



# Information Technology Information Management

## Strategic Plan Fiscal Years 2020-2024

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# **Information Technology Information Management Strategic Plan**

**Fiscal Years 2020-2024**

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# ABSTRACT

The U.S. Nuclear Regulatory Commission’s (NRC’s) Information Technology/Information Management (IT/IM) Strategic Plan for fiscal years 2020–2024 describes how the agency will leverage IT/IM goals, objectives, and strategies to support and enable the NRC mission. The IT/IM Strategic Plan responds as part of Title 44 of the *Code of Federal Regulations*, Section 3506(b)(2), and the Clinger-Cohen Act of 1996. The Office of the Chief Information Officer is required to develop and maintain an information resources management strategic plan. The plan lays out the mission and vision for the agency’s IT/IM efforts and establishes three goals along with associated objectives and strategies. This plan provides the technology and strategic guidance that informs and supports the agency’s budget formulation and prioritization processes over the next 4 years.



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# EXECUTIVE SUMMARY

The U.S Nuclear Regulatory Commission (NRC) has updated its Information Technology/Information Management (IT/IM) Strategic Plan for fiscal years 2020–2024. The IT/IM Strategic Plan describes how the current plans support the [NRC’s Strategic Plan: Fiscal Years 2018–2022](#). The NRC’s Strategic Plan states, “Information technology developments in an increasingly mobile society will impact the agency’s operations. NRC will need to take advantage of technology to enable an effective and efficient work environment. It is essential to maintain a reasonable balance between the need to maximize technological innovation to perform our mission and the secure use and protection of sensitive and proprietary information. The NRC needs to be aware of the heightened risk that sensitive information held by the agency or its licensees could be lost, misplaced, or intercepted and obtained by unauthorized users. The agency will need to develop and maintain a knowledgeable workforce capable of addressing both these technology and security challenges.” This statement is the main influence in the development of the IT/IM Strategic Plan Framework. In addition, the [President’s Management Agenda](#), which outlines cross-agency priority goals, was leveraged to ensure that the NRC implements the long-term vision for modernizing the Federal Government.



# MESSAGE FROM THE CHIEF INFORMATION OFFICER

I am pleased to present this update to the U.S. Nuclear Regulatory Commission's (NRC's) Information Technology (IT)/Information Management (IM) Strategic Plan. The objective of the NRC's IT/IM Strategic Plan Framework is make it easier for the NRC staff to "get the right information to the right people at the right time" while enabling and supporting the NRC's mission: "The NRC licenses and regulates the Nation's civilian use of radioactive materials to provide reasonable assurance of adequate protection of public health and safety and to promote the common defense and security and to protect the environment."



The IT/IM Strategic Plan Framework includes three goals: to empower, serve, and protect. The NRC developed these goals with a view to the future to ensure that it develops staff and processes that are agile and allow for innovation to manage an ever-changing IT/IM environment. At a high level, the goals aspire to (1) entrust a highly engaged IT/IM staff to effectively partner with business counterparts and customers, (2) deliver effective and efficient IT/IM services that meet customer needs, and (3) safeguard the agency's information and IT assets by detecting, protecting, and responding to events.

As the NRC's Chief Information Officer, I am accountable for the agency's IT/IM programs, the scope of which extends to every NRC office and affects both internal and external stakeholders. The NRC workforce strives to maintain an open and transparent partnership with our stakeholders and to ensure responsiveness to data and business needs. The right-sized IT/IM capabilities and resources, in alignment with the agency's mission priorities, provide a path to the future.

David Nelson  
Chief Information Officer  
U.S. Nuclear Regulatory Commission



# ACRONYMS

CAP	cross-agency priority
CISA	Cybersecurity and Infrastructure Security Agency
DHS	U.S. Department of Homeland Security
ESP	empower, serve, and protect
GAO	Government Accountability Office
IG	Inspector General
IM	information management
IT	information technology
NIST	National Institute of Standards and Technology
NRC	U.S. Nuclear Regulatory Commission
OCIO	Office of the Chief Information Officer
PMA	President's Management Agenda



# INTRODUCTION

The U.S. Nuclear Regulatory Commission (NRC) Information Technology (IT)/Information Management (IM) Strategic Plan supports the agency's mission to license and regulate the Nation's civilian use of radioactive materials to protect public health and safety, promote the common defense and security, and protect the environment. Although the current NRC Strategic Plan does not outline corporate support goals, it does reference the need to provide a technology foundation that is mobile, innovative, and secure.

