Comparing Two Field Data Gathering Tools: ArcGIS Field Maps and ArcGIS Survey123

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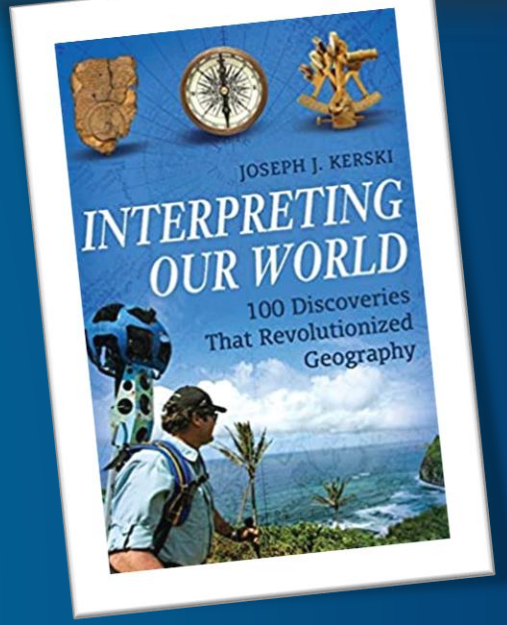
Federal Agencies

Private Industry

University

Graduate School

Nonprofit



Esri’s Education Program

Enabling, Encouraging, and Equipping

… future decision makers to think spatially and critically, solve problems, and use geotechnologies effectively to build a resilient world and become the change agents of tomorrow.

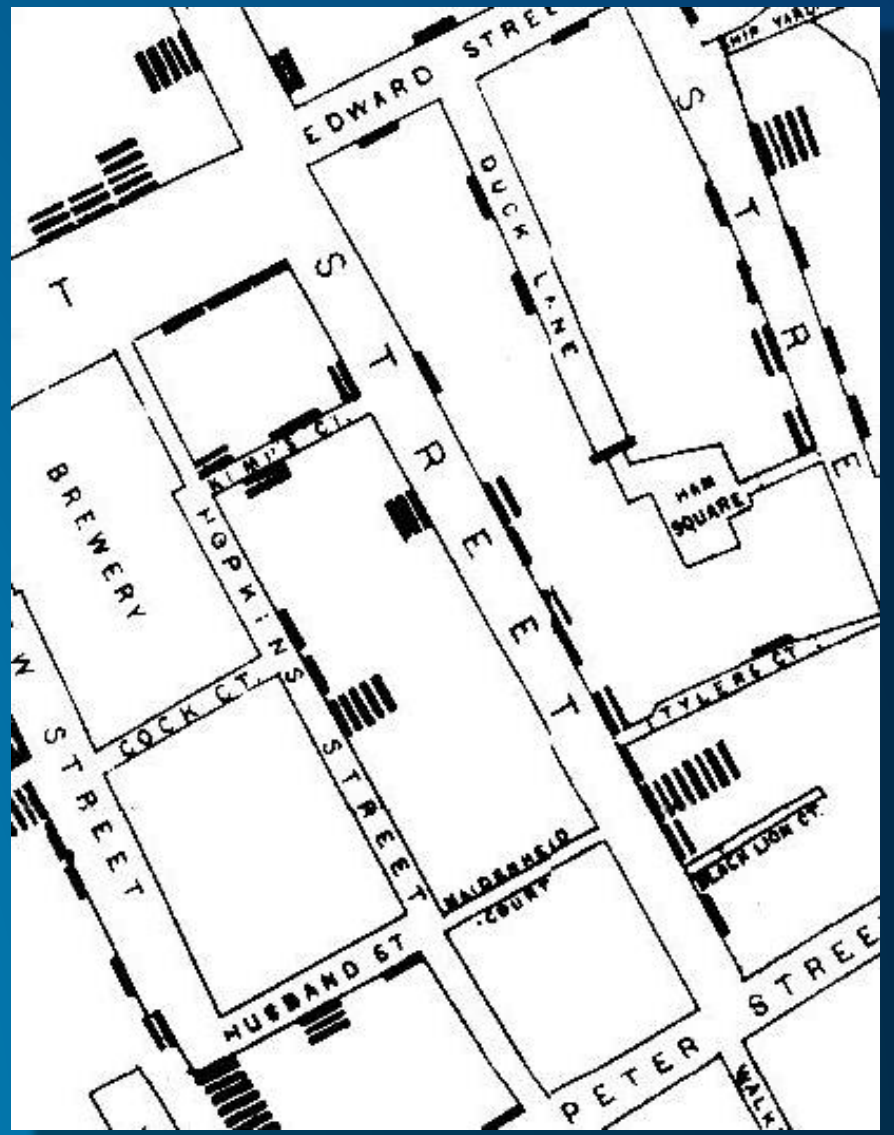
- 7,000+ universities globally
- Free licenses for all K-12 (Esri Schools)
- Education, research, and operations

‘Field Operations’ - Goals for this workshop

- Understand the capabilities of the 2 (+1) main Esri mobile field data collection tools.
- Be able to determine which tool is best to meet specific instructional and research goals.
- Gain confidence using these tools in the ... Field !

Outline

- **Introductions**
- **Why field data and collection?**
- **Esri's field apps**
- ***Discussion***
- **Resources / Wrap-up**

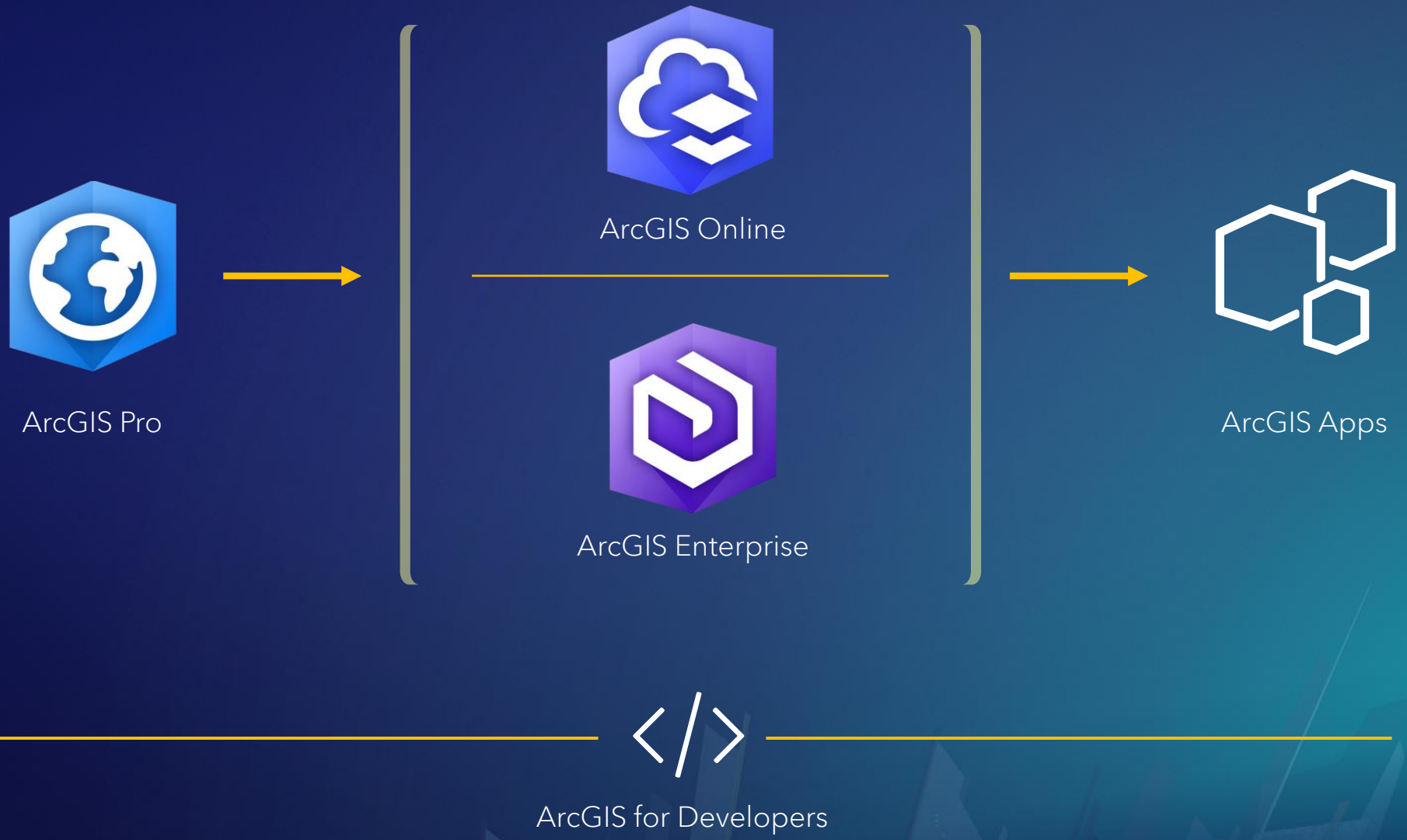


Why use field tools?

1. Collect needed data.
2. Connect people with issues in their own community.
3. Develop skills in field data collection, citizen science, data assessment, mapping, spatial analysis.

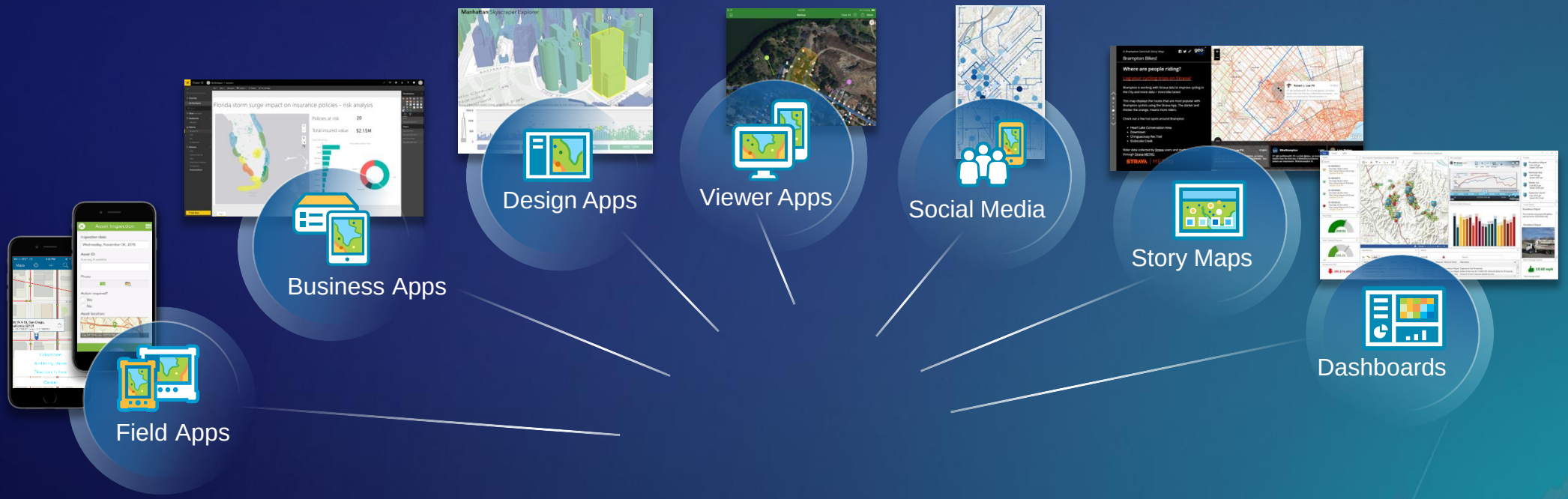
Can you name this location?

The Web GIS Paradigm



ArcGIS Apps Bring the Power of Location to Everyone

Extending the Reach of GIS



Across Organizations and Beyond

Apps by theme

Focused, powerful, ready to use

Office

ArcGIS Earth

Esri CityEngine

Maps for Office 365

Maps for SharePoint

ArcGIS Insights

Esri Business Analyst

GeoPlanner for ArcGIS

Story Maps

ArcGIS Dashboards

Field

ArcGIS QuickCapture

ArcGIS Field Maps

Tracker for ArcGIS

Survey123 for ArcGIS

Drone2Map for ArcGIS

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How can you map field-gathered data?

5 selected methods:

1. Add a set of geotagged photos as “photos with locations” to ArcGIS Online.
2. Collect a GPX file from GPS receivers and smartphone fitness apps.

   > Add to ArcGIS Online.
3. Generate table in CSV or TXT > Add to ArcGIS Online.
4. Use Esri **Survey123**, Collector, or QuickCapture to collect data.
5. Use other field apps: eBird, Globe Observer, Mapillary, iNaturalist, or others.

   Export to CSV > Add to ArcGIS Online.

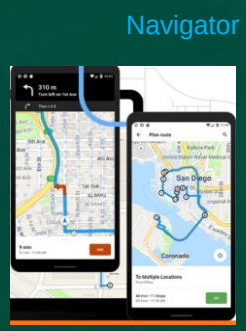
Field Operations & Data Collection

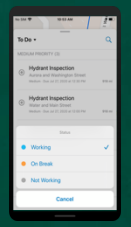
Location-Enabling All Aspects of Field Work

Field Work Management

Workforce

Navigator





Work Coordination

Navigation

Dashboard

Specialized Data Collection

Survey123

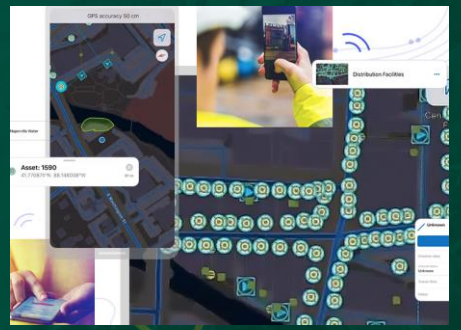
QuickCapture

Form-Centric Collection

Fast Observation Collection

Geocentric Data Collection

ArcGIS Field Maps



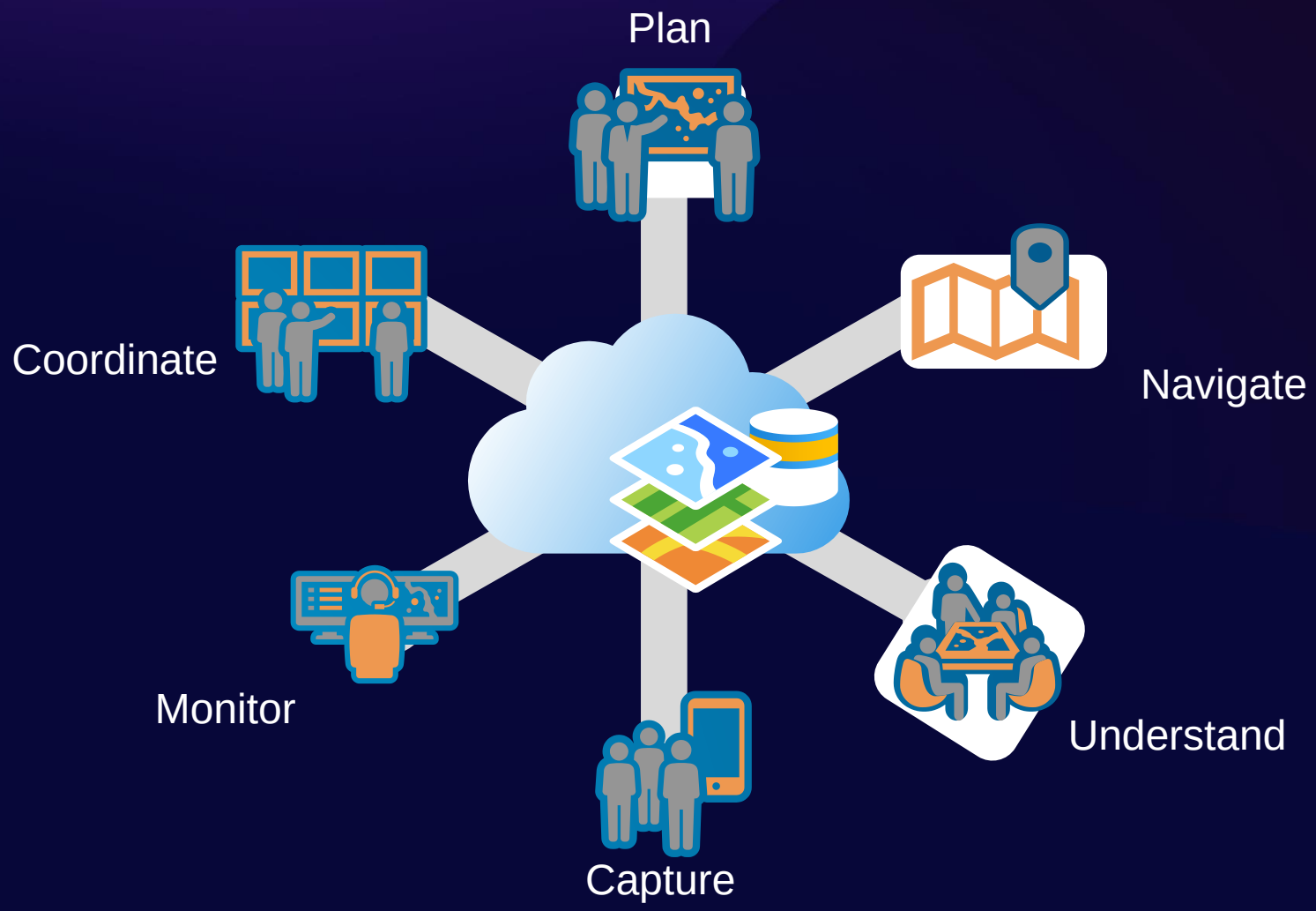
Comprehensive Field App

Integrates

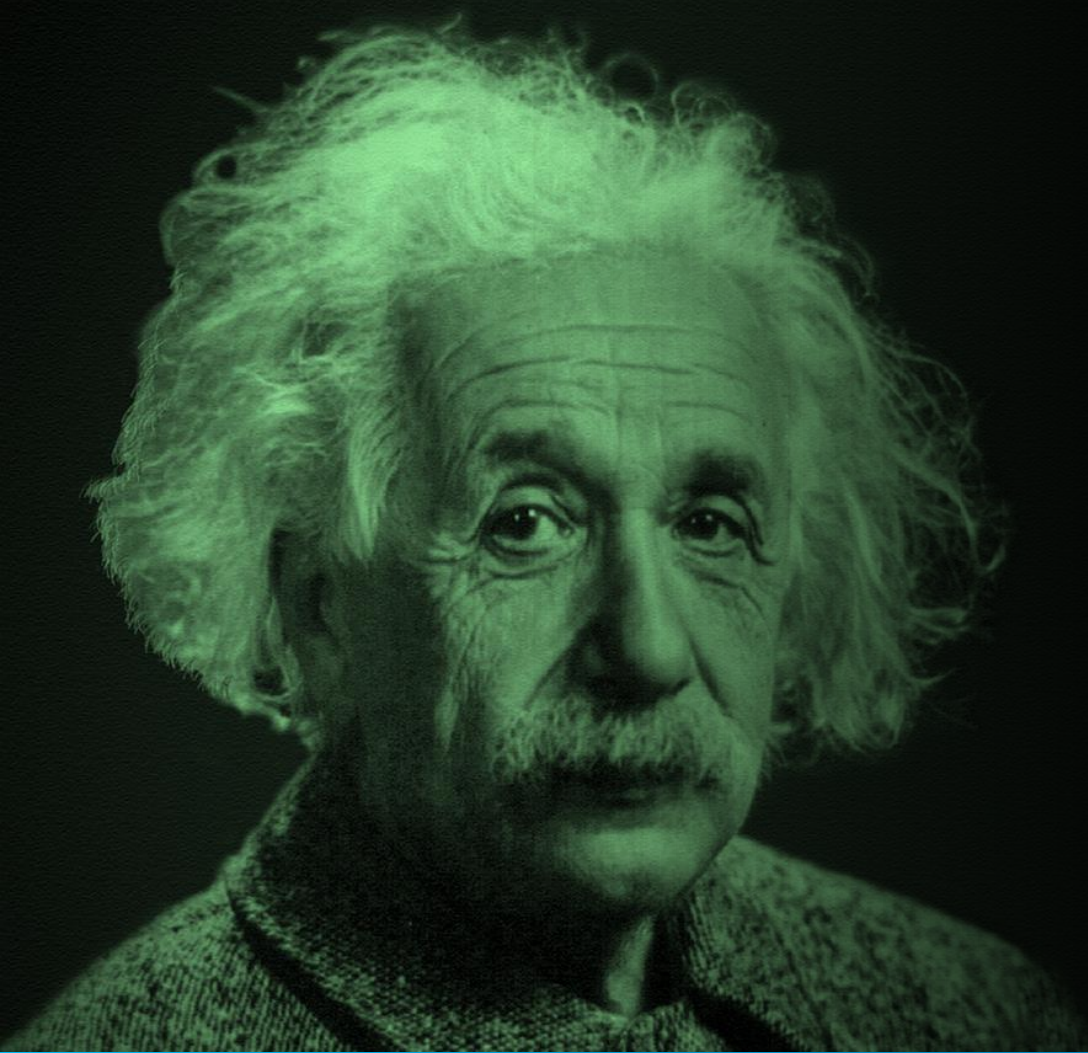
- Collecting
- Updating
- Tracking
- Viewing
- Markup

Connecting & Transforming Mobile Workflows

Data collection overview



Data collection



If I had an hour to solve a problem and my life depended on it, I would use the first 55 minutes determining the proper questions to ask.

- Albert Einstein

Apps by theme

Focused, powerful, ready to use

What about QuickCapture?

