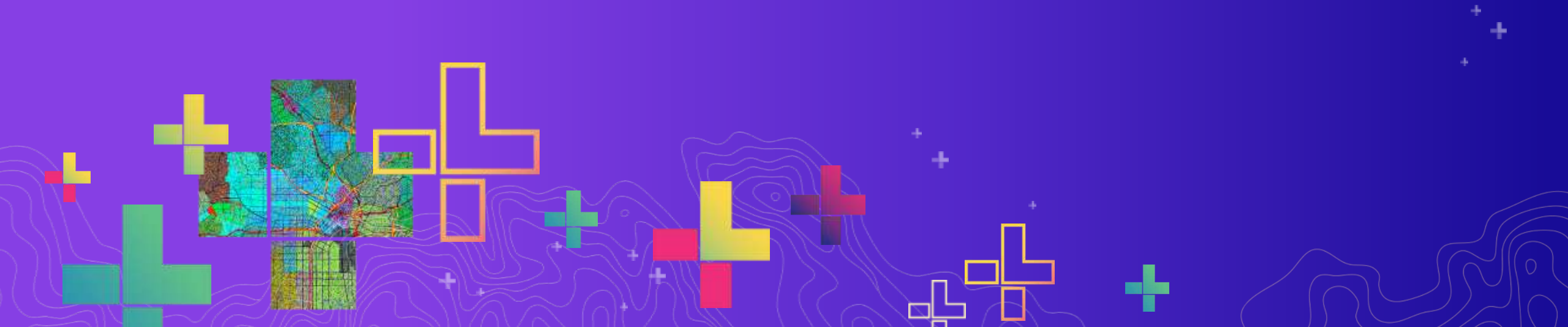




ArcGIS QuickCapture

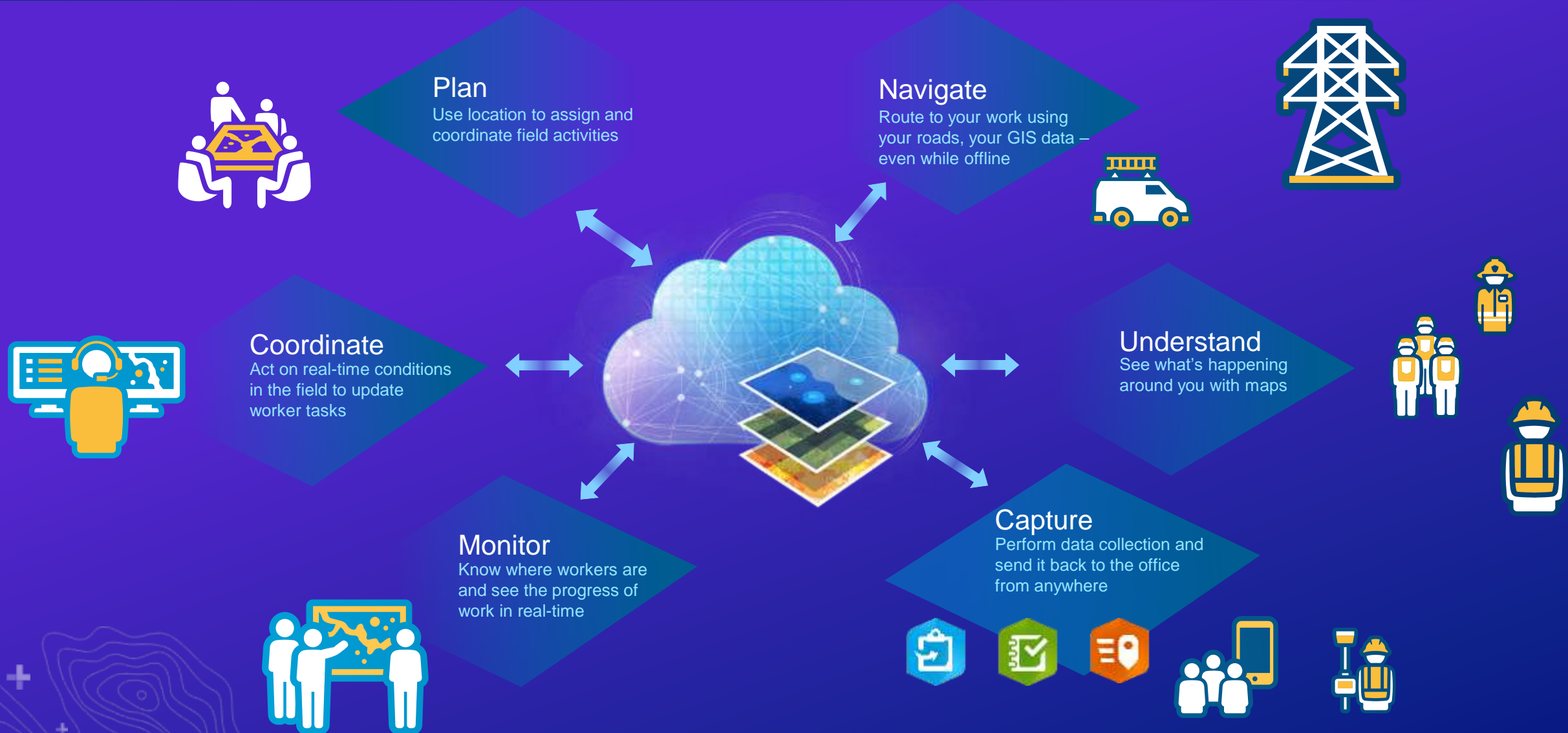
Mark Scott msscott@esri.com

Spring NEARC | May-19 2020



Field Operations in ArcGIS

Optimize field operations with the power of location



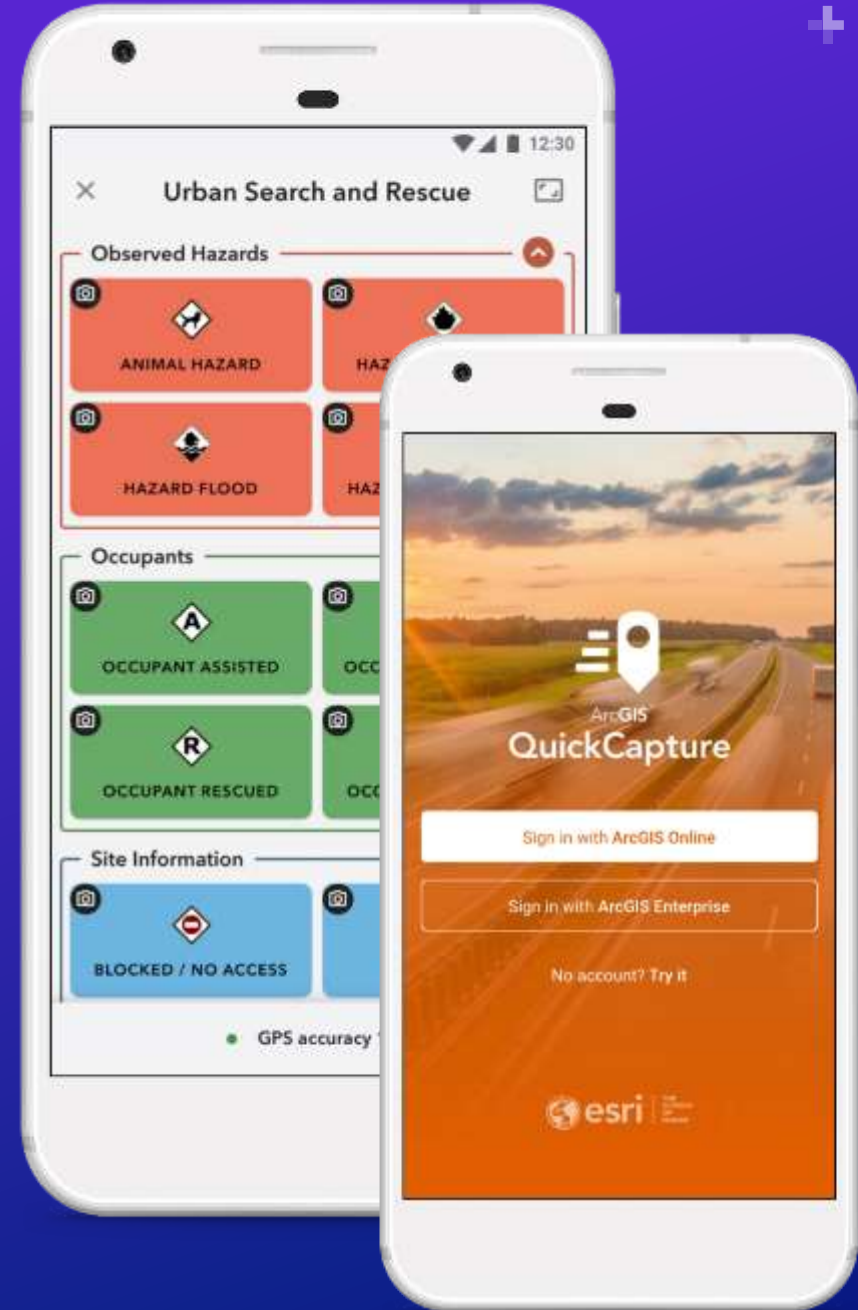
ArcGIS QuickCapture

The rapid data collection app

A “big button” mobile app

Simplest way to capture field observations

