Introduction to ArcGIS Online: A User-Friendly Tool for Creating Interactive Web Maps

Cary Chadwick &
Emily Wilson

May 8, 2012

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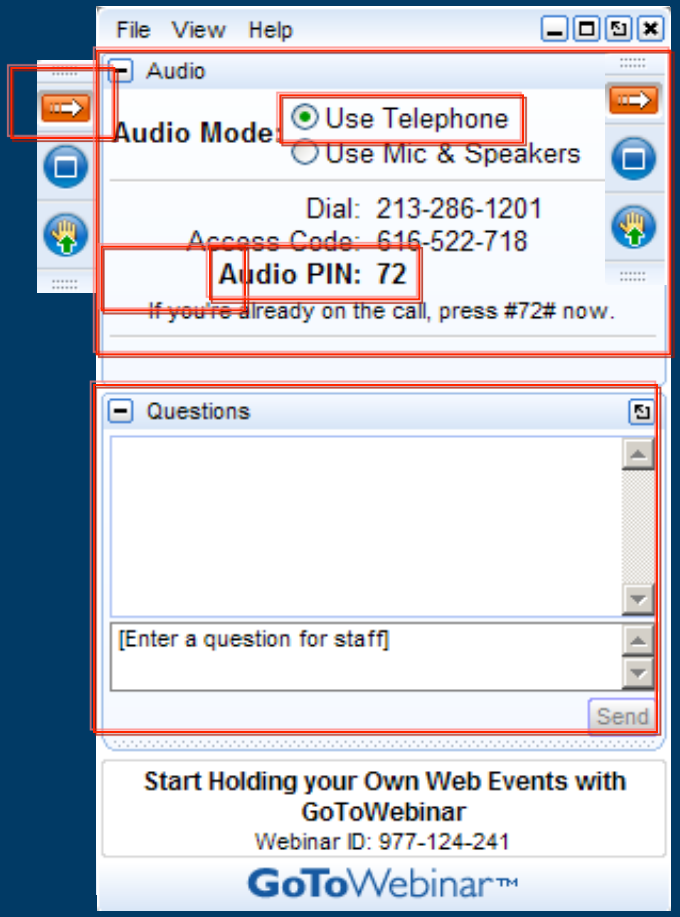
Welcome to the CLEAR Webinar Series!

This is the third webinar in the 2012 series:

- Introduction to Buildout Analyses, Now Online
- LID in CT: A Virtual Tour of Where it's Working, Now Online
- Introduction to ArcGIS Online, May 8
- Community Food Security in CT, July 10
- Climate Change Adaptation, September 11
- Green Infrastructure, October 16
- CT's Changing Landscape Revisited, November 13

Suggestions? Email clear@uconn.edu

How to Participate in the Webinar



- Open and close your Panel
- View, Select, and Test your audio
- Submit text questions
- Pause for Q&A
- Polling
- Recording http://clear.uconn.edu
- Watch out for awkward pauses

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Center for Land Use Education and Research

CLEAR's Mission:

To provide information, education and assistance to land use decision makers in support of balancing growth and natural resource protection.

University of Connecticut

- College of Agriculture, Dept. of Extension
- College of Agriculture, Dept. of Natural Resources
- Connecticut Sea Grant

CLEAR Programs

- Connecticut NEMO
- National NEMO Network
- Geospatial Training Program
- Land Use Academy
- Extension Forestry Program
- Lab for Earth Resource Information Systems
- Green Valley Institute

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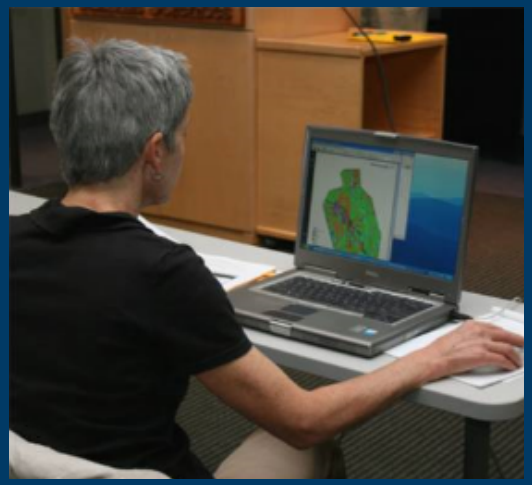
CLEAR's Geospatial Training Program

Hands-on Short Courses in Geospatial Technologies:

- Geographic Information System (GIS)
- Global Positioning System (GPS)
- Interactive Web Mapping (ArcGIS Online, Google Maps, Google Earth)



http://clear.uconn.edu/geospatial

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Webinar Agenda

1. Introduction to Web Mapping
2. Move over Google, ArcGIS Online is here!
3. The ArcGIS Online Map Viewer
4. ArcGIS Explorer Online
5. Sharing Maps, Embedding and Creating Web Mapping Applications
6. Extras: Esri Smartphone App, Resources, Training
7. Demos and Q& A

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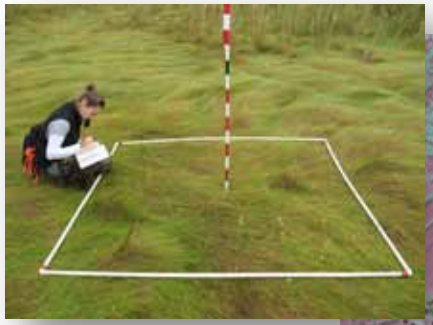
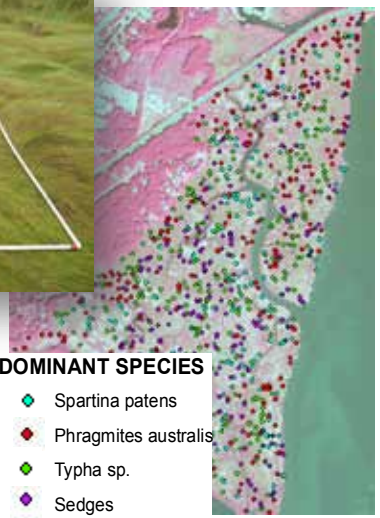
Interactive Web Maps = "Mashups"

Mashups combine separate, stand-alone services or data sources to create a new, value-added product

