



NASA

Data Strategy

FY2025 – FY2027





Table of Contents

Message from the Chief Data Officer (CDO).....	3
Executive Summary	4
Background	5
CDO Mission, Vision, and FAIRUST Principles	6
2025 NASA Data Strategy Framework	7
2025 NASA Data Strategy Goals and Outcomes	9
Goal 1: Federated Data Management (<i>Process</i>)	10
Goal 2: Data Culture (<i>People</i>)	11
Goal 3: Data Management Technology Capabilities (<i>Technology</i>)	12
Moving Forward	13
Appendix A: Data Strategy Crosswalk	14
Appendix B: Key Components	17
KEY COMPONENT – DAMA-DMBOK2 FRAMEWORK	17
KEY COMPONENT – FAIRUST PRINCIPLES	18
KEY COMPONENT – FEDERATED DATA GOVERNANCE FRAMEWORK (FDGF)	19
Appendix C: Acronyms	20

Message from the Chief Data Officer (CDO)

The National Aeronautics and Space Administration (NASA) leads the way in technology application as it pursues its mission to explore the unknown in air and space, innovate for humanity's benefit, and inspire the world through discovery. NASA continues to be an inspirational pillar for the world, encouraging young men and women to dream of new possibilities, and see that not even the sky is the limit.

To adapt to the ever-evolving technical landscape and accommodate the exponential growth of data, NASA must have a robust infrastructure as a solid foundation for mission success. In alignment with federal priorities, NASA is accelerating its efforts to improve data governance and infrastructure to support trustworthy and mission-aligned AI capabilities. As we continue to advance in discovery, our need to analyze grows stronger. Advancements in technology, such as generative artificial intelligence (GenAI), can be leveraged as helpful tools to multiply employees' abilities and allows for greater breadth and depth in analysis. These capabilities are strengthened by the reuse of high-quality agency data, models, and code—key requirements under new federal AI guidance aimed at maximizing value to the taxpayer and avoiding duplicative investments. Leveraging these force multipliers allows us to keep up with the increasing demands of our mission and ensures NASA will continue to make life-changing discoveries every day.

By cultivating a collaborative data sharing community, we can systematically address data challenges and opportunities. This allows for interoperability and greater collaboration throughout the Agency. This emphasis on shared data resources aligns with federal priorities to promote innovation while ensuring transparency and public trust in AI-enabled government services. This strategy promotes procedures and standard behaviors necessary to build discipline and consistency to managing data as a critical organizational competency. The intent is to build practices that become second nature and are adaptative to changing environments. To make best use of technology advancements, we must improve our data skills and understanding and implement a Federated Data Governance Framework (FDGF) to elevate data governance to an Agency-wide priority.

This data strategy outlines the next steps we must take as an Agency to improve on the advancements made from our 2021 Data Strategy. I am confident that we are united in our efforts to move all of NASA forward, and that the 2025 Data Strategy will continue to propel our Agency to make the unknown, known.

Executive Summary

The world continues to experience extraordinary advancements in the use of data, and daily innovation creates an ever-evolving landscape. Navigating that landscape requires agility, expertise, and determination, and most of all, commitment to the mission.

NASA leads the world in scientific advancement, making discoveries that help everyone understand the world around them and advancing humanity as a whole. Data continues to be the cornerstone of these innovations, and a comprehensive data strategy is integral to keeping the Agency at the cutting edge of science and technology.

NASA's 2025 Data Strategy covers three years and builds on the 2021 NASA Data Strategy to establish a framework to operationalize enterprise data management. This strategy positions NASA to harness the full value of its data in service of innovation, exploration, and emerging technologies like AI. By strengthening data governance, access, and infrastructure, the agency lays the groundwork for secure and scalable adoption of future capabilities. The underpinning framework is people, processes, and technologies to implement a comprehensive approach across the goals. Each goal contains outcomes which address an identified gap. More importantly, the 2025 NASA Data Strategy is designed to help NASA achieve Mission and Strategic Goals and is modeled after the Federal Data Strategy.

The Mission of the Federal Data Strategy is to fully leverage the value of federal data for mission, service, and the public good by guiding the Federal Government in practical ethical governance, conscious design, and a learning culture.

