

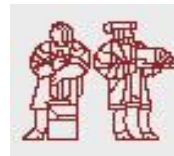


“Build to Share”

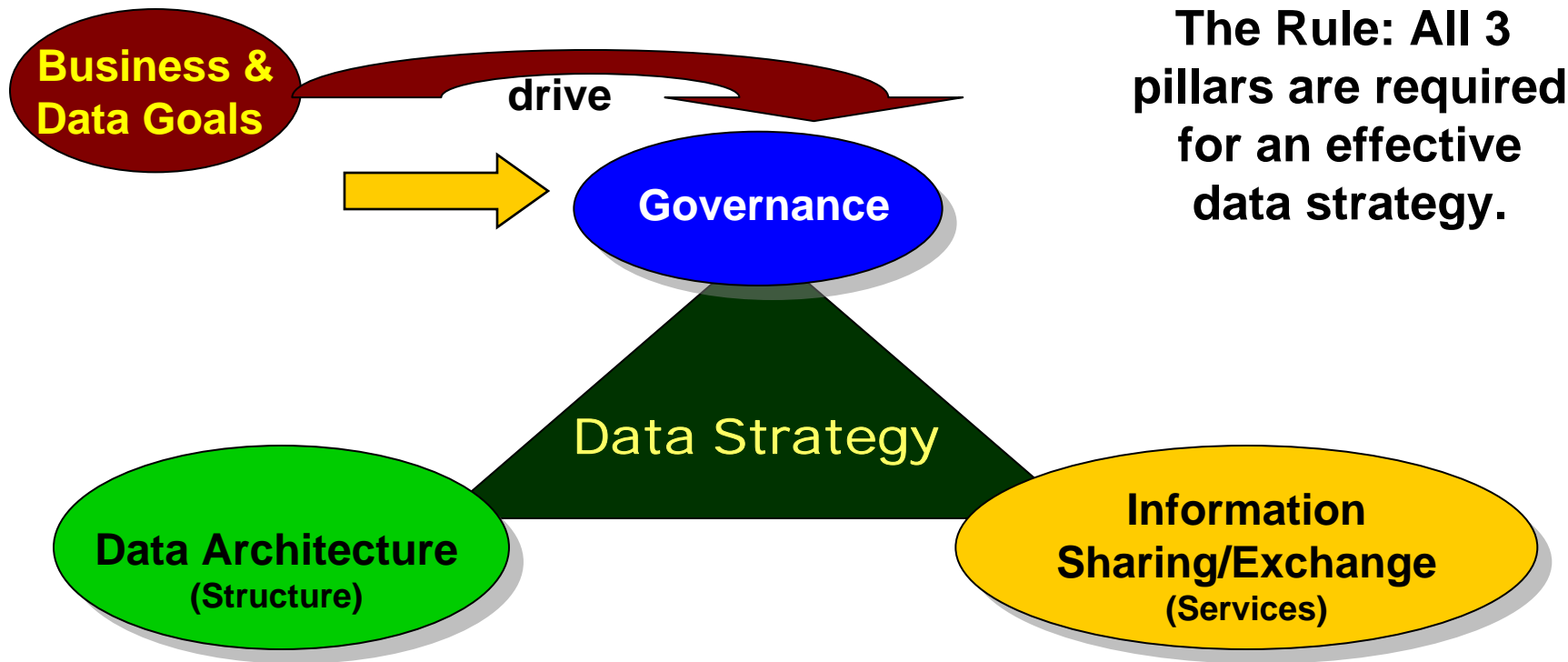
*U.S. Federal Enterprise
Architecture
Data Reference Model
(FEA DRM):
Data Governance
Strategy
July 2007*

