

# Sustaining An Enterprise Geospatial Information Program Supporting Water Resource Management

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Information Technology Director

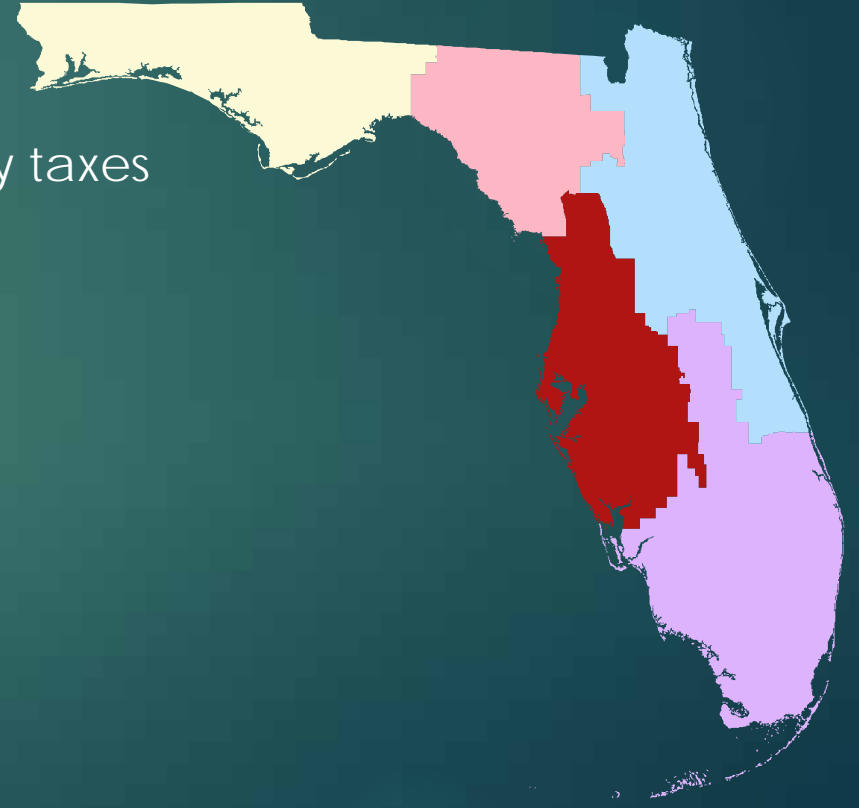
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Mapping and GIS Manager

Southwest Florida Water Management District

# District Overview

- u What we are
  - u One of 5 districts created under Chapter 373, F.S. – Water Resources Act
  - u 10,000 square miles
  - u 16 counties
  - u Population of 4.7 million
  - u Revenue from voter-approved ad valorem property taxes
- u What we do
  - u Permitting
  - u Scientific data collection
  - u Modeling
  - u Habitat restoration
  - u Land management
  - u Water resource projects
  - u Structures operation



# What Leads to Sustainability?

## Boring

- ▶ Consistency
- ▶ Metadata
- ▶ Processes & Procedures
- ▶ Standards
- ▶ Understand the business
- ▶ ...



