

A Report by a Panel of the
NATIONAL ACADEMY OF PUBLIC ADMINISTRATION
for the U.S. Department of Agriculture National Finance Center

Stabilizing and Modernizing the National Finance Center's Operations in Service to the Federal Workforce and the Nation



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July 2023

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The views expressed in this report are those of the Panel. They do not necessarily reflect the views of the Academy as an institution.

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July 2023

Printed in the United States of America

Academy Project Number: 22831

Cover Photo Source: NFC Training and Communications Branch (TCB), Web and Graphics Section

About the Academy

The National Academy of Public Administration is an independent, nonprofit, and nonpartisan organization established in 1967 and chartered by Congress in 1984. It provides expert advice to government leaders in building more effective, efficient, accountable, and transparent organizations. To carry out this mission, the Academy draws on the knowledge and experience of its over 950 Fellows—including former cabinet officers, Members of Congress, governors, mayors, and state legislators, as well as prominent scholars, career public administrators, and nonprofit and business executives. The Academy helps public institutions address their most critical governance and management challenges through in-depth studies and analyses, advisory services and technical assistance, congressional testimony, forums and conferences, and online stakeholder engagement. Learn more about the Academy and its work at www.NAPAwash.org.

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Foreword

The National Finance Center (NFC) is a federal human resources management shared service provider Services housed within the U.S. Department of Agriculture (USDA). It has provided the essential services of payroll, human resources, and retirement to the federal government, regardless of natural disasters, government shutdowns, and other challenges for the past fifty years. For the last twenty of those years, NFC has operated as one of five shared service centers in OPM's Human Resources Line of Business, an initiative to create and centralize governmentwide human resources solutions. The New Orleans-based NFC now serves 650,000 federal employees spread across 170 customer agencies.

In September 2022, NFC contracted with the National Academy of Public Administration (the Academy) to conduct an analysis of NFC's mission and an assessment of its organizational capacity to meet its mission requirements. The task was to assess NFC's governance and finance structures, supporting technology systems and processes, internal organization and infrastructure, stakeholder engagement, and the costs associated with modernization efforts. Like numerous other agencies that deliver computer-based services in the federal government, NFC has been and continues to be challenged to keep up with system modernization needs.

As a congressionally chartered, independent, nonpartisan, and nonprofit organization with nearly one thousand elected Fellows, the Academy has a unique ability to bring nationally recognized public administration experts together to help government agencies address challenges. For this study, a four-member Panel of Academy Fellows with expertise in operational assessment, information technology, financial management, customer service and stakeholder relations, and strategic foresight was established. I greatly appreciate the Panel members' valuable guidance and insights, which helped inform the Study Team's research and analysis throughout this study.

I also appreciate the engagement and candor of USDA and NFC leaders and employees from all levels as the team developed this report and applaud their initiation of reforms to address challenges while the assessment was still underway. Further, I thank NFC customers, personnel from comparable shared service providers, and subject matter experts for sharing their time and knowledge to inform the Study Team's perspectives on best practices in shared services, customer experience, and information technology.

I trust that the research and recommendations in this report will help NFC as it moves forward to stabilize and modernize its functions so that it can better execute its mission and serve the federal government. NFC and other federal shared service providers play a large role in maintaining the day-to-day functions of the federal government and delivering essential services. The recommendations provided in this report can be a starting point for a broader discussion around support for, and investment in, federal shared services.

Teresa W. Gerton
President and Chief Executive Officer
National Academy of Public Administration

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Acronyms and Abbreviations

Acronym or Abbreviation	Definition
Academy	National Academy of Public Administration
BCA	Business Case Analysis
COBOL	Common Business-Oriented Language
CX	Customer Experience
DPRS	Direct Premium Remittance System
EX	Employee Experience
FEVS	Federal Employee Viewpoint Survey
FFS	Federal Financial System
FTE	Full-Time Equivalent
GAO	Government Accountability Office
GESD	Government Employees Services Division
HR	Human Resources
IBC	Interior Business Center
IT	Information Technology
NCC	NFC Contact Center
NFC	National Finance Center
OCFO	Office of the Chief Financial Officer
OCIO	Office of the Chief Information Officer
OMB	Office of Management and Budget

OPM	Office of Personnel Management
POL	Position Organization Listing
PPS	Payroll and Personnel System
ROM	Rough Order of Magnitude
T&A	Time and Attendance
TMF	Technology Modernization Fund
USDA	US Department of Agriculture
WCF	Working Capital Fund

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Executive Summary

The National Finance Center (NFC) is a shared service provider of human resources management services that reports to the Office of the Chief Financial Officer (OCFO) of the U.S. Department of Agriculture (USDA). Established fifty years ago to serve the needs of agencies and organizations within USDA, NFC's customer base has now grown to include more than 170 federal employers in all three branches of the government. NFC has expanded its suite of systems and services over the years and is the largest civilian payroll service provider for the federal government.

NFC's devoted staff has a remarkable record of accomplishment and resilience, having never in its history missed a payroll despite significant

NFC's future is at risk without prompt action.

challenges outside of its control. NFC maintained operations through Hurricane Katrina's devastating impact on its New Orleans headquarters in August 2005, a tornado in 2017 that destroyed NFC's building, the COVID-19 pandemic starting in 2020, the catastrophic Hurricane Ida in 2021, and multiple government shutdowns.

NFC faces other challenges beyond these extraordinary physical threats to its operations. For several years NFC has not received the attention and support it needs to successfully fulfill its vital role. NFC's effectiveness has been compromised by inadequate investment in its people (leadership and staff), technology, physical facilities, and financial support. NFC's success depends on strong relationships with a broad range of stakeholders, including other components of USDA (its "parent organization"), customers, OMB, and the congressional delegation of Louisiana, to name a few. Unfortunately, these relationships have been allowed to deteriorate over time. Current NFC leaders are working to rebuild relationships and trust with all stakeholders so that NFC can move forward to meet current and future challenges.

NFC's challenges have only increased over the half century that it has been in business. The nature of HR shared services has transformed, as have the requirements and challenges of the IT systems that are the heart of NFC's operations. NFC's leaders, with the active support of USDA, now need to take strategic, determined action to catch up and then keep pace with these developments.

NFC's future is at risk without prompt action. Should NFC fail, the consequences would be felt immediately by the hundreds of thousands of federal employees working for organizations like the Department of Homeland Security, Department of Justice, and NFC's other approximately 170 clients. It is unthinkable that the US government could find itself in a position where it could not pay a sizeable portion of the federal workforce—but it could happen, at least in the short term. No other organization currently exists that can readily absorb NFC's customers, each with their own specialized and tailored procedures and requirements. Transitioning to a different provider would likely be a costly, complex, and time-consuming process for customers, even if there were ready options available. Therefore, stabilizing NFC to safeguard its ability to continue to provide services is an urgent priority.

To that end, NFC has recently established a theme of "Stabilize, Modernize, and Grow" for its next five years and a goal that its plans, actions, and communications will align with and support this

theme. NFC states that its new vision is “to evolve from a reliable payroll service provider to an innovative, leading-edge organization that brings value-added human capital solutions and payroll services that are customer-centric, reliable, and modern.”

The Academy’s study finds that to achieve this vision, NFC’s leaders will need to take immediate and sustained action in the following areas:

- Customer experience. NFC must improve the experience of its customers, some of which are notably dissatisfied with important aspects of the service they have been receiving. Poor service is costly for customers; among other things, customers must devote their own staff hours to complex and time-consuming processes and, in some cases, to maintaining backup systems to manually document their transactions and activities. Some customers interviewed even indicated interest in transitioning to another service provider, if they could.
- Employee experience. NFC also must address the challenges facing its workforce, including low morale, overwork, and poor work-life balance. NFC’s employees have shown themselves to be incredibly dedicated to the organization and its customers, but a combination of challenges—lack of steady leadership, decreased staffing levels, loss of institutional knowledge, antiquated systems, bureaucratic processes, retirement eligibility of many staff, and deficient workspaces—have affected employee outlook, sometimes also making it harder to effectively serve customers.
- Information technology. NFC’s IT systems, including its mainframe, are in need of modernization. NFC’s antiquated IT systems and inefficient manual processes have degraded customer service, impeded efficiency, demoralized the workforce; increased the potential for errors, and created a rising risk of a service impairment, disruption, or possible cyber event. Unintegrated systems require customers to take multiple steps to complete a single action. Unautomated and paper-based internal management processes make NFC’s operations sluggish and inefficient and directly impair employees’ ability to serve customers. NFC’s mainframe-based system for processing payroll and other personnel operations requires immediate stabilization and documentation to reduce the risk of failure and improve functionality. NFC’s shortage of technical staff expertise, loss of institutional knowledge, and codebase of complex, unstructured, and poorly documented “spaghetti code,” make NFC’s systems vulnerable and difficult to change or maintain. Like other federal agencies that rely on legacy mainframe systems, NFC must work towards a long-term solution involving the eventual transition from a COBOL-based mainframe system.
- Funding. NFC’s current funding structure and practices have limited the flow of the financial resources it needs and contributed to the deterioration of its systems. Appropriations rules and practical considerations together constrain the amount of fees NFC can charge its customers, who have their own budget constraints. USDA offices are themselves customers, and while NFC’s service to its internal customers is deteriorating in part from lack of funds, it still generally receives neither appropriations from Congress nor dedicated financial support from USDA. Resolving funding requirements will be essential for accomplishing longer-term

IT objectives and will require active support from USDA and other parts of government, likely including Congress.

Achieving success will be both a marathon and a sprint for NFC. While immediate action is needed to stabilize the organization, NFC's ultimate success will depend on an organizational transformation. This multiyear undertaking requires an agreed-upon vision, stakeholder engagement, funding, and effective and efficient IT systems and business processes. NFC's leadership team must execute careful planning to simultaneously make progress in all of these areas and institutionalize transformational change. Thus, NFC's long-term success depends on the following:

- Leadership. NFC's current leadership structure is not appropriately sized or organized to deal with the scope of the change that is needed. It must be strengthened and expanded to successfully meet NFC's challenges while maintaining operations. Specifically, the leadership team must grow to include individuals responsible for supporting the NFC Director in the areas of transformation, customer and employee experience, and IT modernization to enable NFC to both address immediate needs and plan for its future.
- Short-term plan for immediate action. The members of the leadership team must identify and agree on the most urgent challenges and develop a written plan that defines the problems, identifies solutions, specifies responsibilities, and establishes goals and timetables for getting the work done.
- Vision for NFC's future and long-term plan for implementing it. Current documents indicate that, after stabilizing operations, NFC's leaders plan to build on that progress by further strengthening current operations and systems. This crucial step will also enable them and USDA's top leaders to consider alternatives, agree on a vision for NFC's future, and plan on how to accomplish it—including obtaining funding. Depending on the vision and funding availability, the plan for modernizing NFC's systems could involve moving from the current mainframe system.

The good news is that both staff and customers are optimistic about the recently appointed permanent Director and Deputy Director, each of whom have a long history with NFC

Achieving success will be both a marathon and a sprint for the National Finance Center.

and a deep understanding of its challenges. The new leadership team is taking advantage of this goodwill to quickly begin to take a series of key steps towards success, including

- Developing a high-level vision for the future that includes short-, medium-, and long-term goals;
- Creating a short-term (two-year) IT Roadmap that prioritizes stabilization and completion of ongoing system improvements;
- Establishing a customer steering committee and collaborating with members to develop plans and to fully understand and address customer priorities and problems;

- Engaging employees through improved communication (e.g., town hall meetings) and the creation of employee committees; and
- Addressing staffing shortages and competency/skills gaps through active hiring, recruitment outreach to colleges and universities, talent assessments, and the use of retired annuitants.

These and other developments (discussed in Chapters 3-6), while nascent, represent a promising start and demonstrate a will to address NFC's challenges. However, NFC's success will require sustained attention and support not only from USDA senior leaders but other federal entities, including OMB and Congress.

In summary, if NFC's systems cannot operate reliably, the functioning of large portions of the federal government is at risk. Thus, allowing NFC to continue on the trajectory it had been on up until very recently is not an option. The employees of NFC deserve to work in an environment that will allow them to successfully perform their jobs and meet their mission. NFC's federal agency customers that need and depend on the services NFC provides deserve user-friendly, effective, and efficient systems and customer service. Federal employees, retirees, and others who are paid or receive benefits through NFC systems deserve effective, reliable, timely, secure, and accurate system operations. Achieving these objectives is the immediate task at hand for NFC.

The Academy began working with OCFO and NFC leaders in October 2022. During the course of this nine-month study, NFC initiated new approaches and began developing plans. To the extent possible, this report describes these developments, some of which build on the Academy's preliminary recommendations.¹ However, as these efforts were either very new or still under development as this report was being finalized, the Academy was unable to evaluate them. Nevertheless, it is important to acknowledge the commitment being shown by OCFO/NFC leaders to addressing the serious and urgent needs of NFC's employees and customers as they strive to transform NFC into the organization they envision it can and should be.

The Panel recommends the following actions, as described in subsequent chapters:

Chapter 3: Improving Governance and Developing a Vision

- 3.1** The OCFO and NFC leaders should augment the NFC leadership team by adding positions to focus on three specific areas: organizational transformation, employee and customer experience, and IT system modernization. These positions will support the NFC Director and Deputy Director in stabilizing operations, addressing immediate needs, and planning for the future.
- 3.2** Building upon NFC's preliminary *Vision*, NFC's leaders should finalize, communicate, and implement a short-term (two-year) plan to stabilize the organization, build trust and confidence in NFC's commitment to and capacity for change, and create organizational capability for long-term transformation and modernization.

¹ The Panel presented preliminary recommendations, based on the Study Team's research to date, to NFC in April 2023. The preliminary recommendations were very similar to the final recommendations contained in this report.

- 3.3** During the medium-term phase (years three and four), as IT system stabilization is achieved, NFC leaders should develop a formal, long-term IT modernization vision and plan analyzing alternative futures as a basis for the OCFO and other USDA leaders to decide upon NFC's long-term operations.
-

Chapter 4: Engaging Customers and Employees

- 4.1** NFC leadership, with the new CX/EX director and office taking the lead, should foster a culture of innovation and continuous improvement to reverse the decline in service delivery and become a best-in-class CX organization.
- 4.2** NFC leaders must demonstrate their commitment to an engaged workforce and a collaborative and inclusive work environment built on trust to foster a workplace culture that is fair, constructive, and supports managers and staff in addressing and improving performance and morale.
- 4.3** NFC leaders should listen to customers and employees through the systematic collection and analysis of customer and employee feedback to become a data-drive organization, where decisions (particularly decisions about CX and EX) are informed by data on what is working well and where additional focus is needed.
- 4.4** NFC leaders should improve internal and external two-way communication to build trust with employees and customers and gain their support for proposed changes, as well as to ensure maximum effectiveness of those changes.
- 4.5** NFC should improve, streamline, and automate functions and processes, prioritizing those related to customers' ability to receive the assistance and information they need to improve the efficiency and effectiveness of both NFC and its customers.
- 4.6** NFC should address major workforce issues, including the loss of institutional knowledge to ensure NFC has the right number of staff, with the right skills, to address customer needs.
-

Chapter 5: Implementing a Multiphase IT System Modernization Process

- 5.1** Stabilize and improve current systems, prioritizing upgrades that improve the customer experience, and fix security vulnerabilities.
- 5.2** Evaluate systems' status and develop a plan to complete stabilization priorities and address medium-term system priorities.
- 5.3** Depending on the long-term vision adopted, accelerate NFC's mainframe modernization journey to allow NFC to improve its operations, address skills shortages, and reduce risk.
-

Chapter 6: Obtaining the Funding Needed Now and in the Future


- 6.1** NFC should aggressively pursue a variety of funding sources to obtain the amount of funding necessary for both stabilization and long-term success.
- 6.2** NFC should strengthen relationships, build trust, and gain buy-in for future plans and funding strategies to encourage the cooperation, assistance, and support of internal and external stakeholders (including customers, OMB, and Congress) in securing necessary funding.

- 6.3** Continue improving NFC's budgeting and cost-recovery processes to increase efficiency for NFC and to enhance transparency and predictability of charges for customers.
- 6.4** Assuming NFC will remain entirely customer-funded, seek authority and establish procedures for setting NFC's customer rates sufficient to adequately fund operating costs plus necessary investments to avoid a recurrence of underfunding.

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Chapter 1: Introduction

Over its long history, NFC has supported its agency clients and their employees with essential payroll, human resources, retirement, and other services that underpin the well-being and stability of the federal workforce. Federal employees performing their agency’s mission-critical functions—whether working in Washington, DC headquarters offices; patrolling remote areas along our southern border; fighting fires in the middle of vast forests; or providing aid in villages across the globe—get paid on time thanks to NFC. Over time, NFC has achieved many successes and endured many challenges both within and outside of its direct control. The NFC of today is at an inflection point where long-term challenges now threaten its ability to be successful as a modern shared services provider.



“Provide reliable, cost-effective, employee-centric systems and services to Federal organizations, thus allowing [NFC’s] customers to focus on serving this great Nation through their mission delivery.”

National Finance Center Mission Statement

NFC staff have described the organization as familial. It is located in New Orleans, where the vast majority of NFC’s staff of about five hundred reside. NFC staff have endured and recovered from hurricanes Katrina (2005) and Ida (2021), an EF-3 tornado that destroyed their building (2017), government shutdowns, and COVID pandemic telework and stimulus payments—and never failed to make payroll for the more than 650,000 employees that it services.² NFC leaders and staff are appropriately proud of this performance record.

NFC is facing significant challenges in 2023 that have a major impact on the organization:

- NFC was without long-term, consistent leadership for at least four years.
- Communication within the organization and with customers has been unsatisfactory.
- NFC operates under a general set of goals but has had no strategic vision of its future to work toward nor metrics against which to measure and monitor progress.
- Large numbers of NFC staff are eligible for retirement, but workforce planning for specific skills and competencies has been absent or inadequate.
- Essential business processes are performed manually, either on paper or spreadsheets.
- Major investments to replace aging IT systems have not been made and the options for financing improvements are limited and necessitate intervention by USDA, OMB, and Congress.

Many of these issues developed over a period of years and will likely require a number of additional years to resolve successfully and completely. To ensure future success, USDA, the office of Chief Financial Officer (OCFO), and NFC leaders will need to take immediate remedial action while simultaneously planning for a multiyear transformation that will affect almost every aspect

² U.S. Department of Agriculture, National Finance Center, “About the National Finance Center.” <https://www.nfc.usda.gov/about/index.php>.

of NFC's governance and operations: leadership, planning, workforce, IT systems, funding sources, employee engagement, and customer experience. To be successful, NFC will need the involvement and support of internal and external stakeholders, including employees, customers, OMB, Congress, and USDA's leaders.

Study Scope

NFC contracted with the National Academy of Public Administration (the Academy) to assess modernization opportunities for the organization. The Study Team interpreted the term broadly, to encompass IT, financial, process, and service delivery modernization. For this report, the Academy also identified threats and challenges to NFC in pursuing its mission, developed an IT modernization rough order of magnitude (ROM) cost estimate, and assessed modernization opportunities and challenges and the organization's capacity to modernize.

Methodology

To conduct this assessment, the Academy convened a Panel of four Fellows with expertise and experience in IT modernization, federal cost-recovery agencies, organizational assessment, customer experience, employee experience, and federal finance. The Panel provided ongoing guidance to the Study Team, which followed a structured methodology to collect and analyze data (see Appendix A for a list of Panel members and Study Team members, with brief bios).

The Study Team conducted extensive research and analysis of NFC documents and information, including budget and staffing data, Federal Employee Viewpoint Survey (FEVS) results, relevant legislation, and past organizational analyses. To understand the environment in which NFC operates and identify model practices, the Study Team reviewed documents and information on organizational transformation; federal IT system modernization efforts; cost analyses and business cases; shared services; employee engagement; and customer experience.

The Study Team conducted approximately ninety semi structured individual and group interviews with key stakeholders and relevant subject matter experts, including NFC customers; current and former NFC staff, managers, and directors; USDA OCFO and Office of the Chief Information Office (OCIO) and other officials; other federal shared service providers; and experts familiar with modernization and organizational assessment. All interviews were conducted on a not-for-attribution basis (see Appendix B for a list of interviewees).

Chapter 2: Background

National Finance Center History and Evolution

Established in 1973 as a shared service provider located within USDA’s Office of the Chief Financial Officer (OCFO), the National Finance Center (NFC) is one of five recognized federal human resources shared services centers.³ NFC has a large, complex job that is vital to the federal government’s operations. NFC provides a range of services (table 1), from both a technical and support perspective, to more than 170 diverse agencies ranging in size from 200 to over 200,000 employees and provides payroll services to more than 650,000 federal employees. To add to the complexity of the agency’s work, NFC allows customers to opt into its services according to their needs and tailors its systems to customers’ unique requirements.

Table 1 NFC Services

Payroll Systems and Services	Includes payroll processing, payroll accounting processing, salary payment processing, payroll policy support, benefits reconciliation and liaison services, tax reporting, IT services, IT security services, coordination with the Office of Personnel Management (OPM), receipt and processing of employee time and attendance data, calculation of employee payments and withholding amounts, remittance of withheld amounts to the proper authorities, and all related tax reporting
Time and Attendance	Offers two web-based, 508-compliant time and attendance applications: Paycheck8 and WebTA
Human Resources Systems	Provides Oracle/PeopleSoft-based Human Capital Management System comprised of an integrated suite of commercial and government-specific modules
Human Resources Services	Includes transactional personnel action request processing, time and attendance, benefits processing awards and leave administration, policy interpretation, reporting, and workforce planning; human capital strategy development; competency, position, and performance management; classification; job analysis; candidate evaluation/selection; employee conduct; labor relations management and third-party representation; and employee development needs assessment
Insurance System and Services	Supports three OPM insurance products: the Direct Premium Remittance System (DPRS), the Centralized Enrollment Clearinghouse System (CLER), and the Tribal Insurance Program System (TIPS)
Data Analytics	Offers Insight, a web-based data analytics tool that provides management dashboards with a variety of reporting capabilities

Source: National Finance Center. “NFC Overview.” Accessed June 1, 2023. https://www.nfc.usda.gov/Publications/HR_Payroll/Brochures/Brochures_home.php.

³ The four other OPM-recognized federal human resource centers are the DOD Defense Finance Accounting Service (DFAS), Department of Interior Business Center (IBC), Department of Treasury, and General Services Administration.

Since its inception, the range of services NFC provides has expanded, along with its customer base. In 1978, NFC merged and began operating its data center with USDA's New Orleans Computer Center. By 1983, NFC had become a pioneer in cross-servicing by implementing administrative payment processing for the Department of Education. In 1990, NFC embarked on its first insurance line of business venture with the Office of Personnel Management (OPM) and implemented the Direct Premium Remittance System (DPRS). In 2003, OPM selected NFC as an e-Payroll consolidation provider (see table 2 for a timeline of select NFC achievements and Appendix C for a more complete list).