NASA Mission: NASA explores the unknown in air and space, innovates for the benefit of humanity, and inspires the world through discovery.

NASA Strategic Goal 1.3: Ensure NASA's science data are accessible to all and produce practical benefits to society.

NASA Strategic Goal 4: Enhance capabilities and operations to catalyze current and future mission success.

NASA Data Strategy: Leverage the full value of NASA data for mission, service, and public good through federated data governance, a data culture, and improved data management technology capabilities.

Implementing this data strategy transforms how NASA operates internally and externally by promoting collaboration, innovation, and coordination among all parts within NASA in governing NASA's data. The Data Strategy is based on the Federal Data Strategy and grounded in the Chief Data Officer (CDO) Mission and Vision statements:

CDO Mission: "Manage data through FAIRUST principles to provide trusted insights, support mission success, and enable innovation"

CDO Vision: "Enable NASA's data for the known and beyond."

FAIRUST stands for Findable, Accessible, Interoperable, Reusable, Understandable, Secure, and Trustworthy. See Appendix B: Key Components.

Background

PAIN POINTS NEEDING RESOLUTION

The 2021 NASA Data Strategy identified the following key pain points within NASA's Data Systems:



No Comprehensive Search

Steep learning curve to understand the data landscape throughout NASA, which leads to misuse of data and lack of collaboration across centers.



Siloed Data Sets

Data (e.g. Science, Engineering, Flight, Safety, Financial, etc.) scattered across independently managed systems lead to redundancy and confusion among end users and inconsistent reporting and analytical results.



Local Analytics Environments

Exporting data for analysis is limiting and time consuming as data analysts spend large portions of time on data cleaning and integrating.



Decentralized Visualization Tools

Multiple independent instances of the same visualization tools throughout the enterprise makes it difficult to manage reports and create standard definitions and reports for leadership.



Non-Shareable Data Assets

Without a centralized data asset catalog, analysts lack the necessary tools for optimal collaboration and validation.

Figure 1: FY2021 Data Strategy Pain Points

In 2020, NASA formed a Data Governance Board to address the original lack of organizational and governance structure necessary to enable resolving these pain points. That board is now part of the IT Strategy Board (ITSB) which created the Enterprise Data Platform (EDP) to help alleviate the pain point of the siloed data sets issue mentioned above. Although the objectives noted in the 2021 Data Strategy have not been fully realized yet, they provided direction and momentum.

In 2024, NASA's CDO formed the CDO Program, authored a data management policy ([NID 2800.149, NASA Data Governance, Roles, and Responsibilities](#)) that created the Federated Data Governance Framework (FDGF), and formally established the Enterprise Data Working Group (EDWG) to assure data topics critical to mission directorates and support offices are addressed.

This 2025 Data Strategy is intended to directly address the pain points outlined in Figure 1. It outlines a three-year plan beginning in Fiscal Year (FY) 2025. The outcomes listed below reflect what this strategy will provide, and what success will look like in 2027.

CDO Mission, Vision, and FAIRUST Principles

The CDO mission and vision provide the purpose that underpins all program activities. The CDO aims to enhance the quality, value, security, and understanding of NASA data through coordinated efforts with stakeholders. The CDO's ultimate goal is to enable Findable, Accessible, Interoperable, Reusable, Understandable, Secure, and Trustworthy (FAIRUST) data, which in turn enables advanced technologies Agency-wide, such as generative artificial intelligence (GenAI) and digital transformation. NASA's success depends on the ability to manage data as a strategic asset to achieve effective, efficient use of data, and create insight for innovation.

These FAIRUST principles are critical for enabling responsible AI at NASA. Ensuring data is high-quality, interoperable, and trustworthy sets the foundation for secure AI development, testing, and deployment—ensuring we can innovate responsibly and in alignment with best practices.

