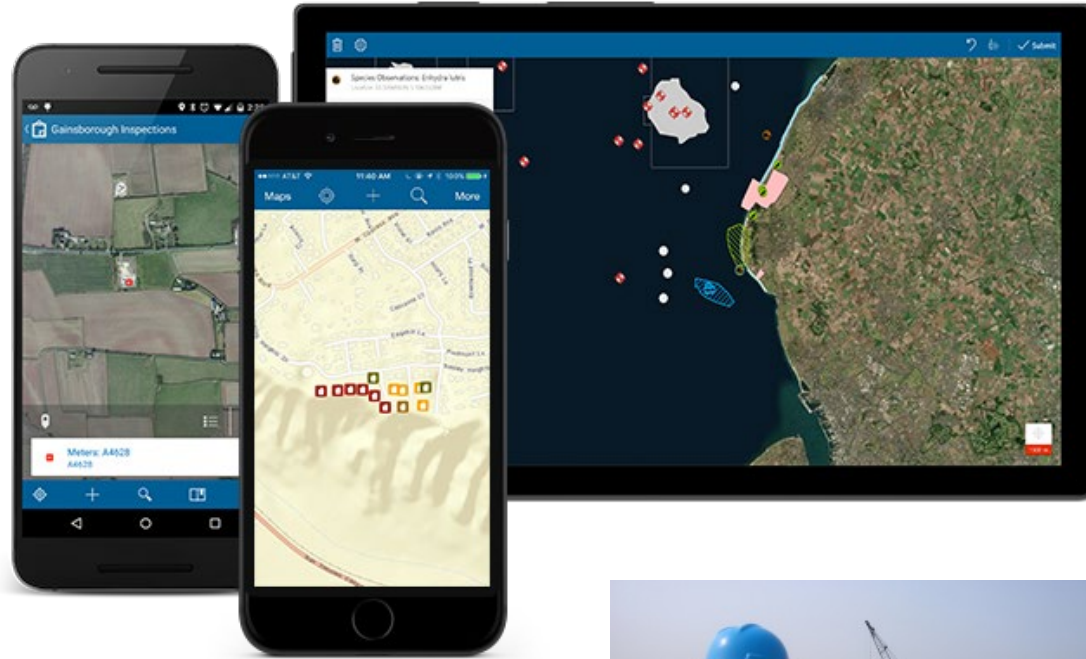


# Efficient Field Data Collection with GIS



- ▶ **Clemson Center for Geospatial Technologies**
- ▶ [www.clemsongis.org](http://www.clemsongis.org)



# Workshop Objectives and Outline

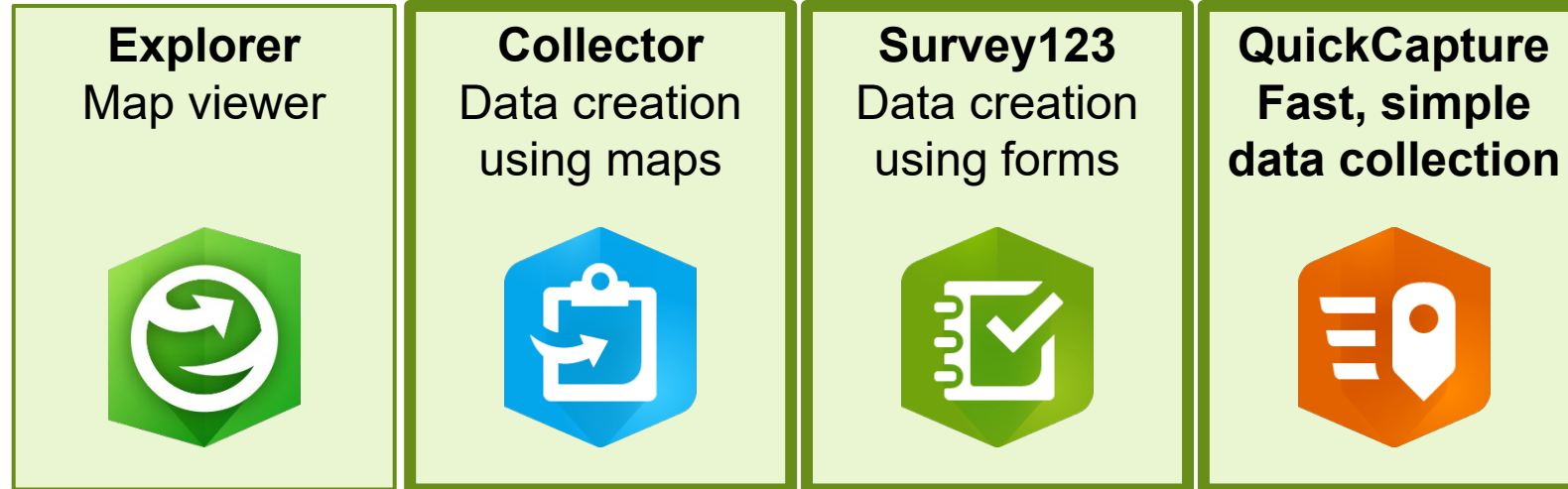
You will be introduced to applications for creating and editing GIS data using mobile devices.

