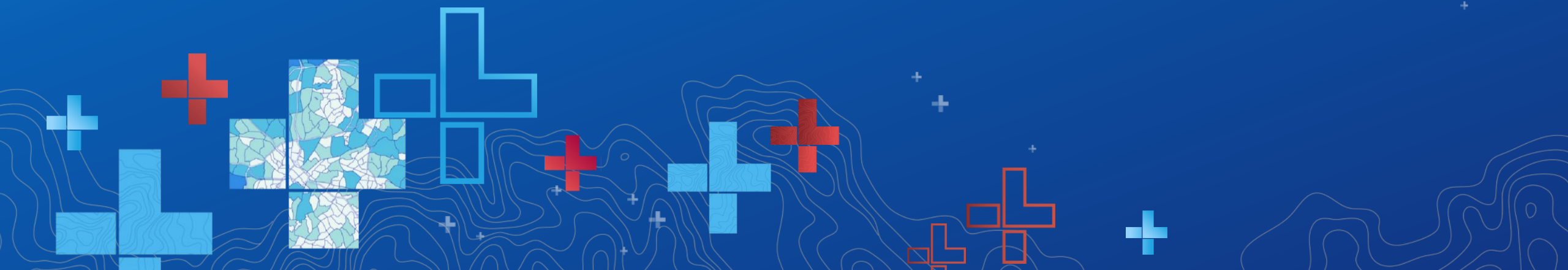
ArcGIS Pro: Tips and Tricks

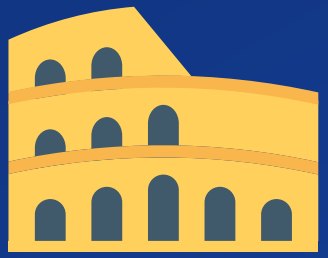
Matthew Berra



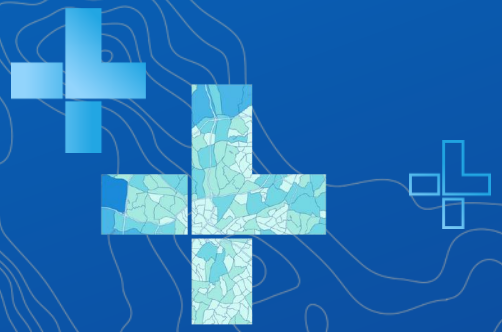
Agenda

- Key Concepts / Backstage
- Exploring the Catalog and Contents
- Working with Raster Layers
- Working with Feature Layers
- Interacting with the Map
- Creating Layouts
- Geoprocessing and Analysis
- Creating and Linking Views
- Editing Data
- Working with Imagery
- Sharing Your Work

- Questions



Key Concepts / Backstage



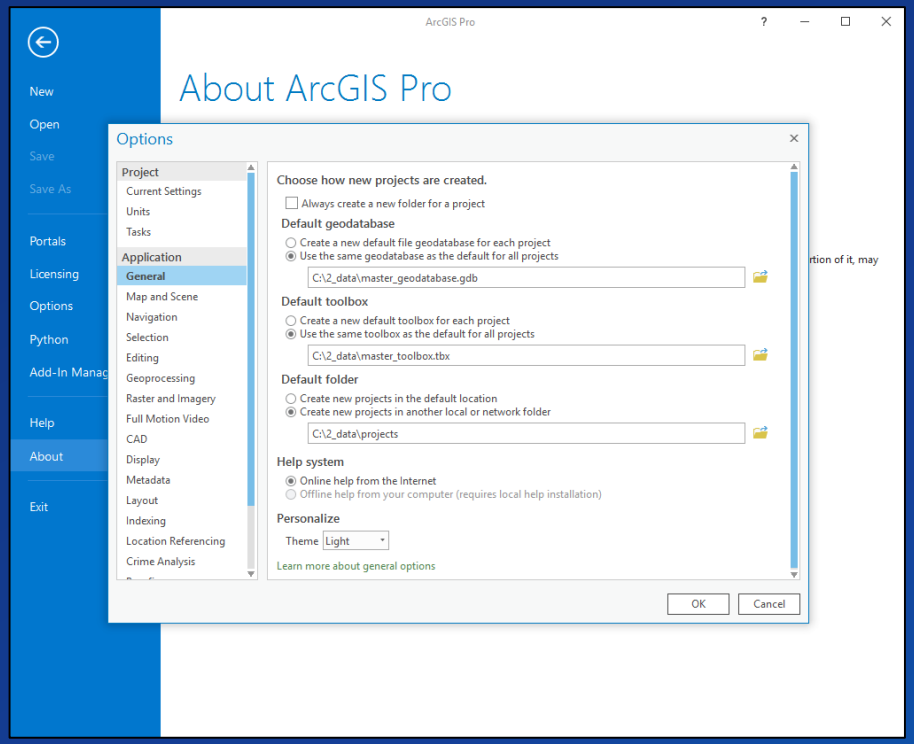
Key Differences between ArcMap and ArcGIS Pro

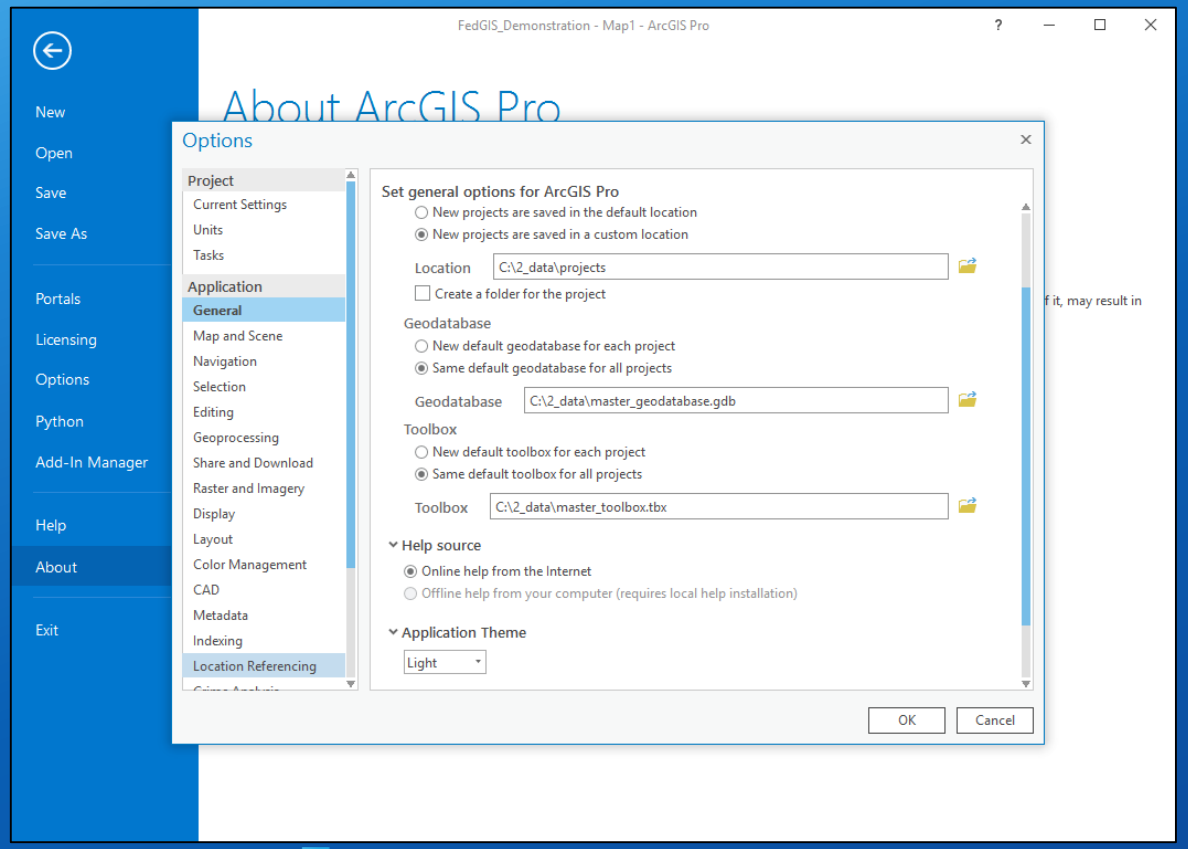
- ArcMap .mxd (Map Document) ≠ ArcGIS Pro .aprx (Project File)