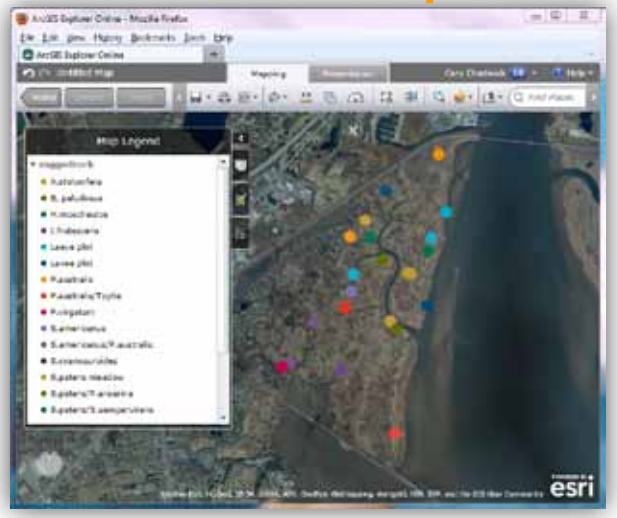
Online Mapping Tool



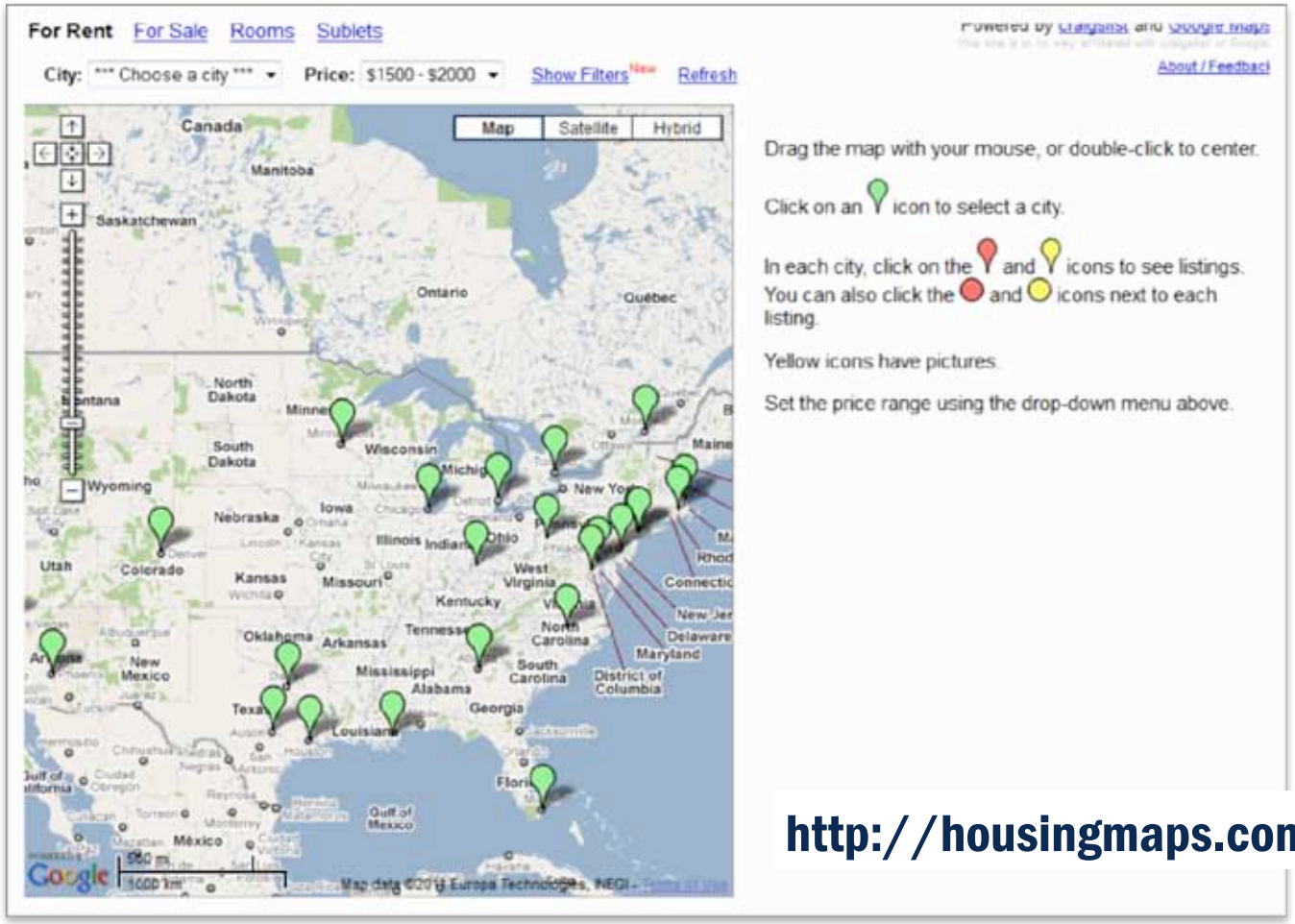
Your Data



Mash them Up!



The World's First Mapping Mashup



craigslist

+

Google maps

http://housingmaps.com

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The Mashup Scale of Difficulty

Rapid Mashup Development Tools

Basic Web Maps
WYSIWYG interfaces

Customized Data Layer Integration

Fully Customized Web Maps

Anyone can do it!

Trending Toward the Techies

Range of Techniques

ArcGIS Online Map Viewer
ArcGIS Explorer Online
Google Maps My Maps
Google Fusion Tables

ArcGIS Online Web Apps
ArcGIS Public Maps Gallery
Customized KML
Out-of-the-box API maps
Creating Map Services

Mobile Mapping Apps
Customized Mapping APIs,
custom HTML, JavaScript,
Administering ArcGIS Server,
Database Integration

**touched on in this webinar*

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Audience Poll

How would you rate your level of GIS expertise?

Homer

Bart

Maggie

Marge

Lisa

What does GIS stand for anyway??

I'm a GIS Master

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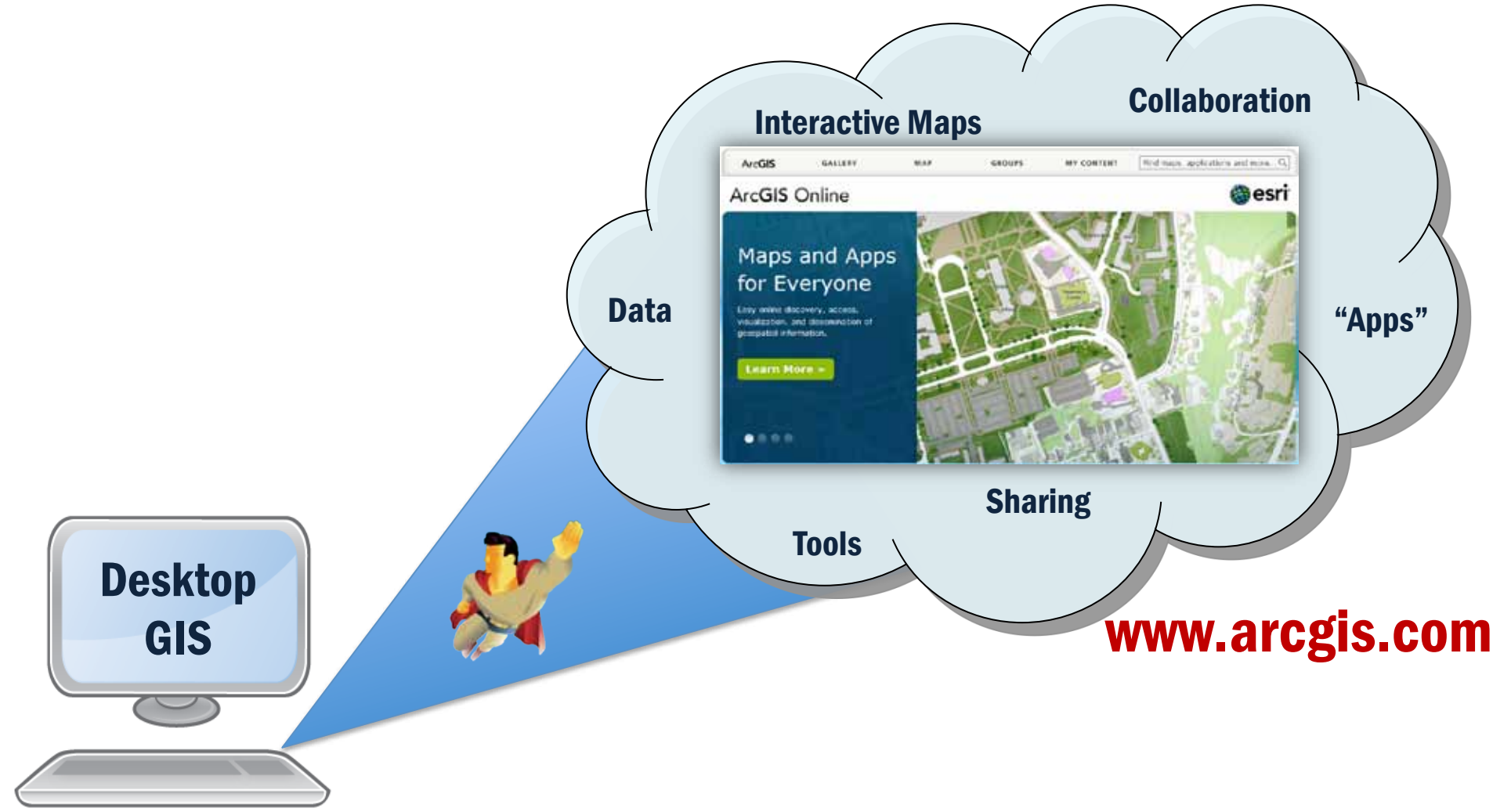
So Why Not Google?

