Making the Move from ArcMap to ArcGIS Pro
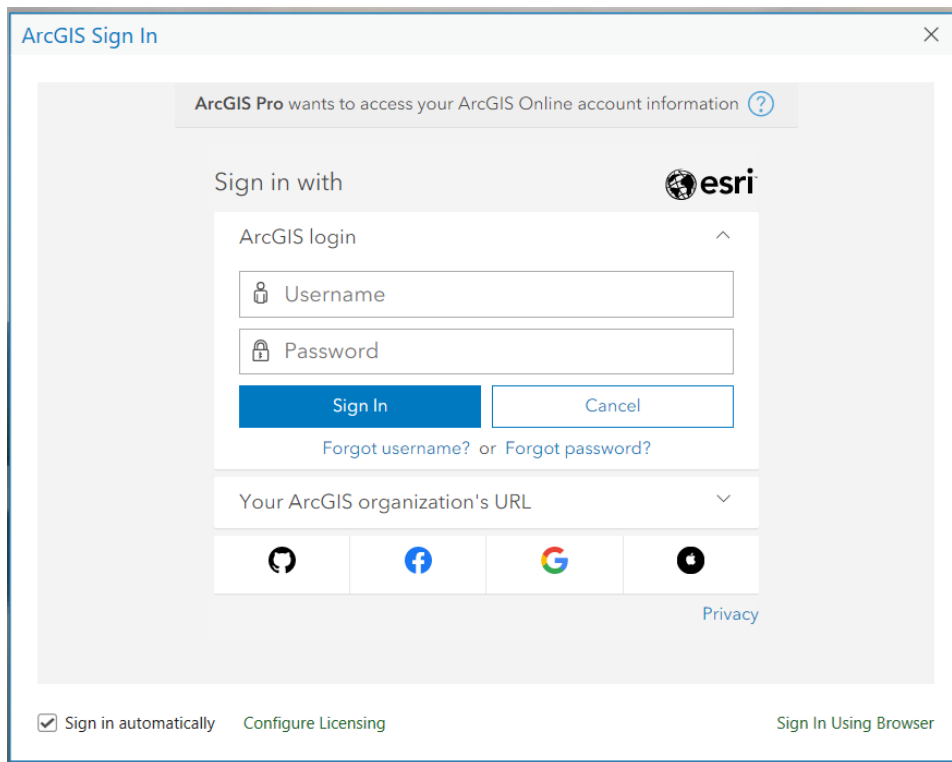
Workshop Details

Are you an ArcGIS Desktop user who is curious about the differences between ArcMap and ArcGIS Pro? This workshop is geared towards existing ArcMap users who are interested in making the switch to ArcGIS Pro and covers topics such as: the timeline of support for ArcMap, licensing and access, differences, and similarities between the two programs, and how to import files from ArcMap and share your content.

This tutorial provides a brief introduction and guide to:

- The process of creating an ArcGIS Pro project file
- Importing an ArcMap project into ArcGIS Pro
- Key features of the ArcGIS Pro interface
- Adding and editing datasets
- Saving and sharing your project