- User Interface
  - Tools appear when you need them
  - Explore tool combines Pan, Zoom, Identify, and HTML Pop-up
  - Editing – Always Enabled
- Connection to ArcGIS Online and Portals
- Previously Separate Tools Combined into One (Maps, Catalog, Toolbox, 2D, 3D)

Before a project is even opened:

- Tip # 1: Right-click ArcGIS Pro in the Start Menu to open a recent project
  - Right-click a project to remove it from the list
- Tip # 2: Go directly to Backstage by clicking Settings
- Tip # 3: Use Portals to manage connections to multiple Portals
- Tip # 4: Licensing → Authorize ArcGIS Pro to work offline
- Tip # 5: Options → General → Create projects (set defaults)
- Tip # 6: Options → General → Help source
- Tip # 7: Options → General → Application Theme
- Tip # 8: Options → Map and Scene → Set Default Basemap
- Tip # 9: Options → Map and Scene → Add Layer - Visibility
- Tip # 10: Options → Editing→ Session → Automatically save edits
- Tip # 11: Options → Geoprocessing → Analyze script and model tools for compatibility
- Tip # 12: Options → Geoprocessing → R-ArcGIS Support
- Tip # 13: Options → Raster and Imagery→ Perspective Imagery
- Tip # 14: Options → Proofing→ Enable spell checking
- Tip # 15: Options → Customize the Ribbon → Accelerator



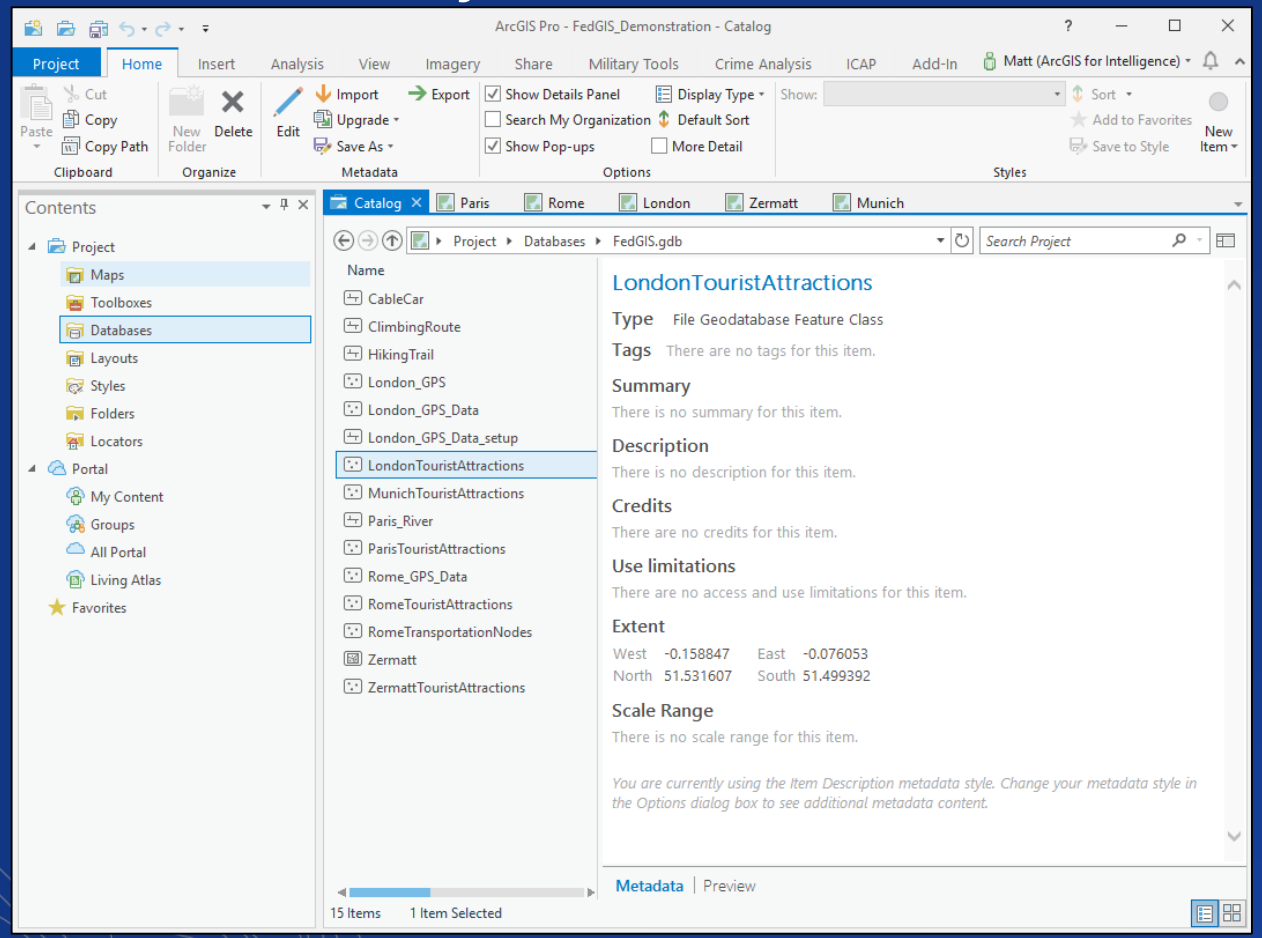

FedGIS_Demonstration - Map1 - ArcGIS Pro
About ArcGIS Pro
New
Open
Save
Save As
Portals
Licensing
Options
Python
Add-In Manager
Help
About
Exit
Options
Project
Current Settings
Units
Tasks
Application
General
Map and Scene
Navigation
Selection
Editing
Geoprocessing
Share and Download
Raster and Imagery
Display
Layout
Color Management
CAD
Metadata
Indexing
Location Referencing
Set general options for ArcGIS Pro
New projects are saved in the default location
New projects are saved in a custom location
Location
C:\2_data\projects
Create a folder for the project
Geodatabase
New default geodatabase for each project
Same default geodatabase for all projects
Geodatabase
C:\2_data\master_geodatabase.gdb
Toolbox
New default toolbox for each project
Same default toolbox for all projects
Toolbox
C:\2_data\master_toolbox.tbx
Help source
Online help from the Internet
Offline help from your computer (requires local help installation)
Application Theme
Light
OK
Cancel

