



Migrating From ArcMap to ArcGIS Pro

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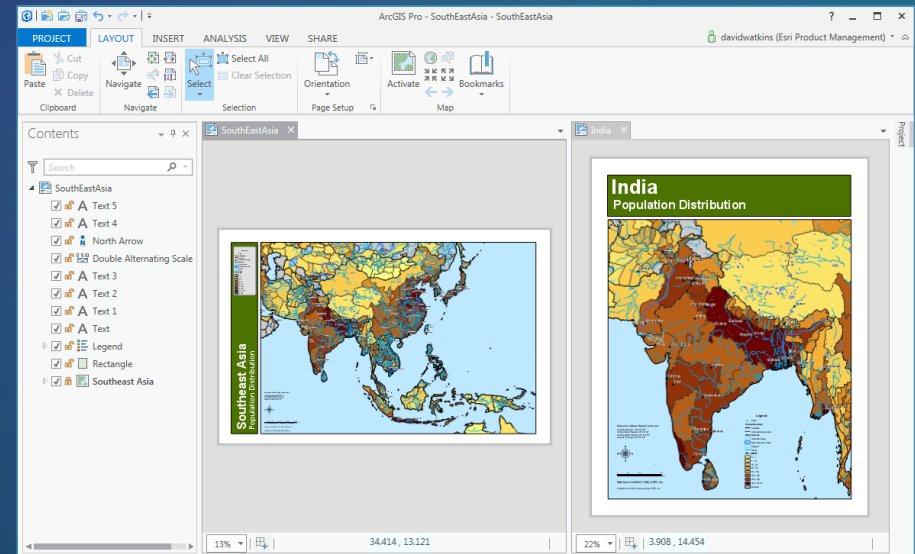
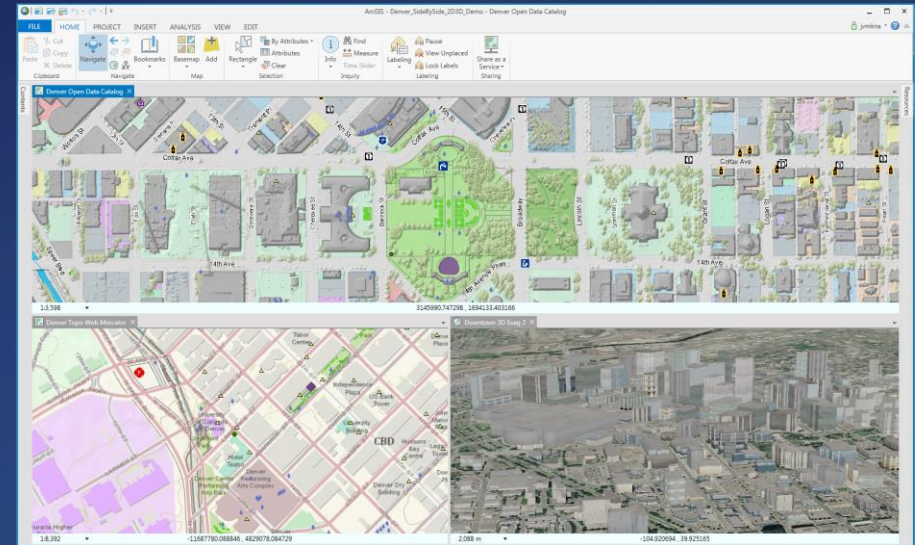
@ArcGISPro

Goals

- Familiarize ArcMap users with ArcGIS Pro, be they those who have not tried Pro yet, or had problems, with the basics
- Not trying to replace a training class
- LOTS of resources on YouTube and the Esri website
- Plug the Books from Esri Press!
- *Switching to ArcGIS Pro from ArcMap*, Excellent starting point for existing ArcMap users
- *Getting to Know ArcGIS Pro*, the next step for really diving into it, or for users new to ArcGIS, or Pro users looking for guidance

ArcGIS Pro

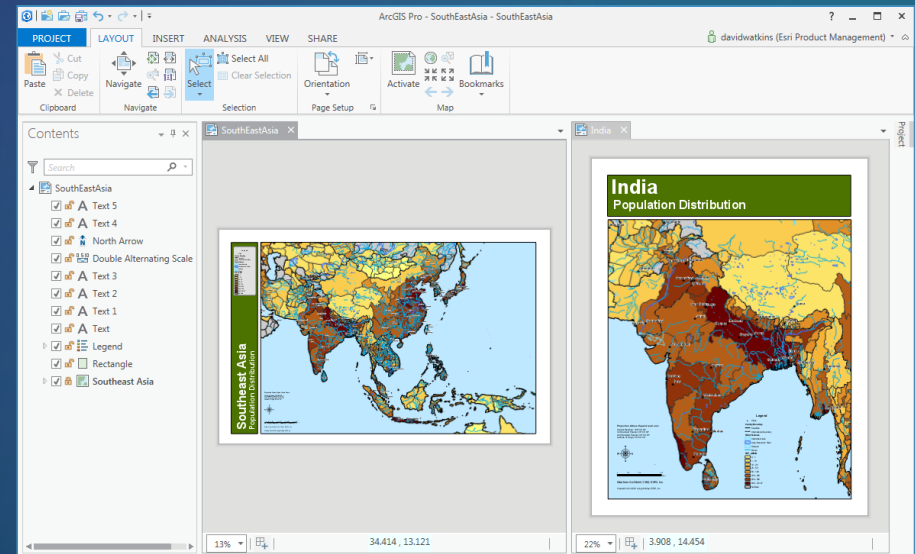
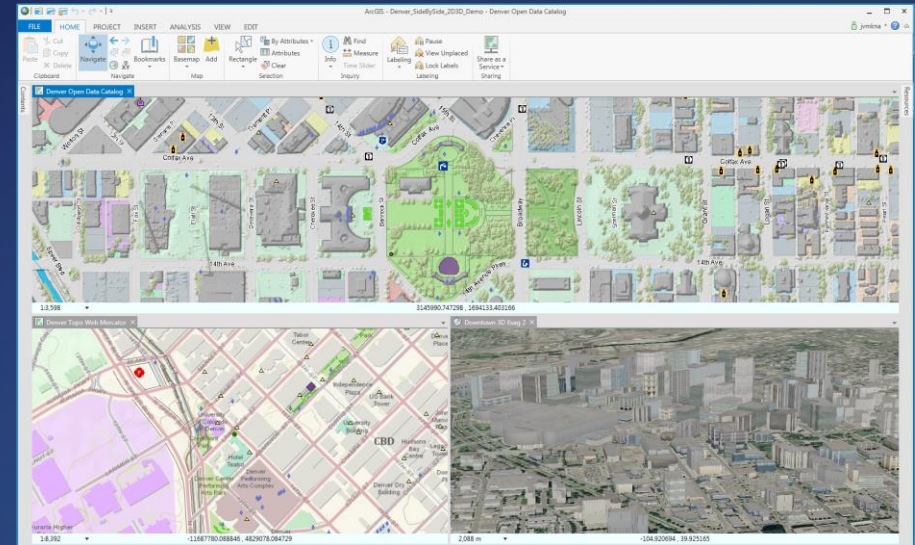
- 64 bit, multi-threaded
- Simplified user interface
- Integrated with the ArcGIS platform
- Combined 2D/3D experience
- Multiple maps and layouts
- Improved analysis experience



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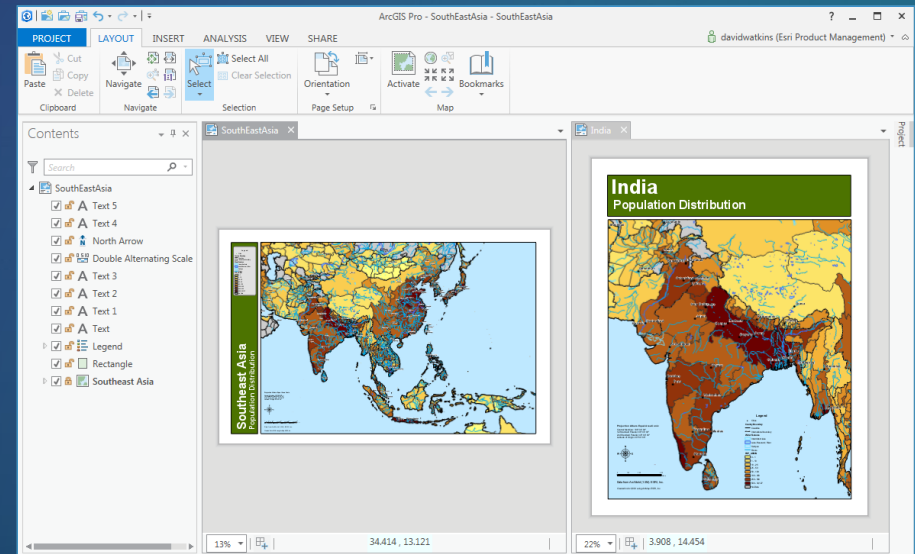
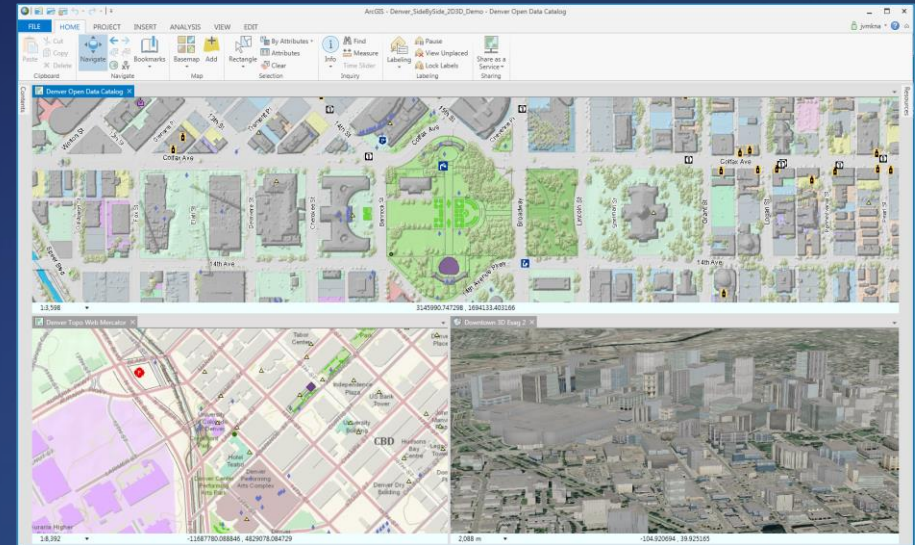
Someday it will replace ArcMap



ArcGIS Pro

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How do you get started?



ArcGIS Pro Why Switch?

The image features a dark teal background with a subtle, light-colored map grid pattern. In the center, the text "ArcGIS Pro Why Switch?" is written in a bold, white, sans-serif font. The design is accented with abstract, colorful geometric shapes in shades of orange, yellow, and light green, primarily located in the top-left and bottom-right corners. These shapes consist of various lines, rectangles, and overlapping patterns, creating a modern and dynamic visual effect.

Reasons for switching and/or starting with ArcGIS Pro

- **Good reasons include...**
 - **Performance (64-bit, multicore architecture)**
 - **Seamless integration of 2D and 3D**
 - **Improved labeling engine and options**
 - **Tight integration with ArcGIS Online and ArcGIS Enterprise**
 - **Default settings for new/inexperienced users**
 - **ArcMap Product Life Cycle (ArcMap WILL go away, someday)**
<https://support.esri.com/en/Products/Desktop/arcgis-desktop/arcmap/10-7#product-support>
 - **Modern and more intuitive/efficient User Interface**
 - **Definition Queries on layers (multiple)**
 - **Spell Check!**

Reasons for NOT switching and/or starting with ArcGIS Pro

- **Your existing computer may not be Pro-friendly**
 - 64-bit requirement
 - System resources may be a non-starter, look at the requirements on the support pages. Memory, GPU, Cores, processor, etc.
 - My laptop: Dell Precision 5530, Intel I7 CPU, 6-Core, 32 Gb RAM, 1Tb SSD, NVIDIA Quadro P2000 GPU
- **Features that are not quite there yet**
 - Geometric Networks (being replaced with Utility Network)
 - Parcel Fabric (released at Pro 2.4 and ArcGIS 10.7.1)
 - Map Annotation (moved off to Map Notes Feature Classes)
- **Need ArcMap compatibility**
- **Finding the time to learn a new desktop GIS is tough, while doing your job.**













The background is a dark blue gradient with abstract, colorful geometric shapes and lines in shades of teal, orange, and light blue. The text is centered in the upper half of the image.

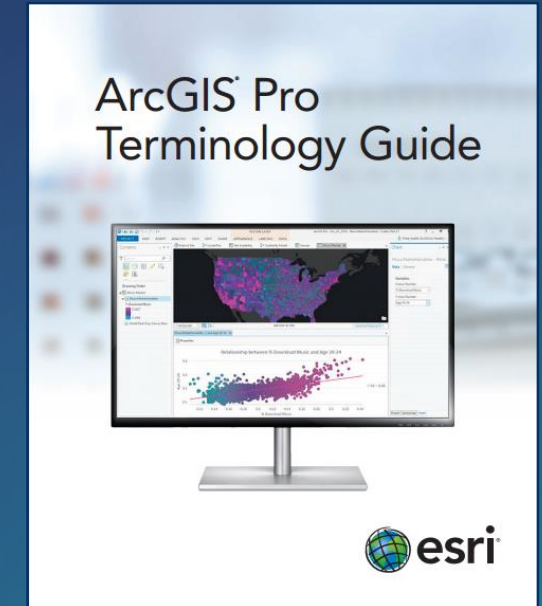
**ArcGIS Pro: New terminology,
new interface.**

Let's talk about the interface

- **Existing ArcMap users may find the interface transition...**
 - **Difficult**
 - **Annoying**
 - **Confusing**
 - **I did...at first**
- **Tools and Toolbars are now in tabs on the ribbon, like Microsoft Office**
 - **Remember transitioning from Office 2007 to Office 2010?**
 - **This can, at first, be challenging, but the majority of feedback has turned positive, once users familiarize themselves with the new GUI.**
 - **New users like it very much.**

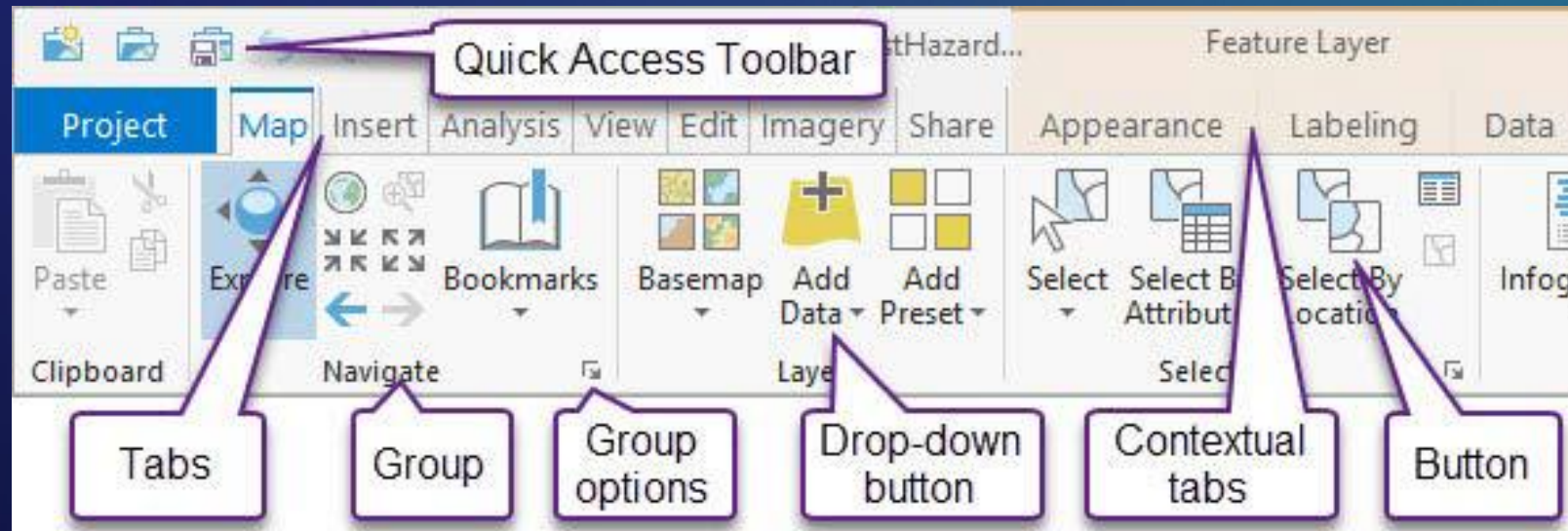
ArcGIS Pro uses some new terminology

 Name in ArcGIS Pro	Name in ArcMap	Description
 Feature layers	Feature service	Serve point, line, or polygon features and their attributes
 Imagery	Image service	Serve raster data products such as satellite images or aerial photography in analyzable form.
 Map image layers	Map service	Map cartography based on vector or raster data dynamically rendered and served as image tiles.
 Tile layers	Hosted tile services	A collection of web-accessible tiles that reside on a service, prerendered for rapid display. Includes basemaps and vector basemaps.
 Elevation layers	Elevation services	Cached elevation image tiles in a compressed format, suitable to show terrain in 3D scenes.
 Web tools	Geoprocessing services	Geoprocessing function that runs on the GIS server rather than using local GIS software capabilities.
 Scenes	Scenes	Symbolized 3D spatial content for visualization. May include 2D and 3D layer services.
 Web maps	Web maps	Maps based solely on GIS services. May include other types of services listed in this table.
 Packages	Packages	Data uploaded to ArcGIS Online for sharing. Includes layer, map, project, rule, or geoprocessing packages.
 Scene layers	Scenes	Collection of 3D objects and z-values, including points, 3D objects, integrated meshes, or point clouds.
 Tables	Tables	Rows and columns of information. May contain locations and be drawn on the map.



