security Event and Incident Management (SEIM)
### Quarter 1 2019 – Patch & Vulnerability Management

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<thead>
<tr>
<th>Budget ($ thousands):</th>
<th>2018</th>
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<th>2021</th>
<th>2022</th>
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<td>$720</td>
<td>$780</td>
<td>$1,280</td>
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**Business value and risk management:** The collective Infrastructure, Platform and Security Infrastructure Project ensures that the previously deferred risks are being addressed prior to system failure. This equates to the value of ensuring our business continuity as identified MEFs and ESAs rely heavily on the availability and stability of these underlined systems.

**Benchmark and peer comparison:** The NCUA has baselined its Information Security and Information Technology Operations environment leveraging both the NIST Baldridge Assessment and the SEI RMM. We have also benchmarked against other financial regulatory agencies via the OMB/DHS Risk Assessment in response to the President’s Executive Order for Cybersecurity.

**Results and technical benefits:** Establish the convergence of operational risk and resilience management via operational and technical controls/solutions that ensure business continuity. In addition to ensuring the existing business continuity, these activities ensure the appropriate preparation for future modernization and organizational changes.
### Project name:
Agency Realignment – Application/Website, Infrastructure, Network, Administration Changes and Program Management Support

### Strategic goal and objective link:

**Goal 1: Ensure a Safe and Sound Credit Union System.**

1.1 Provide high-quality and efficient supervision.

**Goal 3: Maximize organizational performance to enable mission success.**

3.2 Deliver an efficient organizational design supported by improved business processes and innovation.

### Performance metric:
Successful modifications to and uninterrupted operation of affected applications and databases (e.g. CU Online, AIRES, CUSO Registry, SharePoint, SSRS Reports, MIS, etc.)

### Project description, scope, and key deliverable:
The purpose of this project is to modify the NCUA’s systems and websites to support the NCUA Reorganization and Modernization Plan released on July 29, 2017. This plan includes consolidation of the NCUA Central Offices and Regions, which will require modifications to:

- Business Systems – Applications and associated databases must be updated to support the new agency structure, while allowing for historical reporting based on the old structure.
- Agency Websites – The primary public website (NCUA.gov) and Intranet websites (NCUA Central) must be updated to support and reflect the new agency structure.
- Logical and Physical Provisioning – Access, ports, etc.
- IT Infrastructure and Platforms - Equipment must be removed, repurposed, or decommissioned.

The key deliverable is the production rollout of the modified systems, databases, websites, access points and ports. This includes removed, repurposed and decommissioned IT infrastructure and ports.

To provide overall management of the year-long effort, this project requires a dedicated project manager.

### Project timeline and schedule:
The current target implementation of the modifications associated with the Central Office realignment is Q4 2018. The current target timeline for the implementation associated with the Regional Office realignment is Q2 2019. Final implementation schedules are dependent on Central Office and Regional Office realignment business requirements.

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<th>Budget ($ thousands):</th>
<th>2018</th>
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<tr>
<td>Acquisition cost:</td>
<td>$1,250</td>
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</table>
Applications & Databases - $500K
Infrastructure, Platforms & Provisioning - $500K
Project Management - $250K

Future year operations and maintenance: $0 $0 $0 $0

**Business value and risk management:** This investment will support the NCUA’s efforts to achieve greater efficiency, responsiveness and cost-effectiveness through the consolidation of offices and restructuring of staff. By modifying the systems, sites and infrastructure that the NCUA relies on in support of the realignment, this investment will enable the NCUA to realize the efficiencies promised by the NCUA Reorganization and Modernization Plan.

The seamless implementation of the modifications to the NCUA’s systems will reduce the risk to the NCUA’s day-to-day operations. Project risks will be managed primarily through intensive user acceptance testing through which Central Office and Regional users will validate the changes made to the systems and sites.

