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GIS TRAINING CENTER

Intermediate ArcGIS for NextGen 9-1-1

Course Length:3 days
ArcGIS Version:10.x

Overview

NextGen 9-1-1 necessitates a clean and complete GIS database of address points, ESN zone polygons, municipal boundaries, fire districts, and all other datasets relevant to emergency response. ArcGIS Desktop gives emergency response professionals the tools for creating, updating, and maintaining that data. This course teaches how to create GIS data, check the data for accuracy, add new address points, and draw in new street centerlines and boundary polygons as areas are built and other areas annexed.

Audience

Those in the emergency response field who need to ensure a clean and complete GIS database for their NextGen 9-1-1 implementation.

Topics Covered

Day 1

- Street Centerline Data for Address Geocoding – Understanding the Rules for Drawing Street Centerlines in GIS. (Street Accuracy – Why it Matters; Rules for Drawing Street Centerlines; Rules for Street Centerline Attributes)
- Labeling Features – Adding Text to the Map, Including Street Names, Address Ranges, and Jurisdictional Boundary Names. (Labeling Basics; Label Styles; Label Expressions; Label Classes)
- Creating and Understanding GIS Data – Creating New Shapefiles and Geodatabase Feature Classes. (GIS Data Types and File Creation; Understanding Spatial Reference and the Coordinates that Make Map Layers Line Up; Setting Properties of GIS Data)
- Setting Up Your Editing Environment – Best Practices for Editing, and Making Editing Easier. (Helpful Data Layers; Spatial Reference in an Edit Session; Using Street Display Properties Efficiently When Editing)

Day 2

- Finding Attribute Errors–Tips for Identifying Errors in Your Data. (Finding Errors With Road Names and Address Ranges; Finding Errors with Queries)
- Basic Editing –Setting Up and Edit Session. (Basic Editing; Georeferencing an Image to Draw a New Plat)

- Editing Streets Properly – Drawing In New Streets. (Review of Rules: Connectivity and Direction Requirements; Editing Streets; Editing Attributes with the Field Calculator)
- Editing With Map Topology – Using Topology Tools to Maintain Accurate Streets. (Map Topology; Using Map Topology Tools)

Day 3

- Using Geodatabase Topology to Find and Fix Errors in Your Spatial Data – Creating Rules to Keep Spatial Data Clean, and to Find and Fix Digitizing Errors. (Creating a Geodatabase Topology; Finding and Fixing Topology Errors)
- Addressing Concepts – Understanding How Addressing Systems Work. (Addressing Systems; How Are Addresses Matched in ArcGIS?)
- Address Matching in ArcGIS – Creating Point Locations from Lists of Addresses. (Geocoding in ArcGIS; Creating an Address Locator)
- Joins and Relates – Connecting the Map to External Tables and Excel Spreadsheets. (Using Tables in ArcGIS; Table Relationships; Attribute Joins; Relates; Spatial Joins)

Format

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

Prerequisites and Recommendations

Attendees should have knowledge of Microsoft Windows® and be familiar with the basic use of ArcGIS, including the topics covered in either the **Fundamentals of ArcGIS for NextGen 9-1-1**or **ArcGIS Desktop I** classes.