TEACHMEGIS.COM
GIS TRAINING CENTER

Fundamentals of ArcGIS for NextGen 9-1-1

Course Length: 2 days
ArcGIS Version: 10.x

Overview

A Geographic Information System (GIS) is an integral part of a NextGen 9-1-1 system. Maps, tied to database tables, allow addresses to be located, and quick identification of the appropriate emergency services responsible for responding to that address. This course introduces the ArcGIS Desktop software and teaches the fundamental concepts necessary to use the software to query and work with GIS data.

Audience

Anyone responsible for working with maps and GIS data for emergency response and NextGen 9-1-1 systems.

Topics Covered

Day 1

- GIS and the 9-1-1 World – Understanding the importance of GIS in NextGen 9-1-1. (GIS in NextGen 9-1-1; What Datasets are Involved with GIS in 9-1-1; Why Are Standards Important?)
- Introduction to GIS – Understanding How Data is Tied to Maps. (What is GIS?; Understanding the ArcMap Software Structure; GIS Datatypes)
- ArcMap Basics – The Essential Tools. (Map Navigation; Getting to the Data Behind the Maps; Searching for Locations)
- 9-1-1 GIS Data Layers – Understanding the Layers Required for Next Gen 9-1-1. (Required Data Layers; The Importance of Data Accuracy; Recommended Layers)
- Using Symbology to Analyze Data – Changing Colors and Symbols to Make Maps More Readable, and to Expose Attributes for Data QC. (Symbolizing Vector Data. Picking Colors and Symbols to Display Many Layers)

Day 2

- Asking Questions of Your Data – Using Queries to Find and Analyze Data, and to QC Data. (Interactive Selection; Select by Attributes; Select by Location to Find Addresses in a Particular ESN or Addresses Near a Street; Using the Selection)
- Optimizing the Display of Your Data – Organizing the Layers of Your Map for Speed and to Make it More Readable. (Layer Organization; Setting Layer Properties, such as Transparency, Scale Dependency, Map Tips, and Definition Queries)
- Tables and Analysis – Displaying GPS Coordinates and Running Analysis Tools. (Working with Tables to Calculate Statistics and for Data QC; Plotting GPS Coordinates; Running Geoprocessing Tools, Such as Buffer and Clip)
- Designing Your Map for Presentation – Creating a Map for Printing or Sharing as a PDF. (Data View and Layout View; Designing the Page; Adding Elements to Explain the Data; Printing and Exporting)

Format

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

Prerequisites and Recommendations

Attendees should have knowledge of Microsoft Windows®.