**Benchmark and peer comparison:** Not Applicable

**Results and technical benefits:**

With the production rollout of the modified systems, sites and infrastructure, the agency will continue to operate without interruption. Accordingly, the NCUA will be able to realize the cost savings and efficiencies from the organizational realignment. Additionally, effected equipment will be appropriately removed, repurposed and decommissioned to ensure security of the NCUA information.
**CAPITAL PROJECT: Agency Web Design and Platform Modernization**

<table>
<thead>
<tr>
<th>Project name:</th>
<th>NCUA.gov Re-Design and Platform Modernization</th>
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**Strategic goal and objective link:**

Goal 1: Ensure a safe and sound credit union system.
- 1.2 Provide high-quality and efficient supervision.

Goal 2: Provide a regulatory framework that is transparent, efficient and improves consumer access.
- 2.1 Deliver an effective and transparent regulatory framework.
- 2.2 Enforce federal consumer financial protection laws and regulations in federal credit unions.
- 2.3 Facilitate access to federally-insured credit union financial services.

Goal 3: Maximize organizational performance to enable mission success.
- 3.2 Deliver an efficient organizational design supported by improved business processes and innovation.

**Performance metric:** Production rollout of a redesigned and externally hosted NCUA.gov with improved usability, searchability and modern design by implementing a new content management system and new features.

**Project description, scope, and key deliverable:**

The primary goal of the NCUA.gov redesign project is to develop a more intuitive, functional and modern agency website, which will enhance the NCUA’s ability to communicate with its stakeholders and execute its mission. Additionally, this project seeks to improve the efficiency with which it manages its web assets by implementing a new content management system and off-site hosting. The key elements and associated deliverables of this project are:

- Stakeholder sessions and surveys
- Analytics driven recommendations
- User interface (UI) design and web design guidelines
- Revised information architecture
- New search capability
- Interactive features (e.g. Emergency alert)
- New content management system and associated training
- Off-site hosting
- Plan for future updates and improvements

Project management and change management support will be required to coordinate the development and delivery of the site and to prepare and train stakeholders on the new site and content management system. It is anticipated that the existing content on NCUA.gov will largely be copied to the new site and creation of new content will be limited.
**Project timeline and schedule:**

The target production rollout of the redesigned NCUA.gov site on a new content management system is Q4 2018.

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<th><strong>Budget ($ thousands):</strong></th>
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<td>Future year operations and maintenance:</td>
<td>$240</td>
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2018 acquisition cost assumes the transition to a modern content management system and is based upon known requirements and current priorities.

**Business value and risk management:**

The NCUA relies on NCUA.gov as one of its primary communication channels with credit unions, industry, other government agencies, and the public. Making content easier to find will improve the NCUA’s ability to execute its mission. Not only do 3rd parties rely on NCUA.gov, but the NCUA employees depend heavily on NCUA.gov for the latest information on topics from regulatory announcements to Board decisions. Additionally, as the website reflects the NCUA’s brand, this project will help the NCUA operate effectively among its stakeholder community. The implementation of a more modern content management system that is optimized for public-facing websites will enable the NCUA to develop new content (in particular mobile content) and maintain its sites more cost effectively. The NCUA will benefit from native search engine optimization (SEO), improved workflow support, and support of emerging technologies for the web. Through off-site hosting, the NCUA will be able to take advantage of the economies and improved uptime / performance that off-site hosting provides. The NCUA will benefit from specialized support staff with expertise for public-facing websites, protection from online vulnerabilities and hacker activity, reduce risk/liability to, less compliance and administration overhead, and 24/7 on-call support by top experts in the field. Moving the public websites to a hosting provider will resolve workload requirements and will provide improved website hosting arrangements and services. Furthermore, it will permit the NCUA’s IT staff to focus on primary mission responsibilities and increase efficiency.

**Benchmark and peer comparison:**

The NCUA is actively assessing the website design, management and hosting approaches used by partner FIRREA agencies and will use insights and lessons learned from these agencies to influence the NCUA.gov redesign. For example, the NCUA has learned the federal agencies are increasingly moving to content management systems designed specifically for public-facing websites vs. content management systems that serve both intranet and internet sites.
Results and technical benefits:
The NCUA anticipates rolling out the redesigned NCUA.gov site on a new content management system in an off-site hosting environment. The NCUA expects greater efficiency with development of new content and management of its sites. Additionally, the agency forecasts that off-site hosting will improve uptime, performance and security.
**CAPITAL PROJECT: Credit and Deposit Analytic Solution**