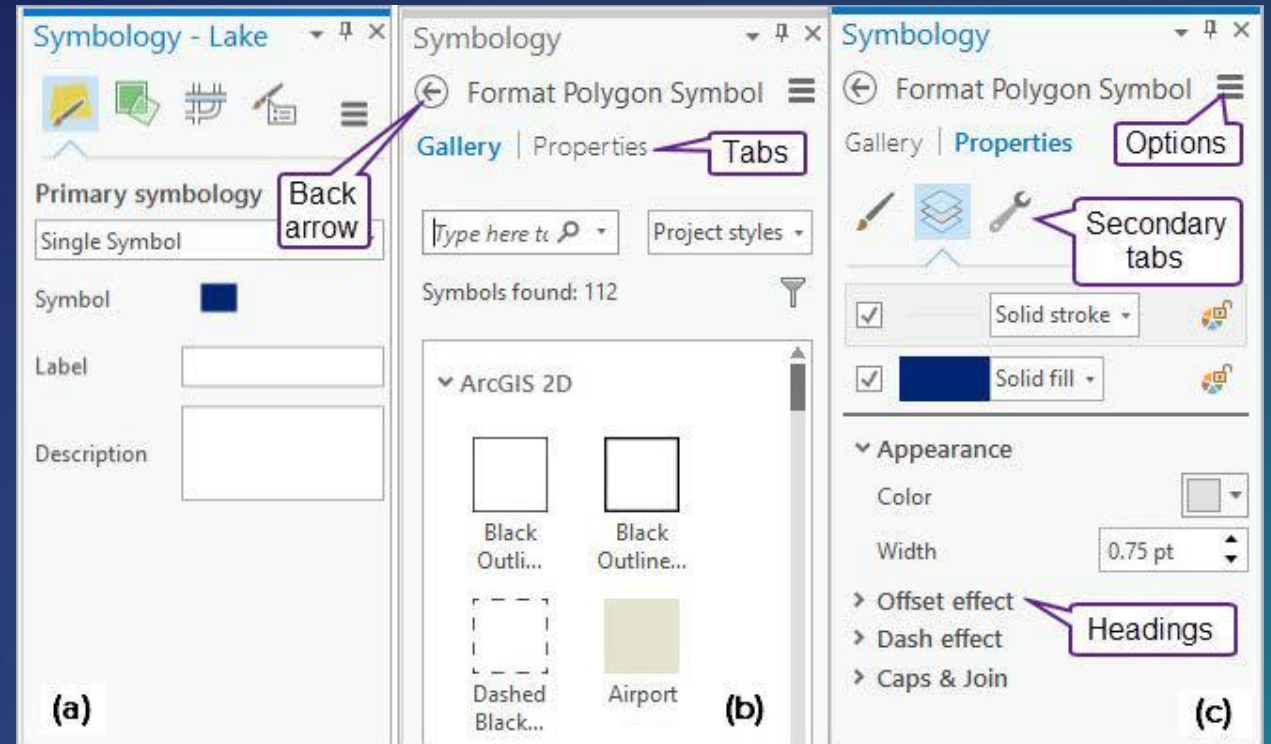
Let's talk more about the interface

- **Instead of Menus and Toolbars and Tools, we have the Ribbon**
 - **Tabs, Groups, Group Options**
 - **Buttons and Drop-Down Buttons**
 - **Tabs may be contextual, meaning they will change, depending on what you are doing**



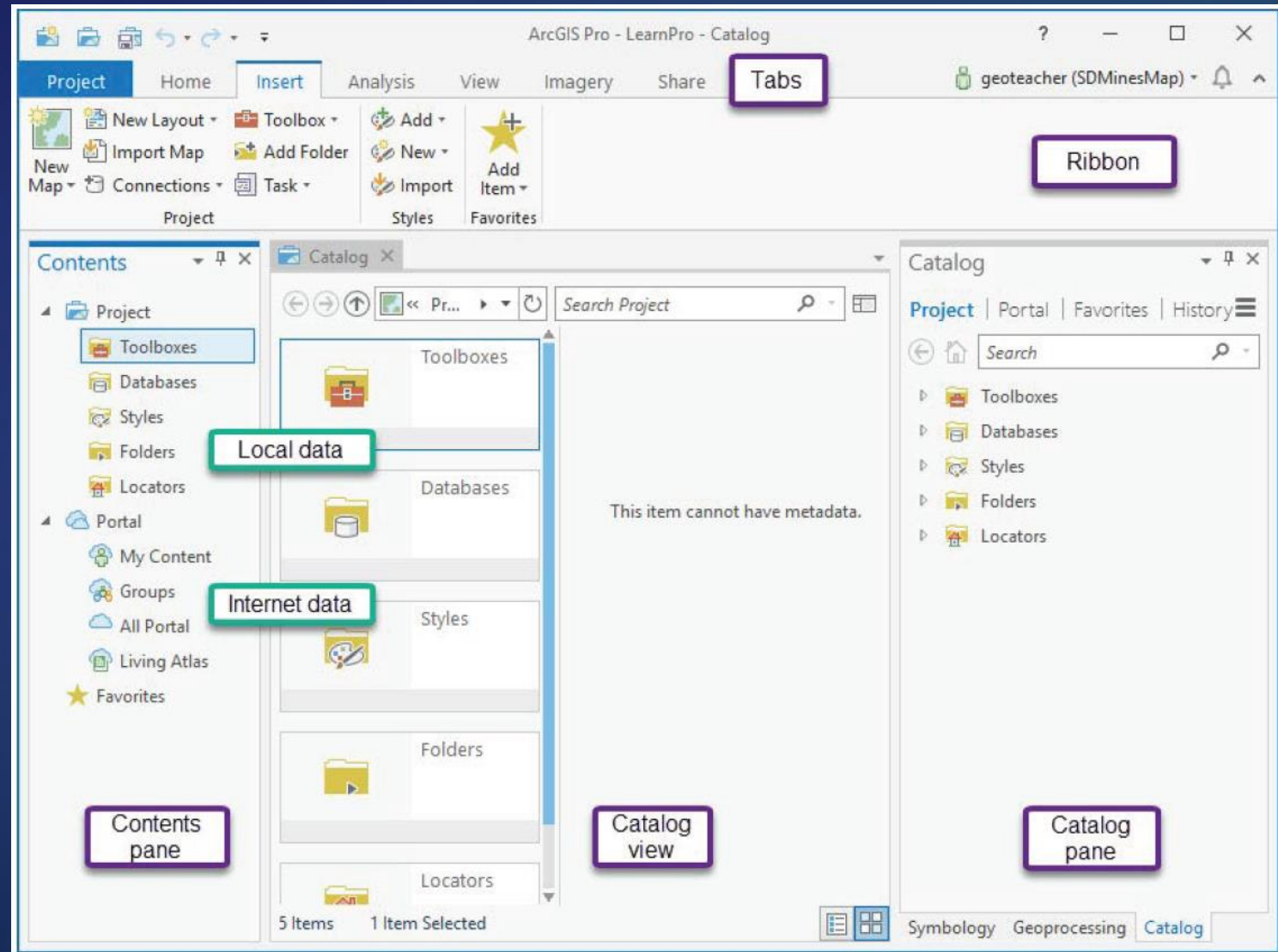
Let's talk about the interface

- Information is presented in the form of dockable/moveable Panes and Views
 - Navigate with the Back Arrow, and tabs
 - Access options with the “Hamburger”



Templates can get you started

- **Catalog Template can re-create the ArcCatalog experience**
- **Catalog Pane is like the Catalog Window in ArcMap**
- **Catalog View is where you would edit Metadata**
- **Can open ArcGIS Pro w/o a project (new)**

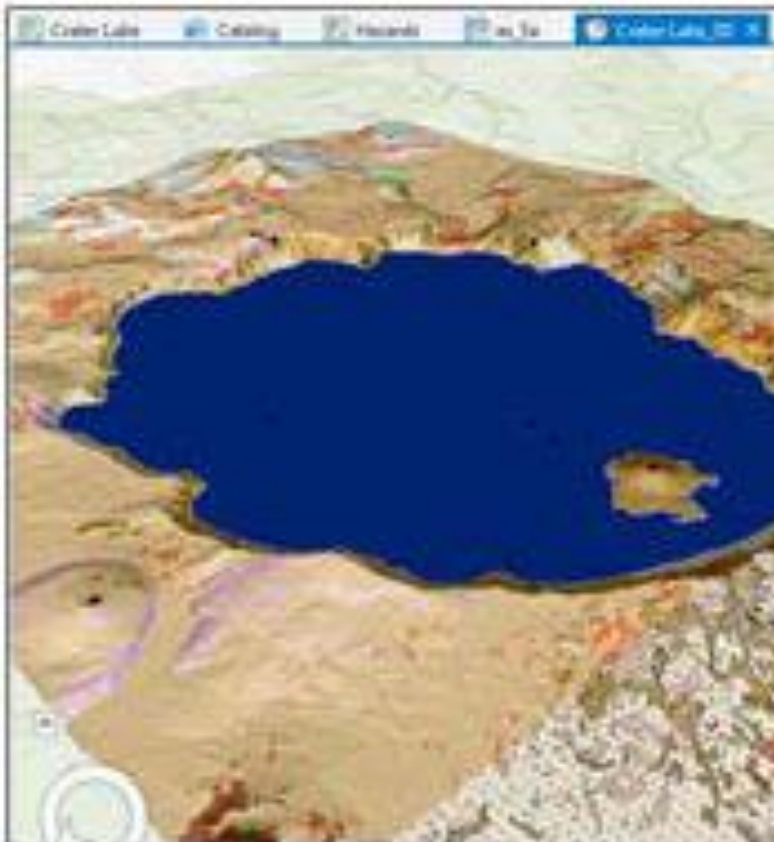


ArcGIS Pro Views

Map view



Scene view

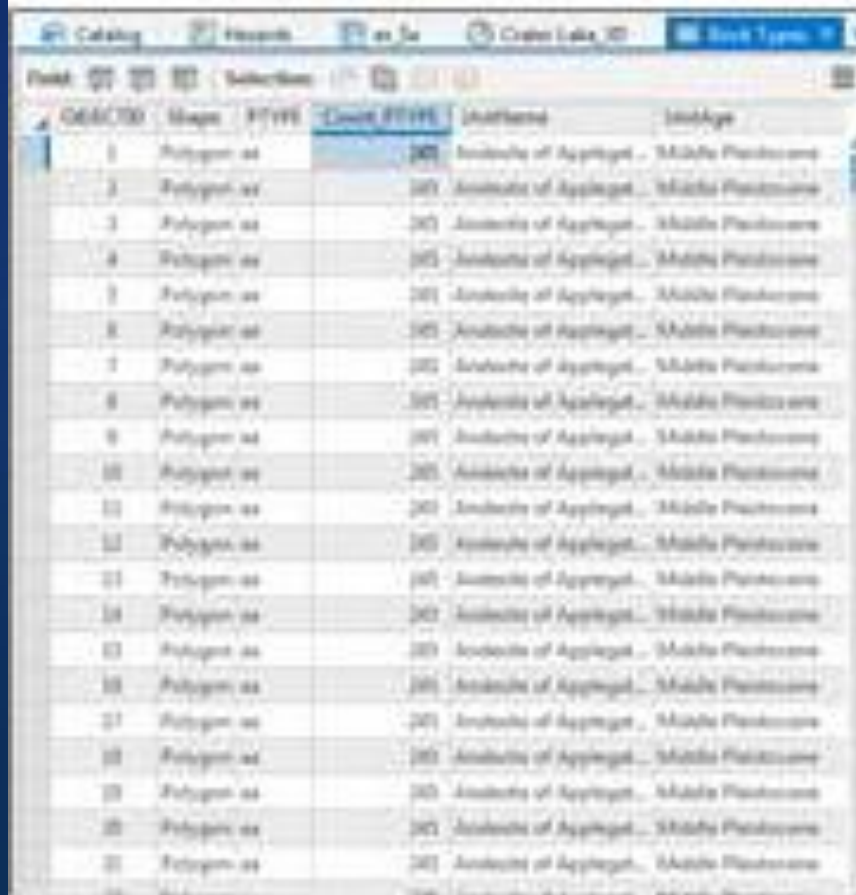


Catalog view



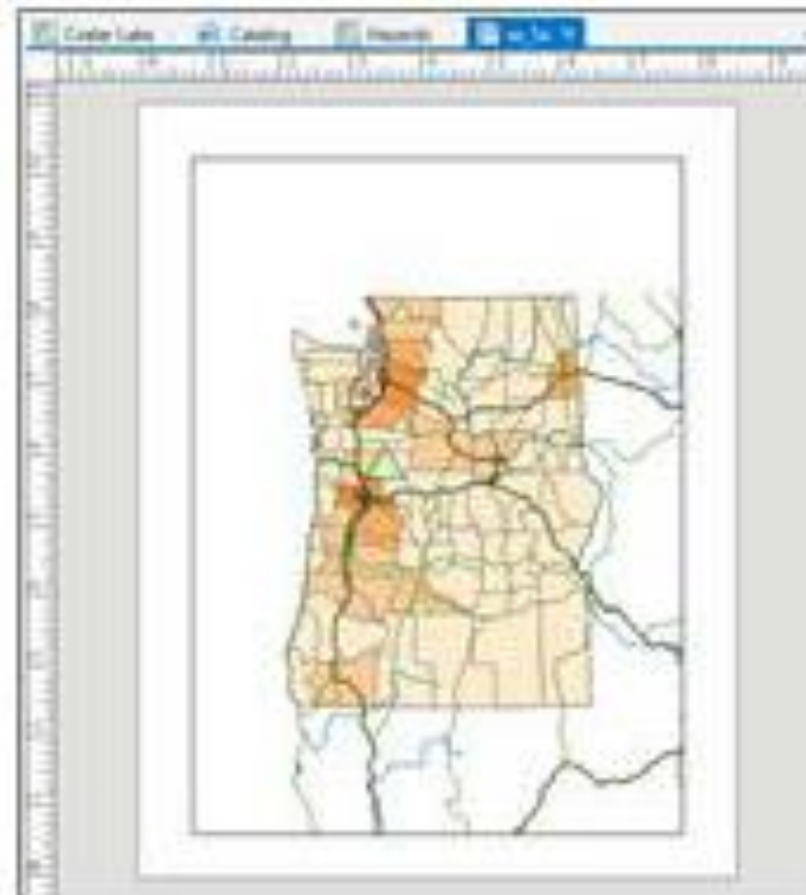
ArcGIS Pro Views

Table view



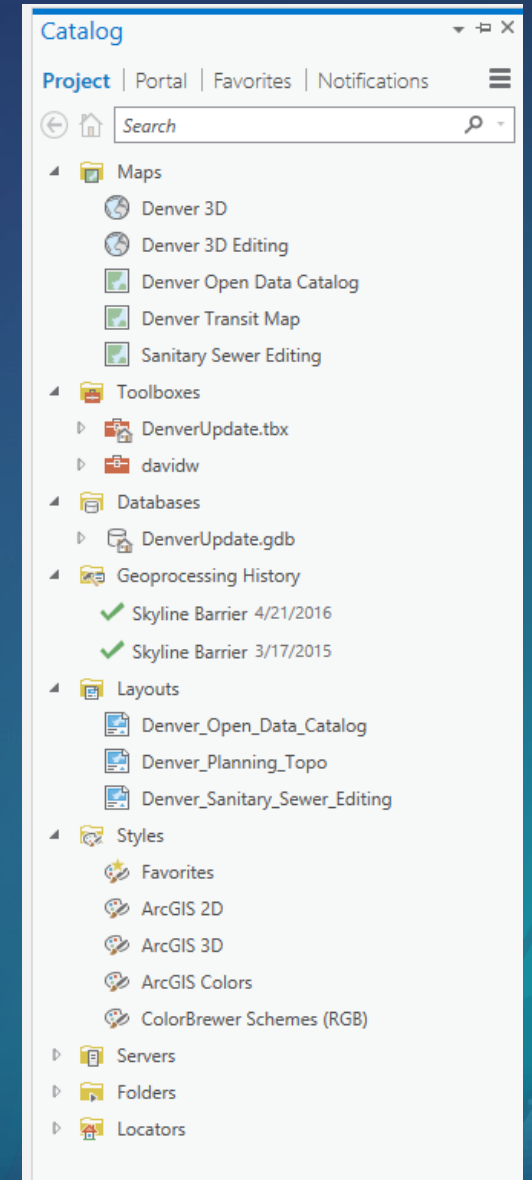
OBJECTID	Shape	FTYPE	Count_FTYPE	Location	Shape_Area
1	Polygon	as	20	Academy of Applegat... Middle Peninsular	
2	Polygon	as	20	Academy of Applegat... Middle Peninsular	
3	Polygon	as	20	Academy of Applegat... Middle Peninsular	
4	Polygon	as	20	Academy of Applegat... Middle Peninsular	
5	Polygon	as	20	Academy of Applegat... Middle Peninsular	
6	Polygon	as	20	Academy of Applegat... Middle Peninsular	
7	Polygon	as	20	Academy of Applegat... Middle Peninsular	
8	Polygon	as	20	Academy of Applegat... Middle Peninsular	
9	Polygon	as	20	Academy of Applegat... Middle Peninsular	
10	Polygon	as	20	Academy of Applegat... Middle Peninsular	
11	Polygon	as	20	Academy of Applegat... Middle Peninsular	
12	Polygon	as	20	Academy of Applegat... Middle Peninsular	
13	Polygon	as	20	Academy of Applegat... Middle Peninsular	
14	Polygon	as	20	Academy of Applegat... Middle Peninsular	
15	Polygon	as	20	Academy of Applegat... Middle Peninsular	
16	Polygon	as	20	Academy of Applegat... Middle Peninsular	
17	Polygon	as	20	Academy of Applegat... Middle Peninsular	
18	Polygon	as	20	Academy of Applegat... Middle Peninsular	
19	Polygon	as	20	Academy of Applegat... Middle Peninsular	
20	Polygon	as	20	Academy of Applegat... Middle Peninsular	
21	Polygon	as	20	Academy of Applegat... Middle Peninsular	