The NRC's Office of the Chief Information Officer (OCIO) has four main functions: (1) plan, direct, manage, and implement the delivery of centralized IT infrastructure, applications, and IM services, (2) provide principal advice and assistance to the agency's senior executives to ensure that the NRC selects and manages IT/IM resources in a manner that maximizes their value, (3) provide oversight of the NRC's IT portfolio to ensure compliance with the requirements imposed by the Federal Information Technology Acquisition Reform Act of 2014, the Clinger-Cohen Act of 1996, and the Federal Information Security Modernization Act of 2014, and (4) provide authoritative assistance, consultation, and guidance to the agency's senior management in the areas of computer security and compliance. To support the OCIO functions, the framework was developed to guide the people and the processes to achieve success. This framework includes the IT/IM mission, vision, goals, objectives, and strategies that feed into the IT/IM Enterprise Roadmap and Performance Measures.

The NRC designed the IT/IM mission and vision to support the foundations of the framework by keeping them at the forefront to ensure that the staff knows what it should accomplish at a high level (mission) and what it should aspire to (vision) every day.



One of the guiding documents in the preparation of the framework is the President’s Management Agenda (PMA). The PMA states that it “lays out a long-term vision for modernizing the Federal Government in key areas that will improve the ability of agencies to deliver mission outcomes, provide excellent service and effectively steward taxpayer dollars on behalf of the American people.” By leveraging the PMA, the NRC developed the framework to incorporate the three PMA cross-agency priority (CAP) goals that are the key drivers of transformation:



- (1) to modernize IT to increase productivity and security (CAP Goal 1)
- (2) to leverage data as strategic assets (CAP Goal 2)
- (3) to develop a workforce for the 21st century (CAP Goal 3)

From the PMA

## LOOKING TOWARD THE FUTURE

The NRC continues to build an agile and innovative IT/IM environment to incorporate advancements in IT/IM. The following future opportunities will keep the momentum moving forward to achieve a right-sized footprint:

- a continued focus on cybersecurity enhancements
- implementation of mobility tools that take advantage of enhanced wireless and fifth-generation infrastructure
- an increased use of Big Data to inform risks and actions quickly
- the adoption of more cloud services and shared services to minimize the Government-owned and -managed data center footprint

In support of the agency, the IT/IM Strategic Plan Framework has defined the mission, vision, goals, objectives, and strategies as a guide to empower, serve, and protect (ESP). The framework will be incorporated into the day-to-day work to ensure that the path outlined in this document is transformative. Using this framework in conjunction with the NRC’s Leadership Model and FranklinCovey’s Speed of Trust will give the staff a foundation on which to implement the modern NRC IT/IM services and solutions of the future.

# IT/IM GOALS, OBJECTIVES AND STRATEGIES

The agency constructed the IT/IM Strategic Plan Framework to reflect the ever-changing environment of IT and IM. As the development of the framework unfolded, it was clear that it needed to be flexible and agile with the rapid development of new technologies throughout the Federal Government and the changes in the nuclear industry as a whole.

The development of the NRC IT/IM Strategic Plan incorporated work from several other documents, including, but not limited to, the following:

- NRC Strategic Plan: Fiscal Year 2018–2022 ([link](#))
- President’s Management Agenda: Modernizing Government for the 21<sup>st</sup> Century ([link](#))
- NRC Leadership Model ([link](#))
- various internal NRC executive-level presentations, including Commission briefings
- agencywide analysis of staff strengths, weaknesses, opportunities, and threats

At a high level, the framework goals will be the main source of reference within the agency. The acronym ESP will help the staff remember the guiding goals and outcomes that should influence how day-to-day IT/IM business is accomplished.



E

## Empower

- **GOAL:** Entrust a highly engaged IT/IM staff to effectively partner with business counterparts and customers.
- **OUTCOME:** The IT/IM staff embraces clear roles and responsibilities. Establish valued business partnerships across the agency that demonstrate shared trust while empowering ownership.



S

## Serve

- **GOAL:** Deliver effective and efficient IT/IM services that meet customer needs.
- **OUTCOME:** Focus on customer service to continuously improve all aspects of service management practices, including communication, responsiveness, and service delivery. Increase service uptime while offering additional streamlined and modern capabilities.