Office

ArcGIS Earth

Esri CityEngine

Maps for Office 365

Maps for SharePoint

ArcGIS Insights

Esri Business Analyst

GeoPlanner for ArcGIS

Story Maps

ArcGIS Dashboards

Field

ArcGIS QuickCapture

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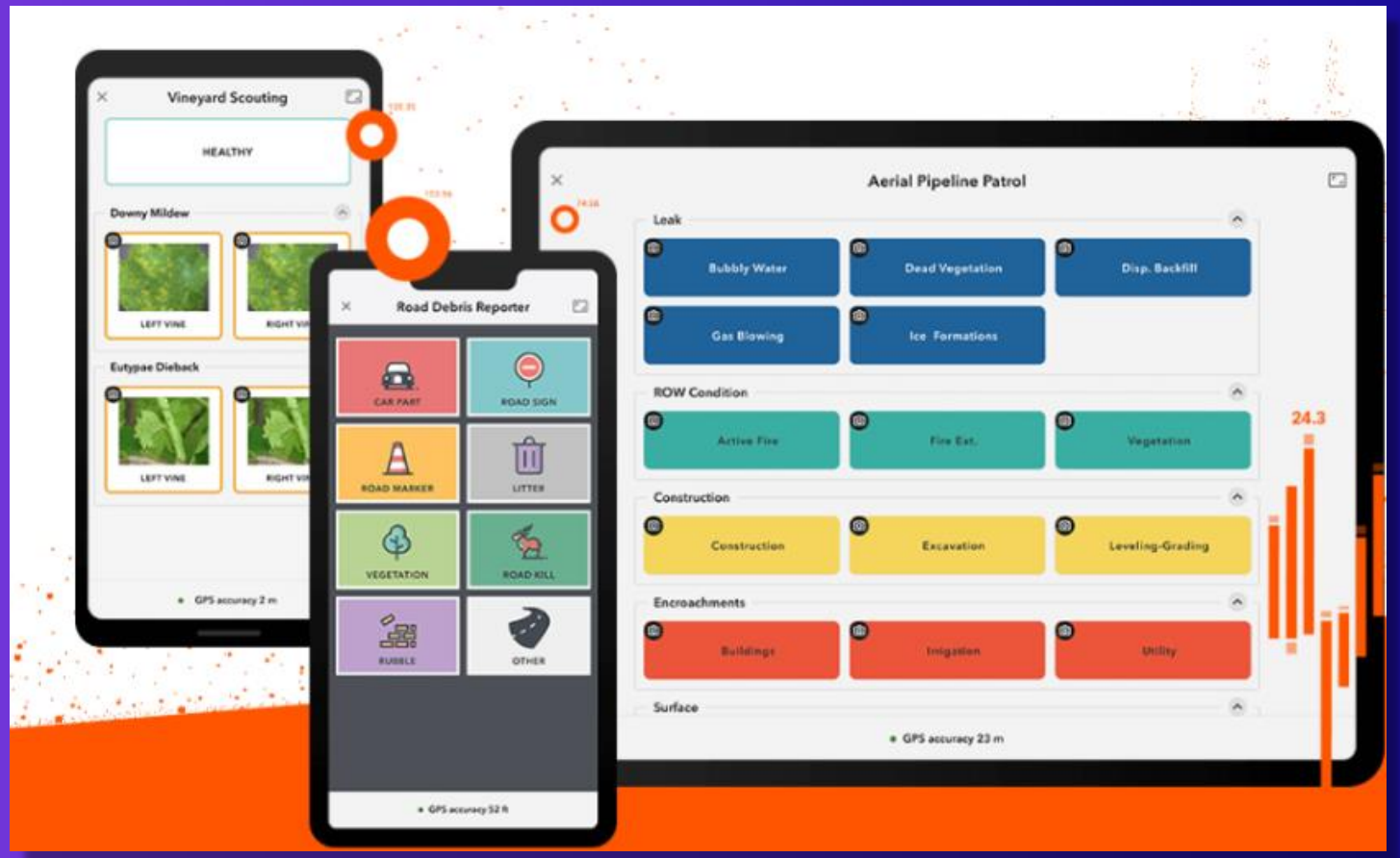
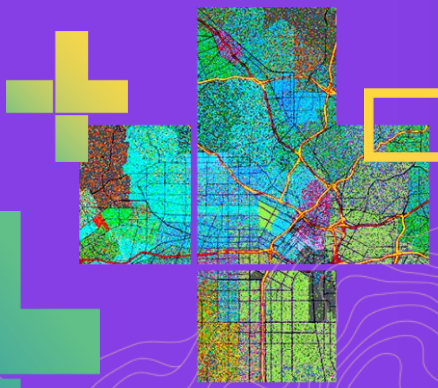
ArcGIS QuickCapture

Is a ‘big button’ app designed to quickly collect data in the field.

Tutorials: https://www.esri.com/en-us/arcgis/products/arcgis-quickcapture/resources





Comparing the 3 ArcGIS Field Data Collection Apps

ArcGIS Survey123

- Fill out a form
- Example:
  Interviews, tree inventory.

ArcGIS Field Maps

- Place info on a map
- Example:
  Map soil types in a field, water assets in a community

ArcGIS QuickCapture

- Press a single button
- Example:
  Post-disaster assessments

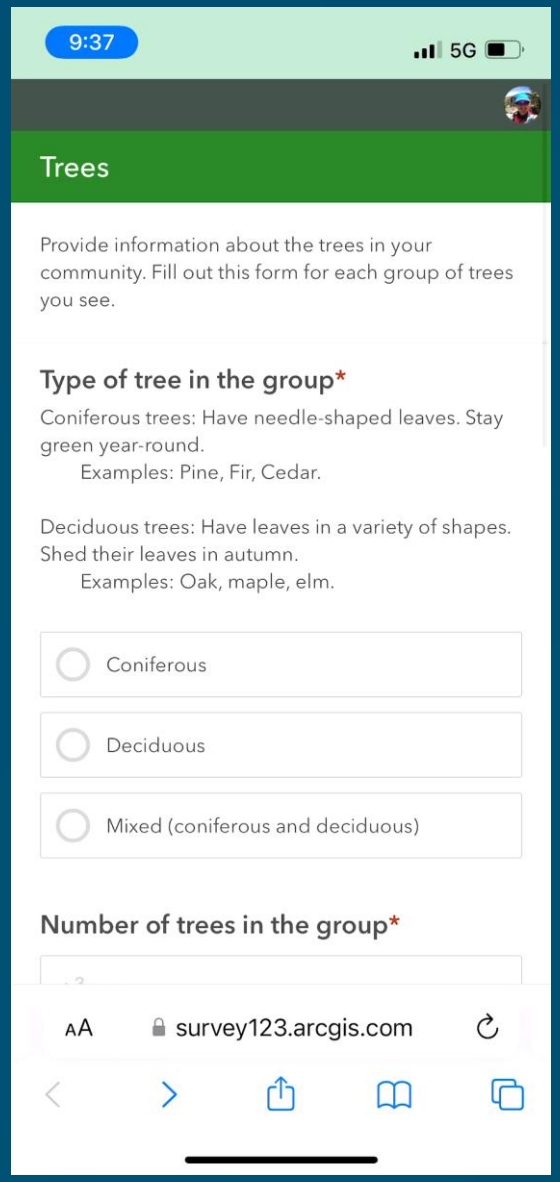
Field app deciding factors

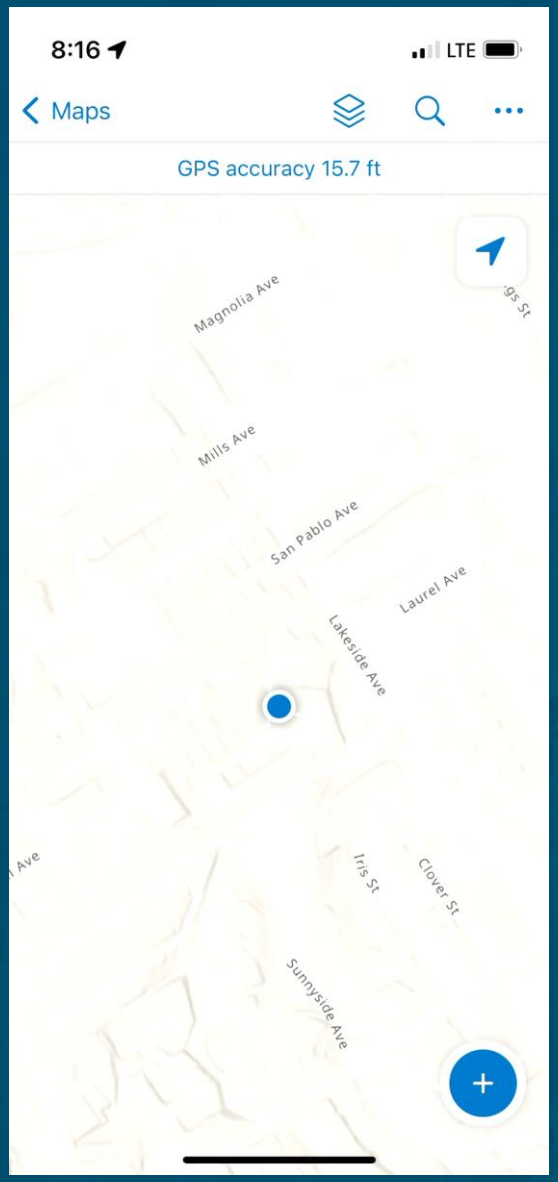
Field app	Level of detail	Collection environment	Answer format
ArcGIS Field Maps	Highly detailed	Stationary location	Map-centric
ArcGIS Survey123	Highly detailed	Stationary location	Form-centric
ArcGIS QuickCapture	Basic	In-motion	Button-centric

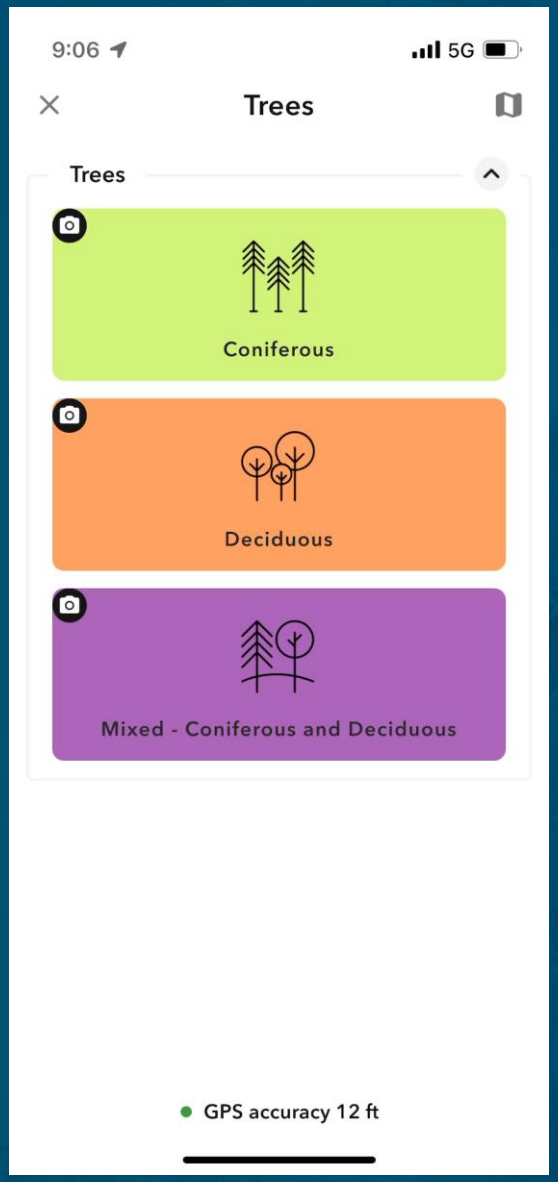
Each of the 3 apps do the following:

1. Capture location
2. Create points, lines and polygons
3. Have the ability to add photographs.
4. Work online or offline.

3 apps, one map







Comparing the different ArcGIS Field Apps

Comparison of fundamentals

https://esriurl.com/appsinschools

	Survey123	Field Maps	QuickCapture
Intended use	Filling out forms, including ones with complex choices and structures.	Map-focused data collection and updating (editing), including advanced location capturing (such as offsets and snapping).	Rapid, one-button data collection.
Example projects	Interviews (ideally with a question about location). Restaurant inspections and other long, complex forms.	Creating a map of an area, such as a campus or park.	Where trash is found on campus, BioBlitz.
Authoring			
Authoring experience	Simple drag and drop website to create forms or app for more complex authoring.	Create an editable feature layer (templates available), put the layer in a map, and share the map.	Create an editable feature layer (templates available), configure a QuickCapture project, and share the project.
Authoring worklfow	*Example*	*Example*	*Example* | *Example*
Data Collection			
Anonymous data collection?	Yes	No (map shared with specific user)	Limited (supported with ArcGIS Hub Premium, else project must be shared with specific user)
Edit (update) existing data	Yes (if form configured for it)	Yes	No
App required for collection	No	Yes	Yes
Capture user-entered information	Yes	Yes	Limited
Capture multiple features simultaneously	No	No	Yes
Capture a line as you walk or drive along it	No	Yes	Yes
Capture into multiple layers in a single form/map/project	No	Yes	Yes
Offline			
Offline support	Yes	Yes	Yes
Offline basemap	Yes Supported for geographic areas you as the map author define.	Yes Supported for geographic areas defined by the map author or defined in the app by the data collector.	Yes Supported by adding a map package (TPK, VTPK, or MMPK) to your project.
Offline workflow	*Offline workflow*	*Overview video* and *Implementation Guide*	*Blog on configuring the map*
After collection			
Viewing the data	Has integrated analytics and reports.	Use Map Viewer or other apps.	Use Map Viewer or other apps.

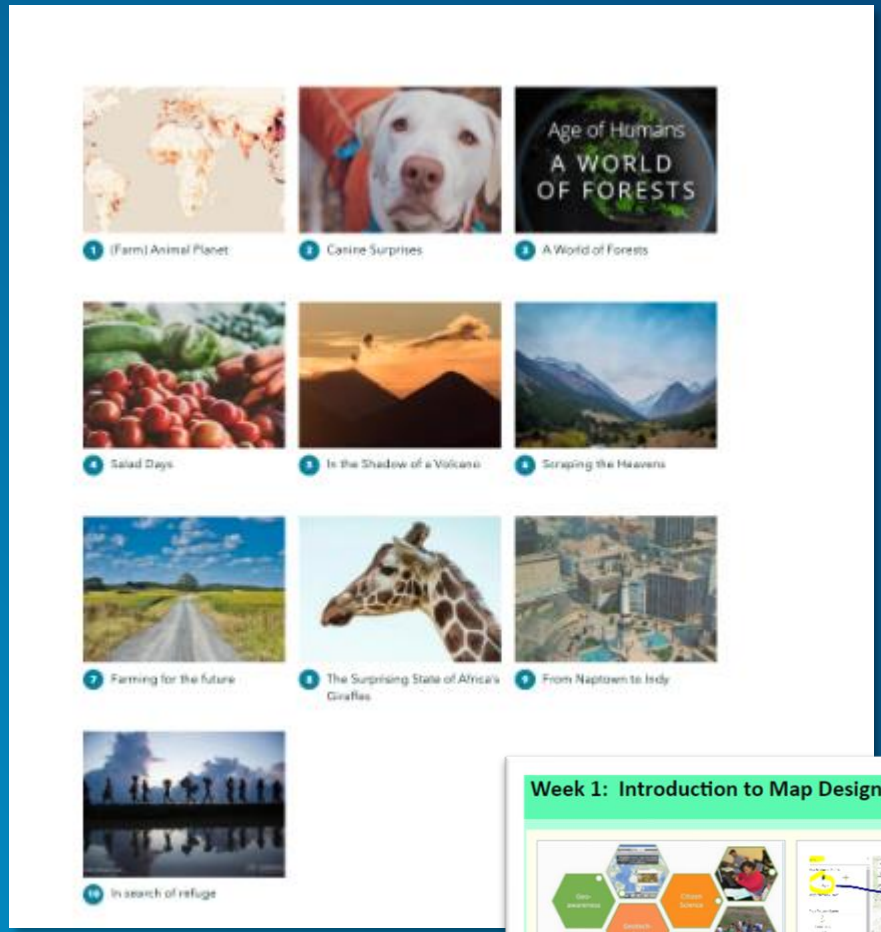
Therefore: What is the best field data collection app?

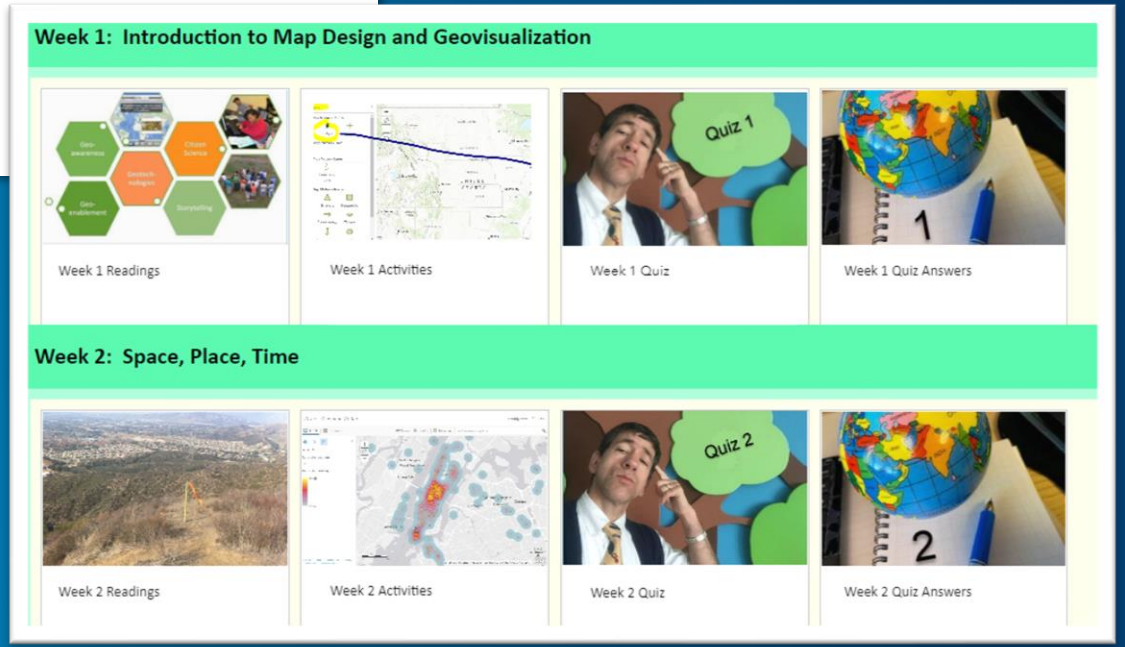
It is the app that best meets your need for field data and your organization’s goals.

If it serves your purpose, it is the best app.

