U.S. Federal Enterprise Architecture Data Reference Model (FEA DRM):
Data Governance Strategy
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“Build to Share”

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The Federal 3-Pillar Data Strategy Framework

Business & Data Goals drive Governance

Data Strategy

Data Architecture (Structure)

Information Sharing/Exchange (Services)

The Rule: All 3 pillars are required for an effective data strategy.

Goals drive; governance controls; structure defines; and services enable data strategy.

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Federal Data Governance

Data Governance encompasses the people, processes and procedures required to create a consistent, enterprise view of an organization’s data to:

- Promote information sharing
- Improve confidence and trust in data used in decision-making
- Make information accessible, understandable, and reusable
- Reduce cost and duplication
- Improve data security and privacy

Data governance is needed to help agencies determine how they will manage the data relevant for business objectives.

*The right information to the right people at the right time!*
Components of Federal Data Governance

**Federal Data Architecture Subcommittee**

**Communities of Interest (COI)**

- Collaborative group of stakeholders who require a shared vocabulary and structure to exchange information in pursuit of common goals, interests, mission or business process.
- Empowered by President Management Agenda (Federated Lines of Business) and Agency E-Government Initiatives.
- Members include:
  - Tribal, local, state, federal, public, private and other non-government organizations.
  - Cross functional members including data consumers, producers, program managers, application developers, and data sharing governance groups.
COI Objectives

COIs facilitate:
- Data sharing through common COI vocabulary
- Establishment of consistent data management processes
- Preparation of integrated data access plans or information exchange schemas
- Development of information exchange agreements
- Brokerage of conflict resolution among data stewards
- Identification of Authoritative Data Sources (ADS)

COIs work to resolve common issues affecting their communities and develop solutions to promote information sharing.
Example: DOI Data Governance Bodies

- **Executive Sponsor**
  - Appoints Principals, ensures adequate funding, delegates decision authority in areas of data requirements, standardization, and quality.

- **DOE Data Architect**
  - Maintains & publishes the DOI DRM with Principal Data Stewards and Bureau Data Architects.
  - Promotes the Data Program.

- **Principal Data Stewards**
  - Coordinates proposed data standards with business data stewards & Bureau Data Architects.
  - Maintains current DOI Data Standards for their respective business line.
  - Submits proposed Data Standards for formal review process.
  - Resolves conflicting data issues.
  - Champions the use of the official DOI data standards.

- **Bureau Data Architect**
  - Assist in the implementation of the Data Program among Bureaus in coordination with data stewards.
  - Maintains Bureau unique data standards in coordination with data stewards.

- **Business Data Steward**
  - Data stewards at the Bureau/Office level.
  - Coordinates implementation of new Data standards with SME and DBA.
  - Ensures data security & data quality requirements for each data standard.

- **Subject Matter Expert**

- **Database Administrator**

- **Business Line Data Panel**

- **Coordination with External Standards Bodies and other Communities of Interest (COIs)**

- **DAC (Data Advisory Committee)**
  - DOI Data Architecture Guidance Body

- **DOI E-Gov Team**

Yellow = IT perspective  Green = Business perspective  Gray = a mixed perspective
Example: Enabling Net-Centricity – DOD Data Strategy

From **Producer-centric:**
- Multiple calls to find data
- Private data – only supports planned consumers
- Data translation needed for understanding when pulled from multiple sources

To **Consumer-centric:**
- Data is visible, accessible, governable and understandable
- Shared data – supports planned and unplanned consumers
- Shared meaning of the data enables understanding

Transition from disparate networks and within legacy systems to an enterprise information environment where known and unanticipated users can access information.
Example: Recreation One-Stop E-Government Initiative

President E-Government Interagency Initiative led by DOI

Requirements:

- Share data among multiple Federal, State, Local and Commercial partners
- Share data across multiple business lines
- Data standards must be easily extensible to accommodate new requirements
- Data sharing standards must be translated to a database and XML
Recreation Community of Interest
Members

US Department of the Interior
Bureau of Land Management

US Fish & Wildlife Service

Department of Agriculture

USDA

US Army Corps of Engineers
Recreation information is the most sought after information by the e-citizen. There are too many sources for Federal, state and local recreation information.
Example: Recreation One-Stop Governance Committees

**COI: Federal Recreation Providers**

- Recreation Executive Council
  - Members: Deputy assistant secretary level (DOI, USDA, & DOD)
  - Provide strategic perspective
  - Provide adjudication

- Recreation Managers Committee
  - Members: Senior level Recreation Managers (Smithsonian, DOT, and 16 other agencies)
  - Set priorities
  - Provide requirements and resources

- Various implementation teams
  - Adoption of data standards
  - Data Stewards
  - Data implementation
Example: Recreation One-Stop Findings

High percentage of data reuse identified across the COI.
Example: Recreation One-Stop Data Standards

Recreation Model

Recreation Data Exchange Standard (RecML) is generated from the Recreation COI data model
Outcome: Data Sharing with Business Lines and Partners

Recreation One-Stop

- RecML was developed through an interagency coordinated set of discussions and vetted through state and local recreation partners.
- RecML has evolved to include data such as recreation areas, sites, events, and activities.
- Recreation information for federal, state and local managed properties is accessible from a single site.

Data sharing across business lines and with partners (e.g. AAA) and services provider (Reserve America) is done by leveraging RecML.
Questions