P

## Protect

- **GOAL:** Safeguard the agency's information and IT assets by detecting, protecting, and responding to events.
- **OUTCOME:** Establish an awareness of cybersecurity risk and knowledge; strengthen policies, processes, and controls; and implement effective governance.

## STRATEGIC GOAL 1: EMPOWER

The first IT/IM Strategic Goal is to “empower.” Embracing its roles and responsibilities will enable the staff to establish valuable business partnerships across the agency and demonstrate trust and leadership skills.

### Objectives and Strategies

The NRC developed the overview of the objectives and strategies below to support the goal of empower. The goal will entrust a highly engaged IT/IM staff to effectively partner with business counterparts and customers.

### Goal 1: Empower

The IT/IM staff embraces clear roles and responsibilities. Establish valued business partnerships across the agency that demonstrate shared trust while empowering ownership.

1.1 Incorporate ownership and leverage trust with IT/IM staff to deliver and implement innovative solutions to increase agencywide productivity and agility:

- Establish and own clear organizational and service roles and responsibilities.
- Leverage the NRC Leadership Model, focusing on PREDICT characteristics.
- Build and demonstrate trust to gain confidence through consistency, communication, and integrity.

1.2 Build valued business partnerships that provide IT/IM solutions:

- Collaborate internally and externally to develop relationships across the agency.
- Provide partnership outreach to meet the needs of offices and the agency.

1.3 Transform the delivery of IT/IM services through receptivity to new ideas, adaptability, and diversity of thought:

- Develop communication methods that are responsive to the level of need.
- Leverage the NRC Leadership Model to spur innovation.
- Support continuous development of the staff’s external awareness.

The NRC has two agencywide initiatives that lend their support to implementing this goal. First is the NRC Leadership Model. This model communicates how we individually and collectively demonstrate leadership. It outlines seven leadership characteristics using the acronym PREDICT:

- (1) Participative Decisionmaking
- (2) Receptivity to New Ideas and Thinking
- (3) Empowerment and Shared Leadership
- (4) Diversity in Thought
- (5) Innovation and Risk Tolerance
- (6) Collaboration
- (7) Teamwork

As the staff begins to embrace the PREDICT characteristics, the level of empowerment rises.

The other initiative currently in place is FranklinCovey’s Speed of Trust. As stated in the FranklinCovey workshops, “Trust means confidence.” This program begins with a series of

workshops designed to provide opportunities for strengthening mutual trust among agency leaders, supervisors, and staff. As trust is built, it increases the speed and quality of the work while reducing costs.

Leveraging these two initiatives along with clearly outlining expectations to IT/IM staff will provide the environment necessary for the staff to demonstrate empowerment.

## STRATEGIC GOAL 2: SERVE

The second IT/IM Strategic Goal is to “serve.” Much of the NRC’s IT/IM work focuses on customer service. Developing governance to support processes and procedures will benefit the entire agency by removing ambiguity. Currently, the NRC is merging all IT/IM acquisitions into a more streamlined and defined process to allow the staff to provide customer service that is responsive and timely. As technology progresses at a quicker rate, the NRC must ensure that its foundation is designed to respond to changing environments.

### Goal 2: Serve

Focus on customer service to continuously improve all aspects of service management practices, including communication, responsiveness, and service delivery. Increase service uptime while offering additional streamlined and modern capabilities.

### Objectives and Strategies

The NRC developed the overview of the objectives and strategies below to support the goal of serve. The goal will deliver effective and efficient IT/IM services that meet customer needs.

#### 2.1 Develop and deliver an IT/IM service portfolio that is right sized:

- Ensure that the staff performs day-to-day duties successfully to build a foundation to respond to emergent needs.
- Deliver high-quality project planning to customers.
- Provide end-to-end services.

#### 2.2 Leverage a proactive approach to service that is responsive to customer needs in an efficient and effective manner:

- Improve IT process tools and communications.
- Respond to potential issues via a vetted process to deliver timely solutions.
- Provide end-to-end services.

#### 2.3 Strive to improve customer experience:

- Actively seek feedback and examine performance.
- Build a culture to encourage constructive feedback on improvements to processes.
- Provide end-to-end services.