Analogy

- Instant App
- Story Map Collection
- Experience Builder





3 field apps, 1 workflow

1- Collect data
Using a field tool

2-Map data
Using ArcGIS Online
or ArcGIS Pro

3- Analyze data
Using ArcGIS Online
and ArcGIS Pro

4- Create
Dashboard

5 - Create and share
via web mapping app
such as story map

ArcGIS Field Maps

All in one map-centric mobile experience, everywhere

- Easy to use
- Streamlined data collection & editing
- Relevant location focused content
- Office and Field Synchronicity
- Connected and Offline
- Part of the ArcGIS System

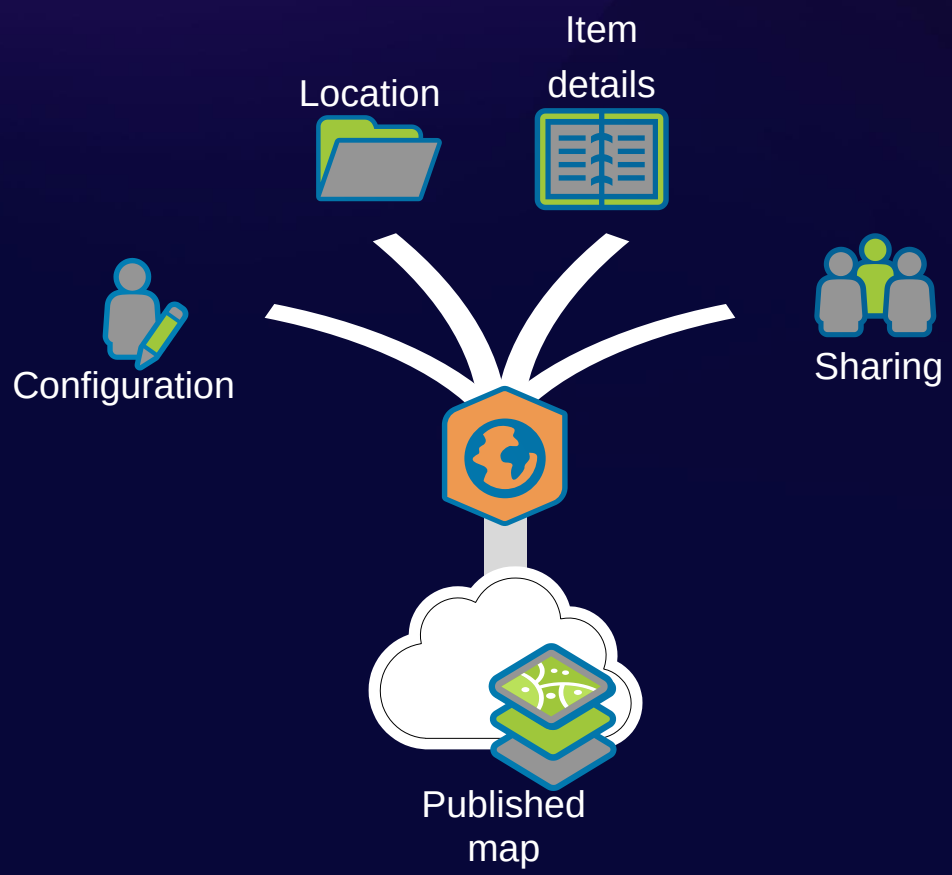
Preparing a web map for ArcGIS Field maps

- Ways to create a web map
  - Publishing from ArcGIS Pro (use Editable configuration)
    - Creates a web map and a hosted feature layer at the same time
    - Domains set up in ArcGIS Pro publish with the hosted feature layer
  - Create or publish web layers > Add to ArcGIS Online map viewer > Save

- Shared with the data collector(s)

- Settings
  - Use in ArcGIS Field Maps

Publishing options for web maps



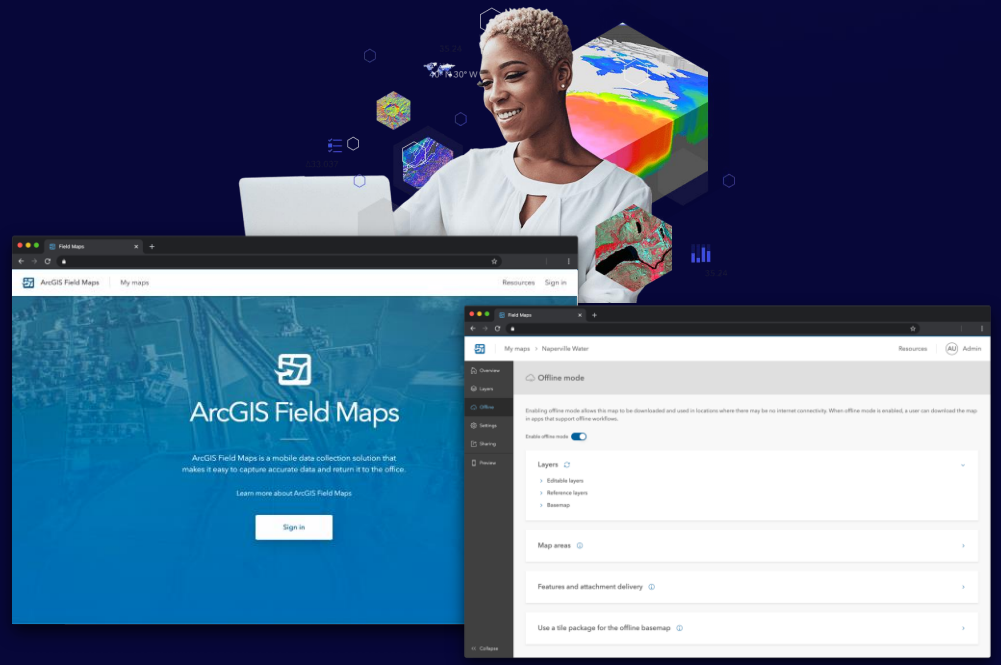
ArcGIS Field Maps

- 5 key capabilities in one app
  - Map Viewing
  - Map Markup
  - Data Collection
  - Asset inspection
  - Location Tracking

Field Maps Components

Prepare Maps for the Field

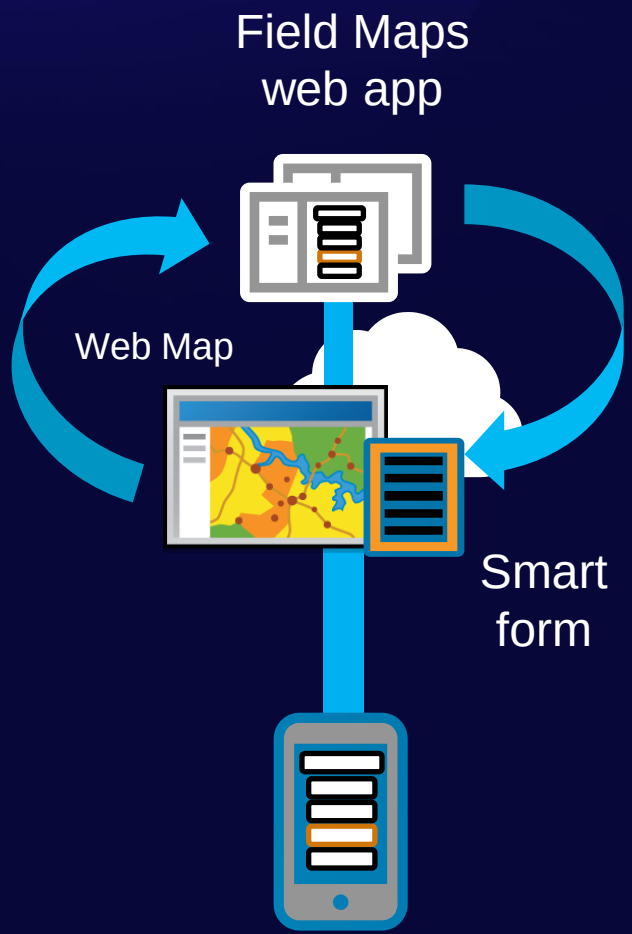
Field Maps web app



Do Work in the Field

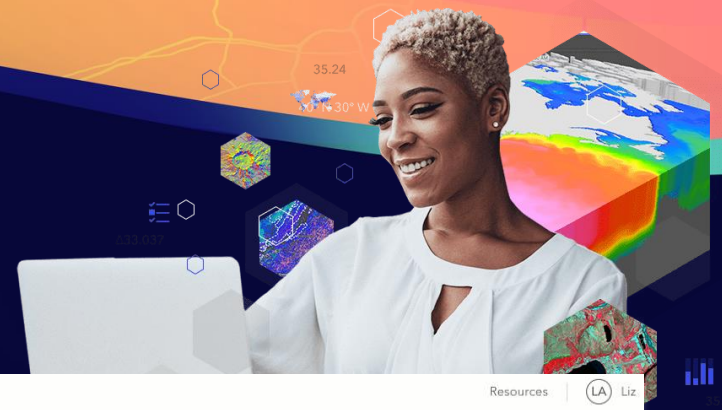
Field Maps mobile app

Field Maps Components



Field Maps Web App

Prepare Maps for the Field



Who is it for?

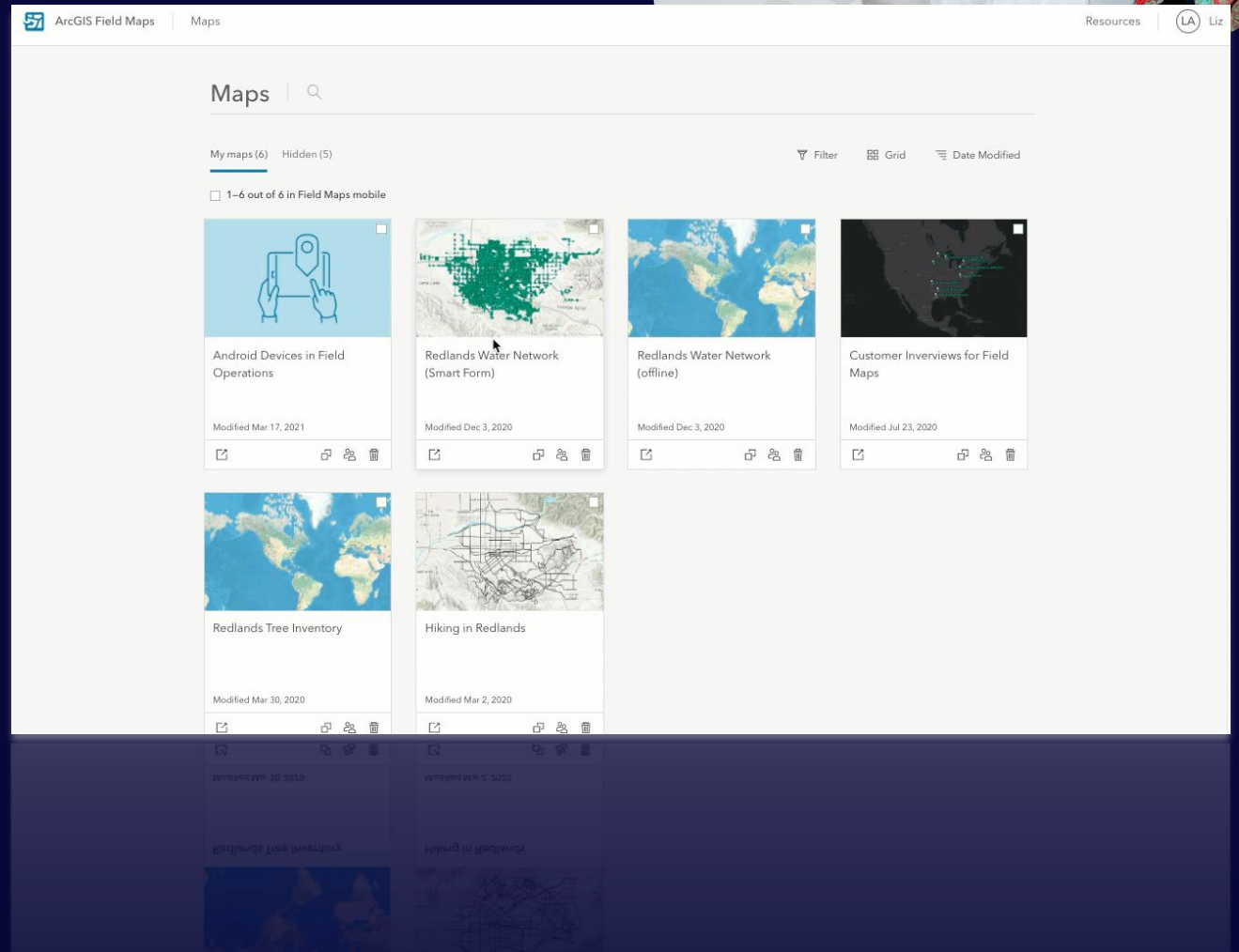
- Map Authors

Requirements

- ArcGIS Online or ArcGIS Enterprise 10.8.1+

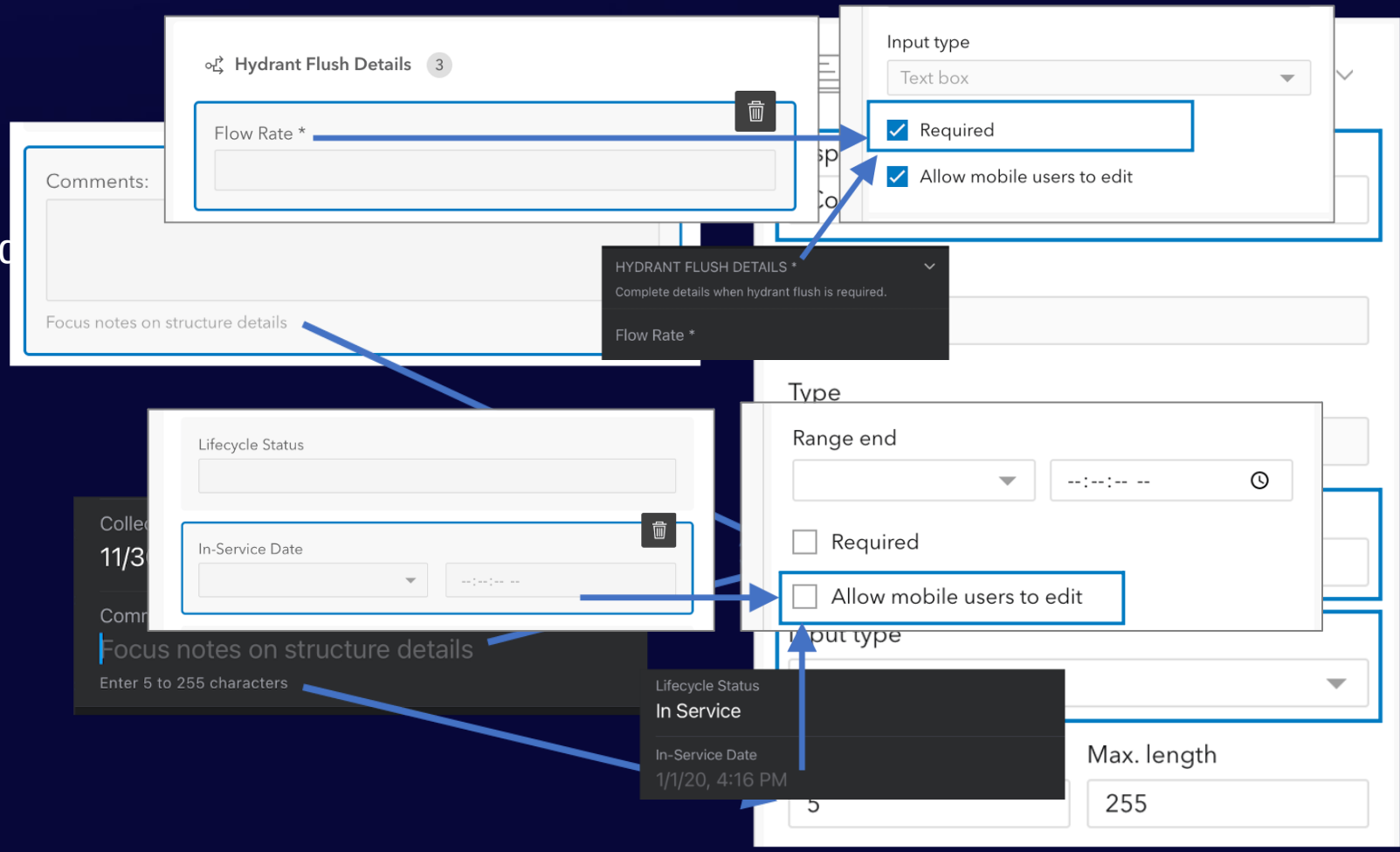
Capabilities

- Configure map properties & settings
- Configure your content (layers, tables)
- Manage feature templates
- Design smart forms
- Create geofences
- Manage offline experience
- Share and deploy maps
- Assign geofences



Smart form capabilities

- Use groups to organize fields
- Apply conditional visibility
- Format form and fields
- Placeholder
  - Example entry and format
  - Displayed when no value entered
- Description to guide form entry
- Required and Read Only fields



Field Maps Mobile App

Do **Work in** the Field

Who is it for?

- Mobile workers

Requirements

- Android 8.0+ / iOS 14.5+

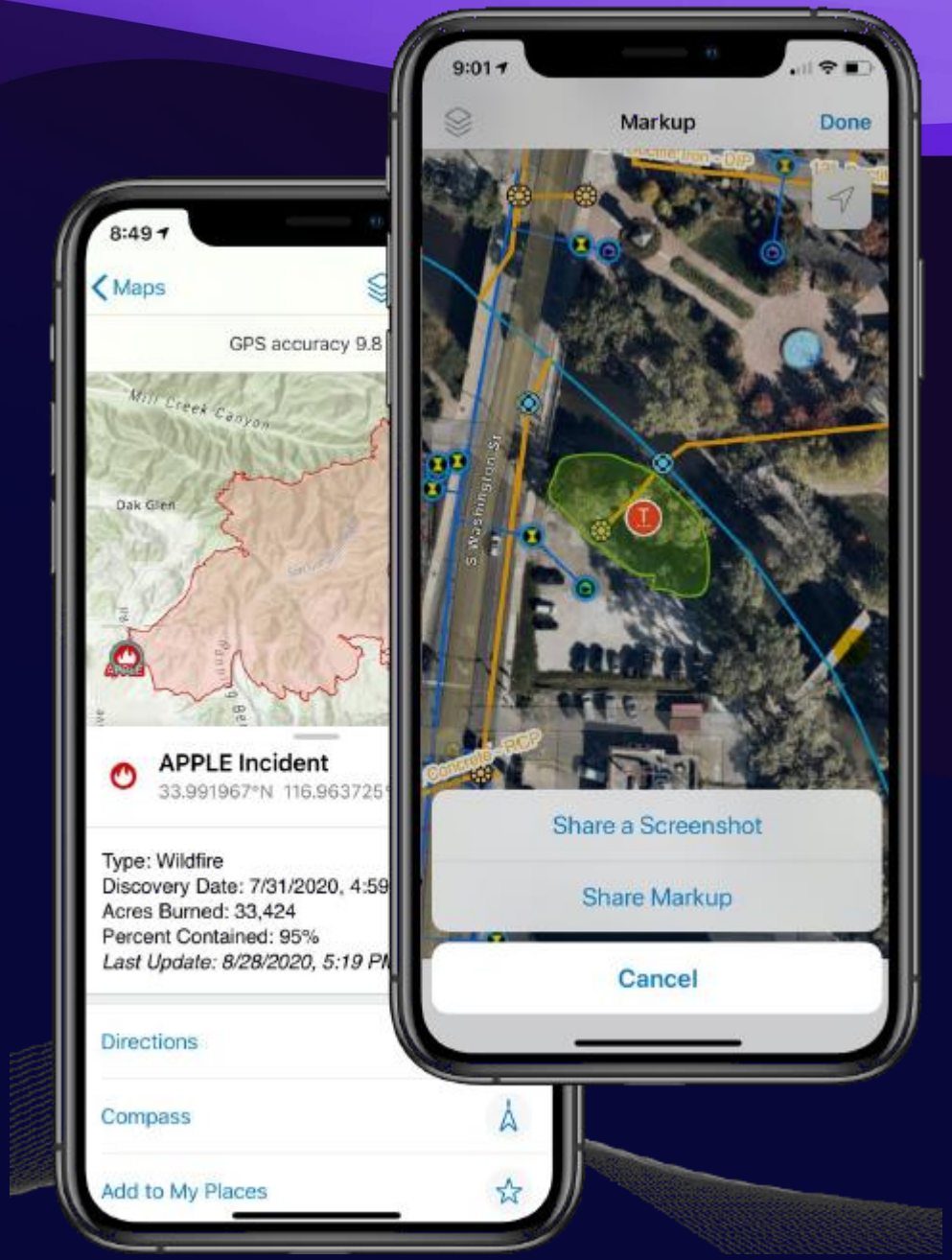
Key Capabilities

- View and search maps
- Receive location alerts
- View and trace utility networks
- Capture location with high accuracy GPS
- Complete smart forms
- Record and share location

Works Collected or Offline

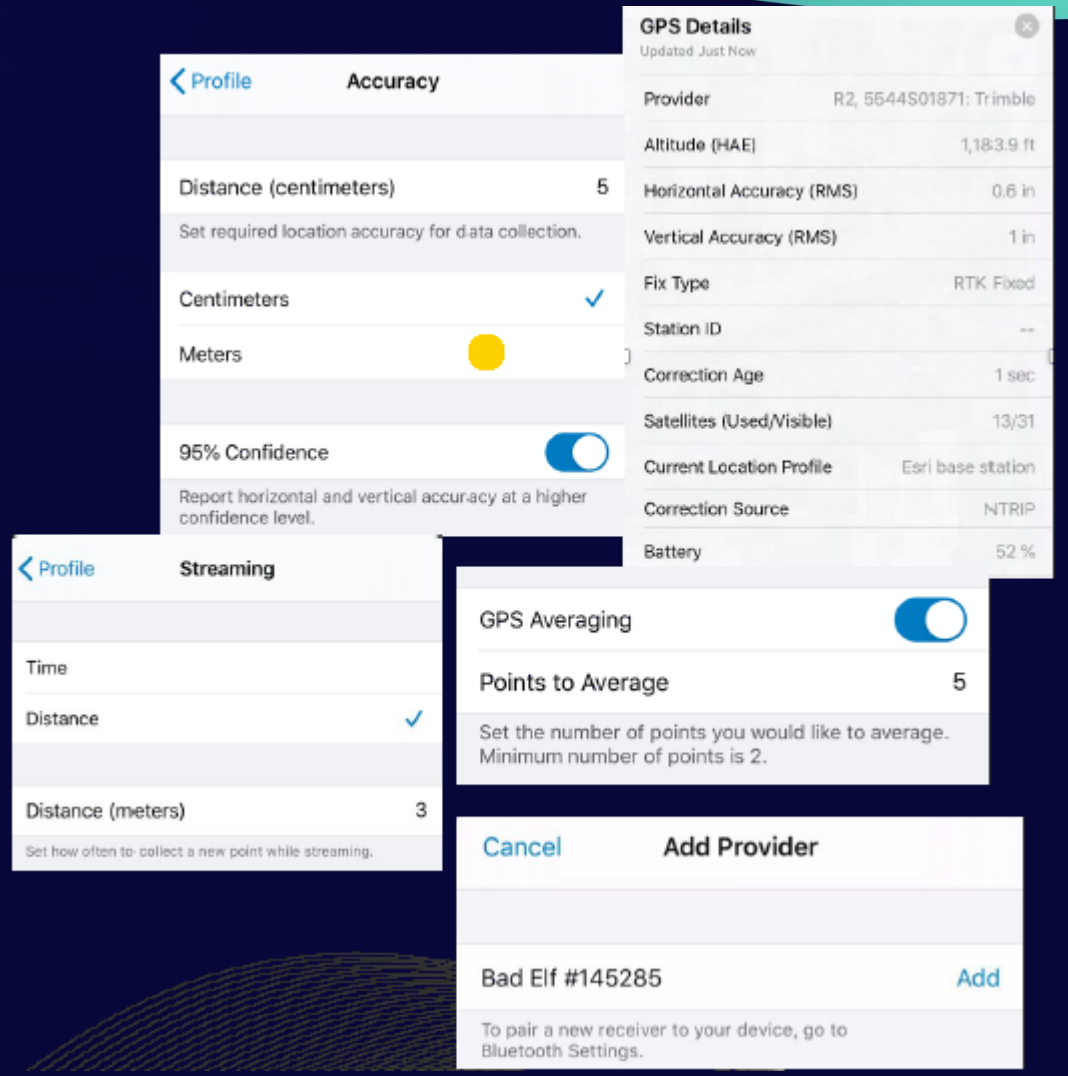
ArcGIS Field Maps mobile app capabilities

- Map Support
  - Advanced symbology/labeling (incl. Arcade)
  - Group layers, annotation
  - Popups (incl. Arcade)
- Map tools
  - Measure, Search
  - Download, Sync
  - Directions, Compass
- Map Markup
  - Notes, freehand sketch, markers
  - Share peer to peer, by email, to organization
  - Apple watch support, track for duration



ArcGIS Field Maps mobile app capabilities (cont.)

