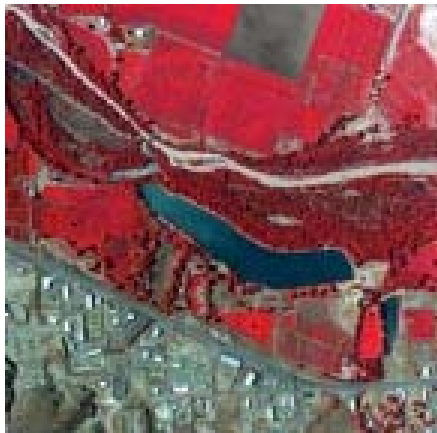


# Land Information Management Solutions for Transportation Agencies

Pierre le Roux

Program Manager: Government Solutions

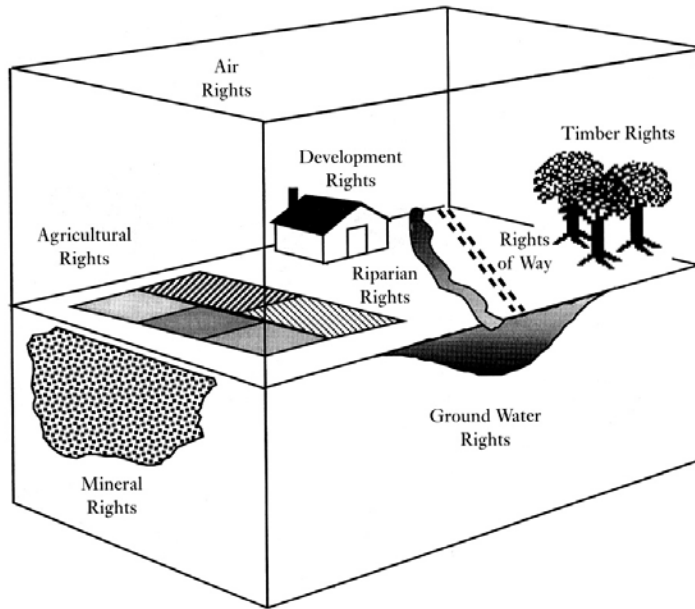


Mapping and Geospatial Solutions

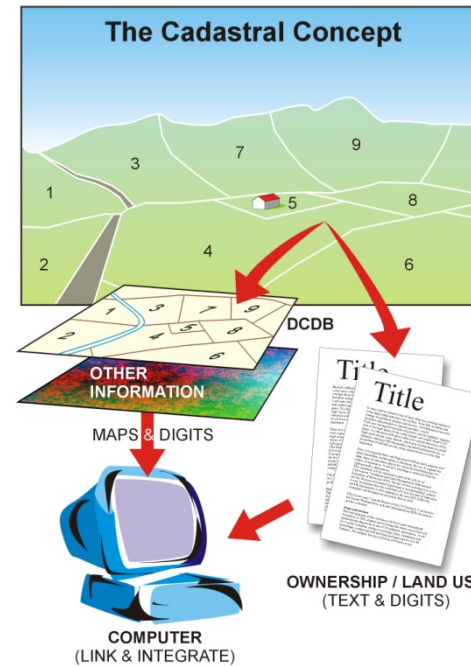
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Patent Pending

