

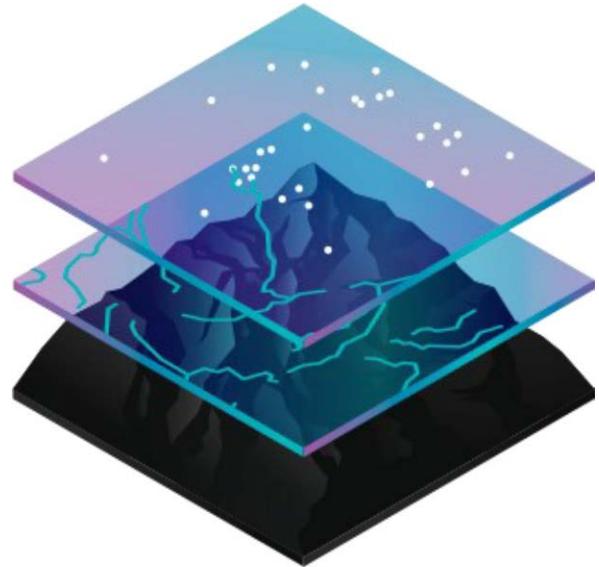
Working with Spatial Data



Navigating, Exploring, Utilizing, Managing, Handling, Manipulating, Organizing

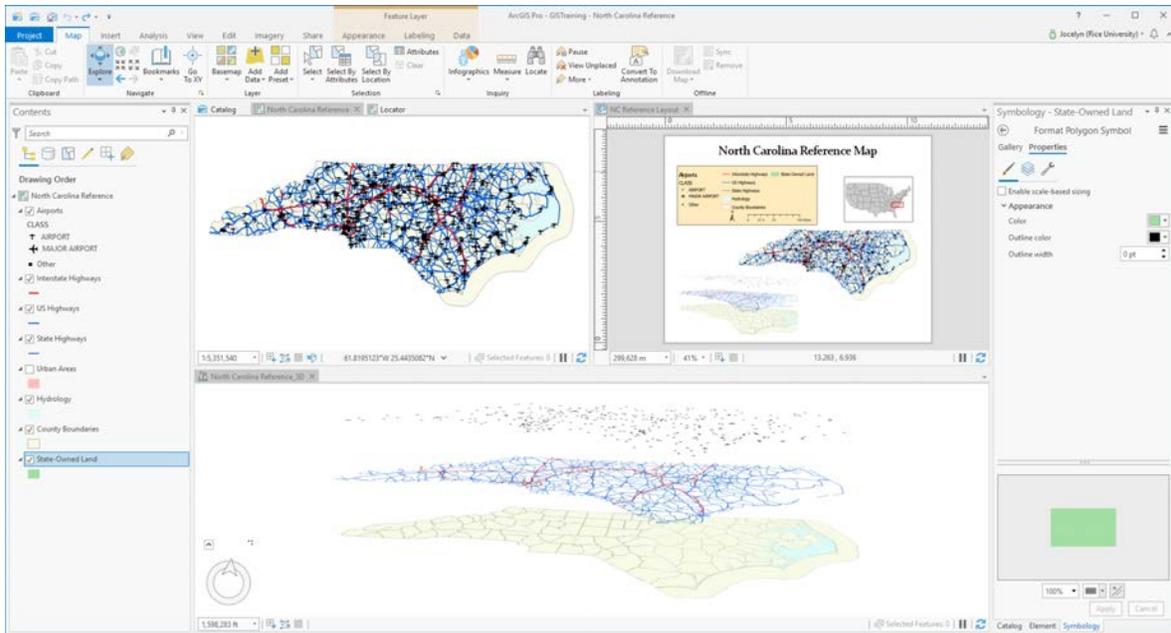
Learning objectives

- Introduce GIS software
- Understand ArcGIS Pro key terms and concepts
- Become familiar with navigating the ArcGIS Pro interface



GIS Software

- Allows you to view, explore, analyze, edit, create, and share maps and spatial data



Options include: ArcGIS Pro, ArcGIS Desktop, QGIS, GRASS GIS, Mapbox, CartoDB
Pictured here: ArcGIS Pro

ArcGIS Desktop & ArcGIS Pro



- Standard in many organizations
- Well-developed & stable program
- Single/concurrent use licensing