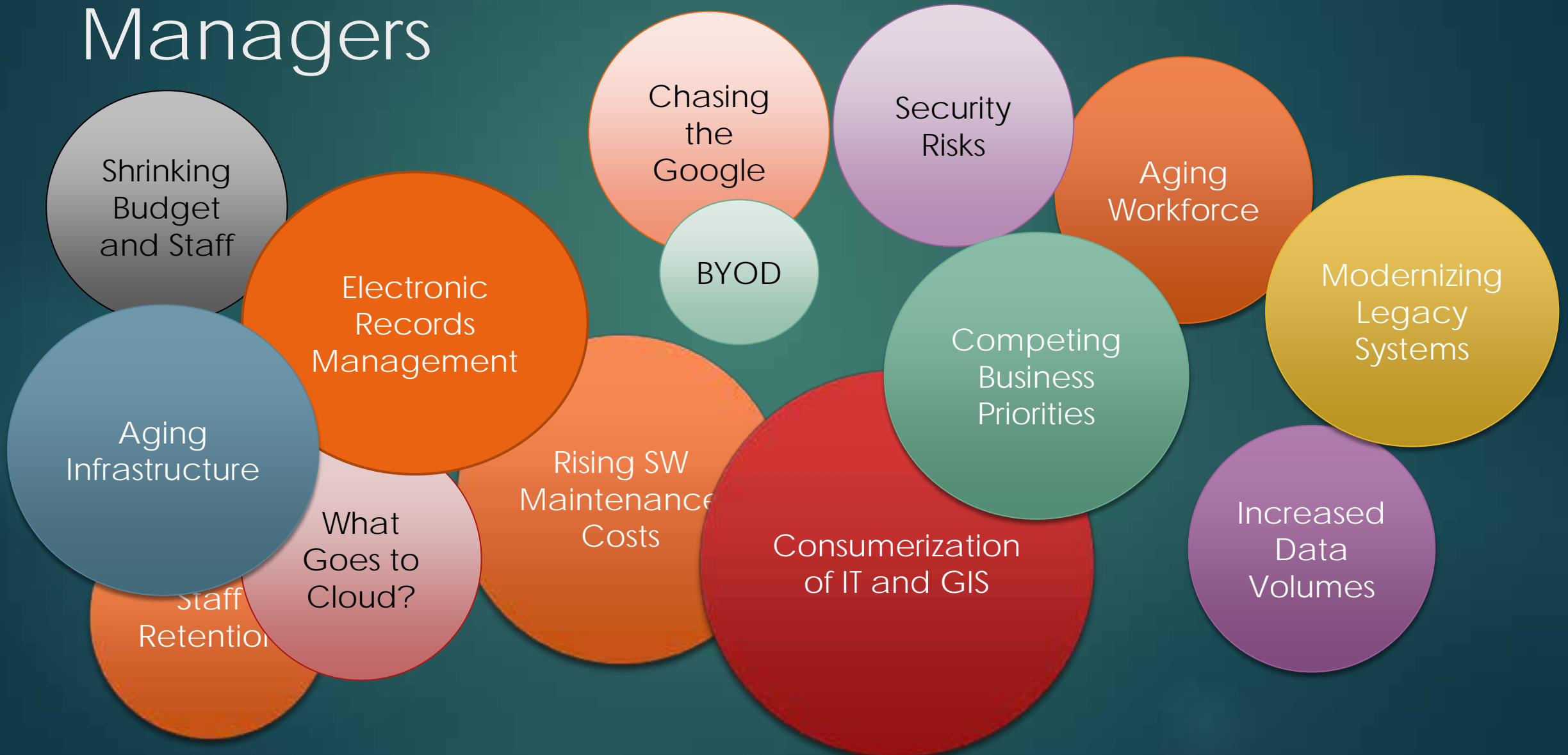
## Exciting

- ▶ Cutting Edge Remote Sensing
- ▶ Drones
- ▶ Latest Hot Application
- ▶ Three Dimensional Visualizations
- ▶ ...