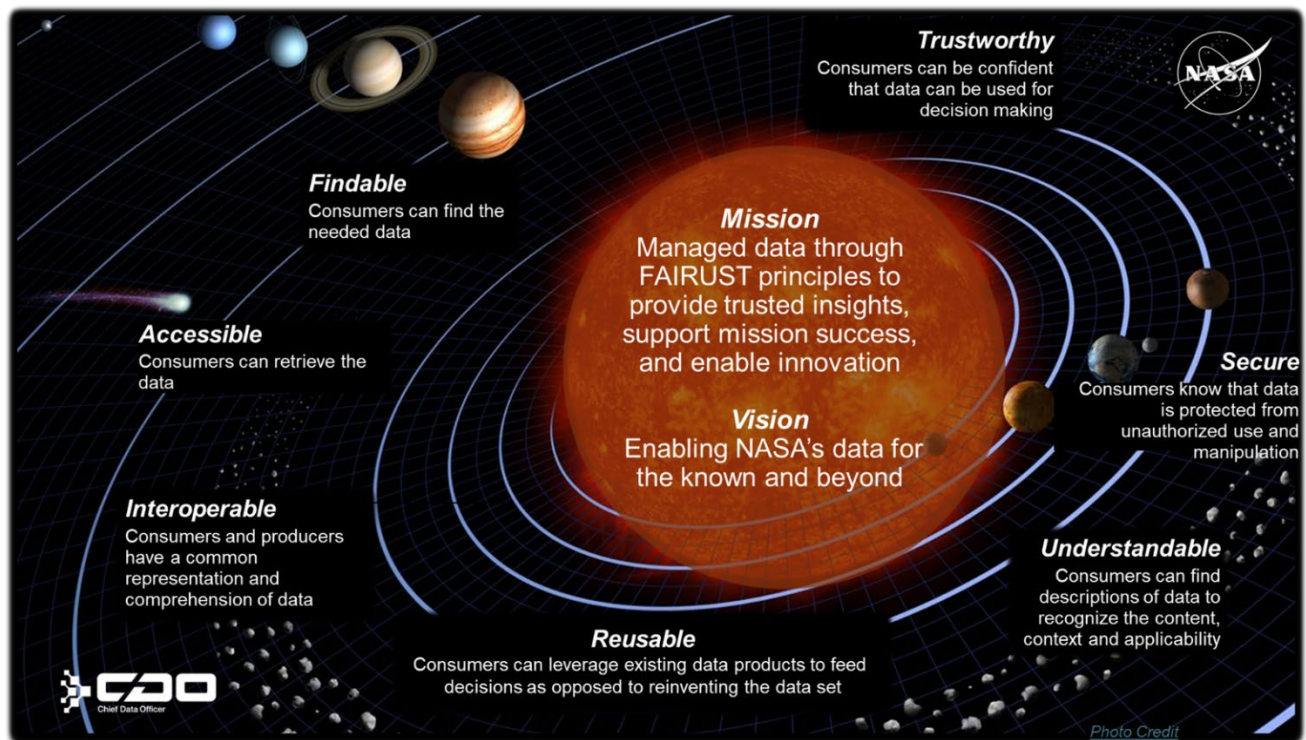


Figure 2: CDO Mission, Vision, FAIRUST Principles

2025 NASA Data Strategy Framework

NASA's Data Strategy **leverages the full value of NASA data for mission, service, and public good through federated data governance, a data culture, and improved data management technology capabilities.**

The 2025 NASA Data Strategy defined here aligns to and supports accomplishing key components from multiple documents throughout the Agency, such as 2022 NASA Strategic Plan and the 2022 NASA IT Strategy. Please see Appendix A for a complete listing including links.

This strategy is a three-year commitment from FY25-FY27 to focus the Agency on address major current data challenges with corresponding annual implementation plans. The annual implementation plans include specific, measurable, achievable, relevant, and time-bound (SMART) goals, major milestones, and metrics (key performance indicators, objectives, and results) over a three-year time frame, including detailed steps to accomplish each objective and deliver an updated enterprise data ecosystem that aligns with the CDO's mission, vision, and guiding principles. Three main frameworks are used here to guide the strategy development and implementation plans: (1) The DAMA Data Management Body of Knowledge (DMBOK) Data Management Framework, (2) the People; Process; Technology (PPT) framework, and (3) the Federated Data Governance Framework (FDGF).

PPT FRAMEWORK

The People, Processes, Technologies (PPT) framework is widely used to balance comprehensive organizational change planning and management. We use this here to guide a comprehensive approach to assess issues and define actions and outcomes established as part of this strategy. The three goals in the strategy statement are mapped to the PPT framework. For Process, the FDGF is a key component. For People, a data culture is a key component. For Technology, an enterprise architecture plan and a data management hub are key components. These key components are necessary to enable progress on implementing the overall strategy.