**INTERGRAPH**

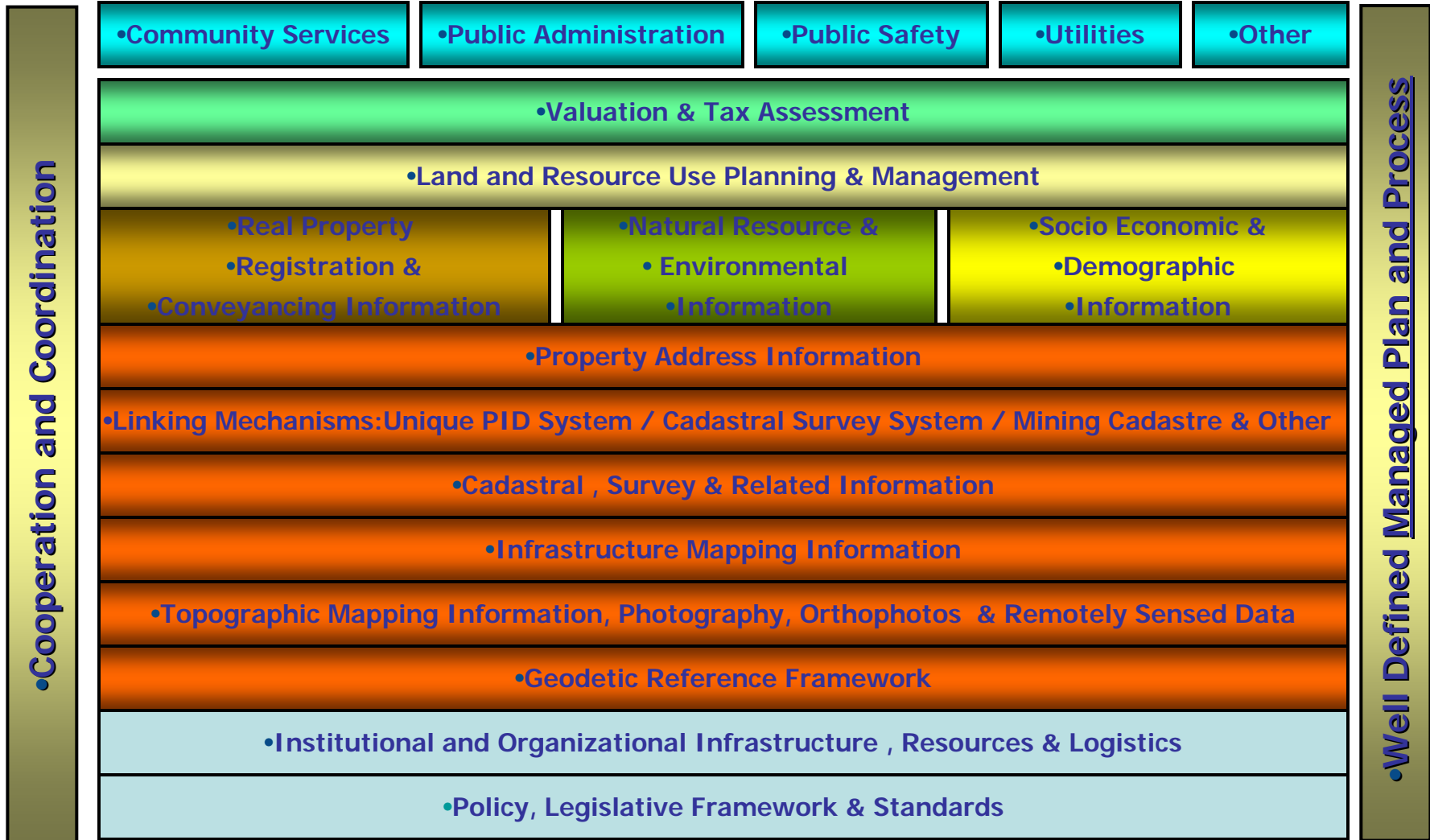
# Land Information Context



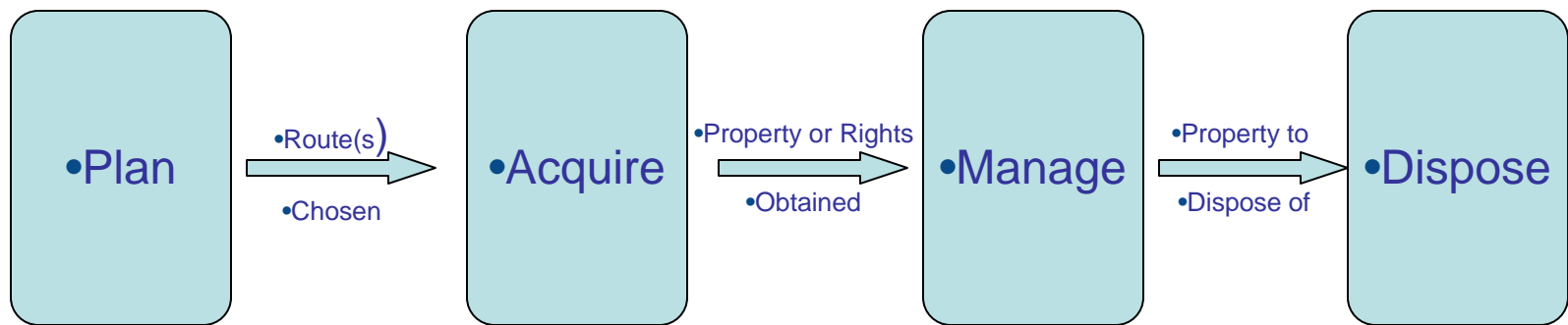
•Source: Land Administration (Peter Dale and John McLaughlin)