To improve IT/IM customer service, the NRC did the following:

- restructured the organization to align with the agency’s IT/IM service demands
- shifted to enterprisewide IT/IM contracts to deliver effective and agile IT/IM services

- modernized legacy IT and adopted cost-neutral or cost-minimal shared, cloud, and third-party-managed services to facilitate long-term cost savings

Providing quality end-to-end services that improve the customer experience will offer an environment that serves customers and ensures that the IT/IM staff has a path to success.

## STRATEGIC GOAL 3: PROTECT

The third IT/IM Strategic Goal is to “protect.” The three main areas of focus under this goal are to detect, protect, and respond. Ensuring that NRC staff and contractors are educated will increase awareness and strengthen policies and procedures.

### Objectives and Strategies

The NRC developed the overview of the objectives and strategies below to support the goal of protect. The goal will safeguard the agency’s information and IT assets by detecting, protecting, and responding to events.

**Goal 3: Protect**

Establish an awareness of cybersecurity risk and knowledge; strengthen policies, processes, and controls; and implement effective governance.

- 
- 3.1 Continue to improve the way we protect information assets:
- Partner with peer organizations to coordinate and improve programs (e.g., the U.S. Department of Homeland Security (DHS)/Cybersecurity and Infrastructure Security Agency (CISA)/Government Accountability Office (GAO)/Inspector General (IG)/National Institute of Standards and Technology (NIST)).
  - Evaluate tools and programs to inform, adapt, and improve the NRC’s information security posture.
  - Educate customers on good security practices and known threats.
- 
- 3.2 Practice risk-informed decisionmaking to provide protection while supporting the effectiveness and efficiency of the mission.
- Continuously review and improve processes to achieve efficiencies.
  - Leverage data to drive decisions.
  - Assess, identify, and mitigate agency risks with internal and external counterparts.
- 
- 3.3 Educate system users and business owners to understand their roles in detecting, protecting, and responding to events.
- Provide training programs.
  - Communicate change management programs.
  - Deliver briefing reports to inform decisionmakers.

Identifying opportunities to improve security and reliability while modernizing is important. These opportunities include a continued focus on security at every level. The NRC is a leader among Federal cybersecurity programs; it is modernizing security toolsets while implementing cloud/shared services and device refreshes and more cloud opportunities for standard industry services that reduce significant internally provided infrastructure.

## Overall NRC IT/IM Strategic Plan Framework

<b>Goal 1: Empower</b> Entrust a highly engaged IT/IM staff to effectively partner with business counterparts and customers.	<b>Goal 2: Serve</b> Deliver effective and efficient IT/IM services that meet customer needs.	<b>Goal 3: Protect</b> Safeguard agency information and IT assets by detecting, protecting, and responding to events.
<p><u>Outcome Goal 1:</u> The IT/IM staff embraces clear roles and responsibilities. Establish valued business partnerships across the agency that demonstrate shared trust while empowering ownership.</p>	<p><u>Outcome Goal 2:</u> Focus on customer service to continuously improve all aspects of service management practices, including communication, responsiveness, and service delivery. Increase service uptime while offering additional streamlined and modern capabilities.</p>	<p><u>Outcome Goal 3:</u> Establish an awareness of cybersecurity risk and knowledge; strengthen policies, processes, and controls; and implement effective governance.</p>
OBJECTIVES and STRATEGIES		
<p>1.1 Incorporate ownership and leverage trust with IT/IM staff to deliver and implement innovative solutions to increase agencywide productivity and agility:</p> <ul style="list-style-type: none"> <li>Establish and own clear organizational and service roles and responsibilities.</li> <li>Leverage the NRC Leadership Model, focusing on PREDICT characteristics.</li> <li>Build and demonstrate trust to gain confidence through consistency, communication, and integrity.</li> </ul>	<p>2.1 Develop and deliver an IT/IM service portfolio that is right sized:</p> <ul style="list-style-type: none"> <li>Ensure that the staff performs day-to-day duties successfully to build a foundation to respond to emergent needs.</li> <li>Deliver high-quality project planning to customers.</li> <li>Provide end-to-end services.</li> </ul>	<p>3.1 Continue to improve the way we protect information assets:</p> <ul style="list-style-type: none"> <li>Partner with peer organizations to coordinate and improve programs (e.g., DHS, CISA, GAO, IG, NIST).</li> <li>Evaluate tools and programs to inform, adapt, and improve the NRC’s information security posture.</li> <li>Educate customers on good security practices and known threats.</li> </ul>
<p>1.2 Build valued business partnerships that provide IT/IM solutions:</p> <ul style="list-style-type: none"> <li>Collaborate internally and externally to develop relationships across the agency.</li> <li>Provide partnership outreach to meet the needs of offices and the agency.</li> </ul>	<p>2.2 Leverage a proactive approach to service that is responsive to customer needs in an efficient and effective manner:</p> <ul style="list-style-type: none"> <li>Improve IT process tools and communications.</li> <li>Respond to potential issues via a vetted process to deliver timely solutions.</li> <li>Provide end-to-end services.</li> </ul>	<p>3.2 Practice risk-informed decisionmaking to provide protection while supporting the effectiveness and efficiency of the mission:</p> <ul style="list-style-type: none"> <li>Continuously review and improve processes to achieve efficiencies.</li> <li>Leverage data to drive decisions.</li> <li>Assess, identify, and mitigate agency risks with internal and external counterparts.</li> </ul>
<p>1.3 Transform the delivery of IT/IM services through receptivity to new ideas, adaptability, and diversity of thought:</p> <ul style="list-style-type: none"> <li>Develop communication methods that are responsive to the level of need.</li> <li>Leverage the NRC Leadership Model to spur innovation.</li> <li>Support continuous development of the staff’s external awareness.</li> </ul>	<p>2.3 Strive to improve customer experience:</p> <ul style="list-style-type: none"> <li>Actively seek feedback and examine performance.</li> <li>Build a culture to encourage constructive feedback on improvements to processes.</li> <li>Provide end-to-end services.</li> </ul>	<p>3.3 Educate system users and business owners to understand their roles in detecting, protecting, and responding to events:</p> <ul style="list-style-type: none"> <li>Provide training programs.</li> <li>Communicate change management programs.</li> <li>Deliver briefing reports to inform decisionmakers.</li> </ul>



