

# NNSA Data Governance DOE Data Days 2026

March 4, 2026



The Office of the Associate Administrator  
for Information Management and  
Chief Information Officer

# Agenda

- NNSA data governance structure
- Role in continuous improvement
- Common metadata and data catalog
- Status and near-term goals

# NNSA has a diverse mission



**Nonproliferation**



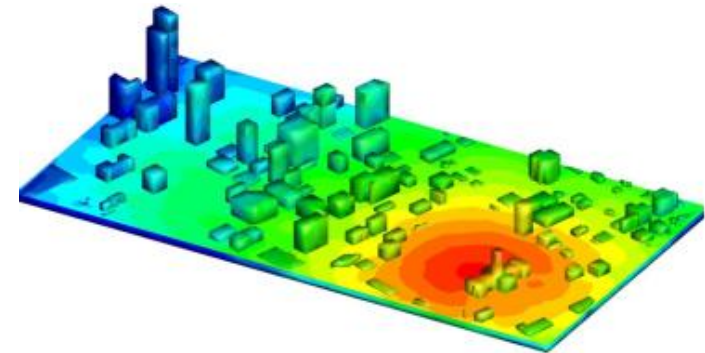
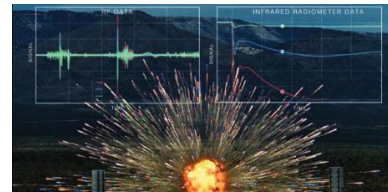
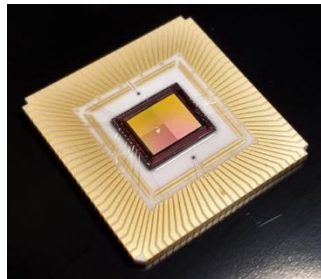
**Maintaining the  
Stockpile**