At-speed & rapid data collection workflows



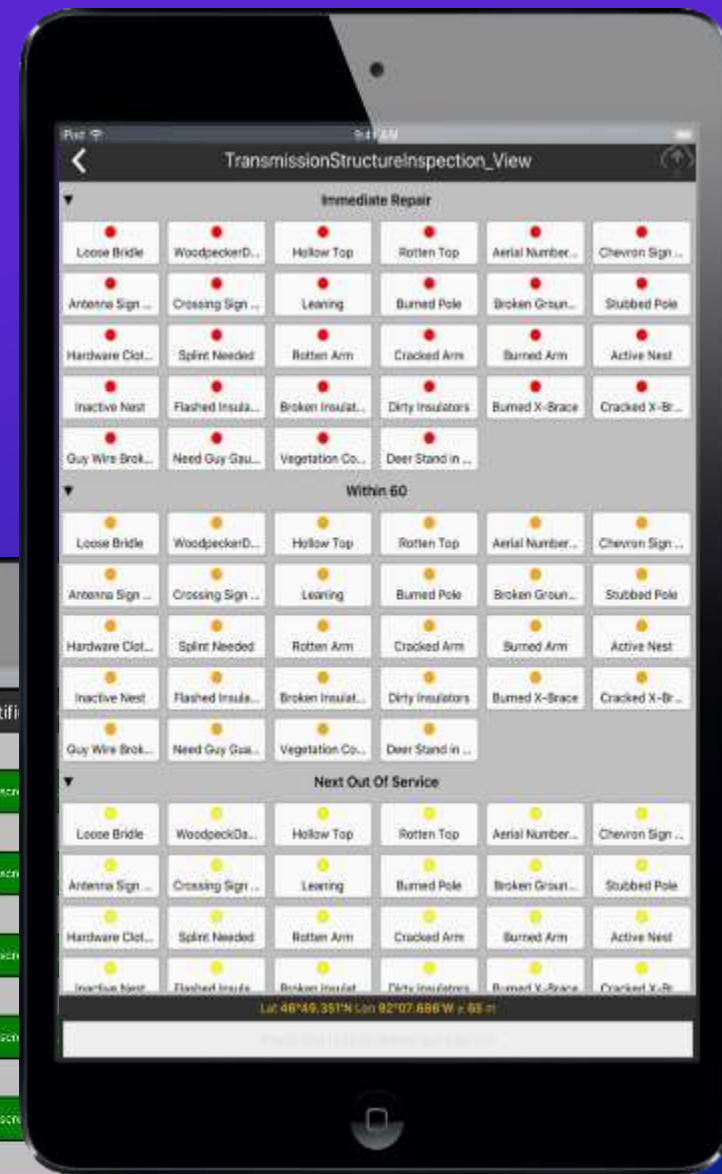
At-Speed Asset Inventories and Inspections

Colorado DOT, USA



Aerial Surveys and Inspections

Minnesota Power, USA



Emergency Response

Fire and Emergency, New Zealand



We are so team!

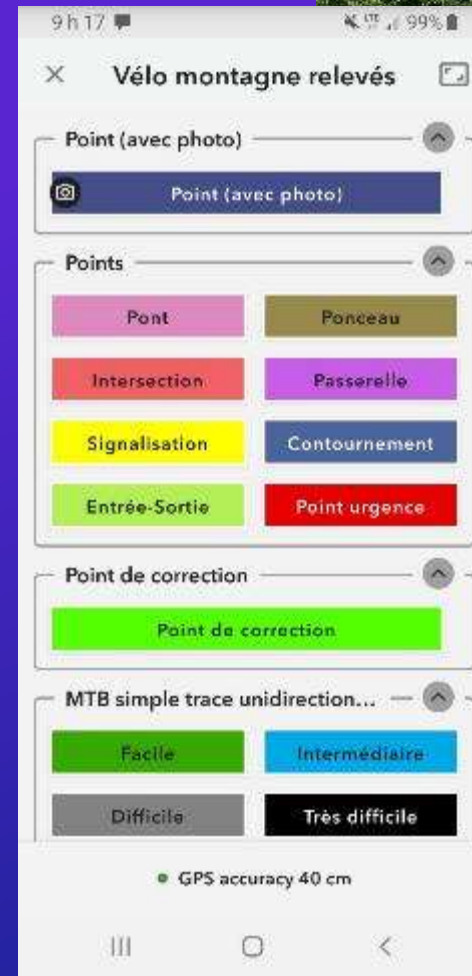
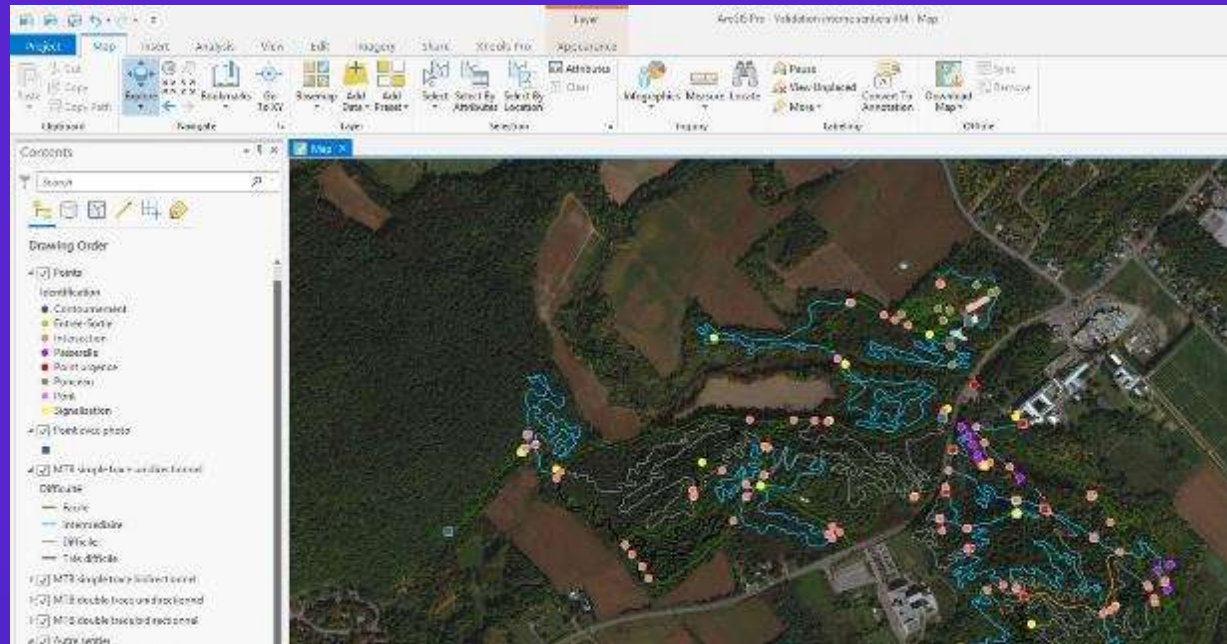
In this photo software v system. L Assessment great success teams are