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This IT/IM Strategic Plan supersedes NUREG-1908, Volume 3

11. ABSTRACT (200 words or less)

The U.S. Nuclear Regulatory Commission's (NRC's) Information Technology/Information Management (IT/IM) Strategic Plan for fiscal years 2020—2024 describes how the agency will leverage IT/IM goals, objectives, and strategies to support and enable the NRC mission. The IT/IM Strategic Plan responds as part of Title 44 of the Code of Federal Regulations, Section 3506(b)(2), and the Clinger Cohen Act of 1996. The Office of the Chief Information Officer is required to develop and maintain an information resources management strategic plan. The plan lays out the mission and vision for the agency's IT/IM efforts and establishes three goals along with associated objectives and strategies. This plan provides the technology and strategic guidance that informs and supports the agency's budget formulation and prioritization processes over the next 4 years.

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## Open Data Plan July 2025

## Introduction

The NRC Open Data Plan is a living document, updated and re-published annually, describing the agency's efforts to make agency data open to the public and accessible in standard, machine-readable formats by default to enable significant efficiency, productivity and cost savings for data consumers, be they internal or external to the agency.

## BACKGROUND

### The OPEN Government Data Act

Title II of the Foundations for Evidence-Based Policymaking Act of 2018 contains the *Open, Public, Electronic, and Necessary Government Data Act* or the *OPEN Government Data Act* which requires federal agencies to develop an Open Data Plan. As codified in Title 44, Section 3506 of the United States Code (44 U.S.C. § 3506), the NRC Open Data Plan addresses agency efforts to:

- ensure data acquired or created use open and non-proprietary formats;
- collaborate with entities external to the agency (the public) to improve transparency and accessibility to agency data;
- develop and improve methods for tracking data asset usage in conjunction with outreach to understand and support high value areas;
- evaluate and improve the timeliness, completeness, consistency, accuracy, usefulness, and availability of agency data;
- continue maturing data architecture and engage with technology acquisition in alignment with administration acquisition pathways
- focus on generic foundational and specific role-based training opportunities to create a culture of data for everyone;
- utilize best practices to prioritize data assets to make open;
- improve and maintain the agency comprehensive data inventory; and
- engage in the Federal Data Catalog

### Additional Resources

The NRC's Open Data Plan is influenced by other data governance strategies and policies, particularly the Federal Data Strategy, which specifies key actions for alignment with the OPEN Government Data Act.