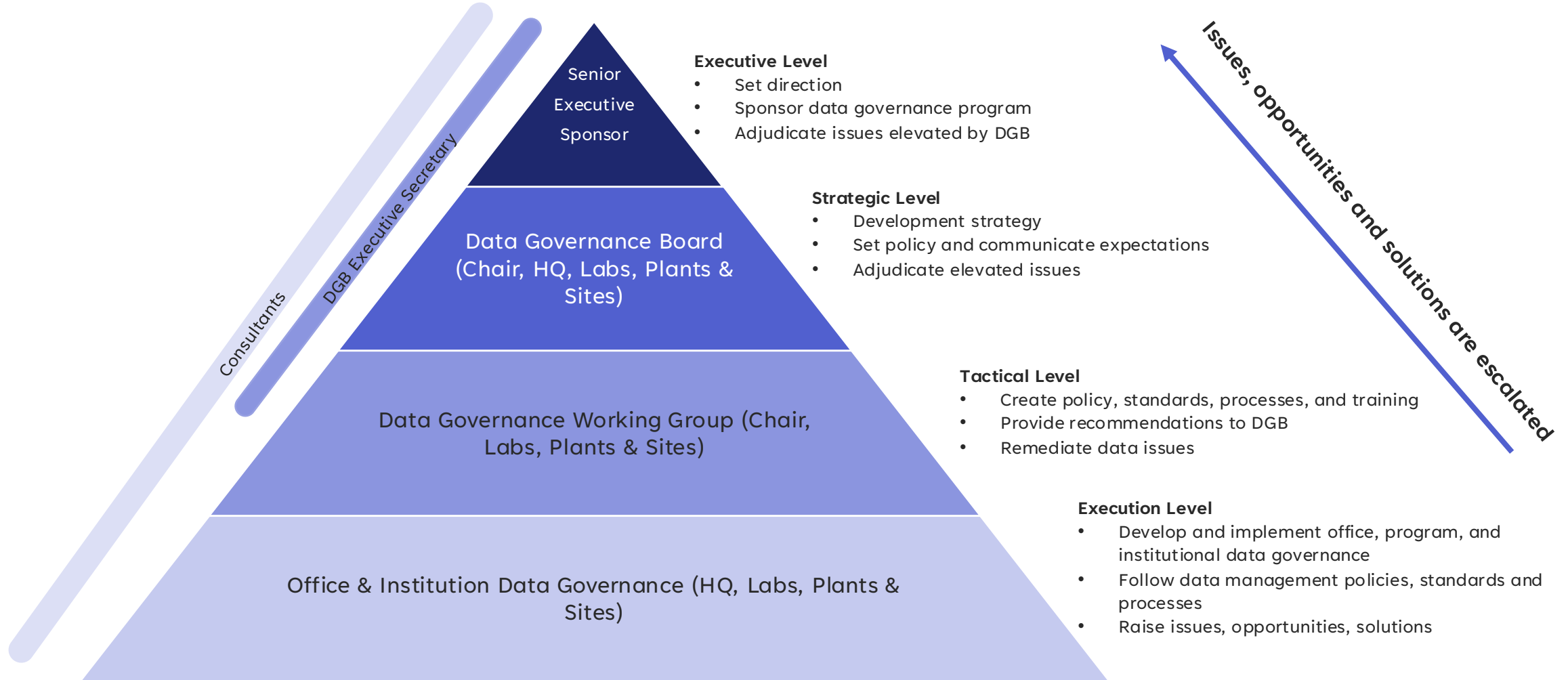
**Powering the Navy**

# NNSA data is diverse and dispersed

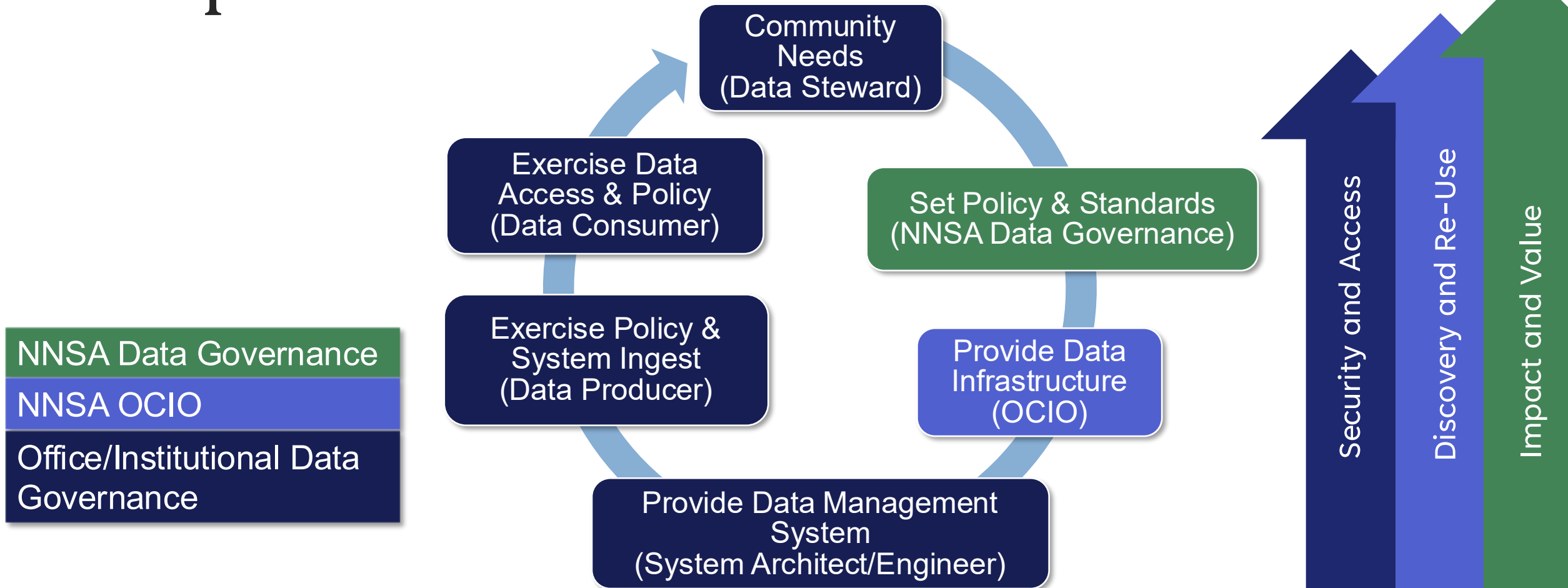
- Diverse set of domains: weapon science and product realization, reactor design and engineering, nuclear threat science, nonproliferation R&D, business, operations, cyber
- Dispersed across many programs and institutions
- Dispersed across several classification levels and networks



# NNSA Data Governance Structure



# Data Governance Role in Continuous Improvement



# Common Metadata and Data Catalog

## Establish Common Metadata Standards

- NNSA common metadata standard contains a common subset of office/institution standards
- Provides a foundation for the inventory and management of data assets
- Required to be captured for data assets

## Data Catalog Requirement

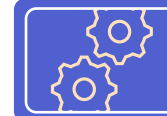
- Data assets must be registered within a federated catalog for discoverability
- A centralized data catalog could support all common metadata standards