Layout view



In ArcGIS Pro, you work with projects

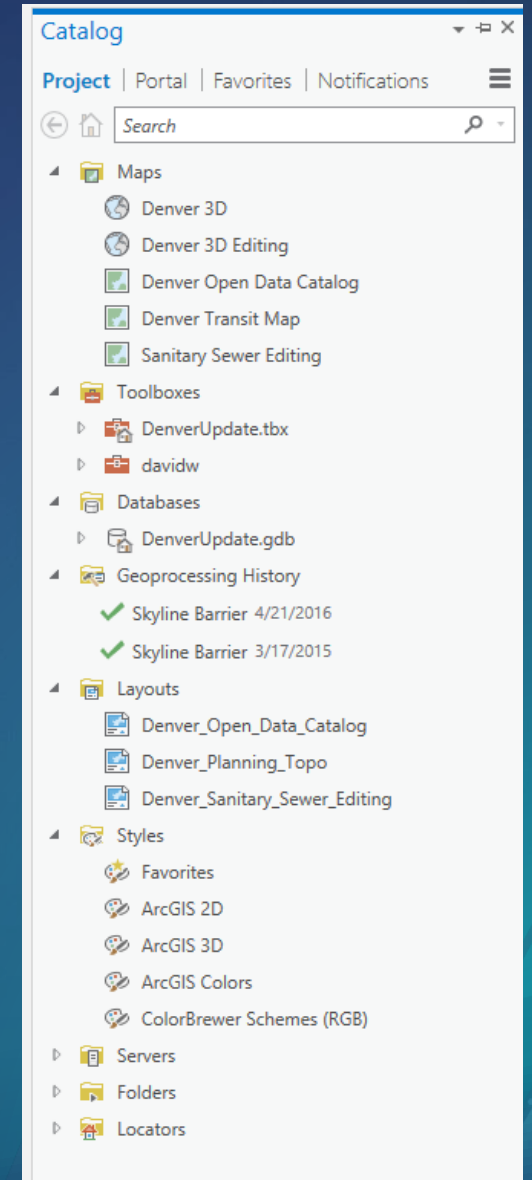
- Multiple maps and layouts
- Database, folder, server connections
- Tools and toolboxes
- Project styles
- Default geodatabase



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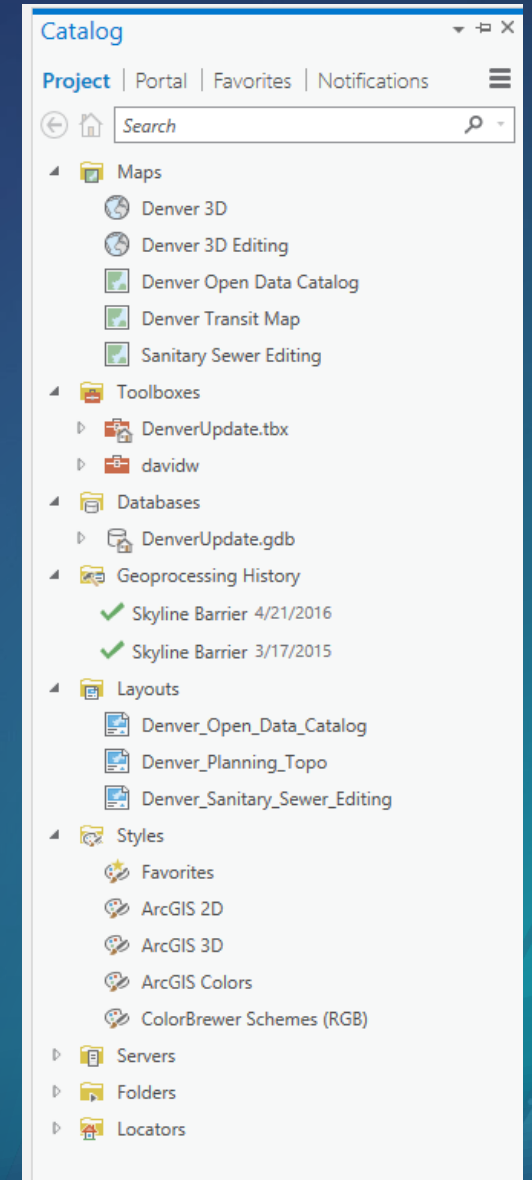
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All can be easily packaged and shared



In ArcGIS Pro, you work with projects

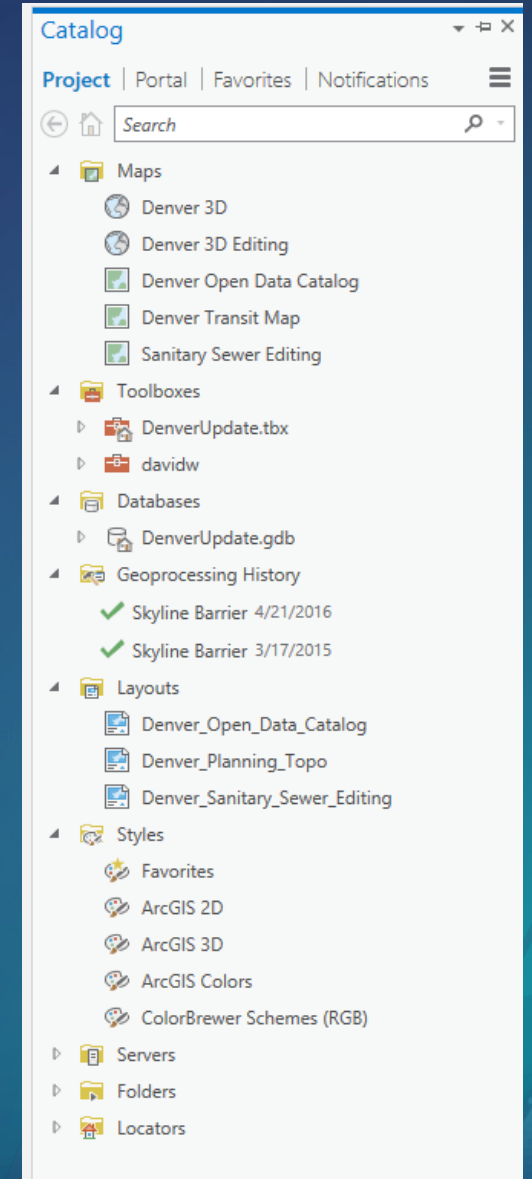
How should you organize your work moving forward?



In ArcGIS Pro, you work with projects

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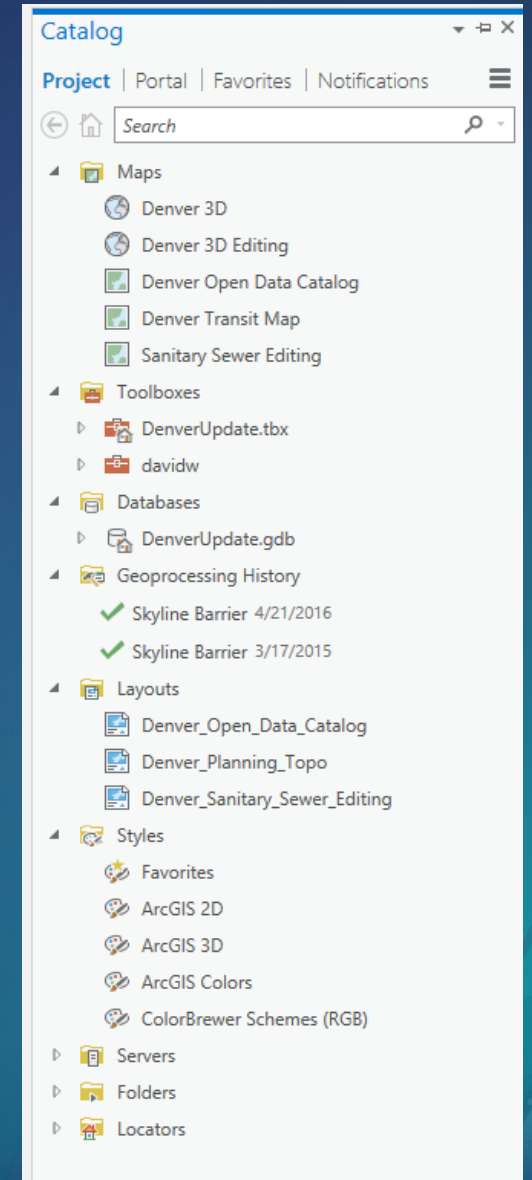
- Do you have related maps?



In ArcGIS Pro, you work with projects

How should you organize your work moving forward?

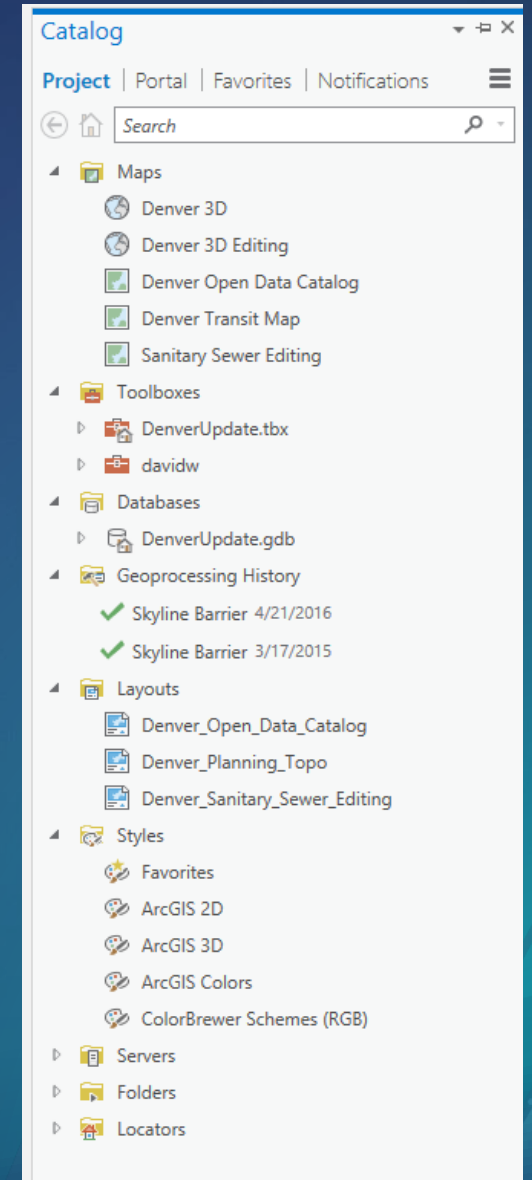
- Do you have related maps?
- Do you use the same map on multiple layouts?



In ArcGIS Pro, you work with projects

How should you organize your work moving forward?

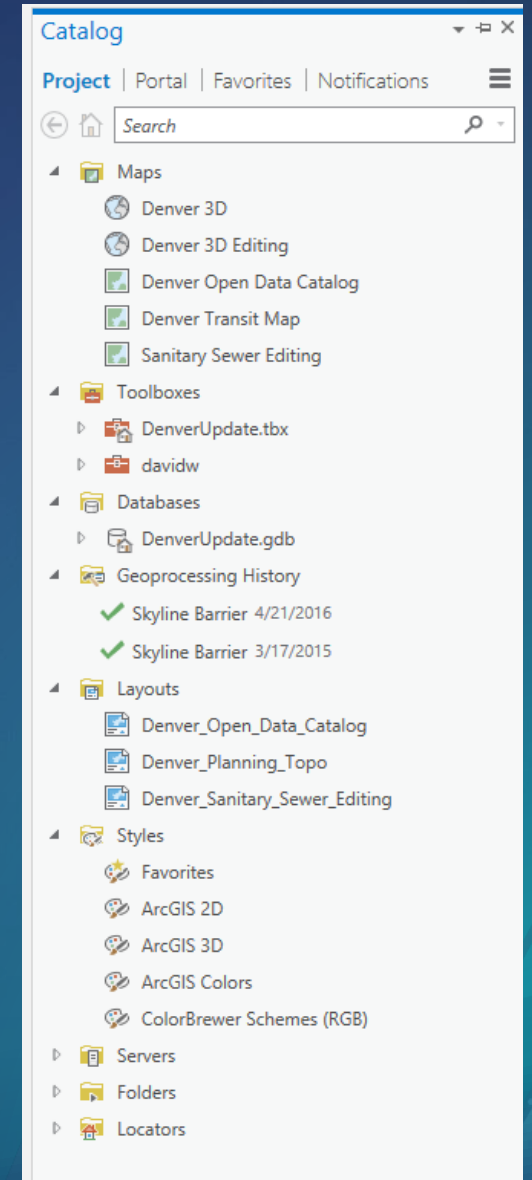
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In ArcGIS Pro, you work with projects

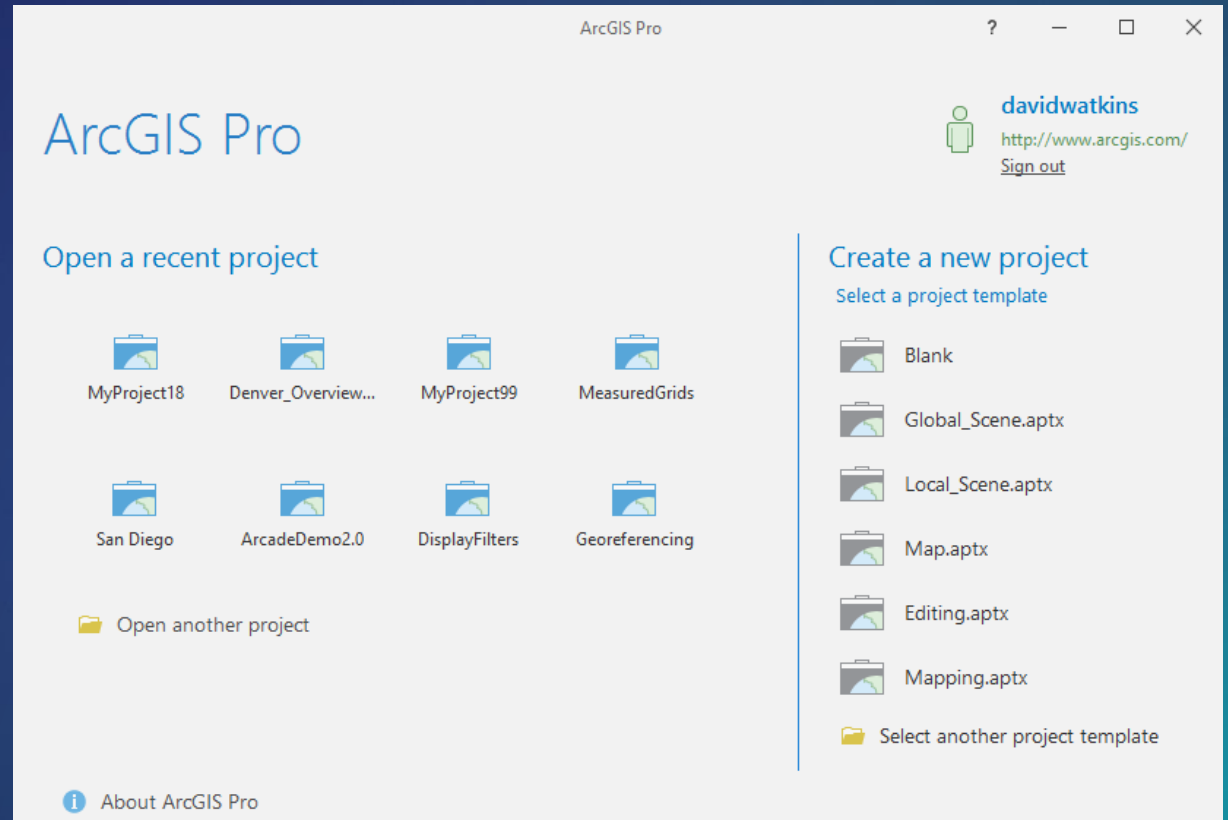
How should you organize your work moving forward?

- Do you have related maps?
- Do you use the same map on multiple layouts?
- Do you use the same data connections for groups of maps?
- What are the different types of work you do?



