Please!
Turn OFF cell phones and paging devices

# Getting Started with ArcGIS Server

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Learning objectives

- **Benefits of centralizing your GIS**
- **Identify the types of GIS resources that can be served**
- **Implement the steps to enable Web GIS**
  - **Author GIS content**
  - **Serve content**
  - **Use services**
- **Differentiate between types of services**
- **Create a simple Web mapping application**
- **Discuss ArcGIS Server system components and access requirements**

What is Server GIS?

- **Centralize data and GIS applications**
- **Helps to eliminate data concurrency issues**
- **Permits remote access and maintenance of GIS**
- **Accommodate unique workflows**
- **Facilitates effective communication and decision making**

Client-Server Communication
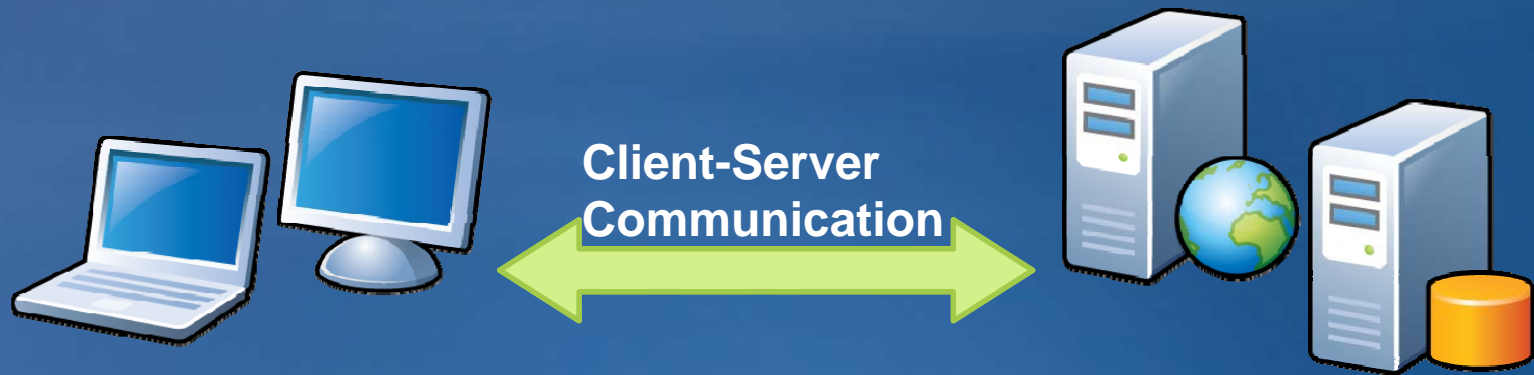
Overview of the ArcGIS Server system