QuickCap + image of Andrew, B Westland West Coast Taskforce West Coast



Trail Maintenance and Mapping

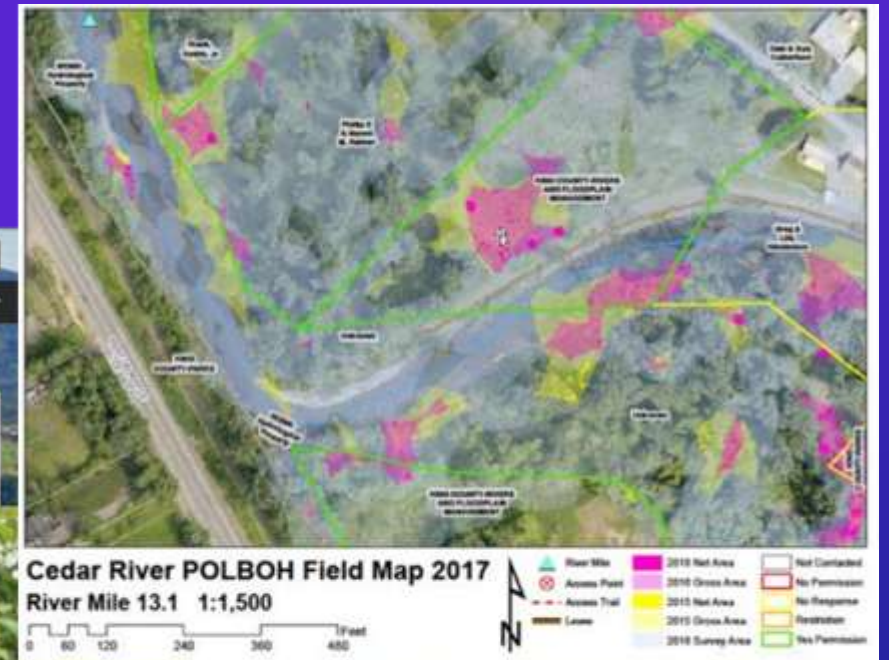
Velo Quebec, Canada



Noxious Weed Abatement

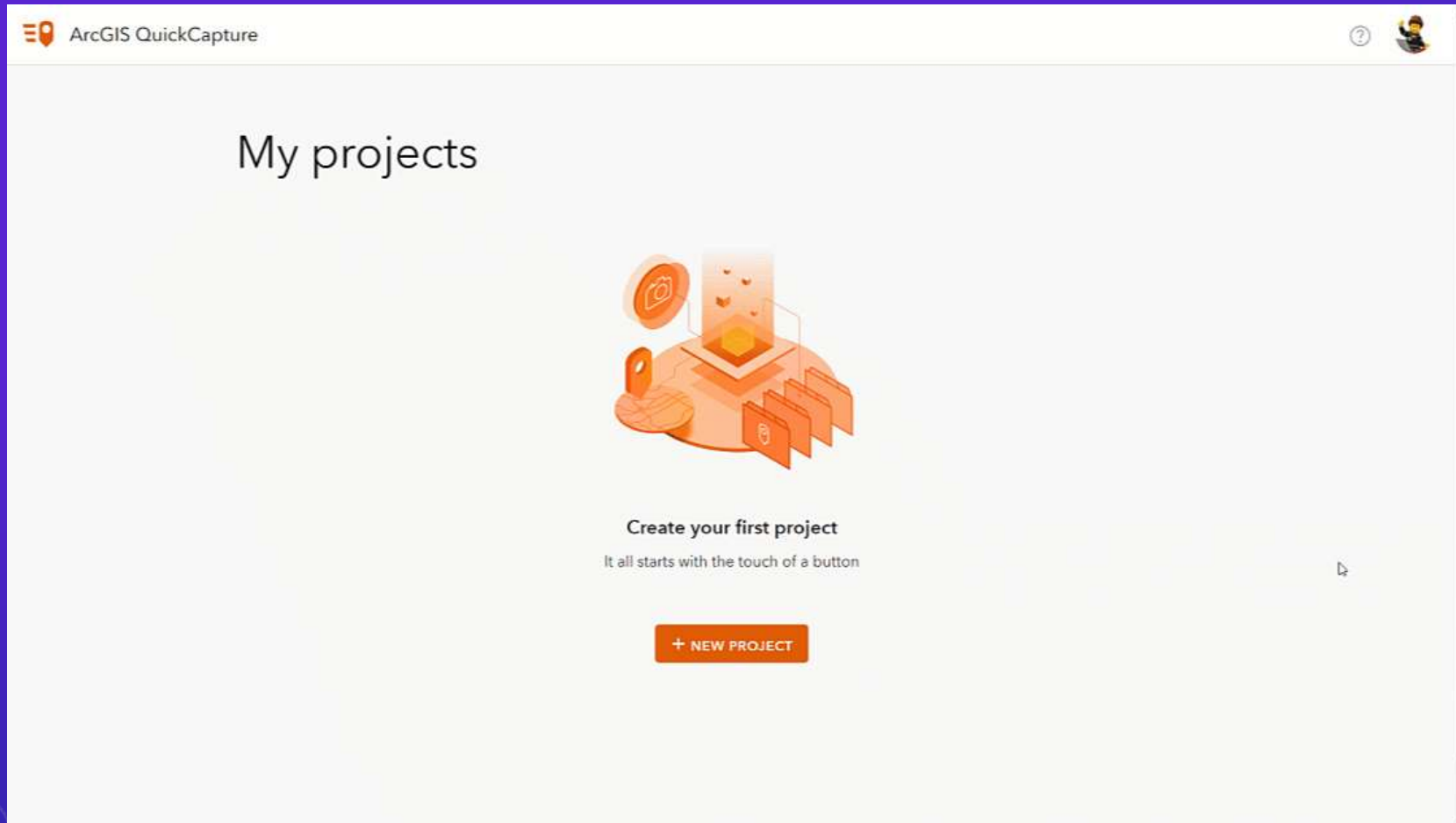
King County, USA

The screenshot shows the King County website's 'Noxious weeds' page. The header includes the King County logo and navigation links: Home, How do I..., Services, About King County, and Departments. A search bar is located in the top right. The main content area is titled 'Noxious weeds in King County, Washington' and includes a brief introduction: 'Noxious weeds are a danger to our environment and the economy. Introduced species cost our region millions of dollars in lost agricultural production, environmental degradation and added maintenance costs. Once spread to natural areas, they harm native plants and wildlife and can be eradicated.' Below this, there are four small images of weeds: Foxglove, Taraxacum, Giant Hogweed, and Blackberry. A section titled 'Identify and learn about weeds and invasive plants' provides links to a photo guide, weed lists, and frequently asked questions. A sidebar on the left lists various resources like 'Report a weed', 'Weed identification photos', and 'Maps'. The footer contains three buttons: 'Information for...', 'Do more online', and 'Get help'.