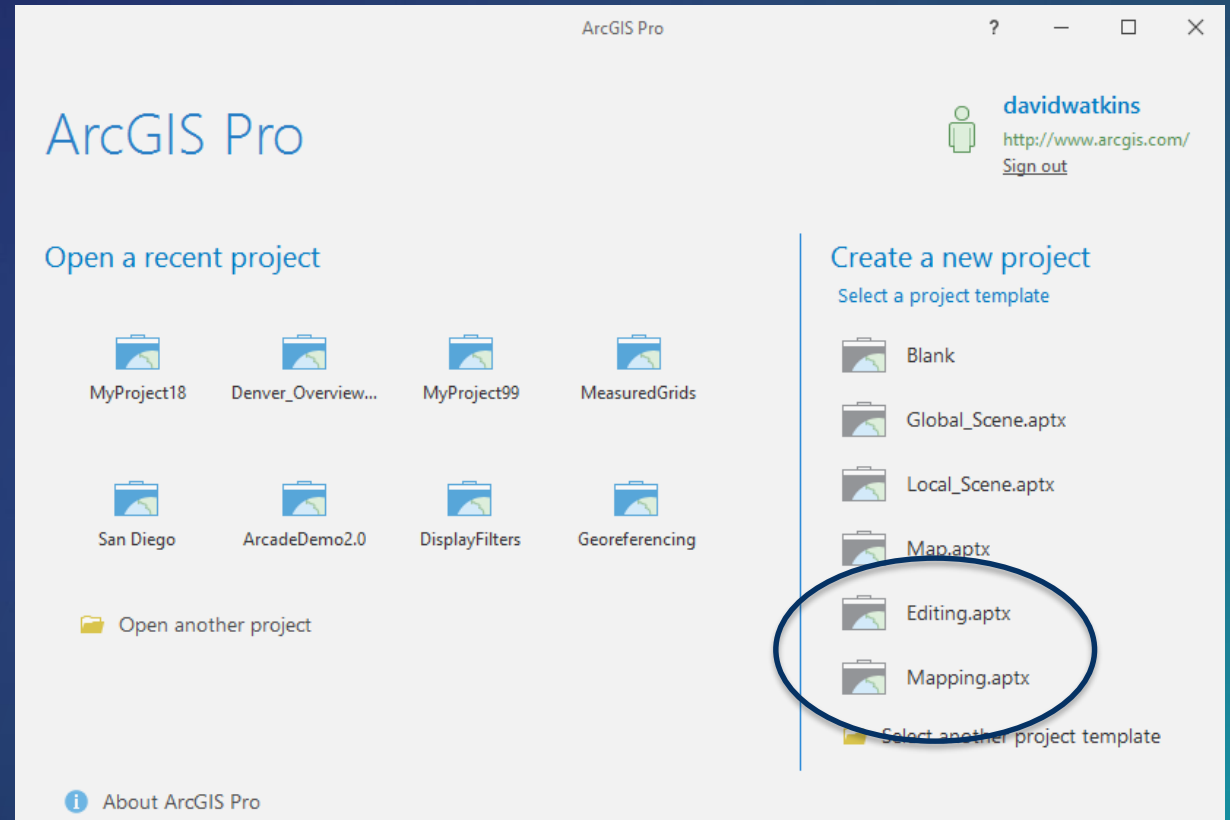
Working with project templates

- You can have many templates
 - Editing, mapping, viewing
- Customize and share
 - User interface
 - Project styles
 - Layouts
 - Connections
 - Toolboxes



Working with project templates

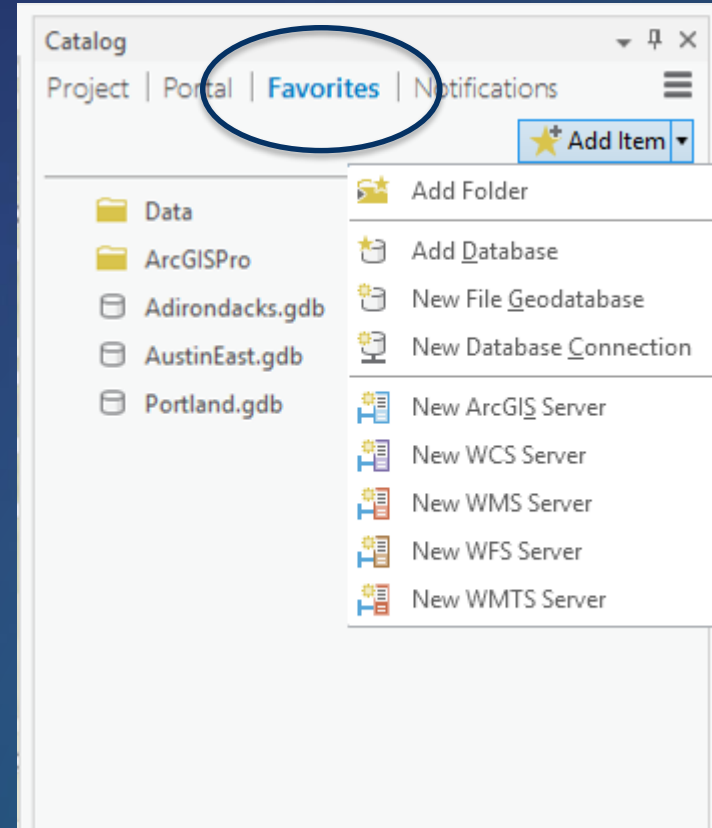
- You can have many templates
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Your templates are displayed on the start screen

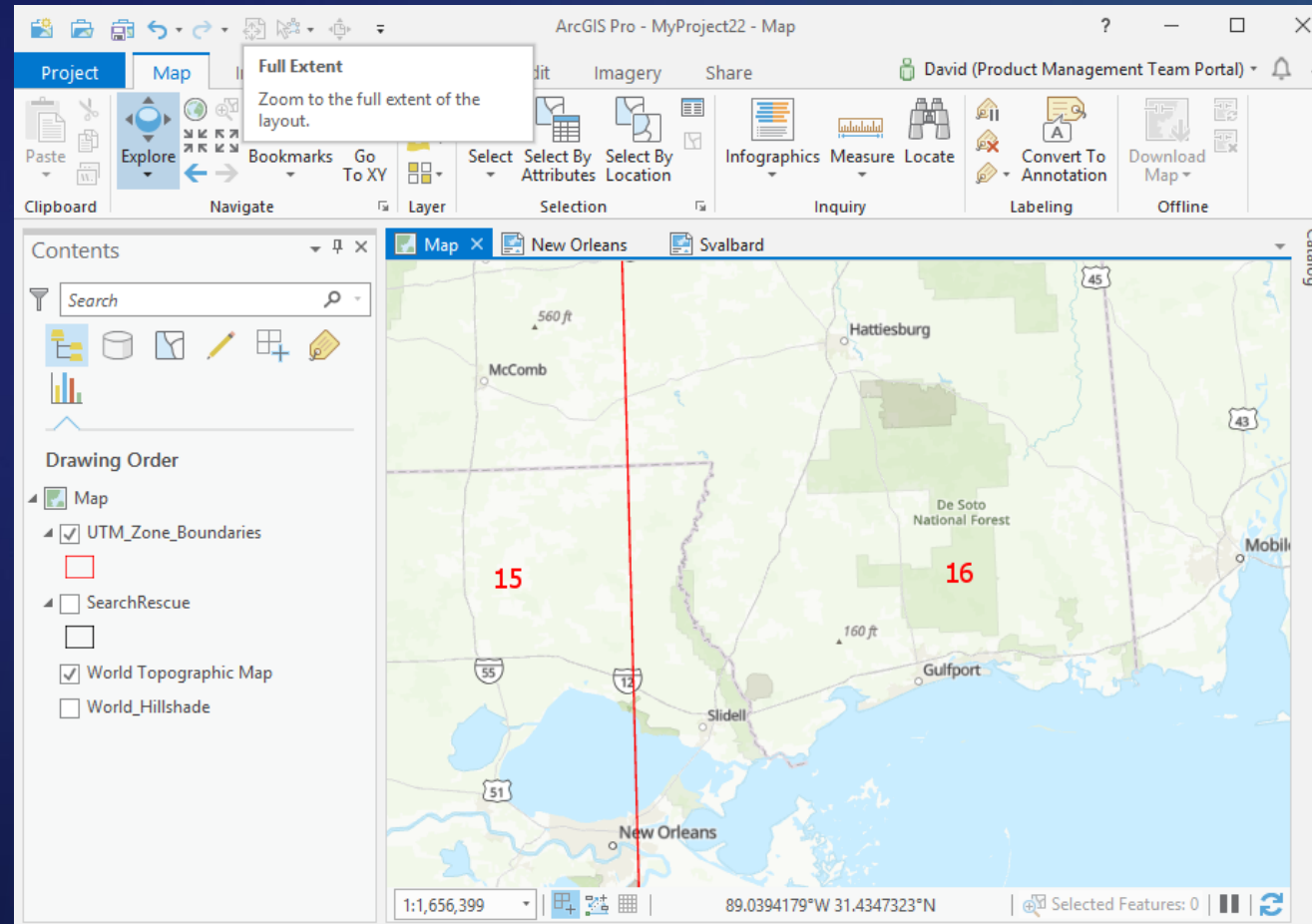
Working with Favorites

- Add file, database, and server connections
- Favorites are saved on a per-user basis

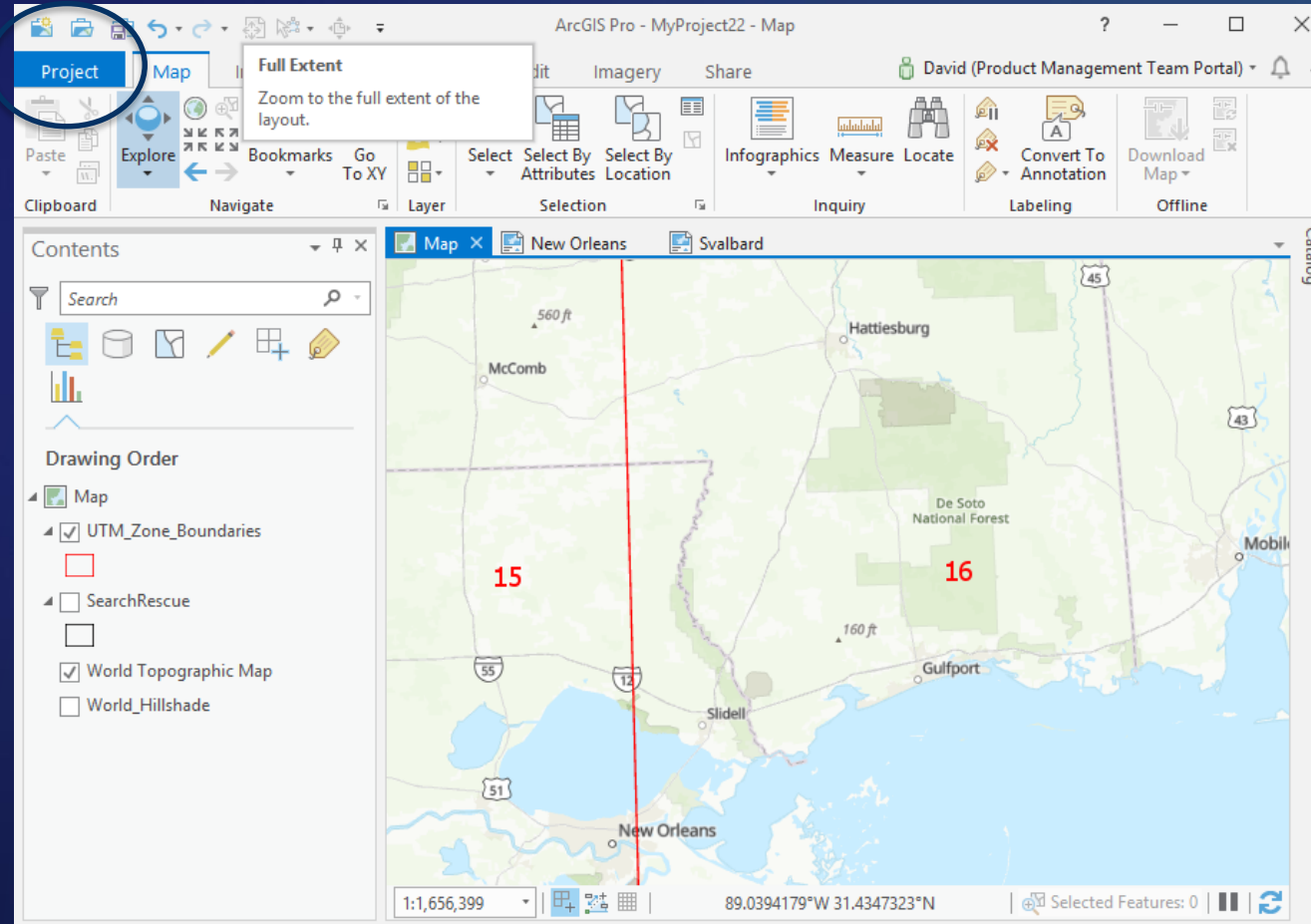


What is the backstage?

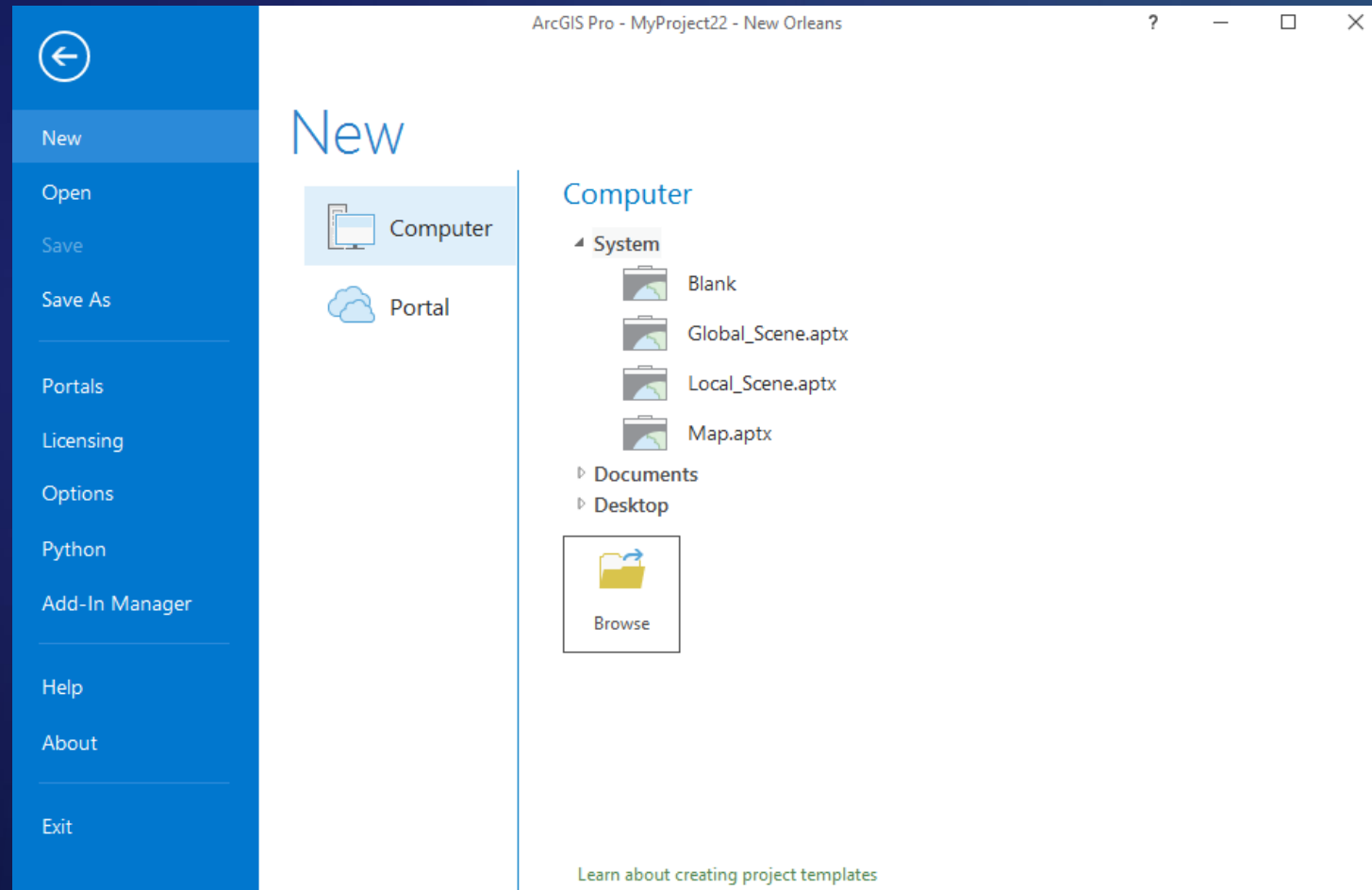
What is the backstage?