Getting Started

- Sign into ArcMap with your ArcGIS account

- Select one of the templates or choose to Start a new project without a template
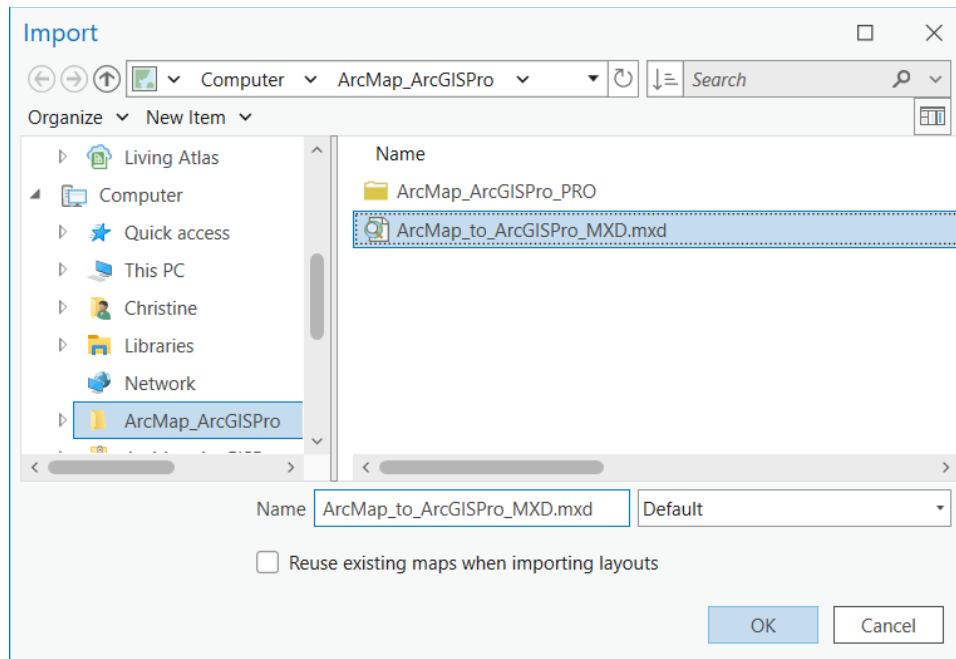
By choosing one of the templates, a project file will be created and saved from the start. Choosing to start without a template provides more flexibility and the option to save or discard the project later.
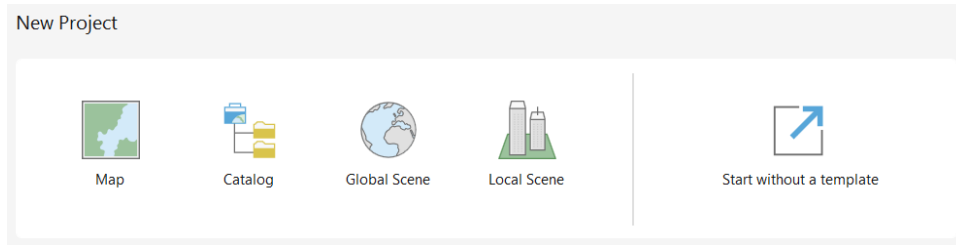
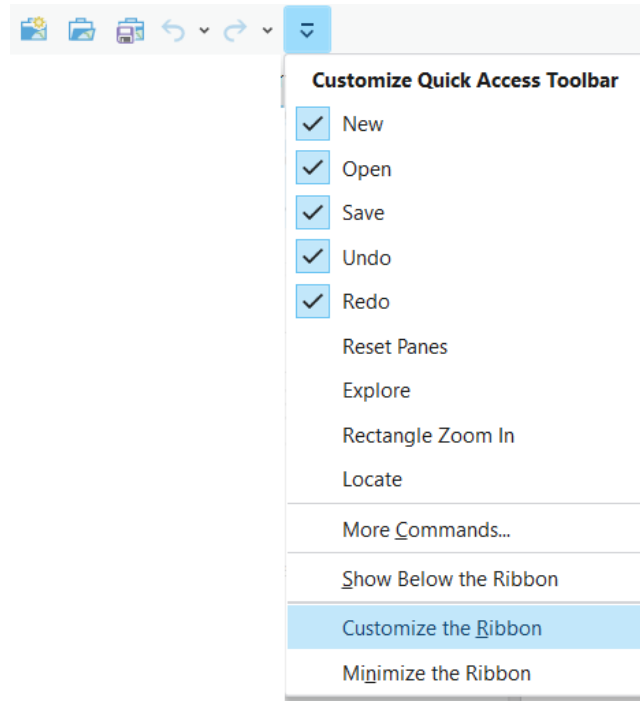- To import an ArcMap project, select Import Map from the Insert tab
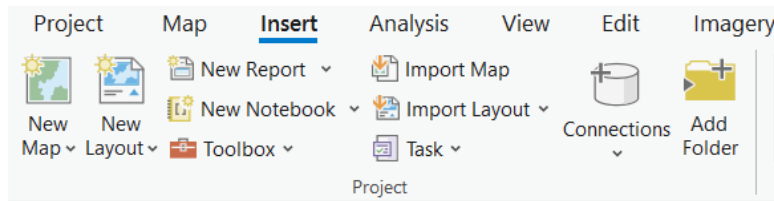
- Navigate to the .mxd file and double-click or click OK to open

