Agenda

What are we going to cover today?

- Short set of slides
- Exercises 1 and 2
- Break 3:00 – 3:15 PM
- Exercises 3 and 4
  - Come back to the classroom by 4:15 PM after collecting data
Web GIS Extends GIS Across Organizations Throughout Communities
ArcGIS Platform
Extends GIS Across Organizations
Throughout Communities

Providing Mapping, Analysis, Data Management, and Collaboration

Available on the Open Web . . . and On-Premises
Data Collection
What is the problem we are trying to solve

Organizations need an easy way to build or maintain a GIS of authoritative data
- Some of that data is collected from scratch in the field
- Some of that data comes from other sources (surveying, photogrammetry, digitizing)
  - That data needs to be validated by ground truthing
- Some of that data may already exist and simply needs to be assessed and updated
  - Condition of assets

In the “past” this was done with notebooks, clipboards, and maps
- Can be error prone, and slow down the turn around time to make that data accessible and useful to your organization
Collector for ArcGIS an Overview

What can Collector for ArcGIS do?

- Collect and update data
  - Using your location or the map
  - Fill out forms
  - Capture media (pictures, videos)
  - Additional tools to help your field workforce (measure, search, basemaps, directions)

- Types of use
  - Collect and inspect assets
  - Ground-truth their GIS data
  - Make observations/conduct surveys
  - Replace paper-based forms/process
  - Spatial awareness in the field
Collector for ArcGIS an Overview

How can I make a map for collector?

- Offline layers needs to have sync enabled
- Tips: leverage domains, ability to capture editor and day/time info
- Choose symbology for the end user (sunlight)
Collector for ArcGIS an Overview

How can I make a map for collector?

- Add your layers to your map
- Configure the map: forms, symbology, tools
- Share to your field users

- Only show the fields in the form that the end user needs
- Turn off tools the user won’t use to do their job (measure, basemap etc)
- Use scale dependency to hide read only layers till they’re needed
Working with offline
Can you hear me now?

Offline is a great way to work in areas of no connectivity

- Requires
  - A sync enabled feature service either hosted in AGO or from your own server (10.3.1 recommended)
  - Tiled map service (basemap) with export tiles enabled or a previously created/side loaded TPK

- Sync frequently when you have access to a stable connection
  - Reduces the risk of timeouts
  - Attachments can add up and cause sync to take a while
Working with relationships

- Relationships are incredibly powerful for collecting information in the field
- Collector workflow is inspection oriented
- Requires ArcGIS Server 10.3 or higher or AGO hosted services
- We support both feature and table based relationships
  - One to Many and One to One
  - Collection of a new related record has to start with a feature, it cannot start directly from a table
Tips and Tricks
Avoiding pot holes along the way

• Maps in collector need an editable layer and to be shared through a group to show up in collector
• Do not use the same layer twice in a map if you intend to use it offline
• Items in ArcGIS Online need to have unique names – for example, you can’t have two web maps called “Field Collection”
• Test your symbology outside before sending people to the field
Other Apps to Explore
Map or Form Centric

• **Survey 123**
  - Form based collection based on XLS Form authoring workflow
  - Supports in-form logic
  - Available for iOS/Android/Windows Mobile, Win/Mac/Linux Desktop
  - Online or disconnected
  - Requires named user

• **GeoForm**
  - HTML5 form input – works on any browser
  - Connected environment only
  - Allows anonymous access

• **Crowdsource Reporter, Manager, Polling**
  - Reporter – app template, allows users to submit problems or observations, smartphone optimized. Authenticate with social media. Allows anonymous access.
  - Polling – app template, allows users to comment on plans or proposals, tablet/desktop optimized.
  - Manager – app template for back office, review entries, tablet/desktop optimized. For named users only.
<table>
<thead>
<tr>
<th>App</th>
<th>Works Offline</th>
<th>Data Collection Style</th>
<th>Captures New Data</th>
<th>Edits Existing Data</th>
<th>Smart Forms</th>
<th>Anonymous Access</th>
<th>Platforms</th>
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<tbody>
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Let’s get collecting!!