QuickCapture designer

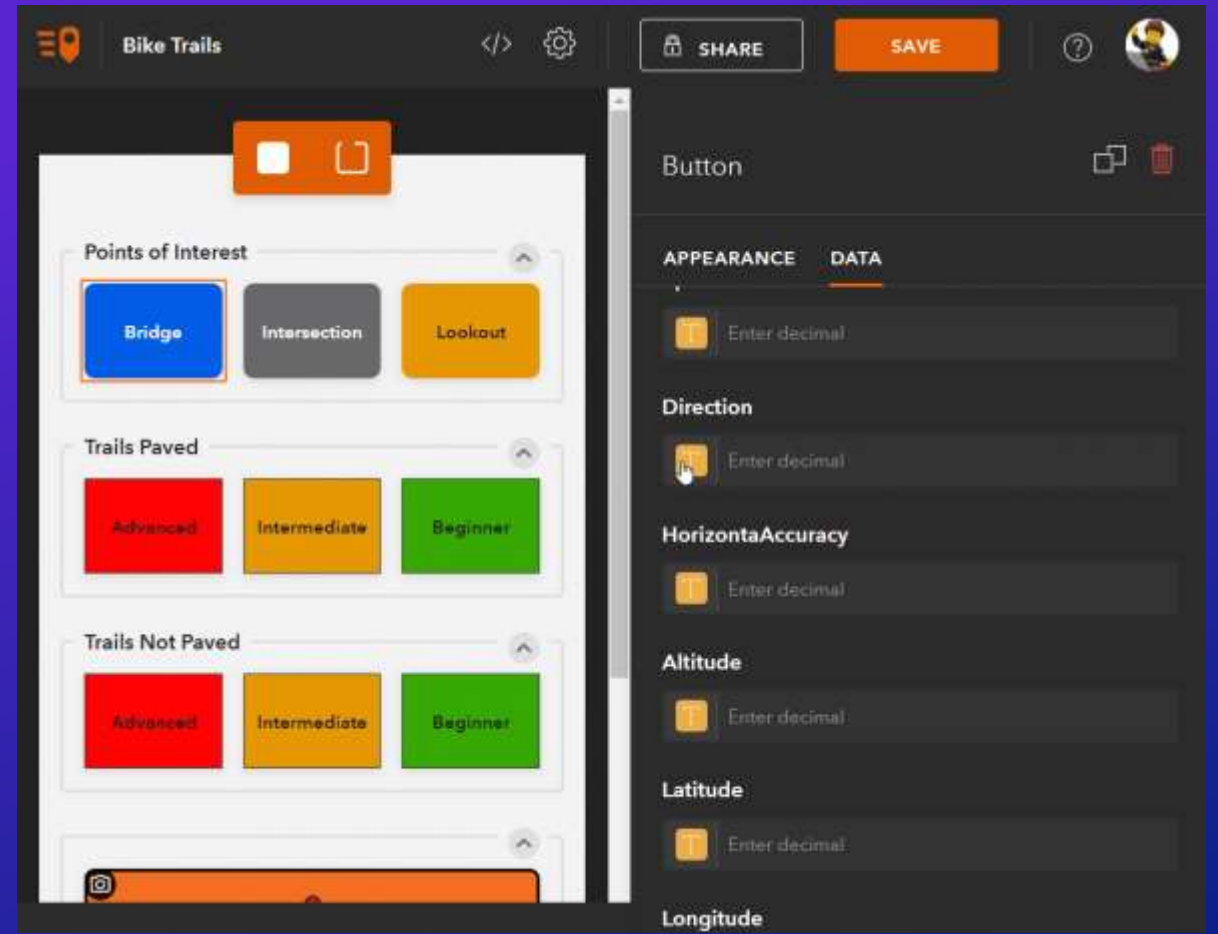
A web tool to create your own QuickCapture projects



Available at quickcapture.arcgis.com and through the app launcher in ArcGIS Online and ArcGIS Enterprise 10.8

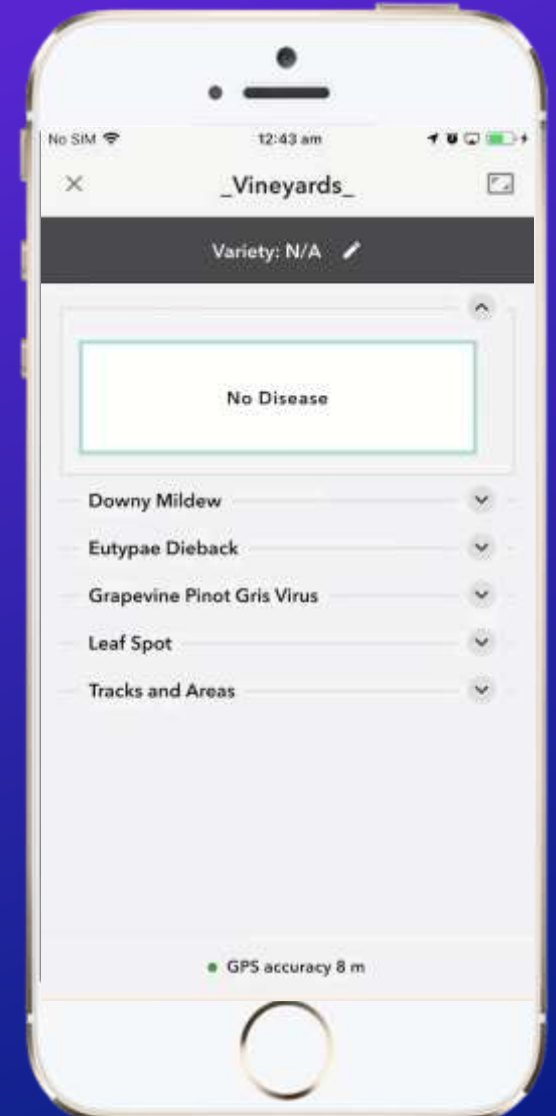
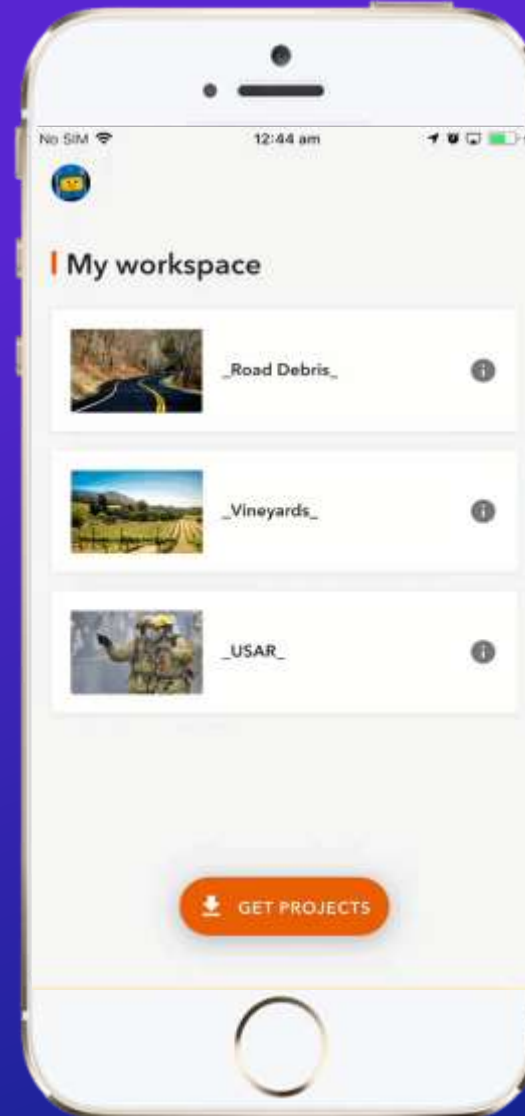
Device Variables