Clients

Web GIS

**Web Server
GIS Server**

Data Server
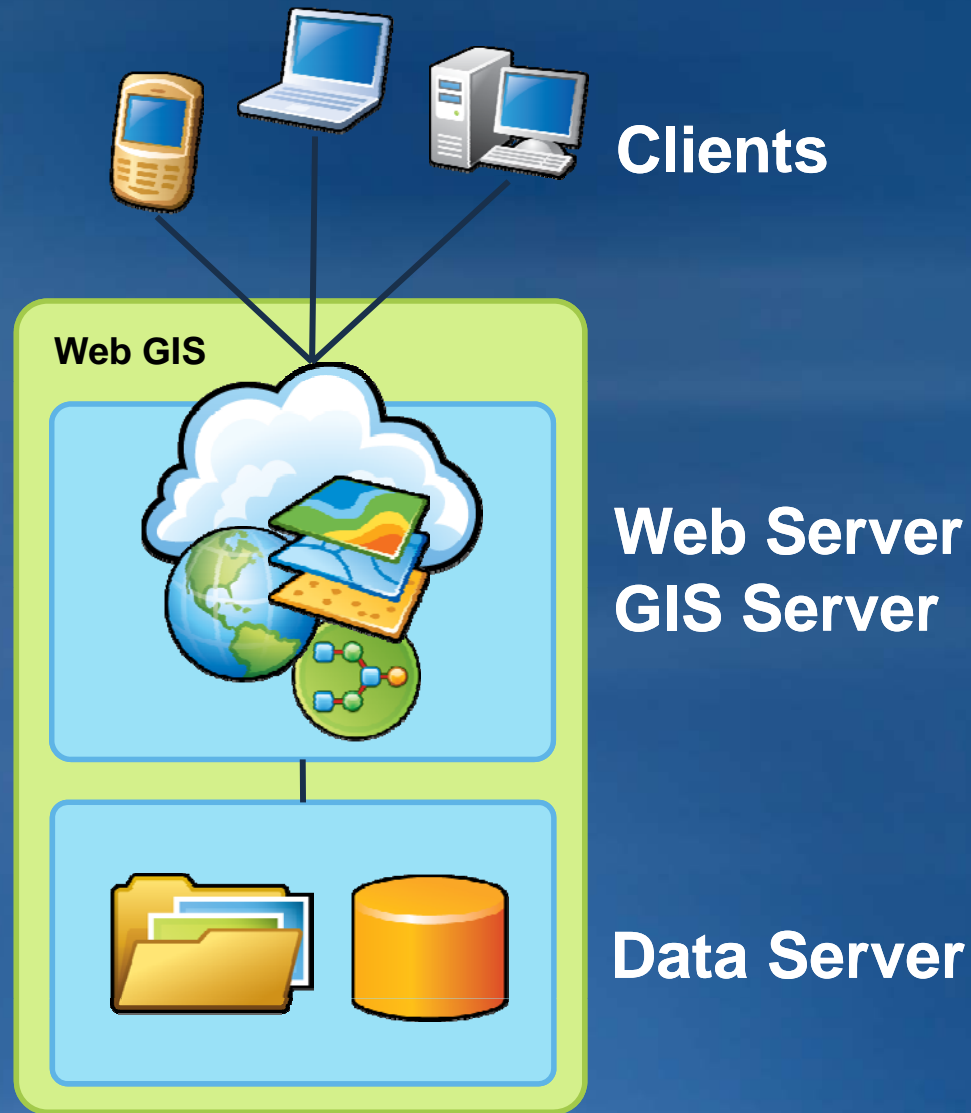
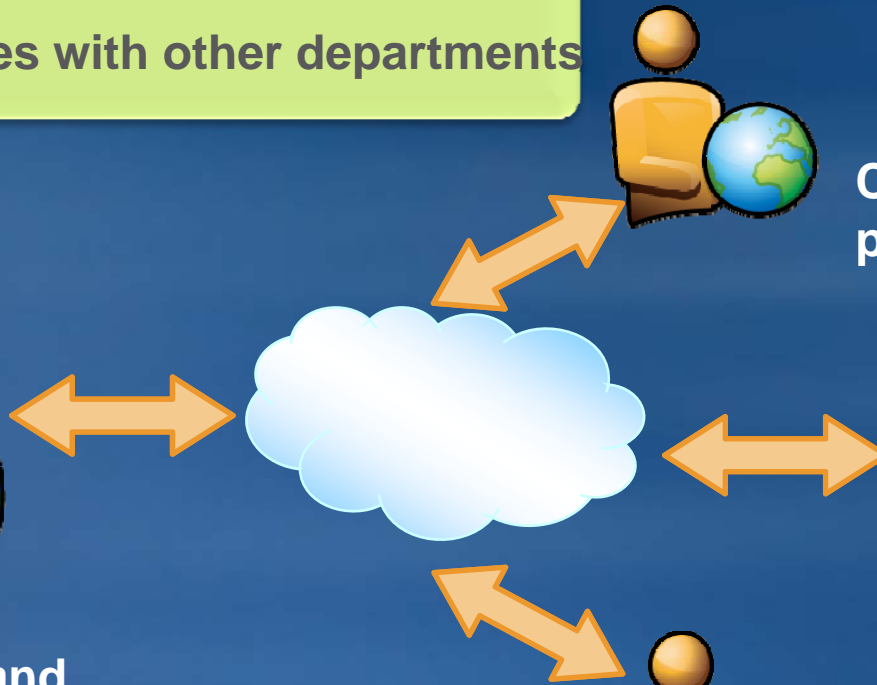# Example:…

30+ ArcGIS Desktop installs

Centralize

◆ **End users require training**

◆ **Maintain 30+ custom tools**

◆**Maintain 30+ installations and service packs**

◆ **Store and maintain copies of data**

◆**Improved data access and simplified application maintenance**
◆**Eliminate data concurrency issues**
◆**Simple interface for untrained users**
◆**Scalable**
◆**Share resources with other departments**

Create focused, well performing application

Central application and data storage

Maps and spatial functions available to a wider audience

Enabling Web GIS with ArcGIS Server

- **Publish GIS resources to create GIS services**
  - GIS resources: Assets you create using ArcGIS Desktop
  - GIS services: GIS resources available on the Web

Service type	Resource
Map	Map document
Globe	Globe document
Image	Raster
Geocode	Locator file
Geodata	Geodatabase
Geoprocessing	Toolbox

Create your own server side resources

❶ **Author GIS content**
- –**Create GIS resources**
- –**ArcGIS Desktop applications**