Google paved the way for online maps. But…

ArcGIS Online has a vast GIS Kingdom behind it (Esri)

Esri's ArcGIS Online takes ArcGIS to the Cloud



So What Exactly IS ArcGIS Online?

Esri says, "ArcGIS Online is a free, cloud based content management system for working with geographic information"

We say, "ArcGIS Online is a free, simple to use tool for creating interesting, interactive web maps by combining your own data with other public map resources. And, it's wicked cool."

Key Functions:

- Create and store web maps
- Two separate web mapping tools for developing maps
- Web-enable your desktop GIS data
- Share maps, data and applications
- Find relevant basemaps, data and configurable GIS resources
- Collaborate with people all over the world
- Manage content and user groups
- Smartphone enabled

esri

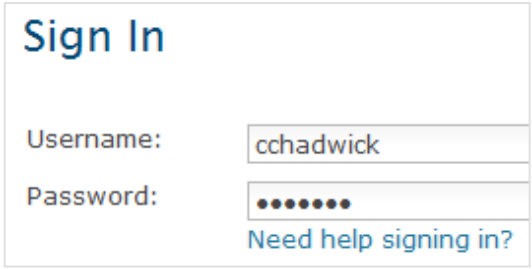
Accessible through a website or mobile device

What You Need to Get Started

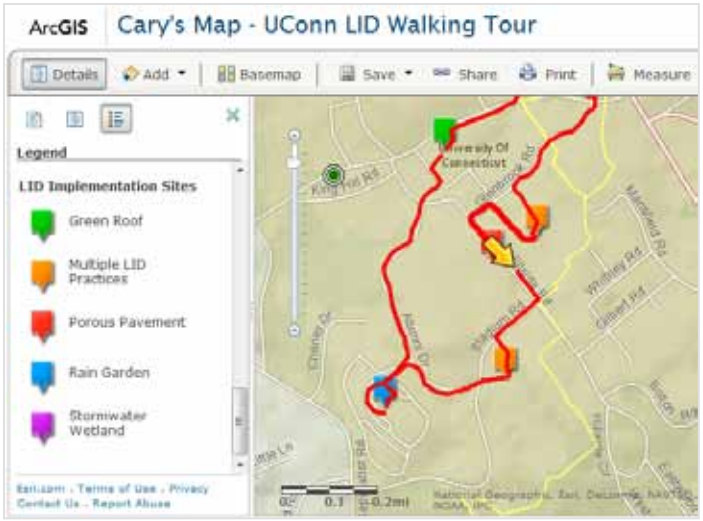
1. Internet Access

arcgis.com

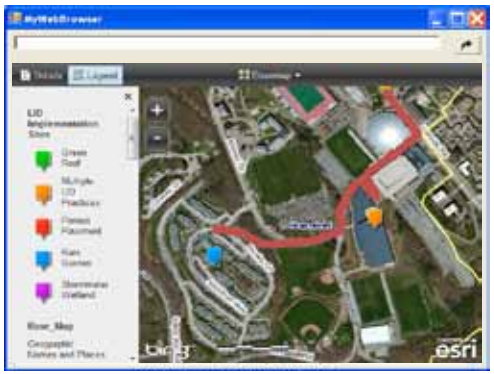
2. A Free Esri Global Account



3. Something to Map!



Helpful but not necessary



Supported Formats for ArcGIS Online

Supported Map Types:

- ArcGIS Online Web Map
- Map Package (.mpk)
- ArcMap Document (.mxd)
- ArcGlobe Document (.3dd)
- ArcScene Document (.sdx)
- ArcReader Document (.pmf)
- Tile Package (.tpk) (ArcGIS 10.1)

Supported Map Layers

- Feature Services
- Map Services
- Image Services

From your ArcGIS Server or hosted via ArcGIS Online Subscription services (coming soon)

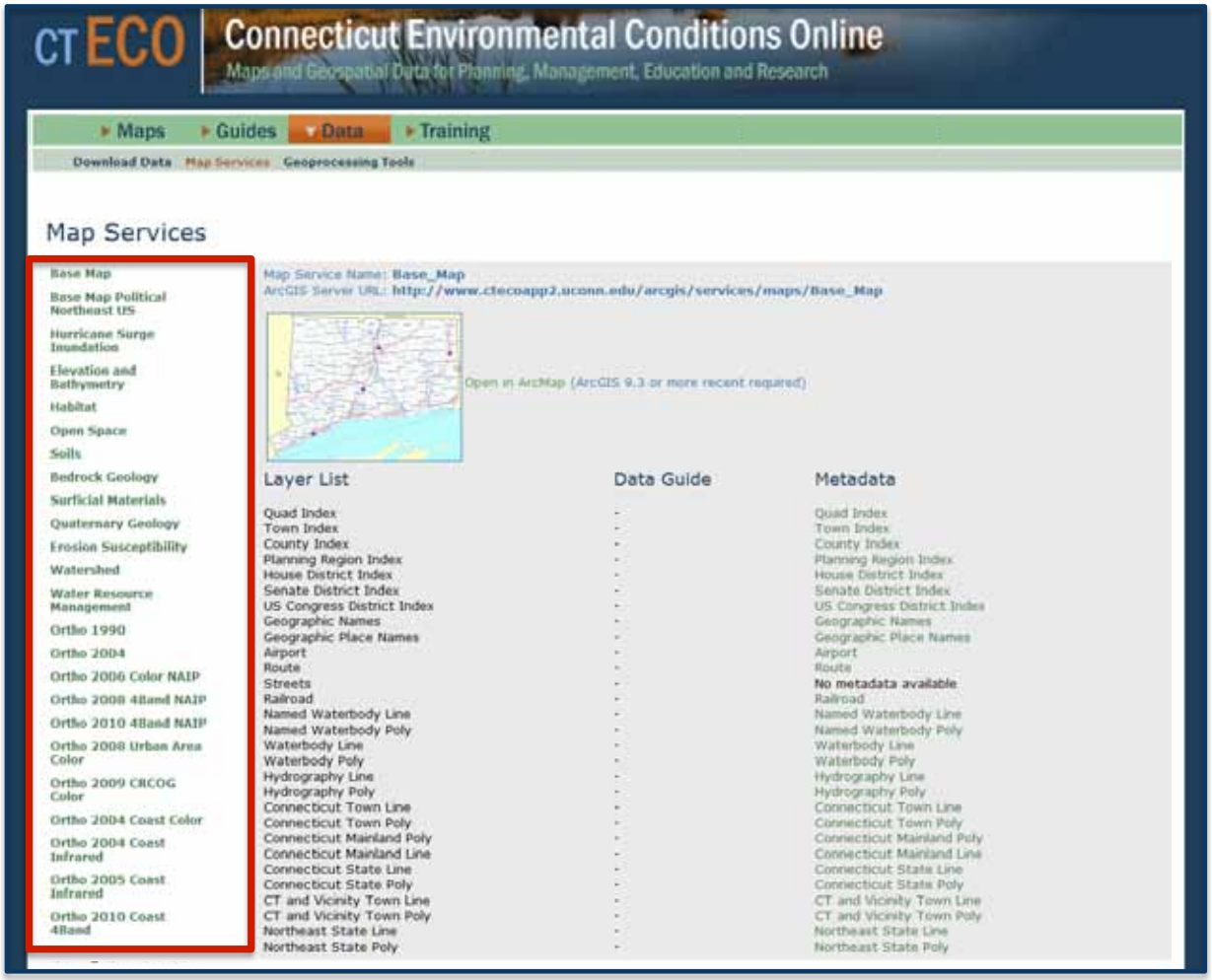
- KML
- WMS
- Shapefile (.zip)
- Delimted Text (.csv, .txt)
- GPS (.gpx)
- Layer packages (.lpk)
- ArcGIS Explorer layer (.nmc)
- “Map notes” layer (stored in an ArcGIS Online web map)