Table 2 Timeline of Selected Notable NFC Achievements

YEAR	ACHIEVEMENTS
1973	<ul style="list-style-type: none"> Established to consolidate USDA Payroll and Financial Services
1978	<ul style="list-style-type: none"> Began operating its own data center with the merger of USDA's New Orleans Computer Center
1983	<ul style="list-style-type: none"> Became a pioneer in cross-servicing by implementing administrative payments processing for the Department of Education
1990	<ul style="list-style-type: none"> Embarked on its first insurance venture with the OPM and implemented the Direct Premium Remittance System (DPRS)
2003	<ul style="list-style-type: none"> Selected by OPM as an e-Payroll consolidation provider
2005	<ul style="list-style-type: none"> Designated by OPM as one of five Federal Human Resources Shared Services Centers/HR LOB providers Sustained NFC core operations and services amid Hurricane Katrina
2017	<ul style="list-style-type: none"> Struck by an EF-3 tornado that rendered NFC's facility unusable. Within hours, NFC implemented its continuity of operations plan, and processed payroll of almost \$3 billion for more than 650,000 employees on schedule.
2019	<ul style="list-style-type: none"> Expanded use of ServiceNow and implementation of the Verizon Contact Center solution
2021	<ul style="list-style-type: none"> Collaborated with government and industry leaders to achieve FedRamp certification for a commercial, off-the-shelf time and attendance solution Sustained NFC core operations and services amid the global pandemic and Hurricane Ida
2023	<ul style="list-style-type: none"> Ongoing modernization efforts for DPRS Web and Retirement Processing NFC celebrates its 50th Anniversary

Source: National Finance Center. "NFC Overview." Accessed June 1, 2023. https://www.nfc.usda.gov/Publications/HR_Payroll/Brochures/Brochures_home.php.

Staff and Organizational Structure

The organizational structure of NFC has changed over the last decade. A draft working version of NFC's organizational chart is provided in figure 1. The left side of the chart identifies the administrative support branches (e.g., auditing, budgeting, planning, etc.) that report to the NFC Office of the Deputy Director. The right side of the chart documents the Government Employee Services Division (GESD), which is the largest division in NFC. GESD provides direct client support for NFC's lines of business, ranging from mainframe and web applications to the NFC Contact Center (NCC). The GESD Division Director position is currently vacant; GESD associate directors are reporting to the NFC Deputy Director until the position is filled.

For the past few years, NFC's staff size has hovered around 500 full-time equivalent (FTE) positions. For FY 2023, NFC was allocated 549 FTE positions, but many are currently vacant: approximately 83 FTE positions are unencumbered, which is a vacancy rate of about 15 percent. The majority of these vacancies are for GESD staff (a breakdown of GESD vacancies is presented in Chapter 5, table 4). As of the writing of this report, NFC is actively recruiting 77 positions and has six employees scheduled to be onboarded. In addition, NFC is working with numerous consultants and contractors to meet immediate needs and, at least in part, supplement current staff until additional staff are brought on board.

National Finance Center
Draft Organization Chart
June 2023

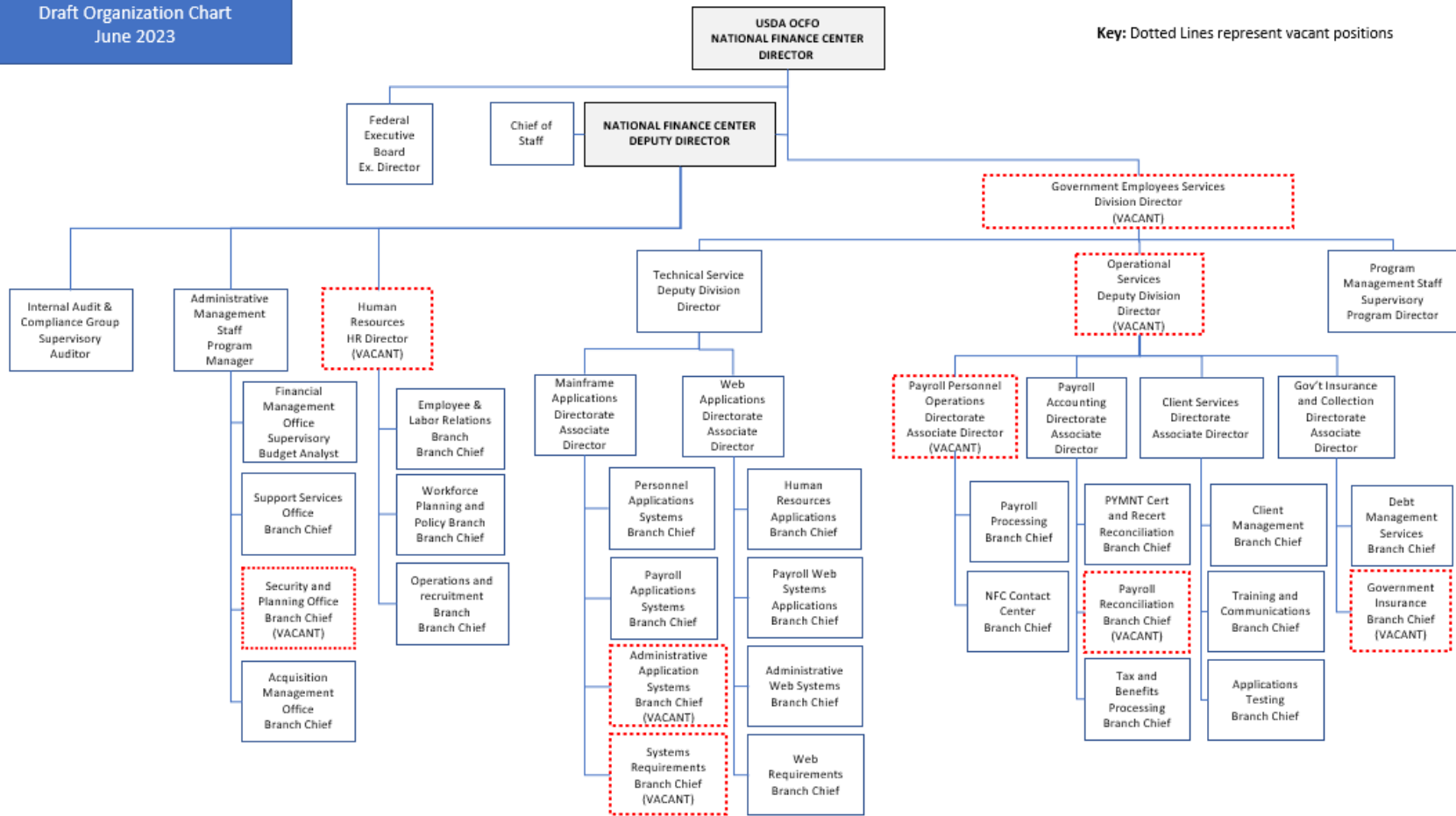


Figure 1 NFC's draft organization chart as of June 2023 (National Finance Center)

Budget

NFC's reimbursable budget for FY 2023 was approximately \$152,000.000. As a full cost-recovery organization, NFC is funded through the fees it charges customers for the services it provides. NFC can charge only for actual costs incurred plus a 1-4 percent surcharge for capital improvements. Customer rates are set annually by the USDA Chief Financial Officer (CFO) and WCF Advisory Committee.⁴ NFC does not receive an annual appropriation from Congress but may compete for additional funding during the fiscal year from sources such as unobligated end-of-year funds transferred by the Secretary to the WCF and credit card refunds and rebates (see chapter 6 for additional detail). NFC must receive prior approval from the USDA Secretary and from House and Senate Appropriations Committees to use funds from these sources.

NFC's Environment and Challenges

NFC faces external and internal challenges that affect its efficiency and effectiveness, including the following:

- Incomplete Alignment with USDA's Mission
- Legislative Constraints
- Leadership Turnover
- Staff Vacancies and High Retirement Eligibility
- Employee Morale
- Antiquated Systems and Insufficient Technical Support Expertise

Incomplete Alignment with USDA's Mission

Like other mission support organizations throughout the federal government, NFC—while vitally important to USDA operations—often has less visibility with or is less of a priority for agency leaders than mission-focused organizations. For NFC, this phenomenon is compounded by the fact that USDA is only one of NFC's many federal customers. Therefore, while USDA could not perform its core mission without NFC's services, a significant portion of NFC's operations do not align with or support USDA's mission.

The incomplete alignment with USDA's mission presents two challenges for NFC. First, NFC might not always get the direction and resources it needs from leaders. Second, employee morale can suffer if employees believe they are unseen and undervalued by their parent agencies. In fact, some NFC employees reported to the Study Team that they feel "separate and apart" from their parent agency—a feeling potentially exacerbated by NFC's location in New Orleans, distant from USDA headquarters in Washington, DC.

Legislative Constraints

NFC is subject to unique legislative requirements and restrictions that impact its operations and finances. USDA's annual appropriation acts restrict NFC and other USDA offices from using unobligated balances and credit card rebates from the WCF without a written request to and

⁴ United States Department of Agriculture, "Assignment of Responsibilities for Review and Oversight of Working Capital Fund Activities," USDA, accessed June 10, 2023, <https://www.usda.gov/directives/dr-1043-040>.

approval from Senate and House Appropriations Committees. Additionally, any activity associated with the relocation of NFC, OCFO, or OCIO staff or relocation of NFC's current or future business lines requires the same prior congressional notification and approval.⁵ Such a situation can be time-consuming and, more importantly, can create uncertainty about NFC's options for future operation.

Leadership Turnover

NFC has not had consistent, long-term leadership in place since at least 2019. In the recent past, three leadership positions—the CFO, NFC Director, and NFC Deputy Director—were filled by officials in an acting capacity or were vacant. NFC now has a permanent Director and Deputy Director. The CFO position is vacant and its responsibilities are currently being fulfilled by the Deputy CFO, who has been fulfilling those responsibilities for a number of years. The combination of leadership vacancies, leadership turnover, and frequent stints of leaders in an acting capacity can limit the ability of leaders to develop a long-term vision for the organization, or to make and execute strategic and other long-term plans to move the organization forward. Instead, plans tend to be shorter-term and tactical. Frequent leadership turnover also affects employee morale and relationships with external stakeholders, including customers and Congress.

As indicated in the draft organizational chart (figure 1), there are also a number of vacancies in senior level positions below the NFC Director and Deputy Director positions, particularly in GESD. Both employees and customers interviewed by the Study Team indicated that turnover in these positions has been relatively high, affecting morale, effectiveness, and customer relationships.

Staff Vacancies and High Retirement Eligibility

NFC's staffing issues are not confined to leadership positions. Staffing numbers are down across the organization due to recent slowness in hiring, as well as difficulty in backfilling positions and reallocating staff. Like other federal agencies, NFC also has been challenged by attrition. Unlike most other federal agencies, a major cause of attrition is outside of NFC's control. NFC's location in New Orleans makes it susceptible to natural disasters that have put an enormous strain on employees who are expected to "make payroll" in difficult personal and professional circumstances.

High rates of retirement are and will continue to be an issue for the foreseeable future. Many staff have spent their entire careers at NFC and attrition represents a significant loss of institutional knowledge. Thirty-seven percent of NFC's current staff are eligible to retire this fiscal year (2023). Over a ten-year period from FY 2023 to FY 2033, approximately 70 percent of NFC's current workforce will be eligible for retirement (figure 2).

⁵ See Appendix D for Section 702 and 725 of the General Provisions of the Agriculture Appropriations Act for Fiscal Year 2023.

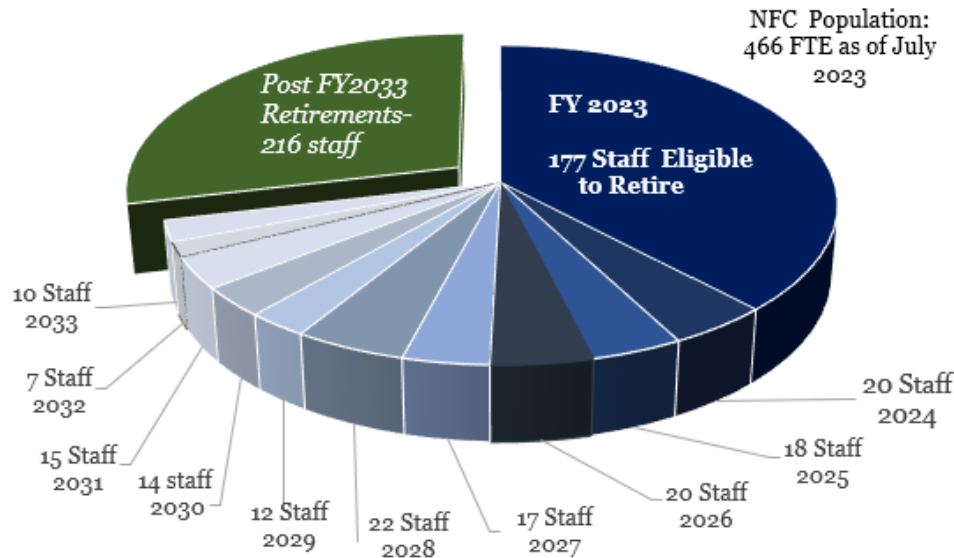


Figure 2 Ten-year projection of NFC staff retirement eligibility, FY 2023 to FY 2033 (National Finance Center)

Employee Morale

Reduced staffing levels and employee morale negatively impact each other. Reportedly, substandard conditions at NFC’s New Orleans facility contribute to low staff morale and a sense of leaders not caring about employee well-being. Such an environment also makes it difficult to recruit top talent. New hires do not necessarily have the experience, skills, and competencies of the employees they are replacing. Low morale may also encourage attrition, further driving down staff levels and accelerating the loss of organizational memory—and so on.

Antiquated Systems and Insufficient Technical Support Expertise

Due to decades of inadequate investment in its IT systems, NFC is running its operations and services on antiquated code and systems that are not user friendly. Additionally, many of NFC’s internal business processes have not been automated and are still paper-based or managed via Word documents or spreadsheets. NFC (and other service providers) faces huge shortfalls between what its reserves can accumulate and the cost of new capital IT replacements or upgrades. The longer action is deferred, the greater the chance that one or more systems will fail and the more it will cost to modernize NFC’s IT systems.

NFC’s need to modernize is all the more urgent with the loss of institutional knowledge from past and impending retirement of staff experienced with COBOL and mainframe applications. NFC’s code is unique because it customizes applications to meet customer requirements. The result is that NFC has a one-of-one system of systems. Hiring more programmers is a government-wide challenge because the number of experienced COBOL programmers available in the job market is dwindling, and programmers can demand top dollar in the private sector for their knowledge. But even if NFC were able to hire all the COBOL programmers it needs, those programmers would not

necessarily have the ability to immediately work with the “spaghetti code” resulting from decades of modifications, many of which were not documented.

All of these challenges have negatively impacted customer experience: systems are complicated and difficult to use due to NFC-specific commands and it is difficult and time consuming to get assistance because of shortages of staff, especially subject matter experts. As a result, several customer agencies have indicated to NFC (and the Study Team) that they would migrate to another service provider if they could. NFC cannot survive as a shared service provider if it cannot meet its customers’ needs.

Employees rightfully take great pride in the fact that—despite disasters like Hurricane Katrina—NFC has never in its history missed payroll.

Opportunity for Change

While the litany of challenges discussed above is daunting, there are also positive conditions and recent developments in four important areas that NFC can take advantage of and build upon to stabilize the organization in the short term and transform it in the medium and long terms:

- **USDA Leadership Attention.** A recent development is the focus and attention that USDA leaders are directing at NFC. Office of the Secretary staff and the Acting Deputy Secretary have held multiple meetings to discuss the future of NFC, including how it can position itself to expand its customer base and lines of business. This support is crucial to NFC’s success.
- **NFC’s Staff.** No less important than leadership attention is the dedication of NFC’s staff to the organization’s mission and customers. Employees rightfully take great pride in the fact that—despite the COVID-19 pandemic, Hurricane Ida, Hurricane Katrina, and the 2017 EF-3 tornado—NFC has sustained its core operations and services and has never in its history missed payroll. The staff at NFC are the heartbeat of the organization; as such, they are the key to NFC’s successful stabilization and modernization. Staff are aware of the challenges facing NFC, and they are eager to be part of the solution.
- **Congressional Interest.** NFC has long enjoyed the support of the Louisiana congressional delegation, which has a strong interest in retaining existing and creating new employment opportunities within New Orleans. Efforts such as NFC’s initiative to partner with local degree-granting organizations to prepare the next generation of employees should align well with the delegation’s interests. Delegation support can help NFC stabilize and grow, creating future opportunities in New Orleans.
- **NFC Leadership.** The new NFC Director and Deputy Director have extensive experience with NFC and a deep understanding of the organizational challenges they inherit. Customers and employees alike are hopeful that this new team can effect meaningful change. If NFC leaders can move quickly—with the support of senior USDA leaders and Congress—to build on this goodwill and optimism by taking urgent action to achieve quick wins, there is a good chance they will be successful in stabilizing the organization and positioning it for the future.

NFC Operational Components

For NFC to be successful in its modernization efforts, it is important to understand and heed the interdependencies between and among the key enablers and groups shown in figure 3. Organizational change begins with a clear strategic vision and sustained leadership that is driven by viewing customer experience as a forcing function to begin and direct the modernization journey. The vision and business objectives thus help scope the breadth and extent of the “modernization roadmap” and the funding/budget required. At the same time and conversely, the likelihood, feasibility, and availability of funding shapes the size and scope of the modernization plan. Finally, and most importantly, employees will both contribute to and benefit from modernization and must be viewed as key stakeholders throughout the process. If their skills and numbers are insufficient for the challenge, then success is at significant risk.

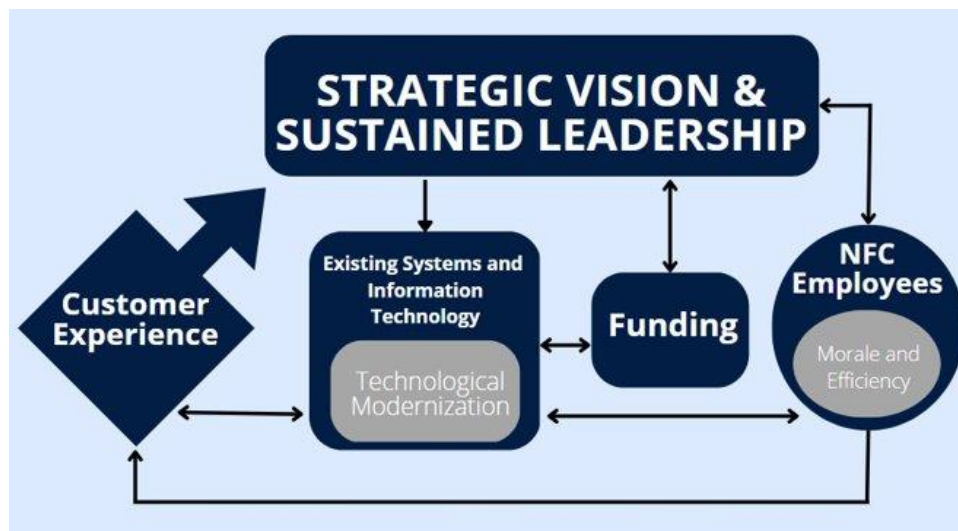


Figure 3 Interdependence of NFC Success Factors (National Academy of Public Administration)

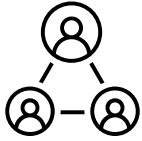
The major components of NFC’s operations depicted in the figure are also critical components of most client-serving organizations. These components are reflected in the structure of the rest of this report, as discussed below.

Chapter 3: Improving Governance and Developing a Vision



Strategic vision and leadership—or governance—determine the existence, direction, operation, and the success or failure of an organization. With stable leadership and a strategic vision that includes goals, objectives, and metrics, NFC can develop the short-, medium-, and long-term plans needed to stabilize the organization and ensure its viability and success into the future.

Chapter 4: Engaging Customers and Employees



Employee and customer experience are inextricably linked; as such, NFC cannot improve either without improving both. NFC would benefit from a new leadership position and office focused on developing an employee/customer experience culture and associated goals, objectives, strategies, and metrics.

Chapter 5: Implementing a Multiphase IT System Modernization Process



NFC's information technology systems are inefficient and antiquated due to decades of insufficient investment. NFC will need to embark on a multiyear, phased approach to reverse this trend.

Chapter 6: Obtaining the Funding Needed Now and in the Future



Due to the laws governing working capital funds and how much NFC can charge its customers, NFC cannot fund its modernization needs by relying on user fees. NFC will need to explore and pursue a variety of funding sources.

Chapter 7: Conclusion: Achieving Organizational Goals

Achieving the breadth and depth of change needed will be a long-term, complex, and costly process requiring sustained leadership attention and funding. While success will take several years, leaders are poised now to build on the start they have made to ensure NFC's success.

Chapter 3: Improving Governance and Developing a Vision



An organization's success is closely related to its governance. This chapter will focus on two aspects of governance particularly important to the National Finance Center's (NFC) success: leadership and planning. Successful organizations recognize the necessity of sustained focus by highly qualified leaders with the capacity to develop and execute plans and proactively and promptly address complex challenges. Governance frameworks (or plans) are also essential because they describe the structure and processes for decision making and operations, including a vision, culture, priorities, roles and responsibilities, communication channels, and metrics for assessing progress. A governance plan also can specify the values of the organization, explaining the ways in which its members will work together to achieve the priority objectives.

NFC's current challenges are complicated, far-reaching, and need to be addressed both urgently and in the long term. As described earlier in this report, they have been exacerbated by inattention by USDA leaders as well as by a lack of steady NFC leadership. When leaders are not permanent or are in their positions for short periods of time, it is difficult for them to plan for the future and implement change. Indeed, both NFC employees and customers expressed frustration that some of NFC's recent leaders were unable to address problems as they occurred or to plan for the future because they were not in their positions long enough.

Until recently, to the extent that NFC had organizational plans, they were largely tactical rather than strategic. However, in June 2023, Office of the Chief Financial Officer (OCFO) and NFC leaders, responding to direction from top USDA officials, drafted a high-level strategic *Vision for the Future of the National Finance Center* (Vision).⁶

NFC's current challenges are complicated, far-reaching, and need to be addressed both urgently and in the long term.

The Vision is strategic in that it describes the organization NFC is working to become and includes short-medium-, and long-term goals and strategies for getting there. While the *Vision* has not yet been finalized and implementation planning is in the early stages, its development is a critical first step. To overcome the complex and wide-ranging set of challenges the organization currently faces, it will be important for leaders to set and communicate priorities and expectations for how the organization will work together with employees and customers to ensure that short-term stabilization of the organization occurs and to build organizational capacity to meet longer term needs.

In its Vision document referenced above, the leaders of the Office of the Chief Financial Officer (OCFO) and of NFC articulated the following high-level strategic goals to be incorporated into NFC's FY 2023-2027 Strategic Plan:

- Goal 1: Build a strong foundation that is people-focused and resilient.

⁶ The CFO and NFC leaders briefed USDA senior officials on the *Vision* on June 1, 2023.

- Goal 2: Improve and enhance brand recognition.
- Goal 3: Transform and modernize business processes and systems.
- Goal 4: Enable data-driven decision making.
- Goal 5: Become a learning organization that creates value for its customers.

Thus, a broad set of activities is to be initiated quickly and under pressure from USDA’s senior leaders and some customers. Over time, successfully achieving these goals will require a transformation of culture and operations; a strong, multidisciplinary leadership team; and solid short-, medium-, and long-term planning.