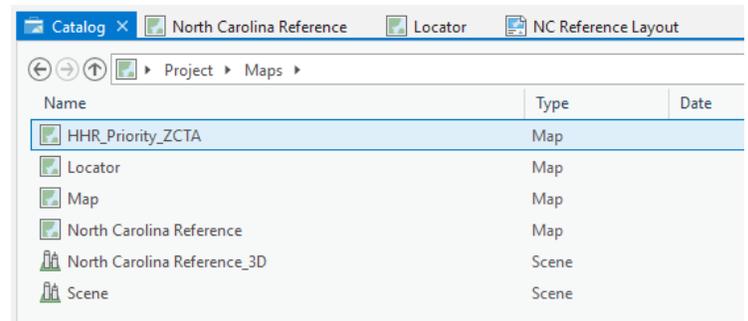
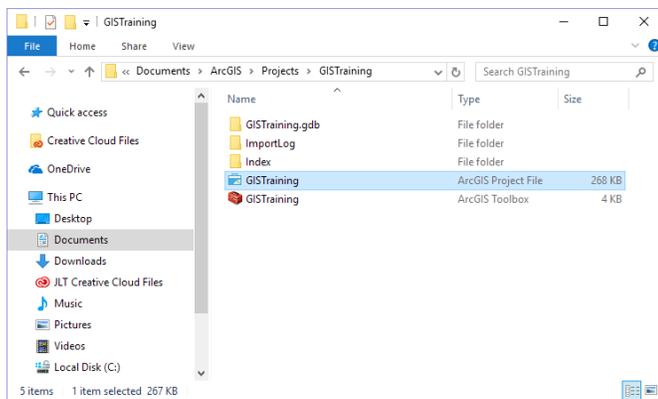
- Refresh of ArcGIS Desktop
- ESRI's focus for new development
- Named user licensing

In the past, CDC GIS Training was performed in ArcGIS Desktop. While there are various pros/cons to transitioning to ArcGIS Pro, a deciding factor was the ease of deployment of named user licenses. We find many organizations are making the transition to ArcGIS Pro.

Projects



- **Project files (.aprx) hold multiple maps, scenes, layouts, and database/folder connections**
- **Each project has its own default geodatabase and toolbox**



Map – display and work with geographic data in 2D

Scene – display and work with geographic data in 3D

Layout – organize map(s) and cartographic elements for printing

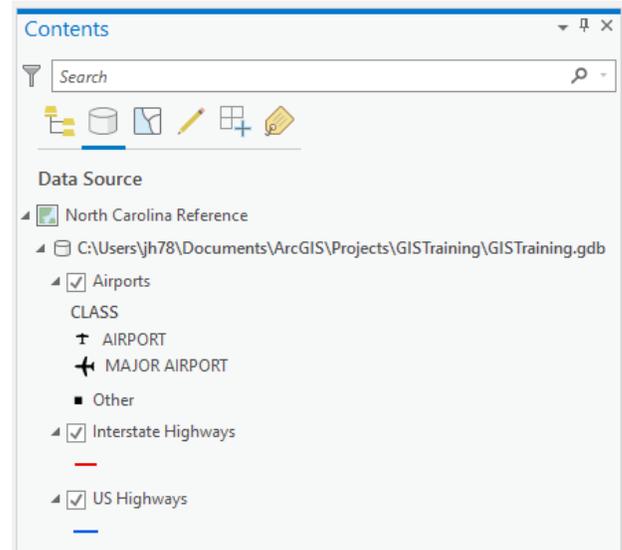
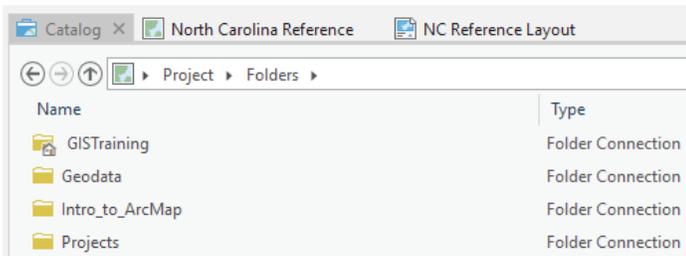
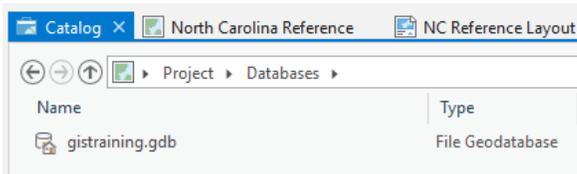
Database/folder connections – pointers to where data is stored