**Project name:** Credit and Deposit Analytic Solution (CDAS)

**Strategic goal and objective link:**

**Goal 1: Ensure a Safe and Sound Credit Union System.**

1.1 Maintain a strong Share Insurance Fund.

1.2 Provide high-quality and efficient supervision.

**Goal 3: Maximize organizational performance to enable mission success.**

3.2 Deliver an efficient organizational design supported by improved business processes and innovation.

**Performance metric:**

Initiate acquisition and develop an actionable roadmap and plan for modernizing the 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 place key examination and supervision capabilities into a streamlined toolset, allowing examiners and supervisors to be more efficient, consistent and effective. As part of replacing AIRES, the Enterprise Solution Modernization (ESM) team conducted market research to find a solution for a complete replacement of AIRES. Through market research, product demonstrations, and discussions with stakeholders, the ESM team determined the audit management solutions did not offer the required out of the box credit portfolio analytics. Therefore, in collaboration with the NCUA stakeholders, the ESM team decided to procure a service or solution, separate from the AIRES replacement acquisition, to replace and improve current analytic tools.

The Business Innovation team has defined “Credit and Deposit Analytics” as an entire suite of information and reports derived from member loan and share-level data provided by credit unions including:

- Portfolio segmentation, composition, and performance;
- Collateral valuation;
- Trends; and
- Data integration.

It includes shared services, desktop solutions, and cloud services (e.g., Software as a Service).

The key deliverable is to obtain a cost-effective, secure, and reliable credit and deposit analytic solution to enable the NCUA business units to identify financial, operational, credit, and strategic risks in credit unions and accomplish mission objectives.
**Project timeline and schedule**:  
The key project milestones are as follows:  
- 2017 – Release procurement package to industry and begin executing against the acquisition strategy.  
- 2018 – Procure, configure and implement the analytic solution.  

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

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<th>Budget ($ thousands)</th>
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<td>Future year operations and maintenance</td>
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**Business value and risk management:**  
The NCUA plans to leverage the expertise and methodology of portfolio analytic experts to provide proven analytic capabilities resulting in critical examination information to assess risk in a credit union and to the National Credit Union Share Insurance Fund. Also essential is the ability to affect timely provisioning and delivery of these services to the individual end users within the NCUA organization.

The NCUA lacks a standard set of portfolio analysis reports from available data and a scalable, easy to use, analytic tool for all examiners. AIRES provides loan and share queries with limited custom query functions from individual share and loan lists. Due to these limitations, the NCUA examiners spend examination time running custom queries in other applications, creating pivot tables, and aggregating and analyzing raw data. In some cases, the volume of loan and share level data cannot be imported into AIRES due to the large file size and it can take substantial time for Microsoft Excel to perform pivot table functions. This solution will help eliminate examiner-developed spreadsheets and encourage consistency through the use of a standard method of assessing loan and share data across the NCUA examinations.

Additionally, the NCUA would like to integrate third-party data that is available from the contractor and/or the NCUA into the analytic solution for a more comprehensive analysis of risk and trends. This may include, but is not limited to, economic, credit bureau, credit union Call Report data, etc. The strategic plan and business imperatives, combined with technical obsolescence, system maintenance, and consolidation needs, serve as the guiding objectives for the project.

**Benchmark and peer comparison:**
As part of this initiative, the NCUA is actively communicating with financial regulatory agencies and conducting market research (including a Request for Information of the Federal Business Opportunities website) with potential vendors.

**Results and technical benefits:**

As the existing systems are replaced by the new system, technical benefits will be realized and reported. The NCUA envisions users utilizing the solution independently of our audit management solution to compile data, generate reports, and create custom queries. As more loan and share data is gathered from credit unions and the NCUA selects the AIRES replacement, ideally, CDAS would integrate with that platform and the reports could be viewed within our audit management solution.

It is envisioned that these services will capture the shared, on-demand capabilities evident in cloud technology. This technology enables on-demand network access to a shared pool of configurable computing resources (networks, servers, storage, applications, and services) and release with little management effort.
**CAPITAL PROJECT: Examination and Supervision Solution**

**Project name:** Automated Integrated Regulatory Examination System (AIRES) Redesign is currently referred to as the Examination and Supervision Solution (ESS) and Infrastructure Hosting (IH).