DAMA-DMBOK2 FRAMEWORK

The DAMA-DMBOK2 data management framework model (See [Appendix B](#)) shows eleven aspects of data management and their relationships to each other, with governance at the center. People and Processes are included in all parts of this framework, while Technology is a secondary focus for Data Architecture, Data Storage & Operations, Data Security, Integration & Interoperability, and Data Warehousing & Business Intelligence. The DAMA-DMBOK2 governance model was used to guide the Federated Data Governance Framework.

FEDERATED DATA GOVERNANCE FRAMEWORK

This data strategy implements the FDGF as described in NASA Interim Directive (NID) 2800.149 (See Appendix B). The FDGF offers latitude for each center and mission directorate to implement data governance and management practices optimized for their mission needs, while allowing for greater cohesion, collaboration, and coordination of data practices within the Agency. It consists of three levels of governance bodies, each with defined levels of responsibility. This framework will help NASA become more agile and prepare for Agency-wide advanced analytics and greater GenAI use.

NASA DATA STRATEGY FRAMEWORK

This strategy uses all three frameworks to guide work needed to resolve the pain points identified in Figure 1 and improve NASA's data ecosystem, which is a key desired outcome of this strategic framework. The PPT framework guides change management planning, the DAMA-DMBOK2 framework guides all data management activities, and the FDGF provides more defined governance roles and processes specific to NASA's federated organizational structure. The frameworks may overlap, but each addresses a different dimension which collectively organizes data management implementation activities.

Leveraging these frameworks ensures the 2025 NASA Data Strategy addresses the 2021 pain points, accounts for commitments, includes all priorities and requirements, and aligns NASA's next steps across the Agency. NASA data needs to be trusted, high-quality, and documented to best accommodate new technologies and serve NASA's mission.

2025 NASA Data Strategy Goals and Outcomes

These goals provide the foundational outcomes for the next three years (FY25-FY27) addressing current NASA data challenges.

Goal 1: Federated Data Management (*Process*)

Risk: Ungoverned data is a liability and exposes NASA to unnecessary risk.

Benefit: Properly governed and managed data becomes a valuable asset usable by all parts of the Agency.

Outcomes

- 1.1 Operational Federated Data Governance Framework (FDGF)
- 1.2 Standardized Data Management Procedures
- 1.3 Published Comprehensive Data Practices and Standards

Goal 2: Data Culture (*People*)

Risk: Lack of a data culture prohibits NASA from realizing its data's full potential and possibly turns data into a liability instead of an asset.

Benefit: Building on a data culture and community empowers the workforce and improves the ability to deliver full data value.

Outcomes

- 2.1 Enhanced Data Skills
- 2.2 Designated Data Roles
- 2.3 Reinvigorated Data Community

Goal 3: Data Management Technology Capabilities (*Technology*)

Risk: Lack of Enterprise Data Management (EDM) technologies creates inefficiencies, inaccuracies, and missed opportunities, impeding the ability to comprehensively search, discover, understand, and share data and insights across the mission.

Benefit: EDM technology capabilities will reinforce NASA's position as a leader in data-driven exploration and innovation by increasing data asset value.

Outcomes

- 3.1 Operational Enterprise Data Architecture (EDA)
- 3.2 Established NASA Data Management Hub (NDMH) for Data Discovery
- 3.3 Expanded Cross-Mission Capabilities for Agency-Wide Analytics

Goal 1: Federated Data Management (*Process*)



Despite the establishment of a data governance board within the ITSB, the Agency still operates in data silos, relies on duplicative tools, and lacks a comprehensive, Agency-wide view of its data. The CDO seeks to unify the Agency's approach to managing data to directly address the data challenges in a systematic and scalable manner through the FDGF, policies, procedures, and standards.

Ungoverned data is a liability and exposes NASA to unnecessary risk. Properly governed and managed data becomes a valuable asset usable by all parts of the Agency.