Interface and navigation

ArcGIS Pro uses a ribbon format like Microsoft Office applications. Like activating extensions and toolbars in ArcMap, the ribbon and quick access toolbar can be customized.

Different tabs and tools become active when clicking on different layers, maps, layouts, etc.

- Click on the layer in the contents pane and explore the new Feature Layer, Labeling, and Data tabs
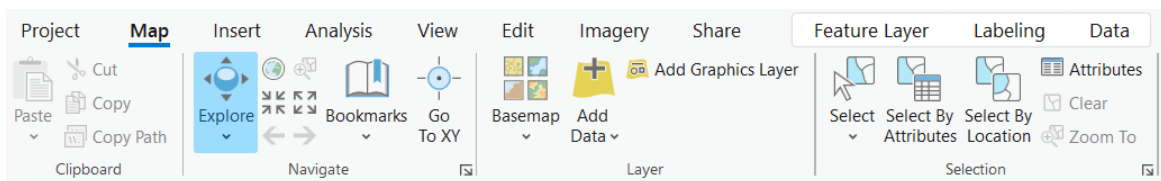
- Navigate the map by panning and zooming to different areas and clicking on different features

With ArcGIS Pro, there is no identify tool, it is built in. Clicking on features will open a pop-up window showing the attributes for that feature. Pop-ups can be disabled using the drop-down underneath the Explore button in the navigate section of the Map tab. The default is to interact with the topmost layer according to the order in the Contents pane but can be changed using the drop-down menu to interact with the visible or selected layers.
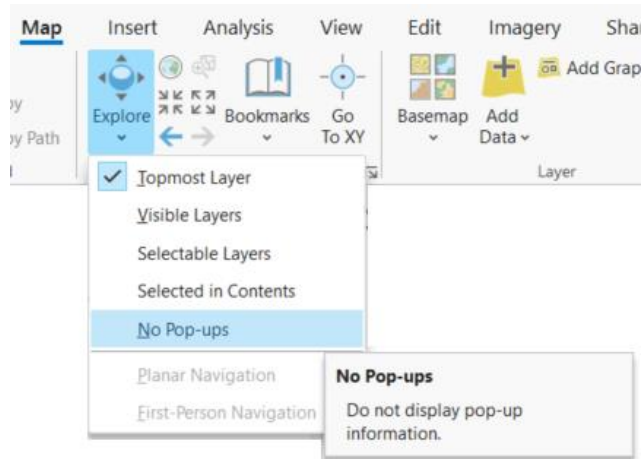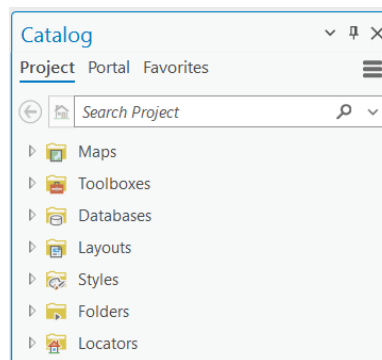
- Explore the project contents in the Catalog pane.