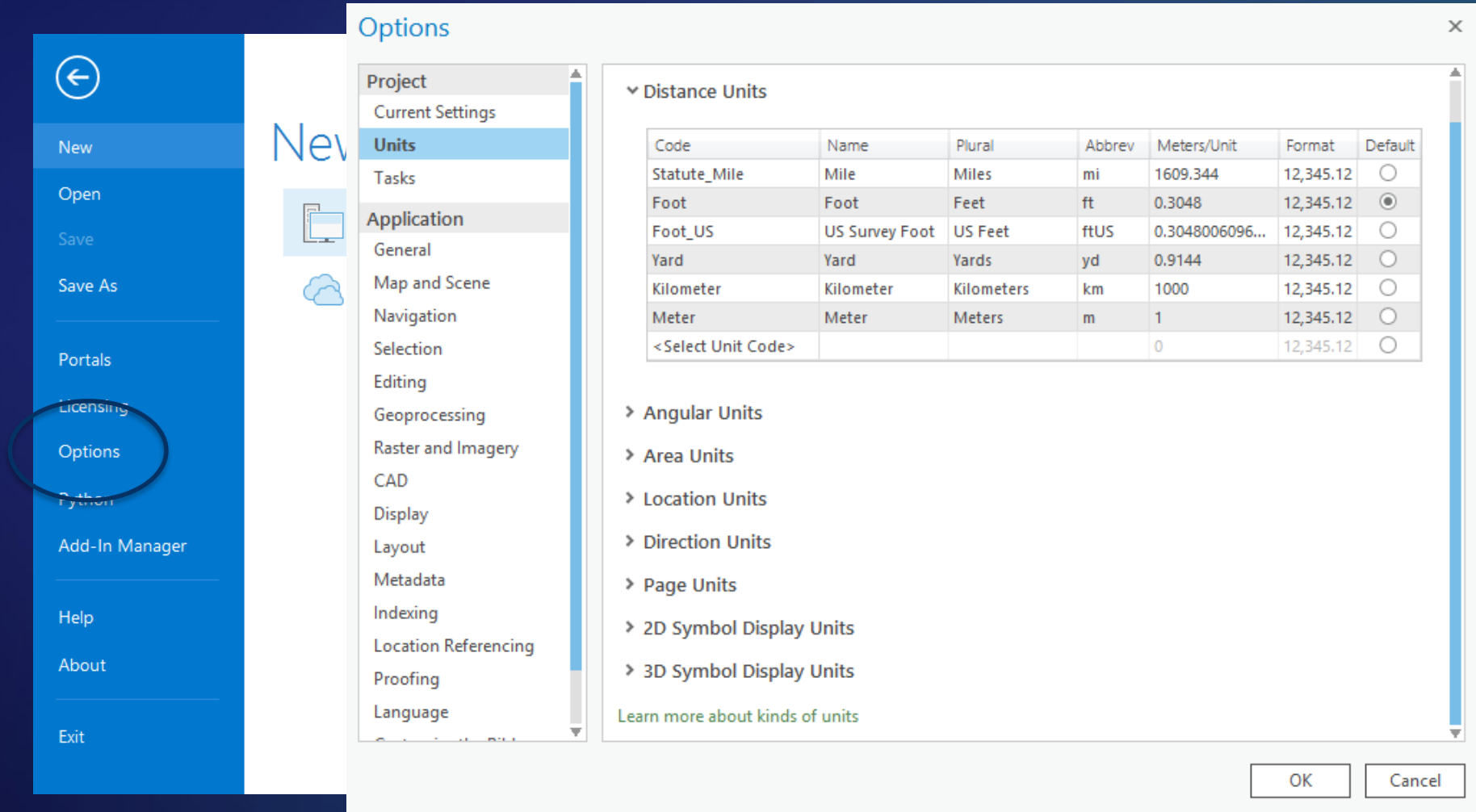
What is the backstage?



What is the backstage?



What is the backstage?



The image shows the ArcGIS Pro interface. On the left, the 'Backstage' menu is visible, with the 'Options' item circled in red. The main window displays the 'Options' dialog box, which is currently set to the 'Units' category. The 'Distance Units' section is expanded, showing a table of unit options. The 'Foot' unit is selected as the default.

Code	Name	Plural	Abbrev	Meters/Unit	Format	Default
Statute_Mile	Mile	Miles	mi	1609.344	12,345.12	<input type="radio"/>
Foot	Foot	Feet	ft	0.3048	12,345.12	<input checked="" type="radio"/>
Foot_US	US Survey Foot	US Feet	ftUS	0.3048006096...	12,345.12	<input type="radio"/>
Yard	Yard	Yards	yd	0.9144	12,345.12	<input type="radio"/>
Kilometer	Kilometer	Kilometers	km	1000	12,345.12	<input type="radio"/>
Meter	Meter	Meters	m	1	12,345.12	<input type="radio"/>
<Select Unit Code>				0	12,345.12	<input type="radio"/>

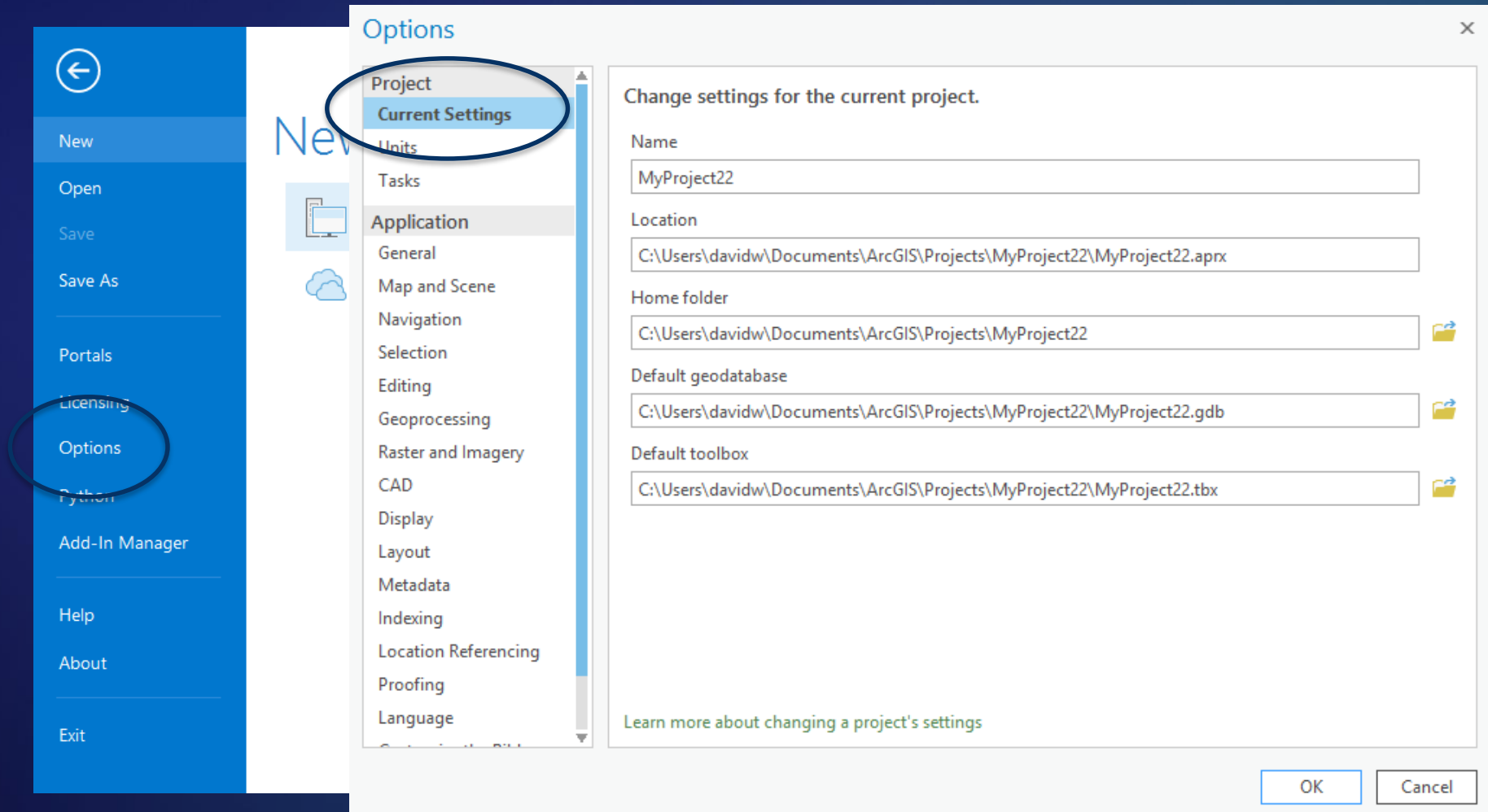
Below the table, there are expandable sections for:

- Angular Units
- Area Units
- Location Units
- Direction Units
- Page Units
- 2D Symbol Display Units
- 3D Symbol Display Units

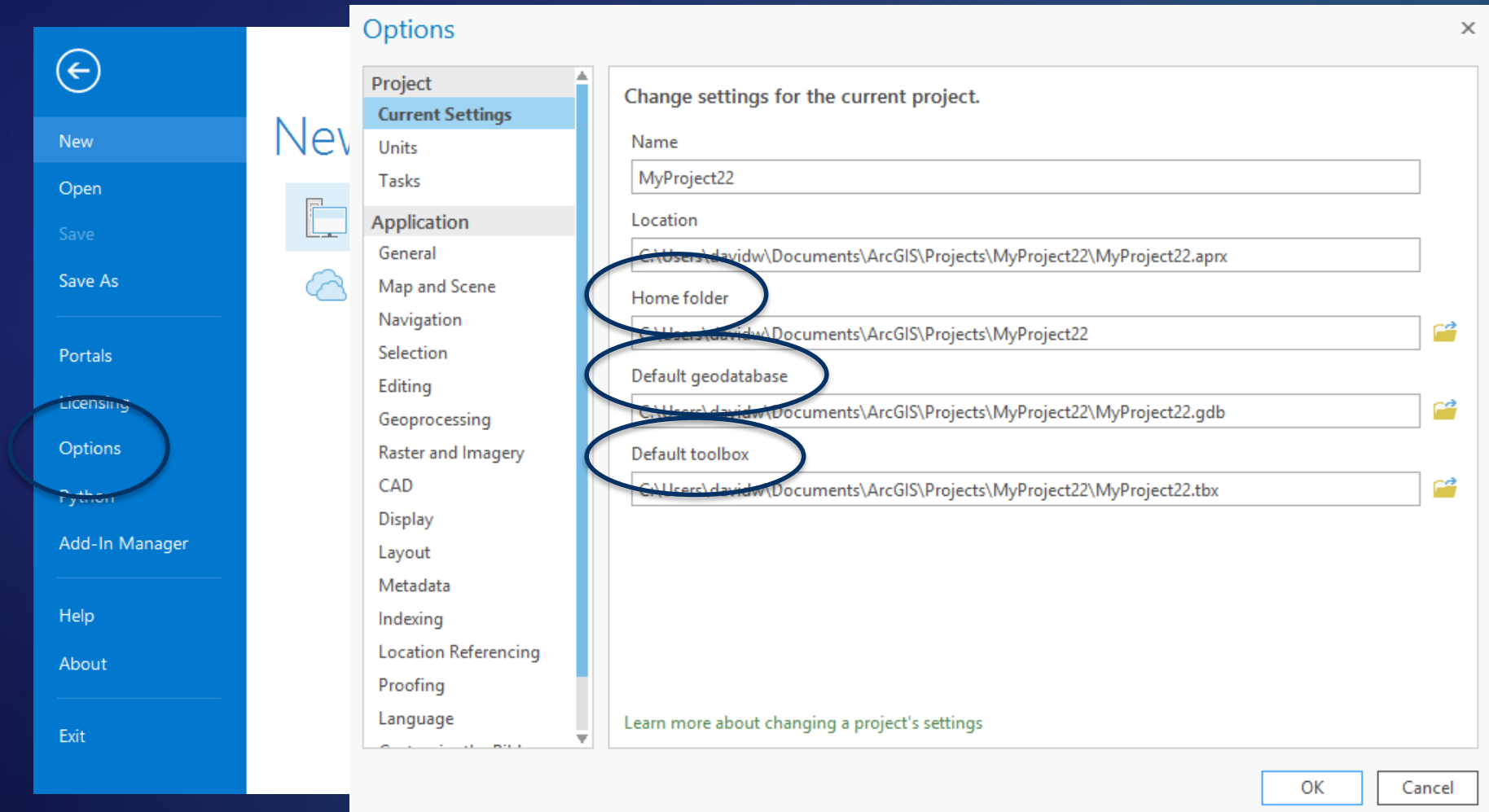
A link at the bottom left of the dialog reads: [Learn more about kinds of units](#)

At the bottom right of the dialog are 'OK' and 'Cancel' buttons.

What is the backstage?



What is the backstage?



What is the backstage?

ArcGIS Pro - MyProject22 - Map

ArcGIS Pro Named User License

Name	Licensed	Expires
Basic	No	N/A
Standard	No	N/A
Advanced	Yes	8/26/2018

Esri Extensions

Name	Licensed	Version	Expires
3D Analyst	Yes	2.2.0.12047	8/26/2018
Aviation Airports	No	2.2.0.12047	N/A
Business Analyst	No	2.2.0.12047	N/A
Data Interoperability	No	2.2.0.12047	N/A
Data Reviewer	No	2.2.0.12047	N/A
Defense Mapping	No	2.2.0.12047	N/A
Geostatistical Analyst	No	2.2.0.12047	N/A
Image Analyst	No	2.2.0.12047	N/A
Location Referencing	No	2.2.0.12047	N/A

Settings

Authorize ArcGIS Pro to work offline ⓘ

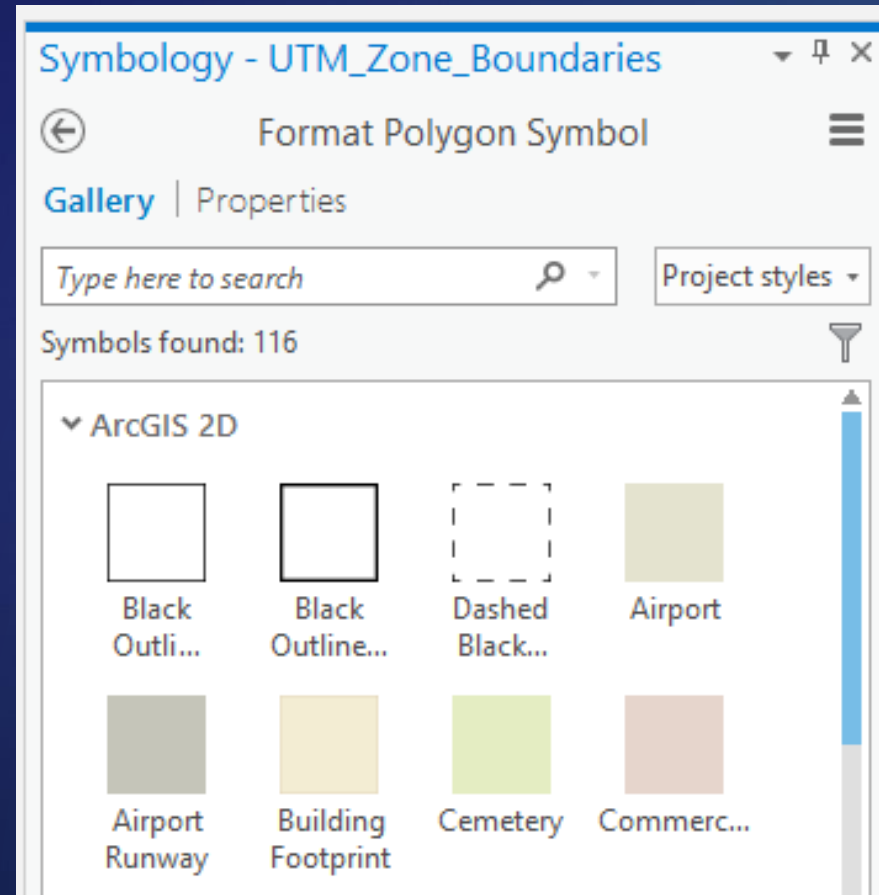
Show license expiration warning messages.

Licensing Portal

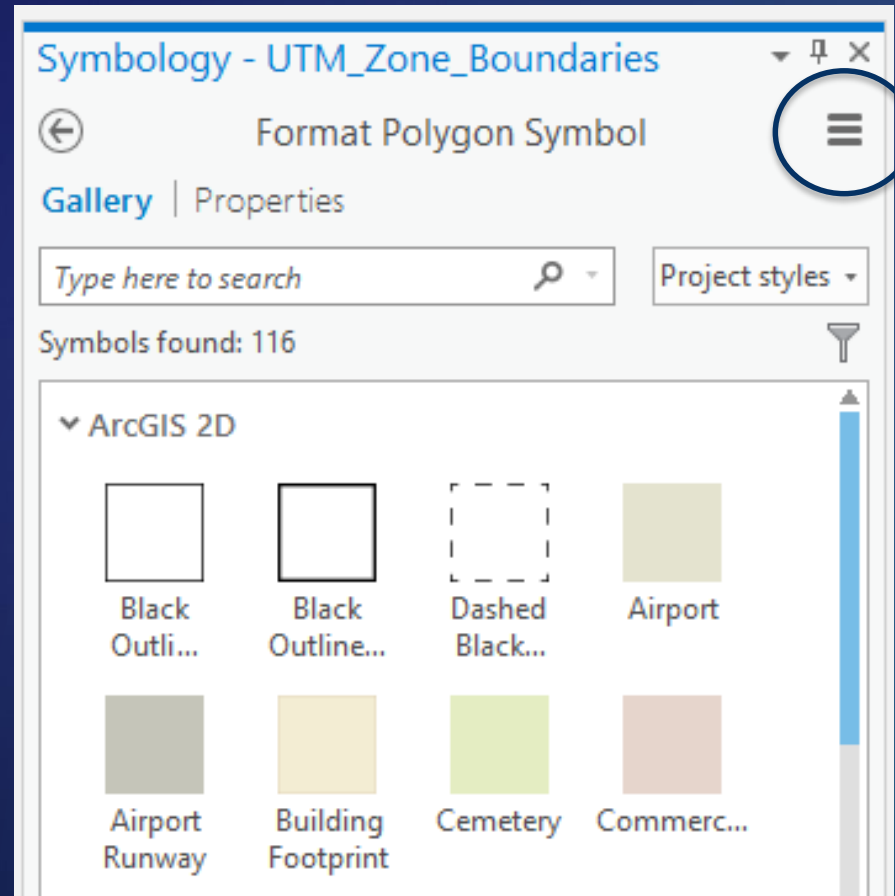
<https://www.arcgis.com/>

What is the burger?