❷ **Publish content**
- –**Publish GIS resources as services**
- –**ArcCatalog and ArcGIS Server Manager**
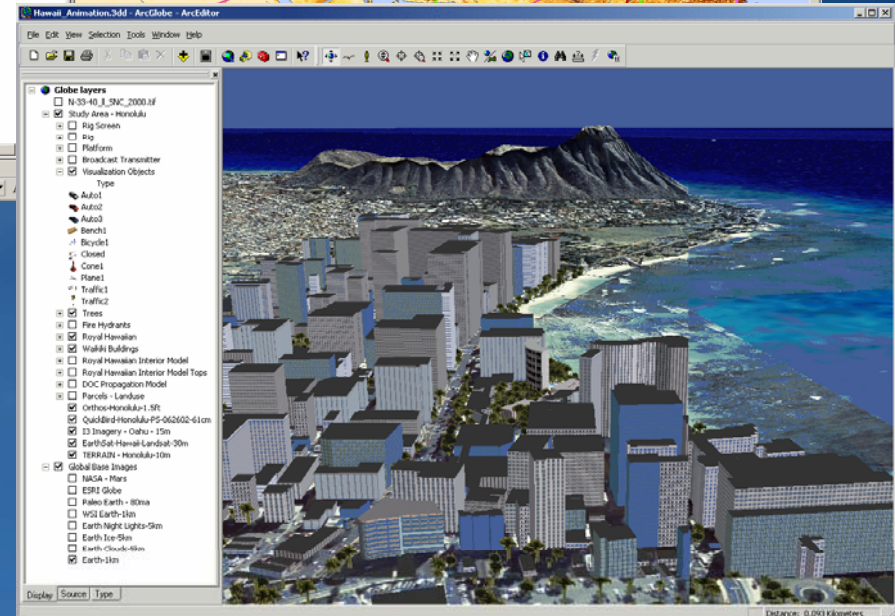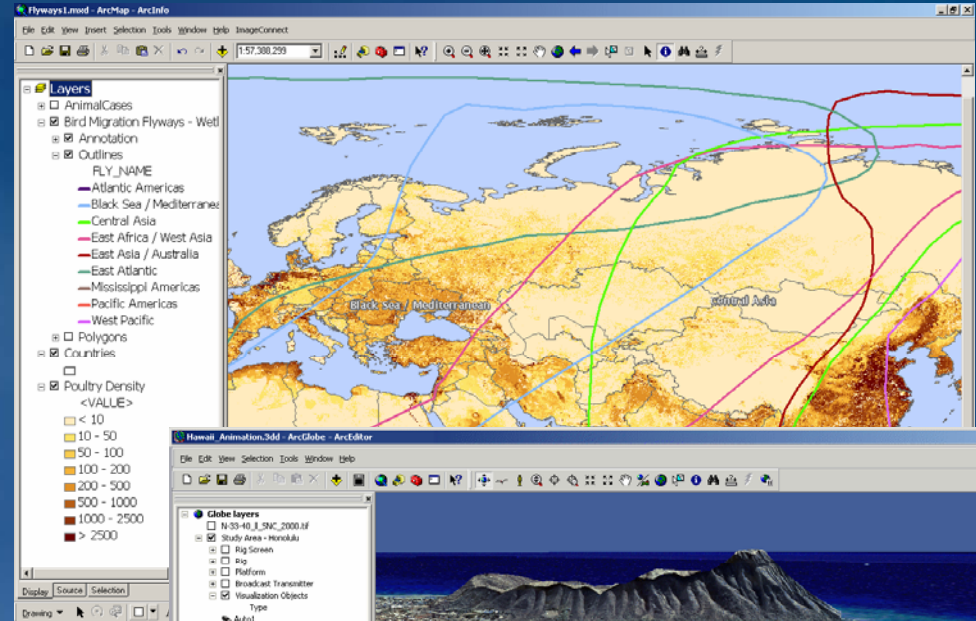
❸ **Use GIS services**
- –**Web applications**
- –**ArcGIS Explorer**
- –**ArcGIS Desktop**
- –**Many others…**
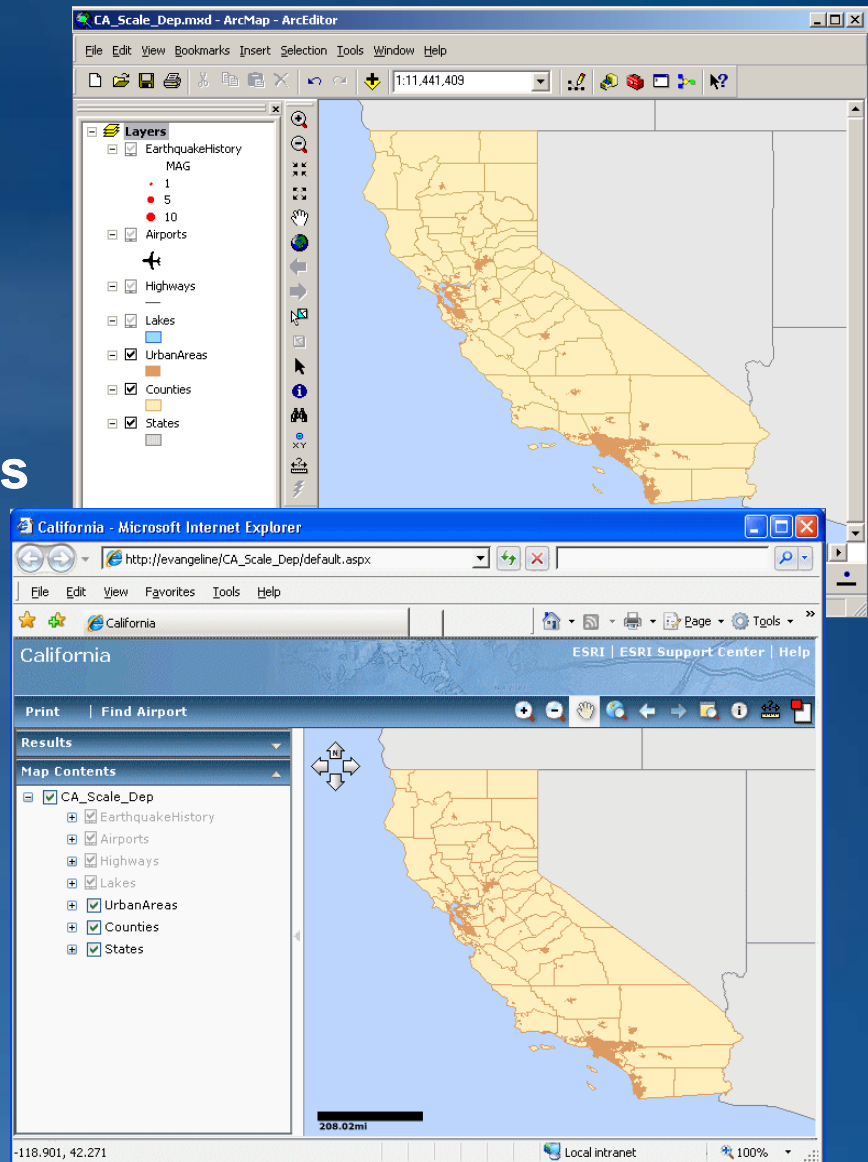
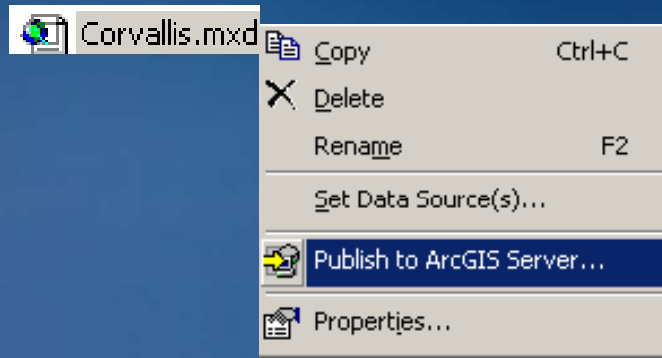# Authoring GIS content