The Project tab includes all the project contents – maps, toolboxes, databases, layouts, styles, folders, and locators.
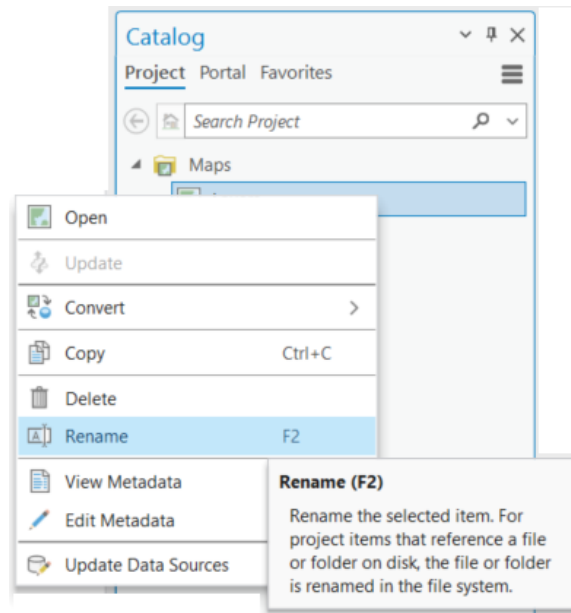
- Expand Maps to view the two maps that were added to the project

Each ArcMap data frame becomes a map.
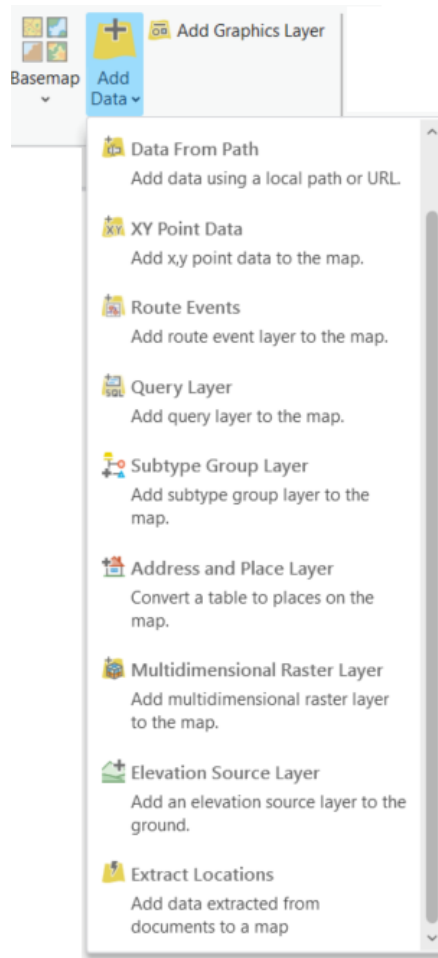
- Double-click each map to open them

- Rename each map by right clicking the item in the Project tab of the Catalog pane and choosing Rename

Add and manage data

From the Add Data dropdown menu, different data types and layers can be added directly to the project such as x/y data, elevation, and multidimensional raster layers.

Using the Catalog pane, data can be added from the folders or databases under the Project tab.

The Portal tab connects directly to ArcGIS Online content. From this tab, content from your ArcGIS Online account, groups, ArcGIS Online, and the Living Atlas can be added directly to the map.