You Don't Always Need Your Own Data

Map Services are Everywhere!

Connecticut Environmental Conditions Online (CT ECO)

http://www.cteco.uconn.edu

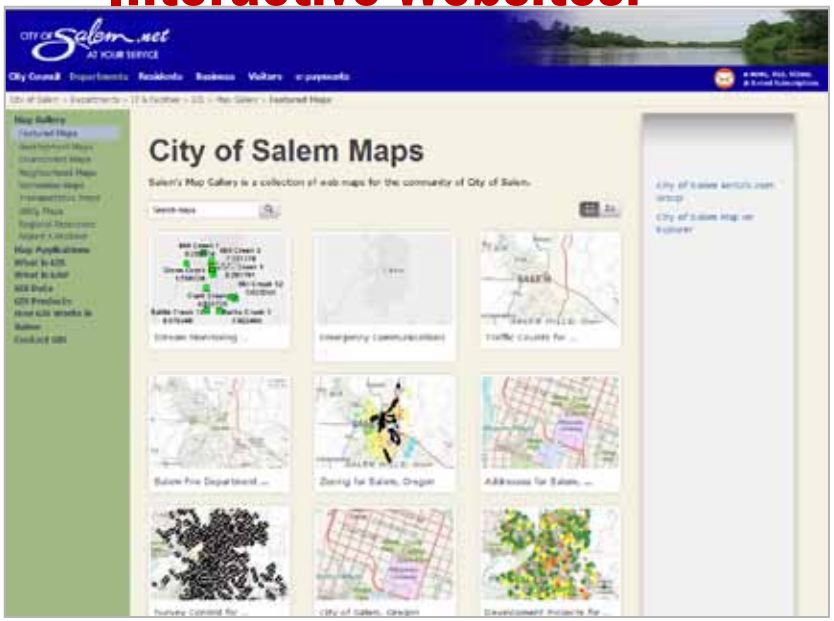


End Products

Web Maps!

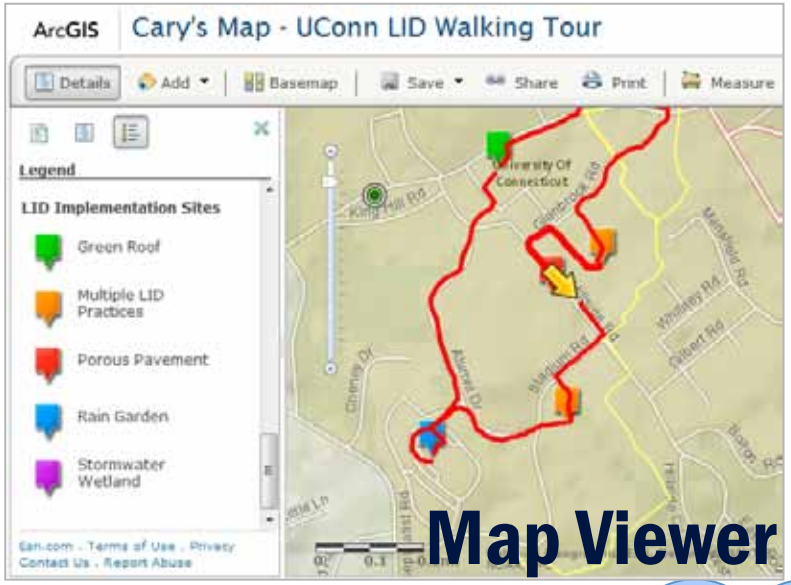
Web enabled content:

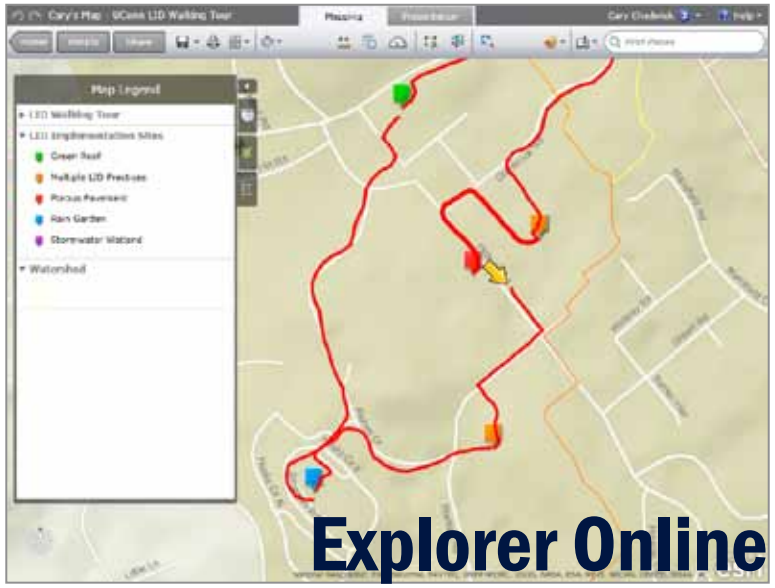
Interactive Websites:



Deploy and Distribute Data

Two Different Mapping Applications





ArcGIS Online has TWO mapping tools:

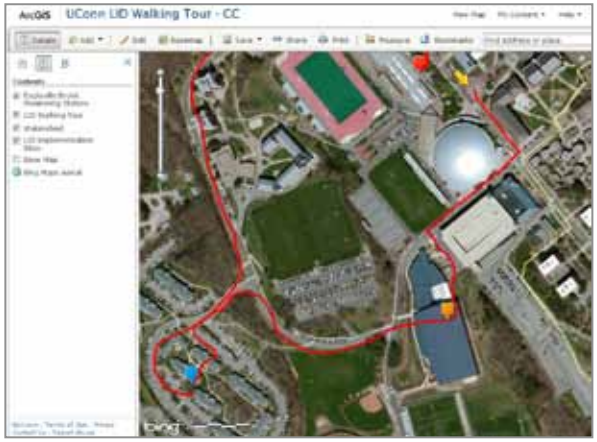
- The Map Viewer
- Explorer Online

Map Description Page

OK, what's the difference?!