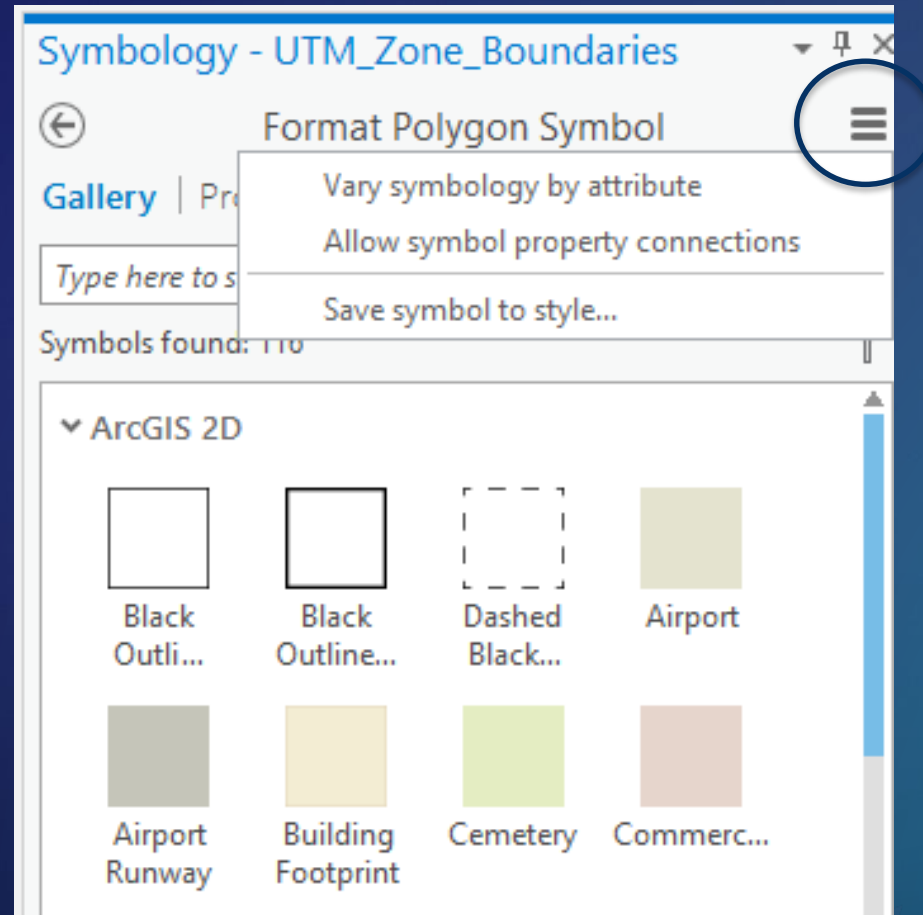
What is the burger?



What is the burger?

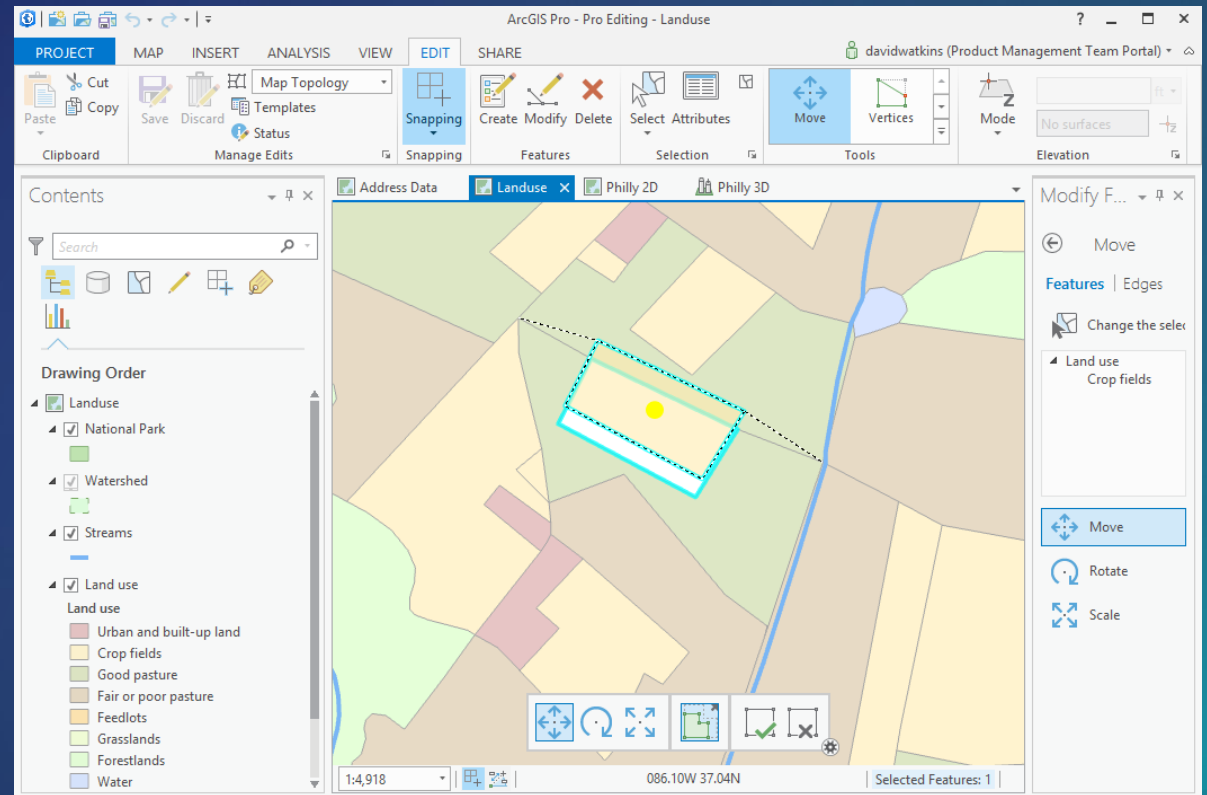


What is the burger?



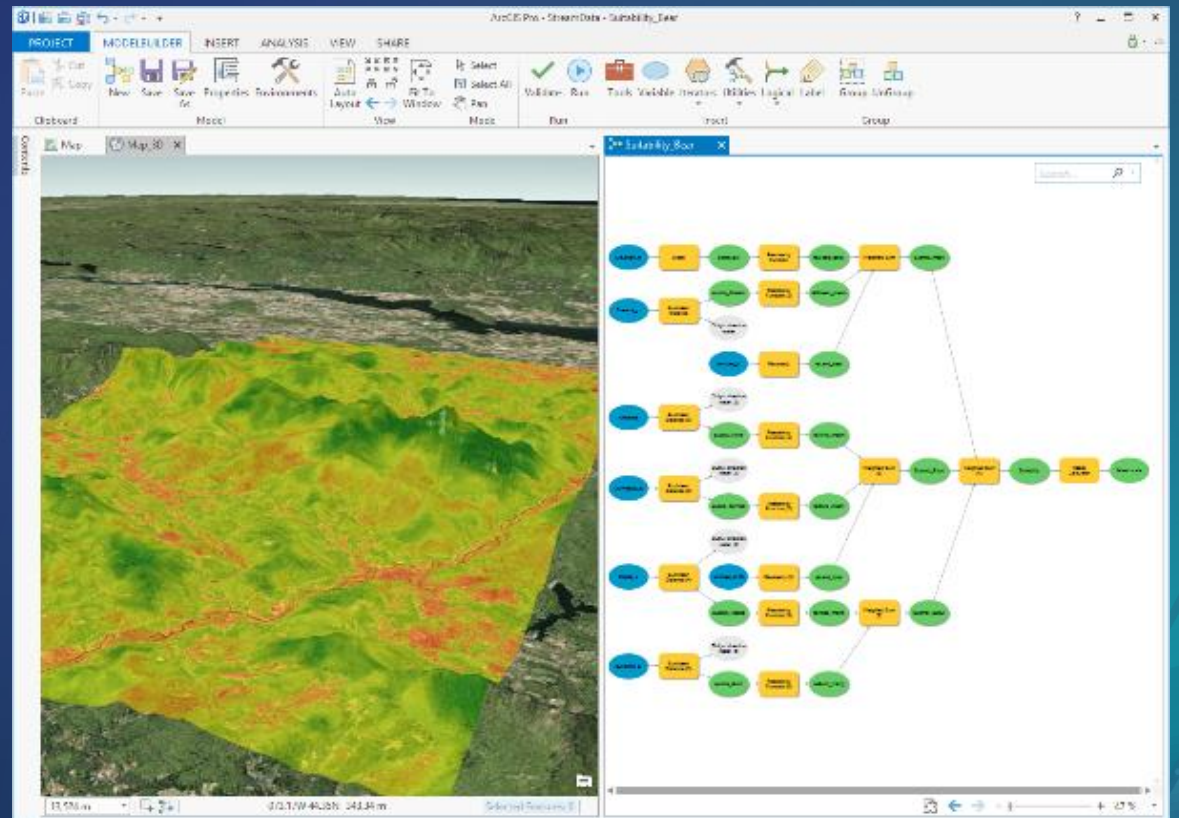
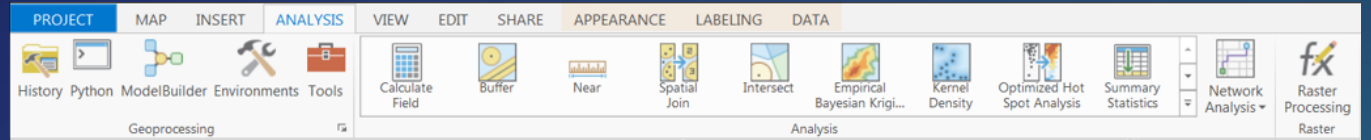
Editing in ArcGIS Pro

- **No need to start and stop editing**
- **Create and modify features**
- **Edit versioned data**
- **Edit map and geodatabase topology**
- **Group templates**



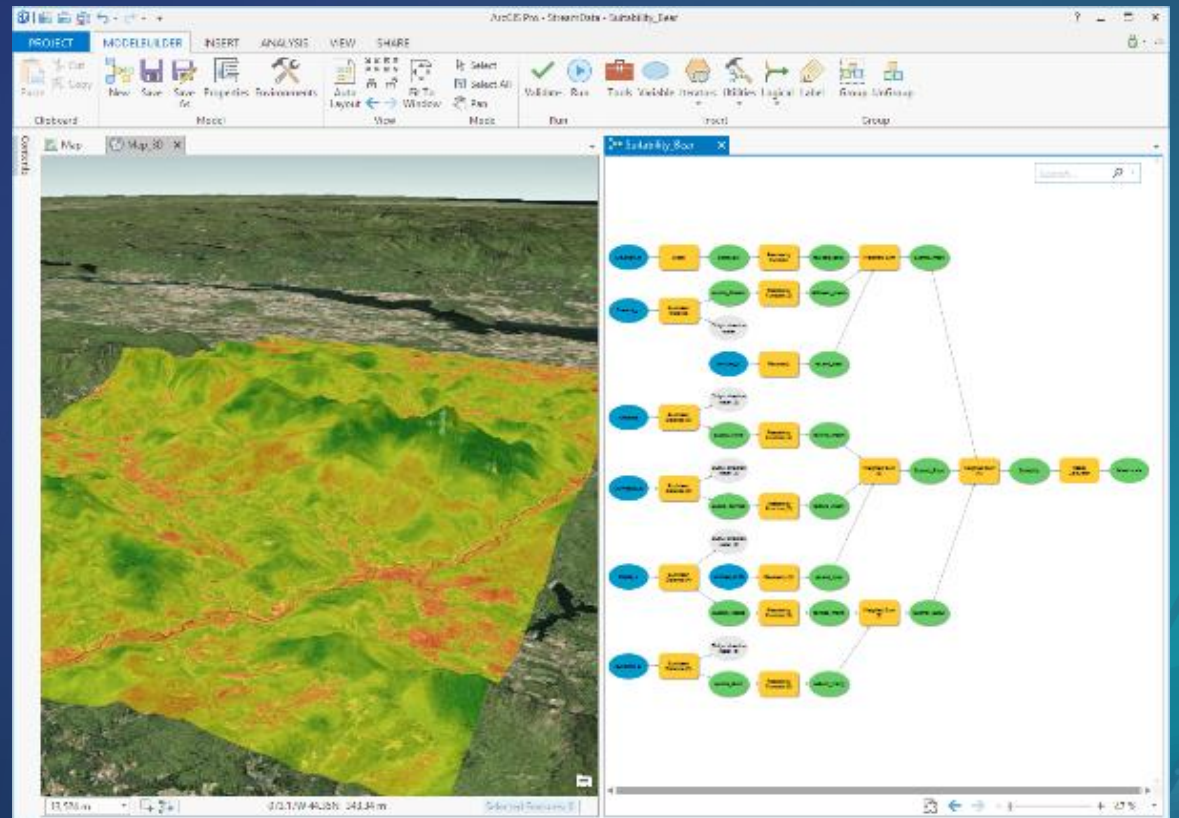
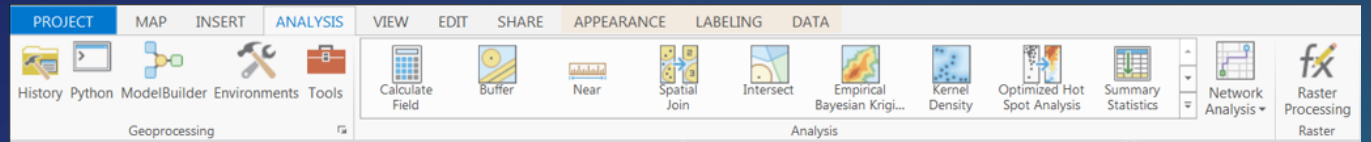
Analysis in ArcGIS Pro

- Analysis tab
- Geoprocessing tool panes
- ModelBuilder
- Python
- Customizable gallery of tools



Analysis in ArcGIS Pro

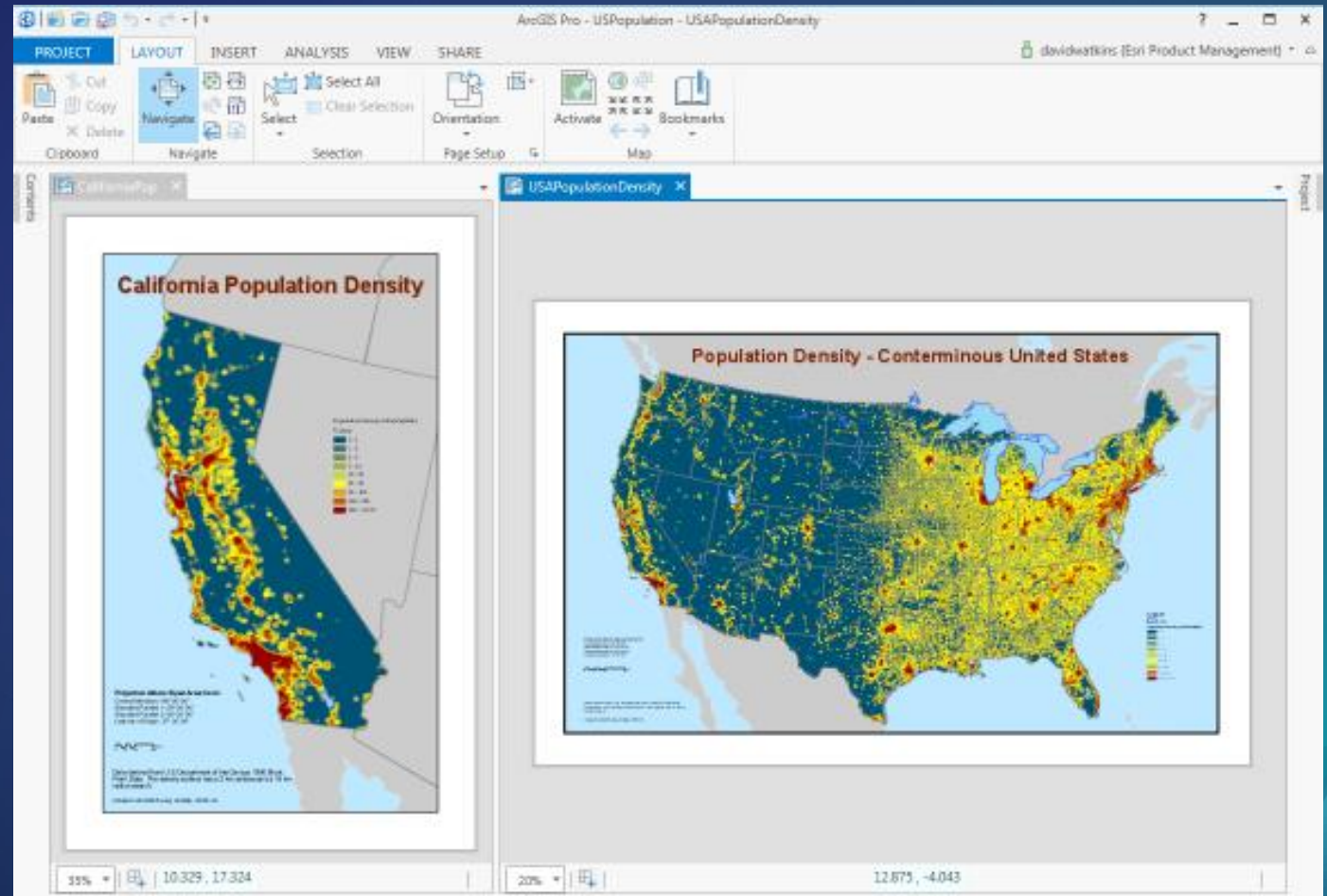
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Analyze tools for Pro

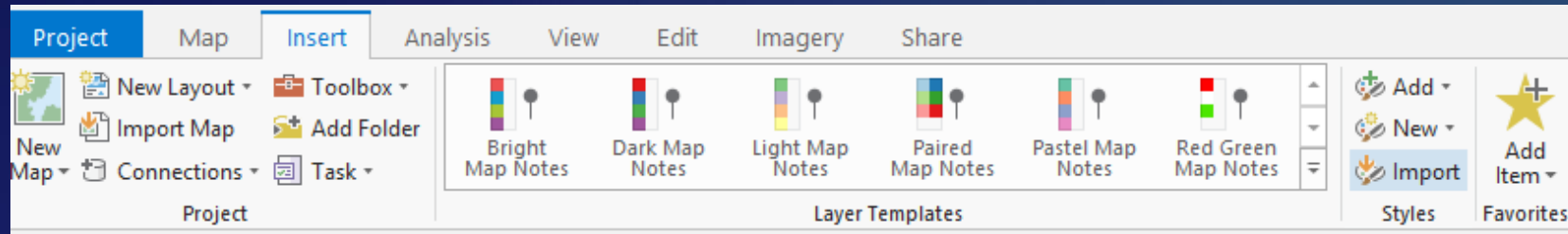
Mapping in ArcGIS Pro

- Multiple layouts
- Anti-aliasing
- Transparency
- Map series
- 3D mapping
- Animation



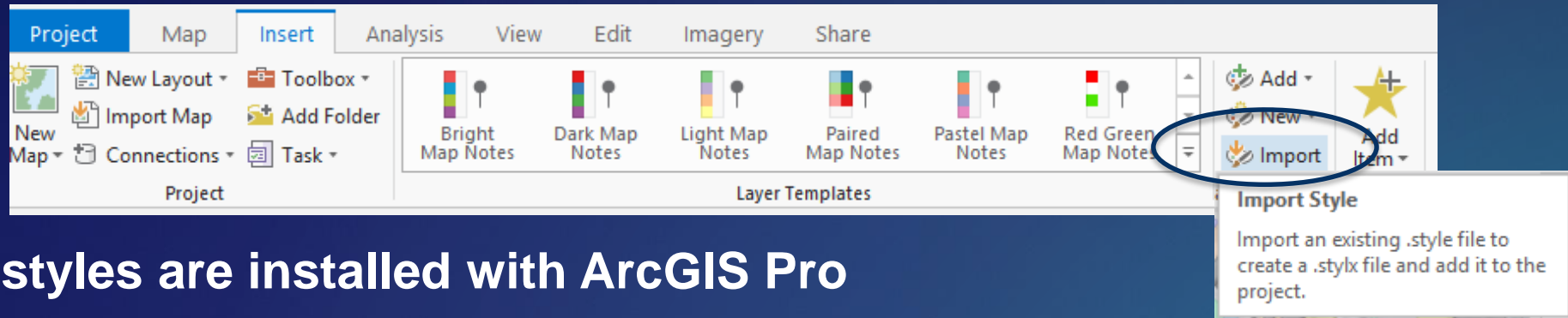
Where are my styles?