Geodatabase – holds various types of geographic data

Toolbox – set of tools for analyzing, manipulating, and managing geographic data

Database/Folder Connections

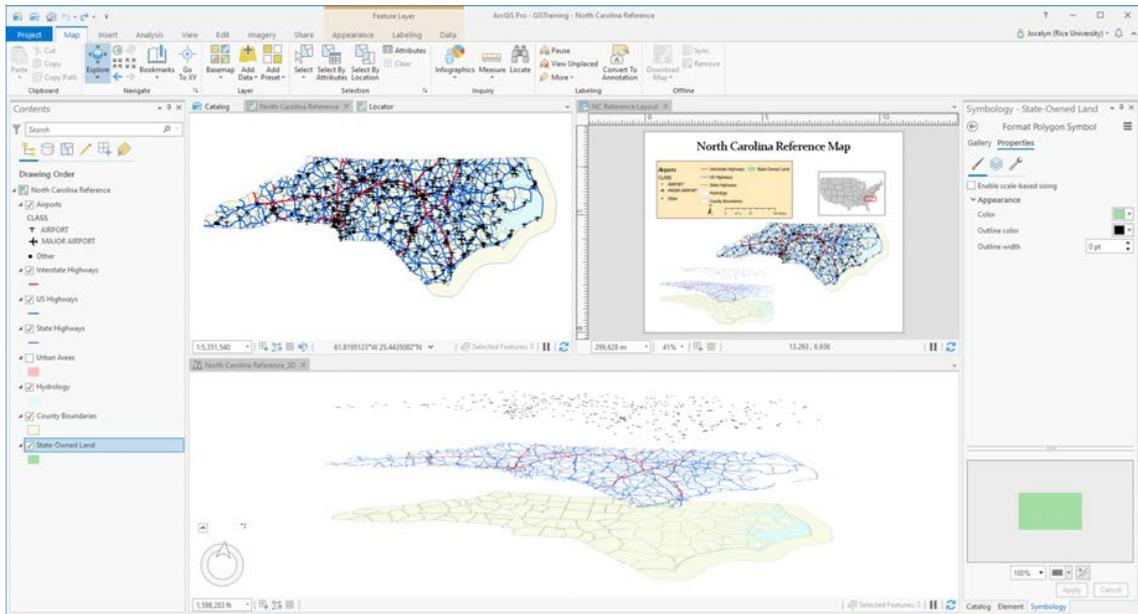
- Connections provide a quick link from your project to the location where data is stored
- Project only stores the data location and references it



Views



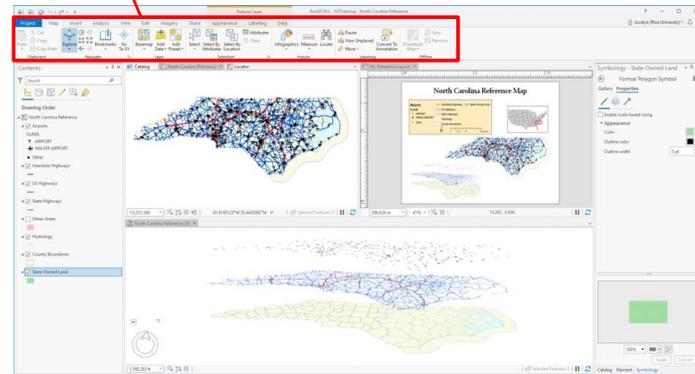
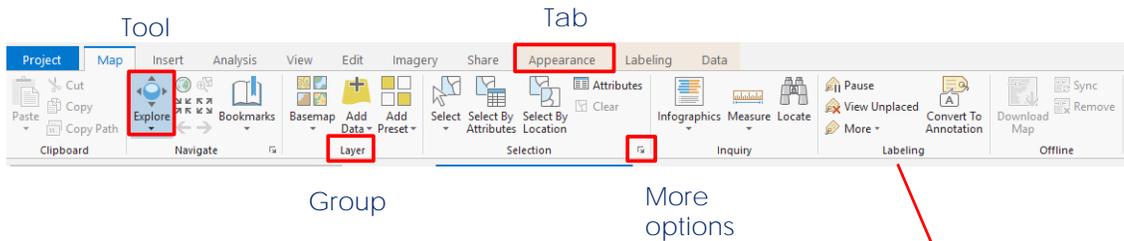
- Main window area for working in project (maps, scenes, layouts, etc.)
- Work on multiple views at the same time



Active view – current view being used

Ribbons & Tools

- Ribbon organizes tools into tabs and groups
- Contextual tools and tabs appear as needed



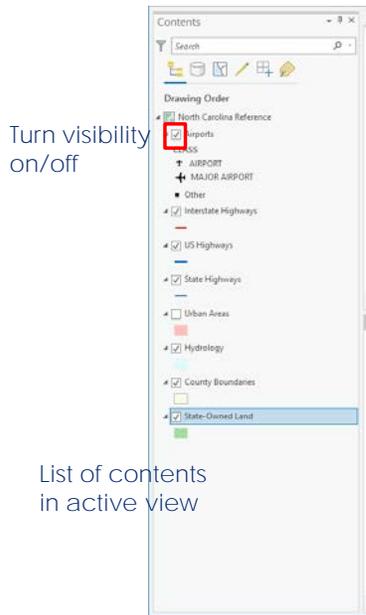
The ribbon will always appear across the top of the window. If the ribbon does not appear in the window, it is because the ribbon is collapsed. Use the ^ button in the top right corner to expand the ribbon.