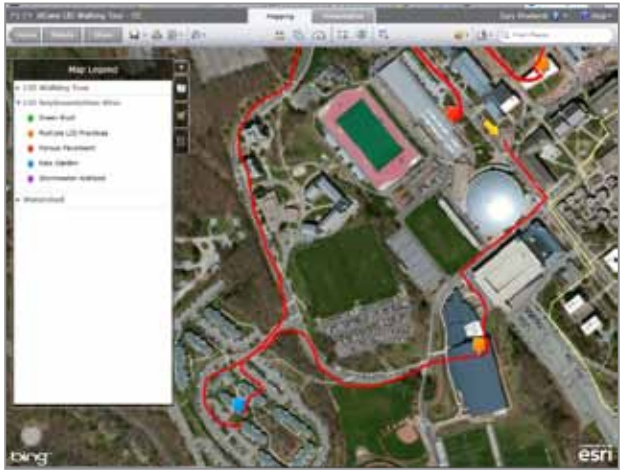
ArcGIS Map Viewer:

- Simple, user friendly interface
- Provides access to basemaps and map services
- User can create new data, customize display
- Built on Javascript API (can use on iPhone/iPad)



ArcGIS Explorer Online:

- More "gadgets"
- Slicker interface
- Presentation mode
- More GIS functions
- Uses Microsoft Silverlight browser plugin (can't use on iPhone/iPad)



ArcGIS Online Map Viewer - Key Functions

- Built in basemaps, searchable data layers
- Built in tools:
  - measure features
  - bookmark locations
  - address/placename search
  - customization tools (colors, pop-ups, etc.)
  - print and share
- Add data from multiple sources:
  - layer from file (SHP, GPX, TXT, CSV)
  - layer from web (map service, WMS, KML, CSV)
  - search for layer (published by organizations that have made their map services accessible)
  - editable layer (map notes)
- Easy to use, less "buggy" than ArcGIS Explorer Online
- Works on iPad/iPhone. Yay!

Live DEMO: The ArcGIS Online Map Viewer

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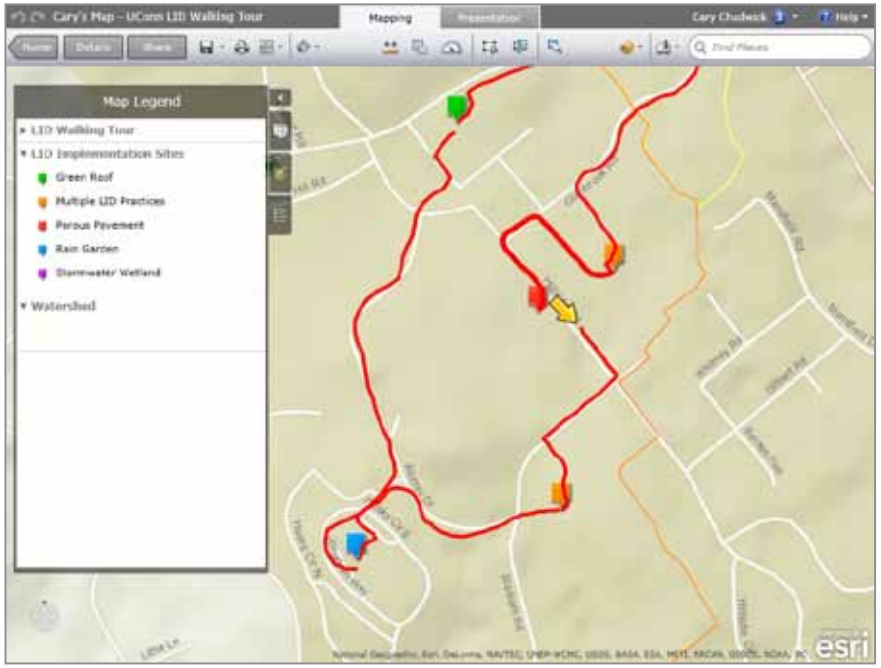
ArcGIS Explorer Online- Key Functions

- Similar to the Map Viewer:
  - basemaps
  - basic tools and customization
  - add data from multiple sources
  - print and share
- Additional Functions:
  - Perform data queries
  - Add “Dashboard Gadgets”
  - Presentation Mode
  - “slicker” interface



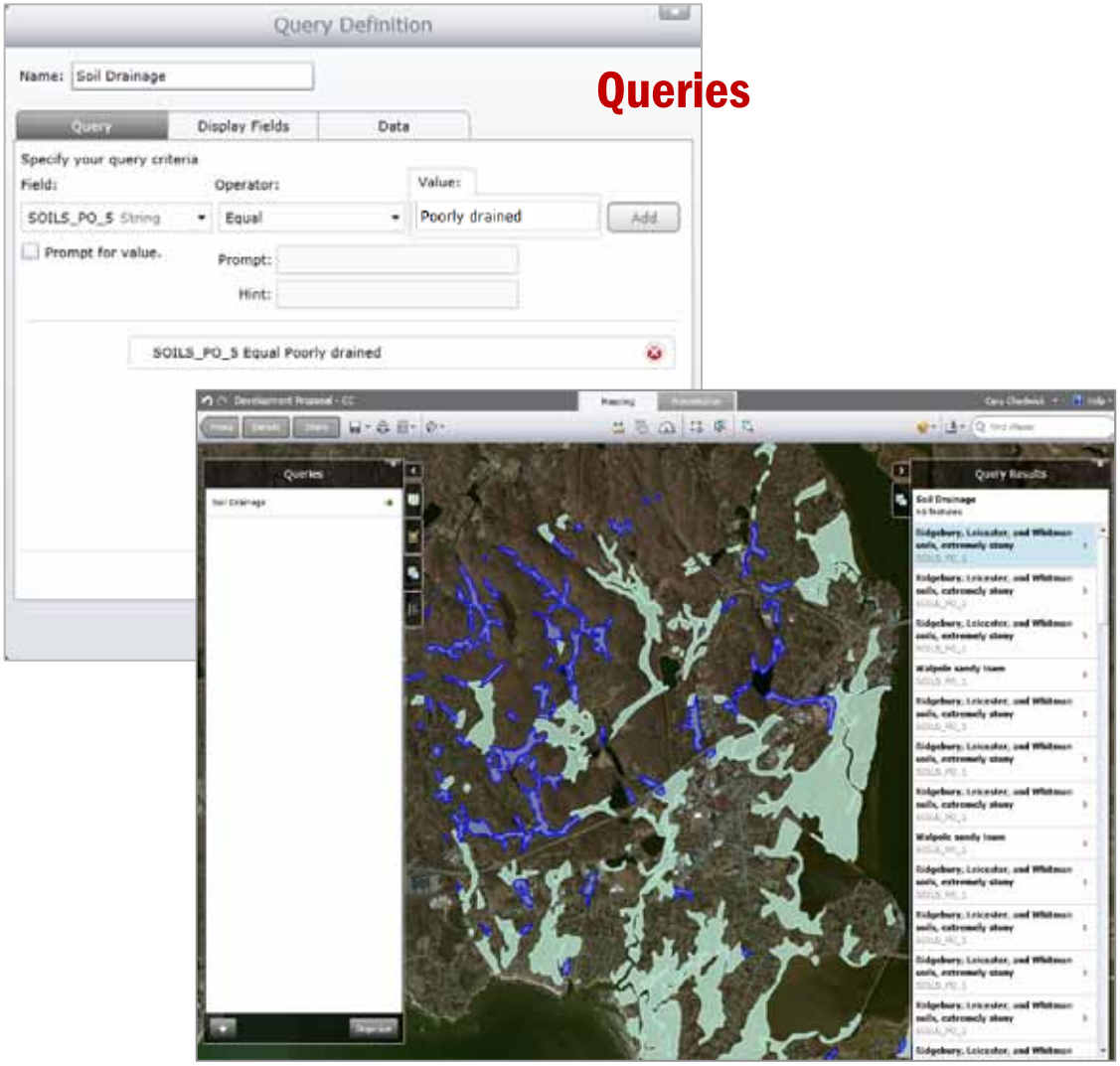
Important Notes:

- Requires the Microsoft Silverlight Browser Plugin
- Generally found to be more “buggy” than the Map Viewer

The ArcGIS Explorer Online GUI

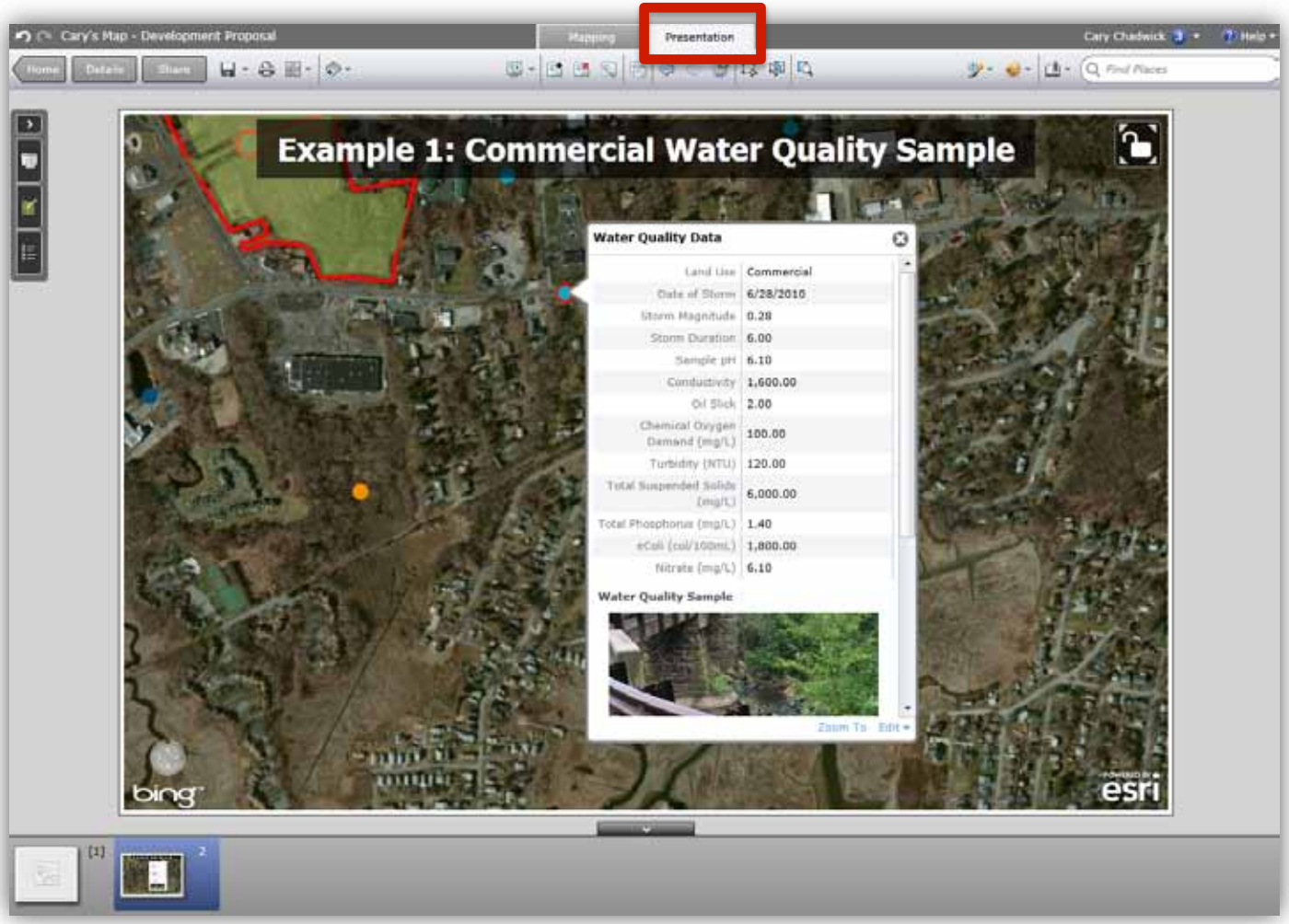
Other Nifty Functions – Queries and Gadgets

Queries



Dashboard Gadgets

Other Nifty Functions – Presentation Mode



- Create “Slides”
- Save Presentation
- Run Presentation
- Embed Presentation

Live DEMO: ArcGIS Explorer Online

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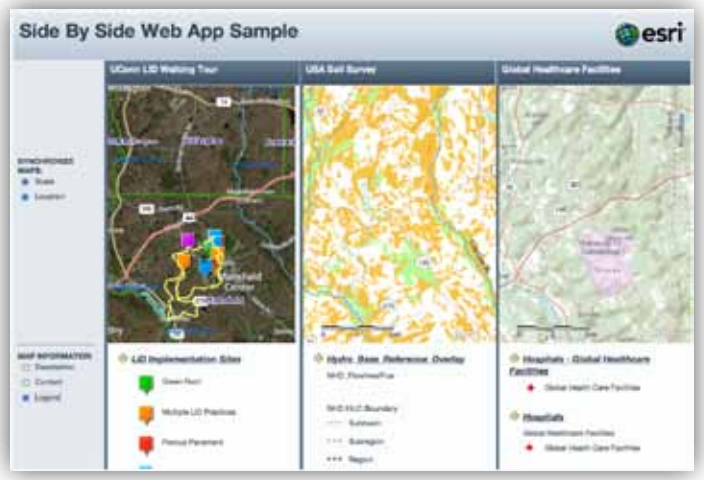
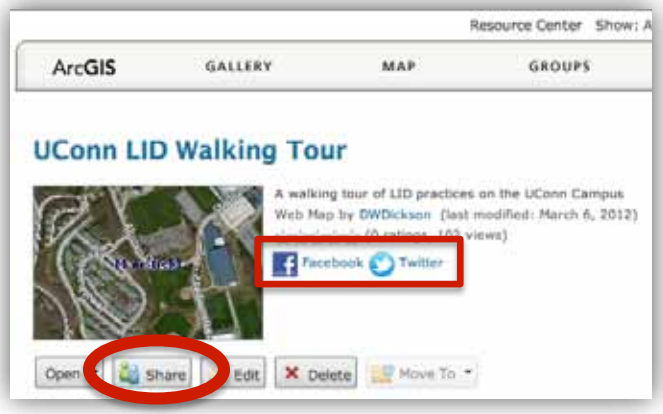
ArcGIS Online Groups, Sharing & Publishing Tools

Ways to Share Your Maps:

- Make your map "public"
  - Searchable, embeddable, tag-based
  - Create and participate in Groups
- Share via URL, Social Media, email
- Embed in third party site:
  - Via HTML code snippet
  - Hosted or downloadable web application template
  - ArcGIS Online Map Gallery template

(http://tinyurl.com/PublicMapGallery)





Live DEMO: Sharing Techniques

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Extra Food for Thought

- ArcGIS Online for Organizations
- Esri Smartphone App
- Resources and Training
- Contact Info
- Q&A