NFC’s Long-Term Success Depends on its Ability to Transform Operations and Culture

Change is needed in NFC’s culture as well as in its operations. An organization’s culture can either facilitate or obstruct operational change.⁷ Many organizations that have tried to achieve changes similar in type and magnitude to the transformation NFC needs to execute have not been successful for a variety of reasons. For example, leaders frequently fail to fully recognize the “people element”—in other words, they do not prioritize the implementation of strategies that help people increase their productivity and effectiveness and realize their full potential. In other instances, the vision for and direction of the change is not clearly articulated and communicated, and people find themselves responding to various directives without a clear sense of why, and without knowing whether or how their actions will lead to the desired end point. Another common pitfall is that change takes several years and leaders are often unable to sustain focus on it while simultaneously providing essential oversight of day-to-day operations.

Proven model practices and requirements for effective change management are presented in Adhering to these practices can help NFC avoid some common pitfalls that cause organizational transformations to fail.

Table 3 Transformational Change Model Practices

1. Senior management should drive the change.
<ul style="list-style-type: none"> • Ensure executives are accountable for the transformational change. • Leverage top-down communications to set the groundwork.
2. Build a holistic framework, not just a road map.
<ul style="list-style-type: none"> • Tailor tactics and solutions to the people, processes, tools, and infrastructure components of change. • Build phased rollouts into the change plan.
3. Combine centralized governance with decentralized implementation.
<ul style="list-style-type: none"> • Use a centralized team with project and change management skills to manage change, and use business unit implementation teams to execute the change.
4. Engage employees throughout the change journey.

⁷ E. Schein, 2010. *Organizational Culture and Leadership*, Jossey-Bass, San Francisco, CA

<ul style="list-style-type: none"> • Combine communication and engagement plans to create buy-in and overcome barriers to change.
<p>5. Build reviews and accumulative measures into the process.</p>
<ul style="list-style-type: none"> • Create flexibility and yet emphasize timely problem solving by using incremental reviews and measures. • Start with the end-state in mind, and then identify the measures that will indicate success at different stages. • Evolve measures of success as the organization matures.
<p>6. Reinforce change through ongoing training, modified performance assessments, and continuous improvement programs.</p>
<ul style="list-style-type: none"> • Provide ongoing training to reinforce the new culture, behaviors, and necessary skills. • Incorporate the desired behaviors into employee evaluations and rewards. • Use continuous improvement programs to modify and refine transformation for sustainable change.

Source: APQC, *Transformational Change-Making it Last*, (Huston, TX, 2014) 11.

These steps illustrate the importance of activities that may not be the direct responsibility of any single NFC workstream but are nevertheless essential to adjusting the whole organization’s culture so that new priorities and new ways of working to accomplish objectives can take root and thrive. Implementing and supporting culture change is the responsibility of all top leaders, just as all share responsibility for improving operations. Going forward, it is vital that steps are taken to ensure that early changes are embedded in daily practice and provide a foundation for overcoming subsequent challenges.

The Structure of NFC’s Current Leadership Team Does Not Reflect the Complexity and Scope of What Needs to Be Done to Accomplish Short- and Long-Term Objectives

NFC’s current leadership team consists of a Director and a Deputy Director. The Director reports to USDA’s Deputy CFO, who is the senior OCFO officer, as the CFO position is vacant. The Deputy CFO provides important, high-level oversight of and direction to NFC leadership. NFC’s Deputy Director has major responsibility for managing and directing ongoing day-to-day NFC operations and providing leadership support and guidance to the Director.

Leadership of OCFO and NFC has not been stable for a number of years. As noted above, the CFO position has been vacant, and therefore the Deputy CFO has fulfilled many of the challenging, complex responsibilities of CFO for USDA, in addition to performing her Deputy CFO duties—and meanwhile providing direction and guidance to the changing leaders of NFC. NFC’s current leadership, while having long-term familiarity with NFC, has been in place a relatively short time: the Director was appointed in March 2023 and the Deputy Director has been in place since October 2022. NFC’s previous most recent former leader was “acting” and “dual-hatted,” being responsible for both NFC and another OCFO unit for about eighteen months. A pattern of senior leadership turnover, resulting in uncertain, part-time, or temporary NFC leadership has been typical for a number of years. Leaders who are in their positions for short periods of time or who

are designated as “acting”—which implies “temporary”—may struggle to effectively and successfully lead and manage ongoing operations, much less to plan for the future.

Having the new Director and Deputy Director in place provides the foundation on which to build a robust leadership team with the variety of skills needed to accomplish the challenging tasks of planning and implementing a complex, multiyear, multifaceted organizational transformation. Therefore, expanding the leadership team with a combination of temporary and permanent positions to focus on the areas needing sustained attention would provide the Director and Deputy Director with additional resources and support. Research and experience show that successful transformation of an organization typically takes five to seven years, so leadership dedicated to organizational transformation is vital.

Recommendation 3.1: OCFO and NFC leaders should augment the NFC leadership team by adding positions to focus on three specific areas: organizational transformation, employee and customer experience, and IT system modernization. These positions will support the NFC Director and Deputy Director in stabilizing operations, addressing immediate needs, and planning for the future. Action steps include

- Establishing an Associate Director for Transformation (potentially a temporary position) to work as an integral part of the leadership team to ensure sustained focus on organizational culture and transformation with the following responsibilities:
 - Recommending operational and system changes in support of stabilization and building organizational capacity for longer-term transformation;
 - Leading the completion and finalization of the *Vision* and other plans; and
 - Managing the activities needed to achieve organizational transformation, including strategy development, coordination with other members of the leadership team to develop and implement internal and external communication plans, and the creation of organizational performance metrics to measure progress.
- Creating a permanent Assistant Director for Employee and Customer Experience to establish and staff an Employee and Customer Experience Office within NFC with the following responsibilities (see Chapter 4 for additional information on this position and office):
 - Developing and implementing employee and customer experience goals, strategies, and performance measures; and
 - Instilling a culture of employee engagement and customer experience.
- Establishing a joint Office of the Chief Information Officer (OCIO)/OCFO-NFC Deputy Director for IT Modernization, filled by an OCIO leader. This new position would help ensure leadership alignment and close and ongoing coordination between NFC’s technical resources and OCIO resources throughout the modernization initiative, expected to take at least four years. Although the details of the working and reporting relationships of this individual vis-à-vis the CIO and the NFC Director will need to be developed and approved within USDA, this individual should have the experience and authority to ensure OCIO and NFC systems are stabilized and modernized to achieve agreed-upon IT system objectives. See Chapter 5 for additional detail on what will likely be required, but at a minimum this function will include working with the NFC Director and Deputy Director on

- Developing a common set of priorities and implementation plans to address short-, medium-, and long-term IT needs;
- Acting as a champion for both the CIO and the NFC organizations, which includes authoritatively presenting options for consideration, advocating to senior leaders on how to meet NFC’s needs, and explaining business impacts and financial implications;
- Rallying, supporting, coordinating, and supervising technical staff in both the OCIO and NFC, including ensuring that training needs are met;
- Authoritatively leading the analysis of options for system change, including identifying funding, and presenting these to senior leadership; and
- Working with contract offices to plan for contracts and/or necessary software procurements that will be part of achieving improved system performance.

The National Finance Center Has Lacked a Strategic Vision and the Range of Planning Documents Needed to Succeed

In the recent past, little planning was systematically performed and documented by NFC to identify and address immediate problems or to plan for future needs. NFC only drafted its high-level *Vision*, which sets forth what the organization is striving to become and how it will get there,

NFC’s successful transformation depends on effective short-, medium-, and long-term plans.

in June 2023. NFC has also developed an accompanying one-page IT Roadmap. Due to their recency, these documents remain in draft form and do not yet include some crucial details on how the

Vision is to be achieved. NFC is also currently drafting a human capital plan. Other plans will need to be developed in order for NFC to successfully implement the *Vision* and IT Roadmap, including communication, business, and customer experience plans.

Such plans have multiple, critical purposes—for example, for communicating to agency leaders what is intended and what the potential outcomes will be; conveying to customers and stakeholders what lies ahead and their roles in getting there; and informing and encouraging staff as to their roles and why their active participation is essential for success. Business plans are also needed to build confidence on the Hill and within the executive branch that NFC is a sound investment.

Plans for individual systems and actions should define the problems and their implications, identify and analyze alternative solutions, assign roles and responsibilities, specify timelines, and define performance metrics. Regular (at least quarterly) reports and follow up are needed to keep managers and staff focused on progress, allow leaders to build credibility and momentum, and help gain the support and active participation of employees in addressing each area of concern. When results show a lack of progress in a specific area, this can be an indication that a plan is not working and that a new approach is needed.

NFC’s Planning Needs Are Both Short- and Long-Term

NFC’s path forward is multiyear and multistage: a three-part timeline covering five or more years is called for. The magnitude and complexity of the organizational transformation and the system

modernization challenges need such an approach to allow time to address immediate needs; then implement system improvements and assess future system options; and finally, to implement the long-term plans, including potentially transitioning from the mainframe to the cloud. The roadmap below contains a general overview and direction for NFC's stabilization and modernization efforts (figure 4).

NFC's new leadership team has begun taking steps to address near-term needs, as described in their *Vision*. These plans include but are not limited to meetings with employees to convey support and assurance that attention will be given to addressing system problems, beginning to fill vacant positions, and addressing other employee concerns. With active support by and direction from the Deputy CFO, current NFC senior leaders have also begun to work with customers by establishing and meeting with a customer steering committee and undertaking other direct activities to learn of customers' challenges and needs. These are important steps, but only the beginning of needed actions.

Thus, for a period of about two years—the short-term phase—NFC leadership priorities should be to assemble the NFC leadership team recommended above, develop and build plans, and take action to concurrently address multiple, urgent challenges.

Then, NFC should move into a second two-year phase—the medium-term phase—that will involve continuing and advancing system improvements started earlier and making meaningful plans about the future of the NFC system, including ascertaining possibilities of obtaining funding for large-scale system modernization. This is the critical point for deciding NFC's future. With the foundation established in the short-term phase, NFC will use this medium-term phase to ascertain what level of support and resources can be made available for significant system change, the approximate amount of time such change would take, and the course of action to be followed to get approval from senior level USDA officials as well as other governmental entities.

A critical product of this phase will be a detailed plan for IT modernization, plus a realistic strategy for funding further NFC system enhancements, including the possibility of moving away from NFC's reliance on a mainframe computer. These materials will lead to decisions that will clearly require the involvement and agreement of the most senior USDA officials, relevant congressional entities, senior Administration officials, and others. It is likely that the potential for securing funding for the plans drawn up will be the most significant factor in decisions about what course NFC will take.

NFC has drafted a one-page IT Roadmap (which accompanies its current *Vision*) that presents preliminary, high-level plans for IT system stabilization and modernization for the next two years. Currently, the Roadmap does not include details about how these objectives will be accomplished; who will be responsible for them; and what resources, including staff and funding, will be needed. Nevertheless, as described in Chapter 5, these short-term activities are essential for system stabilization and enhancement, ultimately leading up to additional in-depth analysis, development of alternatives, review of funding options and possibilities, and decision making about the future of NFC's IT systems, including whether it is feasible to move the NFC system away from its current mainframe configuration.

NFC Stabilization and Modernization Roadmap

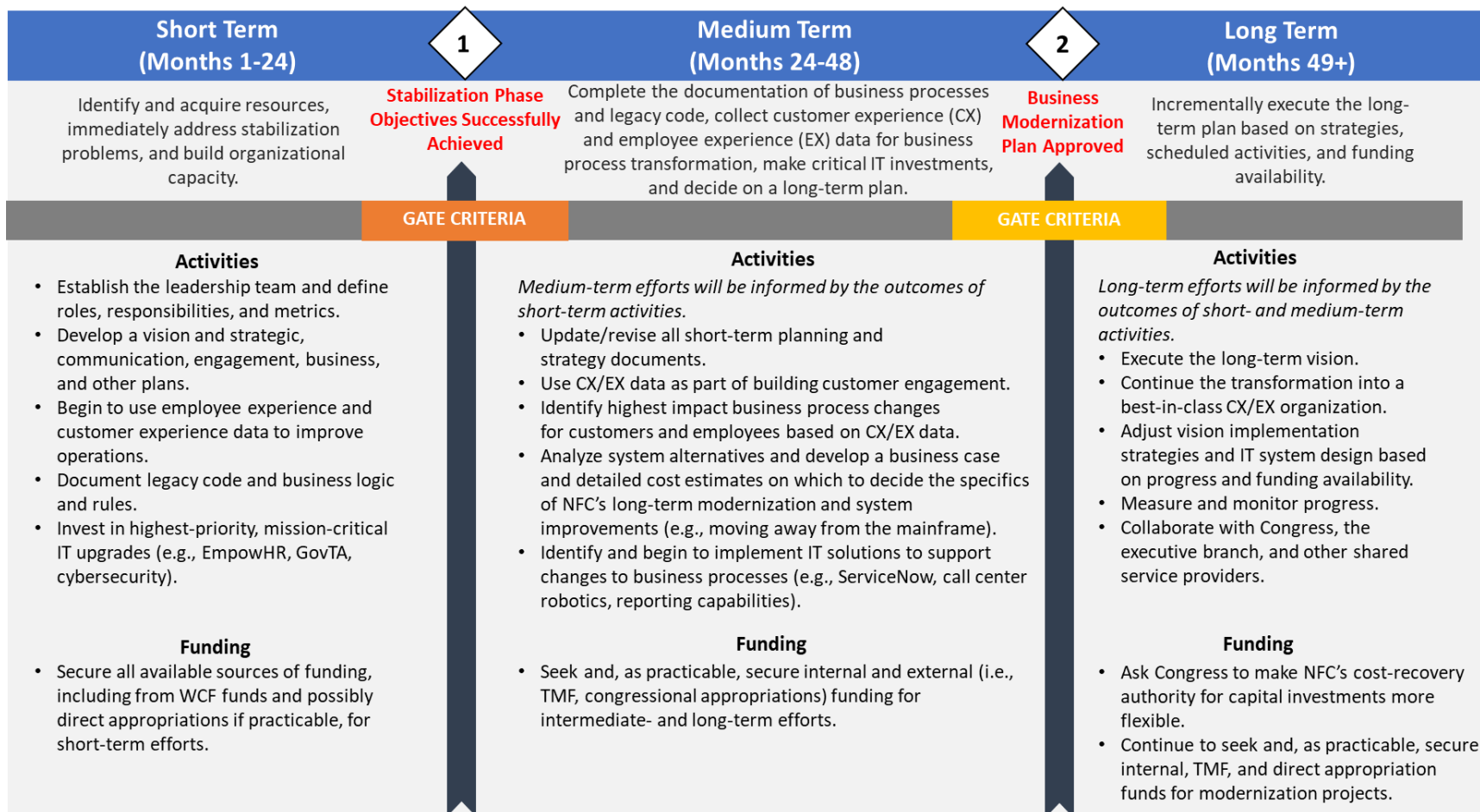


Figure 4 NFC Stabilization and Modernization Roadmap (National Academy of Public Administration)

Thus, the third phase will be to implement the agreed-upon long-term plan for NFC system modernization, with specific requirements to be developed based on the course of action approved by USDA leadership.

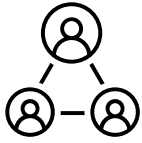
Recommendation 3.2: Building upon NFC’s preliminary *Vision*, NFC’s leaders should finalize, communicate, and implement a short-term (two-year) plan to stabilize the organization, build trust and confidence in NFC’s commitment to and capacity for change, and create organizational capability for long-term transformation and modernization. Action steps include

- Collecting feedback on urgent needs and solutions from customer and employees;
- Developing specific IT, financial, workforce, and customers service goals and strategies to address immediate priorities;
- Addressing urgent staffing needs including filling numerous vacant staff and leadership positions;
- Identifying, achieving, and celebrating quick wins to build momentum and demonstrate to internal and external stakeholders that NFC has the commitment and capacity to change;
- Assigning implementation roles and responsibilities;
- Developing organizational and individual performance measures; and
- Engaging in two-way communication with employees, customers, and other stakeholders about the plan and progress on a regular basis.

Recommendation 3.3: During the medium-term phase (years three and four), as IT system stabilization is achieved, NFC leaders should develop a formal, long-term IT modernization vision and plan analyzing alternative futures as a basis for the OCFO and other USDA leaders to decide upon NFC’s long-term operations. Action steps include

- Building on progress made during stabilization in the areas of improving employee and customer experience, increasing funding, and continuing to improve the security and functionality of IT systems; and
- As described in Chapter 5, working with customers, federal executives, and key legislative branch players and other relevant shared service providers to develop options for NFC’s future IT systems, including estimated costs, funding possibilities, and implementation schedules for each option.

Chapter 4: Engaging Customers and Employees



As discussed in Chapter 3, the National Finance Center (NFC) would benefit from establishing a new associate director position that focuses on customer experience (CX) and employee experience (EX). This new associate director would be responsible for building and institutionalizing a CX/EX office and for developing and implementing CX and EX strategies.

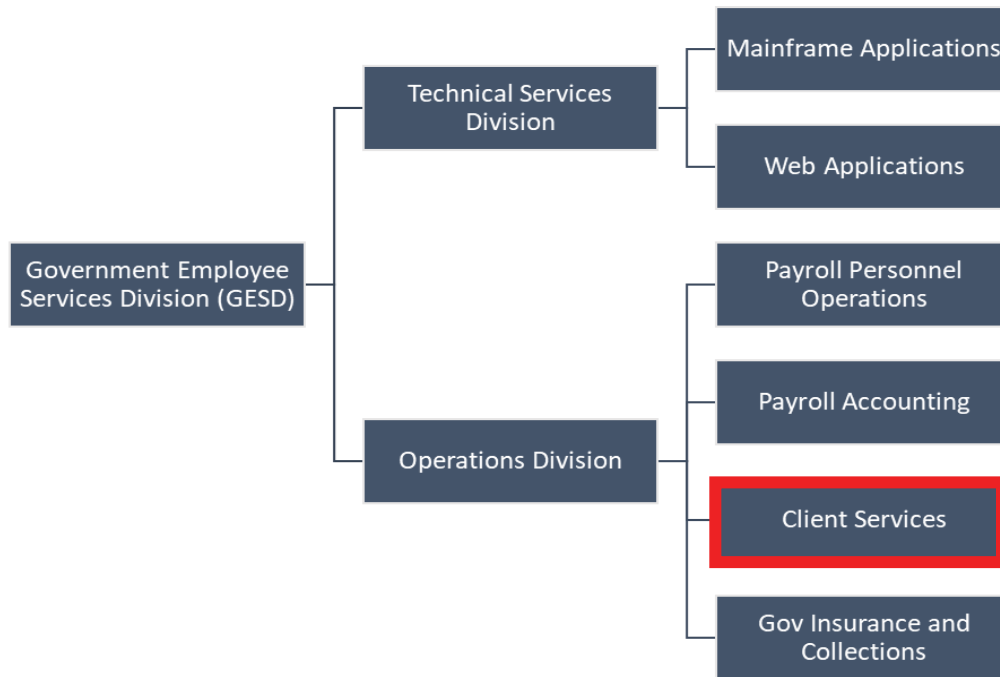


Figure 5 Organizational Location of the Client Services Branch (National Finance Center)

Currently, customers primarily interact with the Client Services Branch in the Operations Division, which is part of the Government Employees Services Division (GESD). The Director of the GESD reports to the NFC Deputy Director. (figure 5)

According to the Office of Management and Budget (OMB), CX refers to

A combination of factors that result from touchpoints between an individual, business, or organization and the Federal Government over the duration of an interaction and relationship. These factors can include ease/simplicity, efficiency/speed, equity/transparency of the process, effectiveness/perceived value of the service itself, and the interaction with any employees. Perceived responsiveness to individual needs and feedback is also important.⁸

⁸ U.S. Office of Management and Budget, “OMB Circular A-11 Section 280 – Managing Customer Experience and Improving Service Delivery,” (Washington, DC, 2020), 2, <https://www.performance.gov/cx/assets/files/a11-280.pdf>.

Similarly, EX is defined as “the sum of everything an employee undergoes throughout his or her connection to an organization, from the first contact as a potential hire to last touchpoints after the end of employment.”⁹

An organization’s ability to deliver excellent CX is highly dependent on EX. For example, employees forced to navigate paper-based processes that are slow and bureaucratic would find it extremely challenging to deliver CX that is “tech-enabled, seamless, and intuitive.”¹⁰ In addition, “it’s unlikely that employees will deliver highly empathetic, caring, and personal service if their employer doesn’t cultivate an organizational culture that embraces those values.”¹¹ In a nutshell, CX is “creating easy, effective and emotionally resonant experiences,” while EX is “empowering employees to deliver exceptional experiences.”¹²

The customers the Study Team interviewed were generally displeased with the service being provided by NFC in almost every category included in the OMB definition, and most indicated they would migrate to another service provider if they could.¹³ However, there are significant barriers to transitioning to a different service provider, including cost and time (it would likely take years simply to plan such a move, and more time and millions of dollars to implement it).¹⁴

An organization’s ability to deliver excellent customer experience is highly dependent on employee experience.

Nevertheless, NFC must take these sentiments seriously and immediately act to improve CX. The consequences of failing to do so are dire; if only one large customer were to leave NFC, it would likely be the beginning of the end for the organization because NFC’s fixed costs would need to be spread among fewer customers. If NFC’s services were to become less cost competitive, there would be even more incentive for customers to look for alternatives.

It is important to note that both customers and employees believe NFC’s commitment to mission and meeting the needs of customers is an organizational strength. In addition, one of the positive

⁹ Denise Lee Yohan, “Engaged Employees Create Better Customer Experiences,” Harvard Business Review, April 5, 2023, <https://hbr.org/2023/04/engaged-employees-create-better-customer-experiences?registration=success>.

¹⁰ Denise Lee Yohan, “Engaged Employees Create Better Customer Experiences,” Harvard Business Review, April 5, 2023, <https://hbr.org/2023/04/engaged-employees-create-better-customer-experiences?registration=success>.

¹¹ Denise Lee Yohan, “Engaged Employees Create Better Customer Experiences,” Harvard Business Review, April 5, 2023, <https://hbr.org/2023/04/engaged-employees-create-better-customer-experiences?registration=success>.

¹² U.S. Department of Veterans Affairs, Veterans Experience Office, *The CX Cookbook* (Washington, DC, 2020), 5, <https://www.va.gov/ve/docs/cx/customer-experience-cookbook.pdf>.

¹³ The Study Team was able to interview only eight of NFC’s approximately 170 customers. However, the issues raised by these customers were consistent with data collected through customer focus groups in 2015 and by Star Cypress Partners in 2022.

¹⁴ See, for example, Library of Congress *Fiscal 2023 Budget Justification*, pp. 38-40. <https://www.loc.gov/static/portals/about/reports-and-budgets/documents/budgets/fy2023.pdf>.

aspects of NFC that customers commented on was the fact that NFC is agile in a crisis: they have never missed a payroll—even, for example, after Hurricane Katrina and government shutdowns.