Where are my styles?



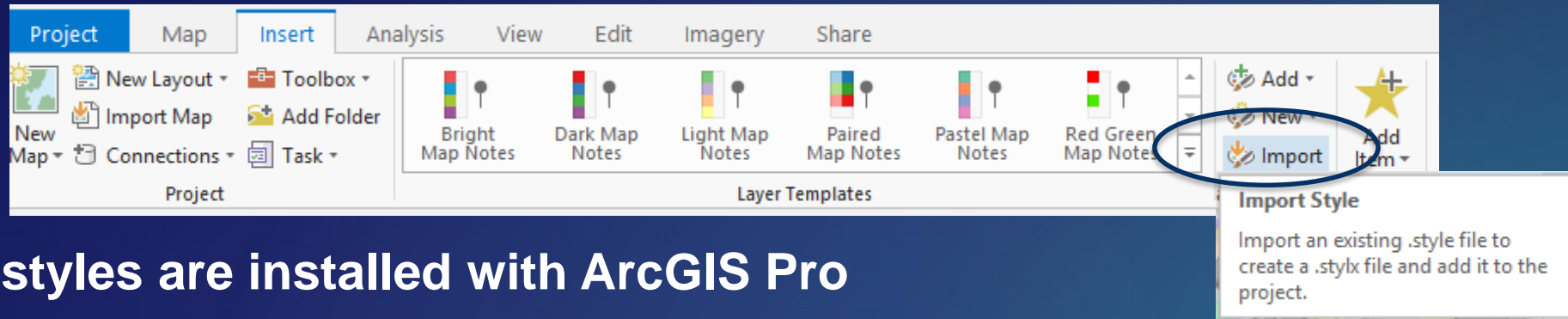
- **Not all styles are installed with ArcGIS Pro**
- **New style format (.stylx)**
- **Styles from ArcMap and custom styles can be imported**

Where are my styles?

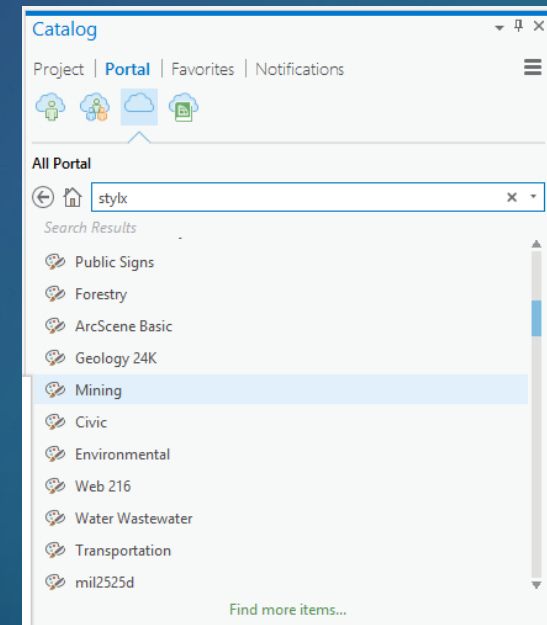


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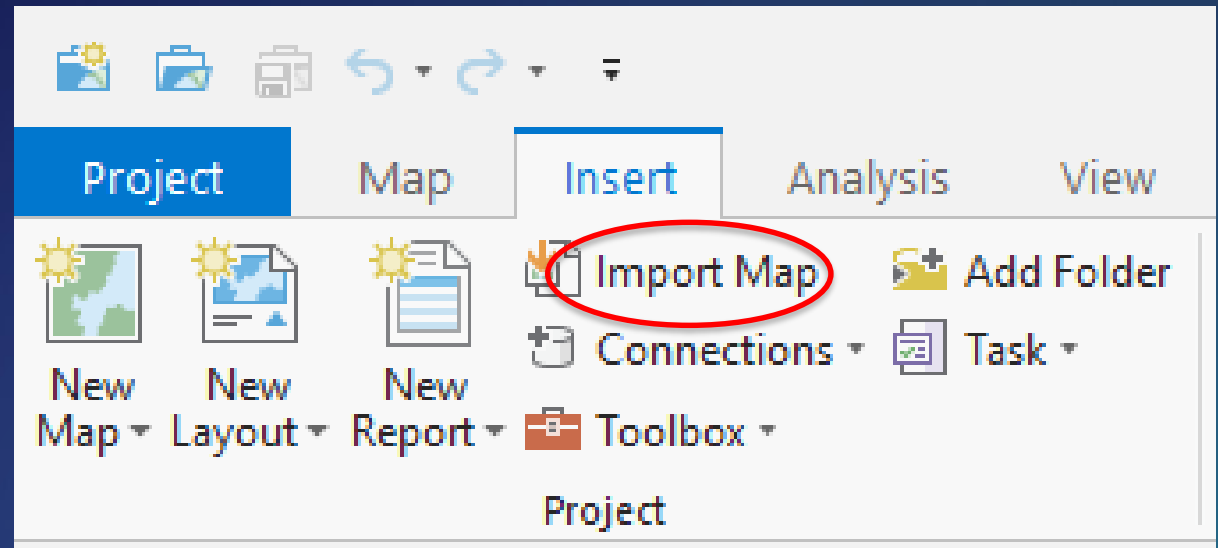
Where are your styles?



- Not all styles are installed with ArcGIS Pro
- New style format (.stylx)
- Styles from ArcMap and custom styles can be imported
- Search from the Catalog Pane
- Add styles to your project from ArcGIS Online
- <https://esri-styles.maps.arcgis.com/home/index.html>



Migrating Map Documents



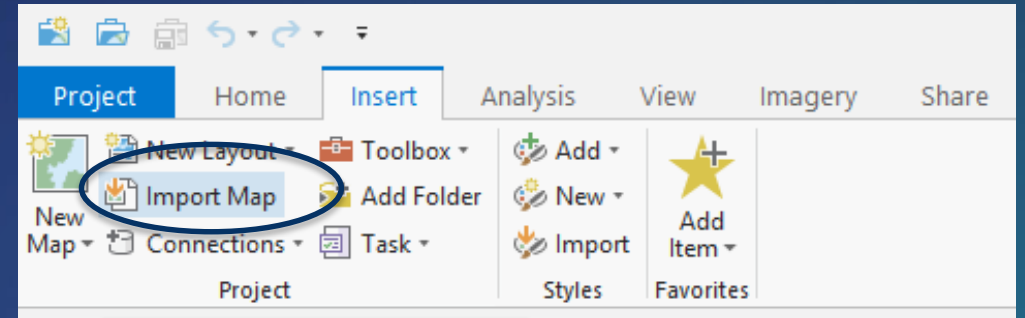
- From the Insert tab, use the Import Map button
- New at 2.3, drag and drop map package from File Explorer on to the Catalog Window

Getting Started with ArcGIS Pro



Import existing maps, scenes, and globes

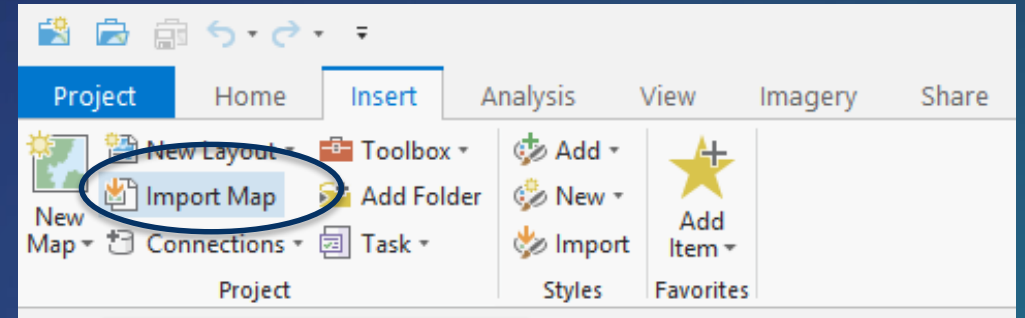
Import existing maps, scenes, and globes



Import existing maps, scenes, and globes

- **What will import?**

- .mxd, .sxd, .3dd files
- **Maps, layouts, symbology, scenes, and models**



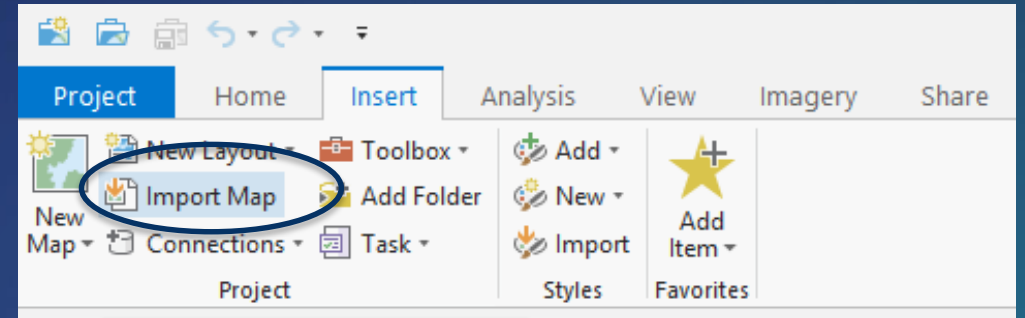
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- **What will import?**

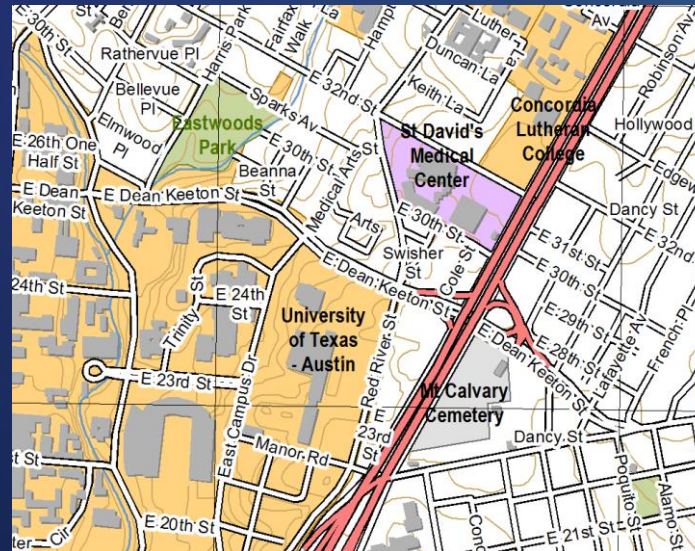
- .mxd, .sxd, .3dd files
- Maps, layouts, symbology, scenes, and models

- **Results should look the same**

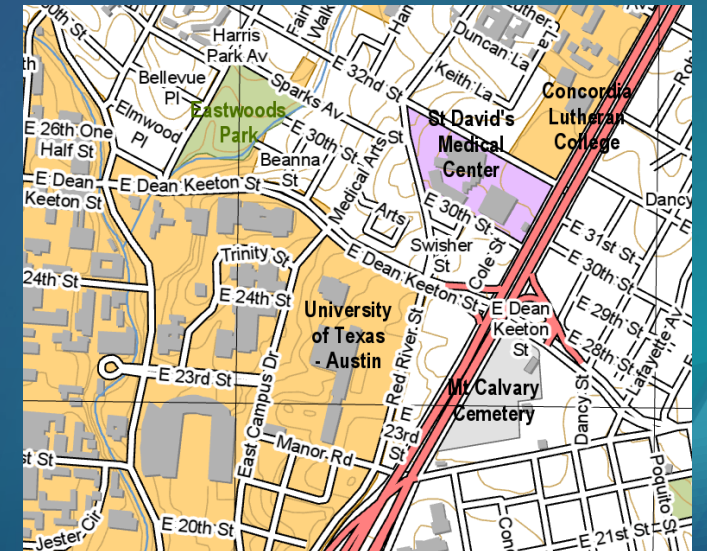
- **New at 2.3, drag and drop from File Explorer**



ArcMap



ArcGIS Pro



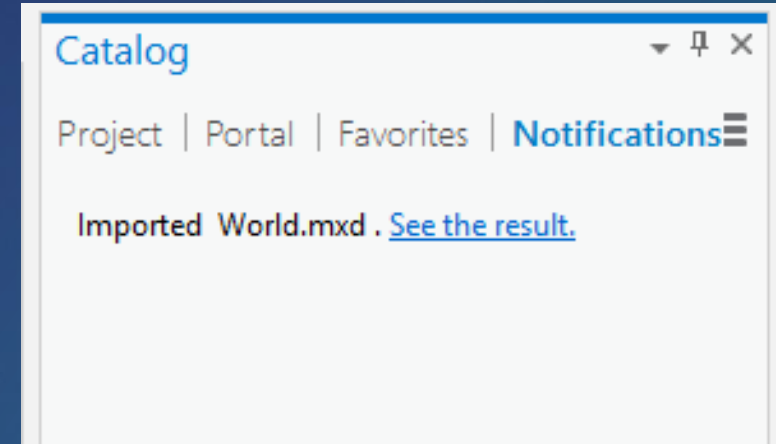
What if something doesn't look the same?

What if something does not look the same?

- **Occasionally, things may differ slightly**
 - **Example: OLE objects are not supported**
 - **Label placement has been improved**
 - **Anti-aliasing used for text and line work**

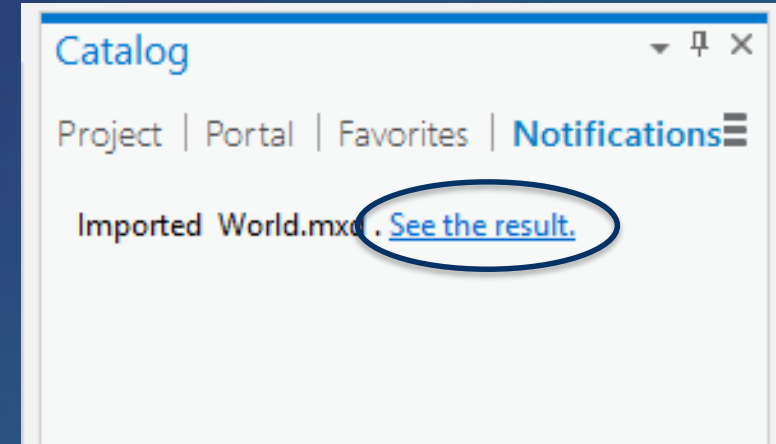
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- Occasionally, things may differ slightly
 - Example: OLE objects are not supported
 - Label placement has been improved
 - Anti-aliasing used for text and line work
- Check the notifications



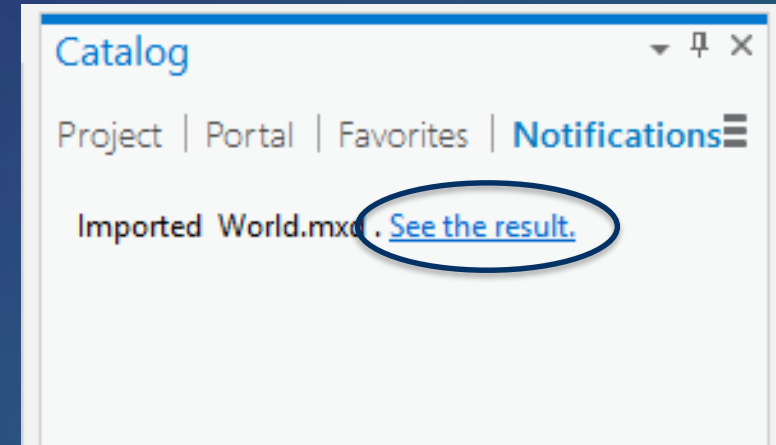
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Import results for World.mxd

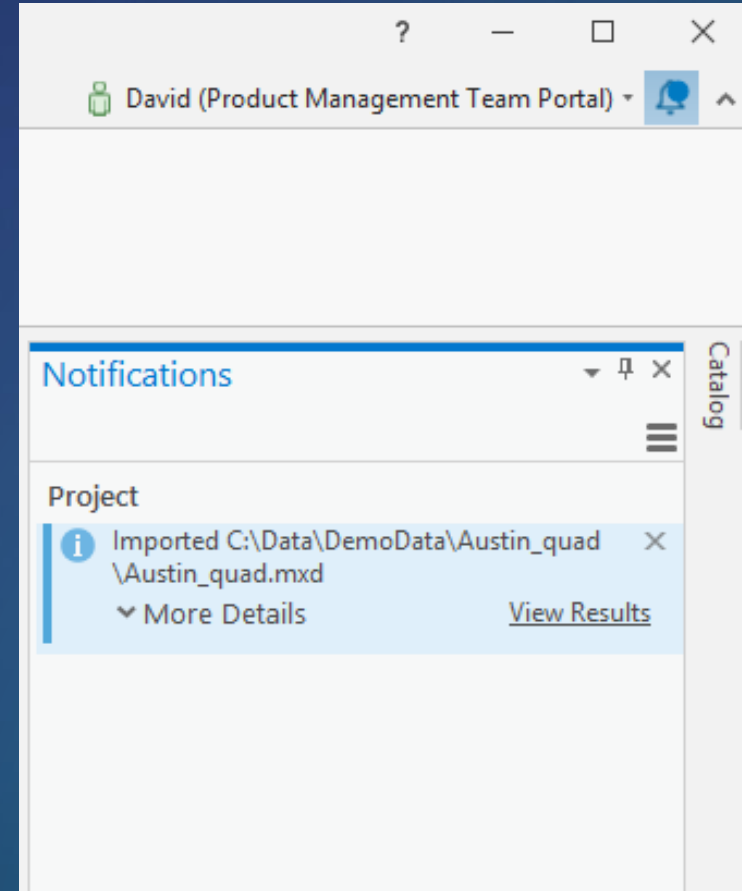
The following messages were produced when this map or scene was imported: C:\Users\dauidw\Desktop\World.mxd

Message Name	Type	Severity	Code	Description	Component Name	Component Type
	Warning	Medium	20039	OLE objects are not supported and were dropped from the layout.	World	Layout

What if something doesn't look the same?