**Strategic goal and objective link:**

*Goal 1: Ensure a Safe and Sound Credit Union System.*
  - 1.1 Maintain a strong Share Insurance Fund.
  - 1.2 Provide high-quality and efficient supervision.

*Goal 3: Maximize organizational performance to enable mission success.*
  - 3.2 Deliver an efficient organizational design supported by improved business processes and innovation.
  - 3.3 Ensure sound corporate governance.

**Performance metric:**

Award the ESS & Infrastructure Hosting (ESS&IH) contract and approve a baseline schedule no later than 45 days after contract award.

The NCUA expects to leverage the contractor proposed specific measures that will be accepted as part of the Quality Assurance Surveillance Plan (QASP) upon award of the contract. Therefore, more specific metrics will be provided during the 2018 mid-year update for this effort.

**Project description, scope, and key deliverable:** 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.

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 project represents the first five iterations of the Enterprise Solutions Modernization (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 Central User Interface, which will enable the secure transfer of data between the NCUA and third parties.

The key deliverable is a new COTS examination solution to replace the legacy system, AIRES, deployment of a Central User Interface and establishment of the technical foundation.

**Project timeline and schedule:**

The key project milestones are as follows:

- **2018 – Award Contract; Establish Technical Foundation**
• 2019 – Deploy Central User Interface; Deploy Examination & Supervision Solution for select user groups

**Note:** Project timelines are estimates and subject to change. This project receives multi-year funding; therefore, prior-year funding supports the contract to be awarded in 2018.

<table>
<thead>
<tr>
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<th>2019</th>
<th>2020</th>
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**Note:** This project receives multi-year funding; therefore, prior-year funding is available to support the contract to be awarded in 2018.

* This amount may change, O&M for 2022 and beyond is being researched

**Business value and risk management:**

With this investment, the NCUA will be able to increase the productivity and quality of its credit union examination and supervision process, which are key mission activities. After careful review by the 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 overarching key business value drivers are:

- **Process Efficiency and Scalability** – To enable the 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 adjust to new regulatory processes, demands, and priorities rapidly to an increasingly sophisticated credit union industry;
- **Improved Analytics** – To enhance the ability to identify and evaluate risk in credit unions effectively 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 non-financial 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, system maintenance and consolidation needs, serve as the guiding objectives for the ESS project.
**Benchmark and peer comparison:**

The NCUA initiated market research for ESS requirements in June 2015 and completed it in March 2017. A Market Research report was provided to the Office of the Chief Financial Officer (OCFO) as part of the procurement package submitted on May 19, 2017. Market research has revealed that COTS solutions and fifth generation tools are configurable and can meet at least 80 percent of ESS requirements. Hosted solutions offer scalability to rapidly respond to changes, such as storage or processing capacity. Many hosting facilities have robust security safeguards, controls, and measures in place to protect sensitive information. The ESS project team also worked with the Office of Minority and Women Inclusion (OMWI) to identify minority and/or woman-owned businesses capable of meeting the ESS requirements, which was included in the Market Research report.

Moreover, the ESS team conducted benchmarking sessions with select COTS customers and other Federal regulatory agencies to gather lessons learned. The team also met with two well-known private sector companies regarding their COTS implementation. This information was also included in the Market Research report.

As a part of this initiative, the NCUA continues to communicate with financial regulatory agencies which are or planning to modernize their examination systems.

**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 the 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 the NCUA’s identity and access management solutions 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-premises business applications and infrastructure services;
- Bi-directional, database synchronization between cloud and on-premises 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: Enterprise Video Conference Collaboration Services and Upgrades

**Project name:** Enterprise Video Conference & Collaboration Services and Conference Room Upgrades

**Strategic goal and objective link:**

*Goal 3: Maximize organizational performance to enable mission success.*

1. **3.1 Attract, engage and retain a highly-skilled, diverse workforce and cultivate an inclusive environment.**
2. **3.2 Deliver an efficient organizational design supported by improved business processes and innovation.**

**Performance metric:**

For the conference room equipment upgrade, performance will be monitored by tracking the incident tickets and the frequency of vendor intervention related to meeting support. A customer satisfaction survey should be used as well. The online collaboration will be measured both by the usage statistics for the NCUA-sanctioned and supported solution as well as the decreased use of current solutions that are not supported.