The Customer Experience Has Worsened in Recent Years

While some customers believe modernizing NFC’s IT systems is the organization’s most urgent priority, most customer interviewees believe NFC’s most significant challenges are its people and customer service. Customers describe an NFC in decline, with many aspects of customer service worsening in recent years. Processes have become more bureaucratic and take longer, communication has deteriorated, and staff who were knowledgeable of the systems and had the ability to resolve customers’ issues have left the organization. It takes longer to make changes and fix problems, and customers have to work harder and be more persistent (e.g., make multiple calls and meetings requests) to identify and reach the right person and get their issues resolved.

In other words, customers who were interviewed had a negative view of almost every aspect of customer service as defined by OMB: ease/simplicity, efficiency/speed, transparency, and effectiveness. Most customers did not address the issue of “equity” (also included in the OMB definition), but some of the smaller customers believe that they do not receive the same attention and assistance as NFC’s larger customers. Finally, regarding the issue of “value” in OMB’s definition, customers viewed it as both a positive and a negative. On the one hand, most of the customers who had explored alternative service providers indicated that NFC’s prices were much lower than the competition. On the other hand, most customers did not believe they were getting good value for their money because costs have remained steady while the level of service has declined. In addition, the cost savings that are supposed to be realized by using a shared service have not come to fruition fully because of the extra staff time customers need to devote to getting issues resolved and learning and navigating NFC’s systems and processes. Another cost customers must contend with is the staff time devoted to manually reconciling and correcting data across NFC’s disconnected systems and manually tracking actions and requests.¹⁵

Examples of specific customer complaints about service include

- NFC closes tickets without resolution or explanation;
- It is difficult for customers to escalate issues for proper attention;
- NFC Contact Center (NCC) helpdesk response times are excessively long;
- Training is difficult to get, the quality is inconsistent, and NFC has not developed training materials for systems that customers are transitioning to; and
- It takes longer to make system changes than it used to.

Customers and employees discussed several factors that have made it challenging for NFC to meet customers’ needs, including the governance issues discussed in Chapter 3 and the antiquated IT systems described in Chapter 5. Customers also attributed the decline in customer experience to the following:

- The client services function residing at a low level in the organizational structure, preventing it from getting the focus and attention from leaders it needs

¹⁵ See, for example, Library of Congress, *Fiscal 2023 Budget Justification*, pp. 38-39. <https://www.loc.gov/static/portals/about/reports-and-budgets/documents/budgets/fy2023.pdf>.

- A siloed and compartmentalized organizational structure, with responsibilities and information split across functions, making it difficult for staff and customers to understand whom to contact to get the help they need
- Understaffing, which causes staff to be inaccessible and unresponsive
- High leadership turnover, which makes developing relationships challenging

Another problem is that staff, including supervisors and managers, do not feel empowered to make changes to improve the customer experience—and it can take years to get permission to make even no-cost improvements. Further, staff do not understand who the decision makers are.

Recommendation 4.1: NFC leadership, with the new CX/EX director and office taking the lead, should foster a culture of innovation and continuous improvement to reverse the decline in service delivery and become a best-in-class CX organization. Action steps include

- Developing CX goals, strategies, policies, and organizational performance metrics;
- Partnering with the USDA CX office to benefit from lessons learned and model practices and policies;
- Developing staff in CX and human-centered design through training and rotations to established CX offices (including USDA’s CX Office);
- Utilizing human-centered design to implement customer-centric processes, practices, and systems;
- Empowering front-line staff to make decisions and implement innovative practices to improve CX;
- Holding leaders and employees accountable for CX through individual CX performance metrics; and
- Rewarding excellence and innovation in CX by establishing a CX awards program.

Employee Experience Has Declined

Like customers, employees also view conditions at NFC as getting worse. The primary causes appear to be lack of steady leadership, overwork, and poor communication. The workforce, which is located in New Orleans, does not feel valued by leaders in Washington and does not believe leaders are invested in NFC’s success. Employees also feel unheard and undervalued by NFC leaders. For example, suggestions for process improvements that would ease employees’ workloads and improve CX are often rejected or dismissed as unimportant, even if they could be accomplished with in-house resources. People also do not feel like they have the support and resources they need to do their jobs efficiently and effectively. Recognizing resource constraints and the pressure employees are under, NFC expended more than \$6 million on contract support in 2022 to assist NFC employees facing resource constraints, backlog issues, or knowledge deficits; that amount doubled in 2023 (\$12,498,677.85).

Both customers and staff observed that NFC employees are exceedingly dedicated to the organization and its customers.

In addition, employees are upset that they have been working in temporary, subpar conditions since their building was destroyed by a tornado in 2017. The current temporary workspace requires

NFC staff to work in modular trailers that are below sea level and connected by boardwalks next to a condemned building on NASA's Michoud campus. This location does not protect staff and NFC's operations from disruption or harm from future weather events. The lack of a safe and permanent home for NFC also has negatively affected employee morale and NFC's ability to attract the next generation of employees.

Despite these challenges, both customers and staff observed that NFC employees are exceedingly dedicated to the organization and its customers. Customers say staff work incredibly hard to try to meet customer needs and that NFC pays their employees on time, which they recognize is an extremely difficult task. However, depending on the staff's willingness to sacrifice work-life balance to maintain operations is not sustainable in the long term.

The new NFC leadership team has an opportunity to reverse recent trends and improve organizational culture and EX through employee engagement. Attention to employee engagement is a critical element of an organization's performance; there is a strong correlation between employee engagement and organizational health, including performance outcomes like productivity and quality.¹⁶ Engaged employees are actively involved in providing input in planning and decision making and promoting an inclusive environment. When done effectively, employee engagement leads to increased staff motivation, productivity, and morale.

NFC leaders have begun to focus on EX, in part in response to recommendations made by an independent study in late 2022,¹⁷ and in part due to their recognition that, in order to succeed in implementing necessary changes, they need to understand employee issues and they need employee support. For example, the new NFC leaders have been meeting with employees.

In addition, NFC established three committees in the spring of 2023 designed to improve employee engagement: a Community Engagement Committee to build relationships with local community groups and fund community projects; an Employee Investment Committee to get employee input on tuition reimbursement, loan repayment, and training offerings; and an Employee Engagement Committee to advise the Director and Deputy Director on employee engagement strategy and events. While these committees are a good start, it is too early to assess their effectiveness; their charters are still being drafted and members have not been finalized. However, it appears that they will be led by senior leaders or managers, and that members will be selected rather than volunteer or be elected by peers.

Recommendation 4.2: NFC leaders must demonstrate their commitment to an engaged workforce and a collaborative and inclusive work environment built on trust to foster a workplace culture that is fair, constructive, and supports managers and staff in addressing and improving performance and morale. Action steps include

¹⁶ See, for example, J.K. Harter, F.L. Schmidt, S. Agrawal, S.K. Plowman, and A. Blue, 2016, The Relationship Between Engagement at Work and Organizational Outcomes: 2016 Q12® Meta-Analysis: Ninth Edition, pp. 2–3.

http://www.workcompprofessionals.com/advisory/2016L5/august/MetaAnalysis_Q12_ResearchPaper_0416_v5_sz.pdf.

¹⁷ Star Cypress report

- Sharing Federal Employee Viewpoint Survey (FEVS) and climate survey data with all staff and encouraging continuous dialogue on scores and progress on actions being taken to address issues;
- Involving staff in problem-solving by establishing employee work groups or teams to analyze FEVS and other employee data, identifying organizational strengths and weaknesses and employee pain points, developing an employee journey map, and making recommendations for change to leadership;
- Establishing at least one permanent, formal employee committee or council that is led and comprised of nonsupervisors to facilitate two-way and cross-functional communication and advise NFC leaders and managers on employee pain points and suggestions for improving employee experience and operations, including customer experience;
- Holding leaders and managers accountable for employee engagement by setting specific expectations and performance metrics;
- Instituting a practice where NFC and Office of the Chief Financial Officer (OCFO) leaders participate in component staff meetings periodically to demonstrate a commitment to improving the workplace;
- Identifying opportunities for NFC staff to feel a valued part of USDA, such as arranging tours of the New Orleans facilities by USDA officials outside of the OCFO; and
- Ensuring that staff have a safe and welcoming place to work when they are onsite.

NFC Does Not Systematically Collect and Analyze Data to Drive Decisions Regarding CX and EX

While some individual managers collect data specific to the functions they oversee, NFC has not systematically collected and analyzed customer data since 2015, when focus groups were held with its eight largest customers and an unspecified number of smaller customers. As a result, NFC leaders and staff have a partial understanding of customer needs and pain points, but their perceptions of customer needs and complaints depend somewhat on where they sit in the organization. Further, leaders do not have an enterprise view of customer complaints and priorities across services and systems.

Similarly, NFC does not use existing data (i.e., FEVS) or systematically collect and analyze data from other sources (e.g., climate surveys, focus groups, etc.) to understand organizational strengths and weaknesses and address employee pain points. One challenge in using FEVS data to drive improvement initiatives is that NFC-specific survey results are not available for 2021, and it is difficult to interpret data from surveys administered during the pandemic years due to unique, unprecedented working arrangements. Therefore, NFC cannot use recent data to identify trends or root causes. However, NFC could use 2023 FEVS results to identify areas needing improvement and as a baseline against which to assess progress.

NFC recently began to collect workforce data. In April 2023, NFC conducted a survey with the objective of identifying and resolving employee concerns. The response rate was somewhat low (32 percent) but NFC plans to conduct

Leaders cannot make informed decisions about where to focus additional attention and resources without data on what is working well and the most significant pain points.

another survey in October 2023. If employees observe progress on issues raised in the previous survey, it is likely that the response rate will increase. In addition, in 2022 NFC hired Star Cypress Partners to perform an organizational assessment; as part of that effort, Star Cypress conducted an employee survey and a SWOT analysis. This is useful baseline data for NFC.

Without understanding what is working well and what the most significant customer and employee pain points are, leaders cannot make informed decisions about where to focus additional attention and resources. In addition, leaders risk making changes to systems and processes that have unintended consequences for CX and EX.

Recommendation 4.3: NFC leaders should listen to customers and employees through the systematic collection and analysis of customer and employee feedback to become a data-driven organization, where decisions (particularly decisions about CX and EX) are informed by data on what is working well and where additional focus is needed. Action steps include

- Using FEVS, customer surveys, employee and customer focus groups, and other feedback to identify pain points and develop customer and employee journey maps;
- Utilizing data and the journey maps to continually improve policies, programs, and services;
- Involving staff in improving employee and customer scores by establishing work groups or teams to analyze results, identify underlying issues, and make recommendations for change to leadership;
- Making information on CX performance available to customers and staff; and
- Utilizing feedback from customers and employees to take an enterprise view of common issues that can be addressed with one solution, instead of treating each pain point as a single problem to solve.

Poor Communication with Customers and Employees Has Caused Frustration and Mistrust

Customers and employees alike indicated that poor communication is one of their biggest frustrations, and that it has gotten worse in recent years. Customers say that NFC is opaque, and communication is not timely, if it occurs at all. NFC does meet regularly with larger customers. Otherwise, communication primarily occurs by phone or through email boxes.

Customers gave several examples of communication shortcomings:

- Project timelines are not shared with customers, which makes it difficult for them to plan.
- Process and system changes happen without notification. Sometimes these changes affect the agencies' employees, but the HR departments cannot inform them in advance because they are unaware the change is coming themselves.
- NFC does not inform customers of all system capabilities, so they are not always using them to the full extent.
- Customers do not understand how costs are calculated.
- There are delays between events (e.g., a data breach) and when NFC notifies customers.

Customers' frustrations are not limited to one-way communication; in recent years, NFC has developed plans and made changes to processes and services without consulting customers or

employees. In the absence of this input, leaders risk directing changes to systems and processes without understanding the impact on employee workloads or customer experience. Employee and customer input on planned changes could help leaders avoid unintended negative consequences.

Internal communication is also very poor from the top-down and bottom-up. Staff reported sometimes learning information from other parts of USDA or even customers, rather than from their own leaders. In addition, the organization is extremely siloed, with limited communication across organizational seams.

Current NFC leaders are aware of the internal and external communication problems and are working to address them. Internally, leaders have begun holding town halls and the deputy director has begun convening monthly meetings with GS 14s from across the organization. The rationale for the meetings with GS 14s is that information was not permeating down to those levels; however, some more senior staff said they are now learning about what is going on in the organization from their subordinates, rather than from leaders. NFC also plans to reinstitute an employee suggestion box.

Externally, NFC has established a steering committee to advise NFC as it implements its modernization roadmap. The steering committee consists of CIOs, CFOs, and HR personnel from DHS, DOJ, and the Small Business Administration. NFC plans to gather input and gain buy-in from other customers through customer surveys and focus groups.

Recommendation 4.4: NFC leaders should improve internal and external two-way communication to build trust with employees and customers and gain their support for proposed changes, as well as to ensure maximum effectiveness of those changes. Action steps include

- Developing a communication plan to ensure consistent messaging, identify the most appropriate messengers for different messages and audiences, and specify frequency and modes of communication;
- Soliciting input from customers and employees on the most immediate pain points and potential short-term solutions to ensure the short-term stabilization plan (chapter 3) addresses their most urgent priorities and has stakeholder support;
- Communicating the final vision and plans, including the short-term stabilization plan and business plans, to customers and employees;
- Communicating progress on implementing plans to employees, customers, and other stakeholders on a regular basis;
- Improving transparency on the status of projects, processes (e.g., rate setting), and how NFC operates and expends funds; and
- Collaborating with customers and staff to anticipate and mitigate risk.

Antiquated IT Systems and Cumbersome and Manual Processes Are Inefficient, Putting Stress on Both Employees and Customers

Many internal NFC processes, including those related to CX, are manual and paper based. The lack of automation prevents NFC employees from being as efficient and effective as they could be and increases staff workloads, which in turn makes it more difficult for employees to be responsive

to customers. Improving the efficiency of the current workforce is critical for building the organization's capacity for modernization.

NFC interviewees provided the following examples of internal process automation priorities:

- Dashboards to track the status of projects, help desk requests, complaints, escalations, etc., which are currently tracked via spreadsheets, emails, and meetings
- Document routing, which is currently done by email and impossible to track
- Learning management system to tailor training content, manage waitlists, etc.
- Updating customer profiles, which are currently Word documents that are updated quarterly
- Report generation on customer service performance (e.g., ServiceNow ticket resolution)
- Interactive voice response for the NCC helpdesk, which would enable customers to access information without speaking to a live agent

Several of these priorities could be accomplished through a customer relationship management system. A recent effort to add functionality to ServiceNow that would have automated several aspects of customer relationship management failed because the vendor was unable to deliver. NFC now has to start over with a new contractor.

NFC's externally facing systems are similarly cumbersome, manual, and burdensome. In some cases, the limitations of these systems are outside of NFC's control. For example, OPM requires paper submission of retirement packages. NFC interviewees most frequently discussed the mainframe, cybersecurity, and user interfaces as primary customer concerns in discussions regarding IT modernization. However, customers had more, and more nuanced, concerns about NFC's IT systems. This is an example of the need for NFC to more systematically invite feedback from customers through surveys and other means to ensure decision making, in this case regarding IT solutions, is informed by customer needs and priorities.

Customers have the following concerns about NFC's IT systems and how they impact their own organization's efficiency and effectiveness:

- Systems are not integrated, requiring customers to access multiple systems and follow a number of steps to complete a single HR action. This is time-consuming and some customers noted that the Interior Business Center (IBC) offers an integrated solution.
- Customers have several issues with getting data they need from the systems:
 - Data extraction either has to be done manually by the customer or through requests to NFC, depending on the data required and the system involved.
 - It can take weeks for NFC to respond to data requests, usually with spreadsheets. It is difficult for customers to plan for data needs so far in advance.
 - Customers cannot get the data in the format they need, and therefore manage the data themselves in spreadsheets.
 - The data they receive are frequently incorrect. As a result, some customers have to set up their own systems to track and record actions themselves.
- Transfer of information among systems has been a problem for years and remains unaddressed.
- Some of the systems are not very user friendly, are difficult to learn (e.g., Insight), and for some there are no user manuals—customers have to figure out the commands, which are not

intuitive, on their own. This requires customers to have people on staff who understand the systems and know NFC-specific commands.

- NFC does not plan adequately for transitioning customers to new systems when systems they are using become obsolete. This, in turn, makes it impossible for customers to plan.
- Customers had several concerns about the mainframe: they are concerned about it failing and they believe it is costly to maintain. It is difficult to customize and change, the code is old and embedded, and it is difficult to recruit and hire the COBOL programmers needed to work on the system.
- Cybersecurity (discussed in more detail in Chapter 5) is obviously a concern because customers need to ensure that their employees' information is safeguarded. But NFC's issues with cybersecurity also can cause extra work for customers. For example, lapsed NFC authorities to operate can trigger IT audits of their customers. In addition, some customers have not transitioned to upgraded systems because of security concerns.

Recommendation 4.5: NFC should improve, streamline, and automate functions and processes, prioritizing those related to customers' ability to receive the assistance and information they need to improve the efficiency and effectiveness of both NFC and its customers. Action steps include

- Performing a business process reengineering analysis (e.g., identifying process inefficiencies, opportunities for process automation, etc.), with customer and employee input, for each user flow/system category;
- Implementing a customer relationship management system in ServiceNow;
- Making the NCC help desk automation more robust;
- Automating training management;
- Improving report generation for internal and external processes; and
- Implementing the IT recommendations in Chapter 5.

NFC Lacks Sufficient Staff with the Necessary Skills and Expertise to Meet Customer Needs

Both customers and employees indicated that NFC does not have an adequate number of employees with the skillsets and competencies needed to effectively carry out the work, including meeting customer needs or managing customer experience. Staff levels have decreased (chapter 2) while demands have not; staff are overworked and overwhelmed, do not have a good work-life balance, and have low morale. The quality of work is suffering because people do not have the necessary skills, knowledge, or experience or are doing multiple jobs. For example, some supervisors are dual-hatted. In some cases, when staff leave, instead of being replaced, their responsibilities are shifted to existing staff, who are already overwhelmed. In other cases, seasoned staff are replaced with inexperienced staff, and supervisors and other staff lack the bandwidth to train them properly.

To make matters worse, the working conditions have led to a retention problem in recent years. NFC has lost significant institutional knowledge, and newer staff do not have the experience and knowledge needed to answer customer questions and resolve their issues. This problem is only likely to get worse, as approximately 30 percent of the workforce is eligible to retire in FY 2023.

NFC's staffing issues contribute to significant customer frustration. Customers said that if they can get to the right person, customer service is usually good. The problem is that it is very difficult to get to the right person. NFC requires customers to initiate all contacts through NCC. Customers have reported long (up to an hour) hold times. The person who eventually picks up rarely knows the answer to the customers' questions or how to help them solve problems. Customers are often transferred multiple times without getting an answer (or inconsistent answers). The next step after contacting NCC is to submit a ticket through ServiceNow. It can take from days to months to get answers to a request. To make matters worse, sometimes NFC closes tickets without explanation, and the customer is required to resubmit it.

The third step for customers is to begin the escalation process. Most customers were very satisfied with the escalation process, especially if they went straight to the client management branch chief. But they do not believe they should have to escalate issues so often. In addition, following the normal escalation process does not always yield positive results. NFC receives at least 100 escalation requests per day. NFC does not have the resources to address and resolve all escalated issues, which results in customers taking their issues to NFC or OCFO leadership (and occasionally to top USDA leaders). According to NFC staff, customers escalate issues to NFC leaders fairly frequently, and then staff are directed to address those issues immediately, which affects workloads and workflows.

Another major customer frustration is the difficulty getting software change requests implemented. Customers attributed this to not enough staff, combined with staff not having the experience with and knowledge of the systems to be effective. As a result, NFC struggles to make changes to the systems and there is a large backlog (customers reported examples of changes they requested six or more years ago that still have not been implemented). Customers report that it did not take NFC as long to make changes in the past.

NFC is aware of its workforce issues and has begun working on a human capital strategy that includes a succession plan and addressing staff shortages and competency gaps through hiring outreach talent assessments, and retired annuitants.

Recommendation 4.6: NFC should address major workforce issues, including the loss of institutional knowledge to ensure NFC has the right number of staff, with the right skills, to address customer needs. Action steps include

- Completing the human resources strategy that is under development, ensuring it includes recruiting, retention, and training;
- Hiring additional NCC staff and providing training needed to understand systems and identify appropriate subject matter experts to assist customers;
- Hiring additional subject matter experts to enable sufficient coverage for carrying out operations while also responding quickly to customer requests for assistance;
- Reskilling or upskilling staff as the roles, responsibilities, and structure of the organization change;
- Creating interdisciplinary customer-assistance teams to resolve CX issues more quickly;
- Stemming the loss of institutional knowledge by documenting system code and processes and establishing a succession plan and formal mentoring program;

- Rehiring recent NFC retirees, potentially as short-term contractors, to document existing code and processes and train staff;
- Establishing an effective working relationship with the Office of Human Resources to immediately explore opportunities to address hiring, retention, and other personnel needs and challenges; and
- Leveraging resources from across USDA (e.g., the offices of the Chief Information Officer, Deputy Secretary, and Customer Experience) and the federal government (e.g., the General Services Administration, Technology Transformation Services, and US Digital Services).

Chapter 5: Implementing a Multiphase IT System Modernization Process



The National Finance Center (NFC) operates an integrated Payroll and Personnel System (PPS) that provides all related payroll services support. As described earlier, NFC is the largest civilian payroll service provider for the federal government, with over 650,000 employees paid biweekly. The PPS is a custom system based on mainframe technology that integrates with multiple subsystems to allow NFC to support the entire lifecycle of employee services including the following:

- Human Resources (HR): Provides HR and benefits transactions, including providing employees with secure electronic access to earnings, tax, insurance, and other personal information
- Time and Attendance (T&A): Provides access to a collection of web-based T&A systems that support time and leave management for employees; the three primary T&A systems supported are WebTA, Paycheck8, and GovTA
- Retirement Systems: Supports the administration of employee retirement benefits
- Insurance Systems: Supports health insurance processing and processes enrollment and health plan data
- Reporting Component: Provides tailored and user-defined reporting capabilities for both agencies and their employees, including data analytics

NFC's technical environment is managed in a hybrid fashion. The core of NFC's system—the PPS mainframe system—was integrated into the U.S. Department of Agriculture's (USDA) Office of the Chief Information Officer (OCIO) Digital Infrastructure Services Center's Platform as a service environment in the third quarter of FY 2020. The platform and infrastructure are managed by USDA's OCIO.

The Technical Services Division (within the Government Employees Services Division [GESD] of NFC) manages technical application development and testing and consists of two subcomponents: the Mainframe Applications Directorate and the Web Applications Directorate. The Mainframe Applications Directorate oversees the function, modifications, and updates to the main PPS mainframe system. The Web Applications Directorate is responsible for several applications that are user-facing and provide access to agency HR users and employees.

NFC manages operations through its Operational Services Division, which has four subcomponents: the Payroll Personnel Operations Directorate, Payroll Accounting Directorate, Client Services Directorate (which includes application and customer user acceptance testing), and Government Insurance and Collections Directorate.

There are two major system areas in NFC's technical environment: Mainframe Applications and Web Applications (figure 6).