Outcome 1.1: Operationalized Federated Data Governance Framework (FDGF)

NASA implements the FDGF established in the 2025 Data Governance NID, enabling agency-wide consistent data management and resulting in a more data-centric Agency with high quality, secure and trusted data to create insights and inform decisions. The CDO, in coordination with the ITSB, will establish and enforce mechanisms to ensure compliance with the FDGF, including performance metrics for data governance roles and processes for addressing non-compliance. The FDGF enables the creation of repeatable policies, processes, and procedures to meet high profile data goals, identify authoritative data sources, and reinforce confidence in Agency data and published data products.

Outcome 1.2: Standardized Data Management Procedures

Through the FDGF, data management procedures are developed, codified, and implemented throughout the Agency. These procedures include, but are not limited to:

- Data Maturity Baseline and Assessments
- Metadata and Data Inventory Procedures
- Data Access Control Procedures
- Data Management Plan Procedures
- Records Management Procedures

Each procedure advances data quality, data sharing, and data governance throughout the Agency.

Outcome 1.3: Published Comprehensive Data Practices and Standards

NASA's Agency-wide data practices and standards align with the Evidence Act, the OPEN Data Act, 2024 Data Governance NID and the forthcoming NASA Procedural Requirement (NPR) are operational. These practices guide the Agency about how to handle data throughout the entire data lifecycle.

Goal 2: Data Culture (*People*)



NASA is its people. The importance of data education, team collaboration, and coordination are critical for success. NASA prepares its people to use these new tools and data management processes to work together in ways that advance the entire Agency. A strong data culture empowers NASA's workforce to work collaboratively across the Agency, reduce redundancies, and allow data to be used in new ways for the benefit of all. **Lack of a data culture prohibits NASA from realizing its full potential and turns data into a liability instead of an asset.** [Building a data culture and community empowers the workforce and improves the ability to deliver full data value.](#)

Outcome 2.1: Enhanced Data Skills

NASA excels at recognizing people as its best resource. Enhanced data skills are necessary for a thriving data culture. The CDO collaboratively assesses current needs and builds data skills through updated data training, hiring practices, and career paths aligning with and enabling the FDGF data practices, standards, and procedures in Goal 1. [Encouraging and enabling staff professional development will create a virtuous circle of improvement.](#)

Outcome 2.2: Designated Data Roles

Within the FDGF, each part of NASA continues to operate with independence while integrating with leadership-driven Agency-wide practices and procedures. The Enterprise Data Working Group (EDWG) includes Senior Data Officials from all parts of NASA as members who are responsible for ensuring practice adherence, role assignment, and alignment to the CDO within their organizations. [Structure and clarity in roles will improve leadership effectiveness within the Agency.](#)

Outcome 2.3: Reinvigorated Data Community

Addressing NASA's data challenges requires transparency and collaboration across all missions and stakeholders. The Data Community needs leadership support to be reinvigorated. The CDO drives a holistic approach that capitalizes on existing data communities to strengthen execution through communication plans that include industry and academic partners. To ensure the long-term sustainability of the data community, the CDO will organize regular events (e.g., workshops, conferences, hackathons), maintain communication channels (e.g., forums, newsletters), and promote knowledge sharing and mentorship programs. [Reinvigorating the data community further empowers the workforce and improves the ability to deliver accurate data.](#)

Goal 3: Data Management Technology Capabilities (*Technology*)



An enterprise data management (EDM) system enables the discovery and delivery of FAIRUST data, secure data sharing, and ensures readiness for advanced data use such as generative AI and beyond. The resulting systems can then be widely leveraged, allowing innovation to build on itself, exponentially increasing opportunities for advancement. Successful implementation of data management technologies requires a strong data culture, effective data governance, and skilled personnel. The agency will prioritize modern platforms, data literacy training, change management, and community engagement. **The lack of EDM technology creates inefficiencies, inaccuracies, and missed opportunities, impeding the ability to comprehensively search, discover, understand, and share data and insights across the mission.** EDM Technology capabilities will reinforce NASA's position as a leader in data-driven exploration and innovation by increasing data asset value.