The favourites tab provides quick access to folder, database and server connections, styles, and toolboxes that have been marked as favourite.
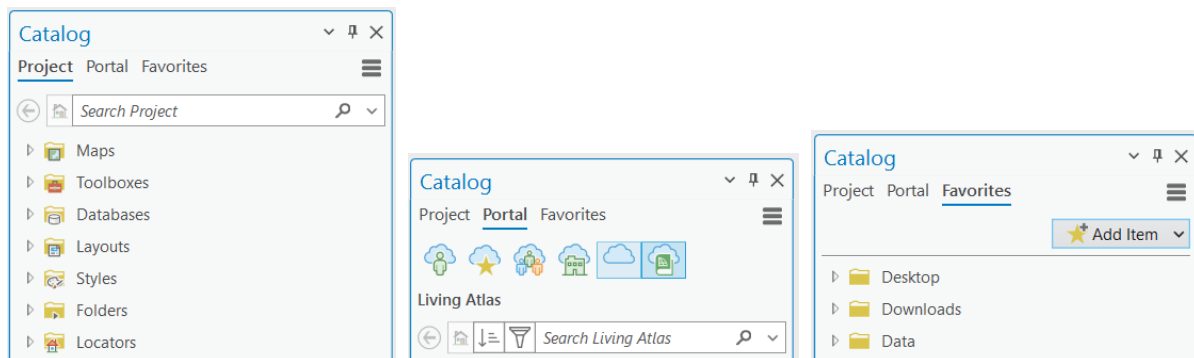
- In the Portal tab of the Catalog pane, switch to ArcGIS Online and search for "owner:openhamilton"
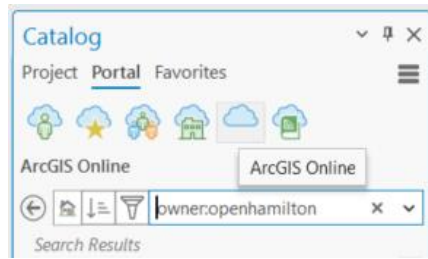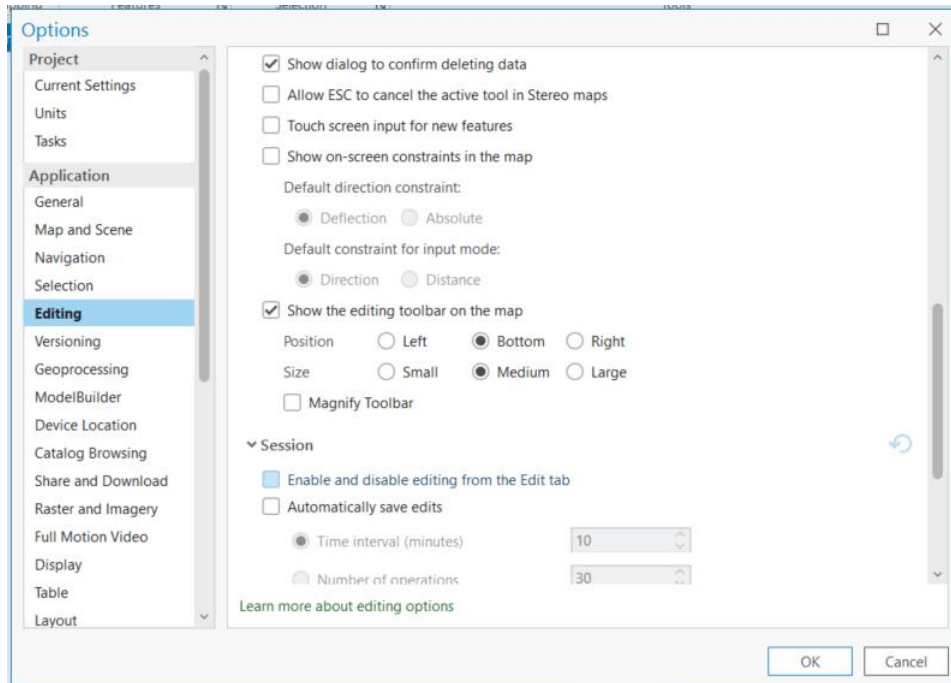
- Scroll down to Neighbourhood Boundaries and drag it onto the map view or right-click and choose to Add to Current Map
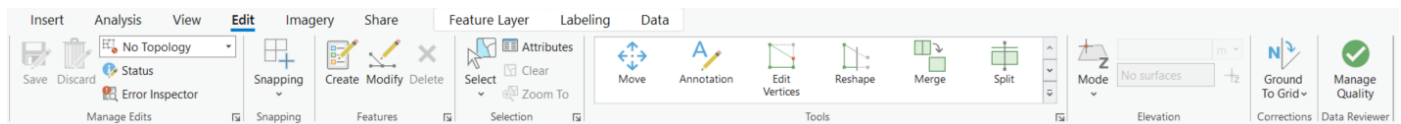- Choose from one of the available basemaps and add it to the map
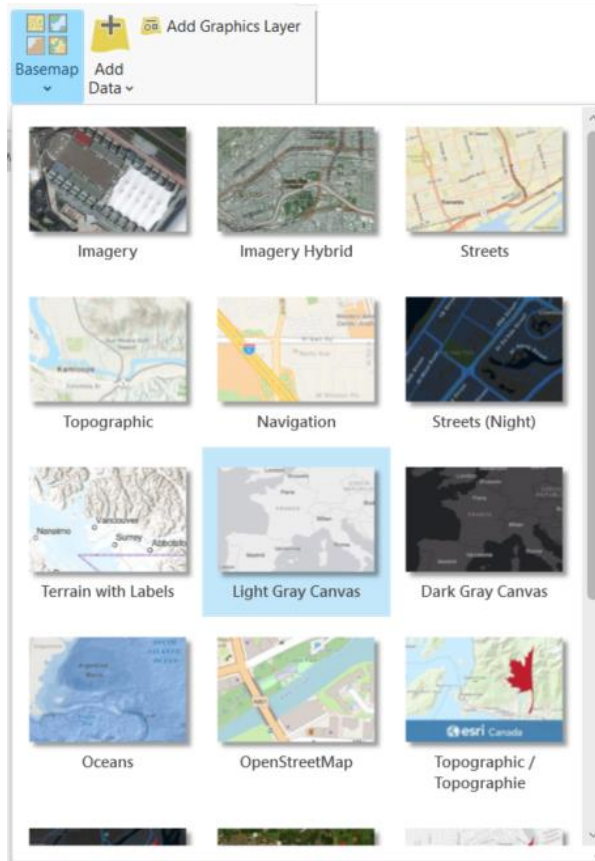
Editing is always on in ArcGIS pro and does not need to be turned on or off as in ArcMap; however, this is an option that can be enabled under the editing options.
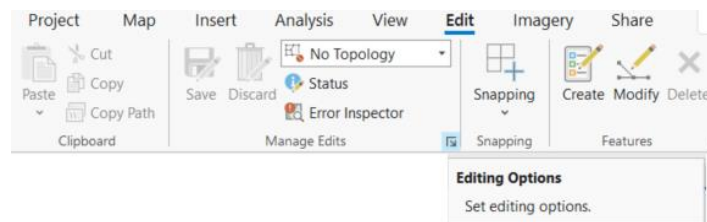
There is a suite of editing tools in the Edit tab of the ribbon, which will open in a pane or window.