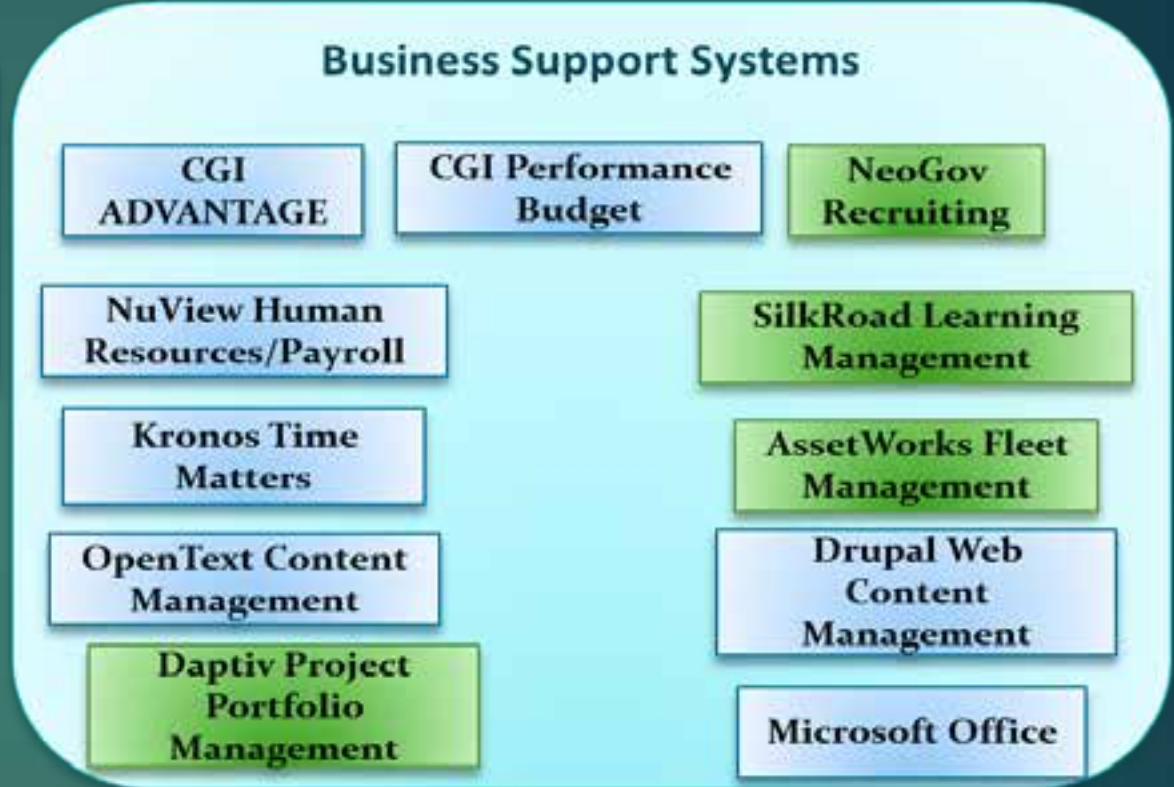
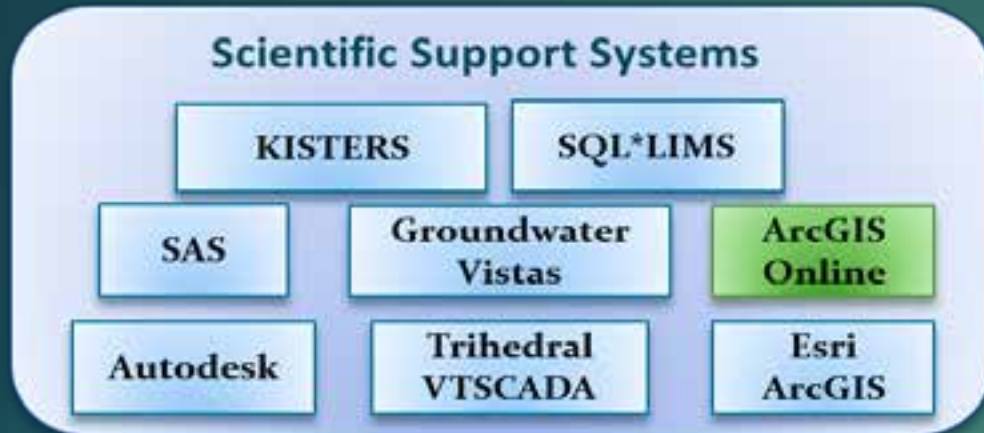
# What Do We Mean By “Enterprise”?

- ┌ Mission critical (when something doesn't work for 5 minutes my phone rings)
- ┌ Multiple Use (data and models)
  - ┌ Many users
  - ┌ Many organizational units
  - ┌ Many business functions