Outcome 3.1: Operationalized NASA's Enterprise Data Architecture (EDA)

The [EDA](#), included in NASA's Enterprise Architecture Framework (NEAF), provides the technology blueprint and business alignment for NASA's data systems. Within NEAF is the Zero Trust Reference Architecture ([ZT RA](#)) which includes *data* as a pillar, *governance* as a cross-cutting capability, and a goal to *Optimize Data Management Operations*. Alignment and adoption of EDA and ZT RA to achieve NASA's IT Strategic Plan target state will enable FAIRUST data and support Evidence Act and AI governance compliance. **This outcome provides improved security, integration, and interoperability, paving the way for future advancements and success in AI, digital modernization, and future innovations in emerging technologies.**

Outcome 3.2: Established NASA Data Management Hub (NDMH)

The NDMH will manage data systems inventories and integrate existing metadata repositories. It contains a centralized business glossary, data dictionary, and lineage in addition to other regulation-required metadata, reducing time previously spent looking for data assets. **This will remove challenges posed by disconnected datasets with differing structures and definitions, which hinders data discovery and collaboration.**

Outcome 3.3: Expanded Cross-Mission Capabilities for Agency-Wide Analytics

NASA is already developing cross-mission capabilities to provide easily accessible, Agency-wide analytics. The solutions are interoperable with the NDMH, provide curated data, and space to store and connect data while lessening time previously spent preparing data. **This outcome addresses challenges posed by disconnected tools operating in silos, hindering data usage and innovation opportunities.**

Moving Forward

To execute this three-year data strategy, NASA will develop annual implementation plans including initiatives and metrics, that are used to measure the Agency's progress towards accomplishing the goals in this strategy. These implementation plans are regularly reviewed, and adjusted as necessary to ensure NASA reaches its long-term data goals. These updates are provided through the FDGF. **Successfully implementing NASA's Data Strategy is crucial for the Agency to achieve data management maturity, accelerate digital modernization, and harness emerging technologies such as GenAI for mission-critical applications** and to solve NASA's toughest problems faster and smarter. While GenAI presents significant opportunities, NASA will also address potential risks such as data bias, copyright infringement, security vulnerabilities, and the spread of misinformation. The agency will establish data management guidelines to address unique data challenges related to GenAI.

Appendix A: Data Strategy Crosswalk

Document	Goal 1 Federated Data Management	Goal 2 Data Culture	Goal 3 Data Management Technology Capabilities
NASA Data Strategy (2021)	Ethical Governance <ul style="list-style-type: none"> • Data policy • Data governance framework • Data management plans 	Learning Culture <ul style="list-style-type: none"> • FAIRUST data • Data stewards • Data custodian POCs • ‘One-data’ culture • Inter-Agency communities of interest • Data-related skills, training, professional development, retention, and recruitment. • Data sharing mindset 	Conscious Design <ul style="list-style-type: none"> • Centralized security architecture • Zero-trust technologies • Programmatic data access • Reusable data artifacts • Enterprise data platform • Catalog and search capabilities • Enterprise analytics product suite
Federal Data Strategy (FDS) Framework	Ethical Governance <ul style="list-style-type: none"> • Uphold Ethics • Exercise Responsibility • Promote Transparency 	Learning Culture <ul style="list-style-type: none"> • Invest in Learning • Develop Data Leaders • Practice Accountability 	Conscious Design <ul style="list-style-type: none"> • Ensure Relevance • Harness Existing Data • Anticipate Future Uses • Demonstrate Responsiveness
NASA Strategic Plan 2022	1.3 Ensure NASA's science data are accessible to all	4.1 Attract and develop a talented and diverse workforce 4.3 Build the next generation of explorers	2.3 Develop capabilities and perform research to safeguard explorers 4.2 Transform mission support capabilities for the next era of aerospace