- **ArcMap**
  - 2D GIS data
  - Tool layers (models)
- **ArcCatalog**
  - Geodatabases
  - Raster datasets
  - Address locators
- **ArcGlobe**
  - 3D GIS layers
  - Globe documents
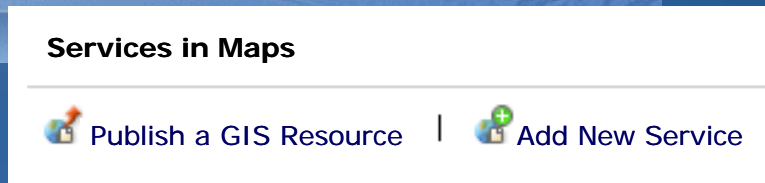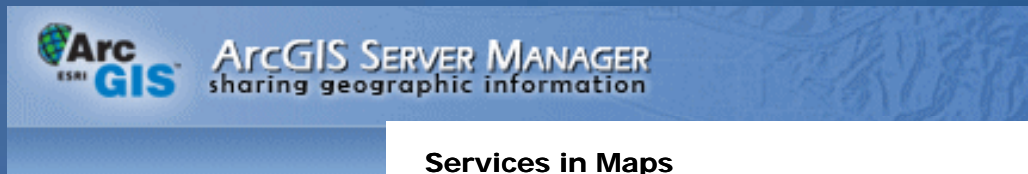- **ArcToolbox**
  - Geoprocessing models