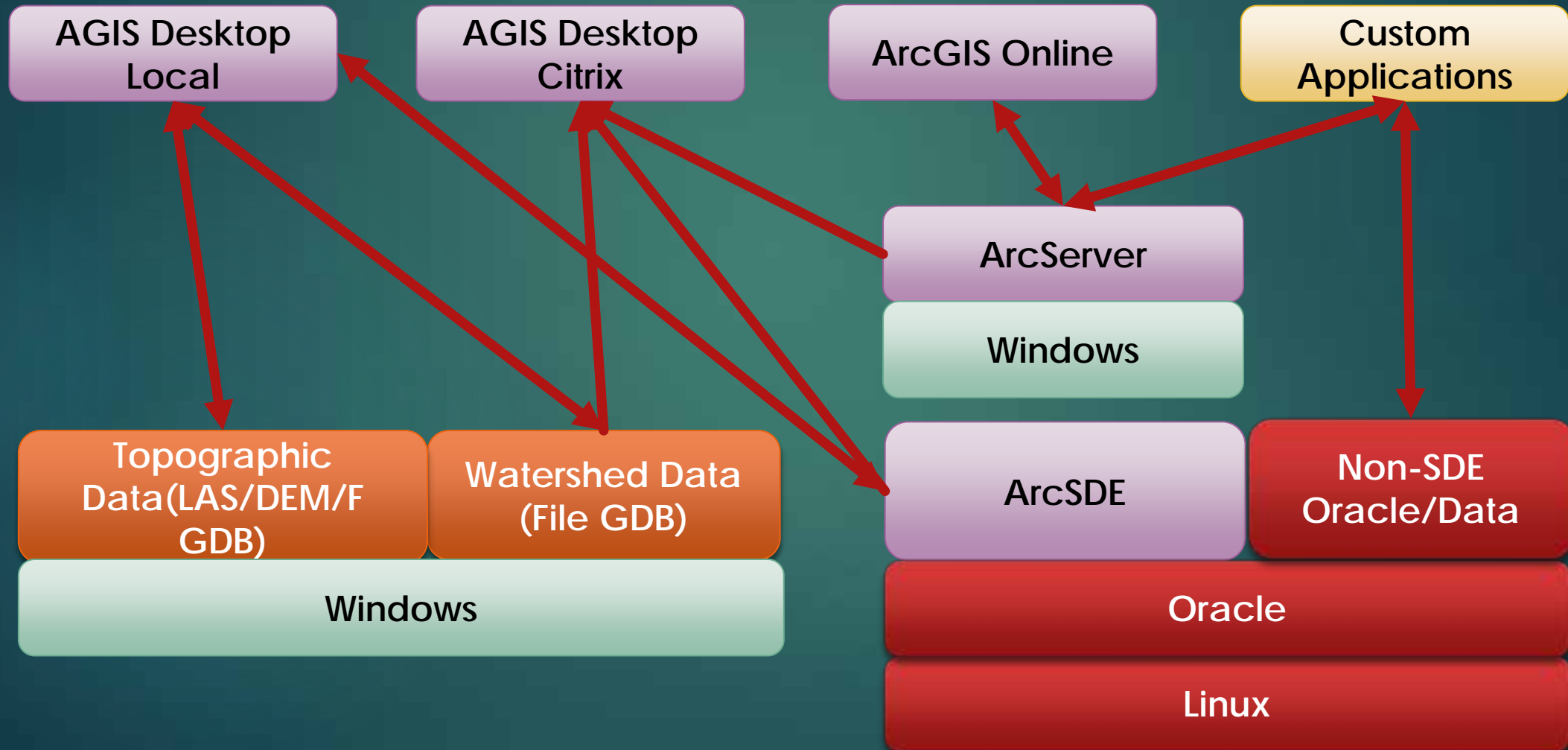
# Issues Faced by Government IT/GIS Managers