# Multipurpose ...



# Right-of-Way Management



- Identify Alternative Routes
- Obtain Current Land Records
- Assess for Suitability
  - Number of Easements
  - Cost of Rights
  - Cost to Build
  - Etc.
- Hold Hearings
- Choose Route
- Notification

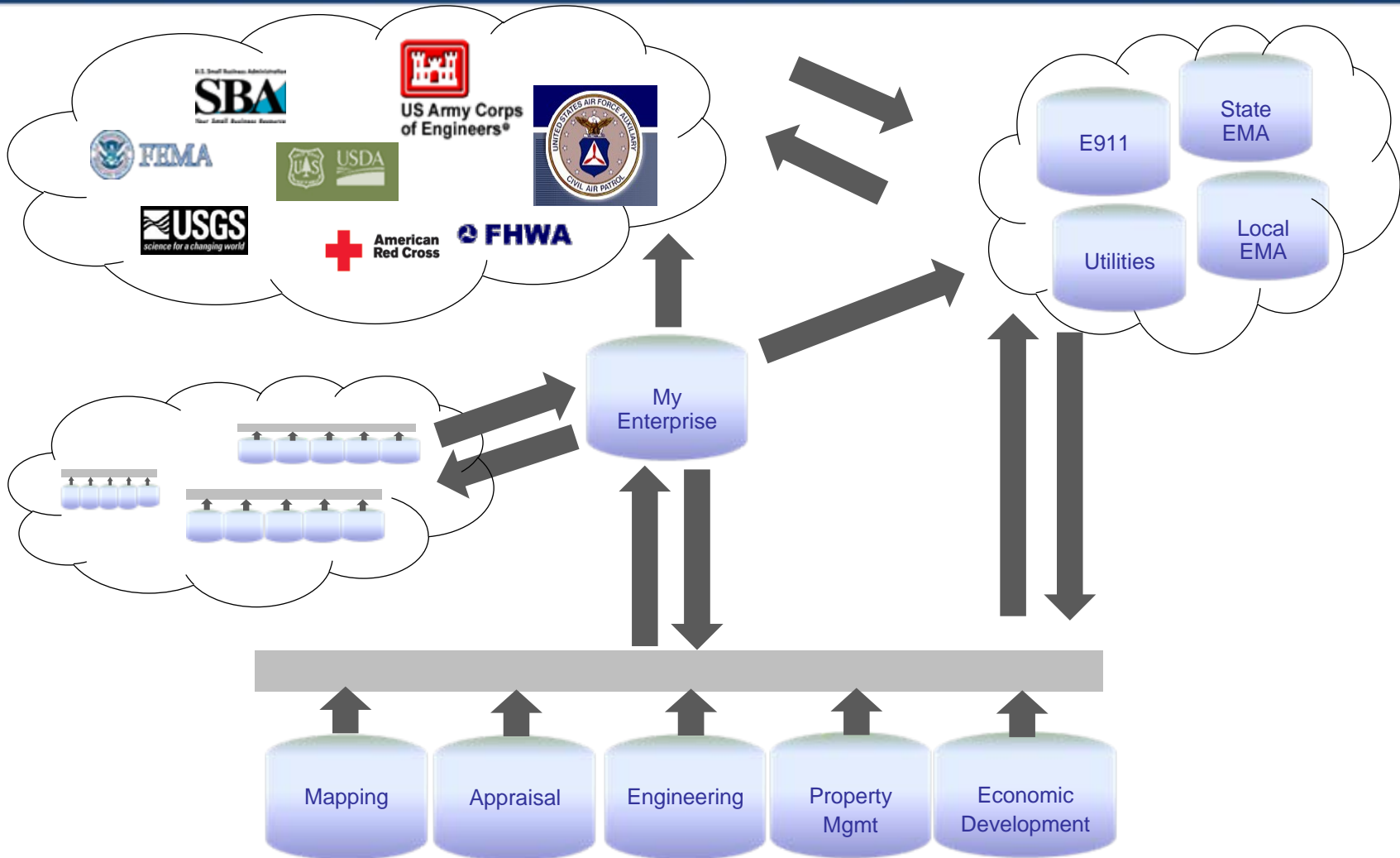
- Identify Current Owners
- Identify Desired Property
- Disposition via Survey –
  - Encroachment
  - Uses
  - Wetlands
- Appraise Property
- Establish Offer
- Negotiate Purchase or Acquisition / Easements.
- Record Property Descriptions
- Record Property Transactions
- Update ERP, Real Property Asset System
- File documents.