**Findable**



**Accessible**



**Interoperable**

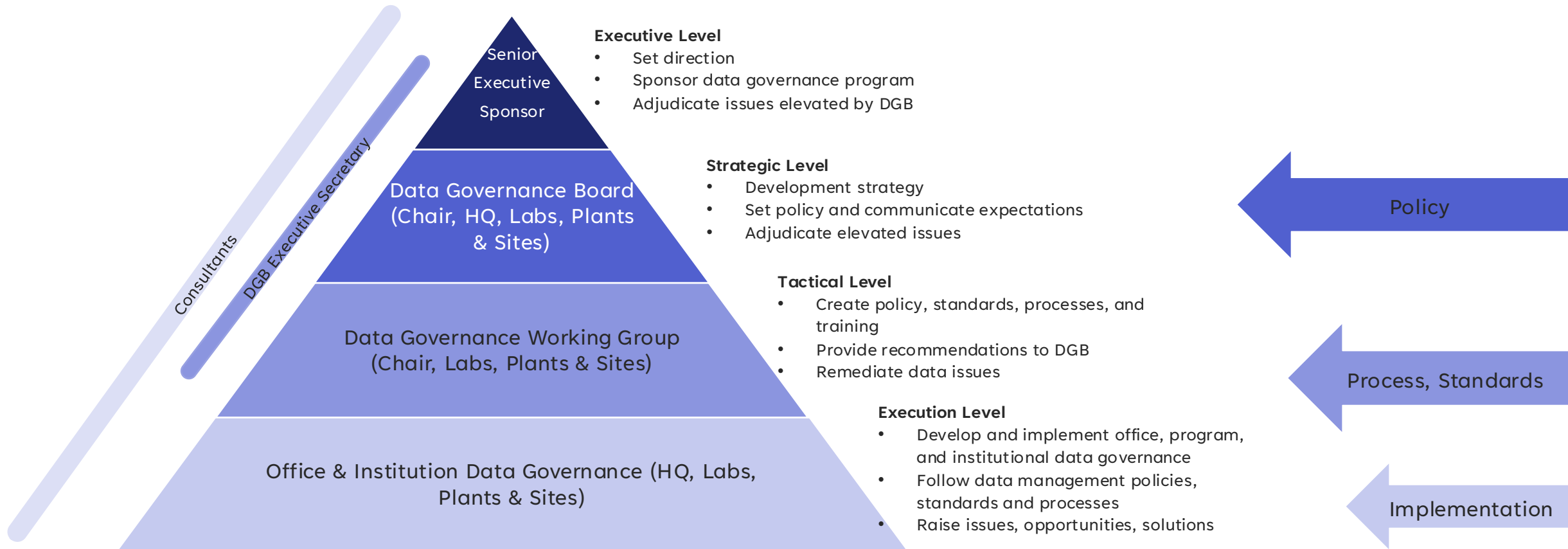


**Reusable**

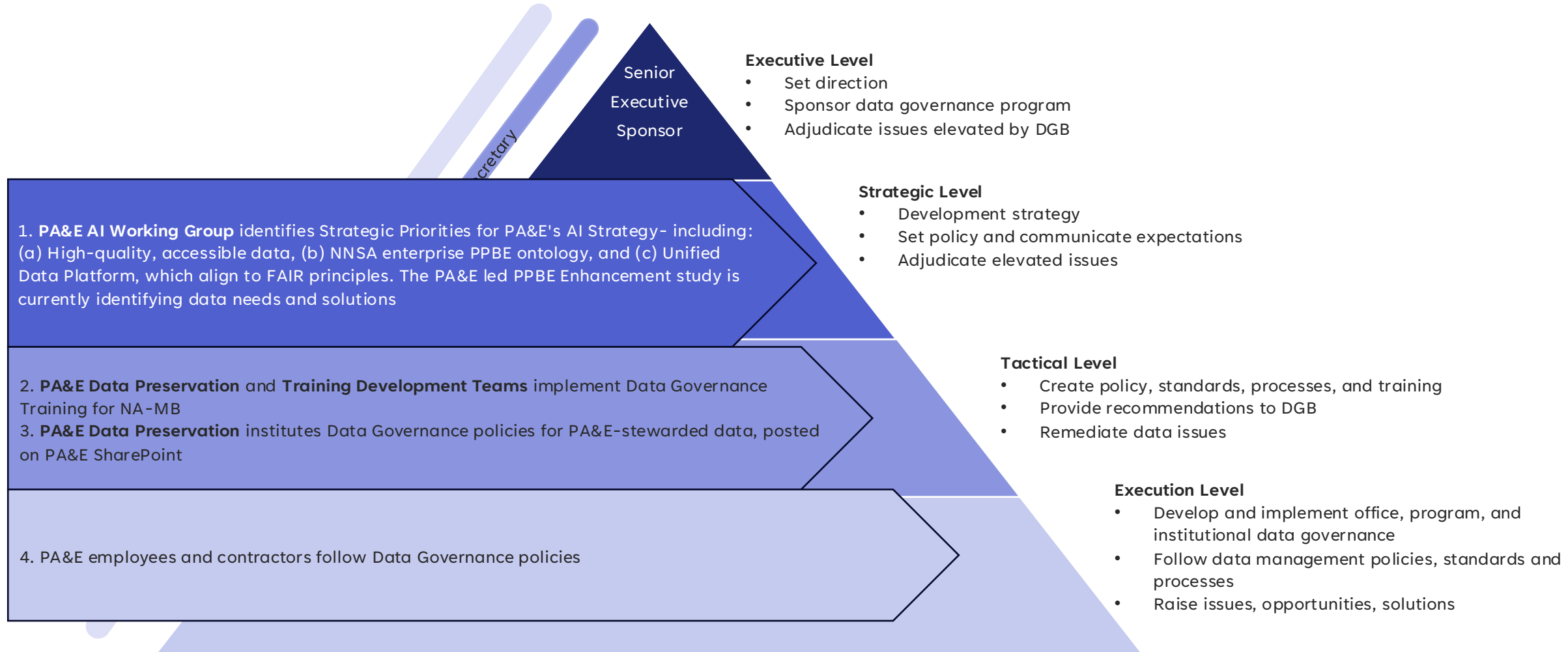
# Status and Goals

- Data Governance Board (DGB), Data Governance Working Group (DGWG), and Data Management Working Group (DMWG) formed
  - 20 DGB members, including all LPS CDOs
  - Over 30 working group members identified (and counting)
  - DGWG and DMWG have Labs, Plants, and Sites and Headquarters co-chairs
- Targeting first DGB by end of March
  - Approve DGB, DGWG, and DMWG charters
  - Review drafts of initial policies and metadata standard; establish path forward for finalizing and approving
    - Data access, sharing, and use policy
    - Common metadata policy
    - Common metadata standard

# Defense Nuclear Nonproliferation (DNN) R&D (NA-22) Data Governance



# Program Analysis and Evaluation (PA&E) Mapping to NNSA-wide Data Governance



# Data Governance

## *Key Considerations (1 of 2)*

- NNSA-wide data governance will require the right dedicated resources (people and funding)
  - Mix of federal and contractor workforce for required expertise
  - Staff dedicated to defining and implementing data policies, processes, and standards
  - Software and infrastructure improvements and sustainment
  - Training resources for staff throughout the enterprise
- The right participants are necessary to execute the enterprise effort
  - Broad representation and proper **coordination** is key
  - Policies, processes, and standards must be implemented across **all networks and security levels**
  - **Enforcement** mechanisms are critical to implementation