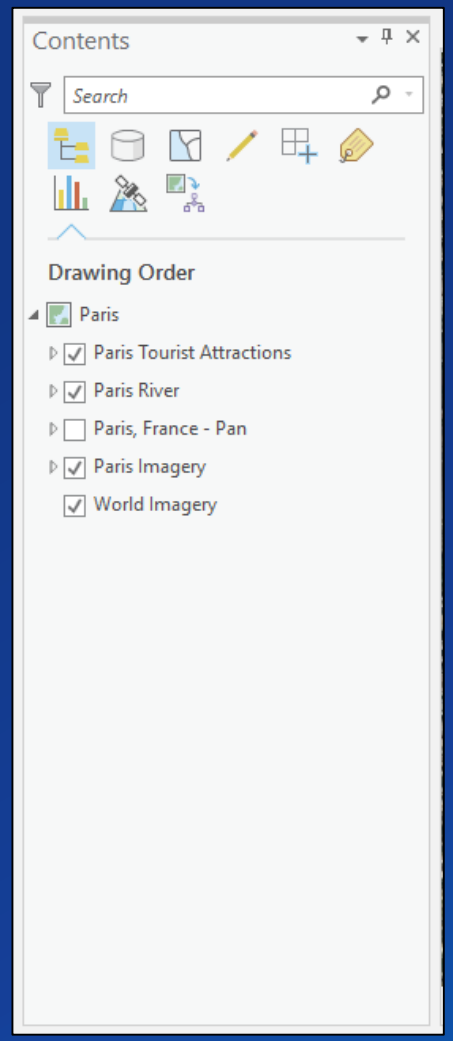
Backstage

Exploring the Catalog and Content

Key Differences between ArcMap and ArcGIS Pro

- In ArcGIS Pro the Catalog opens directly in the main window



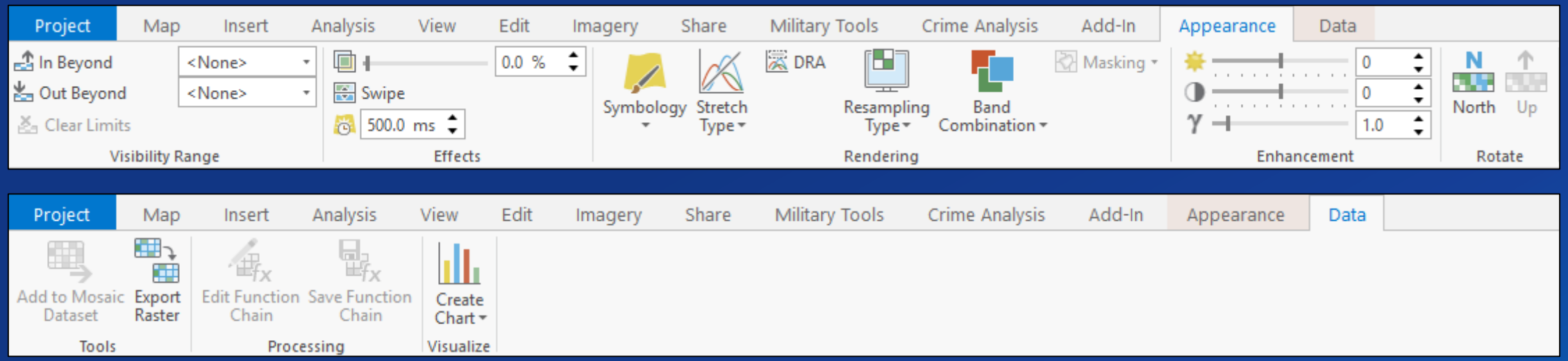


- The Contents window has new tools to sort, filter, and query layers

Working with Raster Data

Key Differences between ArcMap and ArcGIS Pro

- **When a raster layer is selected the Appearance and Data tabs are automatically displayed**

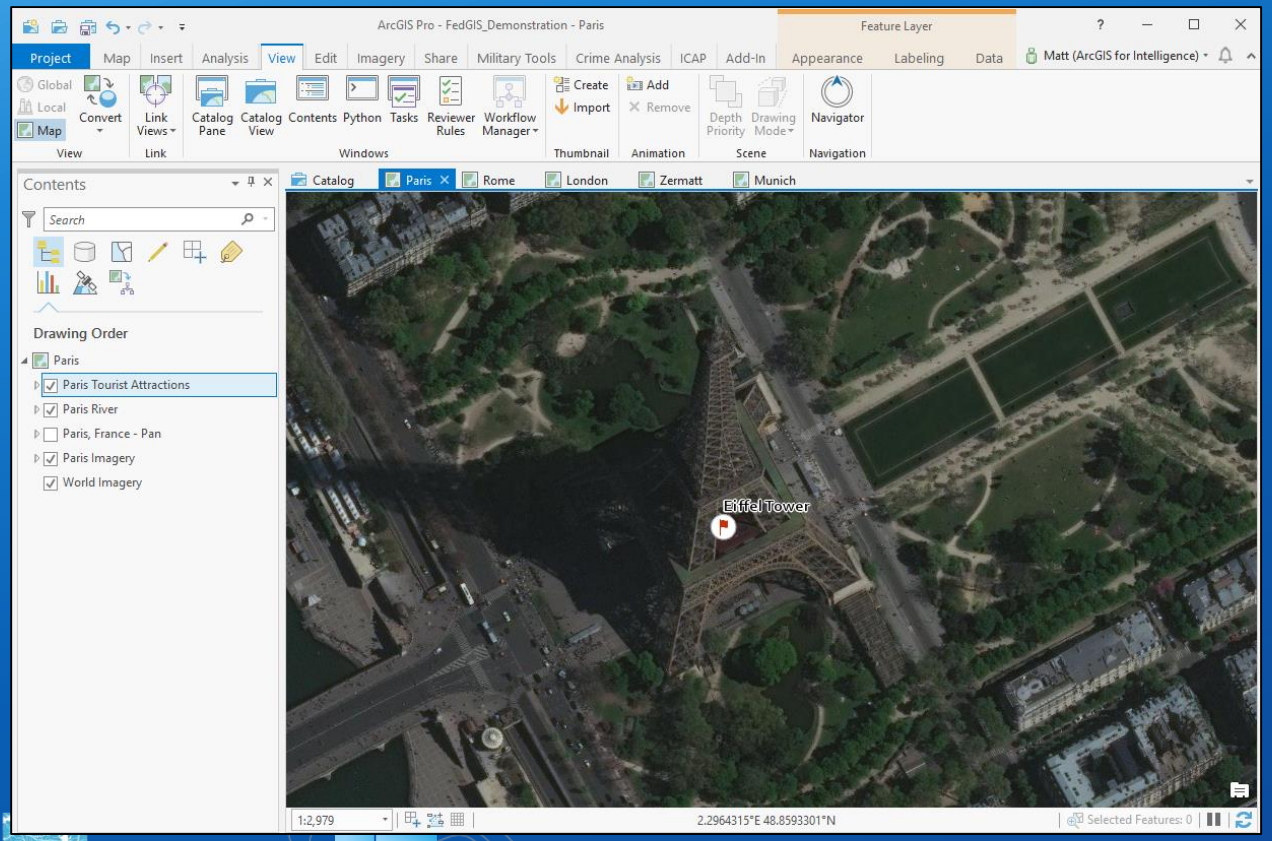


Catalog and Contents:

- Tip # 16: Preview data in the Catalog using a Basemap
- Tip # 17: Right-click folders and geodatabases to Add to Favorites
- Tip # 18: Filter the Contents by layer type by using
- Tip # 19: Use the Search Box to filter the Contents by keyword
- Tip # 20: List Content by Perspective Imagery to set the Focus Image Layer
- Tip # 21: List Content by Labeling to edit the labels of multiple layers at one time
- Tip # 22: Use the Undo Drop Down to go back multiple steps
- Tip # 23: Alt-click a layer – Zoom to layer
- Tip # 24: Left/Right arrows – Expand and contract layer
- Tip # 25: Spacebar – Turn on/off selected layers

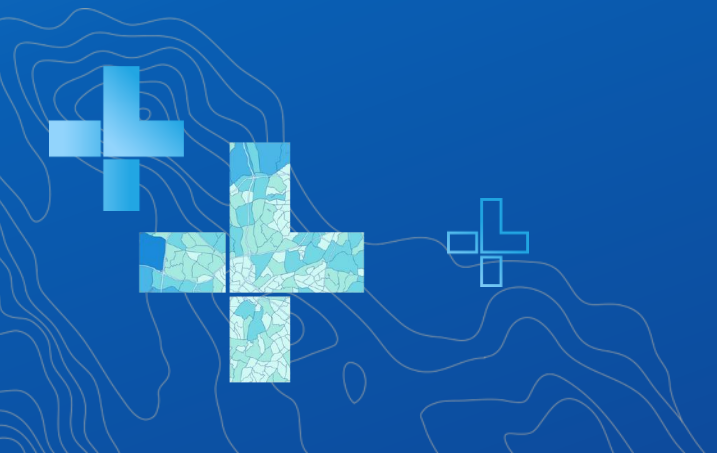
Raster Layers:

- Tip # 26: Use the Top Up and North Up buttons to rotate based on Imagery Metadata
- Tip # 27: Use a and d to rotate the map frame. Use n to rotate the frame to North