Suzanne Acar, US DOI
Co-Chair, Federal DAS
Suzanne_acar@ios.doi.gov

Adel Harris
Citizant, Division Director
aharris@citizant.com



The Federal 3-Pillar Data Strategy Framework



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

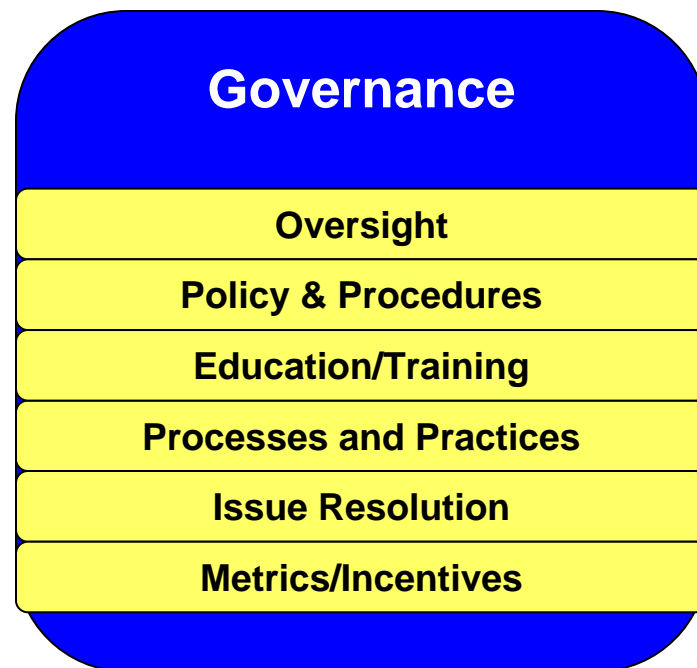
Goals drive; governance controls; structure defines; and services enable data strategy.



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

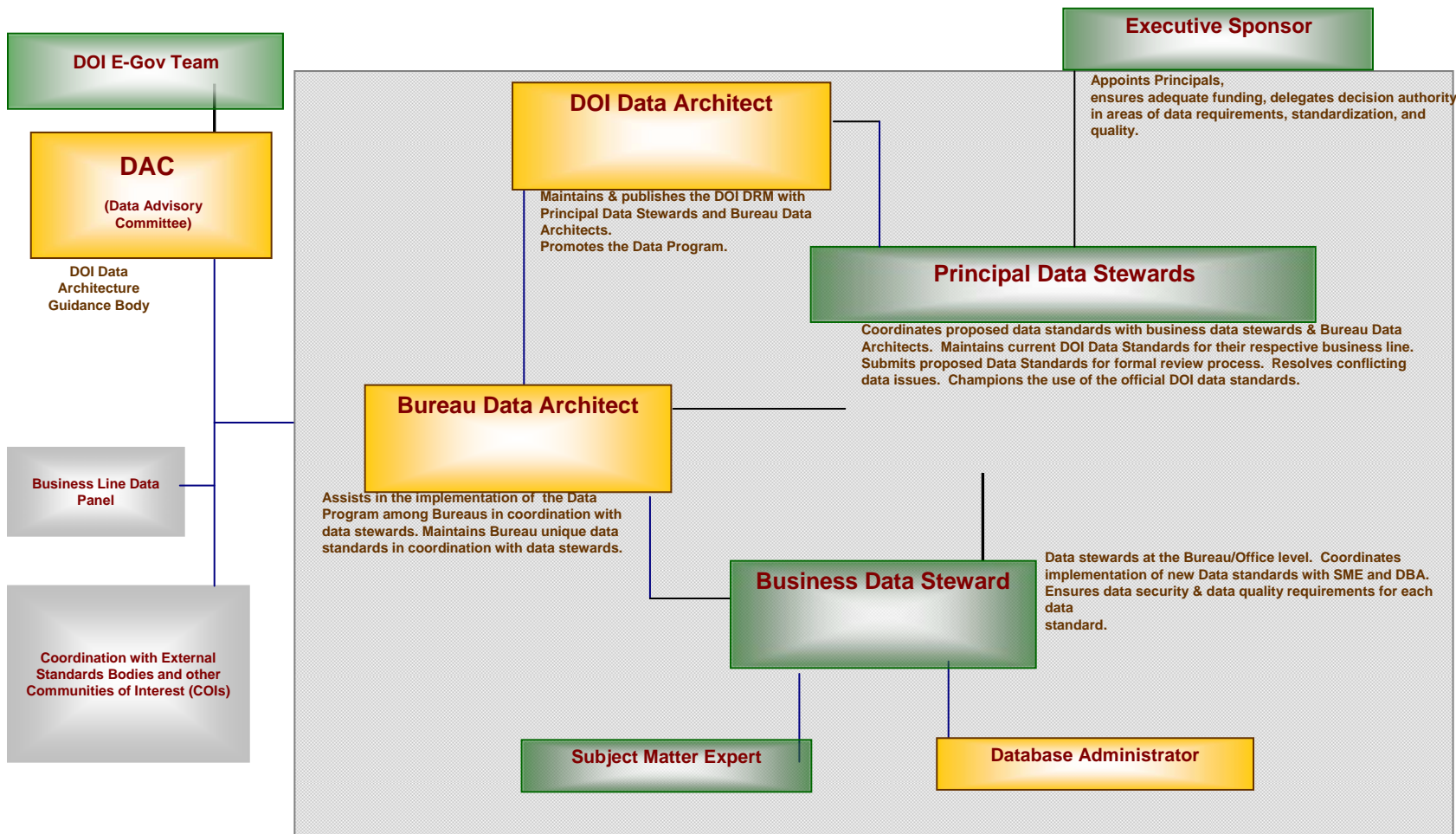
◆ COIs facilitate:

- 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.



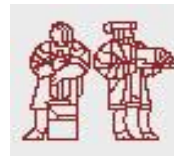
Example: DOI Data Governance Bodies



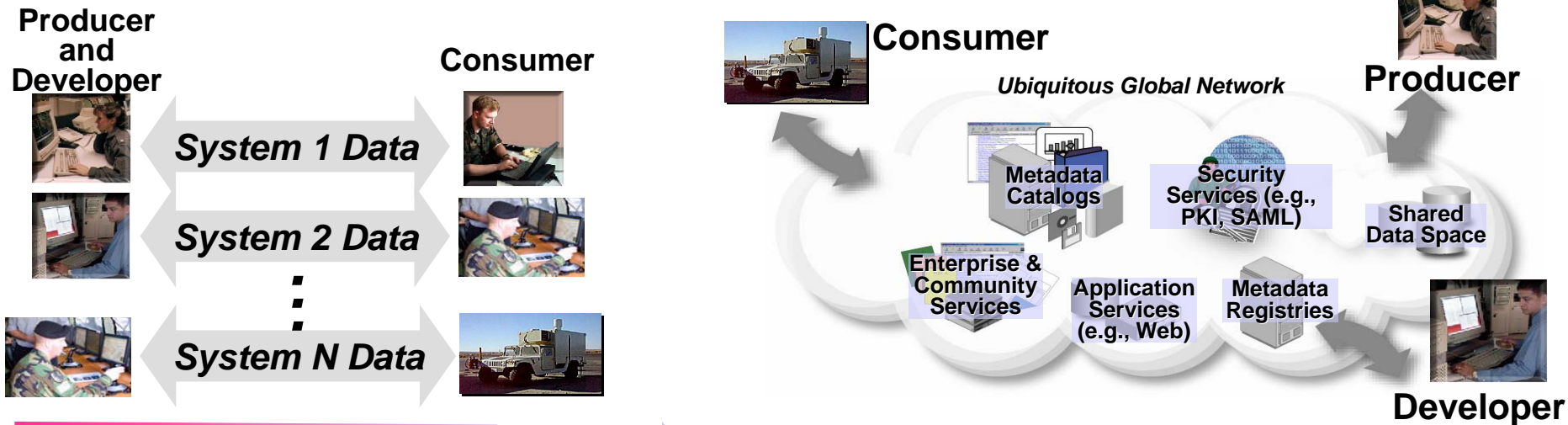
Yellow = IT perspective Green = Business perspective Gray = a mixed perspective



The MIT Information Quality Industry Symposium, 2007



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

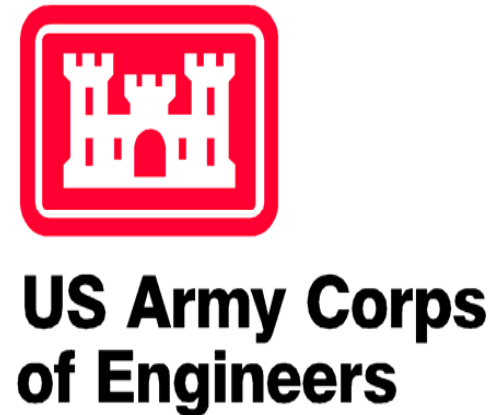
- ◆ President E-Government Interagency Initiative led by DOI
- ◆ Requirements:
 - Share data among multiple Federal, State, Local and Commercial partners
 - Share data across multiple business lines
 - Data standards must be easily extensible to accommodate new requirements
 - Data sharing standards must be translated to a database and XML