- Use them to automatically calculate GIS attributes when a feature is captured
 - Speed
 - Direction of travel
 - Time of capture
 - Etc.
- Over 40 variables



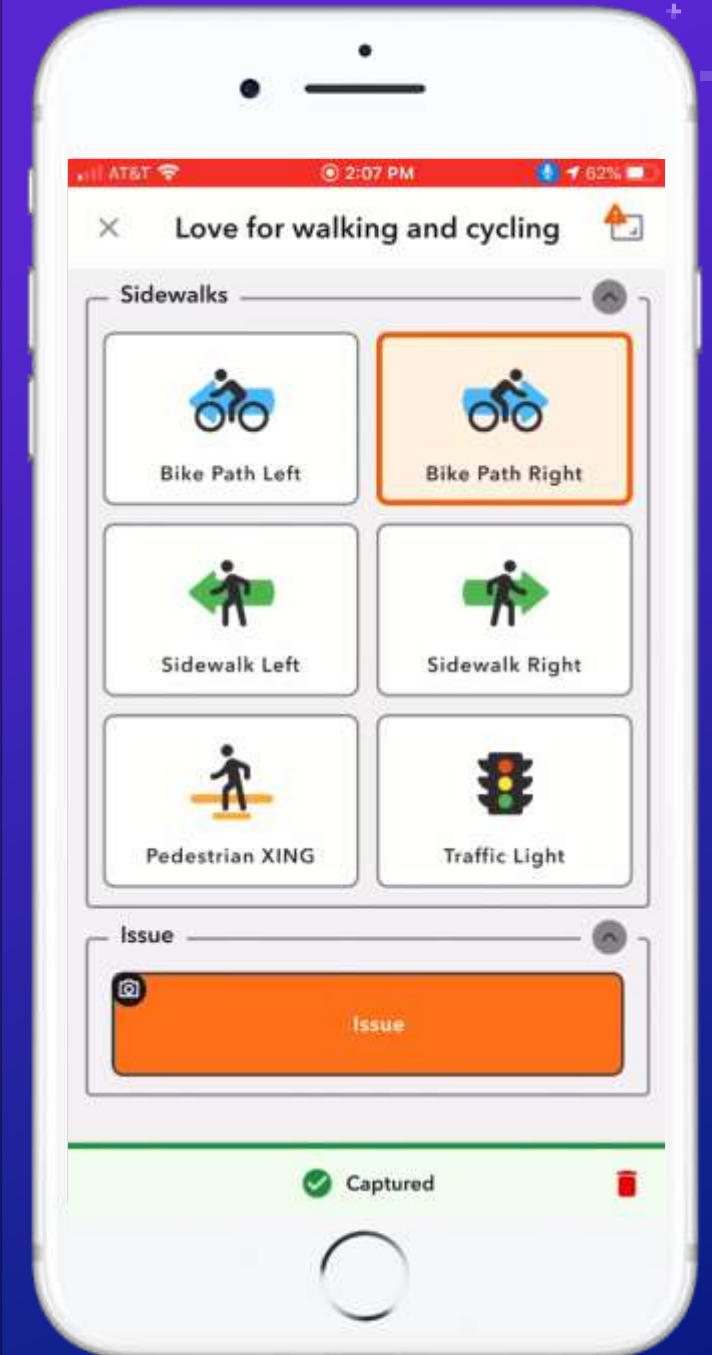
User Inputs

- **Update attributes on new features**
 - Enter input after button is pushed
 - Or when the project starts
- **Can be required or optional**
- **Supports data validation rules**



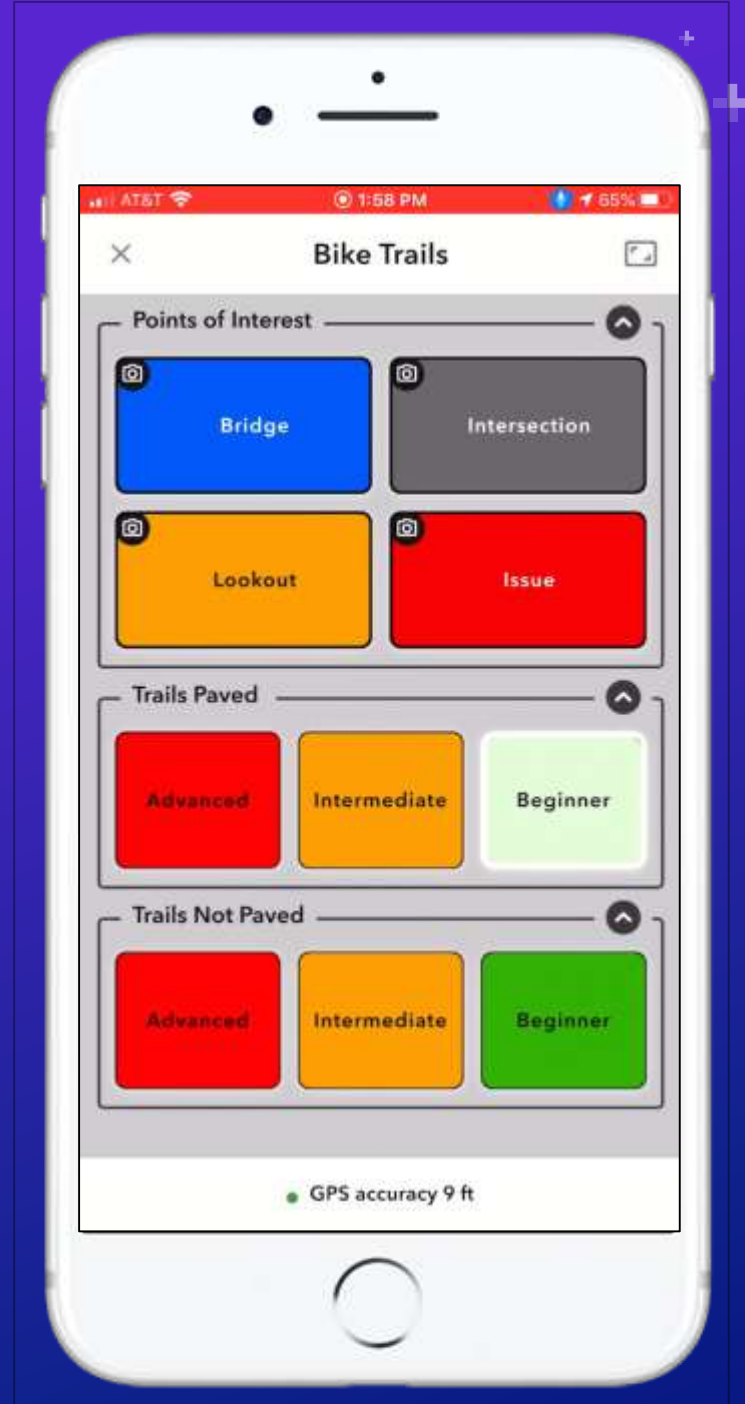
Exclusive Groups

- QuickCapture supports capturing multiple observations at the same time:
 - Bike trail on the right side
 - Also on the left side
 - ...



Exclusive Groups

- QuickCapture supports capturing multiple observations at the same time:
 - Bike trail on the right side
 - Also on the left side
 - ...
- You can also group buttons to capture information in a mutually exclusive manner:
 - Pavement condition good vs bad
 - Beginner trail vs intermediate



QuickCapture Public Projects

- Available since December 10, 2019
- For ArcGIS Hub Premium customers ONLY.
- Share your QuickCapture projects publicly from designer
- End users can download and use with or without signing in
- Use cases:
 - Crowd-sourcing
 - Citizen-science
 - Community engagement
 - Emergency response



Santa sighting season has begun!