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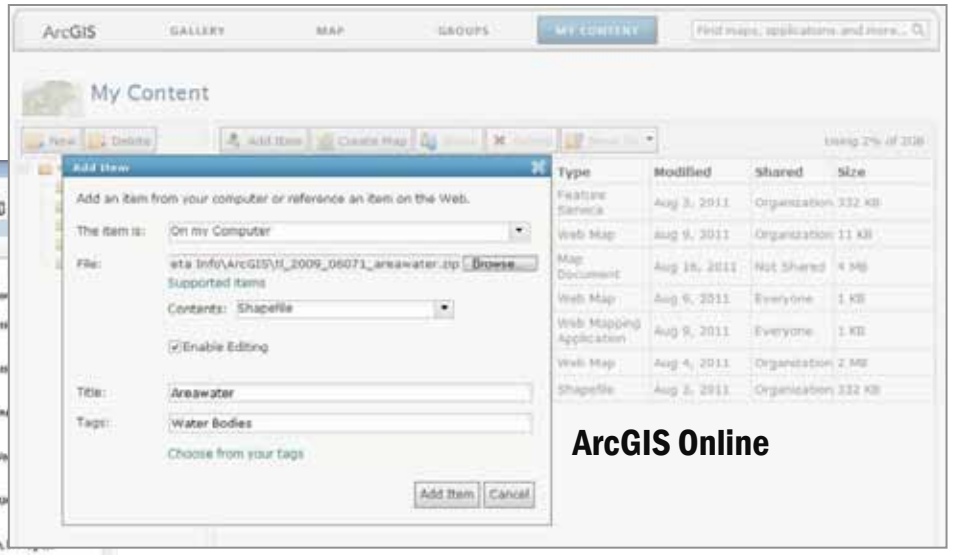
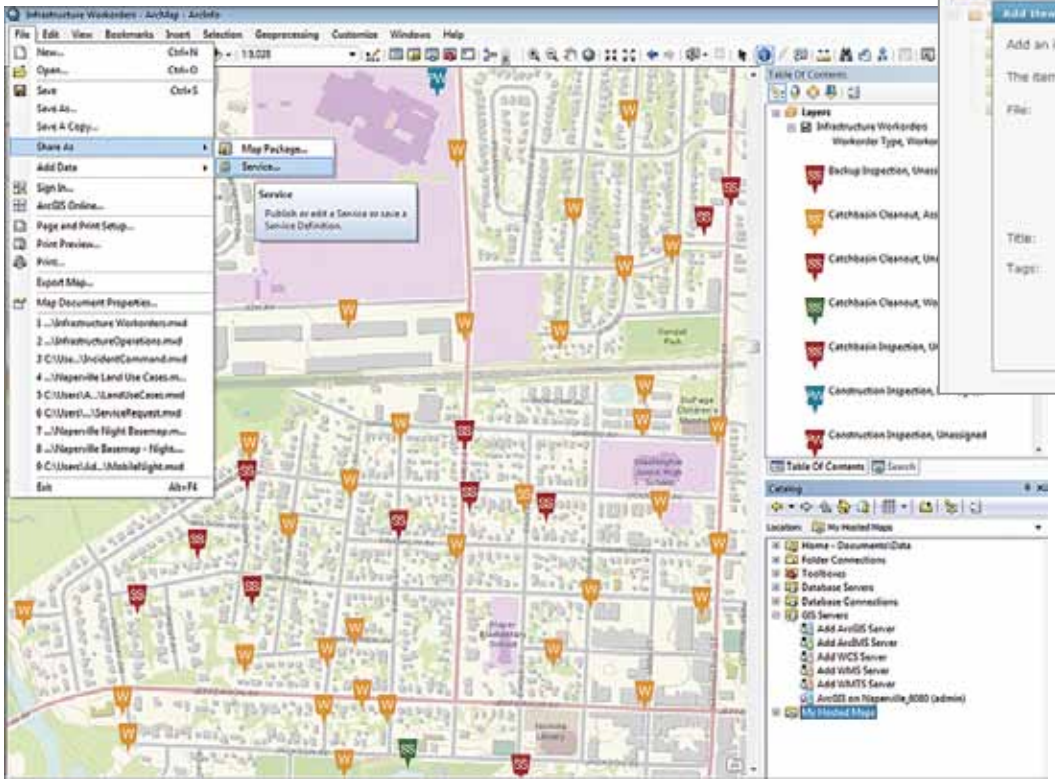
Subscription Based Services – Coming Soon!

ArcGIS Online for Organizations



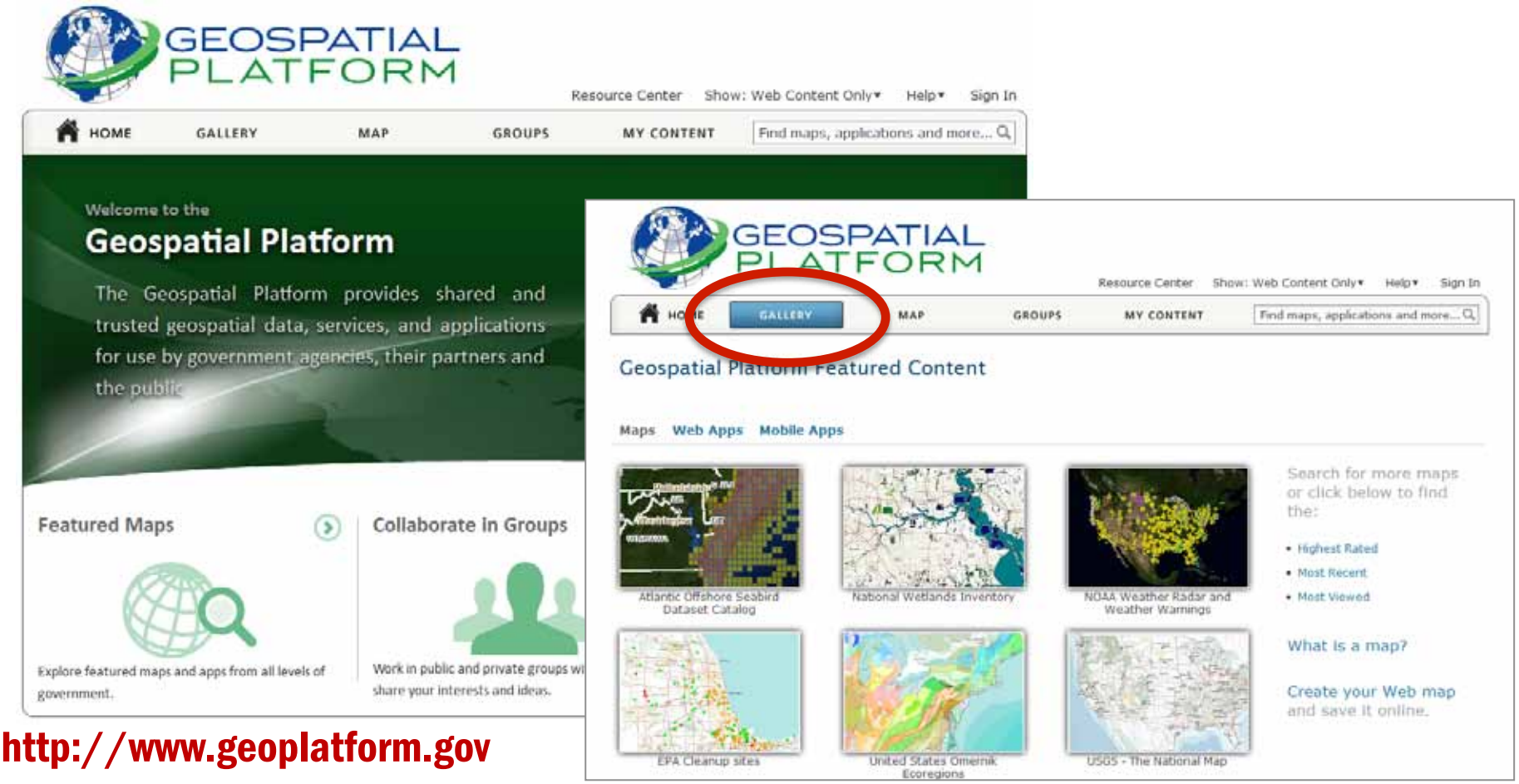
ArcGIS Online



ArcGIS Desktop

- Publish map services without need for ArcGIS Server software
- Manage user roles, access and security
- Personalized ArcGIS Online homepage and URL
- Beta Fall 2011, release Q2 2012?
- Cost?