Publishing GIS services

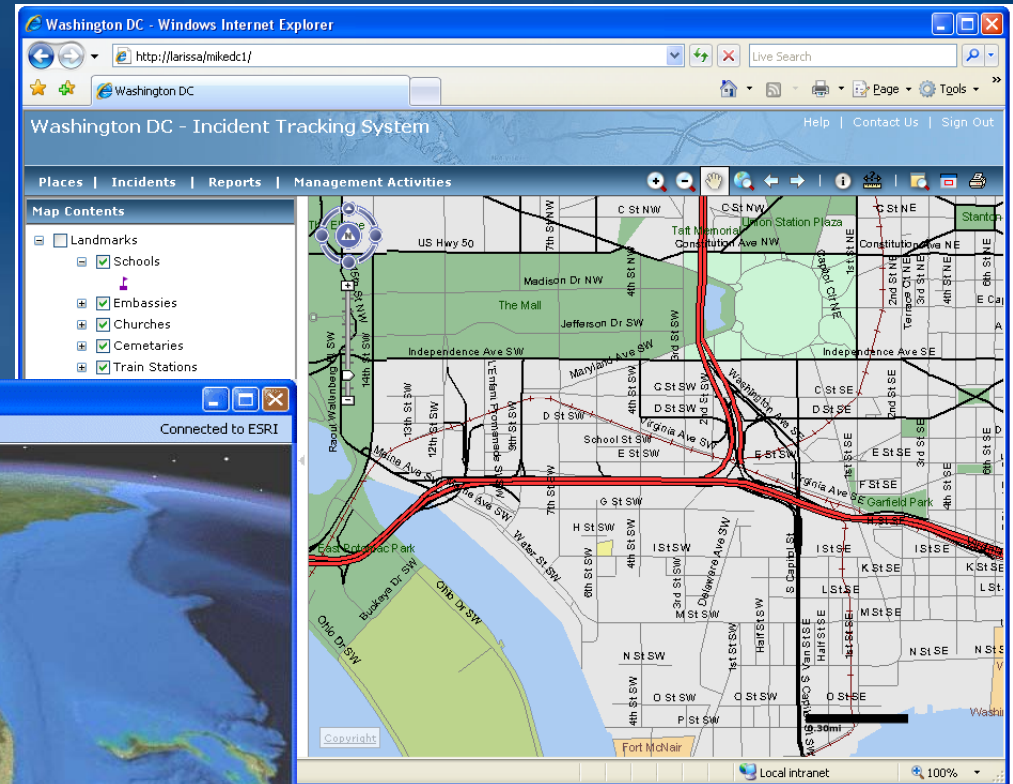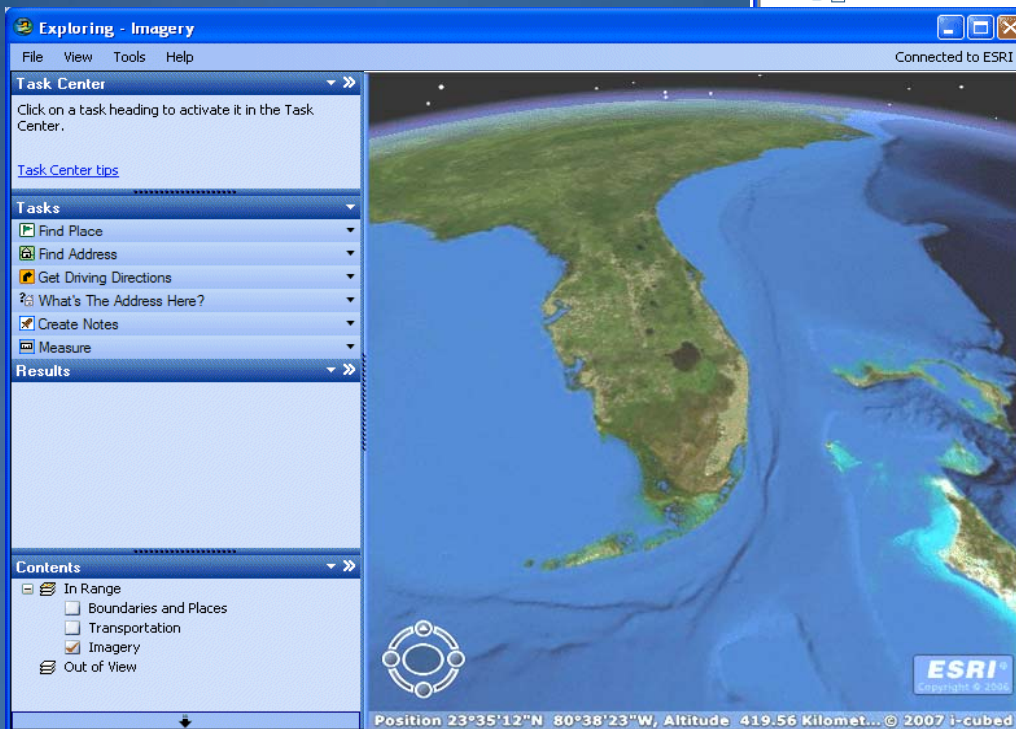- **Make information available over the Web**
    - **Use ArcCatalog**