If you have spotted Santa around your neighbourhood, record it using ArcGIS QuickCapture!

QuickCapture Trial | December 10, 2019

ArcGIS QuickCapture mobile app licensing

Included with Field Workers, Creators and GIS Professionals at no additional cost
Optional add-on for Editor user types



Viewer
(not applicable)



Editor
(add-on)



Field Worker
(included)



Creator
(included)



GIS Professional
(included)

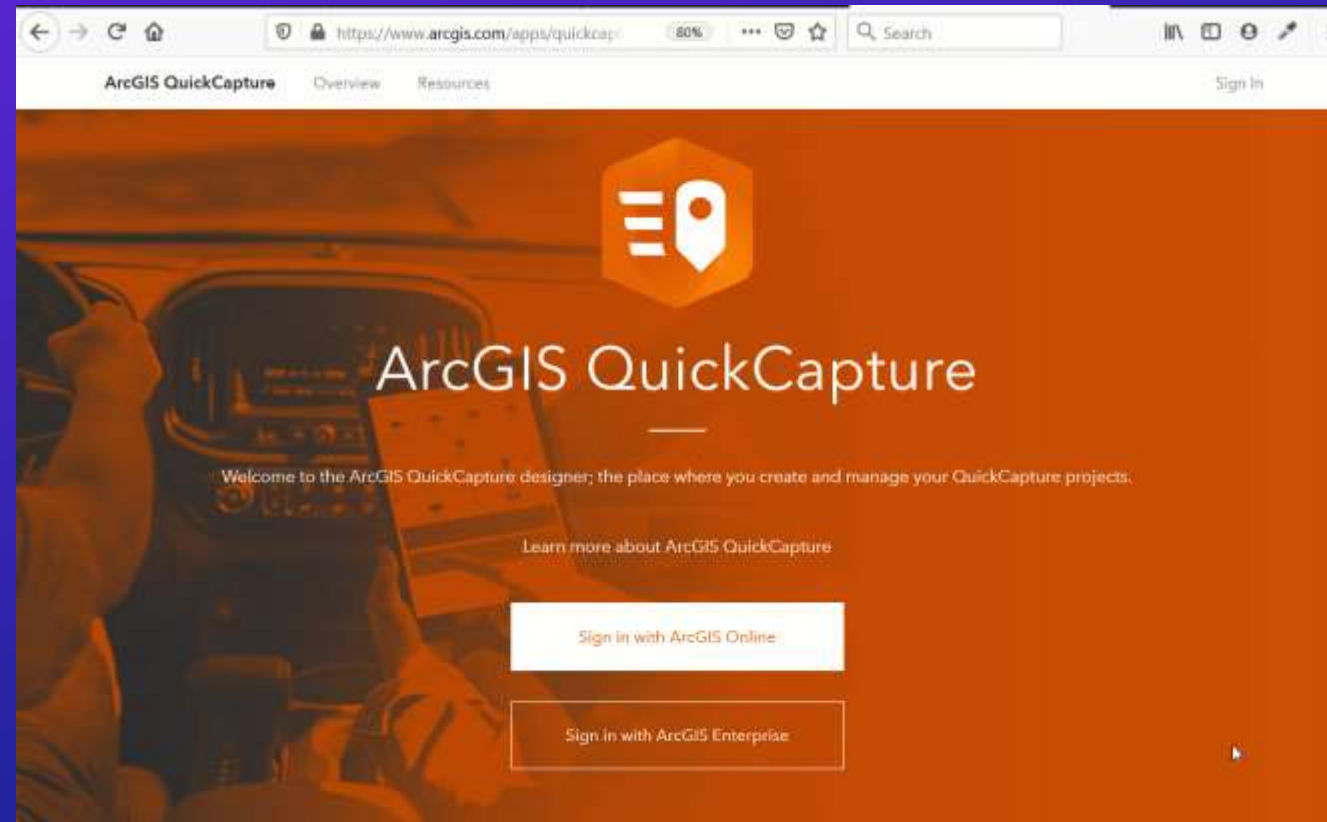
The mobile app can also be used without an ArcGIS account, if a QuickCapture project is shared publicly to an ArcGIS Hub Premium organization.

ArcGIS QuickCapture and Enterprise

- Officially supported with ArcGIS Enterprise 10.7.1 and above
 - It actually works well with previous versions after registering the mobile app and designer

- Designer:

- quickcapture.arcgis.com can be easily configured to work against Enterprise.
- Starting with 10.8, the ArcGIS Enterprise setup includes QuickCapture designer



External GNSS receiver support:

- **Use for:**

- Increased accuracy
- Access to GNSS metadata (through variables)
- Higher frequency data collection

- **Add receiver by:**

- Bluetooth
- USB (Windows Only)
- Network (Windows Only)

- **Supported receivers:**

- Bad Elf – EOS – Leica - Trimble (R1, R2)* - Garmin GLO - Geode



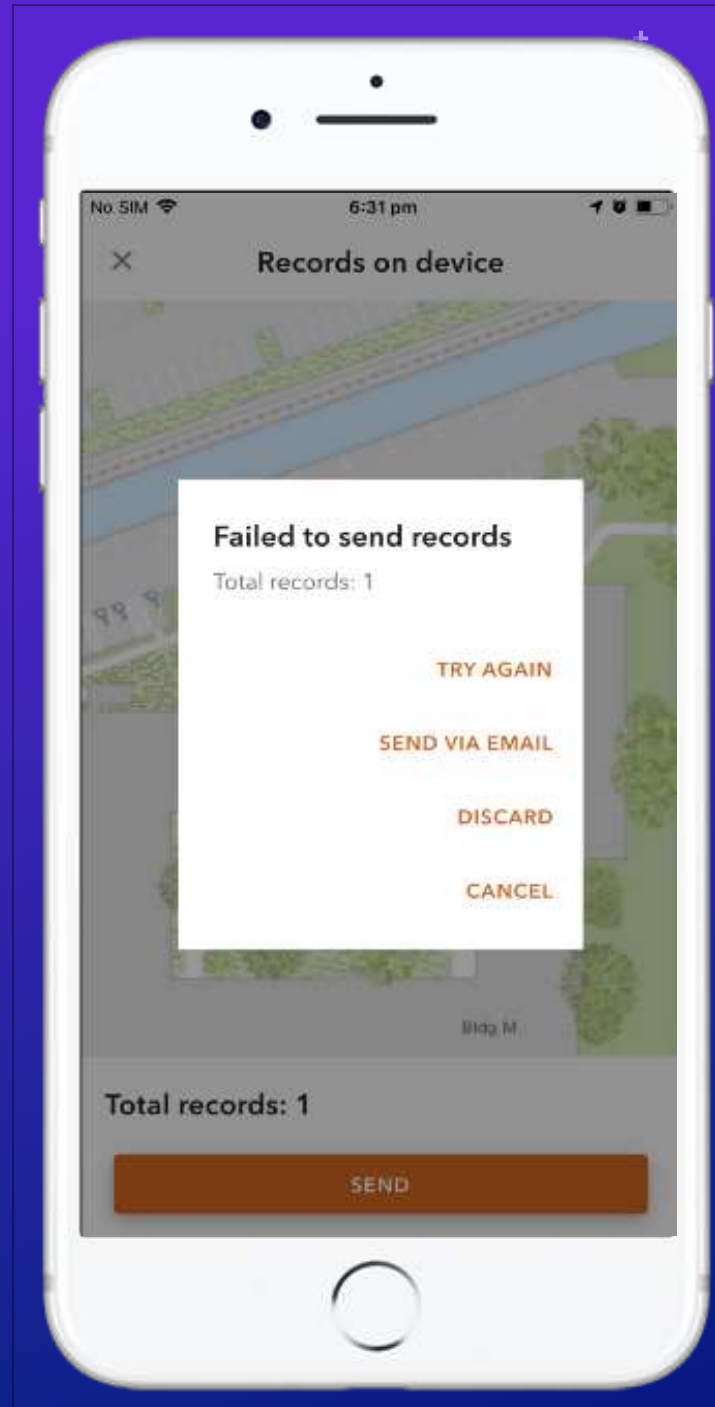
ArcGIS QuickCapture custom url scheme

`arcgis-quickcapture:///?portalUrl=<portalurl>&itemId=<itemid>`

- **Configure the portal url**
- **Download a project**
- **Open a project**
- **Initialize project with a project user input**
- **Use app links to integrate QuickCapture with other apps**