- Trim Trees
- Mow Rights of Way
- Manage Maintenance Contracts
- Manage Leases
- Manage Road Way Assets ( Advertisements etc)
- Maintain Property and Owner Information
- Pay Property Taxes

- Determine Value
- Place on Market
- Negotiate Sale
- Record Sale
- Record Property Transactions
- Update ERP, Real Property Asset System
- File documents

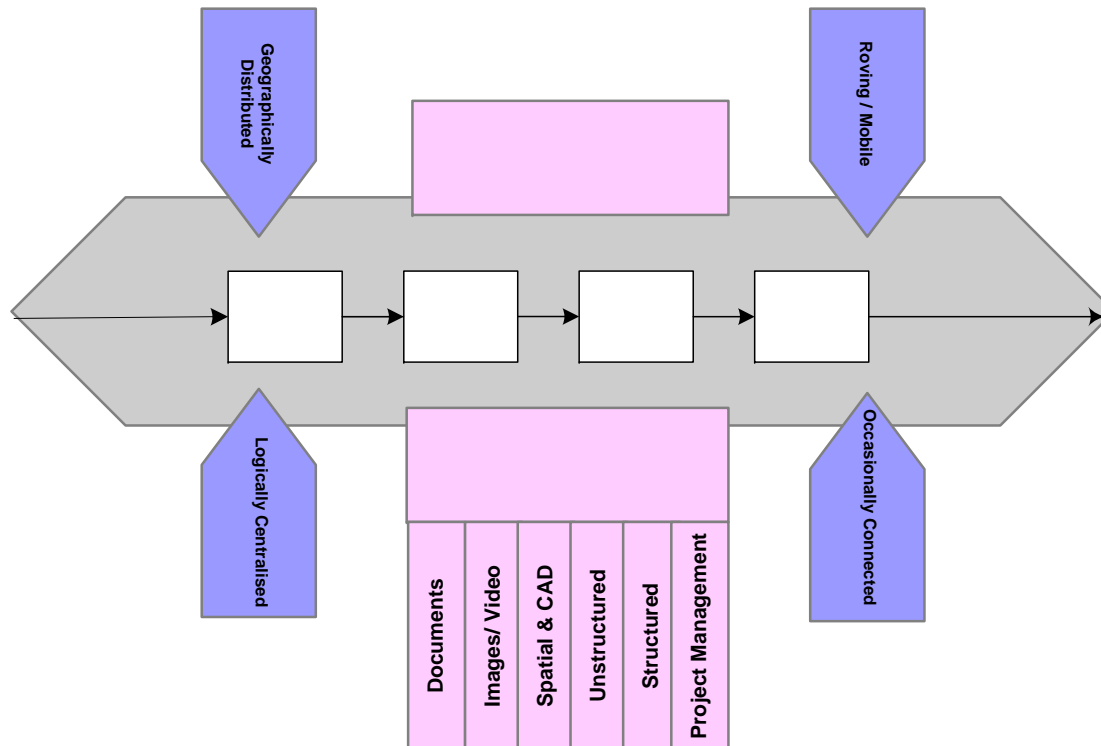
- **Enhance services to businesses and private citizens**
  - Need to improve process and time to find and recall documents so that projects and requests could be completed sooner.
  - Documents include permit applications, leases, deeds, contracts, drawings of proposed designs, and project schedules.
  - Exist in paper , but difficult easily locate, not commonly spatially referenced.
- **Streamline employee collaboration and improve internal operations**
  - Transportation projects require internal and external collaboration.
  - Example: Prior to new construction, process review of 1000's of documents must be completed and public input reviewed.
  - To accomplish this, a variety of information systems and business processes must be integrated. The **solution must be spatially aware** and support interaction with ( or provide) a document indexing, geo-imaging, GIS/Mapping, computer-aided design (CAD) software, e-mail, and electronic forms.
- **Automate administrative real property related tasks**
  - Replace manual, paper-based, and independent electronic workflows / processed with more efficient electronic and spatially aware integrated processes, so staff could devote more time to higher value-added activities.