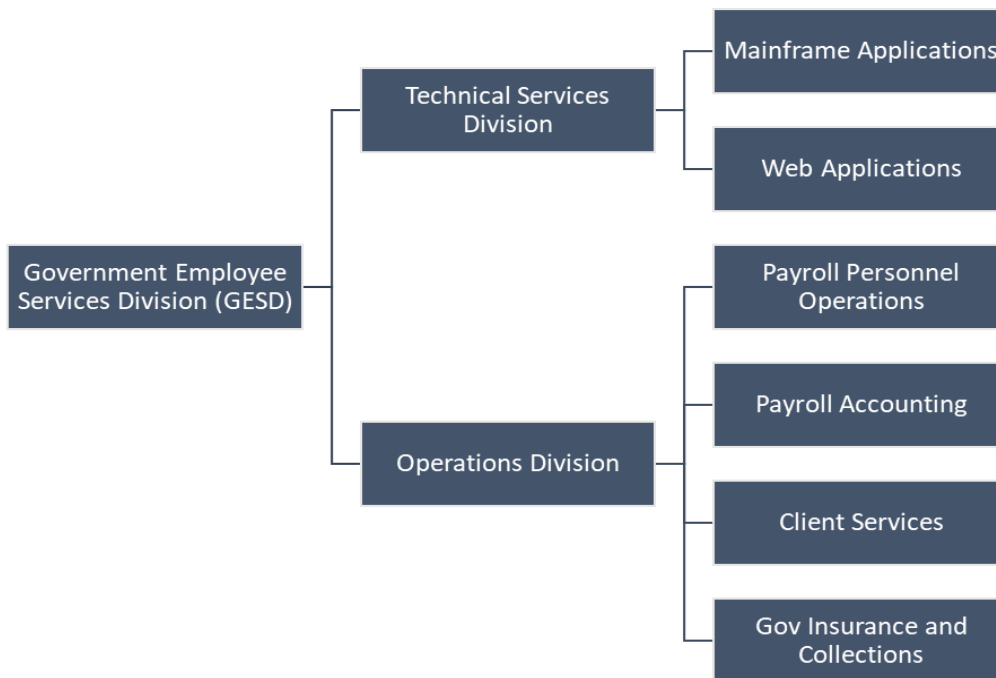


Figure 6 NFC’s Technical Environment (National Finance Center)

NFC’s Systems Have Become Antiquated, with Increasing Technical Debt and Security Risks over the Years

Just like many other federal shared service providers’ systems, NFC’s systems have not kept pace with advances in technology. NFC has tried to modernize its mainframe systems over the last few years with at least three unsuccessful attempts. Each lacked one or more key elements of a successful modernization project, such as a clear modernization plan, a solid project management, or technical expertise. A business case analysis conducted in 2011 (2011 BCA) identified several challenges with NFC’s payroll system, including system complexity, increasing costs, inefficient processes, technical and functional stagnation, and a diminishing knowledge base due to attrition and limited staffing. Since 2011, NFC has not developed comprehensive business cases, alternative analyses, or modernization plans for the mainframe system. Over the years, the issues identified in the 2011 BCA have continued to compound—and the lack of necessary IT investments has resulted in increasing technical debt, a major problem across the entire federal government.¹⁸

Similarly, technical debt has accumulated for the other integrated systems in NFC’s technical environment, such as HR, T&A, retirement systems, and others. Many of these applications are at end-of-support/end-of-life, resulting in potential poor performance and reliability, higher operating costs, and growing cybersecurity risks and vulnerabilities. Customers want alternative, cheaper options and additional functionality that will require enabling add-on modules. While

¹⁸ Technical debt is the cost associated with a system’s architecture and codebase, resulting from inefficient processes, design flaws, or limited decisions; it represents the full cost of maintaining aging software and systems, particularly those which have existed well beyond their expected or planned lifecycles. From Cairns, Chris and Sarah Allen, “Don’t underestimate the danger of technical debt,” 18F, August 7, 2015, <https://18f.gsa.gov/2015/08/07/technical-debt-1/>.

some efforts to modernize these systems are underway, these modernization initiatives have faced extensive project delays. As an example, the EmpowHR upgrade to version 9.2 has been ongoing for seven years (compared to the initial four-year plan). During that time the vendor has announced version 9.2 will no longer be supported in ten years, which will require NFC to consider and develop an alternative solution in the near term (one-two years) to ensure a successful migration.

Inefficient processes associated with NFC's systems have resulted in antiquated user interfaces to access and retrieve information, which have increased customer dissatisfaction and frustration.

PPS is a complex system with more than twenty subsystems that make it time-consuming to design and implement upgrades, enhancements, and increased functionality. Staff also must devote significant time to reworking, error resolution, and reconciliation because workflow and approval processes are not automated.

Inefficient processes associated with NFC's systems have resulted in antiquated user interfaces to access and retrieve information, which have increased customer dissatisfaction and frustration. As an example, the Information Research Inquiry System (IRIS) is an application that allows agencies to research payroll/personnel inquiries received from employees and other sources. The user login screen is shown in figure 7 and illustrates the user's view of NFC's applications. This reflects an older "green screen" presentation that is inefficient and not in keeping with the experience agency customers expect.

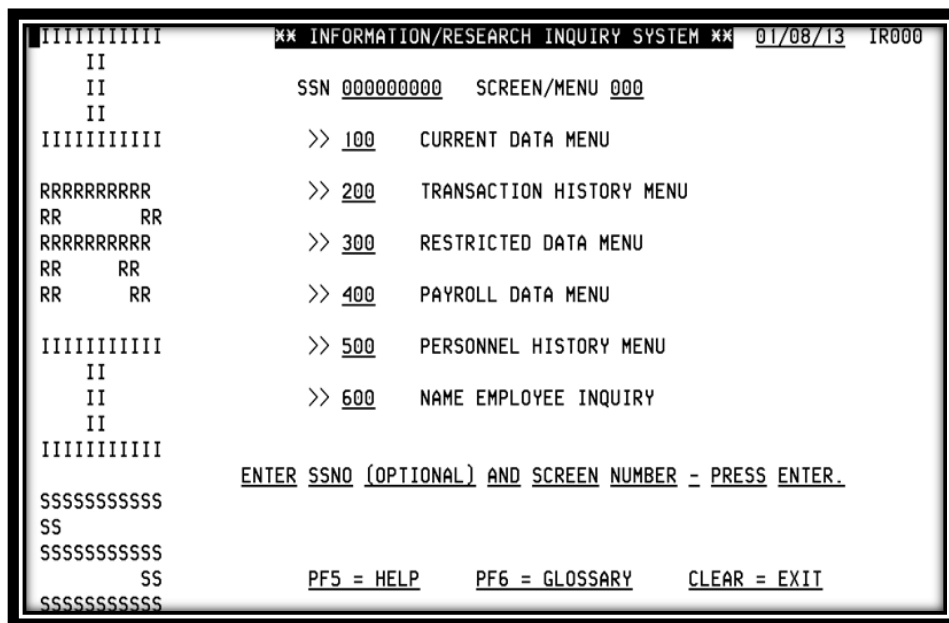


Figure 7 Information Research Inquiry System Login Screen (Information Research Inquiry System)

NFC faces several cybersecurity challenges with its technical systems. There are differing opinions on the scope and scale of these challenges based on internal and external interviews. The USDA Office of Inspector General identified several vulnerabilities in its applications and systems and

USDA OCIO is working on several projects to address top cybersecurity issues, such as secure information sharing and filesharing, encryption and multifactor authentication, and security patching. Some of NFC's systems have only received provisional authority to operate approvals pending USDA OCIO software delivery. Not surprisingly, cybersecurity is one of the primary concerns of NFC's customers.

NFC's Ongoing Modernization Projects (Excluding the Mainframe) Face Considerable Risks without Sustained Leadership Focus, Adequate Staffing, and Strong Project Management

NFC has several ongoing modernization projects to upgrade its HR, T&A, retirement, and other systems. These systems are priorities based on the impact they have on customer priorities and their potential to address process inefficiencies, improve employee experience, and pave a path for future mainframe modernization. They also represent an opportunity for NFC to build momentum and trust by achieving some quick wins. As described in the earlier section, these projects have faced extensive delays and will continue to face risks and delays without leadership focus, adequate resources, and strong project management. Successful completion of these projects will free up the necessary resources and capacity to focus on longer-term modernization priorities (recommendations 5.2 and 5.3) and—more importantly—will allow NFC to build trust and credibility with its customers and agency leaders. These projects need to be followed with improving and upgrading NFC's other systems, such as insurance systems and services.

NFC Has an IT Staffing, Institutional Knowledge, and Business Process Deficit

NFC will require a cross-functional, experienced team of program management, technical, operations, customer service and experience, and testing/quality assurance staff to plan and implement modernization initiatives successfully. However, GESD has limited IT resource capacity, despite being responsible for many of the functions that will be critical for successful modernization, such as application development, testing, operations (business processes), and client services (requirements).

Historically, the NFC has had significant vacancies across the organization. Table 4 below provides a snapshot of the staffing issue in GESD. The table is based on data provided to the Study Team in April of 2023 for Pay Period 09 and does not reflect recent NFC hiring initiatives. The table also shows only staffing information for GESD, not the NFC Office of the Deputy Director, because the vast majority of NFC staff are organized under GESD.

Table 4 Government Employee Services Division Staffing (April 2023)

<i>Division</i>	<i>Directorate/Branch</i>	<i>Total FTEs</i>	<i>Fully Funded Vacancies (as of April 2023)</i>	<i>Vacancy Percentage</i>
<i>Leadership, Support Staff, and Division Directors</i>		<i>17</i>	<i>2</i>	<i>12%</i>
<i>Technical Services Division</i>		<i>120</i>	<i>29</i>	<i>24%</i>
	<i>Mainframe Applications</i>	<i>60</i>	<i>18</i>	<i>30%</i>
	<i>Web Applications</i>	<i>60</i>	<i>11</i>	<i>18%</i>
<i>Operational Services Division</i>		<i>343</i>	<i>97</i>	<i>28%</i>
	<i>Payroll/Personnel Operations</i>	<i>76</i>	<i>23</i>	<i>30%</i>
	<i>NFC Contact Center</i>	<i>37</i>	<i>10</i>	<i>27%</i>
	<i>Payroll Accounting</i>	<i>105</i>	<i>29</i>	<i>28%</i>
	<i>Client Services</i>	<i>65</i>	<i>19</i>	<i>29%</i>
	<i>Government Insurance and Collections</i>	<i>60</i>	<i>16</i>	<i>27%</i>
<i>ALL GESD TOTALS</i>		<i>480</i>	<i>128</i>	<i>27%</i>

Source: National Finance Center Position Organization Listing Report, with Position Information and Location as of Pay Period 09, 2023¹⁹

As was shown in Chapter 2, the organization also faces risks from its aging workforce, with roughly 38% of current FTEs eligible to retire in 2023, roughly 59% eligible to retire by 2028, and roughly 71% eligible to retire by 2033. The staffing shortage issue is further exacerbated by challenges in

¹⁹ The numbers presented in this table may not be consistent with the earlier summary information in this report. This is due to differing sources of information and the fact that the Position Organization Listing (POL) report identifies numerous positions that may or may not support an FTE. For example, some positions are listed as having a vacancy date of 00/00/0000 and the Study Team was told this was an administrative feature used to support hiring, promotion, and retirement activities within the organization. The chart above does not count any positions listed in the POL report as having a vacancy date of 00/00/0000 for the purposes of total FTEs or vacancies and, accordingly, may vary from other numbers provided by NFC in interviews or written responses to data requests. NFC indicated that they completed a comprehensive POL Report Clean-Up project between February and May 2023, and the POL is current as of pay period 16. The numbers in the chart above are consistent with the POL report the Study Team was provided for April 2023, pay period 09.

finding talent. As an example, the Technical Services Division obtained recent approval to fill ten of its vacant positions. However, the job openings had to be extended due to a limited number of qualified candidate applications. This team of technical application development and testing staff currently supports system maintenance, operational support, and customer-requested changes, in addition to ongoing modernization efforts and operations.

Coupled with the shortages in staffing, NFC continues to face a significant loss of institutional knowledge, as have its customer agencies. NFC developed PPS over a period of decades in partnership with the Office of Personnel Management (OPM) and customer points of contact who were very familiar with OPM procedures and understood how to execute those procedures in the PPS. Over the years a large portion of that knowledgeable workforce has retired and been replaced by employees who don't have the same processing foundation and/or familiarity with PPS. This has caused the agencies to become more dependent on support from NFC. Unfortunately, NFC's own loss of institutional knowledge has resulted in customers' frustration that NFC can't resolve their problems quickly and accurately at times.

Several interviewees have commented on the “spaghetti code”—named as such due to its unstructured nature and difficult-to-read code. This creates complexity in maintaining and changing the code and makes it harder to identify the source of a problem.

NFC is also experiencing a skills mismatch gap; the Study Team has heard on numerous occasions about NFC employees who are not familiar with, or knowledgeable about, processes and systems. As a result, customers frequently comment on NFC's lack of speed and completeness when processing service change requests, a condition which can be jointly attributed to the staffing shortages, incomplete knowledge, and skills gaps. The existing skills gap will be even more impactful as NFC considers mainframe modernization, which will require staff with knowledge of and experience with the cloud, modern programming languages, analytics, and other technologies. A condition driving this existing skills gap is the lack of training for the workforce. As an example, in a recently conducted organizational assessment survey, employees rated the need for training in “Application/technology systems” and “other technical skills” as the top training needs (combined score of 51 percent). The lack of expertise and an organization-wide training plan, coupled with challenges in hiring talent with experience and expertise, has contributed to poor employee engagement and morale.

NFC's software development and implementation processes are fraught with several challenges that, over successive years, have created a complex codebase, with limited documentation. Several interviewees have commented on the “spaghetti code”—named as such due to its unstructured nature and difficult-to-read code. This creates complexity in maintaining and changing the code and makes it harder to identify the source of a problem. Interviewees made several references to the absence of comprehensive requirements, process, and integration documentation; shifting project milestones and dates; nonstandard practices (e.g., mainframe developers testing their own software); and many other gaps caused by insufficient staff and the lack of institutional knowledge and documentation. The staffing shortage continues to amplify these challenges.

NFC's Mainframe System Is Not Sustainable in the Long Term and Will Need to Be Modernized

Embarking on the mainframe modernization without sufficient planning and capacity will not only put ongoing projects at risk but will impact the success of the mainframe modernization project.

NFC's mainframe system, when compared against the Government Accountability Office's (GAO) criteria for a legacy system,²⁰ is sufficient in many criteria; the hardware is under warranty, software and

operating systems are supported by vendors, and the infrastructure and platforms were integrated into the Digital Infrastructure Services Center's Platform as a Service in 2020. However, the biggest and most challenging constraint is the use of COBOL. The availability of COBOL engineers and programmers has been a major challenge in recent years, particularly due to the population of experienced COBOL programmers who are reaching retirement age and the difficulty in attracting new talent to the field. Recent trends show a high demand for COBOL engineers and programmers as organizations are facing difficulties in finding professionals with the necessary skills to maintain and modernize their legacy systems. This demand is expected to increase in the coming years as the number of experienced COBOL professionals continues to decline, and organizations face increasing pressure to upgrade their legacy systems to stay competitive in the rapidly changing technology landscape.

Additionally, recent trends within the broader shared services landscape increasingly show that agencies and leaders want to more actively use and analyze their human capital data. NFC has a valuable asset in the form of its payroll data, but currently analytical capabilities are limited, and reporting capabilities are not nimble or sophisticated enough to meet customer needs. A modernized and revitalized NFC represents new potential, where customers can better use the data that NFC stores to inform workforce planning and talent management, while identifying actions needed to improve organizational performance. By embracing data and analytics, NFC can play the role of a strategic, proactive human capital leader, assisting agencies with government-wide insights and transforming human capital management for hundreds of thousands of federal employees.

While NFC urgently needs to modernize its mainframe system, it will need to adopt an incremental and phased approach since it does not have the resources or staffing capacity to focus on mainframe modernization. Mainframe modernization is a complex undertaking and will require not only comprehensive planning but significant resources. Embarking on the mainframe modernization without sufficient planning and capacity will not only put ongoing projects at risk but will impact the success of the mainframe modernization project. An examination of the potential costs, as well as a proposed roadmap, for NFC's modernization is detailed later in this chapter.

²⁰ U.S. Government Accountability Office, *Information Technology: Agencies Need to Develop Modernization Plans for Critical Legacy Systems*, GAO-19-471, (Washington, DC, 2019), <https://www.gao.gov/products/gao-19-471>.

The NFC team has already developed plans and a vision for NFC's future, informed by and consistent with the Panel's preliminary recommendations. Recent NFC initiatives at the time of publishing this report are aimed at addressing key systems in the short-term phase (i.e., the stabilization effort), including, EmpowHR, human capital management, GovTA, retirements, and employee services.

In alignment with the Panel's preliminary recommendations, NFC is also actively considering ways to better integrate IT expertise and resources through enhanced collaboration with the USDA OCIO. In a draft strategic planning document prepared for USDA leadership and provided to the Study Team, the NFC leadership wrote the following:

“In partnership with the Office of the Chief Information Officer (OCIO), begin the Congressional notification process to pilot the transfer of NFC application developers to OCIO. With this transfer, it is proposed to create a 3rd position of Director for IT Modernization. This potential SES position reports to OCIO but is dedicated to addressing NFC IT and Cybersecurity requirements.”

This intended change would address some of the recommendations identified in Chapter 3 and allow NFC to better leverage IT expertise and capacity at the departmental level. It would also create additional levels of connection, collaboration, and accountability between USDA OCFO and USDA OCIO in their joint pursuit of a first-class NFC.

Recommendation 5.1: Stabilize and improve current systems, prioritizing upgrades that improve the customer experience and fix security vulnerabilities.

Action steps include

- Organizing cross-functional leadership (as described in Chapter 3) for the implementation of upgrades and system changes;
- Maintaining strong leadership support and project management capability throughout the life of the system modernization;
- Expediting completion of ongoing system improvements as a priority to build momentum and achieve quick wins;
 - Conduct an analysis of alternatives for a new Human Capital Management system solution.
 - Develop front-end interfaces for T&A systems (webTA, GovTA, Paycheck8).
 - Replace paper-based processes and implement real-time data validation of retirement systems.
 - Upgrade ServiceNow to the current version and add customer relationship management functionality, including dashboards for customers to track requests and progress.
- Addressing security/cybersecurity vulnerabilities by immediately addressing cybersecurity upgrades for WebTA, EmpowHR, and all other systems, including external integrations; implementing multifactor authentication, separation of duties/roles, audit logging, and data masking; and establishing mature software development processes.

Recommendation 5.2: Evaluate systems' status and develop a plan to complete stabilization priorities and address medium-term system priorities. Action steps include

- Continuing unfinished priorities from the stabilization phase; and
- Focusing on medium-term priorities
 - Continuing modernization of current insurance systems and services; and
 - Incorporating data from T&A systems into reporting and enhancing data analytics capabilities.

Recommendation 5.3: Depending on the long-term vision adopted, accelerate NFC’s mainframe modernization journey to allow NFC to improve its operations, address skills shortages, and reduce risk. Action steps include

- Instituting a clear governance structure with leadership focus, cross-functional teams, and transparent decision making;
- Establishing strong project management capabilities, adequate resources, and metrics to measure and track progress; and
- Sharing progress with customers and keeping them informed and involved as NFC executes - its long-term vision.

NFC Mainframe Modernization Rough Order of Magnitude Cost Estimate

Summary of Task and Results

The Study Team used a multiple-pronged approach to develop a Rough Order of Magnitude (ROM) cost estimate for NFC’s mainframe modernization. It included reviewing any available historical analyses or cost estimates of NFC’s mainframe and evaluating mainframe costs for comparable systems. The sources of information included reviewing formal cost estimates, business plans, GAO reports, and investment data from the IT Dashboard and the Technology Modernization Fund (TMF).²¹

Based on the analysis, the Study Team has determined that a reasonable estimate of the costs for NFC’s system modernization is at least in the \$200 - \$300 million range. However, this estimate could vary significantly given the technical approach chosen, and the definition of system requirements, architecture, and design. This cost range is scoped to develop a ROM of the costs for modernizing NFC’s PPS mainframe system, which would include moving from the current mainframe environment. Though not formally validated, the estimated range was informed by interviews with multiple peer organizations and leaders in the government shared service space based on their expertise and specific knowledge of government modernization.

²¹ The IT Dashboard is a General Services Administration managed and maintained data repository of government-wide IT portfolios, their relative health, and future development plans. From “About IT Dashboard,” IT Dashboard.gov, Accessed July 17, 2023, <https://www.itdashboard.gov/about>; The Technology Modernization Fund was authorized by the Modernizing Government Technology Act of 2017 to serve as an oversight and investment program for federal IT projects. Agencies submit project proposals to the TMF’s Technology Modernization Board, which is comprised of Government IT leaders. Projects recommended for funding by the Board receive incremental funding contingent on the successful execution of milestones. From “How the TMF Works,” The Technology Modernization Fund, Accessed July 17, 2023, <https://tmf.cio.gov/>.

Methodology for Cost Estimation

Without knowledge of a specific desired system design for a future NFC system, the Study Team identified reasonable comparisons for NFC's PPS. The team examined over a dozen separate modernization efforts within the federal government, with the nine "similar" comparisons presented and summarized in this report. The team used the following criteria to determine how closely the projects resembled the conditions present in NFC's PPS:

- Overall age of the system
- Continued use of or transition from a mainframe
- Use of COBOL as a coding language
- Total number of unique users or accounts managed
- System complexity and presence of multiple interfacing system components
- Services provided, particularly payroll

Once a modernization effort was identified as a reasonable comparison point for NFC using these criteria, the Study Team identified overall costs and the time to complete for each using business cases, GAO reports, TMF investment details, IT Dashboard investment details, interviews with subject matter experts, and other publicly available data.

Typically, cost estimation is a comprehensive, well-documented, accurate, and credible process. In contrast, the ROM the Study Team developed for NFC is very high level and has several constraints, including

- Limited time for analysis;
- Aggressive schedule and timeline;
- Limited available information;
- Lack of specified system design and requirements;
- Pending decisions on the future state of the service, including which technical approach to take for modernization (e.g., refactoring, rehosting, rearchitecting, rewriting);
- No or limited breakdown of costs into individual cost categories; and
- No vendor outreach and engagement for validation.

Given these constraints, the goal of the team was to identify comparable costs and projects, highlighting a low to high range that NFC can use as a starting point for more comprehensive analysis. In addition, the team developed a process that can easily be repeated and validated: information was obtained from NFC and publicly available data sources, as detailed in this methodology section.

Modernization Cost Estimates of Comparable Systems

The team conducted research using multiple sources of information, including information from the IT Dashboard, TMF applications, agency websites and published business plans, and other sources to identify and select a short list of modernization initiatives from across the federal government to use as data points (table 5).