    - **Use ArcGIS Server Manager**
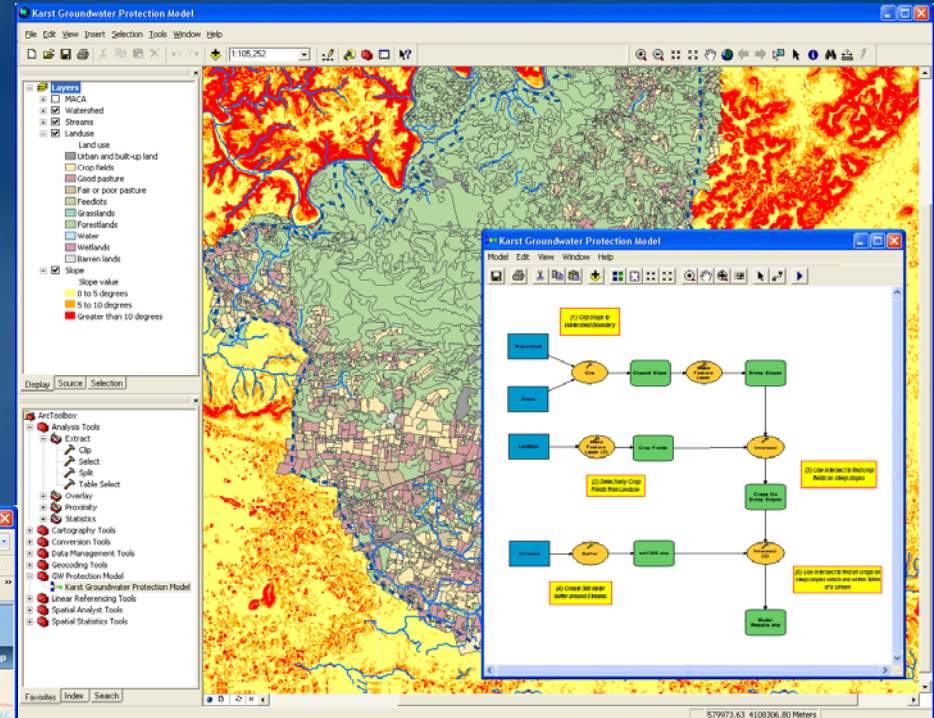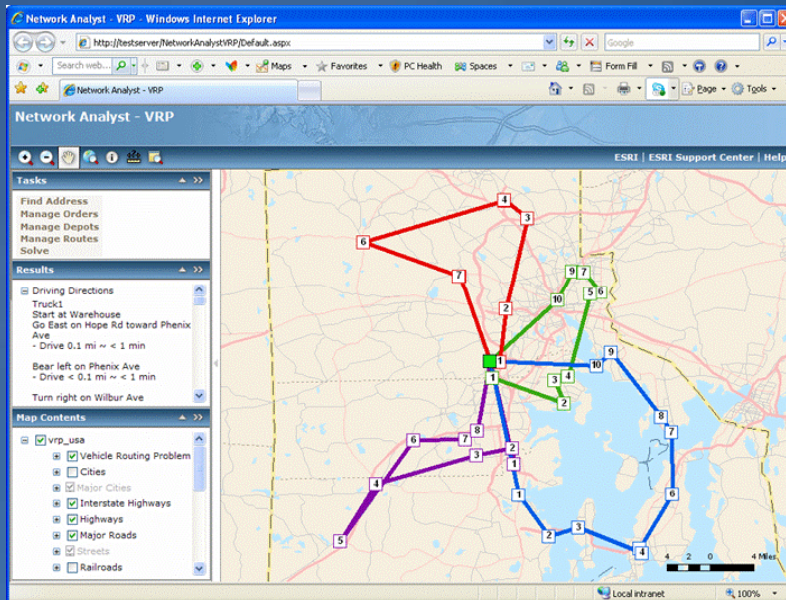
GIS services for visualization

②

- **Map services**
- **Image services**
- **Globe services**

GIS services for geographic analysis

- **Geoprocessing services**
- **Geocoding services**
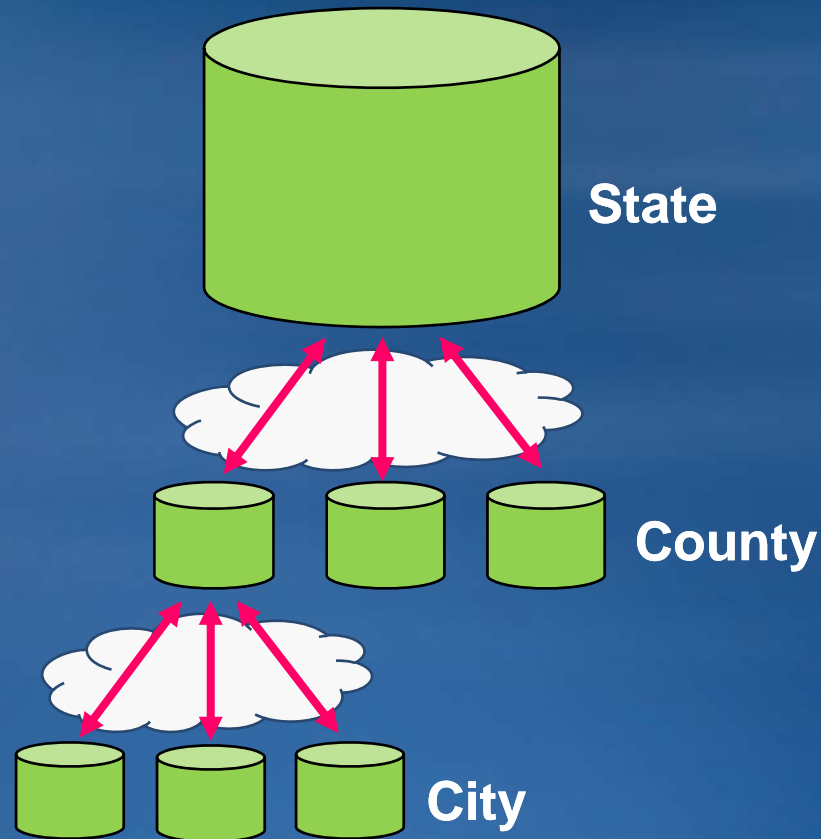- **Network analysis services**
  - **Requires Network Analyst extension**