**Project description, scope, and key deliverable:**

This effort is to continue the analysis of alternatives initiated in 2017 and to formalize the output, such that a complete set of solutions can be implemented to upgrade conference collaboration tools (e.g. video conferencing). The upgraded services will also provide a standardized way to collaborate with the non-NCUA entities (e.g. web conferencing).

**Project timeline and schedule:**

The Analysis of Alternatives should be complete in 2018 allowing a complete project including timelines and costs to be presented for consideration in 2019.

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<th>Budget ($ thousands):</th>
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<td>Future year operations and maintenance:</td>
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**Business value and risk management:**

The technologies supporting the current conference rooms at the NCUA are outdated and in need of an upgrade. The costs associated with maintaining the current systems will increase over time and the value gained by using newer technologies will continue to be unrealized. In addition, there is an increased risk associated with the ad hoc purchase and use of collaboration tools. Both ease of support and economies of scale are foregone by not having a remotely accessible, enterprise-wide solution for collaboration and online conferencing.
### Benchmark and peer comparison:
OCIO will leverage peer relationship and industry research experts to identify best-fit solutions for the NCUA’s needs. Analyzing the current use of existing approved tools such as Lync and others that are in use but not supported, such as GoTo Meeting, will allow a clear understanding of the current needs of the NCUA Central Office and Regional staff, State Examiners and Credit Unions. Physical videoconferencing solutions will be assessed using research, reaching out to peer agencies and benchmarking/piloting potential solutions.

### Results and technical benefits:
The results of this Alternatives Analysis will be a project(s) that improves the collaboration aspects of the NCUA conference rooms and addresses the need to collaborate online with people and institutions that are outside of the NCUA network. By having a known solution that is supported centrally, there will be both cost savings and risk avoidance by ensuring that best practices are followed when collaborating outside of the NCUA’s secure network.
NCUA CAPITAL PROJECT

Project name: Region IV/AMAC – Facilities Operations Contract

Strategic goal and objective link:

Goal 3: Maximize organizational performance to enable mission success

3.2 Deliver an efficient organizational design supported by improved business processes and innovation.

- To maintain current facility infrastructure to include life cycle and replacement of critical components.
- To aid the upgrade of obsolete and outdated facility infrastructure.
- To aid the installation of facility infrastructure that will meet all current codes for life safety, accessibility, security, and increased energy and operational efficiency.
- To introduce cost saving measures by properly maintaining and operating all facility systems and functions.
- To improve services and lower costs in real estate operations, through a professional facilities management provider and improved care and maintenance of the NCUA facilities.
- To drive best practices that can reduce costs and improve service quality.

Performance metric:

Improve facility operations, while maintaining building value and preventing major system catastrophic failures. The specific performance metrics are:

- Schedule compliance of greater than 95 percent.
- Preventive maintenance (PM) compliance, greater than 99 percent.
- Percent planned work, 80 percent.
- Customer satisfaction, greater than 95 percent.
- Response time to trouble calls, 60 to 90 minutes.

Project description, scope, and key deliverable:

The contractor will provide a facility condition assessment to determine the remaining life span of the building components. Based on the assessment, a maintenance plan will be developed that will allow for the equipment to continue to operate and anticipate the replacement schedule for many of the outdated components.

Project timeline and schedule: Five years

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<th>Budget ($ thousands):</th>
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<td>Future year operations and maintenance:</td>
<td>$140</td>
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### Business value and risk management:

This is a capital improvement that is required in order for the facility to continue normal operation, and it is directly associated with the life cycle replacement required for critical infrastructure. Due to the age of the facility, the building components are starting to show signs of aging and inefficient operation. There has never been a proactive maintenance and operations plan for the facility and this has resulted in outdated, obsolete and inefficient equipment. Aging equipment is a large contributor to less sustainable facilities and higher operating cost. Well maintained and modernized equipment will bring considerable savings.