# Data Governance

## *Key Considerations (2 of 2)*

- The right mix of policies and directives are required
  - Should set objectives and establish an executable path forward
  - Once policies are set, writing policy that is **SME-informed** and encompasses set standards
  - Key performance metrics for implementation (e.g., data use)
- Data infrastructure at NNSA is currently inadequate
  - Data governance standards and processes must be implemented on all networks that house useable data
  - Programming languages and packages must be actively managed
  - Tools to enable version control should be made available (e.g., Git)
  - Servers and/or cloud infrastructure must be adopted to enable wide-availability

# Challenges

Challenge	Rationale	Potential Solution
Qualified Staff	SME input is key to delivering a valuable end-product	Re-define key personnel requirements and secure funding
Funding	Without money, none of this works	Clearly define the value that 'data as an asset' provides
Objectives	Data management has long been undefined; structure is necessary	Define data quality and the value of enterprise data, and codify it in policy
Coordination	Every sub-organization manages data differently, for unique use cases	Identify common threads across offices, and implement enterprise architecture that scales without force-fitting
Enforcement	Without a 'stick', change is unlikely	Codify the definition and standards of data quality in policy
Access and Security	Not all data should be widely accessible	Define simple, straight forward mechanisms to enable data access to the right personnel

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Thank  
you.