# Collaboration & Sharing



# Solutions ...

- “We anticipate that responsibility for land information maintenance will be distributed among departments in such a way that data is captured and available to users across the enterprise as early as possible.”



- More ancillary land information than “GIS” Parcel Information.
- Organizational Responsibility
- Standards & Processes
- “First Capture” / “Many Users” Approach
- Enterprise IT Centric Environment

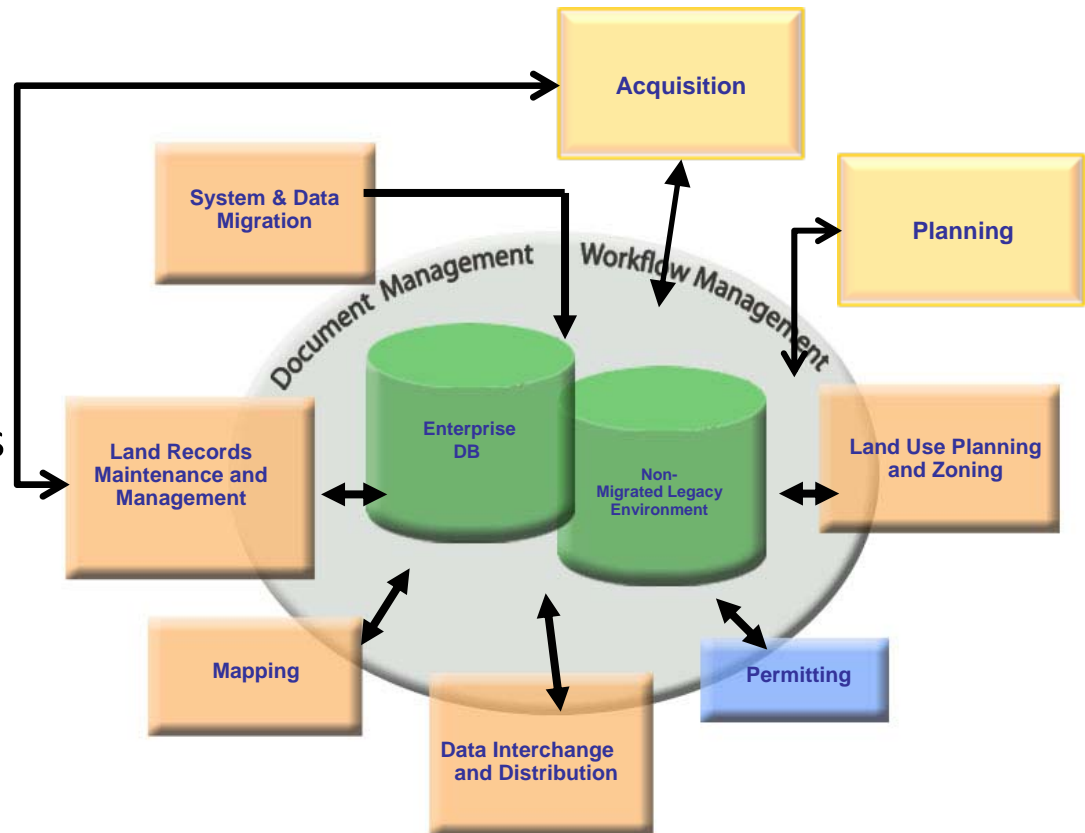
# Sustainable Solution Set

## ■ Approach

- Simplify
- Standardize
- Automate

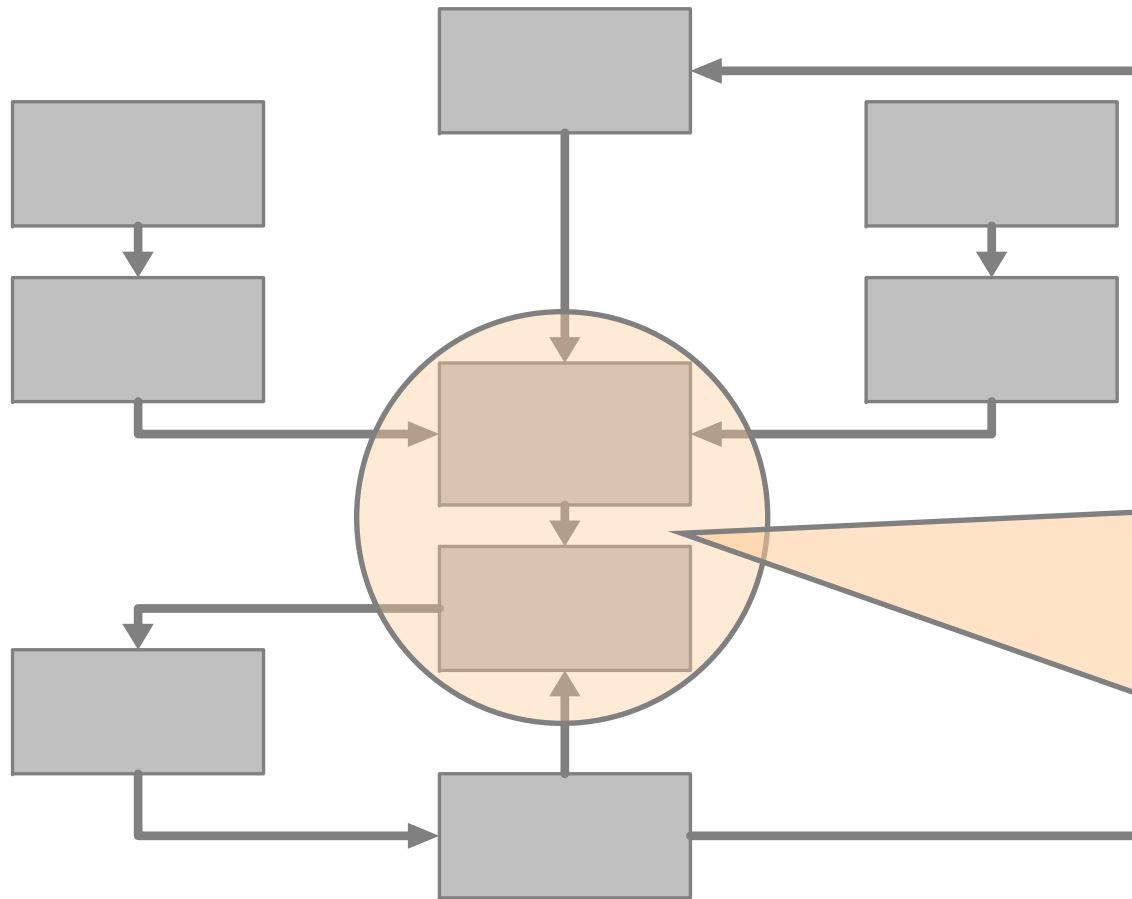
## ■ Environment

- Build on solid IT platforms and standards / protocols
- End-to-End Business Process Solution
- Remote Deployment & Support