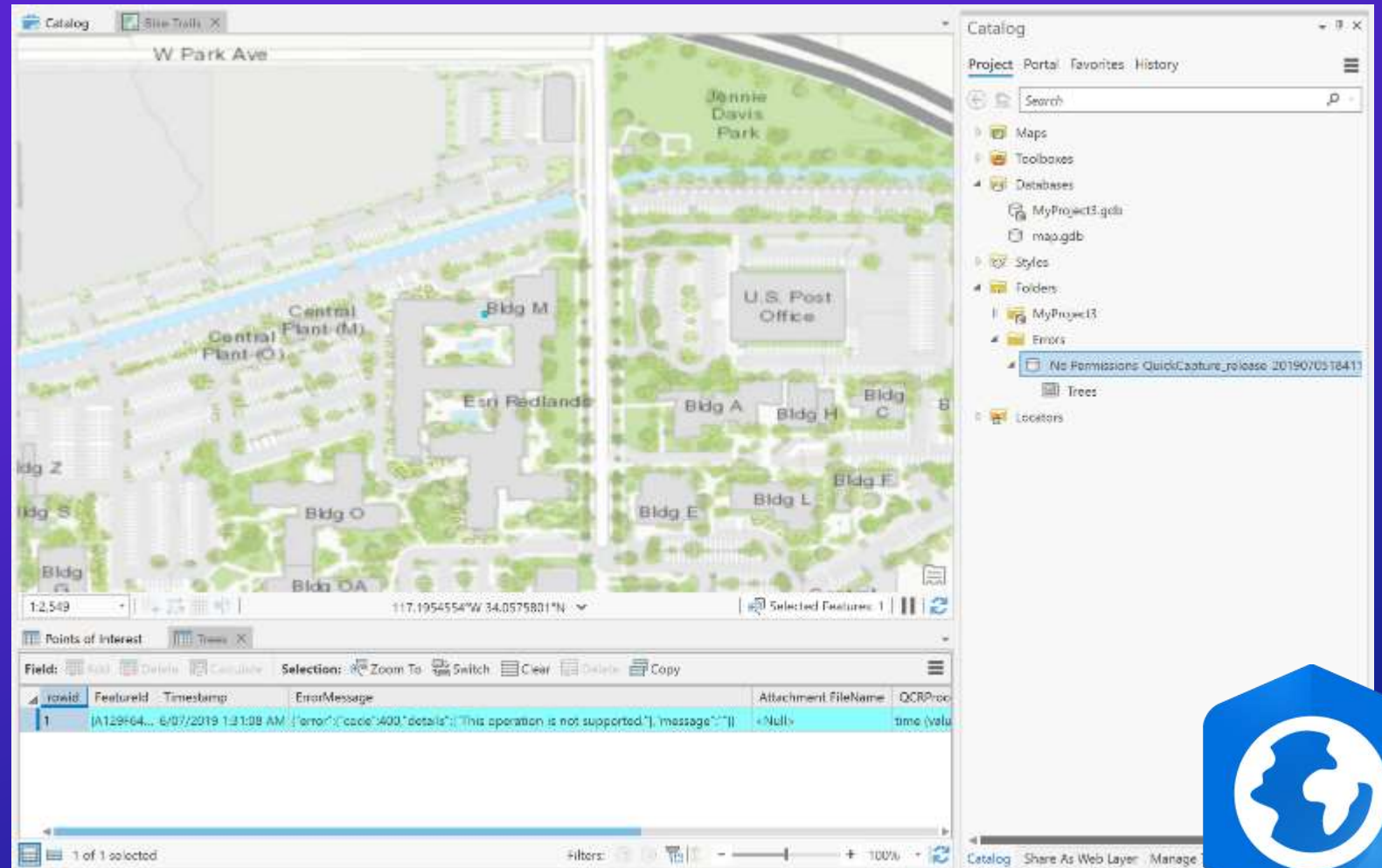
Data Recovery Workflows

- Field users can e-mail any features that fail to upload as a QuickCapture recovery file (.qcr)
- Default recipient of the email is set by the project author
- Contents of the qcr file are:
 - A SQLite database
 - Photo attachments
 - Text files describing the feature layer schema



QuickCapture QCR file reader

- ArcGIS Pro Add-In
- View geometry, attributes and error information
- Use append tool to update source layer