To disable editing of specific layer, uncheck the layer in the Contents pane under List by Editing.
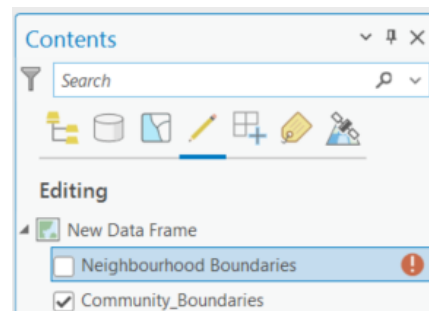
- Change the symbology for the community boundaries to display by unique value
  - In the Feature Layer tab, click Symbology to open the Symbology pane
  - Switch from Single Symbol to Unique Values
  - Select a colour ramp and add all values
  - Click More and uncheck Show all other values to remove the <all other values> from the classes and legend
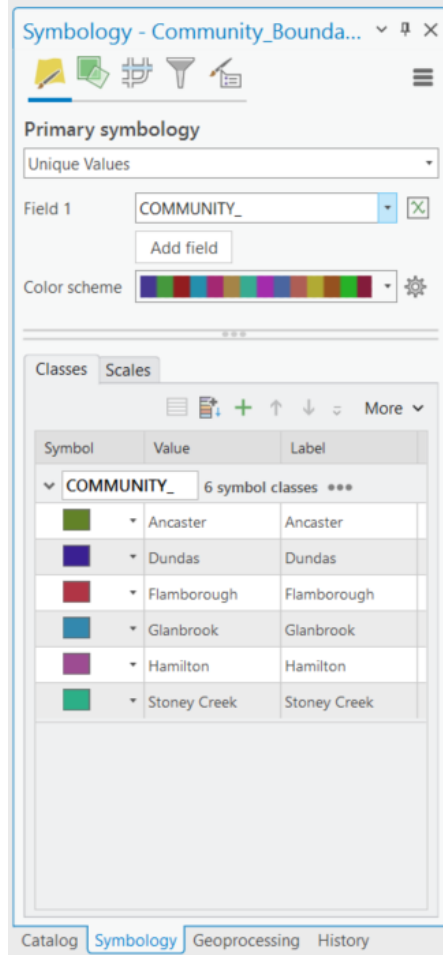
Geoprocessing