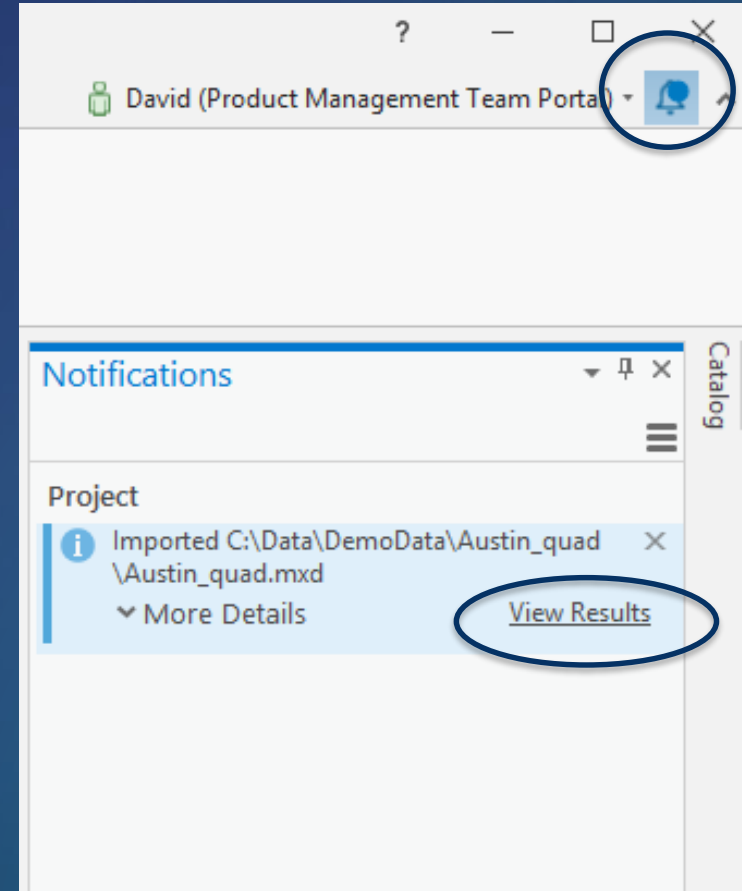
Note: Notifications changed at 2.2

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- Check the notifications



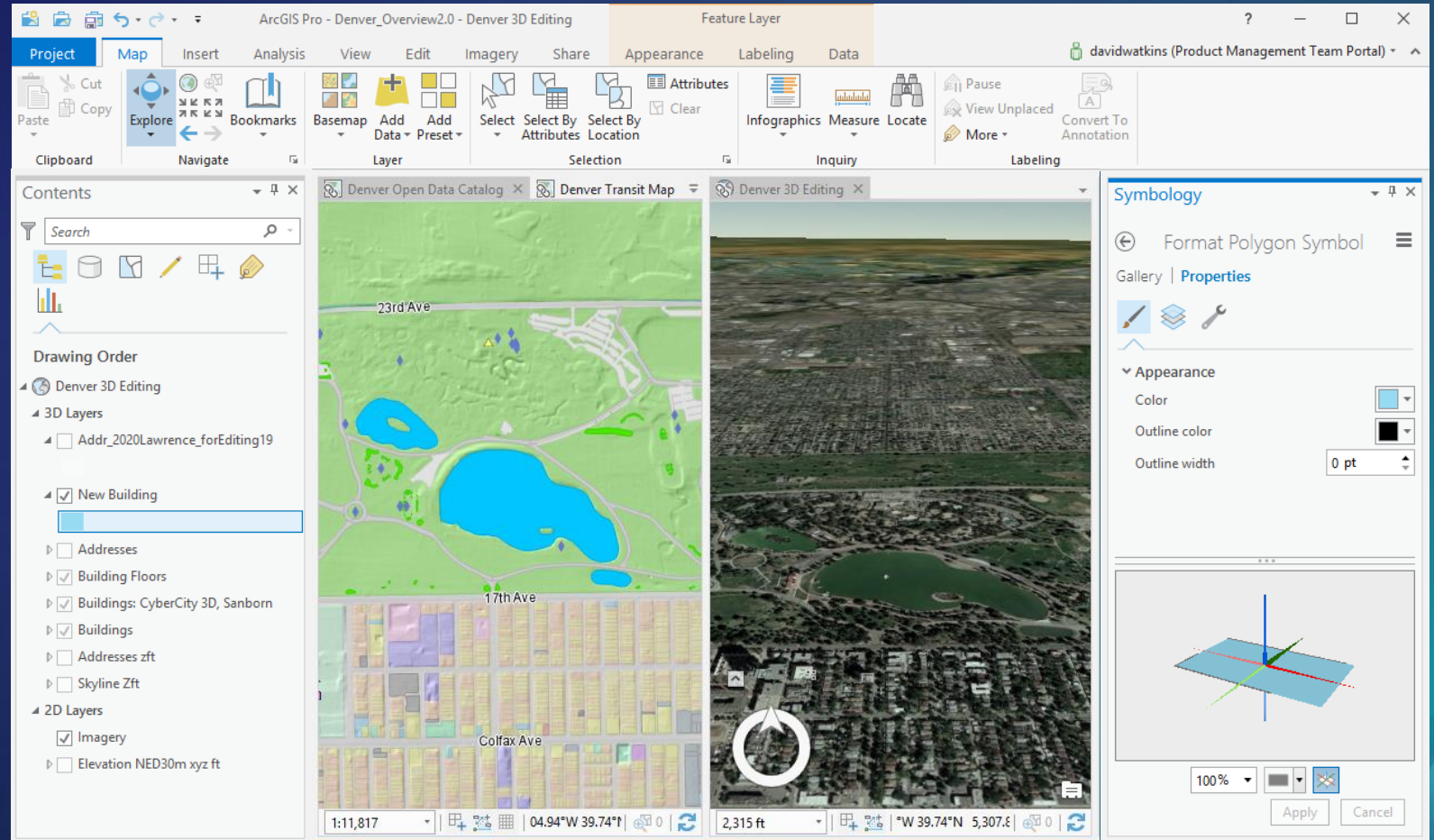
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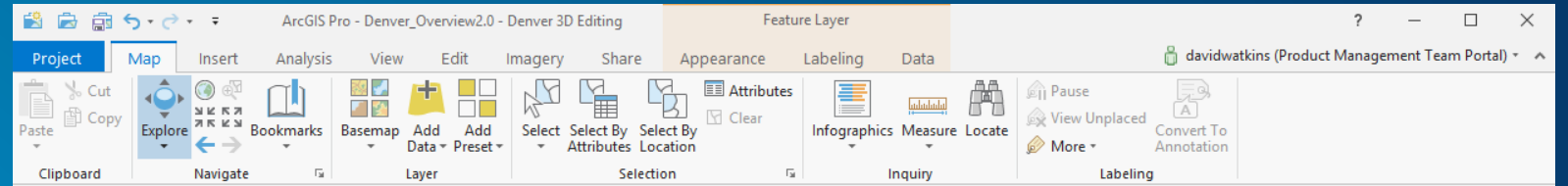
Summary of key differences when working with ArcGIS Pro

The user interface is new



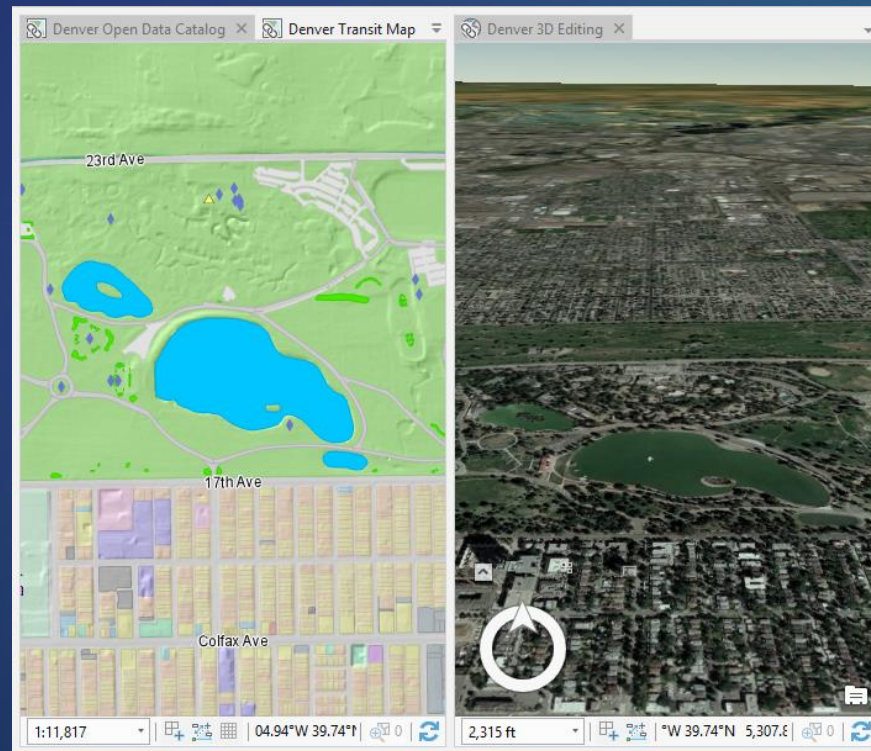
The user interface is new

- **Contextual ribbon**



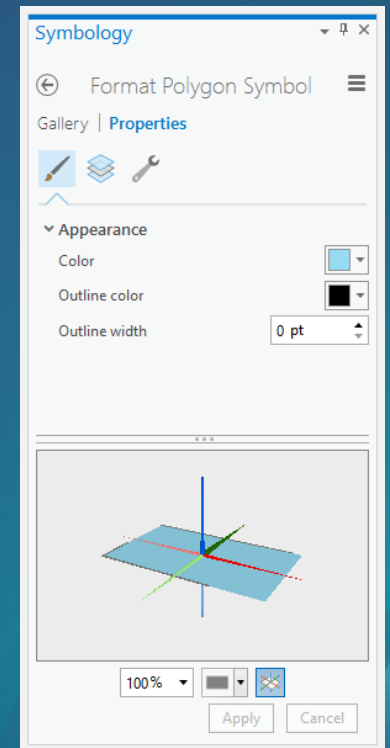
The user interface is new

- Views



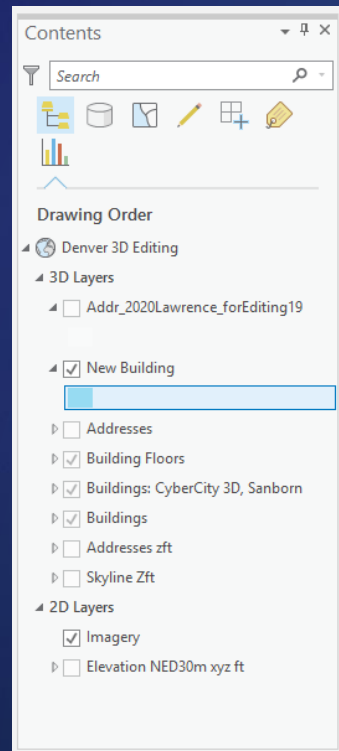
The user interface is new

- Panes



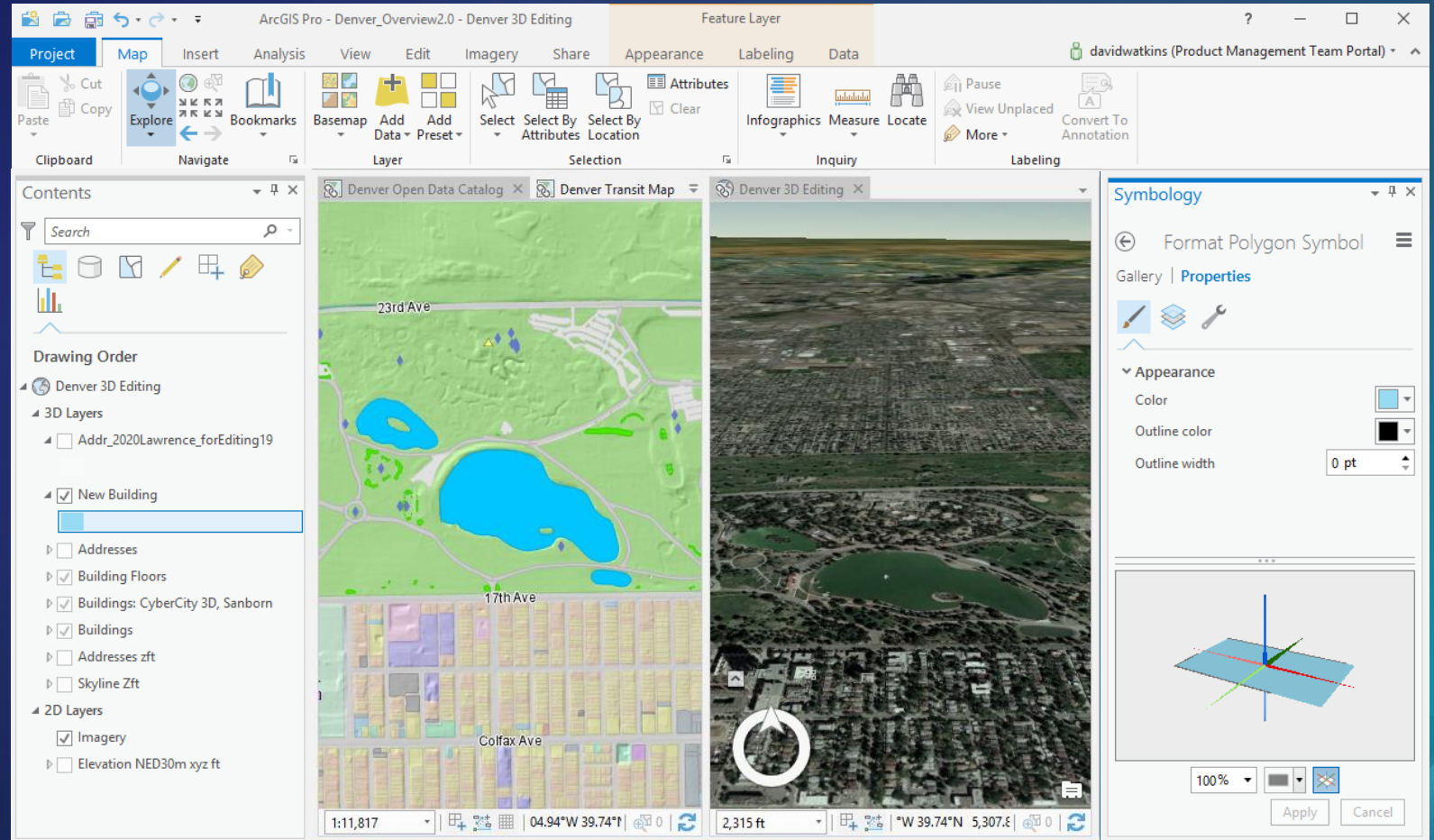
The user interface is new

- Contents



The user interface is new, but concepts are the same

- Contextual ribbon
- Views
- Panes
- Contents





Let's take a look

Get started using ArcGIS Pro!

The best way to get started is just to start

ArcGIS Pro 2.3 is the current version

ArcGIS Pro 2.4 will be released very soon

Questions?

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Esri-Philadelphia, Local Government Team



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SCIENCE
OF
WHERE**