- High accuracy data collection
  - Capture points, lines, and polygons
  - Use external GPS or map
  - Single point/vertex capture or streaming
  - GPS averaging
  - GPS metadata
  - Required accuracy
- Robust smart form editing
- View , record, and share location tracks



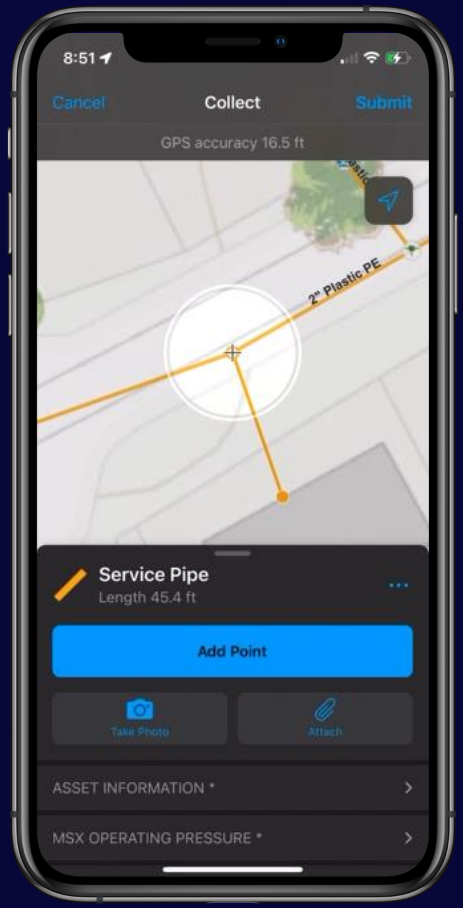
Field Maps: What's New Highlights (Mar – June)

- Smart Forms
  - Calculated Expressions
  - Contingent Values
  - Creating form elements
- Geofencing
  - Notify mobile workers when they enter or exit a location
  - Switch on/off location tracking when inside/outside an area
- Indoors
  - Include support for Indoor Maps and Indoor Positioning
- Linear Referencing
  - Find measurements along linear features
- GPS metadata for lines and polygons
  - Average/Worst horizontal and vertical accuracy, worst fix type, number of manual locations captured

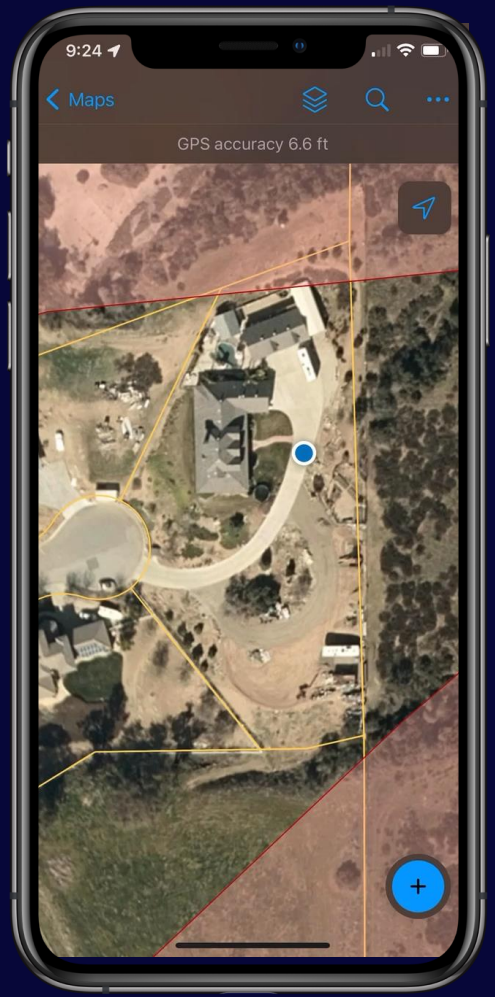
Calculated Expressions

Increase efficiency and minimize errors

- Built in Arcade scripting language
- Provide immediate feedback to mobile worker
- Works online and offline
- Calculations can use:
  - Information already collected in the form
    - Geometry, Attributes
  - Additional layers and tables in the map
  - Portal connection (user information, etc)
- Calculations can control form behavior:
  - Required fields
  - Conditional visibility in forms



Decode barcode



Fields from other layers

Calculated Expressions (cont.)

Increase efficiency and minimize errors

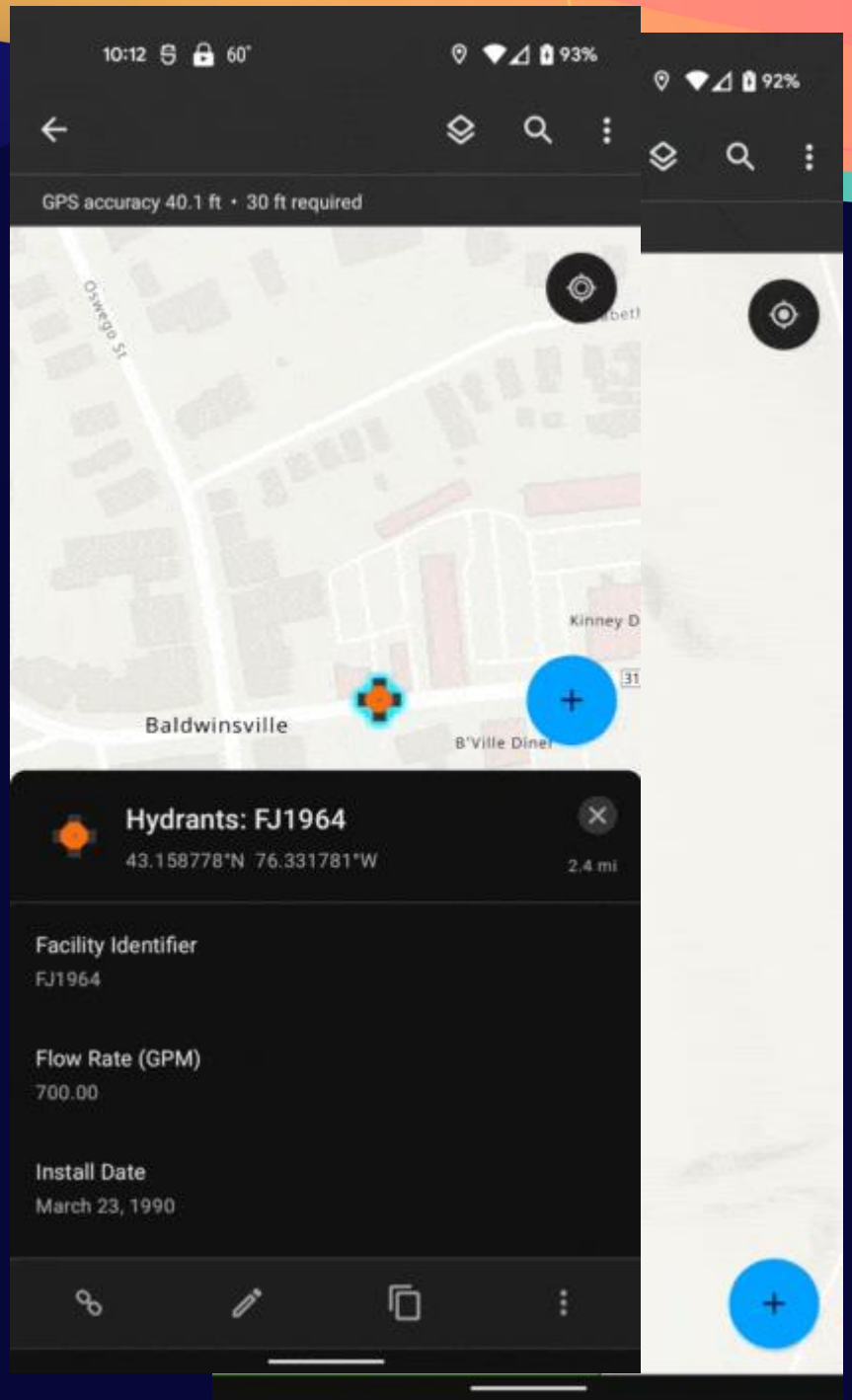
- Example: I am recording bird sightings and want to automatically store the region I'm in.

  → Fetch an attribute from an underlying polygon

- Example: I'm filling out an inspection report and need to provide my name.

  → Store a user's name, email address, or username

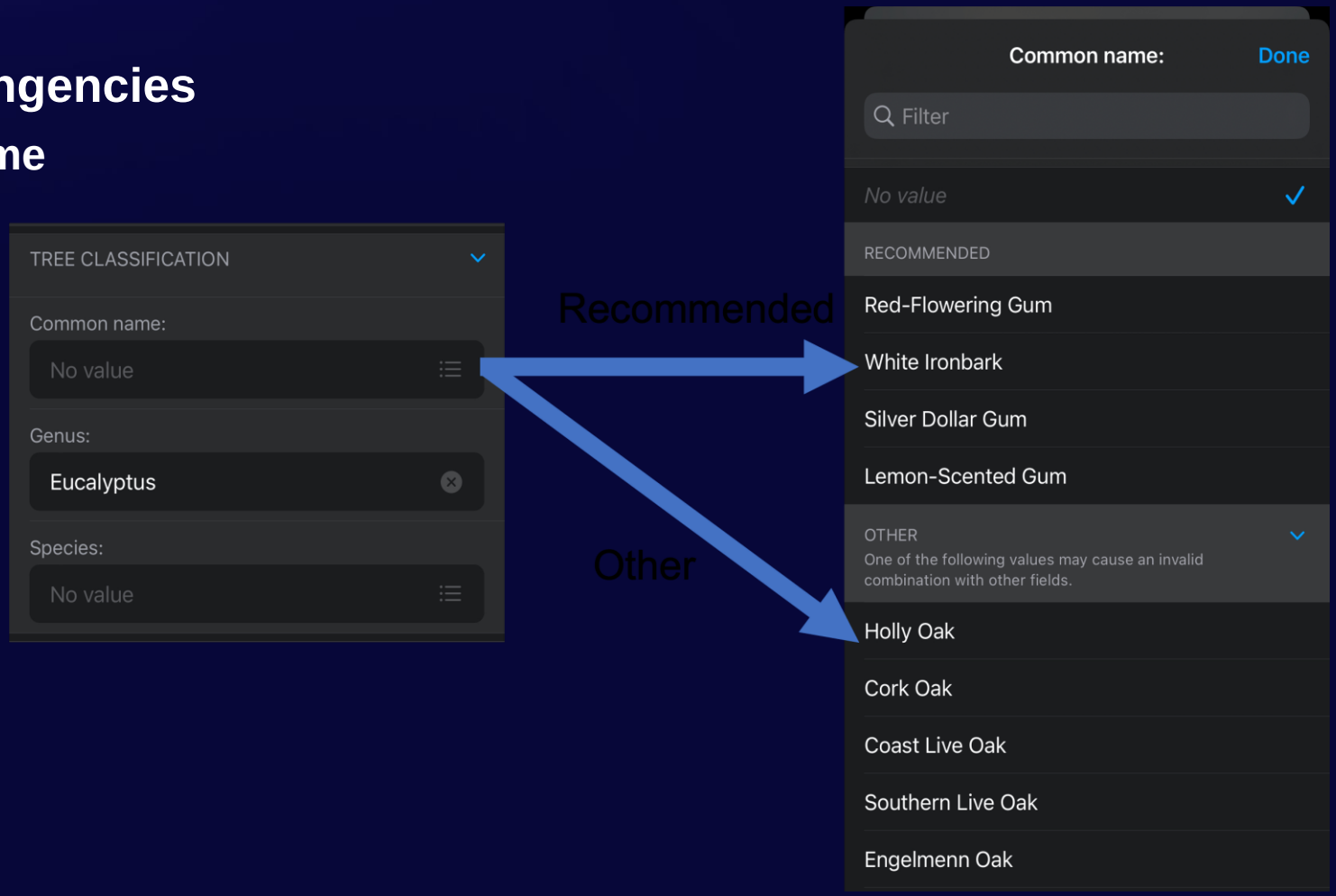
- And many more: Blog article Common Calculated expressions in Field Maps



Contingent Values

Using Field Groups

- **Improve form entry using contingencies**
  - **Genus > Species > Common Name**
- **Author in ArcGIS Pro**
  - **Fields and Field Groups in ArcGIS Pro**
- **Design Field Groups when authoring forms**
- **Supported offline**



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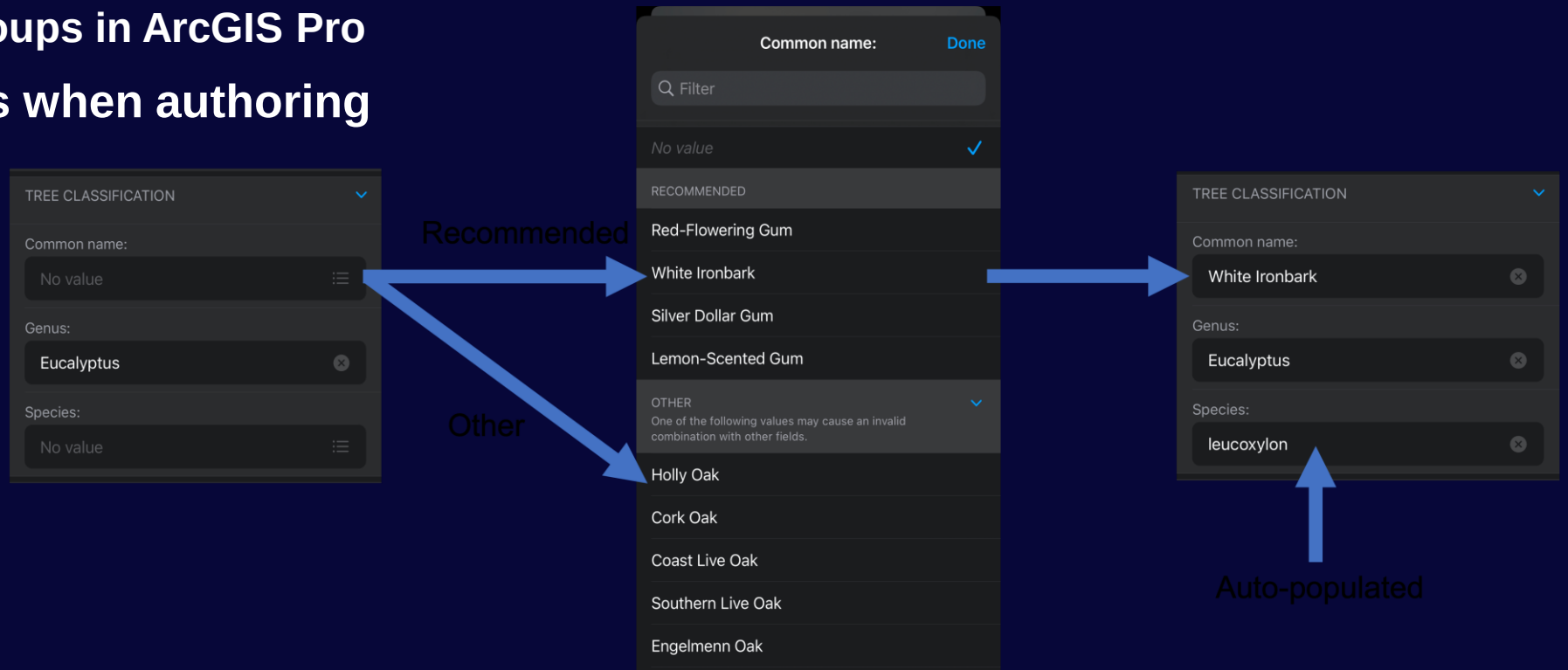
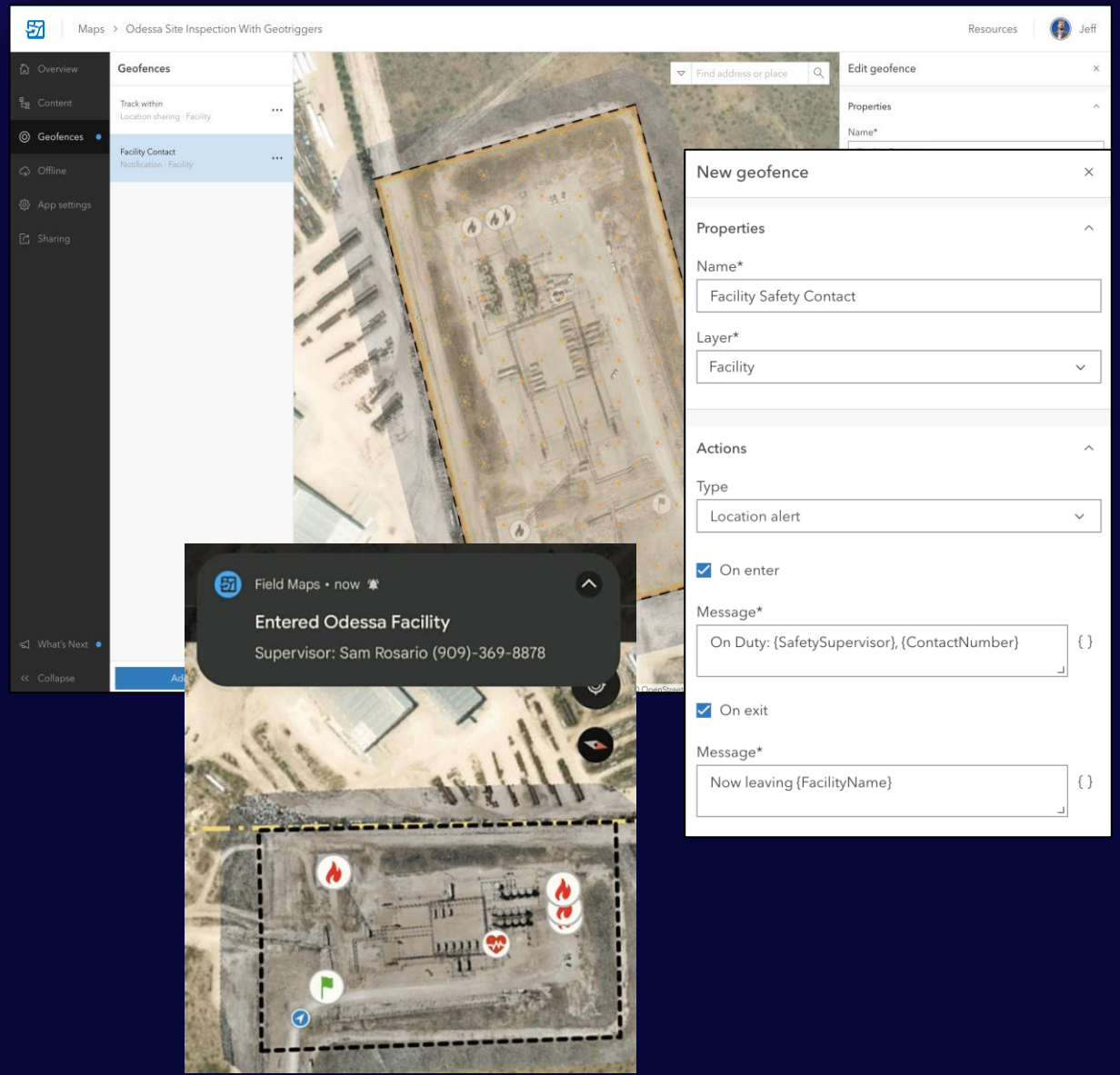


Geofencing

Real-time Location Alerts

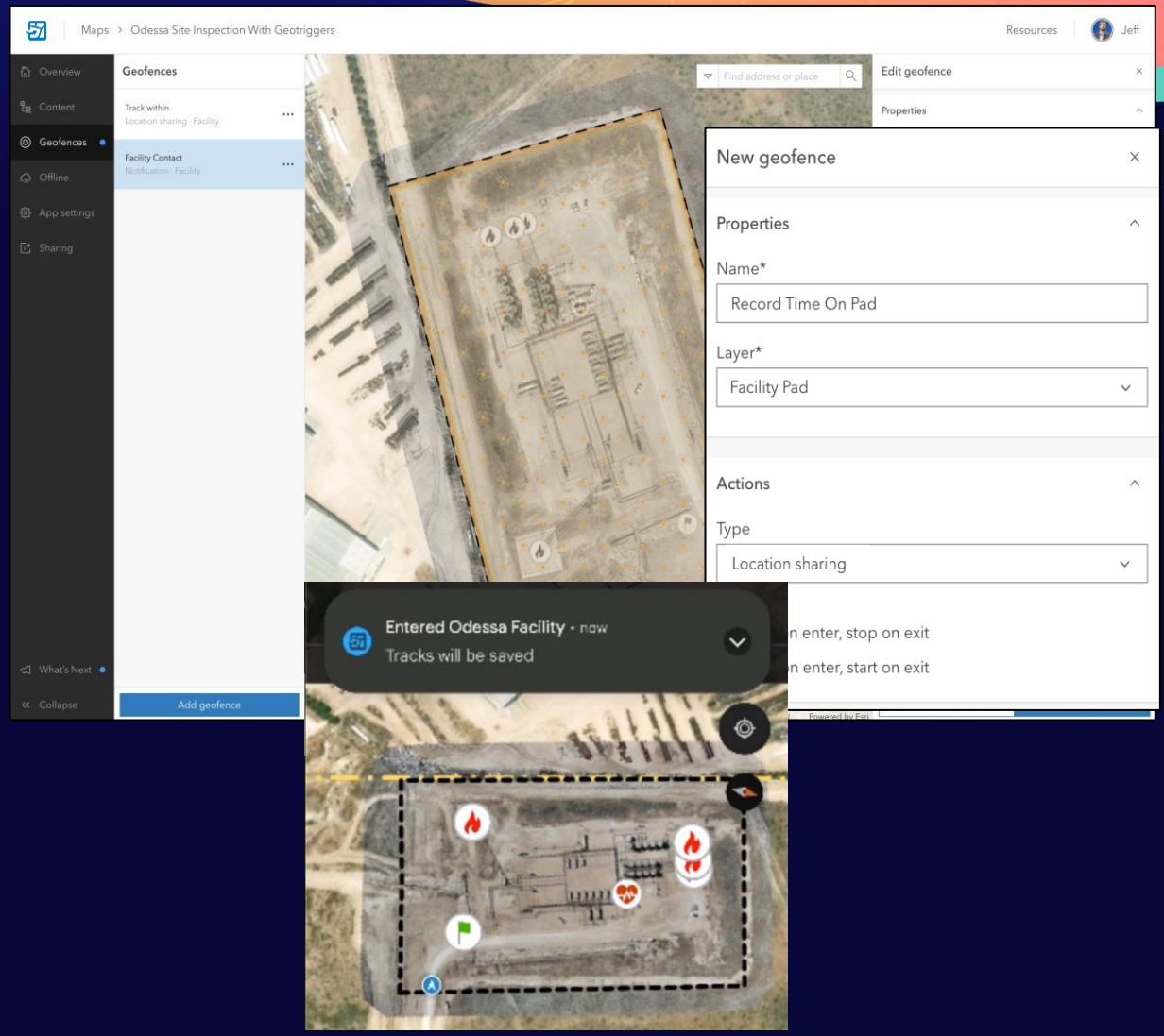
- Notify mobile workers when they enter or exit a location
  - Supported online or offline
  - When app is backgrounded
- Author Geofence Location Alerts
  - From an existing map layer (polygon layer*)
  - Alert details:
    - Name
    - Map Layer
    - Support On Enter and/or On Exit Geotriggers
    - Message can include text and field values from feature (including attribute expressions)
- Requires acknowledgement of location alerts when opening