Table 5 List of Projects Analyzed

Modernization Project	Estimated Total Cost	Project Years	Time to Complete	Criteria notes
Small Business Administration Disaster Credit Management Modernization	\$55,240,000	2017-2022	5 years	The system is over 40 years old and mainframe based. It processes 100,000 – 200,000 loans per year.
OPM Trust Fund Management Modernization	\$71,900,000	2016-2022	6 years	The system is over 30 years old and mainframe based. The system uses a variety of coding languages, including COBOL. The modernization initiative involves transitioning the system to the cloud.
Social Security Administration - Benefits Modernization	\$81,270,000	2017-2025	8 years	The system is over 50 years old, uses COBOL, and has many interfacing components including mainframe and distributed systems.
Interior Business Center (IBC) Financial Systems Modernization Project for the Federal Retirement Thrift Investment Board	\$100,000,000	2019-2022	4 years	The system is over 30 years old. The project retired 4 legacy mainframe systems, some of which used COBOL. The system services nearly 6 million employees and retirees.
Department of the Interior Office of Natural Resources Revenue Modernization	\$152,130,000	2017-2028	11 years	The system is about 20 years old and currently mainframe based. The new system will use cloud-based technology
Housing and Urban Development UNISYS Mainframe Migration	\$175,000,000	2018-2020	3 Years	The system is nearly 40 years old and is mainframe based. It services 10 million applications per year and includes integrated financial and human resources functions.
IBC Federal Personnel and Payroll System Modernization Project	\$200,000,000	2017-2026	10 years	The system is nearly 30 years old and services very similar business functions. It uses natural coding language and features an integrated

				HR system that differs from NFC.
Department of the Treasury Information Returns Modernization	\$316,520,000	2021-2026	6 years	The system is over 30 years old and runs on a mainframe using COBOL. The IRS plans to continue to use COBOL for the foreseeable future.
IRS Integrated Modernization Business Plan	\$1,600,000,000	2019-2024	6 years	The IRS IMBP represents an uppermost-end modernization effort for a large-scale system that features many integrated and dependent subsystems.

Source: National Academy of Public Administration²²

The costs and estimates of the modernization projects vary significantly, but two recent projects emerged as most comparable to NFC: the OPM Trust Fund Management Modernization and the IBC Federal Personnel and Payroll System Modernization. In addition, the Study Team identified a third estimate, based on the 2011 Business Case Analysis developed for NFC.²³ Despite multiple requests, the team did not obtain cost estimates from the USDA OCIO to use in conjunction with the 2011 BCA numbers.

The team received NFC’s proposal for the General Services Administration NewPay initiative, which included the cost for migration of users and data from NFC to the New Pay system, including the cost per employee. The proposal identifies NFC’s PPS as the continuing system of record and will need to be modernized but does not identify the modernization cost. The proposal does not provide insight into the cost to develop the NewPay system, which could be a future data point for consideration in estimating NFC’s modernization costs, if obtained.

Estimate 1: \$72 million - OPM Trust Fund Management Modernization

- OPM is currently in the final stages of a six-year, \$71.9 million-dollar project to modify its Trust Funds Federal Financial System (FFS). The system is comparable to NFC’s system; it is over thirty years old and runs on a mainframe using a variety of coding languages, including COBOL. The system supports about 2.8 million federal employees and retirees in receiving benefits, including retirement benefits. The project has also gone over budget and has been delayed by over a year due to "poor documentation and insufficient staff expertise regarding the legacy system."

²² Information for this table was sourced from the Small Business Administration, the Office of Personnel Management, the Social Security Administration, the Department of the Interior, the Department of Housing and Urban Development, the Department of the Treasury, and the Internal Revenue Service. For a full list of citations please consult the bibliography.

²³ USDA NFC, *Business Case Analysis of NFC Payroll Risk Mitigation Assessment*, (Washington, D.C., 2011)

Estimate 2: \$200+ million –IBC Federal Personnel and Payroll System Modernization Project

- The Department of the Interior’s Interior Business Center (IBC) is another federal shared service provider like NFC providing similar functions, including payroll services, and has many interdependent systems like the mainframe system used by NFC. During interviews, IBC staff provided a cost estimate of \$200 million for modernization of their system, developed using information from vendor requests.
- Despite their overall similarities The IBC estimate was not a perfect analog for NFC. The estimate did not include additional cost categories (such as training, data migration, implementation, etc.) that may increase the overall cost. Additionally, IBC services a smaller number of employees, about one-third of NFC’s total, and features an integrated HR system and functionality that the NFC does not have. The full NFC modernization project will likely cost more than the \$200 million estimate because of the size difference between the systems and the inclusion of the additional cost categories.

Estimate 3: \$615-617 million – Internal NFC information and 2011 NFC Business Case Analysis

- NFC interviewees mentioned preliminary conversations with a vendor to transition the existing mainframe to a cloud-based solution. The initial option to migrate was discussed at a high level, but a full analysis of alternatives was not conducted. This recent estimate for the NFC project was more than \$50 million. The vendor reported they were providing a similar solution for another federal agency with a comparable system. However, the initial estimate could not be fully validated, as there was no information clarifying either the basis for the estimate or the cost components that were considered. This estimate helped to establish the floor for the range considered.
- The 2011 BCA provided a comprehensive review of the actual NFC system and specific breakdowns for implementation costs, labor costs, and overhead—detail and elements that were missing from the other comparators analyzed.
- The 2011 BCA presented four different approaches to modernization; however, the full costs were provided for only two options. The implementation costs occurred only in the first three years for both, and most operational costs reached relative stasis (+/- 2.5%) in years four - ten. For this reason, the Study Team analyzed only the costs incurred over the first five years of the full ten-year period presented in the 2011 BCA.
- The estimate of \$615-617 million has been adjusted for inflation. It is based on the initial cost estimate of both Option 1 – Refactoring and Option 2 - Phased Approach which were reported as \$461 million and \$460 million, respectively, in 2011. The cumulative price change between 2011 and 2023, per the Consumer Price Index calculator, was +33.74% and was used to create the inflation adjusted range as a comparison in table 6 below.

Table 6 2011 Business Case – Estimated Costs

Source	Approach	5-Year Cost Estimate (Inflation adjusted)
NFC Document - 2011 BCA (vendor analysis)	Option 1 – Refactoring	\$ 617 million
NFC Document - 2011 BCA (vendor analysis)	Option 2 – Phased Approach	\$ 615 million
USDA OCIO		NA

Source: National Finance Center

- The 2011 BCA is the only available direct cost estimate for the modernization of NFC’s PPS. Despite being older than many of the other data and modernization projects analyzed, the 2011 BCA is reasonable and comprehensive because it is based on a review of the actual NFC system and business services. The estimate anticipates the system complexity and interdependency and includes specific breakdowns for implementation costs, labor costs, and overhead—costs that were not consistently included in the other estimates analyzed. However, the estimated \$400-\$500 million range does not factor in the growing complexity of the PPS since 2011. The cost estimate also does not capture any cost efficiencies with cloud solutions given they were in nascent stages in 2011.

Conclusion

The Study Team concludes that the IBC estimate of \$200 million is a reasonable baseline cost estimate as a starting point. Of the estimates analyzed, the IBC system is the most comparable to NFC regarding its function, scope, and services provided. Further, the estimate is fairly recent, meaning it captures current IT capabilities and costs better than the 2011 BCA.

The IBC estimate includes modernizing the IBC system’s integrated HR function which may drive the overall cost of their project up, and there is no comparable integrated function within the NFC system. However, considering the scale and scope of the NFC’s PPS as compared to the smaller IBC system, we believe that the NFC project will likely be more complex and hence slightly more expensive. As a result, with inputs and validation from subject matter experts, a reasonable estimate of the costs for NFC’s system modernization is between \$200 - \$300 million.

Future Considerations

This ROM cost estimate includes a fair amount of uncertainty and will require follow-up analysis by NFC. In addition to validating technology (hardware and software costs), NFC must ensure the following cost categories are included in the estimates from vendors seeking to support the modernization effort:²⁴

- Technical program management team to manage the modernization effort (The Study Team estimates five-seven FTEs, government or contractors)
- Organization change management

²⁴ While some cost estimates and examples analyzed may have included some or all of these costs, there is no clear breakdown.

- Implementation and transition costs
- Documentation of business processes and existing code conducted sufficiently ahead of the transition
- Maintenance and operations of the existing system in parallel as customers are migrated to the new environment (\$20-22 million each year for the legacy system needs to be available)²⁵
- Training, both internal and for customer agencies
- Data migration costs and post-migration cost summary

NFC Mainframe Modernization Roadmap

NFC has an opportunity to modernize its mainframe system to provide an enhanced customer experience. However, successful modernization is dependent on an incremental approach, with demonstrated success and outcomes at each critical phase, as described in the proposed phased approach. This approach was developed using recommendations from subject matter experts and addresses common challenges and delays identified in modernization projects. It also factors in the cost estimate identified by the Study Team. Between each phase a ‘gate criteria’ is identified which captures the necessary objectives, decisions, or activities, derived from recommendations 5.1, 5.2, and 5.3, needed before advancing to the next phase. As the NFC completes each phase, the goal of this incremental approach is to demonstrate to employees, customers, and key stakeholders that NFC is progressing in the right direction, building momentum, and continuously improving.

²⁵ Based on data from OCIO Digital Infrastructure Services Center, NFC’s mainframe operations cost over a 2-year period is \$23.3M (FY21) and \$22.2 M (FY22).

NFC Mainframe and Systems Upgrade Roadmap

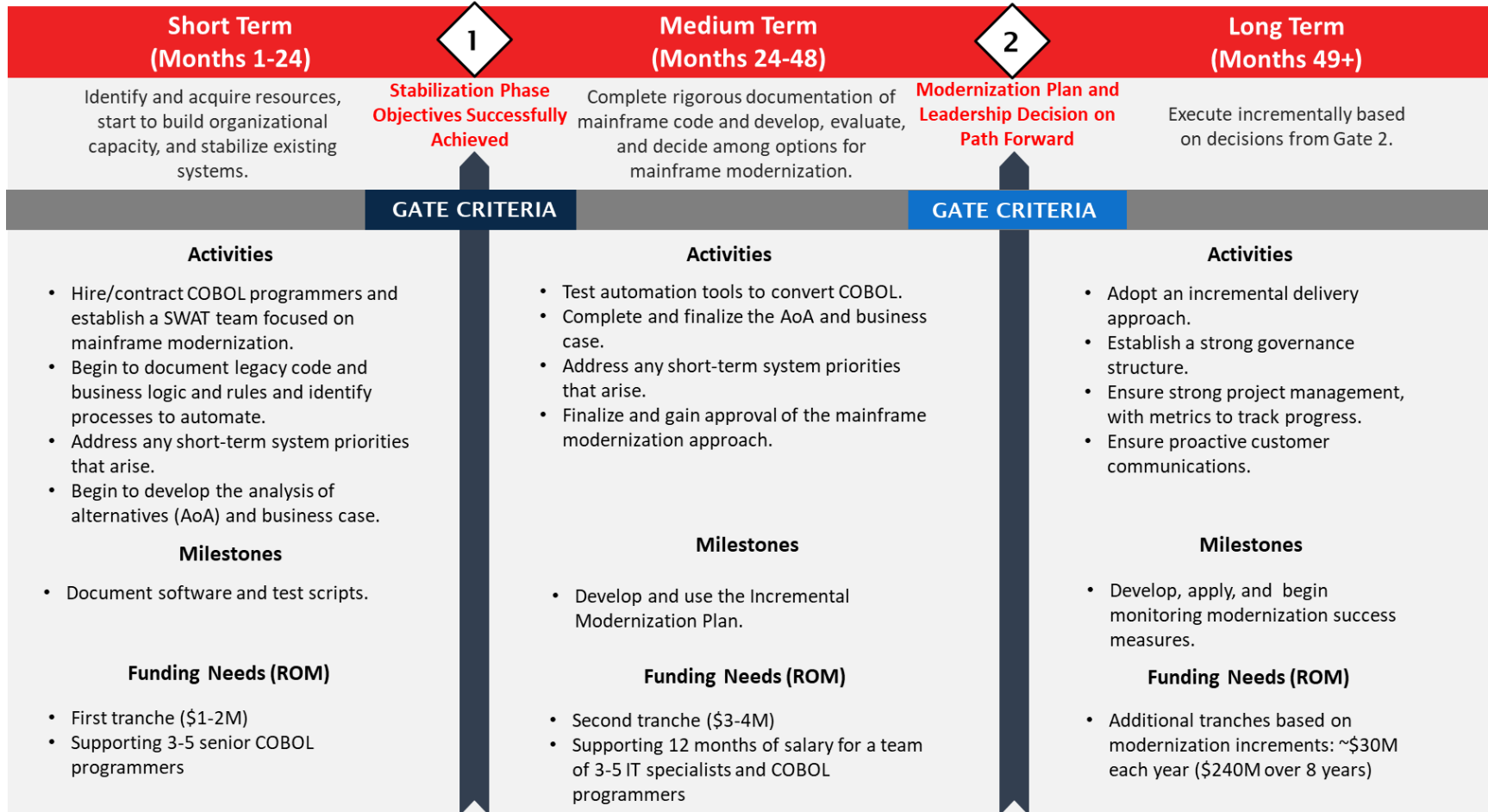


Figure 8 NFC Mainframe Systems Upgrade Roadmap (National Academy of Public Administration)

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Chapter 6: Obtaining the Funding Needed Now and in the Future



Constrained funding of the National Finance Center (NFC) over many years has contributed to the deterioration of customer and employee experience, managerial and workforce capability, and information technology and services, including the accumulation of significant technical debt (Chapter 5). NFC's budget is constrained by demands from customers—both inside and outside of USDA—to keep its fees low, and NFC receives no annual appropriation. As a result, NFC has had little ability to pay for capital upgrades or modernization. USDA, naturally, has focused primarily on ensuring that its core mission areas thrive and, except in extraordinary circumstances, has not allocated departmental funds to this function that serves customers mostly outside of the department. NFC is not unique—many shared service providers in the federal government face similar funding constraints and have comparable histories of deferring technology upgrades and replacements.²⁶

As described in previous chapters, NFC faces a broad scope of immediate and longer-term challenges. NFC's ability to overcome its challenges—such as immediately expanding the cadre of top leaders and promptly hiring additional staff and enhancing IT systems—will depend on its ability to obtain increased resources, both as soon as practicable and ongoing. In the long run, depending on the long-term vision adopted, NFC will need very substantial capital investment for mainframe modernization.

The plans to stabilize, strengthen, and modernize NFC's operations discussed in Chapter 3 must include strategies for obtaining the needed funding at each stage—short, intermediate, and long term. NFC's needs are such that it will not be able to rely on a single funding source or strategy—especially with the acute federal budgetary pressures following enactment of the Fiscal Responsibility Act of 2023 (suspending the debt ceiling).²⁷

Further, the only way NFC will be able to leverage the range of funding sources and strategies necessary to meet its needs will be *NFC's ability to overcome its challenges will depend on its ability to obtain increased resources, both as soon as practicable and ongoing.*

with the support and cooperation of key stakeholders: customers, USDA leaders, the Office of Management and Budget (OMB), and Congress.

This chapter discusses the range of potential sources of funding and how NFC can best position itself to obtain those funds. It also addresses how improvements in NFC's budgetary and cost-recovery processes can help ensure that NFC does not find itself in a similar situation in the future.

²⁶ This problematic situation is long standing. Office of Personnel Management, *Human Resources Line of Business Modernization Roadmap VERSION 1.0*, December 8, 2011, 38-39, <https://www.opm.gov/services-for-agencies/hr-line-of-business/talent-management-service-model/hr-lob-modernization-roadmap.pdf>.

²⁷ Fiscal Responsibility Act of 2023, Public Law No. 118-5, June 3, 2023.

NFC has not, in the past, tapped the range of potential funding sources; however, looking ahead, several of them are options for the increased funding that NFC urgently needs

NFC could potentially seek funding through the following funding mechanisms: (1) NFC’s annual operating budget and a reserve fund for NFC capital equipment, both of which are paid for from customer fees; (2) unobligated USDA balances and credit card refunds and rebates; (3) the “corpus” revolving fund in the Working Capital Fund (WCF); (4) the Technology Modernization Fund (TMF); and (5) direct appropriations from Congress. These funding mechanisms vary significantly in terms of the original source of the money, what organizations control the funds or can affect NFC’s chances of accessing them, the criteria for decision, and the timing of availability. Each is discussed in more detail below.

An effective funding strategy would assess all these factors applicable to the several different possible funding mechanisms that might be part of a solution for NFC.

1. NFC’s annual operating budget and the reserve for NFC capital equipment could be increased, but timing and budget pressures present significant challenges

NFC’s annual budget—estimated to be approximately \$150 million for FY 2023 and projected to be approximately \$156 million for FY 2024—is NFC’s principal funding mechanism. NFC initially proposes a budget about two years in advance; the proposal is reviewed and modified by the WCF Advisory Committee, which is comprised of representatives of USDA agencies, which are, of course, NFC’s customers. The budget is then approved by the CFO and taken to the Secretary for final approval and signature. NFC’s customer fees for a fiscal year are set at an amount designed to recover the amounts in the budget approved for that fiscal year.

The budget for a year is comprised mostly of the operating expenses approved for NFC for that year. Such expenses would include, for example, personnel costs, contractor fees, software license fees, OCIO’s charges for use of IT equipment and services, and other operating expenses. In addition, a surcharge of not more than 4 percent of NFC’s annual income may be included in the budget to fund a reserve, and, once amounts have been collected in the reserve, they can be used to purchase capital equipment for NFC’s IT or other services, or for any unforeseen, extraordinary costs. A surcharge has not been included in NFC’s budget for recent years, but a 1 percent surcharge is in the FY 2023 budget, and the plan is to ramp up the percentage to 4 percent over the next two years.

The expenditures for operations needed to stabilize NFC’s operations and to achieve longer-term strengthening of NFC’s performance are the types of expenses that the annual budget generally covers. Therefore, if the increased expenditure could be approved for inclusion in the budget, customer fees would increase to provide the needed funding. In addition, each additional 1 percent of surcharge yields about \$1.5 million per year; the sooner the surcharge can be increased to 4 percent, the more quickly funds from customer’s fees could be available in the reserve for stabilizing NFC’s systems.

However, NFC's ability to obtain urgently needed additional funding by increasing the expenditures and surcharge in its annual budget faces significant challenges. First, as mentioned above, NFC's budget is set two years in advance, so the budget now being worked on is for FY 2025, and the FY 2024 budget is set and undergoing final review. Thus, if an increase in NFC's expenditures and surcharge were now proposed and approved, NFC's ability to increase its spending would not begin until October 2024.²⁸

A further particular challenge is that NFC's and customers' budgets will face the severe financial constraints applicable government-wide following enactment of the Financial Accountability Act of 2023 (which suspended the debt ceiling).²⁹ This Act rolls back the total government-wide amounts of nondefense discretionary spending that may be appropriated for FY 2024 and FY 2025.³⁰ This development will affect customers' ability and willingness to pay the increased fees that would be required to finance the needed increases in NFC's budget.

Customer agencies both inside and outside of USDA can influence the amounts approved for inclusion in NFC's budget. Members of the WCF Executive Committee, which reviews and adjusts NFC's budget before recommending it to the CFO for approval are naturally responsive to the budgetary constraints of the USDA customer agencies and offices that they represent. NFC's external customers can exert influence regarding NFC's finances through communications with leaders at USDA and Congress, and through exploring the possibility of leaving NFC for other service providers. Therefore, even aside from the current government-wide budgetary constraints, NFC's ability to gain increased funding through its annual budget depends on improving customer experience and on demonstrating to customers that increased funding for NFC will result in customers receiving improved service and consequent reductions in customers' own internal costs (chapter 4).

2. *USDA unobligated balances and USDA credit card refunds and rebates could be promptly made available to NFC upon the decision of USDA leaders*

Tens of millions of dollars are collected each year by the WCF from balances of USDA's annual appropriations that remain unobligated and from USDA's credit card refunds and rebates. These amounts are then allocated at the discretion of USDA leaders for projects throughout USDA. The amount of USDA balances that will remain unobligated at the end of FY 2023 or any future year cannot be predicted, but the amounts are usually around \$11 million to \$12 million, though the unobligated amount last year (FY 2022) exceeded \$20 million.

²⁸ Top USDA officials would have the power to disregard the usual budget process and approve a last-minute increase in NFC's FY 2024 budget. However, NFC's customers, which would need to fund the last-minute increase, have already developed and set their own FY 2024 budgets.

²⁹ Fiscal Responsibility Act of 2023, Public Law No. 118-5, June 3, 2023.

³⁰ "Discretionary spending" means amounts that are appropriated by Congress each year.

Table 7 Amounts of USDA Unobligated Balance Transferred to the WCF in Each of the Past Five Years

FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
\$11,345,522	\$10,818,600	\$12,252,202	\$14,031,039	\$22,728,459

Source: National Finance Center

The amount of USDA credit card refunds and rebates transferred to the WCF is generally around \$11 million. Both the unobligated balances and the credit card refunds and rebates are held in the WCF without fiscal year limitation, and therefore the amounts available each year include both new amounts that year and any unobligated amounts remaining from past years.

Unobligated balances and credit card refunds and rebates may generally be used for acquisition of property, plant, and equipment and for delivery of financial, administrative, and IT services of primary benefit to USDA agencies. (Under appropriations acts, credit card refunds and rebates may be used only for capital acquisitions, whereas unobligated balances may also be used for both capital and noncapital expenditures.³¹) Funds from these accounts have been used for projects similar to some of the initiatives that NFC needs to implement to stabilize and strengthen its operations. For example, over the past couple of years, tens of millions of dollars from these WCF accounts have been allocated to be used to modernize financial systems for Financial Management Services (which is an operation in OCFO that offers certain shared financial services), to establish a new records management system for the USDA Office of General Counsel, and for automation and other IT system improvements for several other USDA agencies and programs.³²

WCF funds were allocated to NFC after Congress directed USDA to allocate unobligated balances to help with travel, systems, and other expenses resulting from the 2017 tornado.³³ USDA then allocated about \$1 million in FY 2018 for immediate tornado-related expenses and about \$5.4 million in FY 2022 for expenses including office space rental, office furniture and

³¹ Under appropriations acts, unobligated balances may be used “for the acquisition of property, plant and equipment *and for*” departmental support systems for delivering services of primary benefit to the agencies of USDA. Credit card refunds and rebates may be used “*only for* the acquisition or property, plant and equipment, *including* equipment for” departmental support systems for delivering services of primary benefit to the agencies of USDA. (Italic emphasis added for clarity.) The statutory authority regarding unobligated balances is in a general provision of annual appropriations acts; in the Agriculture Appropriations Act for FY 2023, that authority is in the initial provision of Section 702. The statutory authority regarding credit card refunds and rebates is in 7 U.S.C. 2235a and in a general provision of annual appropriations acts; in the Act for 2023, the authority is in the proviso in section 725. The full language of sections 702 and 725 of the Agriculture Appropriations Act for FY 2023 is provided in Appendix D.

³² USDA, “2024 USDA Explanatory Notes – Working Capital Fund” (Congressional Budget Justification FY 2024), pages 10-20 to 10-26, <https://www.usda.gov/sites/default/files/documents/10b-2024-WCF.pdf>; USDA, “2023 USDA Explanatory Notes – Working Capital Fund” (Congressional Budget Justification FY 2024), pages 10-21 to 10-24, <https://www.usda.gov/sites/default/files/documents/10b-2023-WCF.pdf>.

