Definitions

Data Resource Management
The development and execution of architectures, policies, practices and procedures that properly manage the full data lifecycle needs of the department.

Data and Information
Data are the representation of text, numbers, locations, graphics, images, sound or video and is managed as a corporate asset. Information is data in context, relevance to usage.

Data Stewardship
The assigned accountability for business responsibilities in data management. Every employee has a responsibility to manage the data they create and use.
Vision for Data Resource Management

An optimized data asset, through a cultural institutionalization of data stewardship and accountability, will support and sustain the continuous improvement of our ability to fulfill the DOI missions, and will culminate into a public recognition that our employees provide trusted, high quality data that are accessible, and promote use and innovation to customers and decision-makers.
The goals for Data Resource Management

- Manage Data as an Asset
- Train Employees in their Data Resource Management responsibilities
- Data stewards adhere to responsibilities in managing their data
- Enable mission programs with effective data management process
- Support laws, regulations, and mandates using strong data practices
- Document data for managing, sharing and reusing
- Realize the value of data
- Provide efficient infrastructure, tools, and resources for better data resource management

In support of Data Resource Management, Departmental Manual 378 (DM 378) is being updated to define the roles and responsibilities and the goals and objectives for managing data assets at DOI.
Key points of DM and its policies

● Culture change
● Institutionalize
● Idea of leveraging vs use
● Data life cycle
● Separate data from systems (investments)
● One team manage DOI data assets by roles, instead of Dept vs B/O
● Unite the process of data management
The Manual Structure and Plans

Data Resource Management
Departmental Manual
(378 DM)

Chapter 1: Departmental Manual Program Description
Chapter 2: Data Governance Board Charter
Chapter 3: Metadata Policy
Chapter 4: Open Data Policy
Chapter TBD: Data Stewardship
Chapter TBD: Data Release
Chapter TBD: Data Standards

Library
Data Related LRM
DOI Dictionary / Glossary
Tool box (templates)

Bureaus and offices will use the Department Manual and its policies and implementation guides to create their own living individual DM Implementation Plan.
Capability Maturity Model

- Data Management Capability Maturity Model (CMM)
  - purchased enterprise license for the maturity model from the CMM institute
  - will be looking how to assess our performance in meeting levels with the maturity model
We have a great cross-bureau and office team.

<table>
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<tr>
<th>Data Governance Board (DGB)</th>
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| Governs the development of all DOI data resource management and ensures it’s managed collaboratively in support of mission objectives  
| **2 people per bureau/office** |  

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<th>Data Service Team (DST)</th>
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| Identifies, collects, and catalogs all DOI data and will deliver more data services in the near future  
| **Members**: Mission program leads, data professionals, IT specialists  
| **Provide expertise to support ad hoc working groups**  
| **Open membership** |  

Collaboration is key to implement DOI Data Resource Management successfully.
Why is Open Data important?

- Improves transparency & accountability
- Spurs innovations
- Gets citizens involved
- Complies with federal mandates

Establishing a DOI Data Resource Management (DRM) Program is critical to achieving open data and supporting mission needs.
Great progress has already been made.

- Stood up cross-bureau DGB and DST
- Established DOI Enterprise Metadata Catalog
- Created DOI Enterprise Data Inventory (EDI) and Public Data Listing (PDL)
- Catalogued over 69,395 public datasets on data.doi.gov
We have specific goals to achieve.

**Goal 1**

The department and its bureaus will have a mature data asset management life cycle following consistent, flexible and effective processes.

**Goal 2**

Educate DOI employees (in both mission and support roles) on their role in ensuring we have an effective data management program that provides benefit to the department, bureaus and the public.
We have specific goals to achieve.

**Goal 3**
All employees who produce or procure data adhere to tenets of data stewardship.

**Goal 4**
Continuous enhancements in data management processes result in measurable improvements in accomplishing our missions and achieving business value.
We have specific goals to achieve.

Goal 5
Build a strong data management foundation with a set of clear processes that interpret and implement relevant laws, regulations, and mandates for meeting the missions of the department, bureaus, and offices.

Goal 6
Departmental and bureau data will be well-documented, of known quality and continually improved over time.
We have specific goals to achieve.

**Goal 7**
Data is sharable, discoverable, accessible, reusable to ensure the value of the data is realized.

**Goal 8**
Employees are provided the necessary and appropriate infrastructure, tools, resources and recognition for them to be effective.
additional slides follow
We have specific objectives planned.

1. Increase percent of actively maintained trusted datasets that use standardized data schemas and metadata.

2. Institutionalize Data Resource Management and its common practices within the bureaus and offices through an increase in availability of shared tools, resources, training opportunities, data management communities of practice, and exchange of practices and policies across the agency.

3. Track benchmarks for alignment with the requirements of related Laws, Regulations, and Mandates (LRM) for interpretation and implementation of direct and negotiating intersecting authorities.

4. Improve the quality of Departmental and Bureau Data.
We have specific objectives planned.

5. Increase percent of completing data inventories for each bureau and percent of non-proprietary data sets made available to the public.

6. Establish cohesive governance practices and direction for the department, and each of the bureaus and offices.

7. Increase percent in the reuse of existing datasets.

8. Improve DOI data management guidance by which Bureau and Office management can better and more easily comply with LRM.