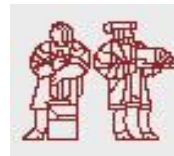


The MIT Information Quality Industry Symposium, 2007

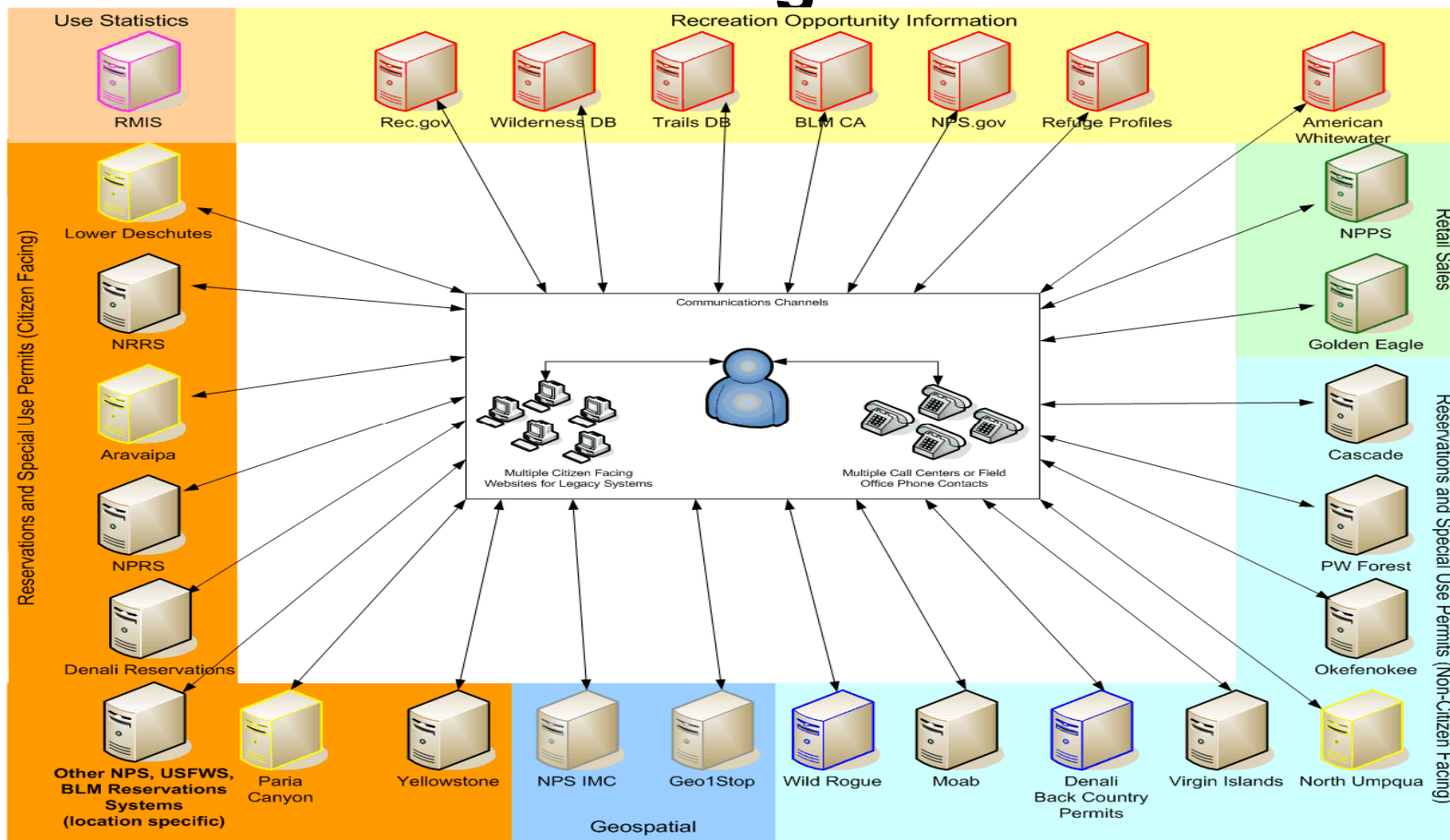


Recreation Community of Interest Members





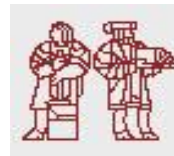
Recreation One Stop Challenges



Recreation information is the most sought after information by the e-citizen. There are too many sources for Federal, state and local recreation information.