# Technology Infrastructure



# Geospatial Infrastructure

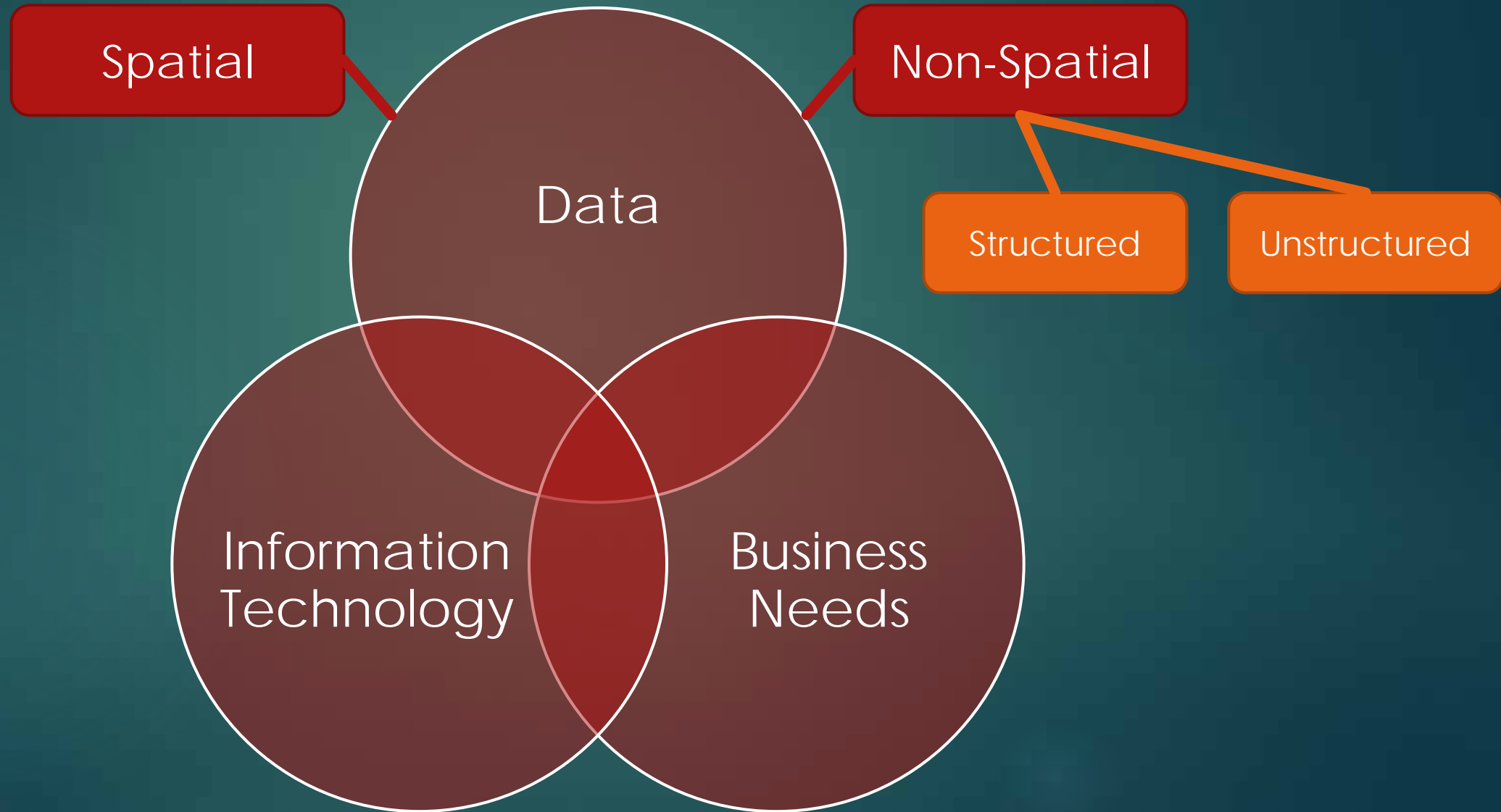


# How To Ensure Long Term Success

- u Step One – Identify components of a modern geospatial program
- u Step Two – Identify where geospatial components fit in your organization
- u Step Three – Establish, monitor and adhere to processes



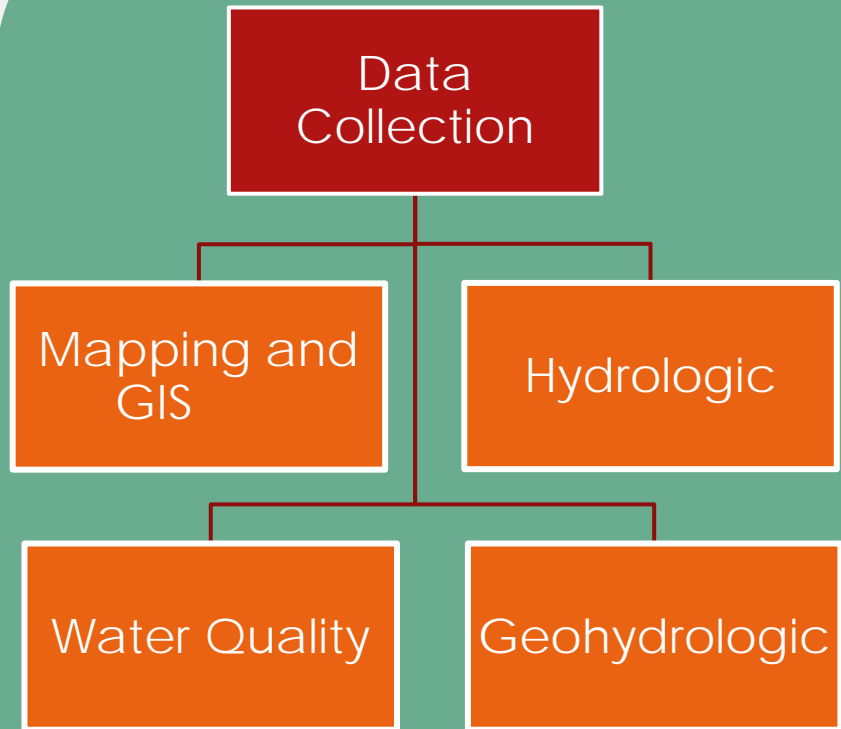
# Geospatial Program Components



# Organizational

## Processes

### Data Stewards



- Document Services
- Permitting
- Financial
- Land Assets

### Business Owners

- Engineering
- Document Services
- Resource Evaluation
- SWIM

### Info. Technology

- Information Technology
- Public Affairs (Web Master)
- Data Collection & Structure Operations (SCADA)