Example: Geospatial Platform



http://www.geoplatform.gov

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The ArcGIS Smartphone App

- Access map galleries
- Navigate
- Search, identify, measure
- Collect, modify, share data
- Develop custom applications

Available in Android Market

Available on the App Store

for Windows Phone 7

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The ArcGIS Smartphone App

- **Access map galleries**

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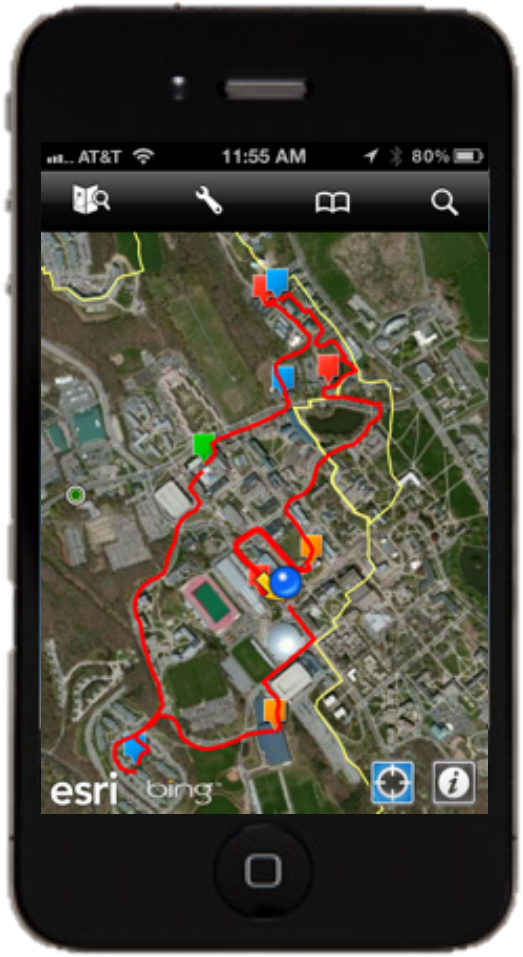
The ArcGIS Smartphone App

- Access map galleries
- Open saved maps



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The ArcGIS Smartphone App

- Access map galleries
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- Measure

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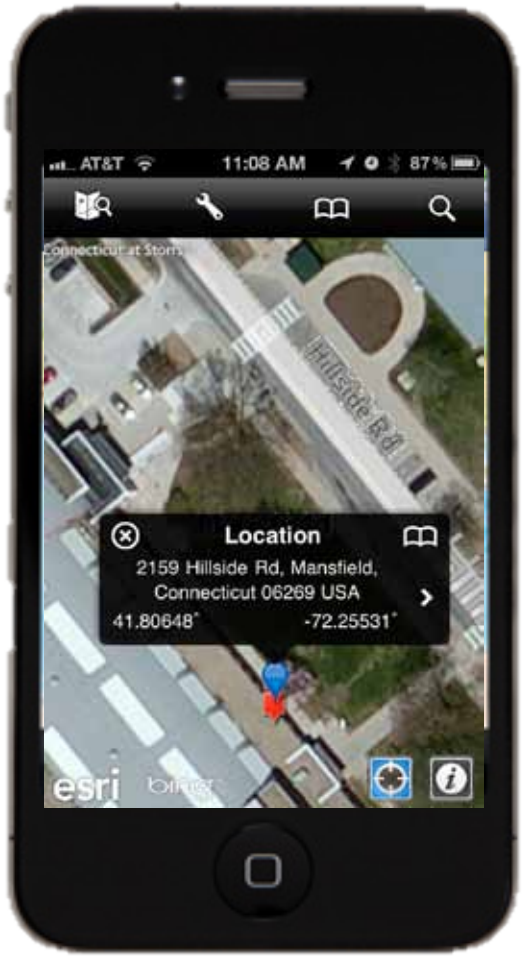
The ArcGIS Smartphone App

- Access map galleries
- Open saved maps
- Navigate
- Measure
- Search and Identify Features



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The ArcGIS Smartphone App

- Access map galleries
- Open saved maps
- Navigate
- Measure
- Search and Identify Features
- Collect, Modify and Share Data

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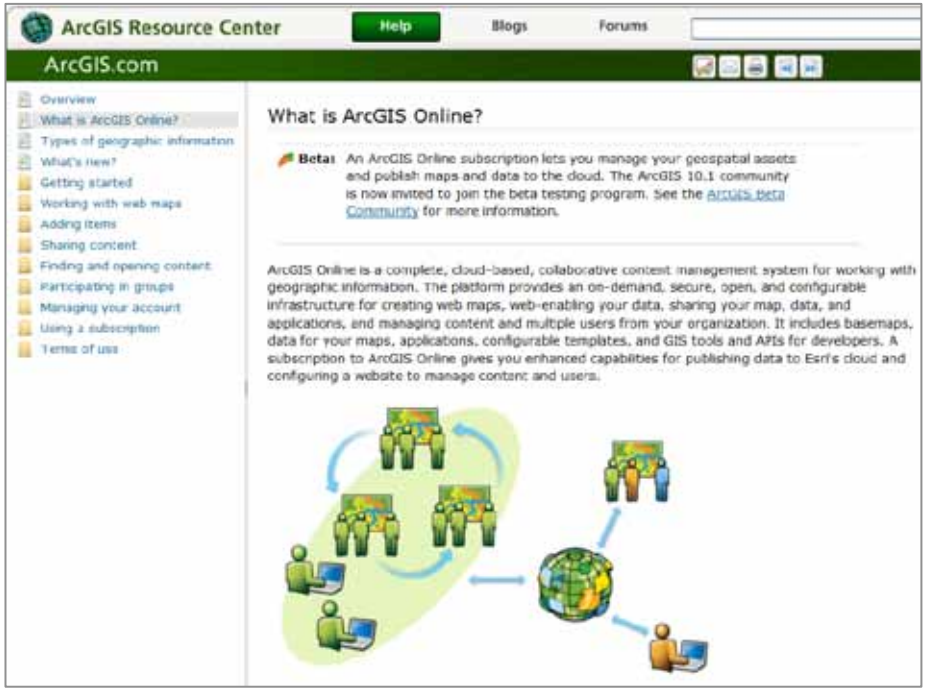
Helpful Resources

http://tinyurl.com/ArcGISOnline

1. The ArcGIS Online User's Guide
2. The ArcGIS Online Blog
3. The ArcGIS Online Forum
4. US!



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Hands On Training

UConn CLEAR Geospatial Training Program

Using ArcGIS Online to Create and Share Interactive Web Maps

June 7th

9 AM-4:30 PM

Haddam, CT

clear.uconn.edu/geospatial

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Q&A

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