# Strategy



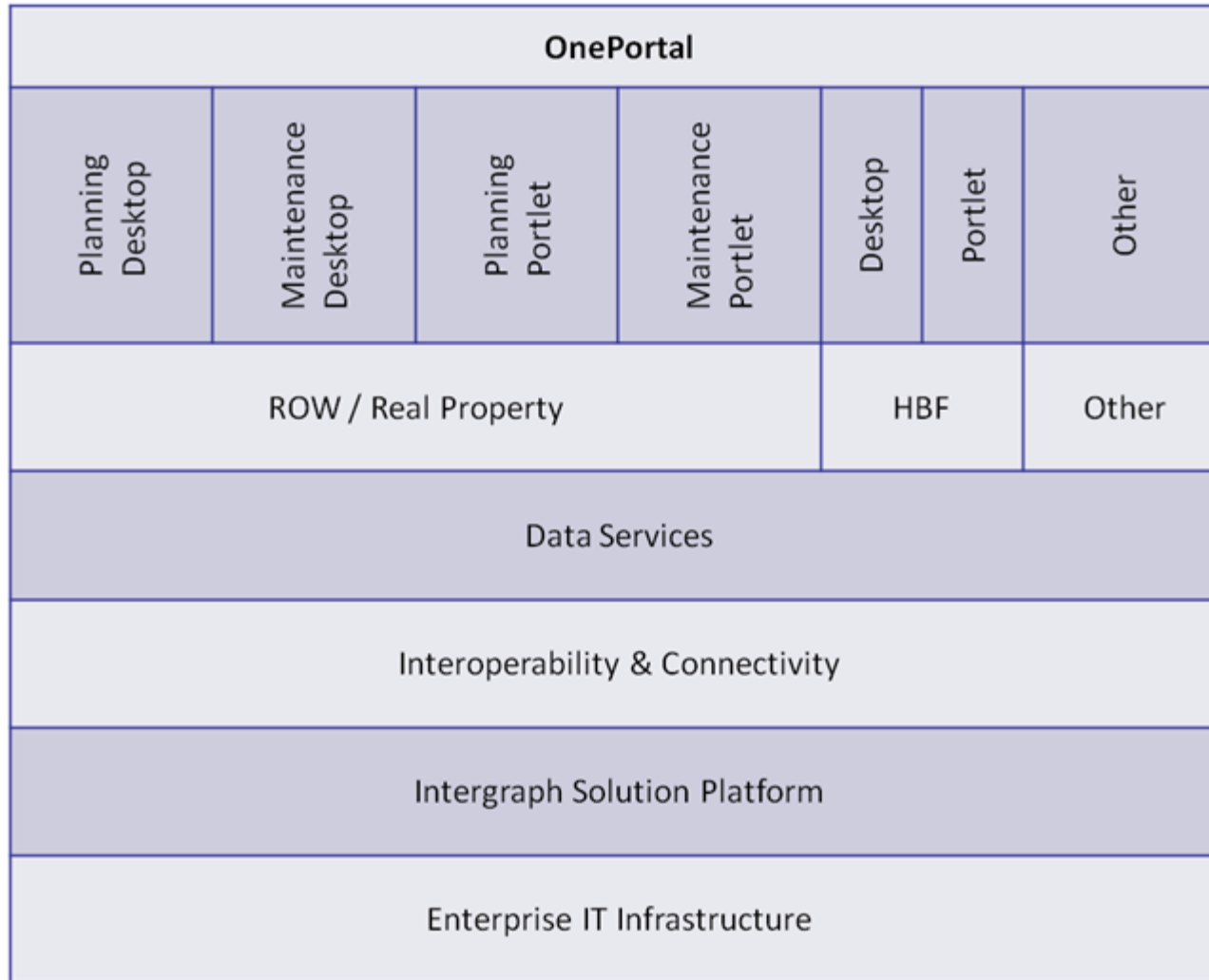
- Sustainability
- IT Standards
- Productivity
- Lower Deployment Costs
- Best-of-class Geospatial Platform
- Integration with Popular Mapping Browsers
- Image Management
- Collaboration
- EII
- Public Distribution
- Legal Compliance.