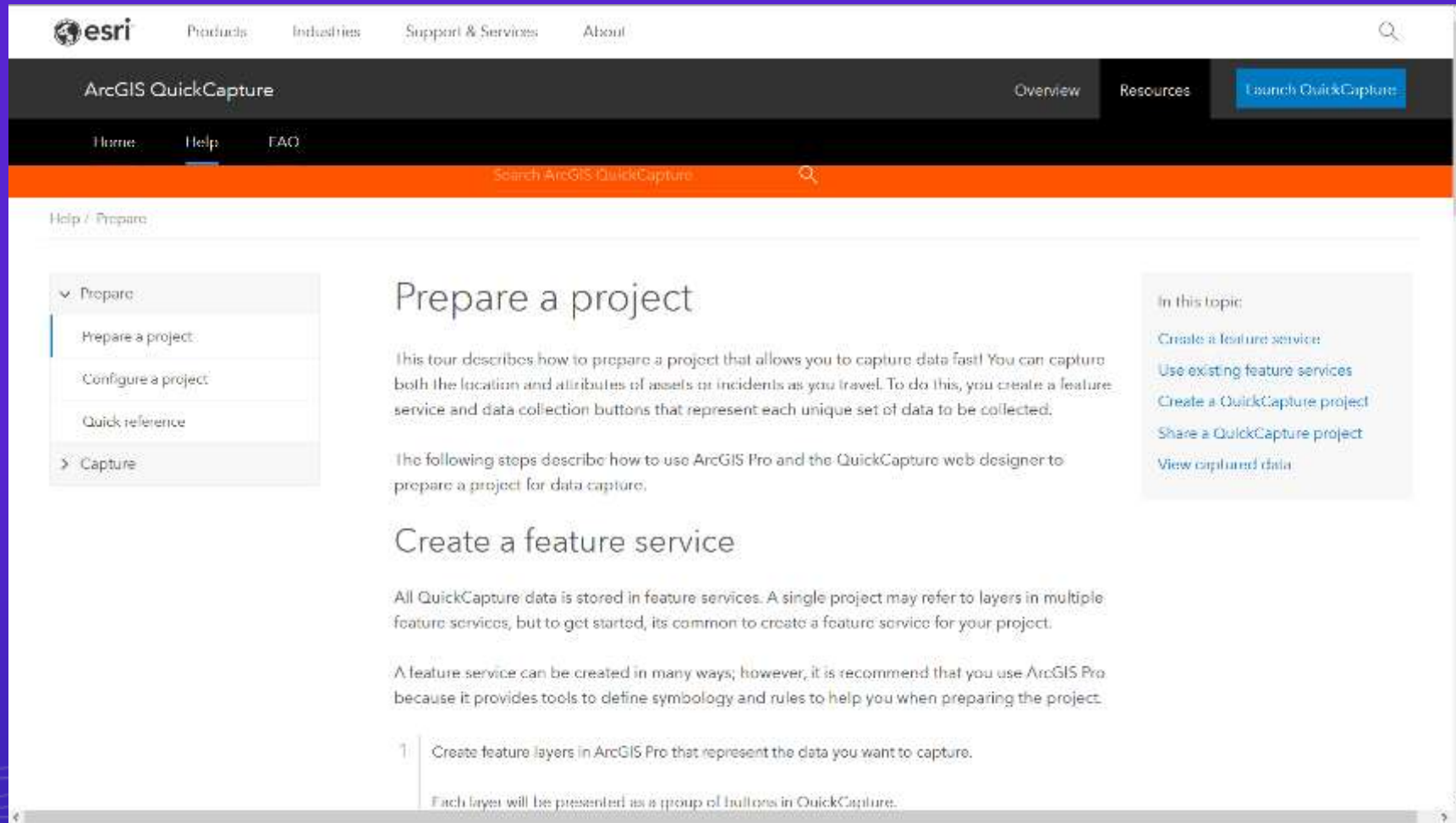


The screenshot displays the ArcGIS Pro interface. The main map area shows a campus layout with buildings labeled Bldg A through Bldg O, a river, and Jennie Davis Park. The 'Catalog' pane on the right shows a project folder structure with an 'Errors' folder selected. Below the map, a table displays error information for a selected feature.

rowid	FeatureId	Timestamp	ErrorMessage	Attachment.FileName	QCRProc
1	A129F64...	6/9/2019 1:31:08 AM	{error":{"code":400,"details":{"This operation is not supported."},"message":""}}	<Null>	time (valu



QuickCapture Documentation



The screenshot shows the ArcGIS QuickCapture documentation page. The top navigation bar includes the Esri logo, links for Products, Industries, Support & Services, and About, and a search icon. Below this is a dark navigation bar with 'ArcGIS QuickCapture' on the left, 'Overview' and 'Resources' in the center, and a 'Launch QuickCapture' button on the right. A secondary navigation bar contains 'Home', 'Help', and 'FAQ'. A search bar is located below the secondary navigation bar. The main content area is titled 'Help / Prepare' and features a left-hand navigation menu with 'Prepare' expanded to show 'Prepare a project', 'Configure a project', 'Quick reference', and 'Capture'. The main content area has a heading 'Prepare a project' followed by a paragraph: 'This tour describes how to prepare a project that allows you to capture data fast! You can capture both the location and attributes of assets or incidents as you travel. To do this, you create a feature service and data collection buttons that represent each unique set of data to be collected.' Below this is another paragraph: 'The following steps describe how to use ArcGIS Pro and the QuickCapture web designer to prepare a project for data capture.' The next heading is 'Create a feature service', followed by a paragraph: 'All QuickCapture data is stored in feature services. A single project may refer to layers in multiple feature services, but to get started, it's common to create a feature service for your project.' Another paragraph follows: 'A feature service can be created in many ways; however, it is recommended that you use ArcGIS Pro because it provides tools to define symbology and rules to help you when preparing the project.' A numbered list starts with '1 Create feature layers in ArcGIS Pro that represent the data you want to capture.' Below the list item is a note: 'Each layer will be presented as a group of buttons in QuickCapture.' On the right side of the page, there is a 'In this topic' section with links: 'Create a feature service', 'Use existing feature services', 'Create a QuickCapture project', 'Share a QuickCapture project', and 'View captured data'.

esri Products Industries Support & Services About

ArcGIS QuickCapture Overview Resources [Launch QuickCapture](#)

Home Help **FAQ**

Search ArcGIS QuickCapture

Help / Prepare

- Prepare
 - Prepare a project**
 - Configure a project
 - Quick reference
- Capture

Prepare a project

This tour describes how to prepare a project that allows you to capture data fast! You can capture both the location and attributes of assets or incidents as you travel. To do this, you create a feature service and data collection buttons that represent each unique set of data to be collected.

The following steps describe how to use ArcGIS Pro and the QuickCapture web designer to prepare a project for data capture.

Create a feature service

All QuickCapture data is stored in feature services. A single project may refer to layers in multiple feature services, but to get started, it's common to create a feature service for your project.

A feature service can be created in many ways; however, it is recommended that you use ArcGIS Pro because it provides tools to define symbology and rules to help you when preparing the project.

- 1 Create feature layers in ArcGIS Pro that represent the data you want to capture.

Each layer will be presented as a group of buttons in QuickCapture.

In this topic

- [Create a feature service](#)
- [Use existing feature services](#)
- [Create a QuickCapture project](#)
- [Share a QuickCapture project](#)
- [View captured data](#)

QuickCapture GeoNet place (Blog, Forum, Tutorials...)

The screenshot shows the Esri GeoNet community page for ArcGIS QuickCapture. The page features a navigation bar with links for Products, Solutions, Support & Services, News, and About. The main header includes the Esri logo and the text "GeoNet The Esri Community". Below this is a secondary navigation bar with links for Home, My News, Browse GeoNet, Communities, ArcGIS Ideas, and GeoNet Resource Hub. The main content area is titled "ArcGIS QuickCapture" and includes a sub-navigation bar with links for Overview, Activity, Content, People, Subspaces, and Calendar. A prominent orange banner displays the app name and images of the mobile application. Below the banner, there is a section for "Welcome to ArcGIS QuickCapture" with a brief description. To the right, there are sections for "ASK ARCGIS QUICKCAPTURE" with a search bar and "Ask my question" button, "LATEST BLOG POSTS" listing recent articles, and "ANSWERED QUESTIONS" listing frequently asked questions.

<https://community.esri.com/community/arccgis-quickcapture>

ArcGIS QuickCapture 2020 Roadmap

Christmas 2019

December 2019

- QuickCapture for Community Engagement
- Designer:
 - User Inputs
 - Optional photos
 - Built-into ArcGIS Enterprise

Dev Summit

February 2020

- App
 - Split screen
 - Biometric authentication
- Designer
 - Save as
 - Drafts
 - Configure map
- FedRAMP
- Accessibility VPAT

May 2020

UC

July 2020

- App
 - AppConfig (portalURL)
 - Webhooks
 - QuickCapture Links
- Designer
 - Project analyzer
 - Create project from template

Research:

- Android Wear OS and Apple Watch
- Hands-free
- AI-based object detection

Synchronized release across all supported platforms (iOS, Android and Windows)

Esri Boston's Hub: <https://go.esri.com/bostonhub>



Esri Boston

About

Events

News

Community

Makers Space



COVID-19: Get live maps, data, apps, and information

[View COVID-19 resources](#)



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Esri Boston Regional Office Hub

State & Federal

50 & 15

ArcGIS is used by all 50 States, and all 15 Federal Executive Departments

Local Governments

100%

ArcGIS is used by all of the top 100 most populated Counties in the US

Fortune 100 Companies

90%

Percentage using ArcGIS in the Fortune 100

Education

87

Number of Forbes top 100 colleges in the US using ArcGIS

Esri is pioneering ArcGIS, the world's most powerful mapping and analytics software.

Esri Boston's Hub: <https://go.esri.com/bostonhub>

Sign Up and Follow Esri Boston

Sign up and follow Esri Boston to receive updates on local events and GIS stories from around Boston.

 Follow Our Office



Q & A
mscott@esri.com

**Will collect questions
from the chat that we did
not get to.**



Lunch Break

Returning at 1:00 pm



1:00 – 1:30 pm

Esri Session #6:
ArcGIS Solutions for COVID-19 Response
Presenter: Mark Scott

The outbreak of COVID-19 has presented great challenges to the world. Esri has provided new solutions that can be built on top of ArcGIS Online to help address some of these challenges.





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