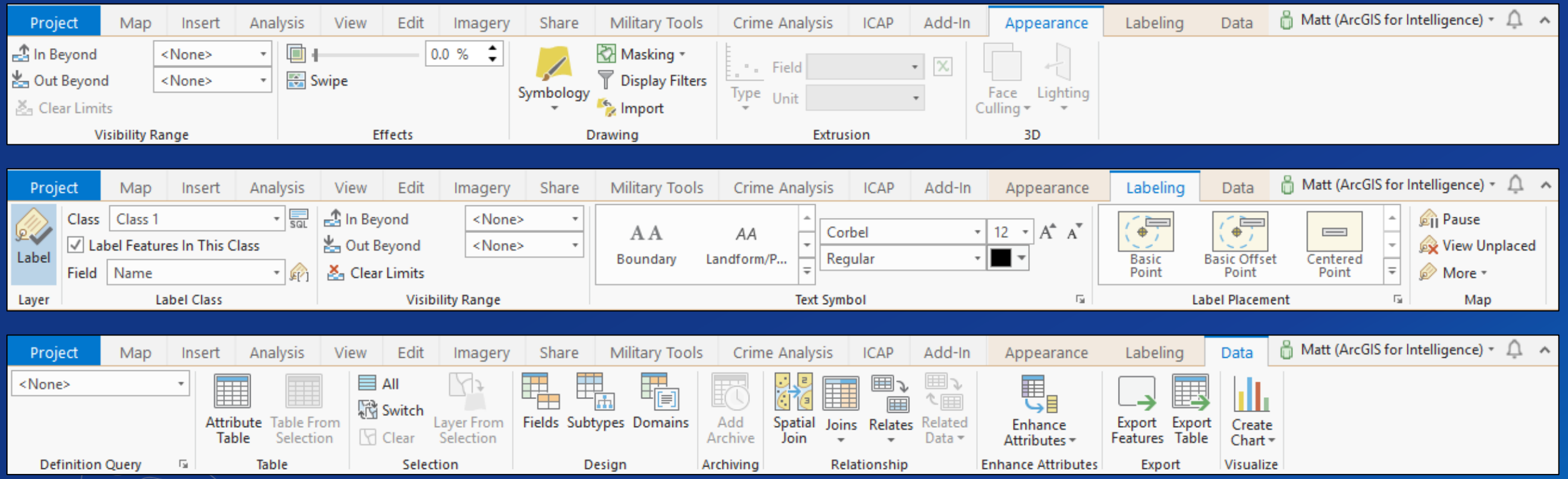
Catalog, Contents, and Raster Layers

Working with Feature Layers



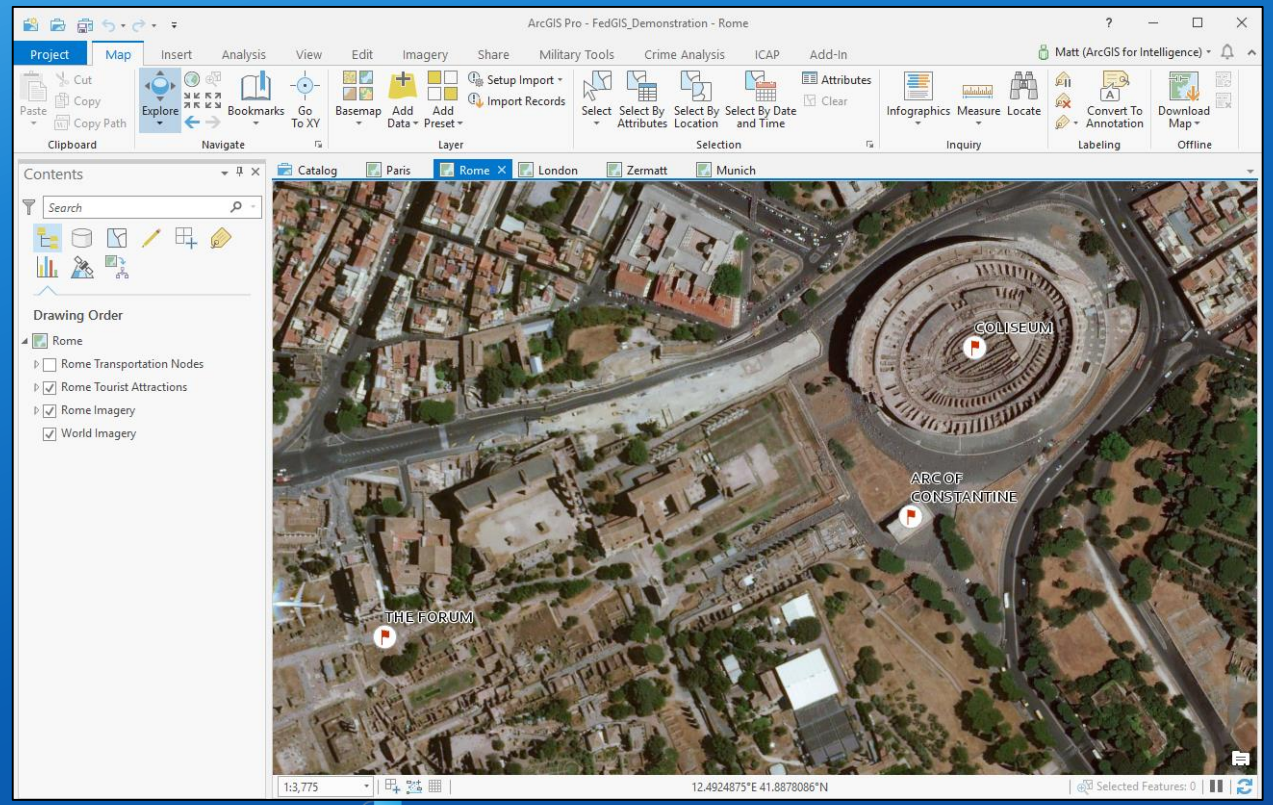
Key Differences between ArcMap and ArcGIS Pro

- When a feature layer is selected the Appearance, Labeling, and Data tabs are automatically displayed



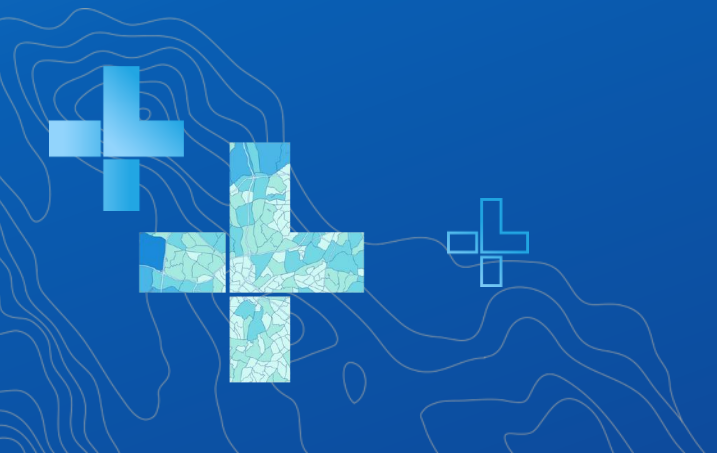
Feature Layers:

- Tip # 28: Use Arcade expressions to customize labels
- Tip # 29: When working with Text Symbols press the arrow in the bottom-right corner for more options
- Tip # 30: Use Appearance → Symbology → Display Filters to change symbols based on scale
- Tip # 31: Use charts to visualize data and interact with the map
- Tip # 32: The Selected Features box below the map is a button that zooms to the selected features