The MIT Information Quality Industry Symposium, 2007

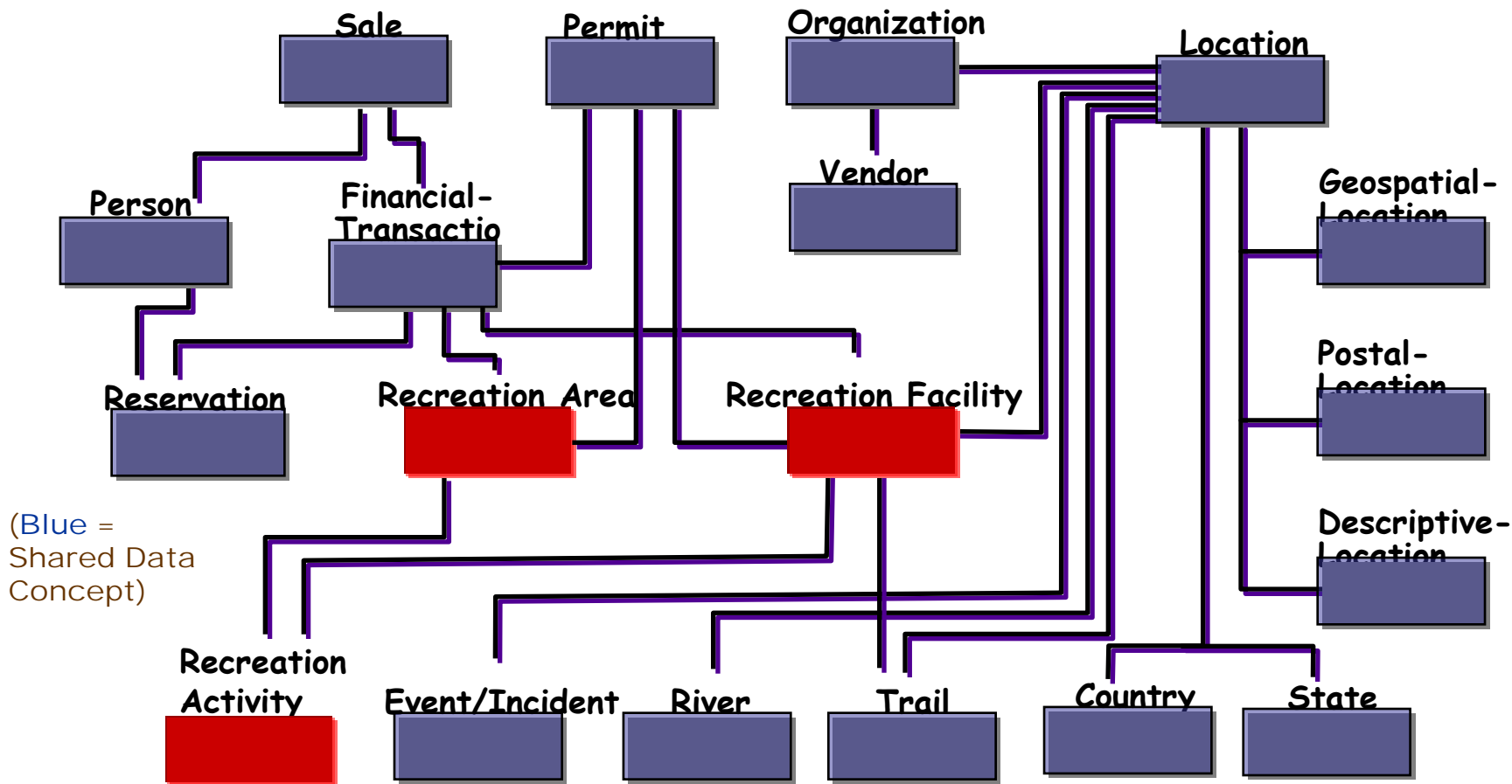


Example: Recreation One-Stop Governance Committees

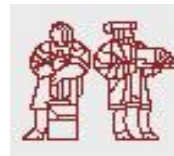
- ◆ COI: Federal Recreation Providers
 - Recreation Executive Council
 - Members: Deputy assistant secretary level (DOI, USDA, & DOD)
 - Provide strategic perspective
 - Provide adjudication
 - Recreation Managers Committee
 - Members: Senior level Recreation Managers (Smithsonian, DOT, and 16 other agencies)
 - Set priorities
 - Provide requirements and resources
 - Various implementation teams
 - Adoption of data standards
 - Data Stewards
 - Data implementation



Example: Recreation One-Stop Findings

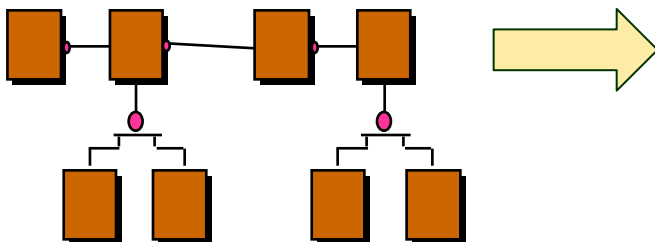


High percentage of data reuse identified across the COI.



Example: Recreation One-Stop Data Standards

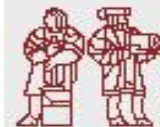
Recreation Model



```

<RecElements xmlns="http://www.recreation.gov/architecture/"
  xmlns:fips="http://www.doi.gov/xml/importedSchemas/fips_10-4"
  xmlns:fips1="http://www.doi.gov/xml/importedSchemas/fips_5-2">
  <Username>string</Username>
  <Password>string</Password>
  <!--1 or more repetitions:-->
  <Event>
    <EventID>100</EventID>
    <EventDataStewardID>100</EventDataStewardID>
    <EventName>string</EventName>
    <EventDescription>string</EventDescription>
    <EventStartDate>string</EventStartDate>
    <EventEndDate>string</EventEndDate>
    <EventStartTime>string</EventStartTime>
    <EventEndTime>string</EventEndTime>
    <EventAgeGroup>string</EventAgeGroup>
    <EventURLAddress>string</EventURLAddress>
    <EventURLText>string</EventURLText>
  </Event>
  </RecElements>
  
```

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.