# Enterprise Information Integration(EII)

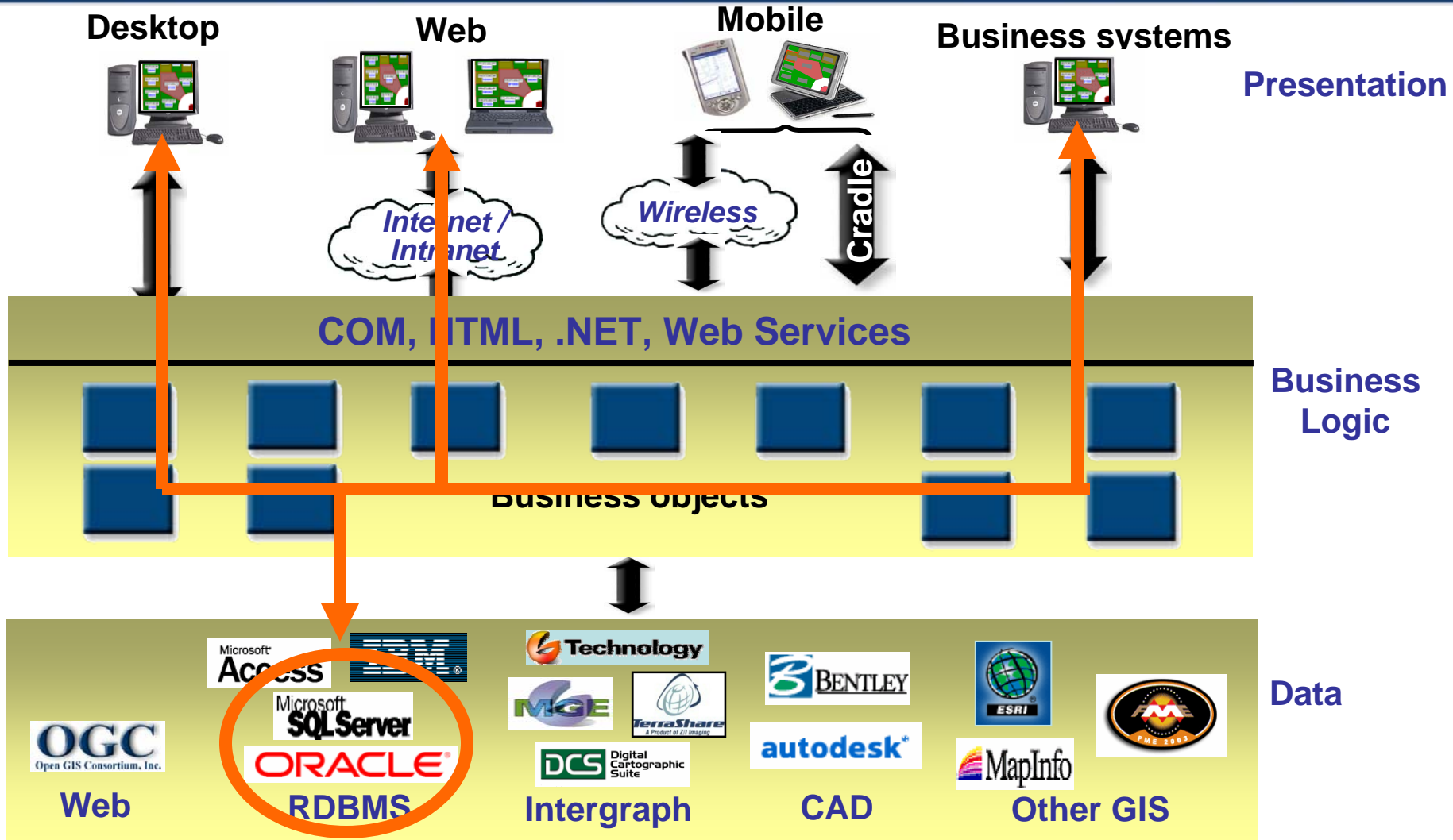


- A process of [information integration](#).
- Goal: Get a set of [heterogenous](#) data sources to appear to a user or system as a single, [homogenous](#) data source.
- Enables [loose coupling](#) between [homogenous](#)-data consuming client applications and services and [heterogeneous](#)-data stores.
- Uses [data abstraction](#) to provide a single interface (aka [uniform data access](#)) for viewing all the data within an organization, and a single set of structures and naming conventions (known as [uniform information representation](#)) to represent this data.

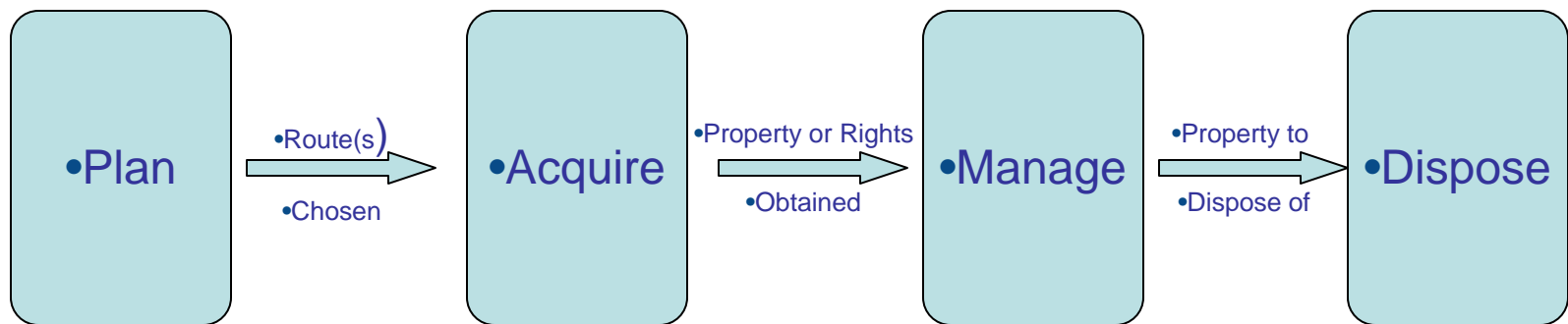
# Solution Architecture



# Integrated Business Solution



# Right-of-Way Management



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- Solution Implementation and Configuration Services
- Training
- Data Acquisition, Integration and Maintenance Services
- Application and Data Hosting Services
- On-Site Staffing
- Sustaining Engineering

# Sustainable Solutions for Land Management