GIS services for data access

- **Geodata services**
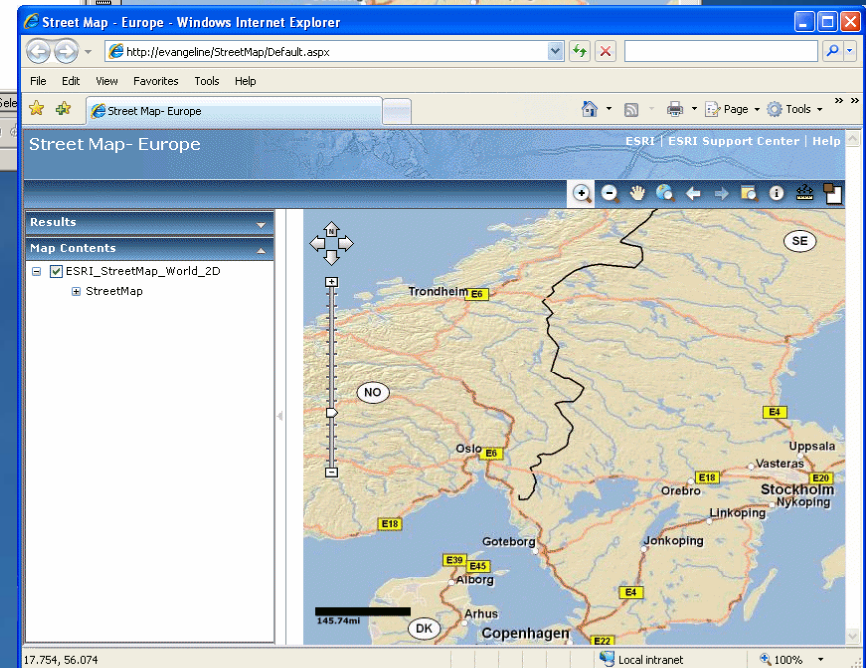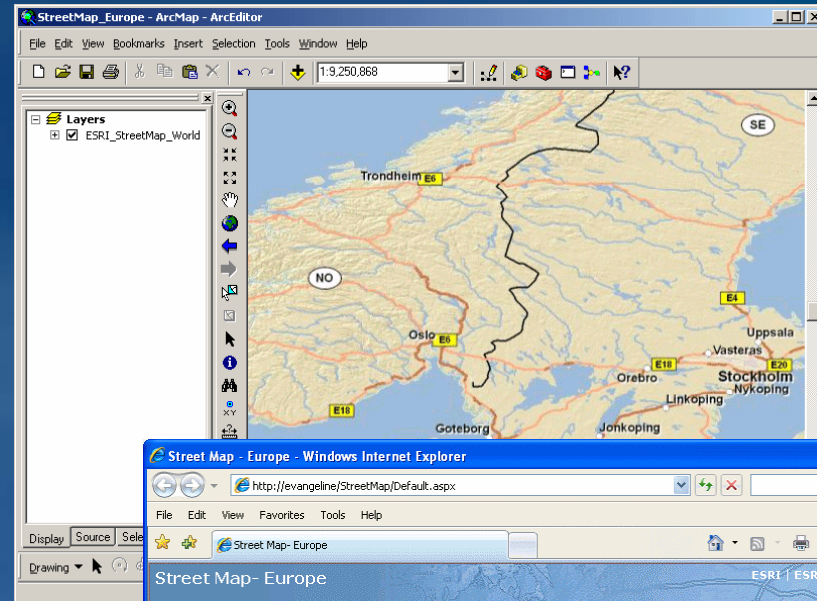 - **Access, copy, edit, and synchronize data over the Web**

State

County

City

Take advantage of public server resources

- **ArcGIS Online**
- **Bing Maps**
- **Google Maps**

Using GIS services

- **Desktop clients**
  - ArcGIS Explorer
  - ArcMap
  - ArcReader
  - ArcGIS Engine application
  - Others…
- **Mobile clients**
  - ArcGIS Mobile application
- **Web browsers**
  - Web mapping application
  - Custom Web applications