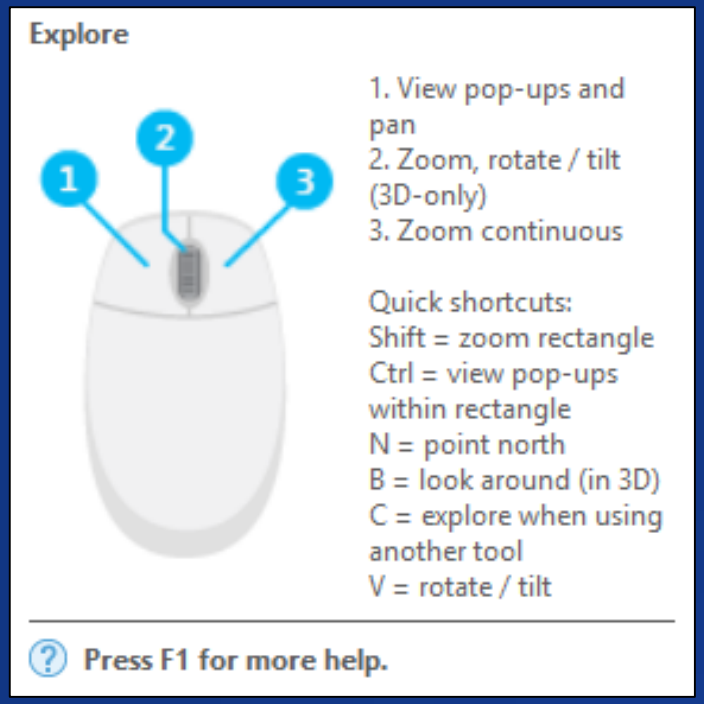
Feature Layers

Interacting with the Map

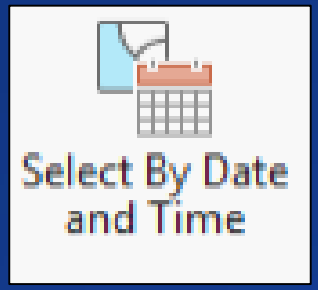


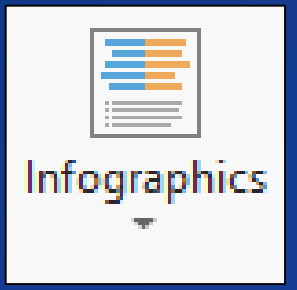
Key Differences between ArcMap and ArcGIS Pro

- **Introduction of the Explore Tool**

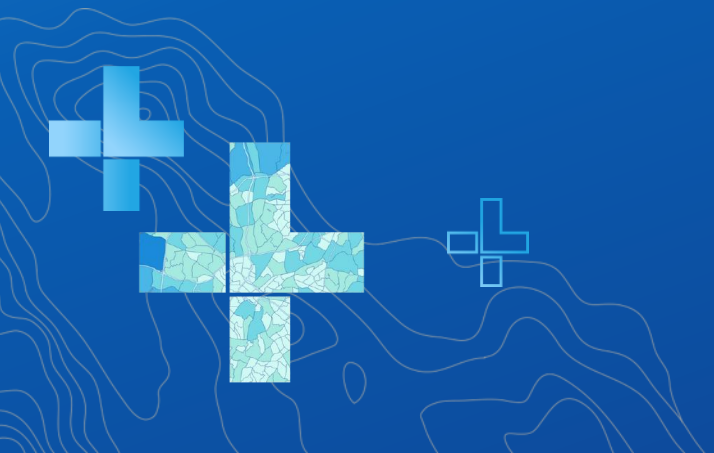


- **Introduction of the Map Ribbon**





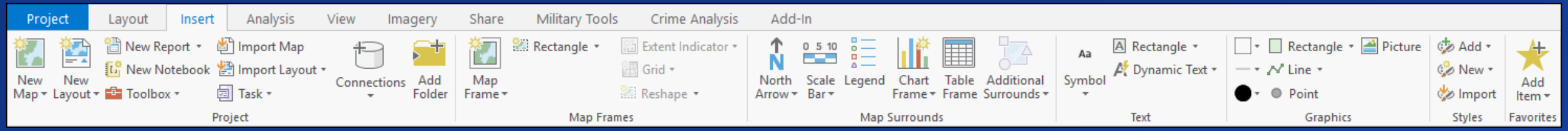
Creating Layouts



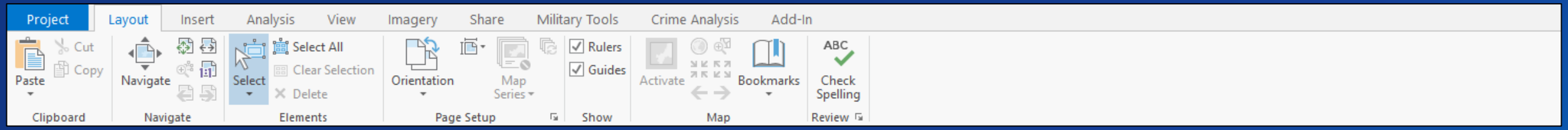
Key Differences between ArcMap and ArcGIS Pro

- To Create a Layout: Insert → New Layout

- The Content in the Insert Tab changes



- A Layout Tab is added to the Ribbon

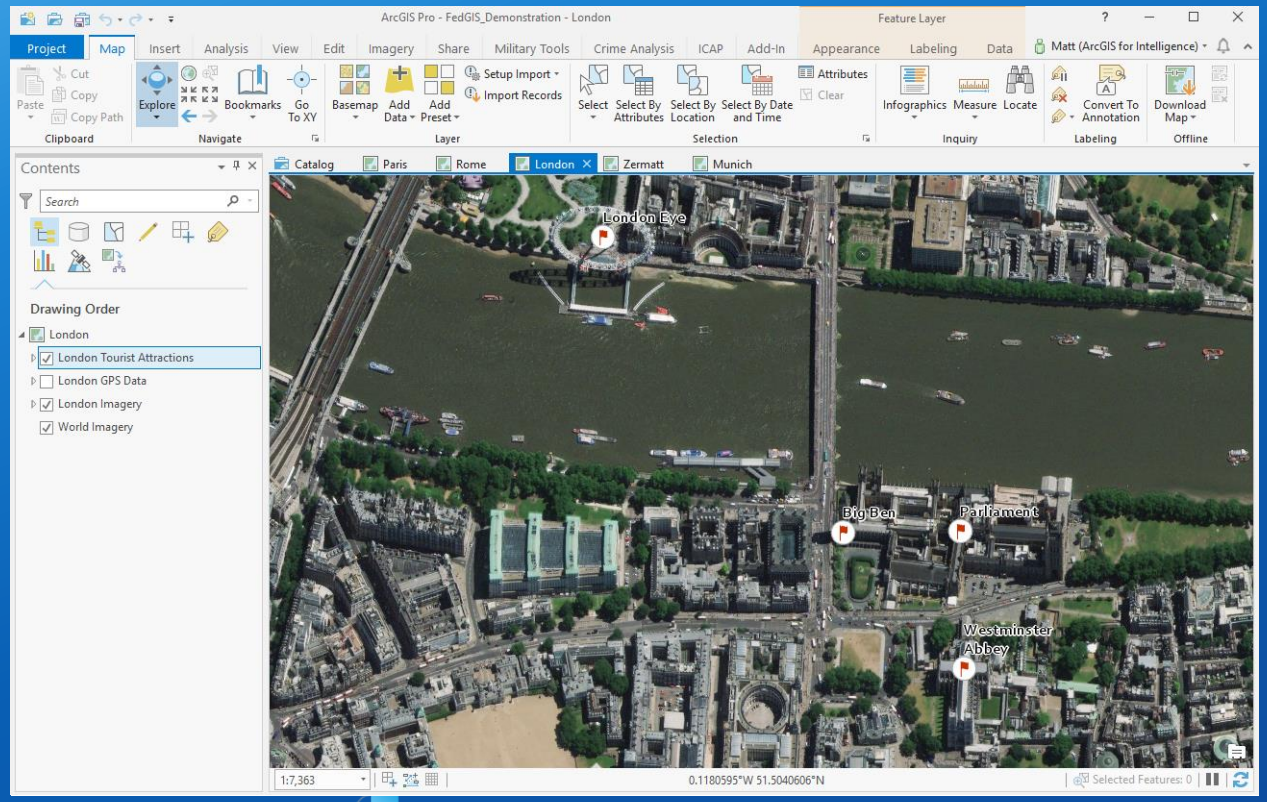


Map Tab:

- Tip # 33: Use the Explore Drop-down menu to only interact with specific layers
- Tip # 34: Click anywhere on a point symbol to interact with the feature
- Tip # 35: Use Select By Date and Time to narrow down a selection using a Date field
- Tip # 36: Add a layer to the Locate tool as a Location Provider to query for locations within local datasets
- Tip # 37: Analyze Esri's curated content using custom Infographics
- Tip # 38: Use the Range Slider to dynamically query features with a numeric attribute
- Tip # 39: Ctrl-click (Center), Shift-click (Center and Zoom), Shift-draw box (Zoom), Insert (Zoom to Full Extent)