Geofencing

Control location sharing

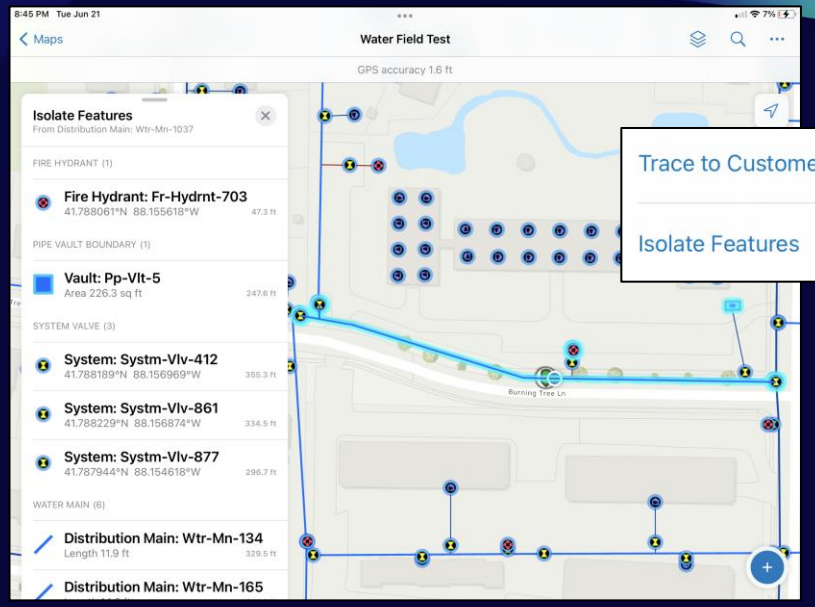
- Automatically start/stop location sharing
  - Supported online or offline
  - When app is backgrounded
- Author Geofence Action
  - From an existing map layer (polygon layer*)
  - Sharing behavior:
    - Start on enter, stop on exit
    - Stop on enter, start on exit
- Requires location sharing for mobile worker

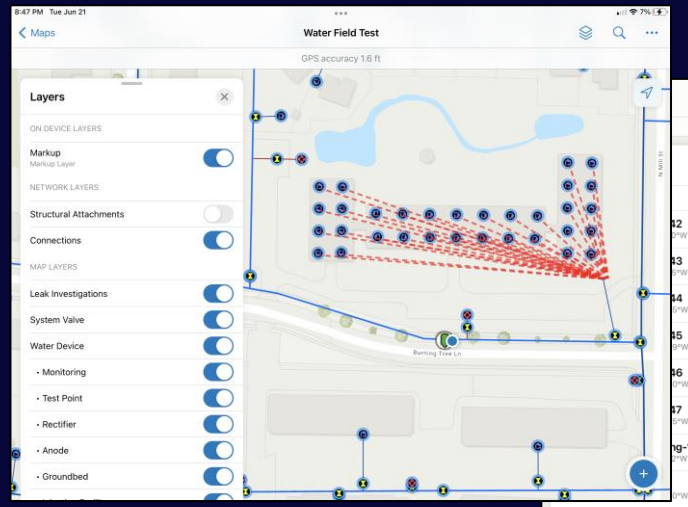


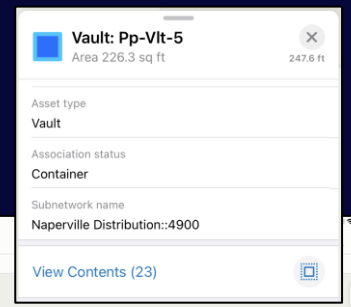
Utility Networks

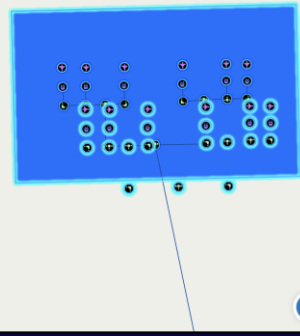
Connected viewing and tracing

- **Support for Electric, gas, water, storm water, and wastewater networks:**
  - **View network connectivity and associations**
  - **View contained assets**
  - **Trace the network**
- **Published from ArcGIS Pro**
  - **Read-only/connected-only support**
  - **Include Named Trace configurations**
- **Requires**
  - **ArcGIS Enterprise 10.9 or higher**
  - **Utility Network User Type Extension license for tracing**









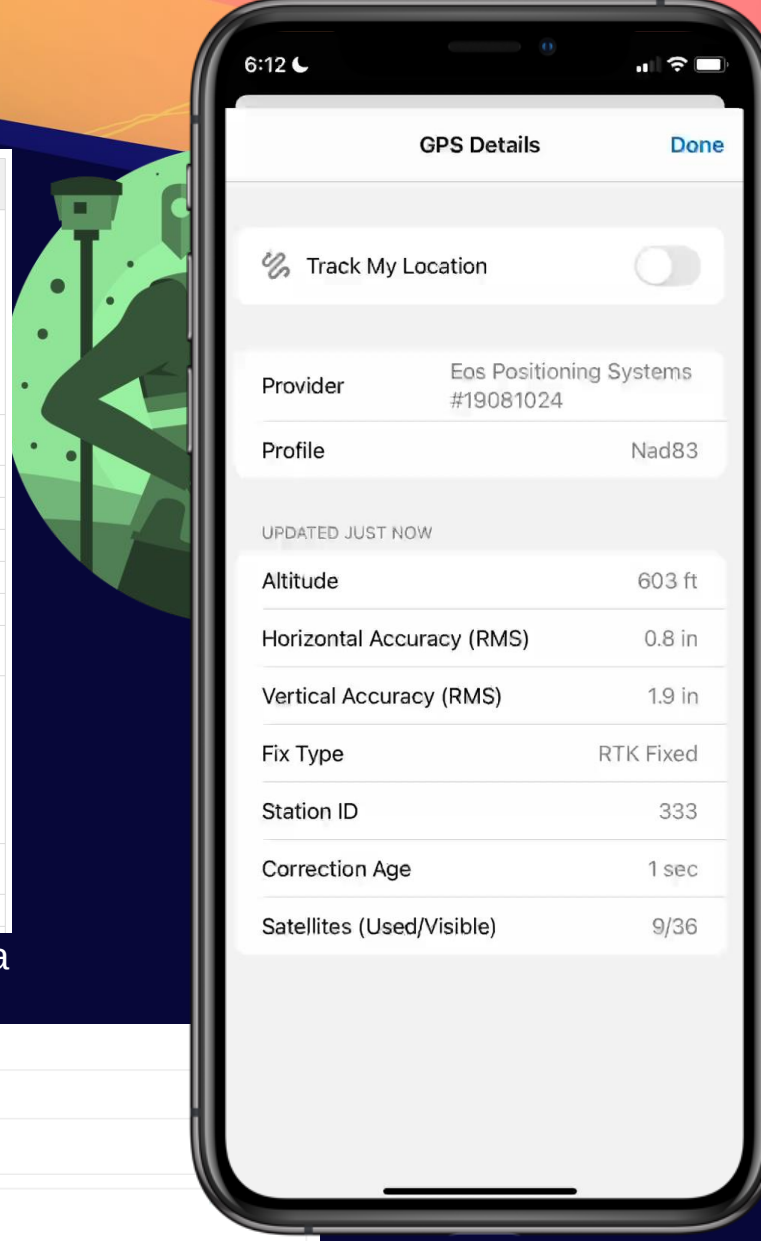
High Accuracy Data Collection

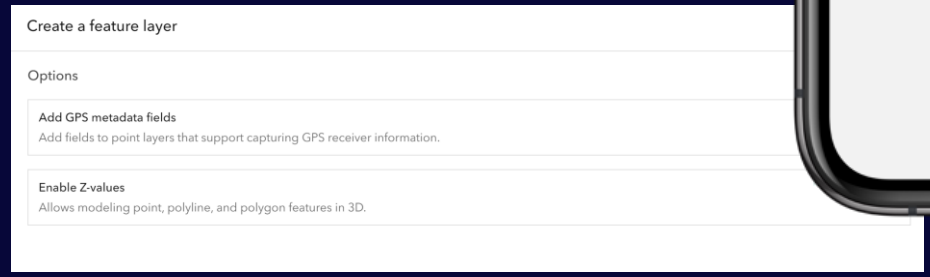
GPS Metadata

- **Metadata fields**
  - **Point layer fields include support for GPS averaging**
  - **Summary statistics for lines and polygons**
    - **Average/Worst horizontal and vertical accuracy of all GPS locations**
    - **Worst fix type of all GPS locations**
    - **Number of manual locations**
  - **Fields hidden during collection**
  - **Fields not directly editable in Field Maps**
- **Adding GPS metadata fields**
  - **When creating a new feature layer**
  - **Existing Layers:**
    - **ArcGIS Pro**
    - **Python notebook https://github.com/Esri/field-maps-scripts/**

Field alias	Field name	Field type	Domain
Position source type	ESRIGNSS_POSITIONSOURCETYPE	Short	ESRI_POSITIONSOURCETYPE_DOMAIN 0–Unknown 1–User defined 2–Integrated (System) Location Provider 3–External GNSS Receiver 4–Network Location Provider
Receiver Name	ESRIGNSS_RECEIVER	String (50)	
Latitude	ESRIGNSS_LATITUDE	Double	
Longitude	ESRIGNSS_LONGITUDE	Double	
Altitude	ESRIGNSS_ALTITUDE	Double	
Horizontal Accuracy (m)	ESRIGNSS_H_RMS	Double	
Vertical Accuracy (m)	ESRIGNSS_V_RMS	Double	
Fix Time	ESRIGNSS_FIXDATETIME	Date	
Fix Type	ESRIGNSS_FIXTYPE	Short	ESRI_FIX_TYPE_DOMAIN 0–Fix not valid 1–GPS 2–Differential GPS 4–RTK Fixed 5–RTK Float
Correction Age	ESRIGNSS_CORRECTIONAGE	Double	
Station ID	ESRIGNSS_STATIONID	Short	

Point layer metadata





Add GPS metadata fields to all layer types

Full list of current GPS values

ArcGIS Field Maps Workflow

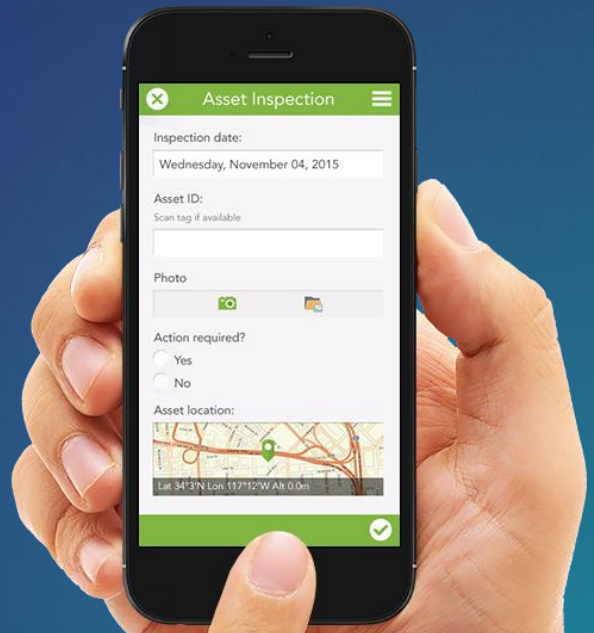
- Create a map for field data collection
- Share your map for use in Field Maps
- Collect data
- Inspect, verify, sync

ArcGIS Survey123

Form-centric field data collection

Leverages Smart forms

Analyze results immediately



Download on the App Store

ANDROID APP ON Google play

HTML

Survey123 workflow

1- Ask Questions

(Design & Publish)

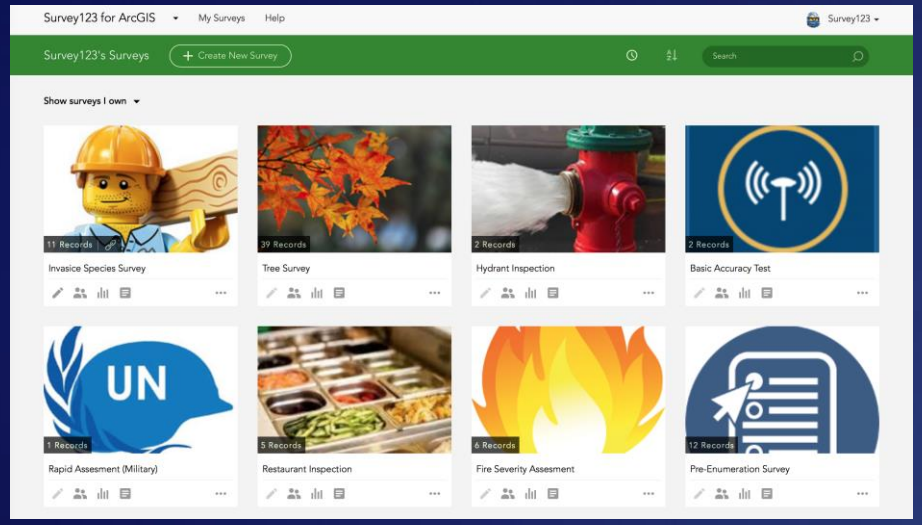
2- Get Answers

(Capture Data)

3- Make Decisions

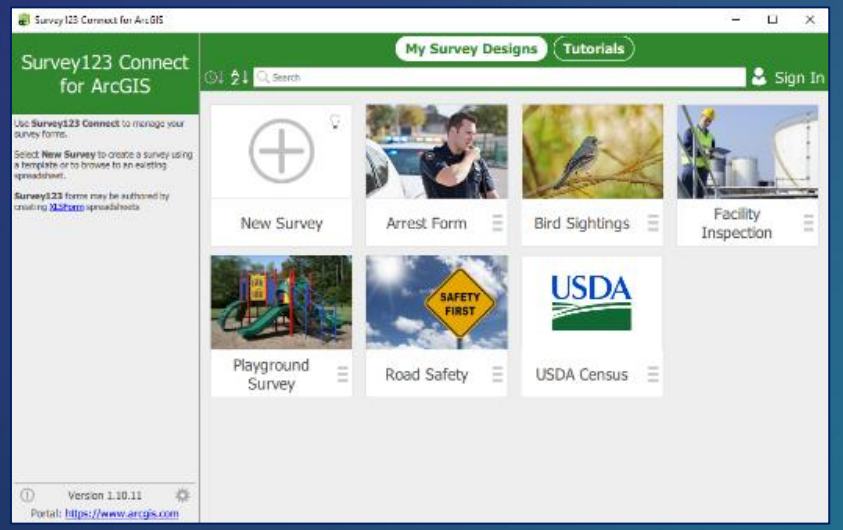
(View & Analyze)

Survey123 Components



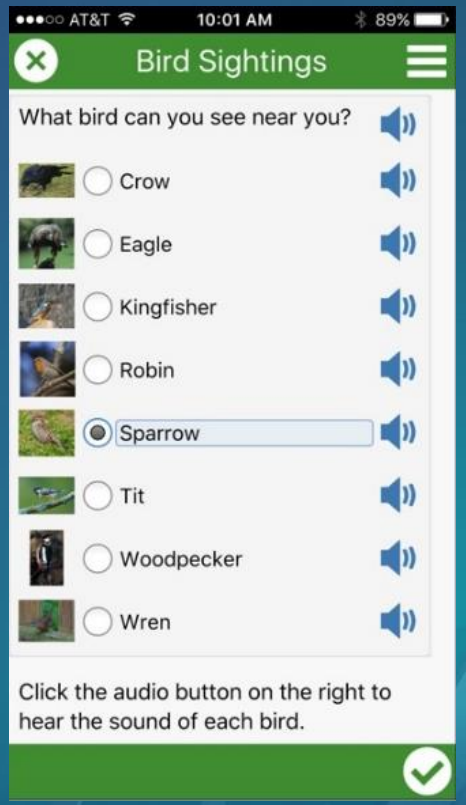
Survey123 website

- Author Simple Surveys
- Complete Simple Surveys
- Manage Access
- Analyze Results



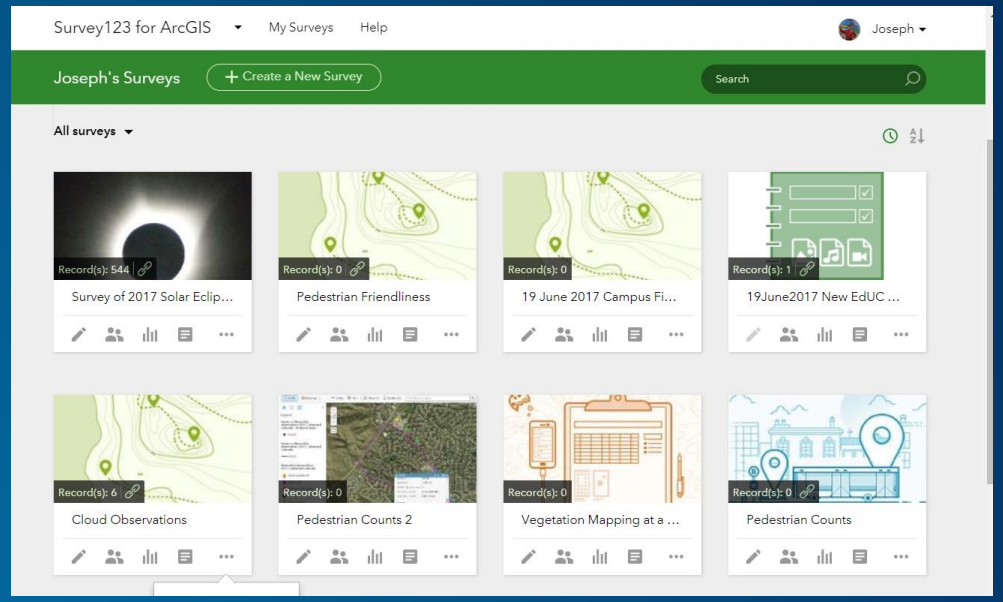
Survey123 Connect – Author Complex Surveys