Document	Goal 1 Federated Data Management	Goal 2 Data Culture	Goal 3 Data Management Technology Capabilities
NASA IT Strategic Plan 2022	<p>1.3 Ensure OCIO's products and services are easily accessible and intuitive.</p> <p>3.1 Transform how NASA operates using digital capabilities.</p>	<p>1.1 Create and evolve a shared understanding of mission and business requirements.</p> <p>3.2 Enable insights from NASA's data & information.</p> <p>5.1 Attract, hire, and retain a diverse, strategically aligned OCIO team.</p> <p>5.2 Enhance employee experience by ensuring team members feel included, engaged, and valued.</p> <p>5.3 Develop team members' talents and support career development to meet mission needs.</p>	<p>2.1 Increase the effectiveness of IT planning, investment, and communications.</p> <p>2.3 Increase the reliability, effectiveness, and efficiency of NASA's IT operations.</p> <p>4.1 Simplify, strengthen, and scale NASA's cybersecurity.</p>
NASA AI Strategy (<i>proposed</i>)	1.2 Promote Responsible AI Governance and Ethical Use	Goal 1: Empower NASA's Workforce in an AI-First Era	<p>Goal 2: Enable and Scale AI across NASA Missions</p> <p>Goal 3: Optimize NASA Operations and data for AI</p>
OCIO IT Customer Commitments 2024	1. Establish an Enterprise Data Management Policy		<p>2. Develop Search Capability that Simplifies Data Discovery</p> <p>3. Modern Tools for Data Storage, Aggregation, and Visualization for Responsive Data Analytics Services</p>
NID 2800.149, NASA Data Governance, Roles, and Responsibilities	Chapter 2 Federated Data Governance Framework	Chapter 1 Roles and Responsibilities	

Document	Goal 1 Federated Data Management	Goal 2 Data Culture	Goal 3 Data Management Technology Capabilities
NPD 2830 NASA Enterprise Architecture			1.b.(4) Integrates IT capabilities, processes, systems, services, data, and other IT resources into a comprehensive enterprise architecture 1.b.(6) Provides a collection of integrated data in the EA that enables analysis of current of current IT capabilities allowing the identification of potential shortfalls, gaps, redundancies, and opportunities for improvement.
M-25-05 “Phase 2 Implementation of the Foundations for Evidence-Based Policymaking Act of 2018”	4(b) Data Asset storage standards 5(a) Data Asset evaluation standards for publication	2 Public Engagement	4(a)(ii) Data Asset Inventory integrated with the Federal Data Catalog 4(a)(iii) Open Government Data Assets published on nasa.gov/data 4(b) Data Assets stored in open data formats
M-25-21 “Accelerating Federal Use of AI through Innovation, Governance, and Public Trust”	(2): Develop AI strategies that remove barriers by strengthening data governance, data traceability, and interoperability. 2(b): Share and inventory AI and data assets, support open formats, reuse, and metadata documentation.	2(e): Recruit, train, and retain an AI-ready workforce and promote AI literacy for all staff. 2(e): Align data talent and upskilling efforts with mission needs.	2(a)–(d): Establish and maintain AI-enabling infrastructure (e.g., metadata, testing, lineage tracking). deployment testing, 2(d)(i) Maximize the value of data for AI.

Appendix B: Key Components

KEY COMPONENT – DAMA-DMBOK2 FRAMEWORK



Figure 3 DAMA-DMBOK2 Framework with activity details.

KEY COMPONENT – FAIRUST PRINCIPLES

FAIRUST is defined in the 2021 NASA Data Strategy in **Goal 3: Improve Data Products & Data Principles**. It is based on the FAIR principles found at <https://www.go-fair.org/fair-principles/>.

PRINCIPLE	DEFINITION
Findable	Consumers can find the needed data.
Accessible	Consumers can retrieve the data.
Interoperable	Consumers and Providers have a common representation and comprehension of data.
Reusable	Consumers can leverage existing data products to feed decisions as opposed to reinventing the data set.
Understandable	Consumers can find descriptions of data to recognize the content, context, and applicability.
Secure	Consumers know that data is protected from unauthorized use and manipulation.
Trustworthy	Consumers can be confident that data can be used for decision making.

KEY COMPONENT – FEDERATED DATA GOVERNANCE FRAMEWORK (FDGF)

NASA currently operates across the United States in nine centers and the Jet Propulsion Laboratory. Each center and the JPL manage its own data governance structure. NASA will implement a FDGF to create a data governance system that is scalable and sustainable without impeding current progress. The FDGF includes developing data management procedures, policies, and standards and allows for enhanced Agency-level governance, promoting greater cohesion, collaboration, and coordination within the Agency. It will help NASA become more agile and prepared for Agency-wide advanced analytics and technology use such as AI. This will also enable NASA to optimize its use of data in the near term and continuously thereafter. Figure three is a pictorial representation of the FDGF and the [NASA Interim Directive \(NID\) 2800.149, NASA Data Governance, Roles, and Responsibilities](#) published to NODIS December, 26 2024 outlines the key roles and responsibilities within the FDGF.

