

## **Ten goals identified in the Data Cache requirements analysis**

- 1) Access to the best, most current fire, weather, fuels and resource data**
  - a. Technical Solution: Operational Data Store (ODS)
  - b. Within scope of the Data Cache Project: Yes
  - c. Existing/Potential Solution: EGP
  
- 2) Access to historical fire, weather, fuels and resource data**
  - a. Technical Solution: Data Warehouse (DW)
  - b. Within scope of the Data Cache Project: Yes
  - c. Existing/Potential Solution: FS Enterprise Data Warehouse, FAMWEB DW
  
- 3) A single source of authoritative reference data**
  - a. Technical Solution: Reference Data Store (RDS)
  - b. Within scope of the Data Cache Project: Yes
  - c. Existing/Potential Solution: NIFC AGOL, DOI Geoplatform
  
- 4) A single repository for images and documents (IAPs, forecasts, etc)**
  - a. Technical Solution: Document Management System (DMS)
  - b. Within scope of the Data Cache Project: Yes
  - c. Existing/Potential Solution: IRMA, Pinyon, Sharepoint, FireNet
  
- 5) A tool to access the data to create reports, dashboards, etc**
  - a. Technical Solution: Business Intelligence (BI) Tool
  - b. Within scope of the Data Cache Project: Yes
  - c. Existing/Potential Solution: Tableau, Cognos, Esri Insights, others
  
- 6) Ensure data comes from the best source so it is reliable**
  - a. Solution: Identify Interagency Authoritative Data Sources
  - b. Within scope of the Data Cache Project: Yes and No
    - i. This is really a business decision, not a technical solution
    - ii. Must be done to meet the overall objectives of the community for the Data Cache
  - c. Existing/Potential Solution: Enterprise Data Management Program and Data Governance Board
  
- 7) Ensure data is accurate, timely, complete and reliable**
  - a. Solution: QA/QC processes and program
  - b. Within the scope of the Data Cache: Yes and No
    - i. Business must identify what “good” data is, then technology can assist in preventing or identifying “bad” data. In the case of duplicate records, a human has to be involved in determining the resolution implemented in the technology.

- c. Existing/Potential Solution: ROSS Clearinghouse, USGS GeoMac, Data Quality and Control Team

#### **8) Access to historical data currently stored in legacy systems or external locations**

- a. Solution: Migrate historical data
- b. Within the scope of the Data Cache: Yes and No
  - i. The Data Cache has to be prepared to receive the data but the actual migration process requires significant business engagement to address changes in structure, pruning unnecessary data, addressing data gaps, etc.
- c. Existing/Potential Solution: Each data set targeted will be unique and should be thought of a project in and of itself

#### **9) The ability to share authoritative data and reduce redundant data entry**

- a. Technical Solution: Data Integration Service
- b. Within scope of Data Cache Project: No
- c. Existing/Potential Solution: IRWIN
  - i. Very successful, need to expand data sets (resources, weather, fuels) to meet overall objectives

#### **10) A shared database to reduce development effort and cost**

- a. Technical Solution: Transactional Database Layer
- b. Within scope of the Data Cache Project: No
  - i. This is an infrastructure issue and has some significant pros and cons but it is not industry best practice to make an ODS, DW or Integration Service a transactional database
- c. Existing/Potential Solution: Need OCIO and WFIT to define and develop a transactional database layer within the enterprise architecture and the transition plan for existing applications
  - i. *Caution from MBS: A single enterprise database will become technically unwieldy quickly and the ability to adapt to business changes will be reduced. Smaller databases focused on similar data and business functions could result in cost savings and efficiencies.*