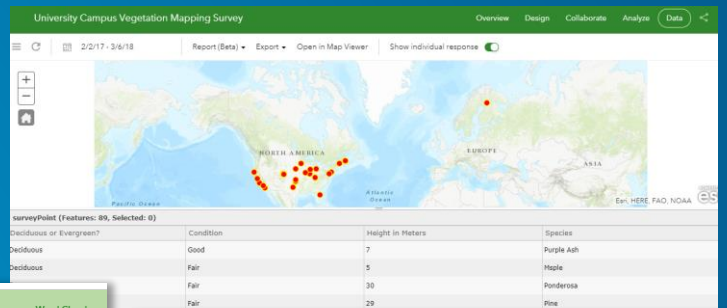
Survey123 for ArcGIS – Complete Surveys

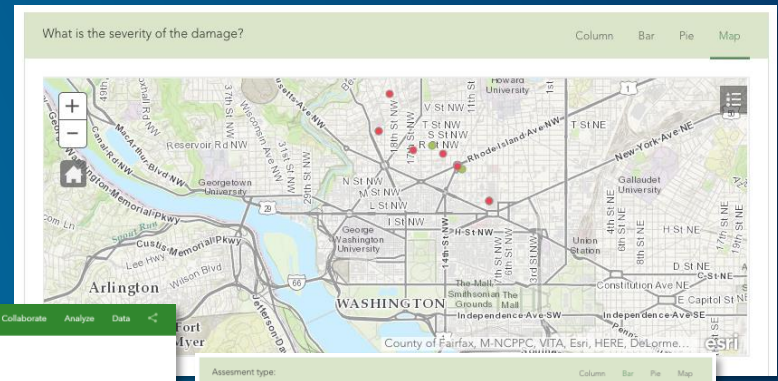


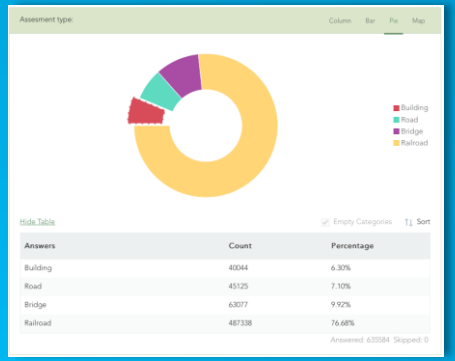
Manage Your Surveys

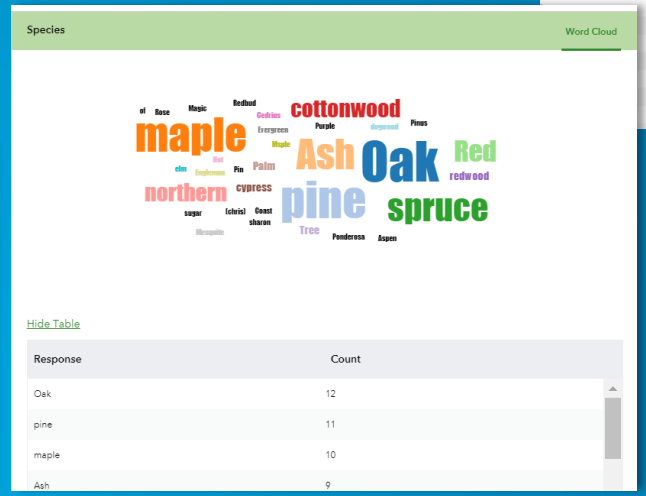
Reporting Tools

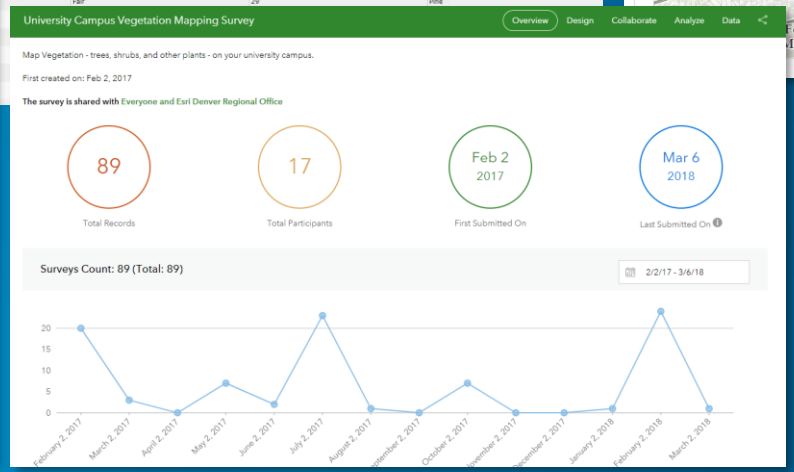


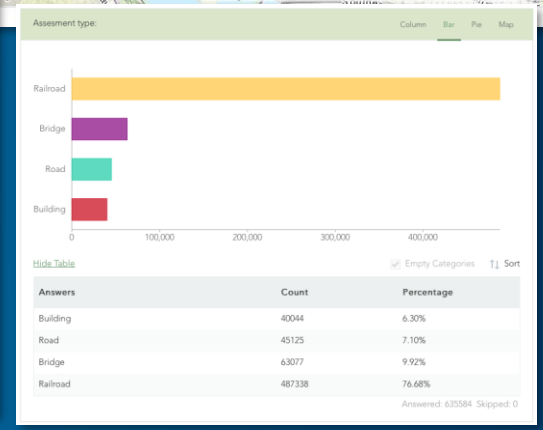






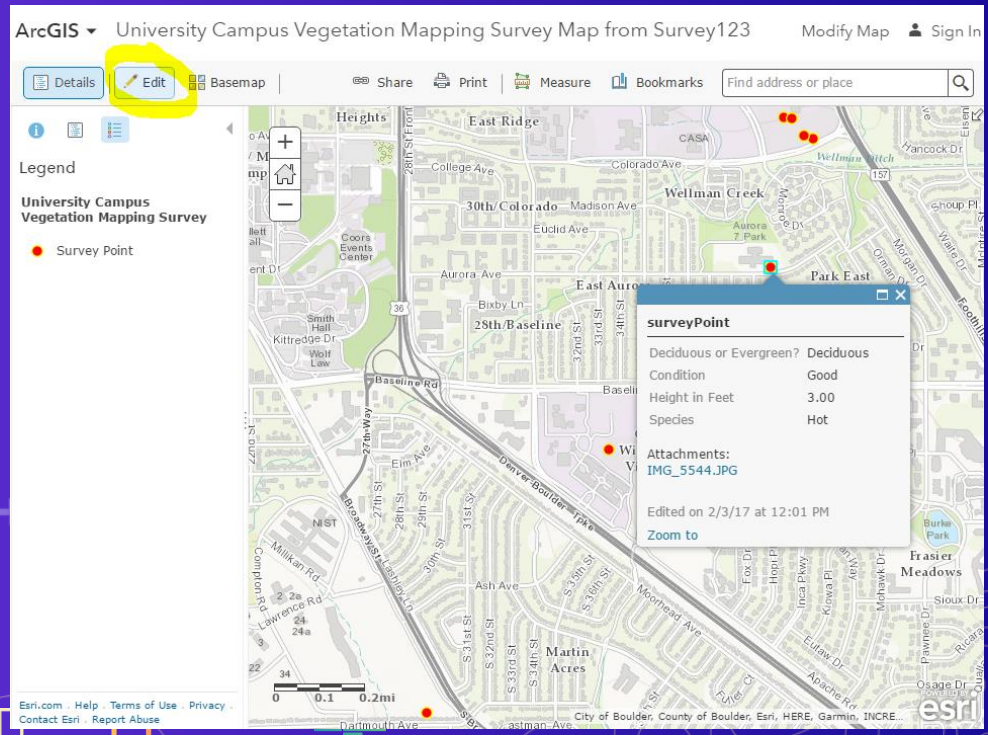






Yes, you can!

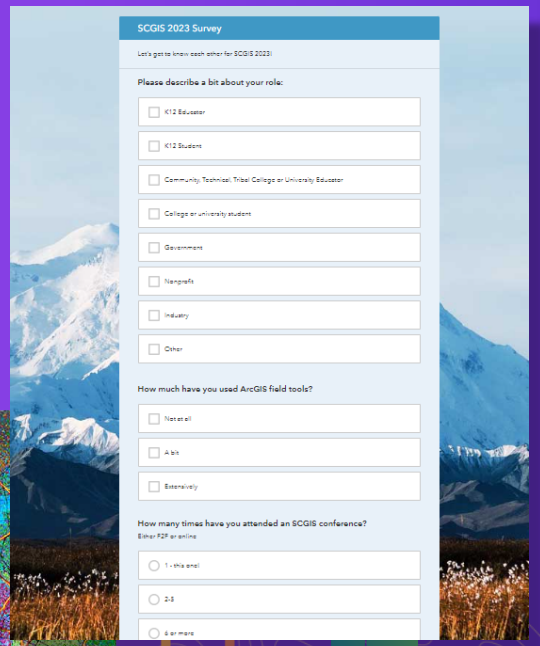
- Download Survey123 data
- Use Survey123 with higher precision GPS
- Citizen Science enable your surveys
- Use the Survey123 app or NOT use it! (the app looks a bit nicer than the web browser display, and the app allows for off-line data collection)
- Add data to your web map in a browser

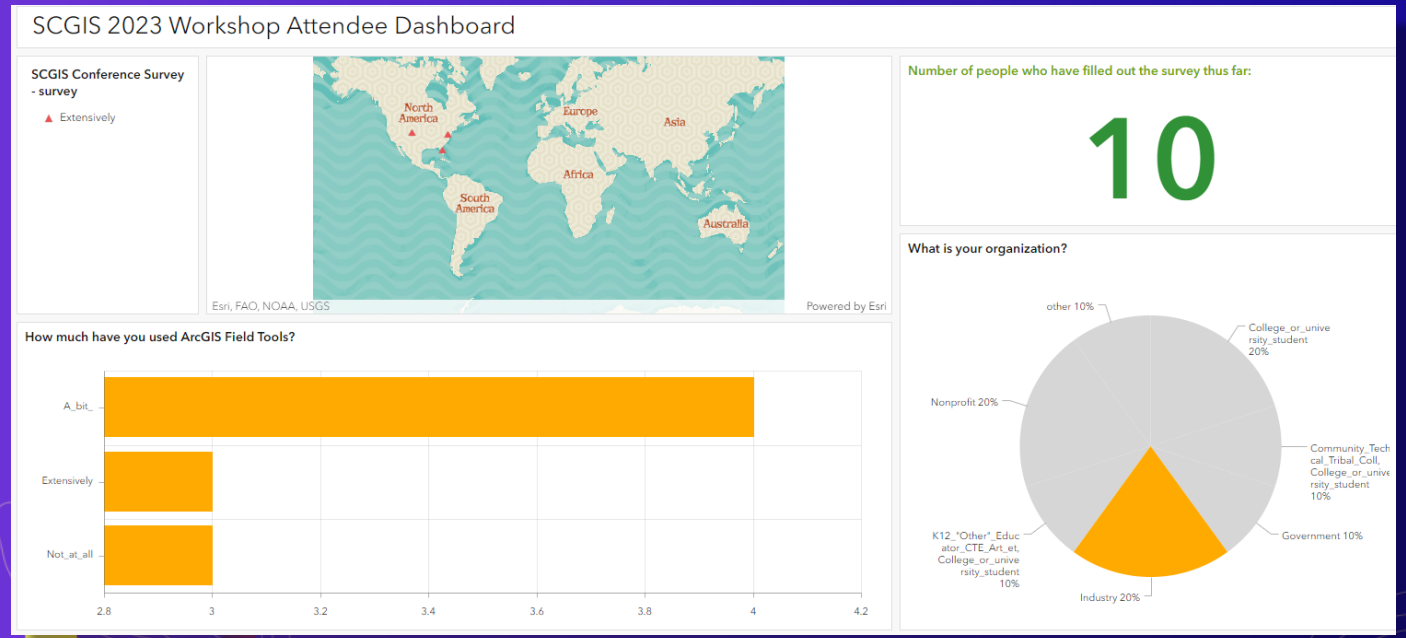


Survey and dashboard of our workshop participants

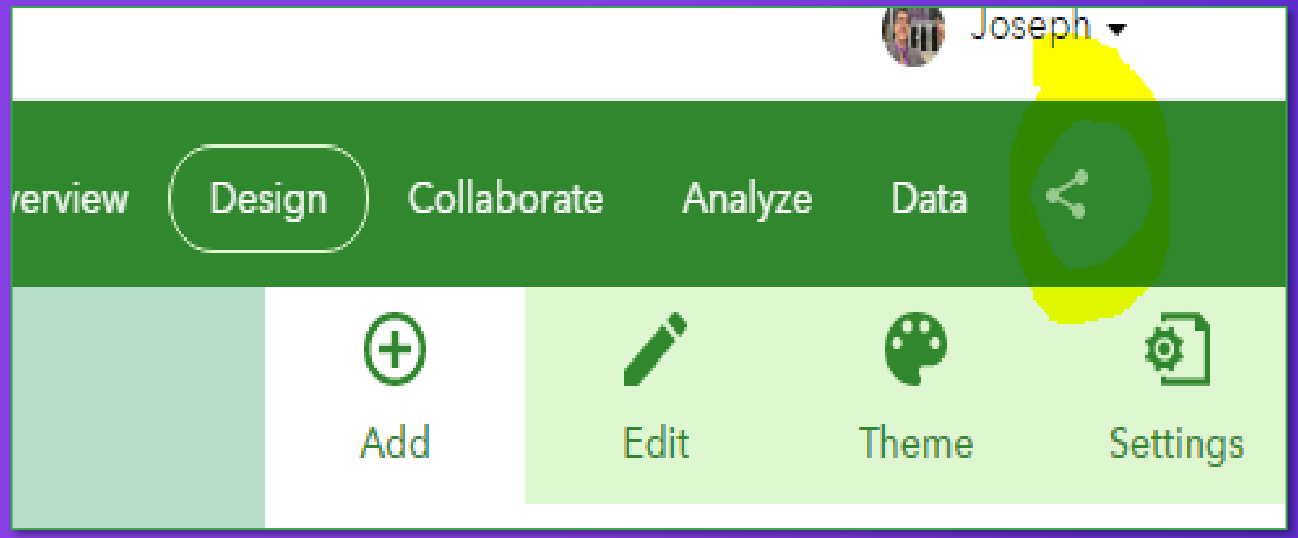
Survey:
https://survey123.arcgis.com/share/8a25d34b60fd4475b43d26f3eb427903

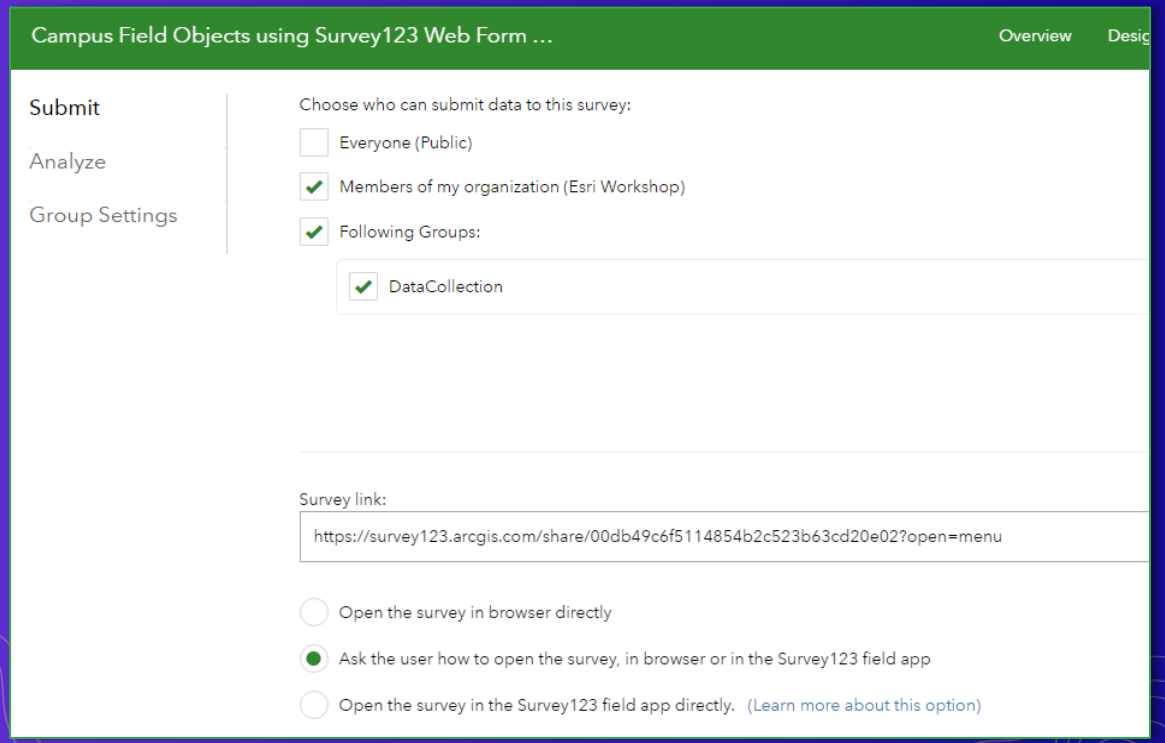
Dashboard:
https://www.arcgis.com/apps/dashboards/a14da7c948a74c528ddd3c1587576866

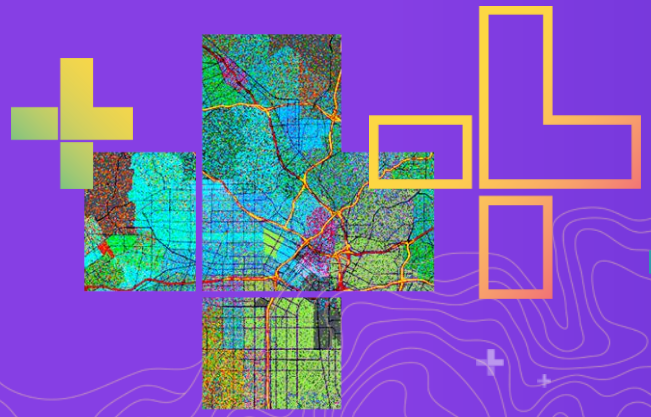




How to citizen science enable your surveys

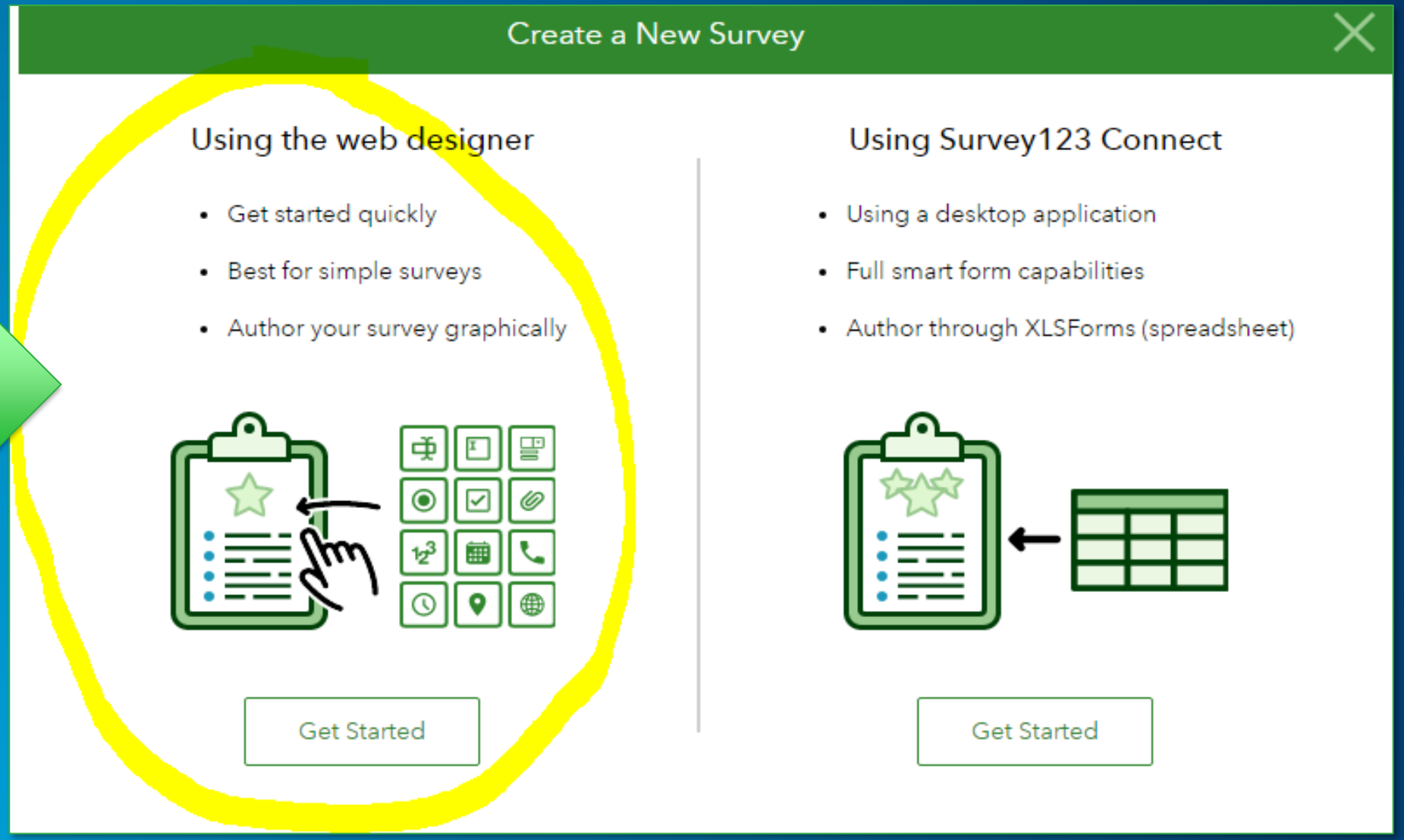






2 ways to create a Survey123

Today we will use this method



How to create a survey using Survey123 Connect (Excel) method

1. Survey123.arcgis.com > Build survey using Survey123 Connect.

2. Build survey using worksheets.

3. Publish survey to ArcGIS Online; test; create map from survey; save; share.

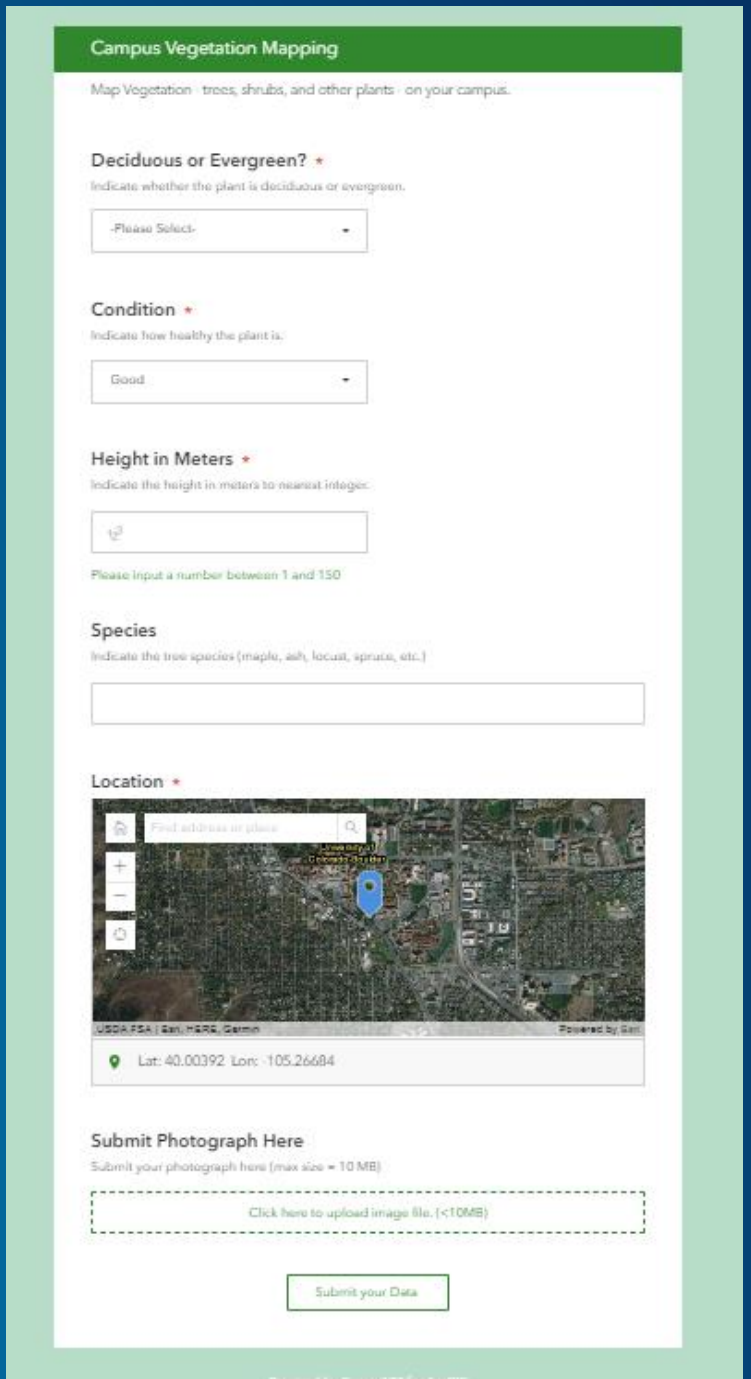
4. Collect data in the field using Survey123 app on smartphone (or web browser if crowdsourced).