Insert Tab:

- Tip # 40: Use Import Map to load a .mxd, .sxd, or .mmpk into your project
- Tip # 41: Use New Report to generate a Report, and New Notebook to create a new Python Notebook
- Tip # 42: Use Import Styles to load symbology from an existing ArcMap style file
- Tip # 43: Use New Layout additional times to create multiple layouts for the same map
- Tip # 44: Use Show only Visible and Show Count to dynamically enhance your Legend
- Tip # 45: Use Lock Elements to prevent layout items from accidently being moved

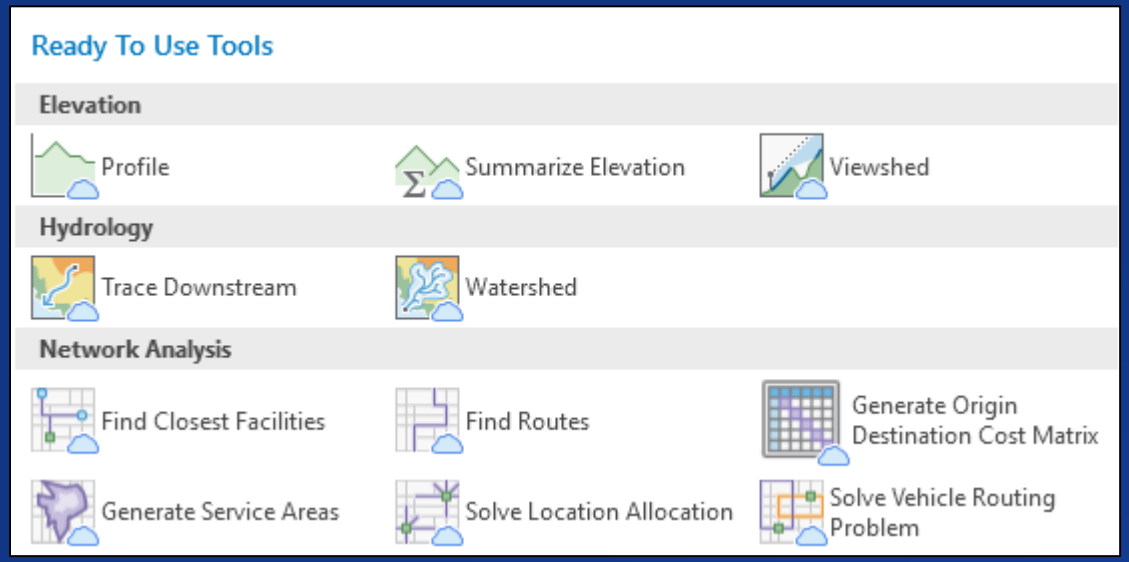


Interacting with Map and Creating Layouts

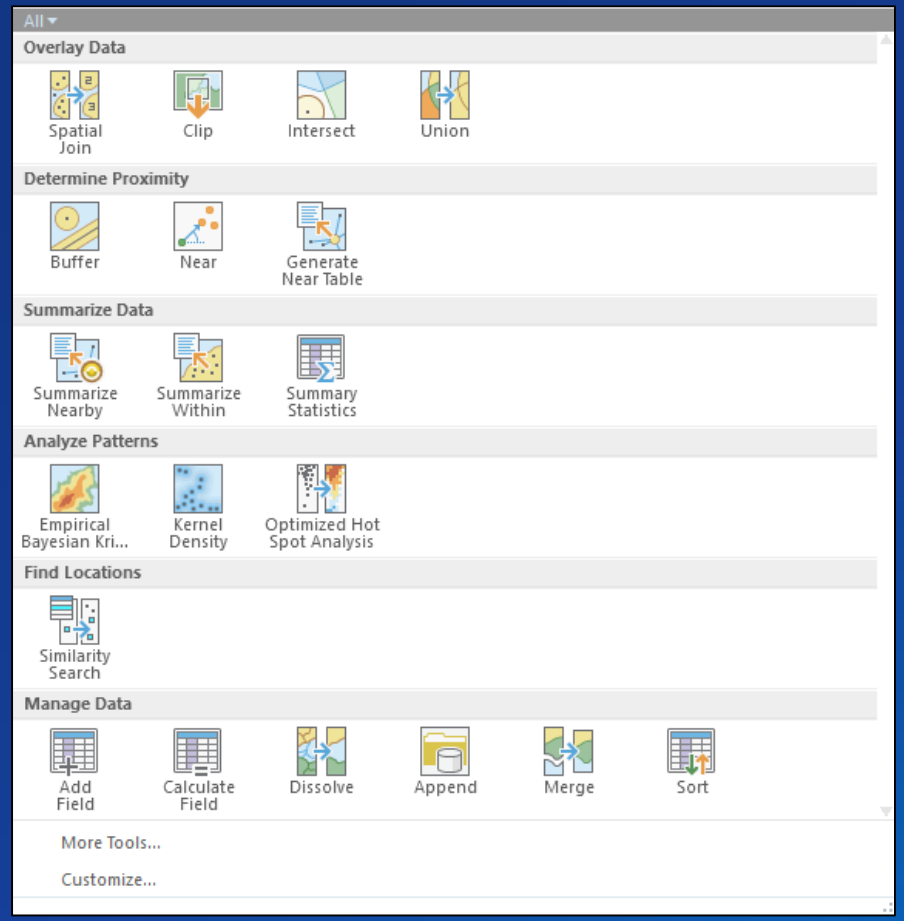
Geoprocessing and Analysis

Key Differences between ArcMap and ArcGIS Pro

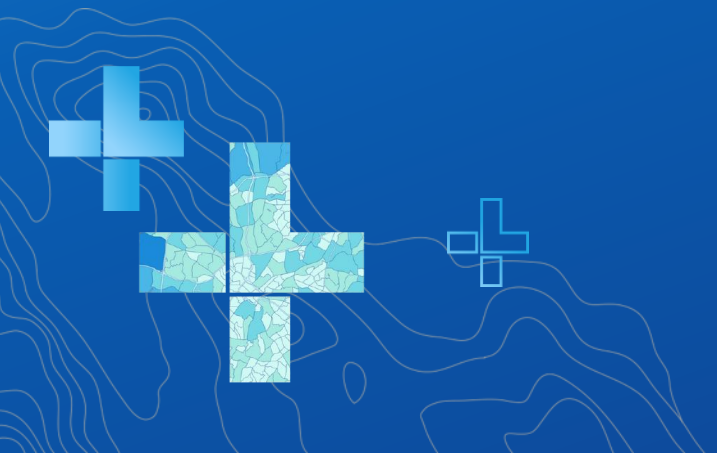
- Ready To Use Tools



- The Analysis Gallery



Creating and Linking Views



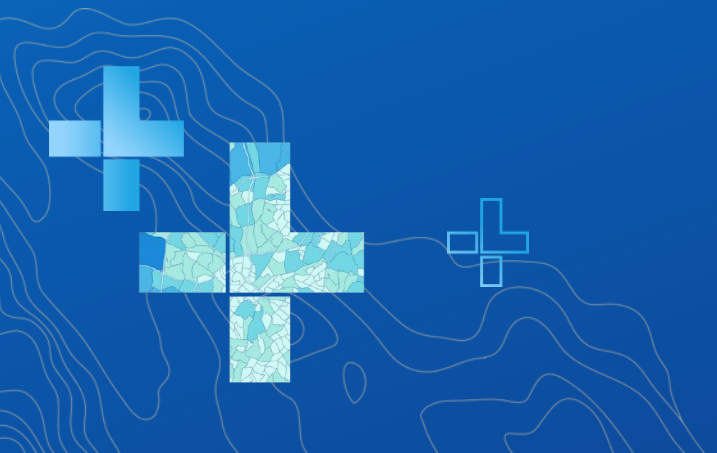
Key Differences between ArcMap and ArcGIS Pro

