**Geodatabase Design and Modeling**

**Workshop Agenda**

**Description:** This workshop covers the essential concepts of the geodatabase, the native data storage format for ArcGIS, and explores its advanced functionality that allows for more realistic representation of spatial data. The workshop will focus on geodatabase design concepts and will explore the creation and editing of advanced geodatabase elements used for maintaining spatial and attribute relationships, in particular, attribute domains, subtypes, topology, and relationship classes. Basic building and modeling of networks will also be explored. Workshop format: approximately 50% lecture, 50% software applications.

**Day 1**

- **Lecture 1:** Geodatabase Design
- Hands-on Training: Building a Geodatabase
- **Lecture 2:** Geodatabase Behavior (Attribute Domains and Subtypes)
  - Hands-on Training: Working with Attribute Domains and Subtypes
- Lunch Provided (1 hr)
- **Lecture 3:** Geodatabase Behavior (Relationship Classes)
- Hands-on Training: Working with Relationship Classes
- **Lecture 4:** Geodatabase Behavior (Topology)
- Hands-on Training: Working with Topology

**Day 2**

- **Lecture 5:** Modeling Directed Flow
- Hands-on Training: Building a Geometric Network
- **Lecture 6:** Network Solvers
- Hands-on Training: Tracing a Utility Network
- Lunch Provided (1 hr)
- **Lecture 7:** Modeling Undirected Flow
- Hands-on Training: Building a Network Dataset
- **Lecture 8:** Network Analysis
- Hands-on Training: Routes and Analysis in a Network