³³ Section 702 of Division A—Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2017, of the Consolidated Appropriations Act, 2017, Public Law 115-31 (May 15, 2017).

equipment, IT equipment, and physical security expenditures.³⁴ Most recently, in the spring of 2023, the WCF approved the allocation of about \$850 thousand from the credit card rebates fund for NFC to use as capital funding for retirement system modernization.³⁵

NFC's current urgent need for funding to make its operations sustainable, if not as dramatic as the need for funding after the 2017 tornado, is likewise existential, and the argument for NFC to promptly receive allocations from the accounts of unobligated balances and credit card rebates and refunds is compelling. Substantial delays should be avoidable, as these allocations of funds are not bound by the annual budget cycle. Appropriations acts direct that no amounts may be obligated until the Appropriations Committees have been notified and approved them,³⁶ and the notifications generally clear the Committees without comment in thirty days. If necessary, the Louisiana congressional delegation might encourage the allocation of funds for NFC and approval by the Appropriations Committee if the delegation were made aware that the funds would help ensure that NFC's operations in New Orleans could be sustained and strengthened.

3. *The WCF “corpus,” a revolving fund used for capital expenditures, could advance funds to NFC for capital purchases, provided that NFC will be required to reimburse the fund*

The revolving fund in the WCF called the “corpus,” estimated at over \$50 million for FY 2024, is available for use by WCF-supported activities for purchase of capital items, but subject to repayment to the fund. NFC has used funds from the corpus in the past, generally repaying within the same year. To help with the urgent need to stabilize and strengthen its operations, NFC could borrow from the corpus to promptly make needed capital investments, such as for software or office equipment, but NFC will need to have receipts—whether from customer fees or some other source—sufficient to reimburse the fund as required. For software purchases, the WCF usually requires payback within three years, though the time may be extended to five years.

4. *For a significant investment strengthening NFC's IT operations, including if NFC undertakes modernizing its mainframe systems, an appropriate approach would be to apply for funding from the TMF.*

The most promising way for NFC to obtain funding for substantial IT projects is through an application to the TMF. This would be an appropriate source of funding for mainframe modernization, if called for under the vision and long-term plan adopted for NFC. A proposal

³⁴ Communication from NFC; USDA, “2018 President’s Budget – Working Capital Fund” (Congressional Budget Justification FY 2018), page 10-27, <https://www.usda.gov/sites/default/files/documents/10wcfexnotes2018.pdf> ; USDA, “2022 USDA Explanatory Notes – Working Capital Fund” (Congressional Budget Justification FY 2022), page 10-20, <https://www.usda.gov/sites/default/files/documents/10bWCF2022Notes.pdf> .

³⁵ Communication from NFC.

³⁶ In the Agriculture Appropriations Act for FY 2023, that requirement for notice and prior approval before unobligated balances are obligated is in the 2nd proviso in Section 702, and the requirement for notice and prior approval of before credit card refunds and rebates are obligated is in the proviso in section 725. The full language of sections 702 and 725 of the Agriculture Appropriations Act for FY 2023 is provided in Appendix D.

could request either the entire amount for modernization or funding for a discrete severable amount on the roadmap that is designed to yield immediate improvement of customer experience or cybersecurity. Other significant IT initiatives, such as modernization of the processing of federal employee retirement, might also receive financial support through an application for TMF funding.

Established in 2018, the TMF has received, to date, \$225 million through annual appropriations and an additional \$1 billion through the 2021 American Rescue Plan for the purpose of funding federal IT modernization projects. Agencies apply for TMF funds by preparing project proposals and submitting them for approval to the Technology Modernization Board (TMF Board), which is chaired by the Federal Chief Information Officer in OMB and is otherwise comprised of agency IT leaders.

The process for reviewing applications for TMF funding is highly selective, and NFC's access to this source of funding will require meeting several key sets of criteria.

- TMF funding priorities. If effectively described and presented, a proposal to modernize NFC's IT systems could fit well within the priorities established to guide the Board's funding decisions, whether it be for a discrete, severable portion of a system, or for a system in its entirety.
 - Criteria established in 2021 to implement the \$1 billion of funding provided by the American Rescue Plan would include funding to modernize high-priority systems in the government, including those that cut across agencies, or whose loss to cyberattack would impair agency functioning, and would include agency-facing shared services.³⁷ A proposal to modernize NFC's systems should satisfy those criteria.
 - TMF funding decisions have often prioritized improved government services to the public, but also include improved services to federal agencies and employees. For example, a TMF publication recently highlighted modernization of OPM's website to improve employee recruitment and benefit management.³⁸ Modernization of NFC's services would likewise serve the priority of improving services to employing agencies and their employees.
 - The initial TMF funding criteria required that agencies plan for full reimbursement of funds, but the criteria were changed to now emphasize flexible repayment terms, with the most flexible, minimal payment arrangements to tackle the most urgent IT problems where cost savings are not easily realized by the proposing agency.³⁹ These

³⁷ Technology Modernization Fund, CIO Council, "American Rescue Plan", Guidelines on the American Rescue Plan Funding, <https://tmf.cio.gov/arp>.

³⁸ Clare Martorana, Federal CIO and TMF Board Chair, and Raylene Young, TMF Executive Director, The White House, "Celebrating 5 Years of the Technology Modernization Fund", <https://www.whitehouse.gov/omb/briefing-room/2023/03/14/celebrating-5-years-of-the-technology-modernization-fund> ("Who We're Helping ... Federal employees and job seekers by modernizing the OPM.gov website").

³⁹ Technology Modernization Fund, CIO Council, "American Rescue Plan", Guidelines on the American Rescue Plan Funding, Repayment Considerations, <https://tmf.cio.gov/arp>.

criteria would support consideration of a proposal to address NFC's most urgent problems, even if cost savings are not easily realized.

- Multiagency collaboration. NFC could strengthen a TMF application by collaborating on the application with other agencies. Applications developed and submitted in collaboration with other agencies can help to demonstrate to the TMF Board that NFC's proposed project would credibly satisfy the general criteria of making a significant improvement of IT services to the government.⁴⁰ A collaborative proposal also may fit within the TMF's specific priorities for projects that deliver common solutions offering high-urgency services across agencies.⁴¹ Such collaboration could take several forms, such as the following:
 - A joint NFC-OPM application to modernize NFC's retirement processing system could emphasize to the TMF Board the government-wide significance of the proposal.
 - An NFC proposal endorsed by one or more of NFC's larger customers would help demonstrate that it would improve cross-agency IT services, and that NFC is equipped to invest the TMF funds effectively. While a key goal of any NFC modernization effort would be to improve customer experience and reduce customer costs, gaining such customer support will be possible only after NFC has improved customer experience and established mutually trustful relationships with them (chapter 4).
 - NFC could join with other shared service providers with similar technical debt, perhaps coordinated through OPM's HR Quality Service Management Office, in a TMF application for modernization of all their systems. Doing so could help make a compelling case to the TMF Board that their projects would deliver common solutions addressing major IT deficiencies affecting several federal shared-service providers and benefitting customer agencies and employees across the government.
- IT management criteria. The TMF requires that proposals demonstrate leadership and management arrangements supportive of successful outcomes, including strong executive visibility and support, appropriate governance structure and operational model, and milestones.⁴² NFC's proposal would therefore be strengthened by implementing many of the Panel's recommendations (e.g., strengthening the leadership team and project management capability). As OCIO would manage the IT equipment and system infrastructure and offers substantial IT project management capability, a TMF proposal

⁴⁰ Technology Modernization Fund, CIO Council, "American Rescue Plan," Guidelines on the American Rescue Plan Funding, Modernizing high priority systems. <https://tmf.cio.gov/arp>; Technology Modernization Fund, CIO Council, "Selection Criteria," Impact on Agency Mission. <https://tmf.cio.gov/criteria/>.

⁴¹ Technology Modernization Fund, CIO Council, "American Rescue Plan," Prioritization of Funding. <https://tmf.cio.gov/arp> ("projects that cut across agencies" and shared services that address "high-urgency areas across multiple agencies"); Technology Modernization Fund, CIO Council, "Selection Criteria," Common Solutions. <https://tmf.cio.gov/criteria/>.

⁴² Technology Modernization Fund, CIO Council, "Selection Criteria," Feasibility. <https://tmf.cio.gov/criteria/>.

describing OCIO's role in implementation could help demonstrate to the Board the likelihood of successful execution.

5. *Direct appropriations could help fund aspects of strengthening and maintaining NFC's operations and modernizing its IT systems, and may be necessary if TMF funding is not provided or is insufficient.*

Although the TMF seems most appropriate for funding particularly large and important IT modernization initiatives, another option for NFC could be to seek direct appropriations to help with specific elements of the modernization or other substantial IT improvements. If NFC is unable to secure TMF funding, or if the amount provided is insufficient, direct appropriations would be essential.

While NFC has been considered entirely customer-funded, Congress could make an exception if it determined that direct appropriations, either one time or regularly, would be essential and desirable to help NFC survive and thrive. Except in very extraordinary circumstances, a direct appropriation could be enacted only as part of the annual Agriculture Appropriations Act.

In enacting appropriations for FY 2024 and FY 2025, Congress's ability to include a direct appropriation for NFC will be subject to the stringent spending caps under the Fiscal Responsibility Act of 2023 referred to earlier. The Agriculture Appropriations Subcommittees would lead in legislating any direct appropriation for NFC, ideally with support from the Louisiana delegation.

Recommendation 6.1: NFC should aggressively pursue a variety of funding sources to obtain the amounts of funding necessary for both stabilization and long-term success. Action steps include

- Developing short- and long-term funding strategies (that support and are part of the plans recommended in Chapter 3) that include
 - Increasing NFC's annual operating budget as soon as practicable;
 - Raising the surcharge for funding NFC's reserve, up to the current 4 percent statutory maximum, as soon as practicable;
 - Working with the CFO and other USDA leaders to secure other sources of funding, including unobligated USDA balances, USDA credit card refunds and rebates, and WCF's "corpus" capital revolving fund;
 - Making one or more applications for TMF funding; and
 - Working with senior USDA officials and OMB to seek congressional appropriations from Congress.
- Partnering with customers, OCIO, and other shared service providers, as appropriate, to strengthen the case for additional funding.
- Advocating to OMB that NFC's customers need to receive appropriations sufficient to accommodate paying adequate fees to NFC.

Stakeholders, whose Trust, Cooperation, and Support Is Necessary for Securing Additional Funding, Will Need Assurance that the Funding is Needed and that NFC has the Capacity to Use it Effectively

NFC can hope to gain the needed additional funding only if NFC gains the understanding, cooperation, and support of stakeholders who control or have an interest in the funds that NFC needs. NFC must now gain the stakeholders' trust that NFC is capable of using the increased funding effectively, and also convince stakeholders that urgent and ongoing financial support is essential for NFC to survive and thrive. Therefore, the NFC's funding strategies must not only lay out the steps for assessing and seeking funding from the sources discussed above, but also for identifying the key partner stakeholders and winning their support.

Generally, NFC can gain credibility with stakeholders by having a strong business plan for how NFC needs to improve and how much it will cost, and by achieving "quick wins" to demonstrate that the organization is capable of positive change. For customers, NFC must show that increased fees are a necessary investment that will be well spent to provide high-quality, stable, and secure customer service. Transparency is particularly important, to show how customer money is spent, and that it is spent well.

USDA and its leaders, including the Secretary, have critical roles to play, both in the decisions they make to support NFC and in championing and advocating on behalf of NFC to external stakeholders USDA customers of NFC. USDA has long benefited from the services that NFC provides and from the efficiency of spreading costs across external as well as internal customers. Those benefits to USDA and its component agencies can be sustained and enhanced only if USDA and its leaders now play a significant role in the effort.

The House and Senate Appropriations Committees, and especially their Agriculture Appropriations Subcommittees,⁴³ can make decisions that directly affect NFC's funding. Demonstrating that NFC has developed and is implementing a detailed business plan is a key step to showing appropriators that NFC is a sound investment.

NFC can hope to gain the needed additional funding only if NFC gains the understanding, cooperation, and support of stakeholders who control or have an interest in the funds that NFC needs.

The Louisiana congressional delegation also can play a key role, if they are persuaded that NFC's plans to stabilize and strengthen its operations will be consistent with the delegation's priorities of supporting NFC's continued and potentially expanded presence in New Orleans.

⁴³ The subcommittees' full names are the Subcommittees for Agriculture, Rural Development, Food and Drug Administration, and Related Agencies.

Recommendation 6.2: NFC should strengthen relationships, build trust, and gain buy-in for future plans and funding strategies to encourage the cooperation, assistance, and support of internal and external stakeholders (including customers, OMB, and Congress) in securing necessary funding. Action steps include

- Developing a communication plan that makes a compelling case that NFC provides a critical government function, that this critical service is in jeopardy unless NFC obtains the necessary funding, and that NFC has the capability and leadership support to implement the necessary changes;
- Demonstrating that NFC has developed and—through quick wins—is successfully implementing a detailed business plan, thereby verifying that NFC is a sound investment;
- Being transparent about how fees are set and how NFC operates and expends funds;
- Demonstrating that NFC has the project- and contract-management capacity to expend additional funds effectively;
- Facilitating the involvement and advocacy of the Secretary and other top USDA officials to demonstrate leadership support; and
- Engaging with congressional stakeholders and demonstrating to them that NFC is capable of using additional funding effectively to stabilize and strengthen its operations, and that stabilizing and strengthening NFC’s operations are key to safeguarding and potentially expanding its employment opportunities in New Orleans.

NFC’s Cost-Recovery, Budgeting, and Financial Reporting Processes Rely Too Much on Outdated Manual Processes and Otherwise Need Updating

While exploring the range of funding sources to cover the costs of NFC’s urgent and longer-term needs, as discussed above, NFC can also work on improving its budgeting and cost-recovery processes. Accurate cost recovery methods are essential to NFC’s business model, and NFC recently engaged in an evaluation of its budget model and cost recovery processes. The evaluation resulted in a variety of recommendations, including changes to some cost drivers and cost pools, and improved management of policies, procedures, methodology, and workflow. Improvements in NFC’s reporting and transparency can help its customers to understand NFC’s charges and change their own operations to reduce their costs. NFC anticipates implementing the recommendations in the FY 2026 budget cycle.

The evaluation found that NFC would benefit particularly from an investment in an automated budgeting system. NFC’s approximately \$150 million budget is manually managed on linked spreadsheets, and financial reports for customers are developed ad hoc. Manual input of financial data is prone to error, and the reporting function is not timely for customers’ needs.

Recommendation 6.3: Continue improving NFC’s budgeting and cost-recovery processes to increase efficiency for NFC and enhance transparency and predictability of charges for customers. Action steps include

- Acquiring and applying an automated budget management system; and
- Continuing other ongoing steps to improve the efficiency and accuracy of the process and improve reporting and proactive communication with internal staff and customers.

NFC's Receipts from Customer Fees, and Occasionally from Other Funding Sources, Have Historically Been Insufficient for NFC to Keep its Systems Up to Date and Otherwise to Thrive

As discussed above, NFC's current precarious condition can be attributed in part to long-term underfunding and the resulting outdated management systems, staffing shortages, and accumulation of technical debt. The only way to prevent this situation from recurring is for NFC's

The challenges that NFC faces are representative of a government-wide deficiency and might be addressed best by a government-wide solution.

authorities, policies, and practices to be modified so that adequate operating funds are available for sufficient staffing, necessary maintenance and upgrades to avoid technical debt, and investments to replace

equipment and undertake modernization projects. Funding must be provided through the kinds of mechanism discussed earlier in this chapter.

If NFC is to remain customer-funded (rather than regularly receiving funding, e.g., from an annual appropriation or from WCF accounts), it must be able to charge customer fees that are adequate to cover both NFC's operating costs and its capital investments. The annual operating budget that is approved each year must be sufficient for customer fees to fund adequate staffing levels and working conditions. Moreover, the costs of future capital investments must be anticipated and accounted for, and NFC must have mechanisms to pay for those capital investments from customer fees. Such mechanisms may include (1) NFC having leeway to establish a customer surcharge sufficient to fund an adequate capital reserve, (2) NFC using funds from the WCF "corpus" to make capital acquisitions and then being able to charge customers sufficient amounts to repay the "corpus," or (3) for IT equipment purchased by OCIO, NFC being able to charge customers sufficient amounts to pay OCIO's service fee. In turn, NFC will not be able to charge sufficient amounts from customers unless their own appropriations are increased, and that will depend in part on NFC's ability to convincingly communicate to decision makers the critical importance of customer fees sufficient to forestall the recurrence of underfunding, technical debt, and the risk of deteriorating service.

Moreover, as noted earlier, persistent underfunding is a problem for other HR shared services providers too, not just for NFC. If NFC and other providers banded together, perhaps coordinated through OPM's HR Quality Service Management Office, they could make a strong case for a government-wide solution that includes mechanisms to adequately fund the shared-service providers. The challenges that NFC faces are representative of a government-wide deficiency and might be addressed best by a government-wide solution.

Recommendation 6.4: Assuming NFC will remain entirely customer-funded, seek authority and establish procedures for setting NFC’s customer rates sufficient to adequately fund operating costs plus necessary investments to avoid a recurrence of underfunding. Action steps include

- Making a business case to OMB and Congress that NFC, as a fully reimbursable organization, needs the statutory leeway to reserve and expend funds for its lines of business and, support IT systems, and fund capital investments for replacements, upgrades, and modernization;
- Establishing practices and procedures for NFC’s budget and ratemaking that implement the authority to fully fund NFC’s operating and capital costs;
- Advocating for the President’s Budget to propose sufficient funding for NFC’s customer agencies and offices to cover NFC’s fees sufficient to fund necessary IT replacements and upgrades for the long term;
- Collaborating with other HR shared services providers, possibly coordinated through OPM’s HR Quality Service Management Office, to identify and advocate for a government-wide solution that would (1) enable all such service providers to set customer fees at a level sufficient to fund operating costs and necessary capital investments and (2) provide sufficient funding to customer agencies to cover the cost of the increased fees.

Chapter 7: Conclusion: Achieving Organizational Goals

It is important that NFC's leaders—as well as OCFO's and USDA's leaders—recognize that successfully addressing NFC's urgent challenges will require an organizational restructuring and operational “transformation.” Achieving and sustaining the breadth and depth of change needed will be a long-term (multiyear), complex, and costly process that will require sustained leadership attention and funding. While success will take years, leaders urgently need to act now to ensure NFC's viability.

As it embarks on this long-term endeavor, NFC has a powerful foundation to build on:

- A dedicated, highly motivated, and resilient workforce that is rightfully proud of its ability to repeatedly overcome daunting barriers to meet goals “in service to the Nation”
- A new leadership team that is acutely aware of the importance of and urgent need for change and is rapidly taking action
- The active support of the Deputy CFO—the senior officer in OCFO—who has committed herself to developing an approach that will win the approval and support of senior USDA officials to make NFC successful
- The active support of (and pressure from) NFC's major customers for initiatives to stabilize and then significantly improve and modernize systems and operations

The Panel has identified the following steps that, if successfully completed, will address NFC's greatest challenges and thus drive the operational changes needed for NFC to achieve its goals:

- Establish and empower a talented, multifaceted leadership team for NFC (Chapter 3).
- Develop a governance structure and a vision for what NFC can and must be (Chapter 3).
- Develop short- and long-term plans for action and implement them while building a powerful relationship with employees who are committed to accomplishing the vision set forth by leaders (Chapters 3 and 4).
- Identify and address major challenges in the areas of employee and customer experience (Chapter 4).
- Focus on immediate needs in NFC's IT systems to dramatically improve and secure their operation and service (Chapter 5).
- Identify and obtain funding in the short term for immediate and medium-term system stabilization and improvement (Chapters 5 and 6).
- Conduct a fact-based, detailed evaluation of modernization alternatives as a basis for deciding whether and how to modernize NFC systems (Chapter 5).
- Identify and obtain funding for full-scale modernization of NFC's mainframe—should that approval be given (Chapter 6).

Literature about effective organizations emphasizes the importance of a common leadership “vision” that sets direction, clarifies organizational priorities, and focuses attention on what matters. Without a vision and clear priorities, NFC personnel might have a general understanding of what tasks they must complete and why but still lack clarity—and possibly the means—to accomplish organizational objectives efficiently, effectively, expeditiously, and in a

manner that meets customers' needs. Identifying and providing the means to achieve the objectives is a primary—and critical—responsibility of leaders.

In addition, almost by definition, transformational change of the kind NFC is embarking on also requires NFC's culture change to be successful. An organization's culture can either facilitate or obstruct change. Many organizations that have tried to achieve change of the magnitude NFC is facing have found it difficult. But lessons can be learned, including that successful culture change results from efforts that address specific problems, with teams working together to achieve results through greater communication and building trust, and by working jointly on solutions to achieve intended results. One success leads to other accomplishments, with the steps providing guideposts for the organization's direction and with measurements of results against goals serving as indicators of progress.

So, what should OCFO/NFC leadership prioritize?

This report by the Academy's Panel has laid out action priorities against a high-level, multiyear timeline based on the insights and information provided by NFC employees and leaders, current and past customers, and individuals active in shared services and IT operations across the federal government. The Panel recommends multiple approaches to foster greater strategic thinking, broader communications, and more productive and trusting working relationships with customers and within the NFC workforce. Other recommendations focus on the complex issues around stabilizing current systems and identifying alternative future systems, depending upon the support of NFC's many customers, and support and funding from USDA and key executive and legislative branch entities.

Appendices

Appendix A: Panel and Study Team Member Biographies

Panel of Academy Fellows

Margaret Graves, Panel Chair: Margie Graves is a Senior Fellow with the IBM Center for The Business of Government and the IBM Partner for Digital Transformation Strategy. She serves as a Senior Advisor to IBM's Federal Services practice. Her work with the Center and IBM Federal accounts is informed by her track record of experience and expertise in the government and private sectors. She is the former Federal Deputy Chief Information Officer. In this federal-wide role, she led the Office of the Federal Chief Information Officer's efforts to drive value in Federal IT, deliver digital services, protect Federal IT assets and information through cybersecurity, and develop the next-generation IT workforce. She also drove elements of the President's Management Agenda; IT Modernization, Data as a Strategic Asset and Workforce of the 21st Century. Prior to her role as Federal Deputy CIO, Margie served as the Deputy CIO at the U.S. Department of Homeland Security (DHS). She was one of the original "plank holders" of DHS and helped to stand up the agency after the devastating events of 9/11. As the DHS Deputy CIO, she had oversight of an IT portfolio of \$5.4 billion in programs. She holds an M.B.A. from the University of Virginia Darden School of Business and a B.S. in Chemistry from the University of Virginia.