- Convert between 2D and 3D

- On-screen Camera Navigation

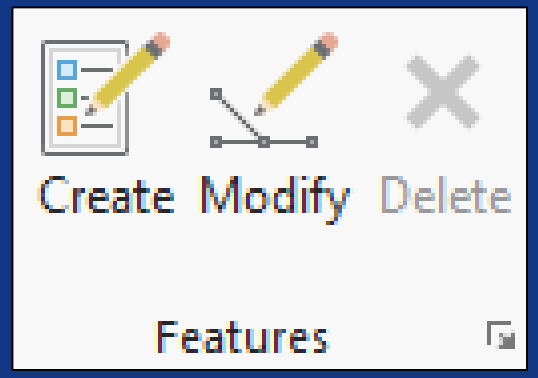
- Link Views for Simultaneous Navigation

Editing Data

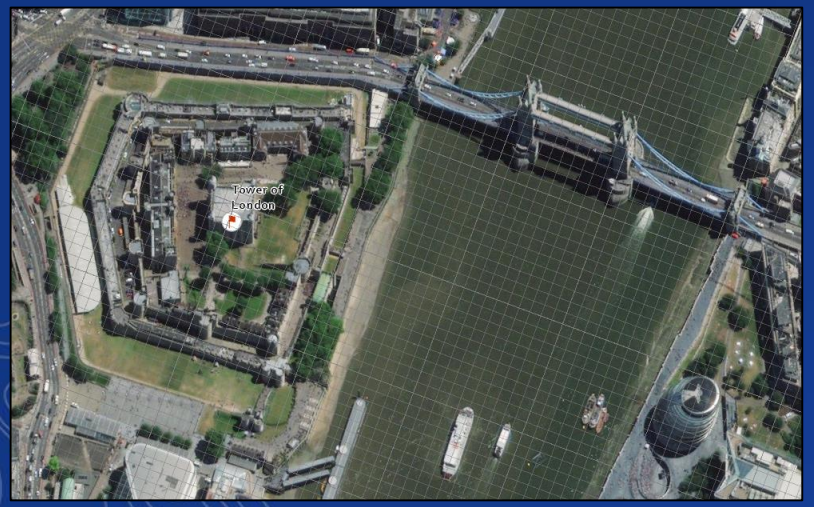


Key Differences between ArcMap and ArcGIS Pro

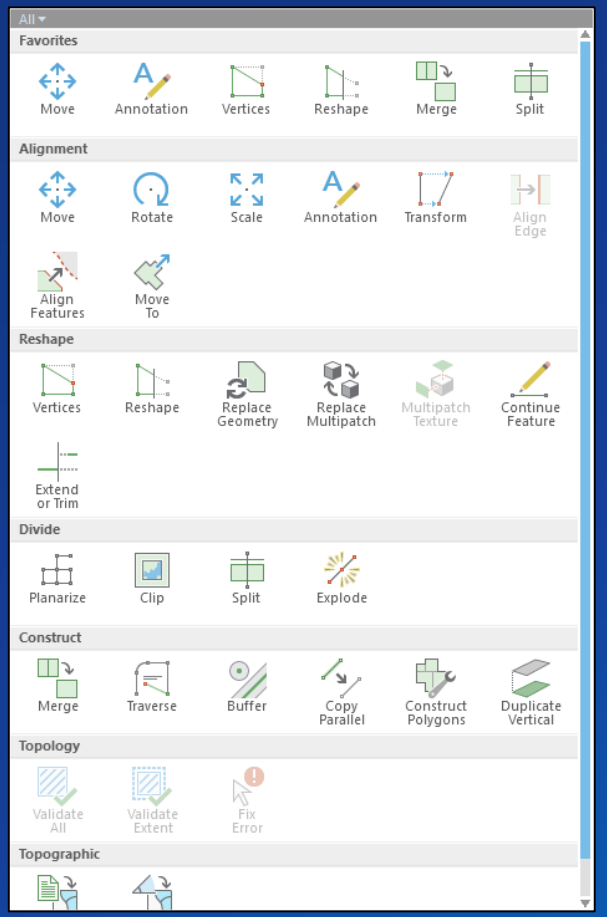
- **Automatic Editing**



- **Editing Grid**



- **The Editor Tool Gallery combines the tools from the ArcMap Edit, Advanced Editing, and Topology Toolbars**



Analysis Tab:

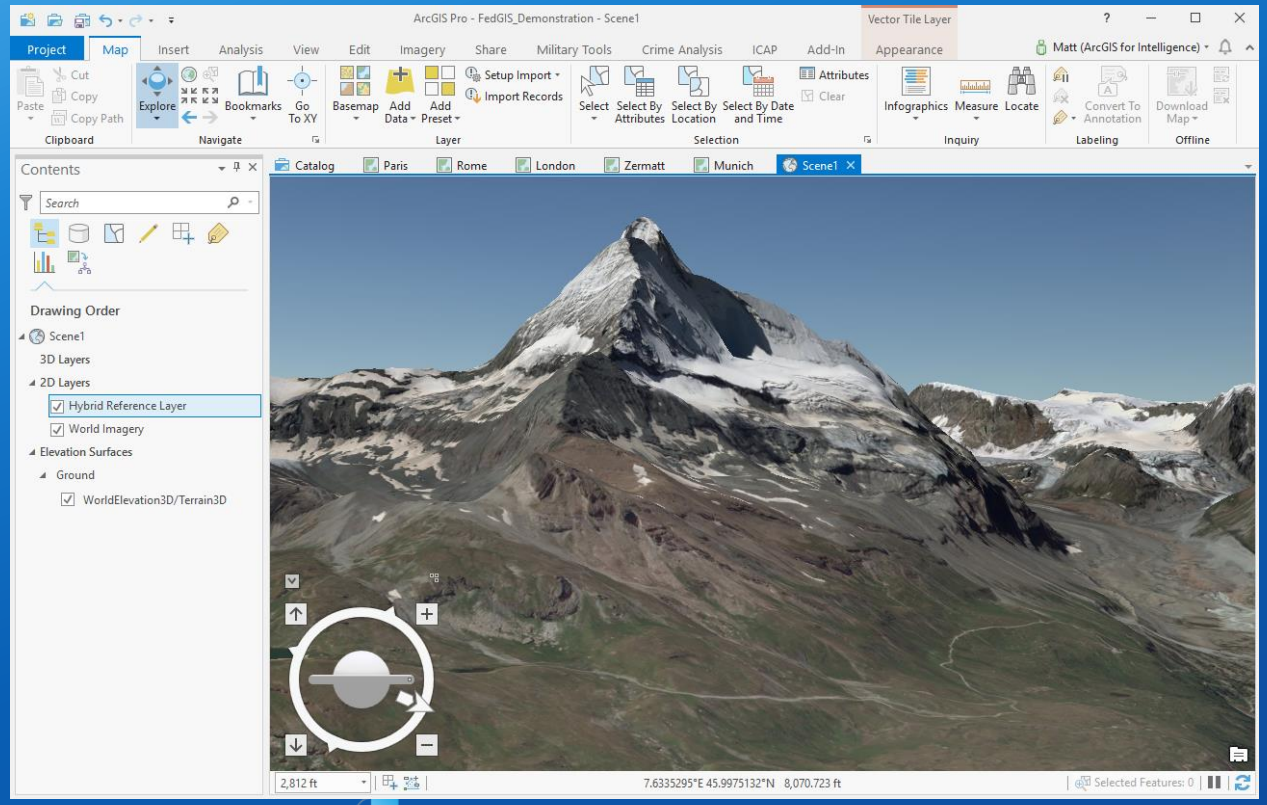
- Tip # 46: Use Ready to Use Tools to access Esri hosted data and analysis capabilities
- Tip # 47: When running a geoprocessing tool use an Interactive Input to draw new input features
- Tip # 48: Right-click a tool in the toolbox to run it in Batch mode
- Tip # 49: Right-click a tool in the toolbox to add it to the Geoprocessing Gallery or Favorites
- Tip # 50: Right-click a tool in the Ribbon to add it to the Quick Access Toolbar
- Tip # 51: Access the Exploratory Analysis Tools when viewing a 3D scene