Geoprocessing tools and workflows can be accessed from the Analysis tab. Additional tools are available by clicking the toolbox in the geoprocessing section. This toolbox will open the standard list of tools and includes a search bar.

If layers have any selected items, the tool will provide a warning. The analysis can be run on the selected items, or the selection can be cleared and run on the layer.

ArcGIS Pro uses parallel processing, intended to speed up processing and improve the functionality. If the tool can be run using parallel processing, it will suggest the pairwise version.
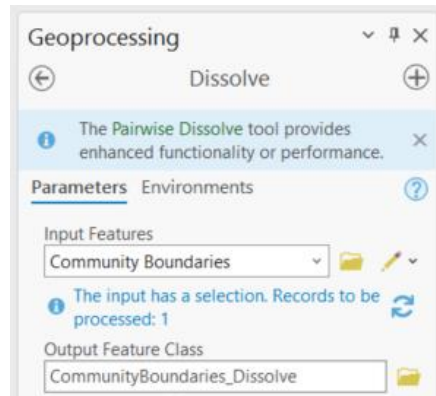
For tools that use ArcGIS services, an indication and estimate of the number of credits will be shown. For example, with the Origin Destination cost matrix, the run symbol includes a cloud icon with the following message when hovering over it. By creating your own network dataset from available data, no credits will be consumed.
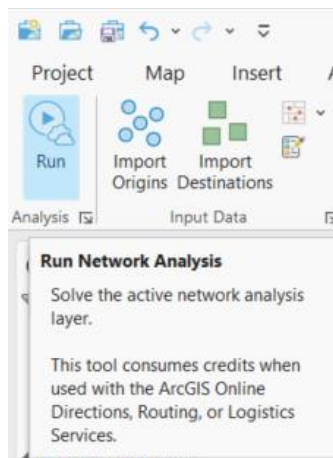
Layout

As with map frames, different tabs and tools become active when working with layouts. Below is an overview of the layout view and some of the commonly used tools.

