

# Enterprise Location Referencing: ArcGIS® Roads and Highways Technical Enablement Workshop

Dates: March 29-31, 2022

**Duration:** Six 4 hour sessions (3 days, morning and afternoon sessions)

# **Workshop Description:**

The goal for this workshop is to introduce technical staff to **ArcGIS® Roads and Highways** route and event data management capabilities, operations, and configuration options for managing LRS networks and LRS event characteristics. A Roads and Highways/LRS subject matter expert will lead presentations and facilitate discussion. The workshop uses sample surface road transportation data to demonstrate Roads and Highways capabilities and configuration using **ArcGIS Pro** desktop and **ArcGIS Enterprise**. Participants will gain handson experience through exercises run through an Esri-provided cloud-based computing environment.

Presentation and exercise materials will be provided to participants at the completion of the workshop.

#### **Workshop Format:**

- Webcast via Zoom (includes annotation and whiteboarding capability)
- Online presentations, exercises, and discussion led by an Esri Professional Services Transportation Practice Roads and Highways subject matter expert
- Workshop sessions will be scheduled in 4 hour blocks with breaks included
- Esri will provide a hosted, virtual computing environment, including licensed software, for attendees to use during the workshop.
- Roads and Highways editing exercises will require participants to connect to a cloud-based virtual computing environment from their local computer using Remote Desktop Protocol (RDP).

## Prerequisites:

- ArcGIS Pro feature editing knowledge
- ArcGIS Enterprise Geodatabase administration knowledge
- ArcGIS Enterprise (Portal, Web Adaptor, ArcGIS Server) administration and configuration knowledge

#### **Cost and Purchasing:**

- Through Esri Advantage Program, the cost is 2 credits per seat
- Seats can also be purchased with hours from an Esri Professional Services Retainer Package
- Contact Clive Reece (<u>creece@esri.com</u>) or Amit Hazra (<u>ahazra@esri.com</u>) to order (cc your Esri AP Advisor)

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# Workshop Agenda Topics

The Workshop Agenda Topics will be used as a general guide but are subject to change at the discretion of Esri and/or the participants.

#### Roads and Highways Overview

- Introductions
- Orientation to webcast and Azure environment
- Overview of Roads and Highways
- Differences between Roads and Highways in ArcMap vs ArcGIS Pro
- Linear Referencing System Information Model
- Getting to Know Roads and Highways Desktop (ArcGIS Pro)
- Linear Referencing Methods
- Rule Based Event Location Management

## Roads and Highways Desktop Editing

- Roads and Highways Desktop (LRS) Editing
  - o Route geometry and attribute edits
  - o Centerline and Cartographic realignment
  - Calibration edits
  - o Event Behavior
- Location Referencing Geoprocessing Tools

## **Roads and Highways Server Editing**

- Getting to Know Roads and Highways Server (API, Event Editor)
- Event Location Methods (Interpolation, referent offset, intersections, stationing)
- Roads and Highways Server (Event) Editing
- Attribute Sets
- Bulk Event Edits
- User-contributed Markup Routes
- Quality Control Checks

#### **Enterprise Location Referencing Configuration and Administration**

- Migrating to ArcGIS Pro (existing RH customers)
- Database Configuration & Security/Versioning
- Geoprocessing Tools
- Creating and Configuring the LRS
- Data Loading
- Preparing the LRS for Editing
- Conflict Prevention
- Adding Linear Referencing capability to map services
- Understanding LRS REST services
- Redlining service
- Map Authoring and Publishing Best Practices
- ArcGIS Enterprise Configuration & Security
- Portal Integration / Content Control
- Event Editor (EE) UI, Configuration and Deployment
- Creating and Sharing Attribute/Replacement Sets
- EE Launcher HTML
- LRS REST API / External System Integration