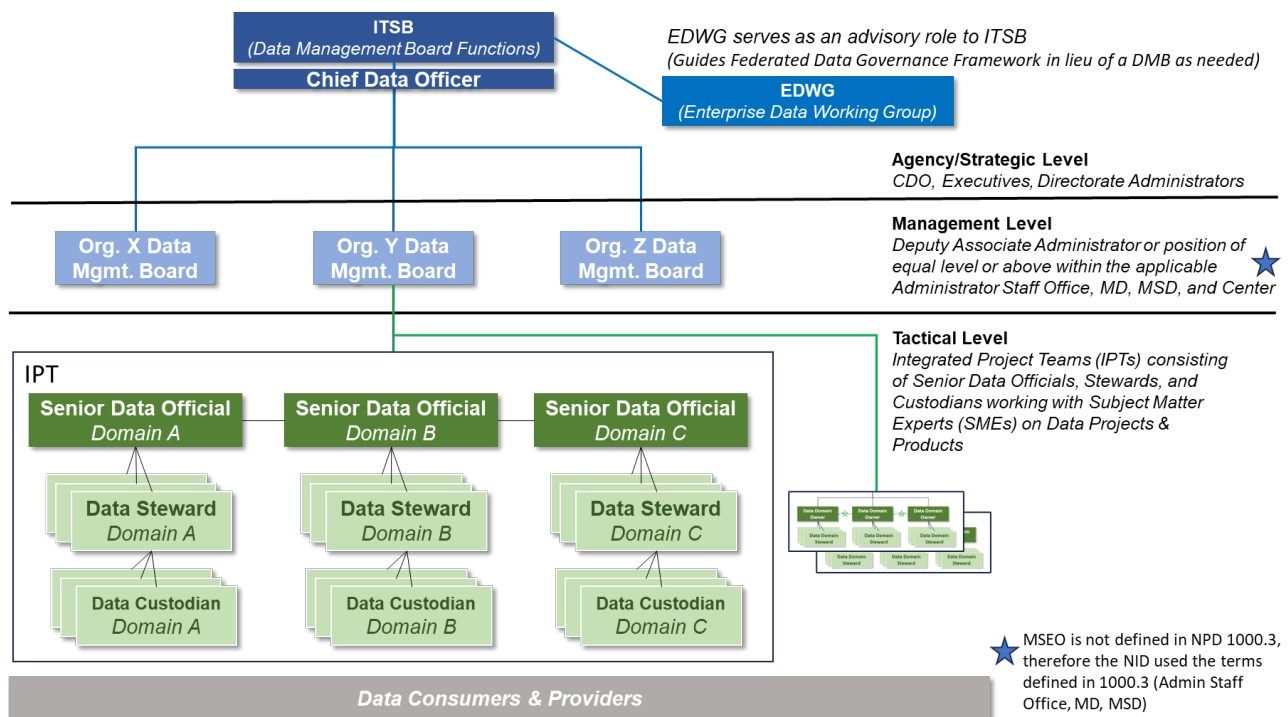


Figure 4: Federated Data Governance Framework

Appendix C: Acronyms

Acronym	Definition
CDO	Chief Data Officer
CUI	Controlled Unclassified Identifiers
DGB	Data Governance Board
DMB	Data Management Board
DMP	Data Management Plan
FAIRUST	Findable, Accessible, Interoperable, Reusable, Understandable, Secure, and Trustworthy
FISMA	Federal Information Security Modernization Act
GC	General Counsel
IT	Information Technology
ITSB	Information Technology Strategy Board
MD	Mission Directorate
MSD	Mission Support Directorate
NASA	National Aeronautics and Space Administration
NID	NASA Interim Directive
NPD	NASA Policy Directive
NPR	NASA Procedural Requirements
NSPM	National Security Presidential Memorandum
OCIO	Office of the Chief Information Officer
OIC	Official-In-Charge
OMB	Office of Management and Budget
OSTP	Office of Science and Technology
SME	Subject Matter Expert
STD	Standard