### Federal Data Strategy

Alignment with the *OPEN Government Data Act*, the 2021 Federal Data Strategy specifies key actions:

- Action 5: Determine which data assets are most valuable to the public, such as researchers and other stakeholders, prioritize those assets for inclusion in the agency's Open Data Plan, and engage with users (internal and external) to understand which datasets are in highest demand or have the greatest potential impact.
- Action 6: Maintain a comprehensive data inventory of all data assets held by the agency, publish open data assets to the public via Data.gov, update inventories regularly to reflect new, modified, or retired datasets and use standardized metadata to improve discoverability and interoperability.

### **NRC Data Strategy**

Similarly, [the 2024 NRC Data Strategy](#) includes as part of its Goal 4 objectives to identify and support data access, transparency by extending data access and insights to external stakeholders and make publicly shareable data open to the public.

### **Evidence Act**

The Foundations for Evidence-Based Policymaking Act of 2018 (Evidence Act) introduced several key actions related to promoting data that is open, well managed, and useful for policymaking. Agencies are required to:

- make as much data available for public use as possible given the resources and requirements to avoid disclosure of personally identifiable information
- maintain comprehensive data inventories published as open data in standardized, machine-readable formats; and
- collaborate with entities external to the agency to understand how data users value and utilize government data.

### **NRC OPEN DATA PLAN GOALS**

The NRC Open Data Plan is built upon four goals and their related strategies consistent with FAIR (Findability, Accessibility, Interoperability, and Reusability) data principles which act as guidelines to improve the findability, accessibility, interoperability, and reuse of data assets.

- **Goal 1:** Advance the secure management and governance of agency data (Architecture and Governance).
- **Goal 2:** Advance the collection, transformation, and use of data (Data Use)
- **Goal 3:** Advance or improve the continual data management maturity of agency staff and processes (Data Maturity)
- **Goal 4:** Advance the use of data driven insights (Data Analytics).

### **GOALS AND STRATEGIES**

### **Goal 1** – Advance the secure management and governance of agency data (Architecture and Governance)

- **Mature the Data Architecture** - The NRC will continue to enhance the agency data architecture to ensure sufficient and scalable capacity to ingest and process data from existing and new data sources to meet agency business needs and support public access to government data and assets. As part of the strategy to meet this goal, the NRC continues to work to identify opportunities for the creation of data assets as well as improve the discovery of and access to data and assets which can support business needs and the public interest, provide actionable insights, and which may be included in the Comprehensive Data Inventory and Federal Data Catalog. The agency also regularly evaluates toolsets and emerging technologies for inclusion in its architecture to improve data cataloging and enhance public access and usability of agency data.
- **Enhance Data Governance** - The NRC will continue to develop, document, refine, implement, communicate, and enforce data policies and standards across the agency to ensure data assets are managed in accordance with agency regulations, applicable mandates, and industry standard best practices. To meet these goals, the agency leverages its Data Governance Board, Artificial Intelligence Governance Board, subject matter experts (SMEs) and other oversight bodies adjacent to each asset if relevant to ensure the agency meets its data transparency and public accessibility objectives in accordance with its duties to protect personally identifiable and other sensitive information.
- **Leverage Cloud Capabilities** - In conjunction with the agency's Cloud Smart Strategy, the NRC works to leverage the enterprise data capabilities made available through cloud services to promote “accessibility from anywhere” objectives and enable data and code sharing best practices.

### **Goal 2** – Advance the collection, transformation, and use of data (data use)

- **Leverage Modern Capabilities** - The NRC will continue to leverage modern capabilities as a default to enable the secure collection of and access to various forms of data within the agency data architecture in machine readable formats and in compliance with M-25-05, 44 U.S.C. § 3511, and other applicable mandates. These activities include the expanded use of web forms, automated data collection capabilities facilitating the efficient use of stakeholder input into agency actions; the investigation of opportunities to leverage streaming media and machine-to-machine data feeds; the use of modern tools for enterprise content search and discovery; and the conversion of data to Open Data formats, if necessary. The conversion of data sets for public use will be prioritized based on cost benefits analyses and rubrics balancing business need, level of effort, and resource availability against burdens associated with converting and maintaining the assets, as well as restrictions associated with intellectual property rights, confidentiality, and security.
- **Provide Data as a Service** - The NRC continues to improve its robust enterprise Data Service capabilities to promote the ability of business users to leverage the data needed to perform data analysis in support of business outcomes, capabilities which allow the public

to comment on and submit requests for data sets that can be used in downstream reporting, analysis, and visualization.