type	name	label	hint
date	ReportDate	Date	
time	ReportTime	Time	
begin group	basic	Collect Field Data:	
select_one LivNonLiv	LivNonLiv_1	Living or Non Living?	
select_one ObjectType	ObjectType_1	Select Object Type:	
end group			
integer	Height_m	Height_m	Give height in meters rounded to nearest integer
geopoint	Location	Location	
image	Photograph	Photograph	

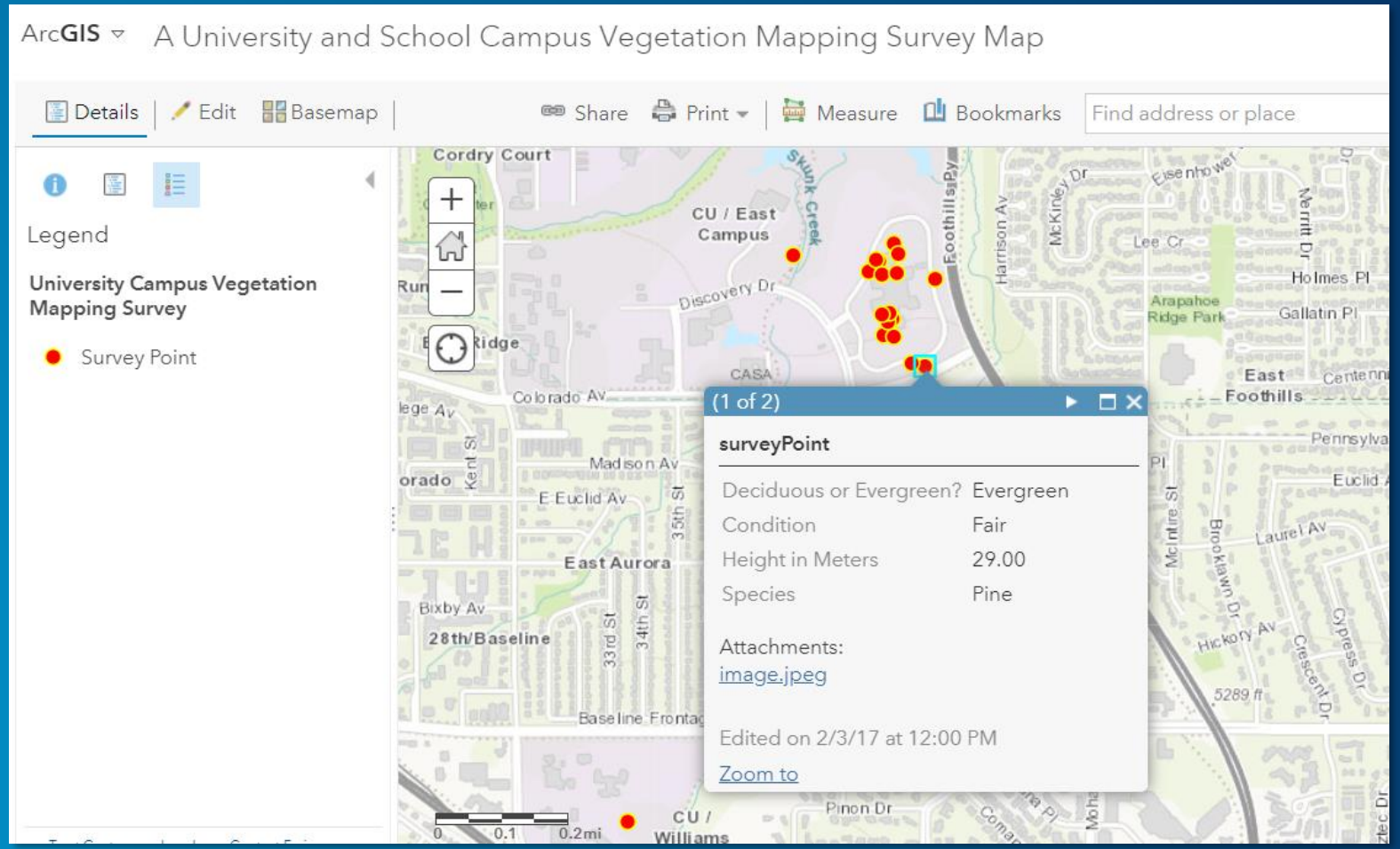
list_name	name	label	image	label::language1	Object
LivNonLiv	Living	Living			
LivNonLiv	Non_Living	Non Living			
ObjectType	tree	tree			Living
ObjectType	shrub	shrub			Living
ObjectType	other_living	other living			Living
ObjectType	chair	chair			Non_Living
ObjectType	bench	bench			Non_Living
ObjectType	trashcan	trashcan			Non_Living
ObjectType	other_nonliving	other nonliving			Non_Living

Open a web browser and go to this survey for campus vegetation mapping:

https://bit.ly/2pbnWDT

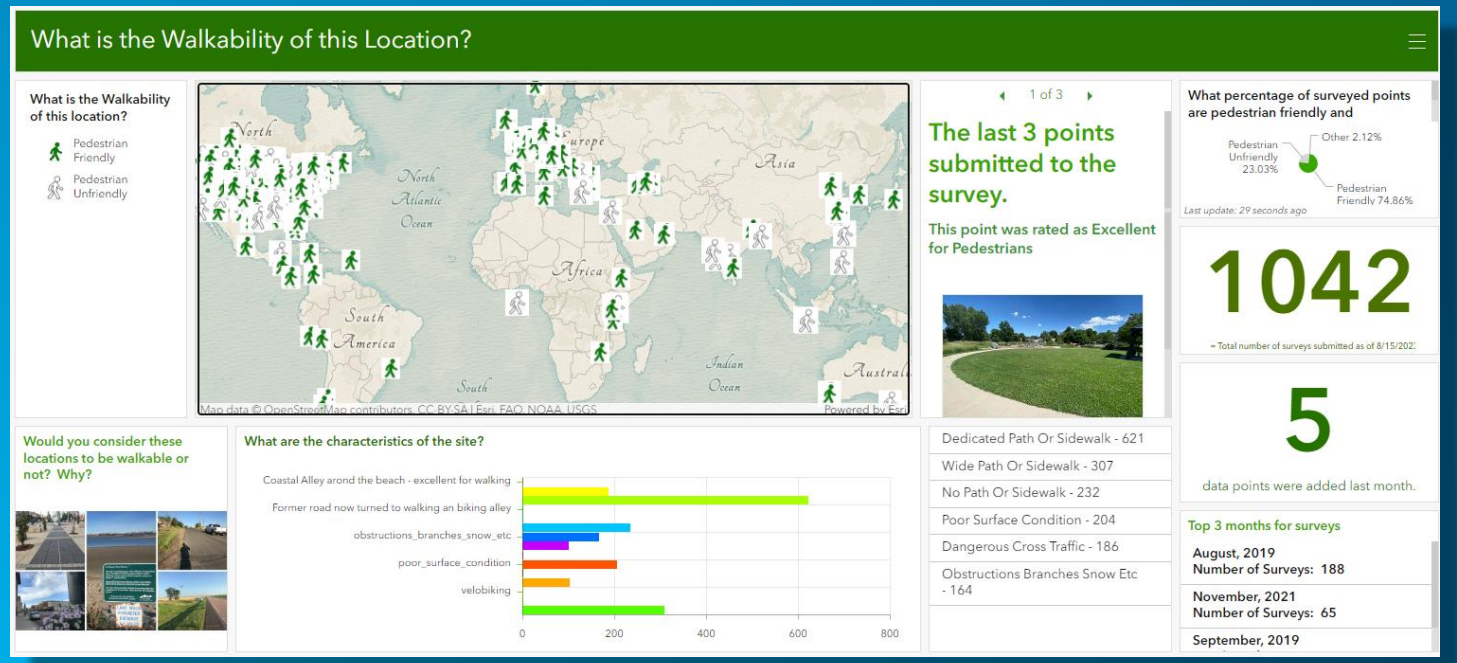


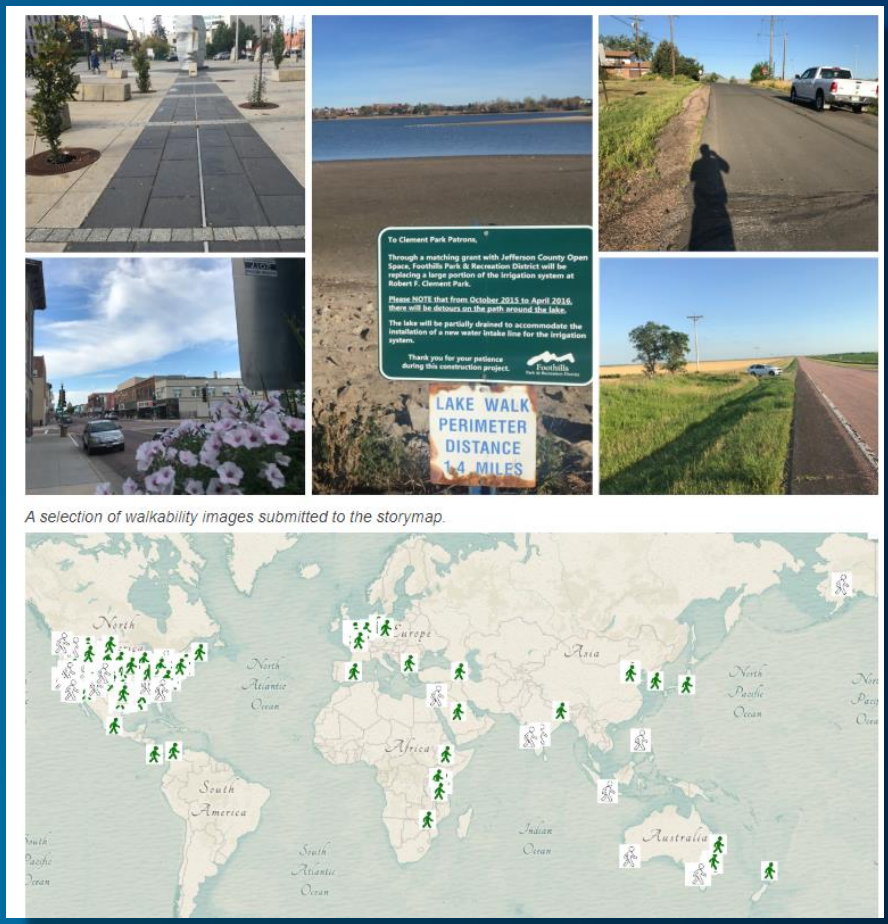
After filling in fields, verify results that you have submitted are on this map: https://arcg.is/1bPeTG



Let’s build this example: Survey, ArcGIS Online Map, Story Map, Dashboard

https://community.esri.com/community/education/blog/2019/08/27/how-walkable-is-your-community





A selection of walkability images submitted to the storymap.

Let’s go to work!

This lesson is organized in 4 parts:

Part 1: Creating a field survey using Survey123.
Part 2: Creating and analyzing a map from your survey data.
Part 3: Creating a dashboard from your survey data.
Part 4: Creating a storymap from your field data.

1. Create Survey

[1a]. https://survey123.arcgis.com > Sign in

[1b]. Create new survey > Use the web designer > Get Started > Provide some metadata (name, tags, summary): Walkability Survey | Walkability, pedestrians, smart cities | A survey to assess if and how different areas in a community are walkable. > Create.

[1c]. Design the survey.

[1c]. Design the survey.

(1) Add question #1: **Single Choice:** Pedestrian Friendly or Unfriendly? Create 2 choices: Pedestrian Friendly, and Pedestrian Unfriendly. Make 2 choices only. Make this a required question. > Save.

(2) Add question #2: **Likert**. Label: Rate the walkability of this site. For “items” indicate: Horrible for pedestrians, Not ideal for pedestrians, Neutral, Good for pedestrians, Excellent for Pedestrians. > Save.

(3) Add question #3: **Multiple Choice**: Label: Tick all characteristics that describe the site: Dedicated path or sidewalk, Wide path or sidewalk, Poor surface condition, Dangerous cross traffic, No path or sidewalk, Obstructions: Branches, snow, etc., Unsafe. 7 characteristics total. Do not allow “Other”. > Save.

(4) Add question #4: **Map**. Label: Where is the site located? Set Default Map to “OpenStreetMap”. Tick “Ask for device’s location when opening this question.” For the map’s location, set the scale and location where you anticipate you will collect the most data. > Save.

(5) Add question #5: **Image**. Label: Submit a photograph of the site. > Save.

- [1d]. Preview the survey. Close. If necessary, make adjustments. When satisfied, > Publish.

- Go to **Collaborate** tab > Tick: Ask the user how to open the survey, in browser or in the survey123 field app. Then, under “who can submit to this survey?” share at least with your organization, or groups within your organization.
- Under “What can submitters do?”, tick “add and update records”. Before leaving this screen, copy the “arcg.is” link near the top of the Collaborate page under “Link.” Example: https://arcg.is/0z1vfu. At bottom of screen > Save.

- [1e]. **Test** it! Add 1 point to your survey.

2. Create map

[2a]. Open a new browser tab > Go to www.arcgis.com > Sign in > Go to Content, My Content.
In list of folders on left, find the folder (beginning with “Survey” in the title) with your new survey.
This folder will contain a form, a feature layer (hosted, view), and another feature layer (hosted).
Click on feature layer (hosted) and examine the metadata. Fill in summary and description as “Walkability survey feature layer.” >

[2b]. In upper right, Open in Map Viewer. Pan and zoom the map to your study area.
Verify that your added point exists. If desired, change basemap.
Change style to Pedestrian Friendly or Unfriendly. Under Options > Unique Symbols, choose symbols that contrast with each other.

[2c]. Save your map and provide some metadata.
Share your map with everyone using the resulting URL.

We have data – now what?

Having the data isn't the goal. And having your data mapped is not the end goal, either.

The goal is answering a question, solving a problem, and understanding something in a deeper or richer way. And communicating what's been learned.

Analyze

Map Viewer in ArcGIS Online

ArcGIS Pro

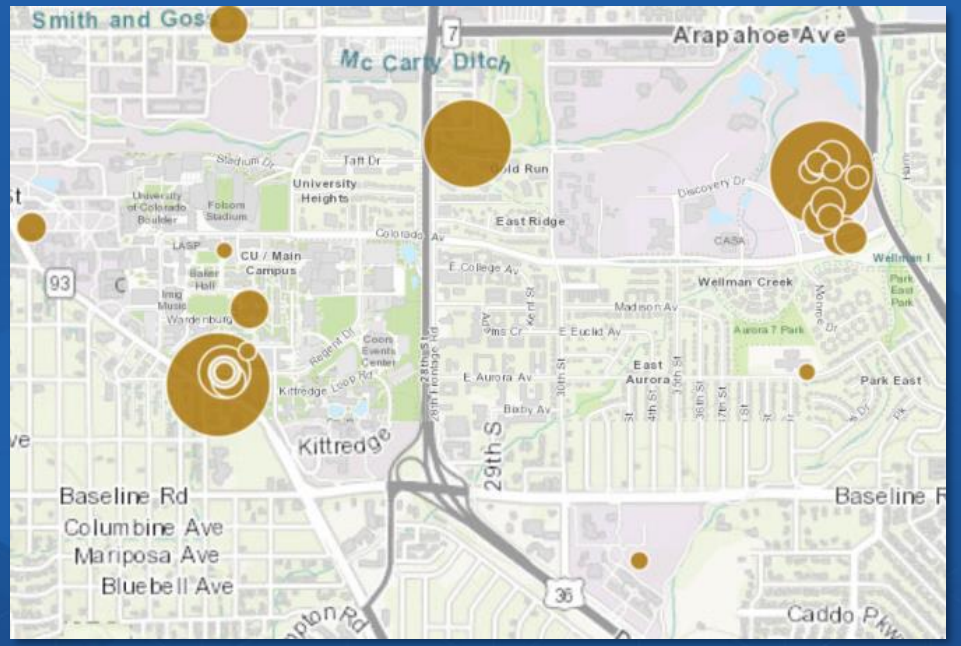
Communicate

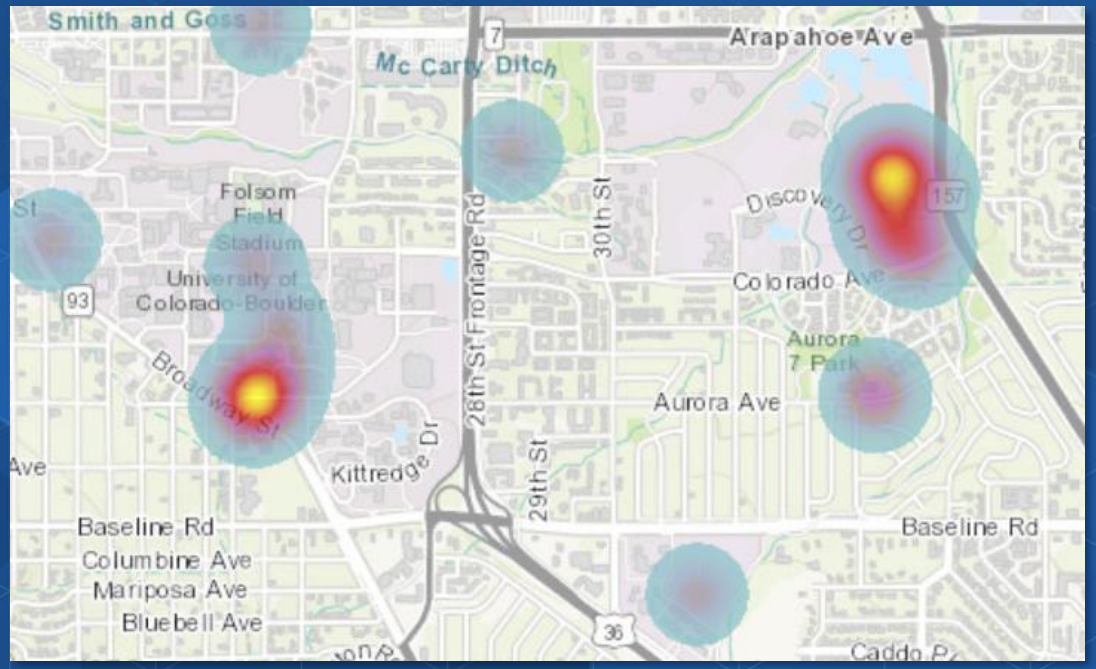
ArcGIS StoryMaps

ArcGIS Dashboards

Spatial Analysis

- Symbolize, classify your data on maps
- Investigate statistically significant hotspots
- Proximity, routing, overlay, and other map analysis tools
- Add and analyze additional data





Not only is it important to ask questions and find the answers, as a scientist I feel obligated to communicate with the world what we were learning.

- Stephen Hawking

Analyze

Communicate

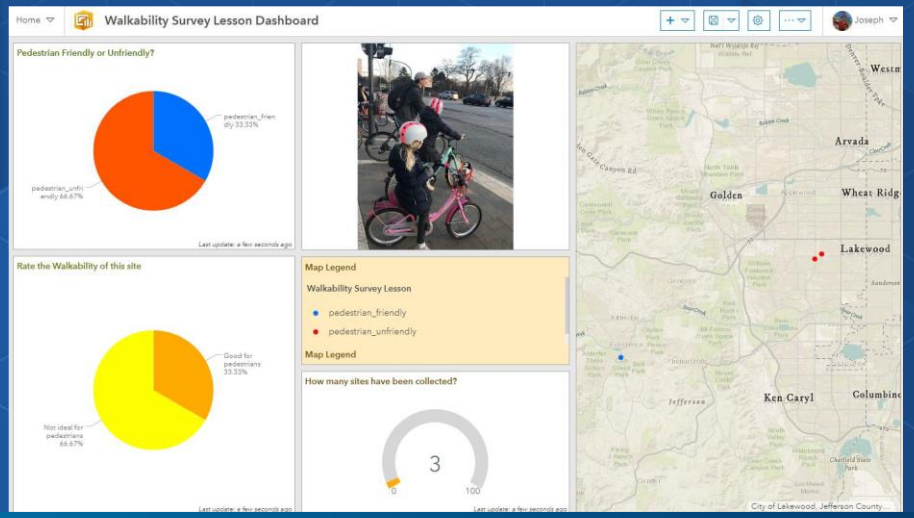
3. Create a Dashboard

A dashboard allows you and others to quickly visualize your survey results in a series of maps and graphs.