### Benchmark and peer comparison:

The central office facilities operation contract for approximately 180,000 GSF facility is approximately $1 million per year. This facility is approximately 30,000 GSF and the anticipated cost is around $100,000. The smaller facility does not have the complex and large industrial cooling equipment that is the main cost driver.

### Results and technical benefits:

A well maintained facility will reduce the risk of unplanned cost for repairs and the down time it will take for the performance of these repairs. Additionally it will allow to plan for the replacement of major building components.
### NCUA CAPITAL PROJECT

**Project name:** Central Office Facilities – Heating, ventilating, and air conditioning (HVAC) Replacement

**Strategic goal and objective link:**

*Goal 3: Maximize organizational performance to enable mission success.*

3.2 *Deliver an efficient organizational design supported by improved business processes and innovation.*

- To 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 introduce cost saving measures by designing and installing more energy efficient systems, while maintaining comfort standards.

**Performance metric:**

Annual Energy cost reduction of at least 15 percent.

**Project description, scope, and key deliverable:**

Replace all HVAC systems in the central office. To include all cooling towers, air handlers, boilers and HVAC components. The current HVAC system is original to the facility, 24 years old, and obsolete; and some component parts are no longer available. In the last 23 years, technology and codes governing HVAC systems have dramatically changed; a modern reliable HVAC system will not only increase energy and operational efficiency; but will allow better comfort factors and more efficient temperature control. A new HVAC system will 1) be better for the environment, 2) reduce the NCUA downtime from emergency replacements, 3) maintain a more comfortable environment for facility users, 4) keep the RTU technologically current with more efficient units, and 5) keep up with the federal mandate for more environmentally friendly refrigerants.

**Project timeline and schedule:** 16 months

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<tr>
<th>Budget ($ thousands):</th>
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<td>Future year operations and maintenance:</td>
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**Business value and risk management:**
This is a capital improvement that is required in order for the facility to continue normal HVAC 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 HVAC 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 improve the performance and flexibility of office space dramatically 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.

**Benchmark and peer comparison:**

The replacement will improve the building efficiency by an estimated 15 percent, which exceeds the 2011 Energy Code that mandates that for existing nonresidential buildings 10,000 square feet and larger. An energy efficiency audit has to be performed once every five years identifying specific cost-effective measures that would save energy and the reduction of energy consumption of five percent by the introduction of more efficient systems.

**Results and technical benefits:**

HVAC operating costs are estimated to be approximately 70 percent of the NCUA’s facility energy operating cost or approximately $250,000 annually. New energy efficient HVAC equipment can represent up to 20 percent savings compared to old equipment. Not only are these savings represented on energy usage but also in comfort and temperature management, as equipment will operate for shorter periods of time to reach desired temperatures compared to the old equipment.
Project name: Home Mortgage Disclosure Act System Development (HMDA) cost sharing

Strategic goal and objective link:

Goal 2: Provide a regulatory framework that is transparent, efficient and improves consumer access.

2.2 Enforce federal consumer financial protection 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. The NCUA enforces compliance with HMDA requirements in all federally insured credit unions. Historically, the 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 new HMDA Platform was fully implemented on 1/1/2018. Financial institutions submit their annual HMDA data through this new HMDA Platform. Financial regulators use this data to identify possible discriminatory lending patterns. Reports are generated from the HMDA Platform on both an individual and aggregate financial institution level. The HMDA Platform represents an improvement over the prior system, it streamlines the HMDA submission process, and reduces burden on HMDA filers.

### Budgets ($ thousands)

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<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
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<tr>
<td>Acquisition cost:</td>
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<tr>
<td>Future year operations and maintenance:</td>
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**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 it continues development on the HMDA collection, processing and reporting system, it 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 among all of the FFIEC agencies and HUD, as this new system 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 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 prior to submission that eliminated back and forth or scanning/emailing.

Operational drivers include:

1) Cost avoidance: Develop ongoing staffing structure changes for 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) Benefits to the public: improvements to timeliness, accuracy, utility and availability of data to allow for quicker and data-driven decision-making and reporting.