The agency continues to leverage a broad range of iterative methods to engage with the public and agency stakeholders to prioritize business needs including:

- public forums
- the offering of high value data sets
- participation in Data.gov and the Federal data catalog
- social media platforms
- online forms and feedback polls, and
- email opportunities.

The information gathered is presented to the appropriate governance and oversight staff for timely review and response, as well as presented to the Chief Data Officer (CDO) on a weekly basis for feedback. These channels allow for the public and stakeholders to make recommendations driving process evaluation and data asset improvement.

While the agency maintains these mechanisms to support dialogue with the public, there is also recognition that with improved tools, and new technologies other communication methods may arise that facilitate communication, and the agency is committed to reviewing emerging technologies to support transparency and access.

The Open Data staff regularly work across the agency to provide updates to the Comprehensive Data Inventory (CDI) on a quarterly basis, adding new data sets as appropriate. Engagements include in person discussion, process reviews, and usage of new toolsets and techniques to determine asset applicability, improve quality of the data, and add or improve descriptive metadata to support findability and accessibility in accordance with all applicable mandates clarify any usage constraints.

Beyond comments and requests, the agency recognize the importance of understanding how the public uses data, both to drive improvement in quality but as well as use information to better target the information provided to the needs of the public. While the agency currently does not track or provide data around the way the public interacts with agency data beyond Data.gov's limited toolset, the agency is exploring how to implement the tools and techniques required to expand capabilities to better understand and meet public data needs on a quarterly basis. The public is encouraged to provide comment on metrics which would be of most value.

- **Identify and Fill Data Gaps** - The NRC will continue to engage the public in the identification of data sets to meet business objectives. If data gaps are identified, the Data Service will seek out methods of sourcing the desired data.

Goal 3 – Advance the continual data management maturity of agency staff and processes (Data Maturity)

- **Establish Roles and Responsibilities** - The NRC establishes, communicates, and reinforces the roles and responsibilities associated with the management of data throughout its lifecycle in accordance with industry best practices and under the guidance of the Chief Data Officer in conjunction with the Data Governance and Artificial Intelligence Boards and the Chief Information Officer. This approach includes coordinating across offices to nominate Data Stewards for data assets, the creation and population of data analytics and data science teams to collectively support the identification, curation, lifecycle management, determine fitness for use, and correct and appropriate verification of usage and insights. The agency also promotes data for everyone as a core tenant and creates spaces specifically for staff of all levels of expertise to share tactics, techniques, and procedures to enhance the utilization of data as a service in support of risk-informed decision making and process improvement.
- **Provide Role-based Training** - The NRC will continue to review and implement best in class role-based and generalized training to ensure staff can enhance and reinforce their data management skills within and beyond their respective functional roles. Beyond establishment of general and specific data training to the agency enables staff at all levels to leverage emerging tools and techniques in pursuit of data excellence through communities of practice, data specific events.
- **Improve Data Management Resource Pool** - The NRC will continue to fill skill gaps in key data roles through a combination of selective hiring and cross-training by leveraging its Strategic Workforce Planning, Capacity Planning, and Competency Modeling programs.
- **Integrate Data into the Software Development Lifecycle** - The NRC will integrate the management of its Data Architecture into the agency's SDLC processes to ensure that software development considers potential impacts to and required modifications of the data architecture and data catalog.

### Goal 4 – Advance the use of data driven insight (Data Analytics)

- **Mature Data Science and Analytics** - The NRC will continue to mature its use of data science and analytics tools and methodologies to simplify public access to and consumption of insights gleaned from agency data.
- **Mature Data Transparency** - The NRC will continue to identify and support opportunities to promote data transparency by extending data insights to external stakeholders where appropriate and in compliance with agency policy. The agency will leverage curated data sets and dashboard visualizations to ensure that data insights are easy to understand and simple to navigate.
- **Promote Data Quality** - The NRC will continue to engage data and functional subject matter experts in the standardization, normalization, quality assessment, and deduplication of data to promote trust and confidence in the agency's data sources.
- **Unite Around Data** - The NRC will continue to leverage the momentum of existing data analytics initiatives by creating new opportunities to share data-driven insights, innovative ideas, and data successes across the organization and with the public.





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