View Tab:

- Tip # 52: Use Convert to switch your view between 2D, 3D, and Basemap options
- Tip # 53: Reset your ArcGIS Pro layout with Reset Panes
- Tip # 54: To link the navigation of multiple maps or scenes use Link Views
- Tip # 55: Turn on the Navigator Control to enable on-screen navigation

Edit Tab:

- Tip # 56: Use Attributes → Geometry to get a feature's raw coordinates
- Tip # 57: Add an Editing Grid to assist in aligning features
- Tip # 58: Click the arrow in the bottom-right corner of the Features toolset to Manage Templates

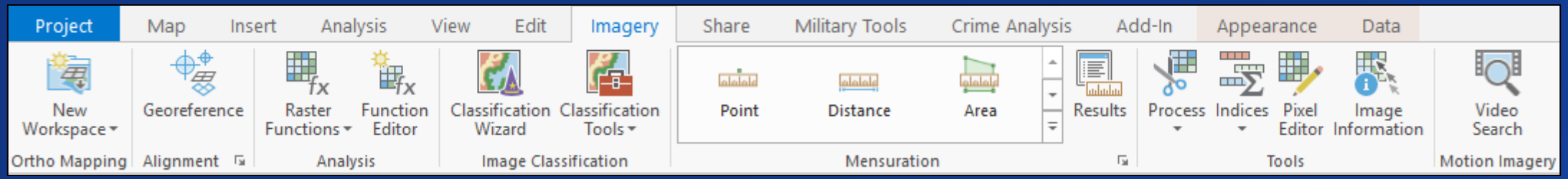


Geoprocessing and Analysis, Creating and Linking Views, and Editing Data

Working with Imagery

Key Differences between ArcMap and ArcGIS Pro

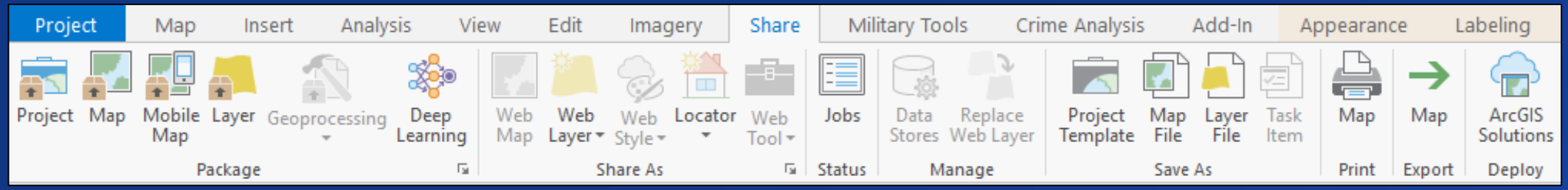
- **Introduction of the Imagery Tab**



Sharing Your Work

Key Differences between ArcMap and ArcGIS Pro

- **Better Integration and more options when working with ArcGIS Online / Portal**

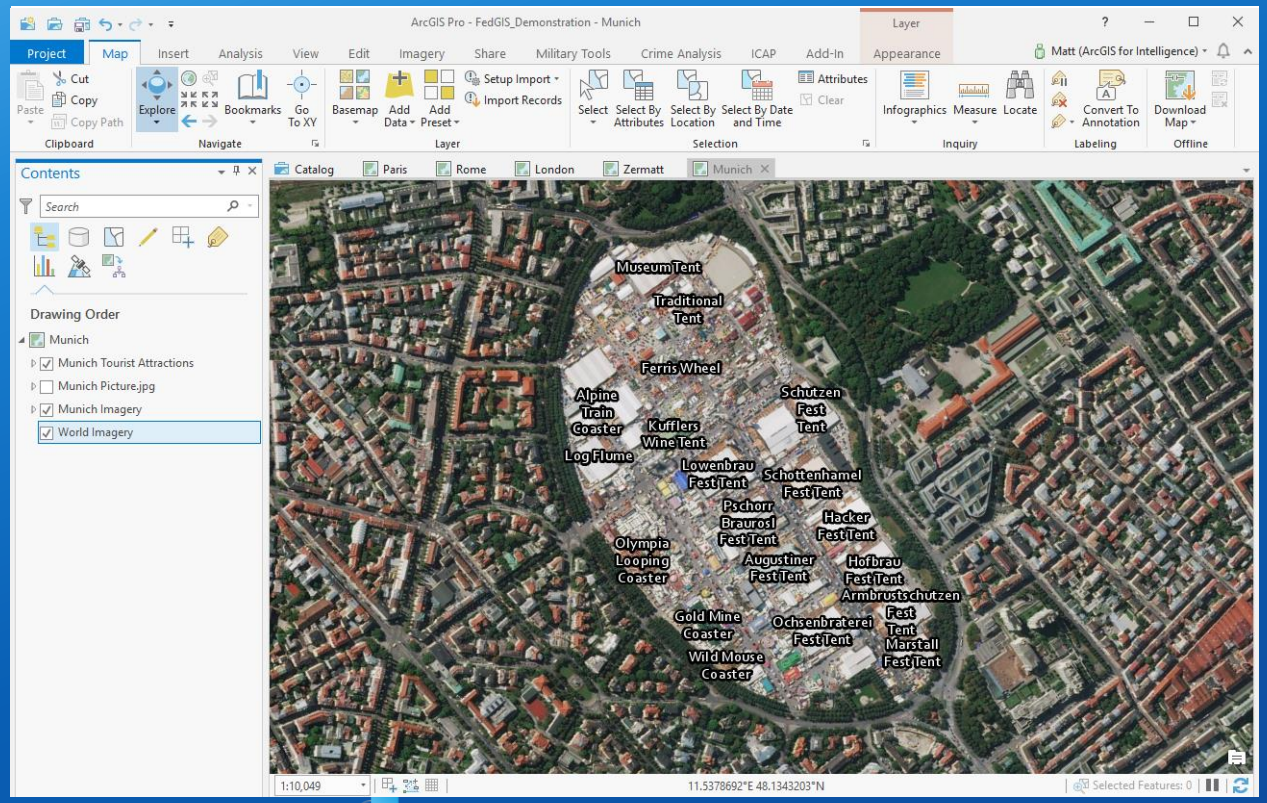


Imagery Tab:

- Tip # 59: Use Auto-georeference to align a non-geolocated image
- Tip # 60: Use Pixel Editor to make changes to a raster’s display
- Tip # 61: Use the Motion Imagery Tools to analyze Full Motion Videos (FMV) or Drone footage

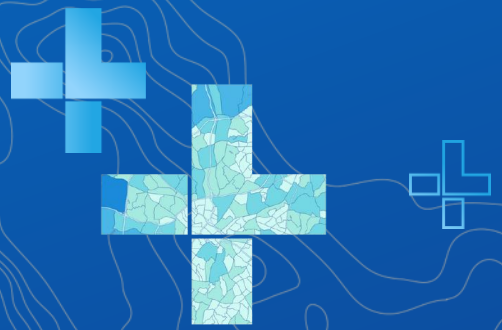
Share Tab:

- Tip # 62: Share maps as a Mobile Map Package to use it in a Mobile Application
- Tip # 63: When sharing a Web Map set the appropriate configuration (Exploratory, Editable, Visualization)
- Tip # 64: Create and share Project Templates to use when creating common product types



Working with Imagery and Sharing Your Work

One Last Tip…

- **Tip # 65: Esri provides numerous online help resources:**
  - https://learn.arcgis.com/en/
  - https://community.esri.com/
  - https://www.esri.com/arcgis-blog/arcgis-pro/
  - https://pro.arcgis.com/en/pro-app/community/
  - http://pro.arcgis.com/en/pro-app/get-started/faq.htm
  - https://www.esri.com/training/
  - https://go.esri.com/ProRoadMap
  - https://developers.arcgis.com/
  - http://esri.github.io/
  - http://pro.arcgis.com/en/pro-app/help/main/welcome-to-the-arcgis-pro-app-help.htm
  - http://pro.arcgis.com/en/pro-app/tool-reference/main/arcgis-pro-tool-reference.htm

Questions?