Alan Balutis: Alan Balutis is Executive Director of The CIO Collective. He recently stepped down as Distinguished Fellow and Managing Partner with Cisco Systems strategy and consulting group. Before joining the networking firm, he served in public service and industry leadership roles. He was a founding member of the Federal CIO Council in several leadership positions. At the Department of Commerce, he headed their Office of Management, Budget and Planning and served as the first CIO of a cabinet-level agency. During that period, he managed Commerce's transition to USDA's National Finance Center for payroll and personnel services -- the first Federal department to do so. For that work, he won one of his three Presidential Rank Awards. He finished his government career as Director of the Advanced Technology Program (ATP) at the National Institute of Standards and Technology; ATP funded cutting-edge, emerging technologies. He has been selected as a Federal Computer Week (FCW) FED 100 recipient eight times and was voted into membership in both the Government Computer News and FCW IT halls of fame. A strong advocate for government reform, he has authored six books and numerous articles and papers on that topic and spoken at multiple conferences. He's been a Fellow of NAPA since 1998 and also is a Senior Advisor to Government Executives (SAGE) at The Partnership for Public Service. He serves on corporate Government Advisory Boards.

Anthony Scardino: Tony Scardino is a Vice President with CGI Federal, where he helps federal agencies solve organizational, financial, and IT challenges. Prior to this role, Tony was a Managing Principal at Grant Thornton, where he led the firm's cadre of former government executives (FGEs) to help government agencies work across the C-suite to improve mission outcomes. Tony had previously served in high-ranking civil service roles in five US Government agencies, culminating in his service as the Chief Financial Officer for the United States Patent and Trademark Office (USPTO). In recognition of his achievements, Tony has been the recipient of

numerous awards and distinctions, including the Meritorious Presidential Rank Award (2014), the Frank Greathouse National Leadership Award from AGA (2017), and American University's Roger W Jones Award for Executive Leadership (2018). In November 2017, Tony was inducted as a lifelong Fellow into the National Academy of Public Administration (NAPA).

Renee Wynn: Renee Wynn has over 30 years of leadership experience in environmental policy, global information technology, and cybersecurity operations, supply chain, risk management, and ESG. Renee has extensive knowledge about guiding government agencies through complex digital transformations. She led programs at the Environmental Protection Agency (EPA) and served as the CIO at an iconic agency, National Aeronautics and Space Administration (NASA). At NASA, Renee managed a \$2 billion IT portfolio serving more than 65,000 employees and contractors. She led NASA's transformation to a more centralized services model that improved overall service quality; partnered with procurement to modify processes to include cyber and digital supply chain risk reviews and save \$50 million per year in software costs; and established a cybersecurity program which included complex space systems that reduced risks. Renee serves on two non-profit boards and is a National Academy Public Administration (NAPA) Fellow. Renee earned her Bachelor of Arts degree at DePauw University in Greencastle, IN and is a TEDx speaker, "Space: The Final Frontier for Cybersecurity."

Study Team

Brenna Isman, Director of Academy Studies Brenna oversees the Academy studies, providing strategic leadership, project oversight, and subject matter expertise to the professional study teams. Before this, she was a Project Director managing projects focused on organizational governance and management, strategic planning, and change management. Her research engagements have included working with the National Aeronautics and Space Administration, the Environmental Protection Agency, the Social Security Administration, the Department of Veterans Affairs, and multiple regulatory and Inspector General offices. Before joining the Academy, Brenna was a Senior Consultant for the Ambit Group and a Consultant with Mercer Human Resource Consulting. Brenna holds a Master of Business Administration (MBA) from American University and a Bachelor of Science (BS) in Human Resource Management from the University of Delaware.

Sarah (Sally) F. Jaggar, Project Director. Sally is a Project Director at and Fellow of the National Academy of Public Administration. She has led multiple Academy projects working with agencies examining how to accomplish Congressionally-specified, mission-related objectives as well as internally-directed projects. She is currently leading a study on modernizing the National Finance Center (US Department of Agriculture). Other recent studies led include assisting CISA/DHS and the Office of the National Cybersecurity Director to address the federal government's role in building a cybersecurity workforce for the nation; the National Association of Counties to identify how counties handled the distribution of pandemic funds in 2020 and needed funding improvements; and a 4+ year assessment of needed governance and management improvements at the National Nuclear Security Administration (at the Department of Energy). She has been an advisor on use of agile government techniques by federal agencies and has worked on other Academy projects including *No Time to Wait I* and *II*, and workplace improvement at the U.S. Centers for Disease Control. Prior to joining the Academy, Sally was at the Partnership

for Public Service where she focused on Civil Service reform and performance management and improvement. Her career at the US Government Accountability Office included roles as Managing Director for Mission Support in the Human Capital Office; Managing Director for Health Financing and Public Health Issues; and Director of Operations in the Accounting and Information Management Division. She holds an MA from The American University and a BA from Duke University.

Lawrence B. Novey, *Senior Advisor*. Larry joined NAPA as a senior advisor in 2016 and has worked on studies and reports addressing governance and management reform, environmental and regulatory policy and practice, and international anti-corruption and human rights initiatives, among other matters. Before that, Larry served for 17 years with the Senate Committee on Homeland Security and Governmental Affairs, including four years as Chief Counsel for Governmental Affairs. While there he managed the committee's legislative and oversight agenda on government management and aspects of homeland security, focusing particularly on issues of civil service and human capital management, regulatory policy, and governmental transparency and ethics. He previously served at the Congressional Office of Compliance, at EPA, and at OMB developing regulations and processes to implement new legislation on pollution control, employee rights, and expedited permitting of industrial projects. Larry practiced law in Washington, D.C., and New York City, where he advised and assisted companies and trade associations on governmental and commercial matters, including regulatory compliance and the resolution of disputes from mass exposures to toxic chemicals. He holds an undergraduate degree from Harvard College and a J.D. from Columbia Law School.

Sukumar Rao, *Senior Advisor*. Sukumar is President of The Parnin Group and specializes in cross-agency program implementation, performance improvement, IT strategy, digital transformation, and information architecture and data management. Previously, he was a Principal at SRA International. He brings cross-agency experience in performance management and improvement of operations and service delivery of the 24 CFO ACT agencies, including mission areas, IT, and mission-support/administrative operations. In addition, he brings a depth of IT strategy experience that includes evaluation of government-wide high-risk IT projects, 71 National Academy of Public Administration assessment of cloud computing and shared services, and design and implementation of digital transformation initiatives. Finally, his experience includes designing and implementing a \$30 million R&D program to improve a nationwide emergency alert system. He has an MBA from Columbia University and Master of Science and Bachelor of Engineering degrees in Telecommunications. He is a Project Management Professional (PMP) and Certified Technology Business Management Executive (CTBME). He is on the Board of Directors at the Child and Family Network Centers (CFNC), a non-profit organization based in Alexandria.

Maria Rapuano, *Senior Advisor*. Maria has served as a Deputy Project Director and as a Senior Advisor for several Academy projects. Her areas of expertise include public policy, strategic planning, organizational design, and change management. She holds an MA in International Affairs from American University and a BA in Government from the College of William and Mary.

Mark Hertko, *Senior Research Analyst*. Mark previously worked on several Academy projects, including the Federal Bureau of Investigation; Department of Homeland Security—US Coast

Guard; Department of Interior—National Park Service; Environmental Protection Agency’s National Center for Environmental Innovation, Office of Environmental Information, Office of Water, Office of Environmental Justice, Office of Air and Radiation; Corporation for National and Community Service; and Department of Energy’s Office of Energy Efficiency and Renewable Energy.

E. Jonathan Garcia, *Senior Research Associate*. Jonathan has served on studies for numerous different federal and local agencies, including work for the Office of Personnel Management, U.S. Department of Homeland Security Office of Inspector General, U.S. Coast Guard Academy, Montgomery County Fire and Rescue Service, and the U.S. Agency for International Development Office of Inspector General. Jonathan’s focus areas include organizational change management, strategic planning, and diversity, equity, inclusion, accessibility, and belonging (DEIAB). Previously, Jonathan served as a Research Intern with the Federal Trade Commission and a paralegal intern for Sughrue Mion PLLC and Zavos Junker Law Group. Jonathan holds a Bachelor of Arts in Public Policy, a Bachelor of Arts in Communication, and a minor in Law and Society from the University of Maryland, College Park.

Sarah Jacobo, *Research Associate*. Sarah has served on studies for different federal agencies, including work for the U.S. Department of Agriculture and the National Science Foundation. Sarah earned a Master of Public Policy and a Bachelor of Arts in Government and Politics, and Public Policy from the University of Maryland, College Park. Before joining the Academy, Sarah was an intern with the Academy’s Study Team and worked on the Cybersecurity Workforce Study for the Cybersecurity and Infrastructure Security Agency.

Winston Kelly, *Management Consultant*. Winston is a management consultant at The Parnin Group (TPG) with in-depth experience in the non-profit and government sectors. An alumnus of the Presidential Management Fellowship (PMF), Winston has a strong track record of success in helping streamline operations and improve efficiency using data-driven approaches. Winston is a problem-solver who can identify key challenges and opportunities and develop practical solutions that drive results. Winston has a combination of career and educational experience in public finance, organizational development, facilitation, and strategic planning.

Appendix B: List of Interviewees

U.S. Department of Agriculture

Office of the Secretary

- **Kevin Shea**, Acting Deputy Secretary
- **Eric Deeble**, Deputy Assistant Secretary for the Office of Congressional Relations
- **Maribel Duran**, Chief of Staff
- **Bernie Kluger**, Senior Advisor

Office of the Chief Financial Officer

- **Lynn Moaney**, Deputy Chief Financial Officer
- **Stanley McMichael**, Associate Chief Financial Officer and former Acting NFC Director
- **Glennette Brown**, Director of the Working Capital Fund
- **Adrian Carter**, Chief Enterprise Architect
- **Marquette DeFillo**, Enterprise Systems Management Human Resources Director
- **Frank Hodo**, Acquisition Director
- **John Pirchio**, Budget Director

Office of Chief Information Officer

- **Gary Washington**, Chief Information Officer
- **Joe Weaver**, Director of the Information Technology Center, Digital Infrastructure Services Center

National Finance Center

- **Michael Jackson**, NFC Director
- **Angelique Dyer**, NFC Deputy Director
- **Douglas Burns**, Chief of the Financial Management Office
- **Rick Culotta**, Program Analyst
- **Chris Cutitto**, Associate Director of Payroll Accounting
- **William Dempsey**, Accountant
- **Craig Earhart**, Accounting Branch Chief
- **Adrienne Fourcade**, Associate Director of Payroll Operations
- **Eileen Hamblen**, Applications Testing Branch Chief
- **Tracey Hoolahan**, Client Management Branch Chief
- **Dawn Hughes-Morris**, Deputy Director, GESD Operational Services Staff
- **Wardell Jones**, Associate Director of Client Services
- **Cherie Landry**, Associate Director of the Mainframe
- **Susan Le**, Chief of the Internal Audit & Compliance Group
- **Tina LeBeau**, Budget Analyst, Financial Management Office
- **Lisette Lopez**, Training and Communications Branch Chief
- **Renee Pellissier**, Associate Director of Program Management Staff
- **Trudy Sandefer**, Deputy Director of Technical Services

- **Michael Schleifstein**, Contact Center Branch Chief
- **Debby Tatum**, Associate Director of Web Applications
- **Alisa Wells**, Associate Director of Government Insurance & Collections

Other USDA Entities

- **Leslie Barrack**, Deputy Director, USDA Office of Budget and Program Analysis
- **Rachel Daugherty**, Cost Analyst Researcher, Financial Management Services
- **Tamieca Hamlin**, Deputy Chief Customer Experience Officer, Office of Customer Experience
- **Simchah Suveyke-Bogin**, Chief Customer Experience Officer, Office of Customer Experience

NFC Customers

- **Chris Alvarez**, Justice Management Division Director, Finance Staff, Department of Justice
- **Vonda Bell**, Chief Human Capital Officer, Farm Credit Administration
- **Julie Brill**, Deputy Chief Human Capital Officer, Small Business Administration
- **Elizabeth Cappello**, Deputy Chief Information Officer, Department of Homeland Security
- **Joseph Cappello, Jr.**, Chief Human Capital Officer, Library of Congress
- **Terry Cook**, Senior Advisor, Justice Management Division, Finance Staff, Department of Justice
- **Jermaine Cooper**, Assistant Director, Financial Systems Payroll Systems Group, Justice Management Division, Finance Staff, Department of Justice
- **Stephanie Cousins**, Deputy of HCBS, Department of Homeland Security
- **Roland Edwards**, Chief Human Capital Officer, Department of Homeland Security
- **LaRell Faulkner**, Division Chief, Division of HRIS, Department of Labor
- **Kimya Lee**, Deputy Chief Human Capital Officer, Department of Homeland Security
- **Stacy Marcott**, Deputy Chief Financial Officer, Department of Homeland Security
- **Leigh Ann Massey**, Chief Human Capital Officer, Office of Special Counsel
- **Amy McAllister**, Human Resources Supervisor, Library of Congress
- **Trevor Norris**, Acting Assistant Secretary Management, Department of Treasury
- **Carin Otero**, Deputy Chief Human Capital Officer, Department of Labor
- **Jeffrey Pullen**, Associate Director, Justice Management Division, Finance Staff, Department of Justice
- **Matthew Roper**, Deputy Director, Justice Management Division, Finance Staff, Department of Justice
- **Sydney Rose**, Chief Human Capital Officer, Department of Labor
- **Yahida Salazar-Hikida**, Director of HR Systems and Processing Division, Small Business Administration
- **Mona Shaw**, Chief, Operations Support Division, Library of Congress
- **Neil Singh**, Executive Director, Human Capital Business Solutions, Department of Homeland Security
- **Tracey Stackhouse**, Human Resource Specialist, Library of Congress

- **Nick Totten**, Associate Chief Information Officer, Department of Treasury
- **Michael Weissman**, Senior Leader Human Resource IT Technical Liaison, Department of Homeland Security
- **Jennifer Williams**, Associate Director, Farm Credit Administration

Shared Service Providers

- **Julie Bednar**, Associate Director of the Human Resources Directorate, Interior Business Center
- **Mary Marsh**, ESS Civilian Pay Director, Defense Finance and Accounting Service

Government Accountability Office

- **Jessica Steele**, Assistant Director of Information Technology and Cybersecurity
- **Jeanne Sung**, Assistant Director for Information Technology and Cybersecurity
- **Kevin Walsh**, Director of Information Technology and Cybersecurity

Office of Personnel Management

- **Peter Bonner**, Associate Director of Human Resources Solutions
- **Michael Cundiff**, Program Manager, HR Quality Service Management Offices and HR Line of Business
- **Steve Krauss**, Senior Advisor, HR Quality Service Management Offices and HR Line of Business

Subject Matter Experts

- **Vincent Chustz**, Director, Star Cypress Partners
- **Mary Davie**, Former Director of the Program Management Office, General Services Administration
- **Natalie Elghossain**, Senior Manager, Star Cypress Partners
- **Amy Haseltine**, Deputy Assistant Commissioner, General Services Administration
- **Suzette Kent**, Former Federal Chief Information Officer
- **John Marshall**, Founder of Shared Services Leadership Coalition
- **Barbara Morton**, Deputy Chief Veterans Experience Officer, Department of Veterans Affairs
- **John Ortego**, Former Director of the National Finance Center
- **Maya Zamek**, Associate, Star Cypress Partners

Appendix C: Timeline of Notable NFC Achievements

Timeline of Notable NFC Achievements	
YEAR	ACHIEVEMENTS
1973	<ul style="list-style-type: none"> Established to consolidate USDA Payroll and Financial Services.
1978	<ul style="list-style-type: none"> Began operating its own data center with the merger of USDA's New Orleans Computer Center
1983	<ul style="list-style-type: none"> Became a pioneer in cross-servicing by implementing administrative payments processing for the Department of Education.
1984	<ul style="list-style-type: none"> Implemented the first cross-serviced payroll customer, Merit Systems Protection Board.
1987	<ul style="list-style-type: none"> Developed and implemented the Thrift Savings Plan (TSP).
1990	<ul style="list-style-type: none"> Embarked on its first insurance LOB venture with the Office of Personnel Management (OPM) and implemented the Direct Premium Remittance System (DPRS).
2002	<ul style="list-style-type: none"> Launched the Centralized Enrollment Clearinghouse System (CLER), which provides an efficient and cost-effective reconciliation of Federal employees' health care premiums to health insurance carriers.
2003	<ul style="list-style-type: none"> Selected by the OPM as an e-Payroll consolidation provider.
2005	<ul style="list-style-type: none"> Designated by OPM as one of five Federal Human Resources Shared Services Centers/HR LOB providers.
2007	<ul style="list-style-type: none"> Relocated its primary data center to Denver, Colorado.
2010	<ul style="list-style-type: none"> Implemented and managed the initial rollout of the Pre-Existing Condition Insurance Program (PCIP) until it transitioned to the Department of Health and Human Services.
2012	<ul style="list-style-type: none"> Implemented, and continues to manage, the Tribal Insurance Processing System (TIPS), which is a component of the Affordable Care Act. Introduced Insight, a reporting and analytics tool for its customers, and consolidated its multiple help desks into a single Contact Center.
2013	<ul style="list-style-type: none"> Established its Alternate Worksite in Shreveport, Louisiana, to support the USDA, Office of the Chief Financial Officer (OCFO) New Orleans' continuity of operations plan.
2017	<ul style="list-style-type: none"> Struck by an EF-3 tornado that rendered its primary business facility unusable. NFC implemented its continuity of operations plan and successfully resumed critical business operations within 12 hours at its Alternate Work Site in Bossier City, LA, and still successfully processed payroll of almost \$3 billion for more than 650,000 employees on its normal schedule.

2018	<ul style="list-style-type: none"> Transitioned one of the time and attendance solutions offered by NFC to a software-as-service model, thus outsourcing this key component of the HR LOB
2019	<ul style="list-style-type: none"> Improved the customer experience through expanded use of ServiceNow and implementation of the Verizon Contact Center solution.
2020	<ul style="list-style-type: none"> Bolstered the security of the Employee Personal Page application by integrating two-factor authentication. Optimized NFC's information technology infrastructure as part of USDA's Data Center Consolidation initiative
2021	<ul style="list-style-type: none"> Collaborated with government and industry leaders to achieve FedRamp certification for a commercial, off-the-shelf time and attendance solution. Sustained NFC core operations and services amid the global pandemic and Hurricane Ida.
2022	<ul style="list-style-type: none"> Data Masking/Obfuscation USA Staffing and fingerprinting Integration. Implementation of Executive Order on Protecting the Federal Workforce (\$15 minimum wage for Federal employees) Implementation and support of Executive Order on Cyber Security to strengthen USDA's security posture. implementation of Consolidated Appropriations Act 2021 for Student Loan Non-Taxable Payment Implementation of OPM's Parental Bereavement paid leave entitlement. Implemented enhancements to the Enterprise Performance Management System
2023	<ul style="list-style-type: none"> Incorporating cultural improvements with Student Outreach Programs and HR Customer Outreach Modernization efforts for DPRS Web and Retirement Processing OCFO/NFC procured services of the National Academy of Public Administration (NAPA) for an overall NFC Modernization Assessment. NFC Celebrates its 50th Anniversary

Source: National Finance Center. "NFC Overview." Accessed June 1, 2023.
https://www.nfc.usda.gov/Publications/HR_Payroll/Brochures/Brochures_home.php.

Appendix D: Section 702 and Section 725 of the General Provisions of the Agriculture Appropriations Act for Fiscal Year 2023

[In the statutory text copied into this Appendix, certain words have been highlighted in bold for clarity.]

Consolidated Appropriations Act, 2023, Public Law No. 117-328, December 29, 2022

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DIVISION A—AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES APPROPRIATIONS ACT, 2023

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TITLE VII GENERAL PROVISIONS

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SEC. 702. Notwithstanding any other provision of this Act, the Secretary of Agriculture may transfer unobligated balances of discretionary funds appropriated by this Act or any other available unobligated discretionary balances that are remaining available of the Department of Agriculture to the Working Capital Fund for the acquisition of property, plant and equipment and for the improvement, delivery, and implementation of Department financial, and administrative information technology services, and other support systems necessary for the delivery of financial, administrative, and information technology services, including cloud adoption and migration, of primary benefit to the agencies of the Department of Agriculture, such transferred funds to remain available until expended: **Provided**, That none of the funds made available by this Act or any other Act shall be transferred to the Working Capital Fund without the prior approval of the agency administrator: **Provided further**, That none of the funds transferred to the Working Capital Fund pursuant to this section shall be available for obligation without written notification to and the prior approval of the Committees on Appropriations of both Houses of Congress: **Provided further**, That none of the funds appropriated by this Act or made available to the Department’s Working Capital Fund shall be available for obligation or expenditure to make any changes to the Department’s National Finance Center without written notification to and prior approval of the Committees on Appropriations of both Houses of Congress as required by section 716 of this Act: **Provided further**, That none of the funds appropriated by this Act or made available to the Department’s Working Capital Fund shall be available for obligation or expenditure to initiate, plan, develop, implement, or make any changes to remove or relocate any systems, missions, personnel, or

functions of the offices of the Chief Financial Officer and the Chief Information Officer, co-located with or from the National Finance Center prior to written notification to and prior approval of the Committee on Appropriations of both Houses of Congress and in accordance with the requirements of section 716 of this Act: **Provided further**, That the National Finance Center Information Technology Services Division personnel and data center management responsibilities, and control of any functions, missions, and systems for current and future human resources management and integrated personnel and payroll systems (PPS) and functions provided by the Chief Financial Officer and the Chief Information Officer shall remain in the National Finance Center and under the management responsibility and administrative control of the National Finance Center: **Provided further**, That the Secretary of Agriculture and the offices of the Chief Financial Officer shall actively market to existing and new Departments and other government agencies National Finance Center shared services including, but not limited to, payroll, financial management, and human capital shared services and allow the National Finance Center to perform technology upgrades: **Provided further**, That of annual income amounts in the Working Capital Fund of the Department of Agriculture attributable to the amounts in excess of the true costs of the shared services provided by the National Finance Center and budgeted for the National Finance Center, the Secretary shall reserve not more than 4 percent for the replacement or acquisition of capital equipment, including equipment for the improvement, delivery, and implementation of financial, administrative, and information technology services, and other systems of the National Finance Center or to pay any unforeseen, extraordinary cost of the National Finance Center: **Provided further**, That none of the amounts reserved shall be available for obligation unless the Secretary submits written notification of the obligation to the Committees on Appropriations of both Houses of Congress: **Provided further**, That the limitations on the obligation of funds pending notification to Congressional Committees shall not apply to any obligation that, as determined by the Secretary, is necessary to respond to a declared state of emergency that significantly impacts the operations of the National Finance Center; or to evacuate employees of the National Finance Center to a safe haven to continue operations of the National Finance Center.

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Sec. 716. * * *

[Section 716 establishes a process by which the Secretary gives at least 30 days' advance notice to the Appropriations Committees.]

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SEC. 725. None of the credit card refunds or rebates transferred to the Working Capital Fund pursuant to section 729 of the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2002 (7 U.S.C. 2235a; Public Law 107-76) shall be available for obligation without written notification to, and the prior approval of, the Committees on Appropriations of both Houses of Congress: **Provided**, That the refunds or rebates so transferred shall be available for obligation only for the acquisition of property, plant and equipment, including equipment for the

improvement, delivery, and implementation of Departmental financial management, information technology, and other support systems necessary for the delivery of financial, administrative, and information technology services, including cloud adoption and migration, of primary benefit to the agencies of the Department of Agriculture.

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