[3a]. While viewing your web map, > Share > Create a web app > Dashboard. Provide a title such as Walkability Survey Dashboard. Tick “share this app in the same way as the map.” > Done.

[3b]. Edit your dashboard. Use + sign > Pie chart > Select Walkability survey > Grouped Values > Pedestrian Friendly or Unfriendly? Take default colors. Use + sign > Add another pie chart > Select walkability survey > Grouped Value > Rate the walkability of this site. Use + sign > Add map legend. Use + sign > Add gauge. Use + sign > add image. If you need an image, you can use the author’s image on: https://live.staticflickr.com/7805/33263417808_640912b3bf_w.jpg.

Adjust the size, placement, and add titles to the elements in your dashboard. An example of what your dashboard could look like:

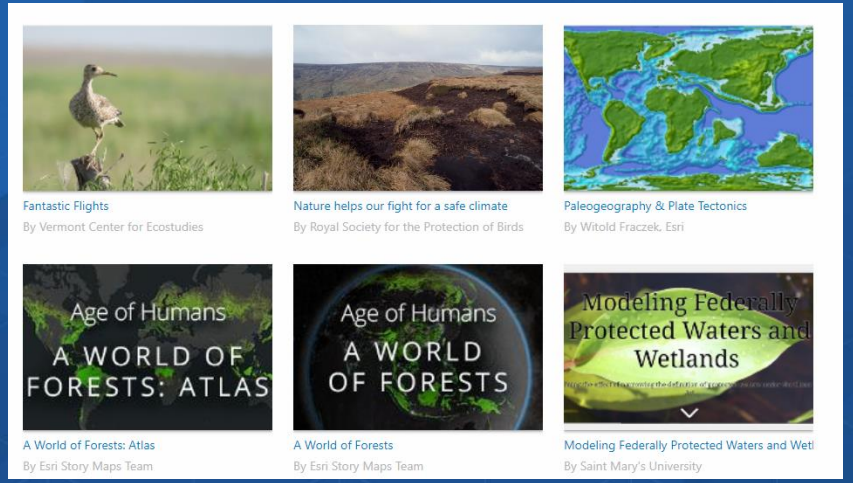


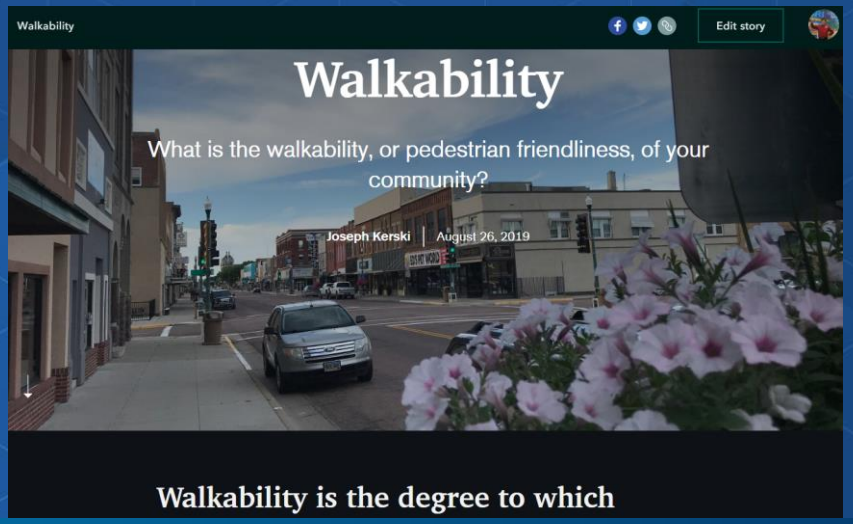
4. Create a Story Map

A storymap allows you, with multimedia and interactive web maps, to tell the story about the problem you are studying, along with possible solutions.

[4a]. Go to: https://storymaps.arcgis.com > Sign in. Using application launcher > Story Map > Create New Story.

[4b]. Insert the following items into your story map.
[Title] How walkable is your community?
[Subtitle]
A survey and map showing the degree of pedestrian friendliness of your community.
[Cover image: Lakewood Photograph #1 or your own photo.]
[Byline]
By < your initials >| Today's Date





[Quote]
“The General Theory of Walkability explains how, to be favored, a walk has to satisfy four main conditions: it must be useful, safe, comfortable, and interesting.”
— Jeff Speck, Walkable City: How Downtown Can Save America, One Step at a Time.

[Paragraph]
Walkability is the degree to which pedestrians, including those in wheelchairs, on bicycles, scooters, and in any other non-vehicle mode, feel safe and able to traverse their community. Whether one wants to walk in a community depends on many factors, such as social norms, safety, personal preferences, and other factors. This study focuses on the physical challenges or lack of challenges that pedestrians face. For pedestrians using wheelchairs or pushing strollers, walkability can also be influenced by curb cuts, stairs, or obstacles on the sidewalk.
[Paragraph] Connecting Surveys, Maps, and Apps -:- Author: Joseph J. Kerski, PhD GISP, Esri -:- Page **7** of **9**

What is the walkability on a street or path in your own community? Submit your own point using the link below:

[Button]
Text in button: **Click to Submit Survey Point.**
Link in button: Find the URL for your Survey123 about walkability and insert it here. Or, use the author's survey here: https://arcg.is/1nKevj

[Paragraph]
The results of this survey, with data gathered from pedestrians around the world, can be visualized on the map below.

[Map]
Open a separate tab in your browser and go to www.arcgis.com > Sign in if necessary > search for your ArcGIS Online map showing the results of your walkability survey. Once you find the map, under the thumbnail, click "Add to Favorites." Or, use the author's web map, here: http://www.arcgis.com/home/webmap/viewer.html?webmap=f2c79a4332be488fb15a2254a3bf901e
Go back to your browser tab where you are editing your story map.
[Map]
> My favorites > select the walkability map, which should now appear in your favorites from the previous step.
Zoom in to the largest scale such that all 3 walkability survey points are visible > Place Map.
Overwrite the default caption with the following text: Map showing walkability survey points. Your map should look like this, below. Your users will be able to interact with it.

[Embed]
Add a link to your Dashboard. Or use the author's dashboard:
https://www.arcgis.com/apps/opsdashboard/index.html#/f4e5ce79b4bb4ffc8b29e1c73629bfce
Change the dashboard caption to: Walkability survey responses.
When done, the dashboard should be embedded into your storymap. Your users will be able to interact with it.
[Heading] Would you say the following location is walkable?
[image] Use the Lakewood Colorado #1 image (or your own image).

Walking in a pedestrian unfriendly place

[Video]
Add "Walking in a Pedestrian Unfriendly Place" video in New Jersey by the author, Joseph Kerski at this URL: https://youtu.be/wEmZiDv7BjM
The video should appear as embedded content.

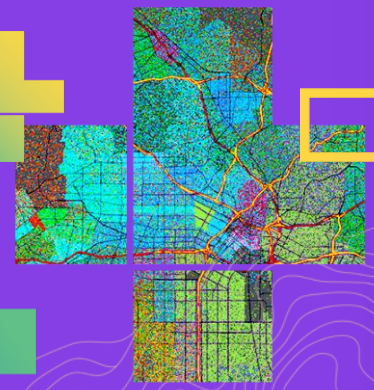
[Separator] [Paragraph]
Story Map by < your initials > using lesson provided by Joseph Kerski, Esri, as an introduction to Survey123, web maps, operations dashboards, and story maps.
[Separator]

[4c]. When satisfied, preview your story map, test it, publish, and share. The author's story map is here:
https://storymaps.arcgis.com/stories/7afc60296c424214b0be2221232a8346

This Lesson

Connecting surveys, maps, dashboards, storymaps:

https://community.esri.com/community/education/blog/2020/03/13/lesson-connecting-surveys-maps-dashboards-and-story-maps

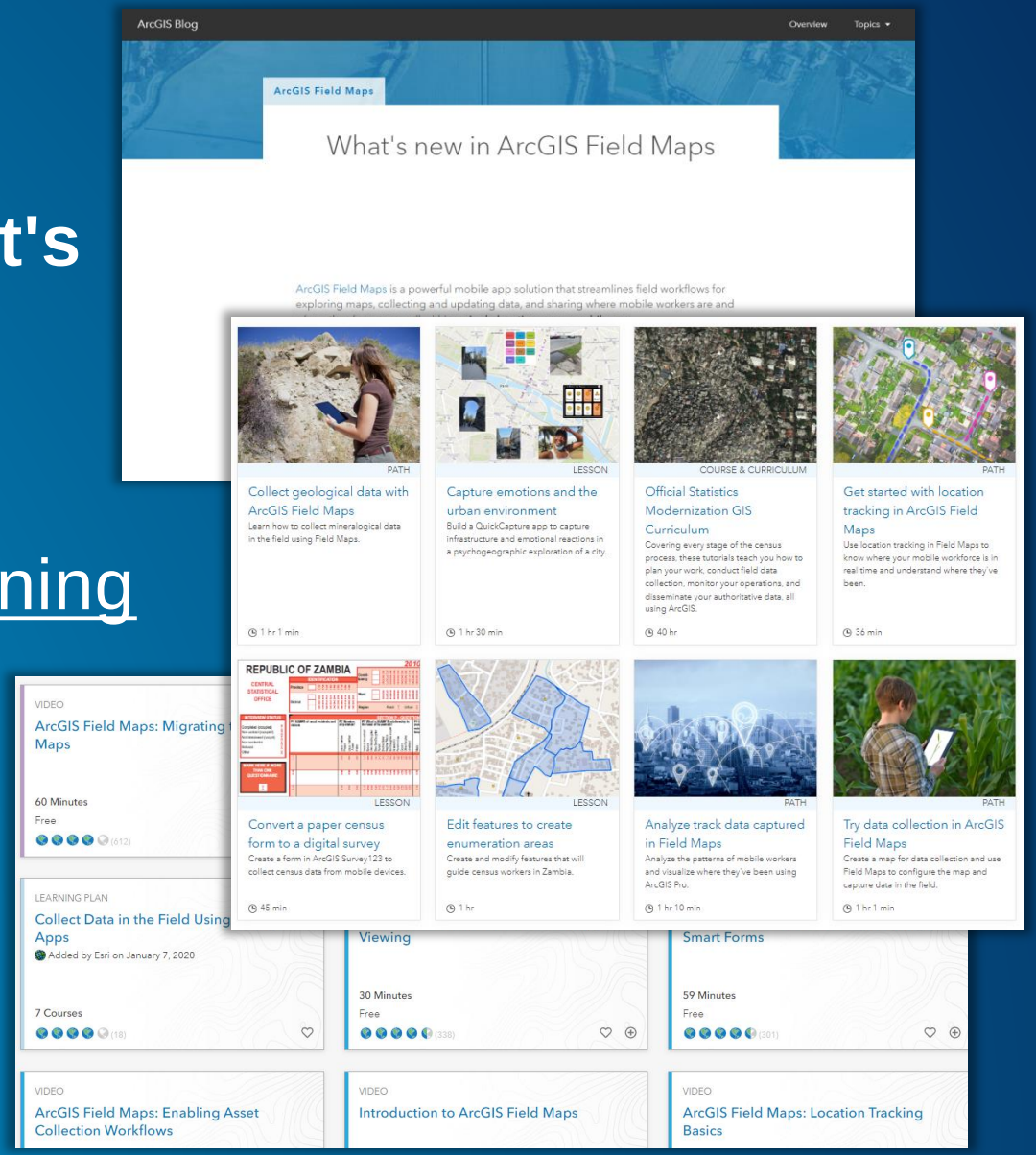


Keep learning!

Keep in touch with periodic "What's New" in each of the tools.

Lessons and Tutorials: https://www.esri.com/training

Story Map: https://esriurl.com/appsinschools



Keep learning!

Recent Higher Ed Chat recording on this topic: https://mediaspace.esri.com/media/t/1_x372uids

Esri Canada's de-mystifying essay: https://resources.esri.ca/getting-technical/demystifying-arcgis-field-data-collection-apps

Connect these tools—GIS is a platform!

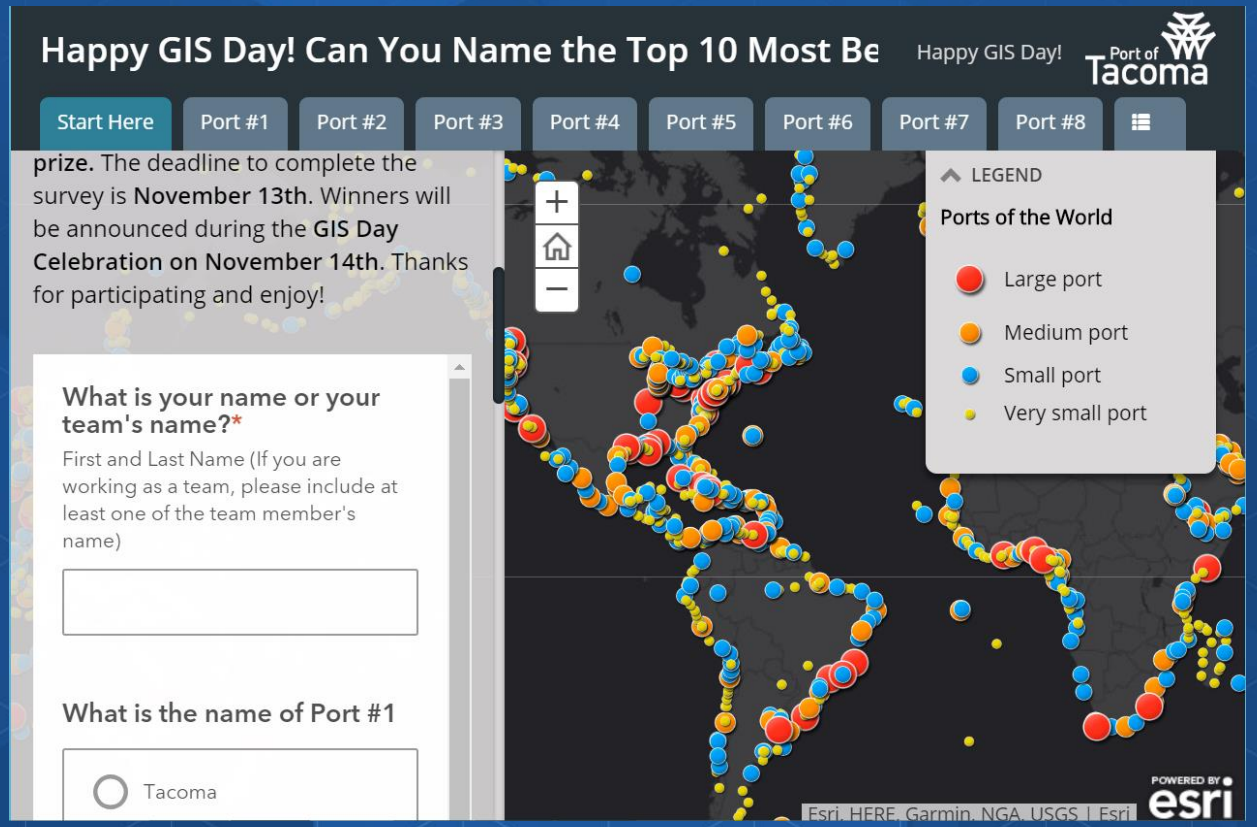
Embed a survey in a story map!

The Top 10 beautiful Ports

Use a survey in a dashboard!

Learn Lesson:

https://www.arcgis.com/home/item.html?id=856da9aeb6944e3da2384906c7139dea



Analyze

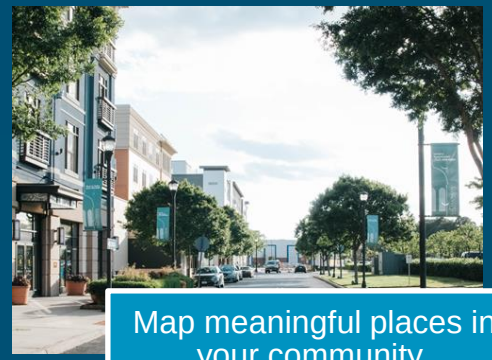
--spatial analysis tools in ArcGIS Online
--spatial analysis tools in ArcGIS Pro

Communicate

--Instant Apps
--StoryMaps
--Dashboards
--Embed maps in videos
--Articles/chapters/blog essays

ArcGIS Tutorials

Step-by-step tutorials based on real-world scenarios



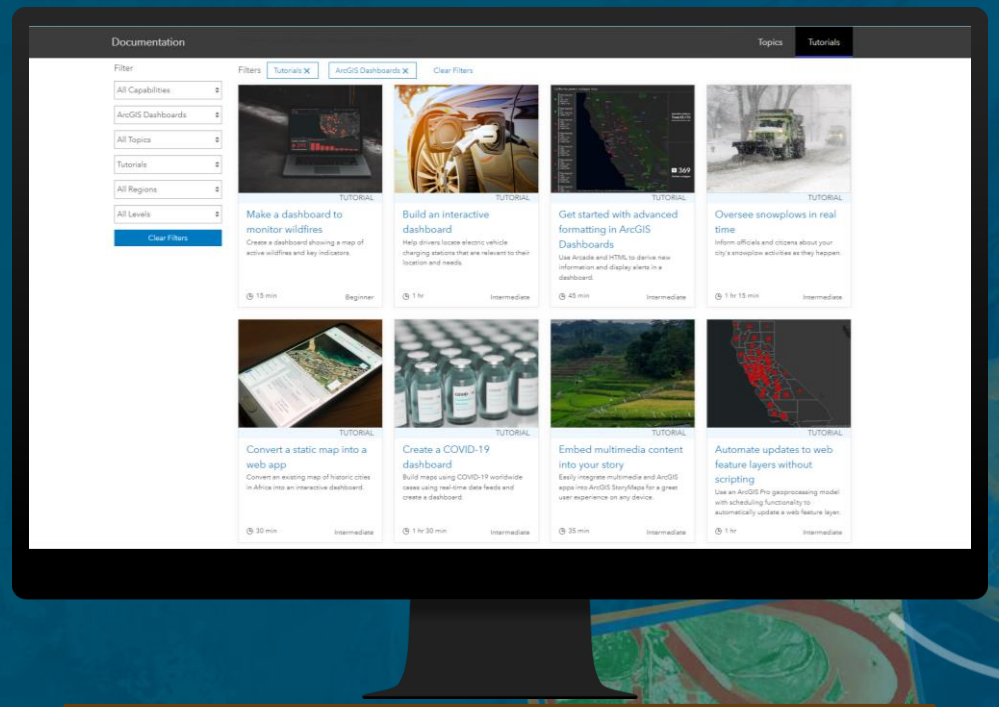
Map meaningful places in your community

Crowdsource student hangouts

Map your community cleanup

Evaluate equitable drinking fountain distribution

ArcGIS tutorials featuring field collection apps

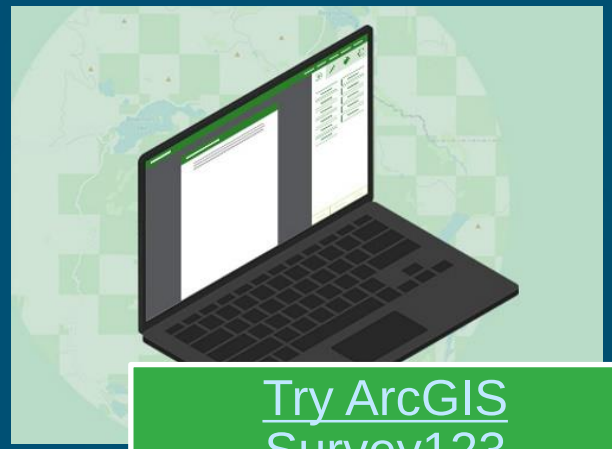


https://learn.arcgis.com

ArcGIS Tutorials Series

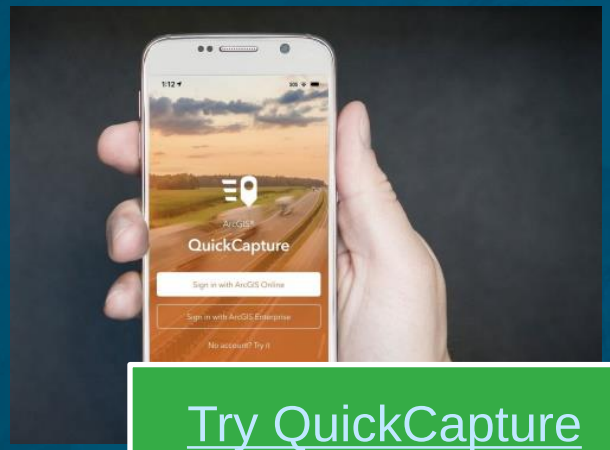
Step-by-step tutorials based on real-world scenarios

www.learn.arcgis.com



Try ArcGIS Survey123

Try data collection in ArcGIS Field Maps



Try QuickCapture

Keep learning!

Esri Training: https://www.esri.com/training (teaching with GIS, field data collection).
Esri Press: https://www.esri.com/en-us/esri-press/overview
Esri MOOCs: http://www.esri.com/mooc (especially - do-it-yourself web apps).

Esri Community space on Survey123: https://community.esri.com/groups/survey123
Esri Community space on Field Maps: https://community.esri.com/t5/arcgis-field-maps/ct-p/arcgis-field-maps

Esri Community space on QuickCapture: https://community.esri.com/t5/arcgis-quickcapture/ct-p/arcgis-quickcapture

Learn library of lessons: https://learn.arcgis.com
Choosing which app to use: https://esriurl.com/appsinschools

Comparing Two Field Data Gathering Tools: ArcGIS Field Maps and ArcGIS Survey123

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