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GIS TRAINING CENTER

Field Data Collection with ArcGIS Field Maps and Survey123

Course Length: 2 days
App: ArcGIS Pro, ArcGIS Field Maps, ArcGIS Survey123, Survey123 Connect

Overview

Field data collection involves more than just publishing a map and opening an app. With appropriate planning, you can reduce the amount of time spent by your crews in the field as well as the amount of post-processing and data cleanup required after collection, improving the project efficiency and the data quality.

This course will span the entire project starting with using ArcGIS Online and ArcGIS Pro to prepare data for use in ArcGIS Field Maps, followed by collecting data using the app and finally uploading it back into ArcGIS Online. The course focuses on streamlining the entirety of the project, including creating an efficient field data collection strategy, properly configuring your attributes with drop-downs (domains), publishing feature services with appropriate settings, and establishing guidelines for your field crew's data collection efforts.

In addition to learning how to configure and use ArcGIS Field Maps, participants will also learn how to create and use highly customizable forms in ArcGIS Survey123. ArcGIS Survey123 allows users to create highly customizable forms, both through the web and using the XLSForm language in the desktop application. In this course, you will learn the various components of the Survey123 suite, how to create simple custom forms using the Survey123 website, and how to get more customized using the Survey123 Connect desktop application. You will then see how end users can complete the forms, and how to analyze the results.

> NOTE: Variations of this class are also available for ArcMap or ArcGIS Online/Portal users who do not use ArcGIS Pro. Contact us for more information on booking these private classes.

Audience

This course is for anyone familiar with the use of ArcGIS who will need to set up a field data collection project. This includes GIS professionals who will be responsible for the project planning, data setup, data QC, etc.

> NOTE: A partial-day private course covering the use of Field Maps and Survey123 and field data collection best practices is available for field crews. Contact us for more details.

Topics Covered

- Planning Your Project – Plan your project before you get started to ensure that it runs as smoothly as possible (Project Overview; Data Collection Strategy)
- Preparing Maps and Data – Create datasets with attachments and domains, as well as maps that can be published to ArcGIS Online as a feature service to later be used in Collector (Creating Data, Setting up the Map)
- Working with Services - See how to publish a map from ArcMap to ArcGIS Online in preparation for use in Collector, and how to set required permissions in ArcGIS Online. (Publishing the Map, Setting Up in ArcGIS Online)
- GPS Basics – Understand how GPS devices know your location (The Global Positioning System)
- ArcGIS Field Maps – Learn how to use the Field Maps app to collect and modify data in the field. (What is Field Maps?; Working with Field Maps; Map Tools; Collecting Data; Working Offline)
- Data QC and Post-Processing – Discuss types of cleanup that may need to be done after data is collected (Processing After Collection; Data Quality Control)
- Introduction to Survey123 – Learn the pieces of the Survey123 platform, as well as how to create simple forms in a web browser using the Survey123 web application (What Is Survey123?; Creating Forms Online)
- Getting Started with Survey123 Connect – Become familiar with using the Survey123 Connect desktop application by opening and modifying form templates other users have created (What is XLSForm?; Modifying Existing Forms)
- XLSForm Syntax – Now that you have seen some existing surveys, learn the available XLSForm questions and columns that can be used to create your own forms (XLSForm Questions; Advanced Options)
- Designing Custom Forms – Use the XLSForm syntax you learned in the previous chapter, as well as existing feature services from ArcGIS Online or Portal, to create your own custom forms in Survey123 Connect. (Templates; Feature Services; Completing Forms in the Survey123 Mobile App)
- Analyzing Survey Results – Become familiar with the options on the Survey123 website for analyzing submitted survey data, including downloading datasets and creating reports (Survey123 Web Site)

Format

In-person or virtual instruction with hands-on practice and course materials you can keep.

Prerequisites and Recommendations

Students should have knowledge of Microsoft Windows® and be familiar with the basic use of ArcGIS Online and ArcGIS Pro including knowledge of the topics covered in the Introduction to ArcGIS Pro and Intermediate ArcGIS Pro, as well as the Web Map Essentials courses. If you are not sure whether you are ready for this course, contact us and we will help you decide.

For public classes, participants must bring their own iOS or Android mobile device to class and be familiar with its operating system and basic operation. Your device must have location capabilities (GPS chip) and be able to connect to a WIFI network, but does not need to have a data plan. Contact us if you have questions about acceptable devices. For private classes, contact us about tailoring the course to the use of your corporate devices, including the operation of the devices and company best practices.

NOTE: Field Maps is not available on Windows devices.