Panes & Settings

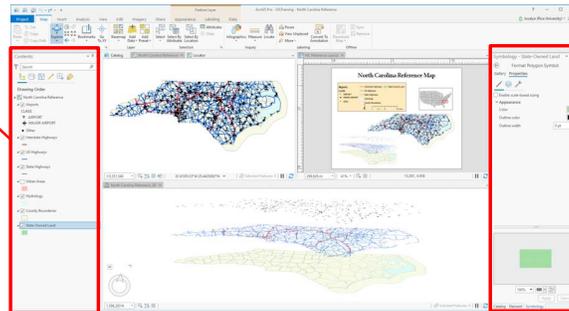


- Dockable windows containing additional functionality, settings, or commands



Turn visibility on/off

List of contents in active view



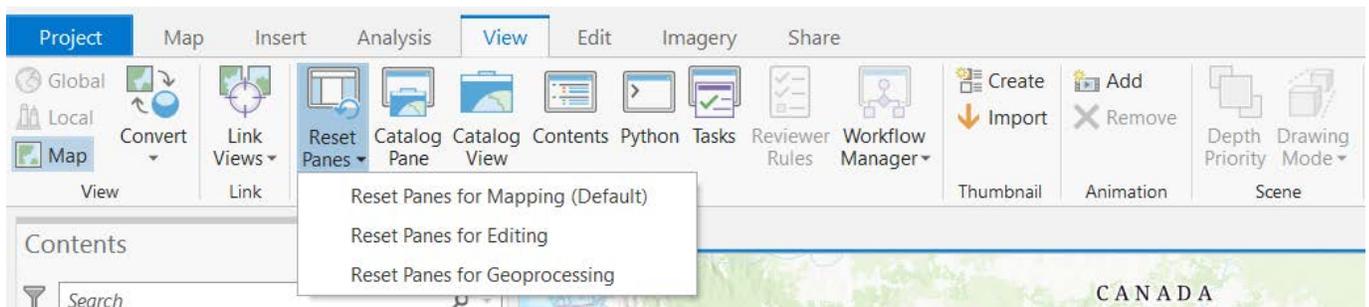
Text-based & graphical tabs

Expandable settings



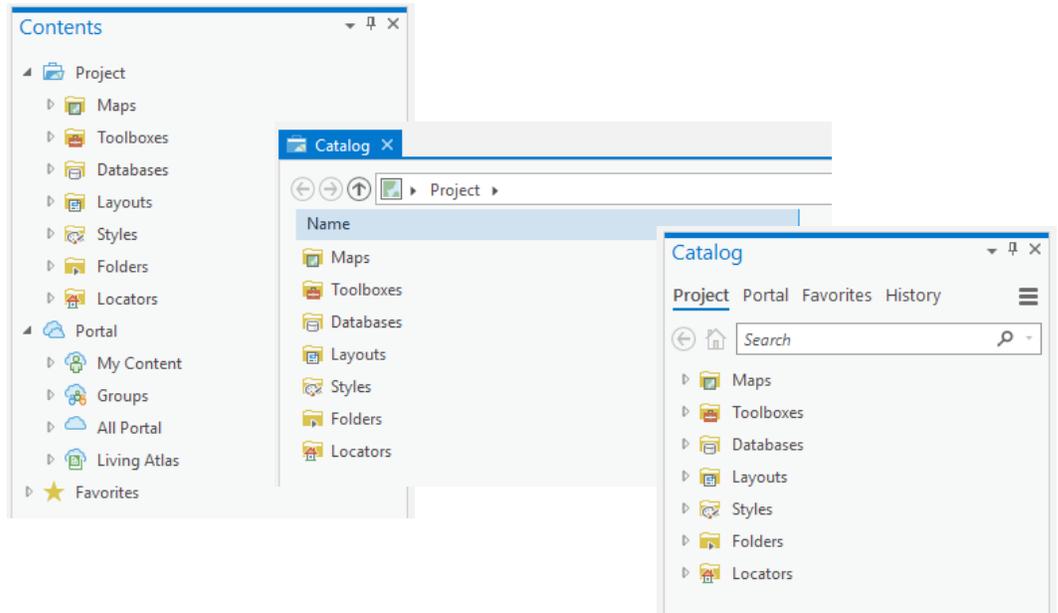
More options

The dockable windows, or panes, can be displayed by navigating to the 'View' tab in the ribbon, selecting 'Reset Panes', and then selecting 'Reset Panes for Mapping' and/or 'Reset Panes for Geoprocessing'. The contents, catalog, and geoprocessing panes can be displayed in your project window using this method.



Catalog

- Navigate through project items using the Catalog
 - Contents
 - View
 - Pane



Basic tools

• Explore

- Navigate and interact with the map and individual features

• Open/Save Project

- Save any changes made to the project itself

• Add Data

- Add geographic data and tables to the map

• Basemaps

- Referential background maps