# Options for creating Web mapping applications

- **ArcGIS Server Manager template**
  - No programming required
  - Interactively build new Web mapping applications
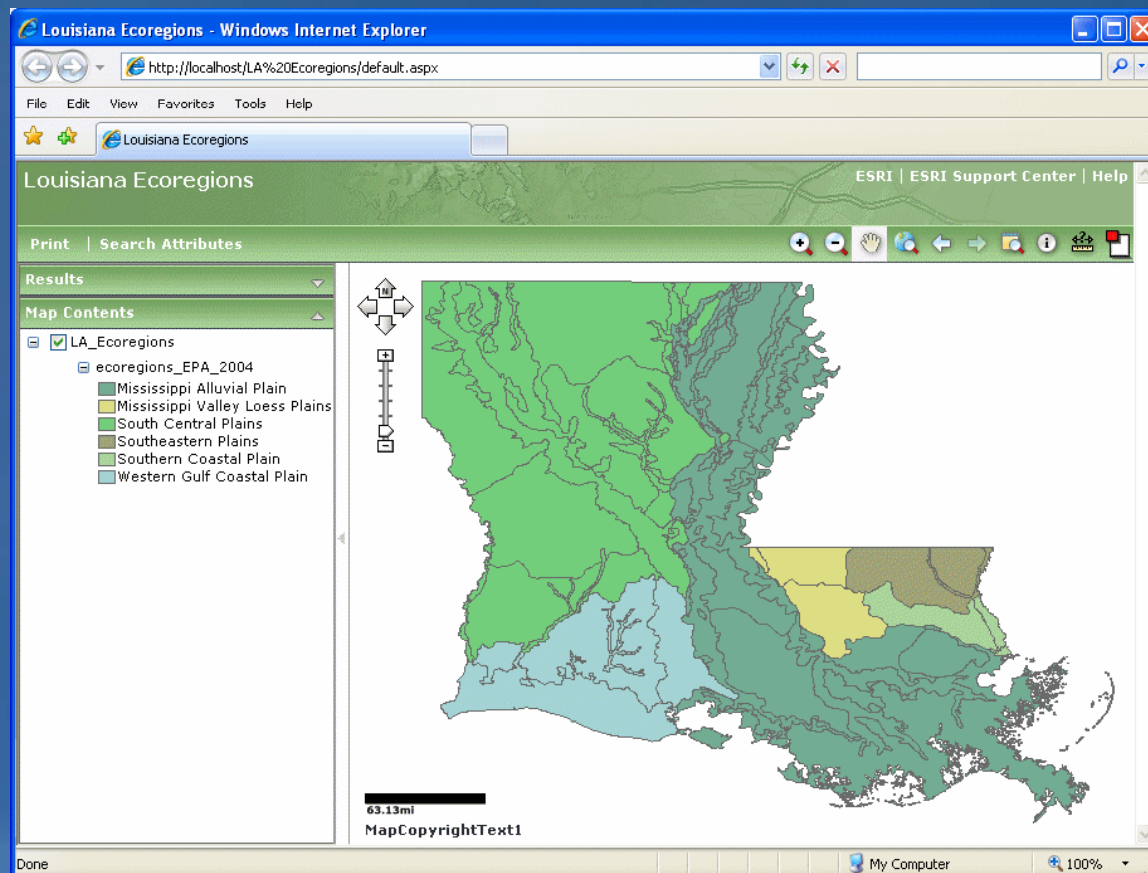
Options for creating Web mapping applications

- **ArcGIS Web APIs**
  - **ArcGIS API for JavaScript**
  - **ArcGIS API for Flex**
  - **ArcGIS API for Silverlight**
- **Use robust samples to begin configuring your own applications**

Visit the Hands on Learning Lab for more information on the ArcGIS API for JavaScript
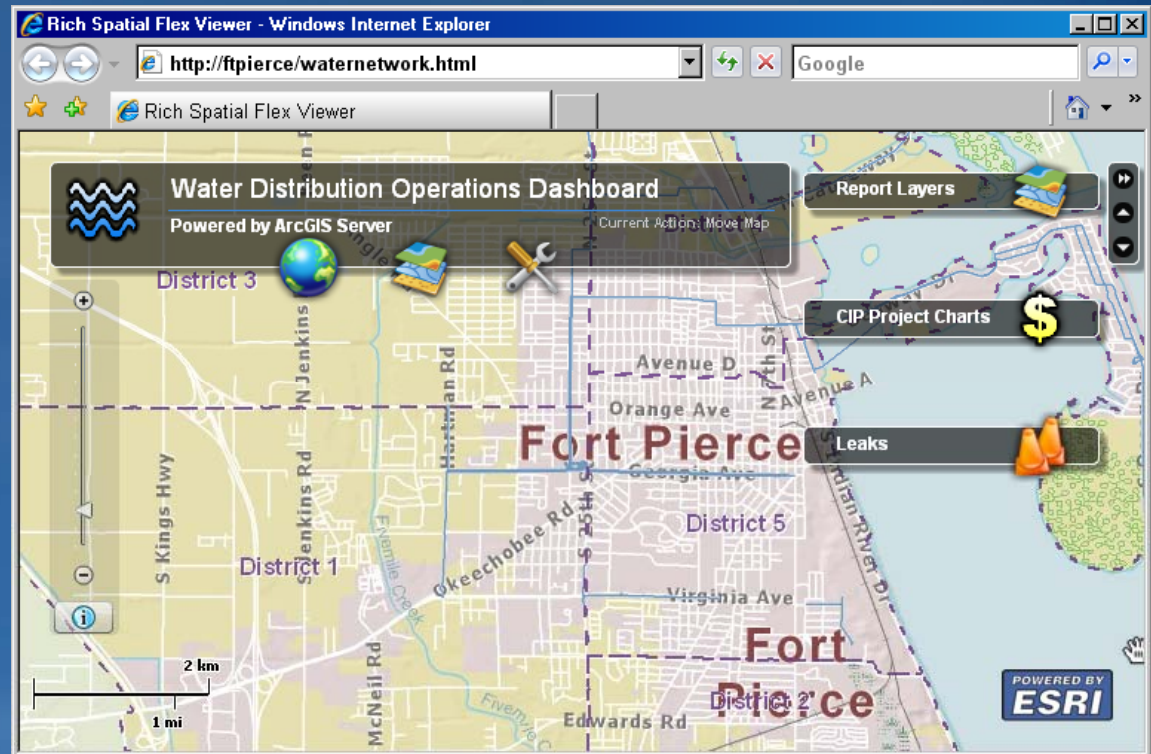
Summary

- **Identified the types of GIS resources that can be served**
- **Implemented the steps to enable Web GIS**
- **Differentiated between types of services**
- **Examined the Web Mapping Application**
- **Discussed ArcGIS Server system components and access requirements**