# Key Processes for Success

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## IT and Data Governance

- u Architecture
- u Business Continuity
- u Capacity Management
- u Change Management
- u Customer Relation Management
- u Standards
- u Incident Management
- u Metadata (spatial and non-spatial)
- u Project Prioritization and Management
- u Security
- u Software Development Lifecycle

## Financial

- u Budget Development
- u Cooperative Grants Program
- u Long Range Planning

## Human Capital

- u Career Latticing
- u Position Profiles
- u Succession Planning

# Process Implementation

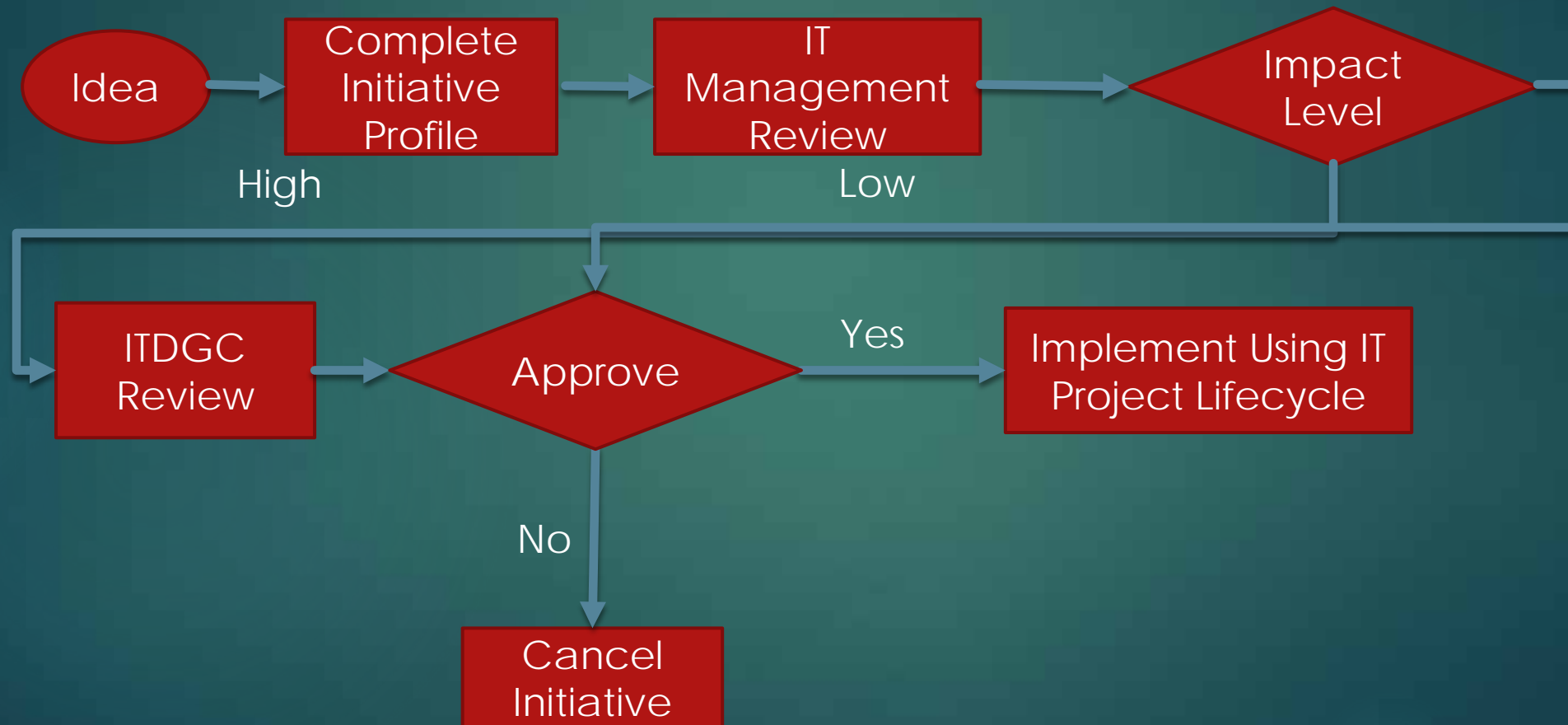