The screenshot shows the Recreation.gov website interface. The page title is "Rappahannock River Valley National Wildlife Refuge". It features a search bar at the top with a "Go" button and a "Keyword/Phrase Search" field. The main content area is green and contains several sections:

- Description:** A paragraph describing the Rappahannock River Valley National Wildlife Refuge (NWR) as the newest of three refuges in the Eastern Virginia National Wildlife Refuge Complex, established in 1996. It mentions the goal of protecting 20,000 acres of wetlands and uplands, and notes that as of April 2003, the Refuge had protected 5,206 acres. It lists conservation partners like Chesapeake Bay Foundation, The Nature Conservancy, and The Trust for Public Land.
- Wildlife:** A photograph of two wood ducks with the caption "Wood ducks at Rappahannock".
- Online Recreation Maps:** A map showing the location of the refuge near Hopewell, Fort Lee, and Petersburg, Virginia, with major roads like I-95 and I-64 highlighted.
- Directions:** A paragraph providing driving directions from Tappahannock, Virginia, to the refuge entrance via Route 360, Route 624, and Route 636.
- Managing Partner:** Information for the National Wildlife Refuge System, including the address (336 Wilina Road, Warsaw, VA 22572), phone number (804-333-1470), and email (fw5rv_evrwr@fws.gov).
- Additional Information:** Links to the Rappahannock River Valley National Wildlife Refuge Web Site and the Virginia Tourism Site.
- Weather Information:** A link to the Weekly National Weather Service Forecast for Warsaw, VA.

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



The MIT Information Quality Industry Symposium, 2007



Questions