- ▶ Explore **Collector** and **Survey123** for ArcGIS
- ▶ Data design and authoring
- ▶ Creating maps and forms specifically for field use
- ▶ Compare various use cases for best app to use
- ▶ Hands-on exercises: mapping and asset inspections in the field



# ArcGIS Field Apps

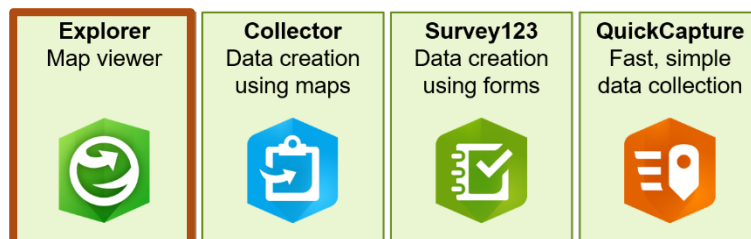
Esri has several apps for collecting data in the field with different capabilities



# Explorer for ArcGIS

Explorer is a **map viewer** application for locating assets and making notes in the field

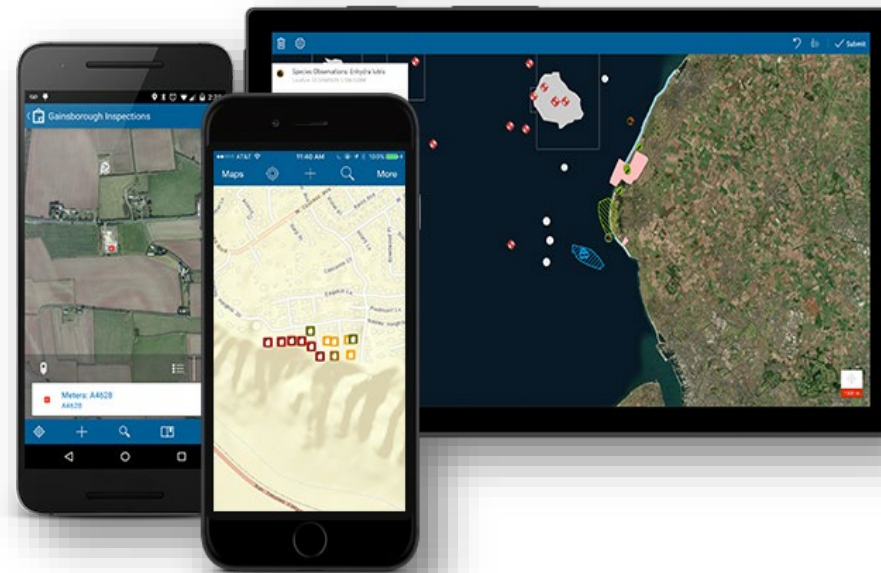
- ▶ Native iOS and Android app
- ▶ Allows maps and GIS data to be viewed and used by you and/or others
- ▶ Shares GIS information with non-specialists
- ▶ Search for specific assets in a database
- ▶ Locate and navigate to selected assets
- ▶ Draw a **markup** layer on the map with notes and share back to ArcGIS Online







# Collector for ArcGIS

Collector is a **map**-centric application for creating features in the field

- ▶ iOS and Android
- ▶ Create/edit points, lines, polygons
- ▶ Offline option
- ▶ Customize the map to your needs
- ▶ Multiple editors simultaneously
- ▶ Various user roles – editor, updater, viewer
- ▶ Database created in ArcGIS Pro or Online