Governing Board Policies

Executive Procedures

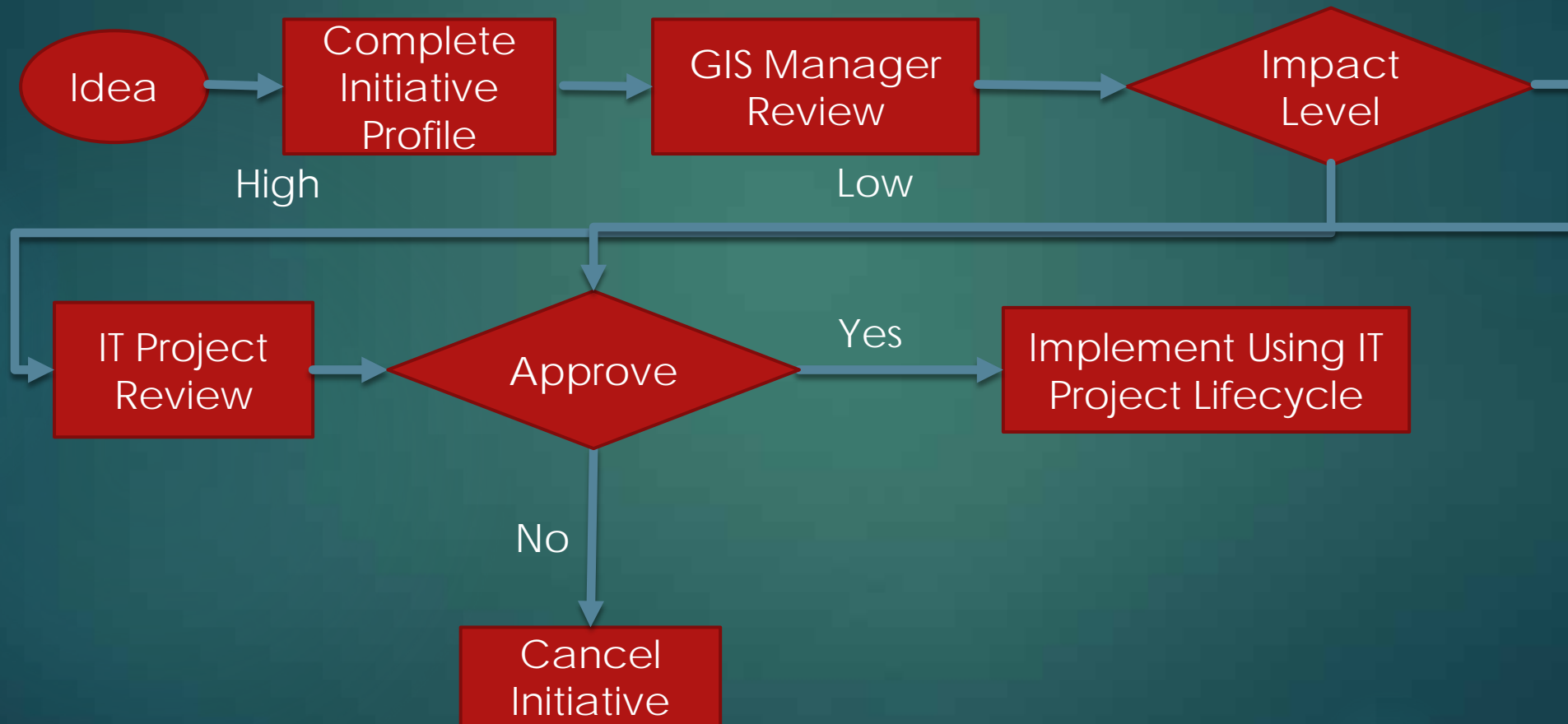
Departmental Guidelines

# Consistency Example – IT Project Approval

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# Example – Extended to AGOL Projects



# Summary - Long Term Success

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- u Identify the components of your geospatial program
  - u Data
  - u Information technology
  - u Business needs
- u Put the components in the correct place in your organization
- u Create, maintain and adhere to processes and procedures

# Contact Information

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