1. Layout view
2. Layout contents
3. Page navigation
4. Page setup
5. Map navigation
6. Insert group (insert map elements)
7. Map frame group (edit and arrange maps, text, and graphics)
8. Project layouts
9. Share tab (export layout)
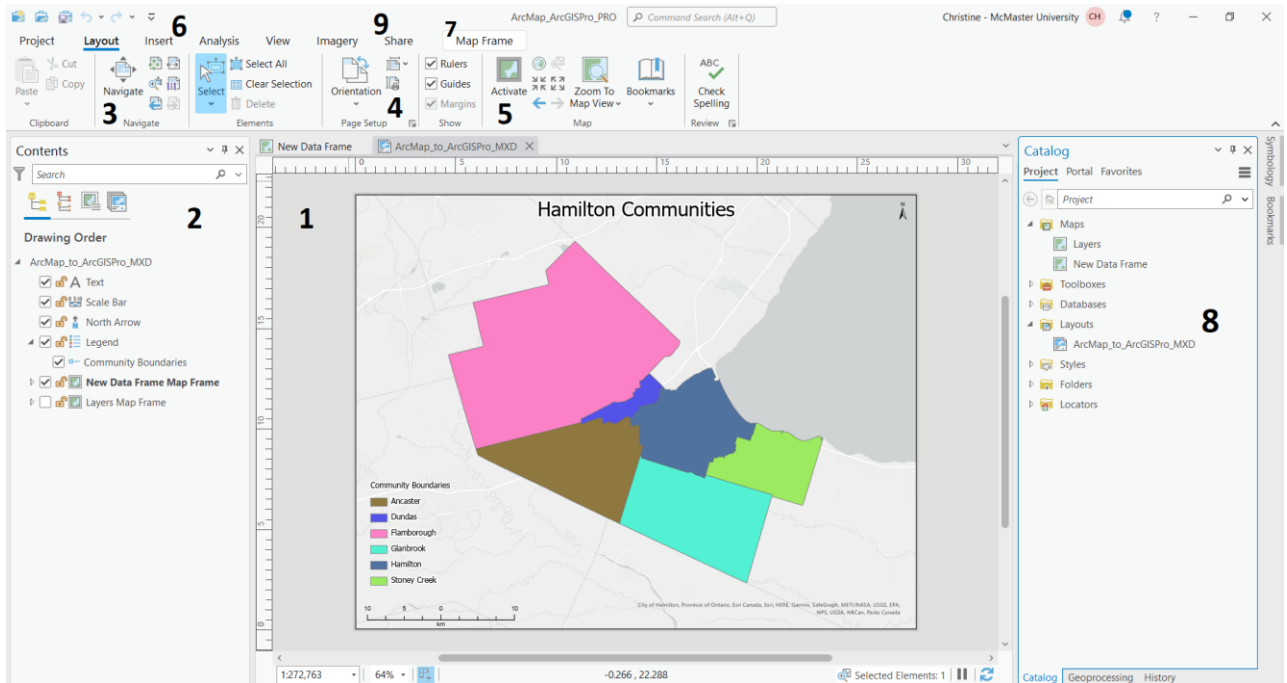
- To work with one map frame, uncheck or remove the second map frame from the layout
- Add map elements to your layout using the Insert tab
- To export the layout, go to the Share tab and click the Export Layout option

    Layouts can be exported in several different formats including AIX, BMP, EMF, EPS, GIF, JPEG, PDF, PNG, SVG, TGA, and TIFF.

Save project (.aprx)

- Save your project

ArcGIS Pro project files (.aprx) save all maps, layouts, databases, notebooks, etc., in one project folder. The project database becomes the default output location
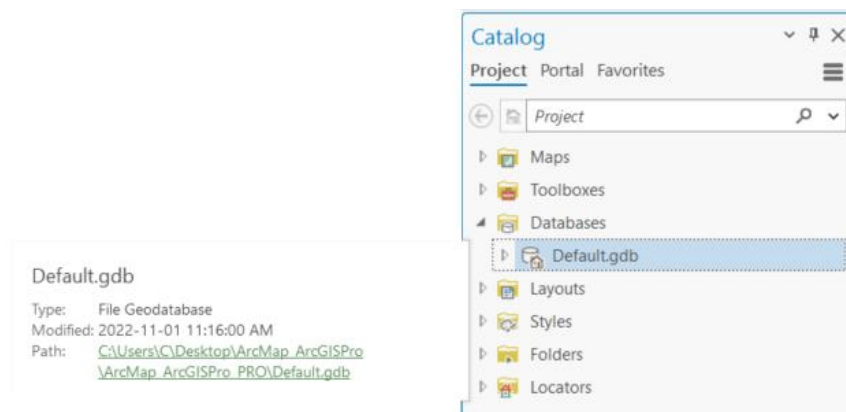
Data Sources

The data for this workshop is available from the cities of Hamilton and Toronto at the following links.

- [Neighbourhoods](#) (City of Toronto Open Data Portal)
- [Community Boundaries](#) (Open Hamilton)
- [Neighbourhood Boundaries](#) (Open Hamilton)

Related Resources

Below are links to additional resources, including documentation and a tutorial from Esri on migrating from ArcMap to ArcGIS Pro.

- [Migrate from ArcMap to ArcGIS Pro](#): Gain familiarity with common tasks in a new interface and use ArcGIS Pro's greater integration with ArcGIS Online
- ArcGIS Pro Resources: [For ArcMap Users](#)
- [Learn ArcGIS](#)
- [McMaster University Library GIS Services](#) (Contact: libgis@mcmaster.ca)