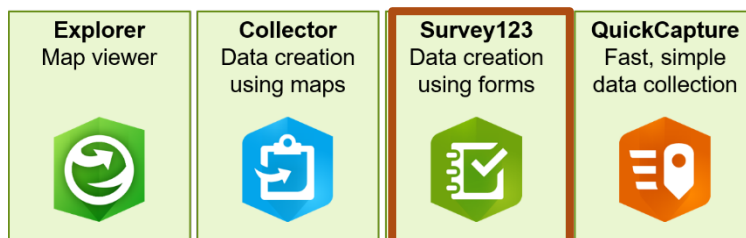
<b>Explorer</b> Map viewer	<b>Collector</b> Data creation using maps	<b>Survey123</b> Data creation using forms	<b>QuickCapture</b> Fast, simple data collection
			



# Survey123 for ArcGIS

Survey123 is a **form-centric** application for collecting data in the field

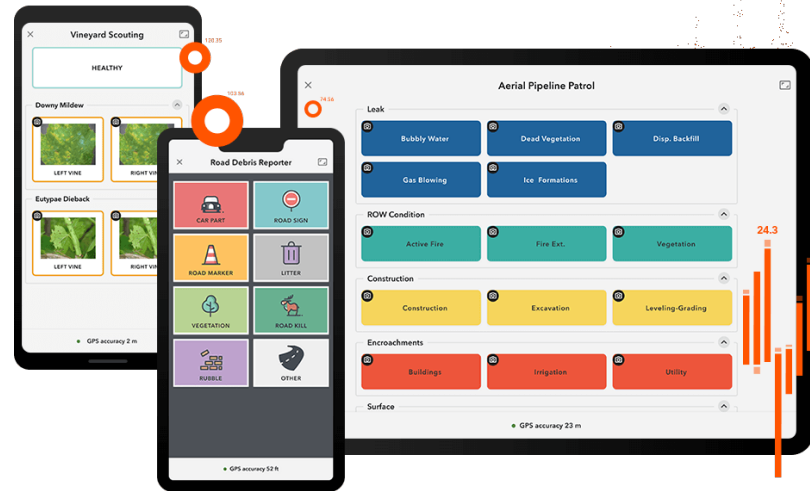
- ▶ Native iOS and Android app or access via web browser
- ▶ Create point features
- ▶ Conditional (if/then) logic
- ▶ Multiple editors and roles
- ▶ Easy set up via web
- ▶ Quick data analytics
- ▶ Desktop application for advanced features







# ArcGIS QuickCapture

QuickCapture is for **rapid data collection** of features while moving

- ▶ iOS, Android, Windows
- ▶ Create/edit points, lines, polygons
- ▶ Intuitive push-button interface needs little training
- ▶ Simple attribute tagging
- ▶ Publishes instantly to ArcGIS Online to leverage data rapidly
- ▶ Form set up in ArcGIS Online
- ▶ <https://www.youtube.com/watch?v=tSpLw-EtMm0>



<b>Explorer</b> Map viewer	<b>Collector</b> Data creation using maps	<b>Survey123</b> Data creation using forms	<b>QuickCapture</b> Fast, simple data collection
			

# Workshop Tutorials

The tutorial instructions are located at the CCGT Workshops page:

[www.bit.ly/clemsongis](http://www.bit.ly/clemsongis)



# Comparing App Capabilities

	Survey123 for ArcGIS	Collector for ArcGIS
Types of data collected	Points only (Browser) Points, lines, polygons (Desktop)	Points, lines, and polygons
Work offline	Yes	Yes
Edit existing data	Yes	Yes
Anonymous access allowed	Yes	No
Conditional (if) statements	Yes	No
Supports external GNSS receivers	Yes	Yes, with full metadata
Platforms	iOS, Android, Windows (7,8,10), Mac, Linux, Web	iOS, Android, Windows Mobile
Data collection style	Form Centric	Map Centric
Map customization	Only Desktop version	Yes



# Which application do I choose?

- ▶ Need to crowd-source locations of animal sightings around city
- ▶ Survey123
  - ▶ Simple form accessed over the web
  - ▶ No user account required
  - ▶ Nothing to download
- ▶ Do you need to customize the map?
  - ▶ Survey123 Desktop Version required



# Which application do I choose?

- ▶ Perform inspections in the field where data/WiFi is not available
- ▶ Survey123 or Collector
- ▶ What type of interface is better for you? Map or form?
- ▶ Do you need to customize the map? Depends
- ▶ Do you need to record lines? Polygons? Collector
- ▶ Are there lots and lots of attribute categories? Survey 123
- ▶ Do some attributes depend on others? Survey 123
- ▶ How complex is the asset? Depends



# Provide Your Feedback

Thank you for attending. Please provide your comments at:

[www.bit.ly/ccgtfeedback](http://www.bit.ly/ccgtfeedback)