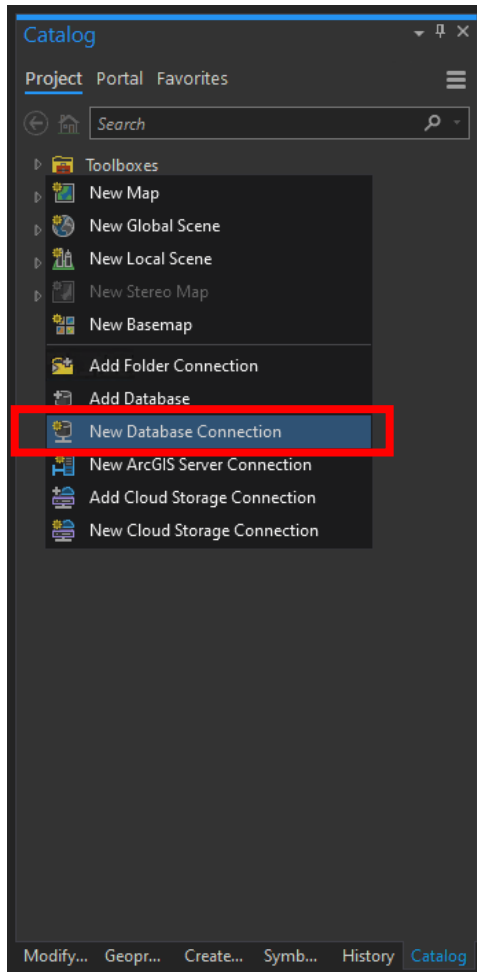


Connecting and Viewing SQL Views in ArcGIS Pro Version 4 – 8/4/2022

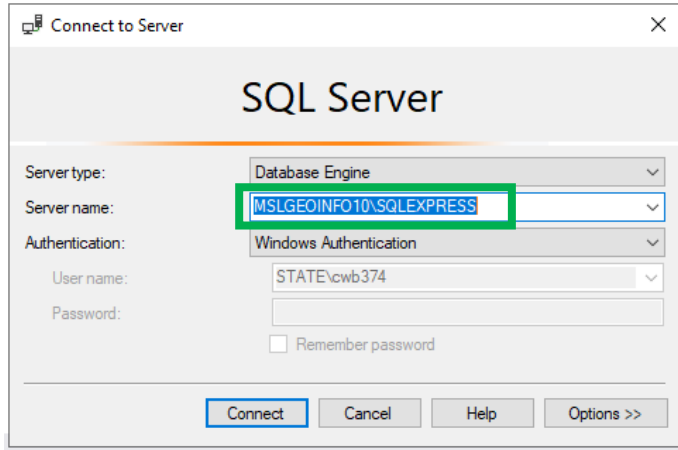
Connecting to the Database in ArcGIS Pro

1. Open ArcGIS Pro and within the Catalog pane, right-click and select **New Database Connection**.

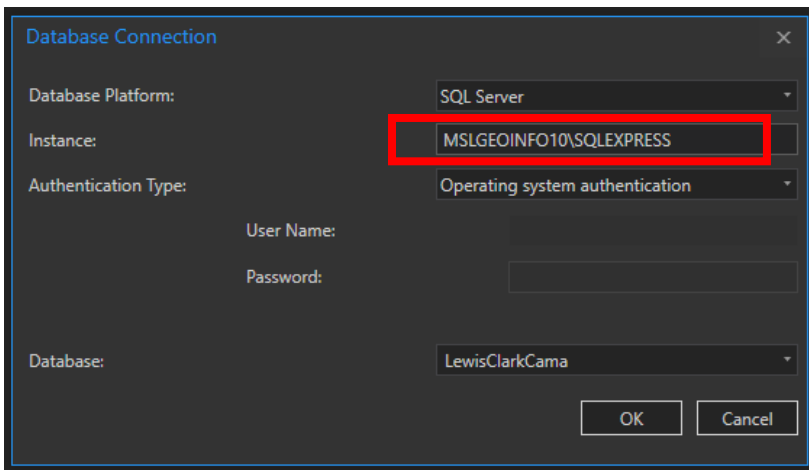


2. Within the Database Connection pop-up box, fill in the **Instance**, **Authentication Type** and the **Database**. The instance name would be your **Server name** of your SQL Express Database Engine. Follow the next steps if you need additional help filling these boxes out.

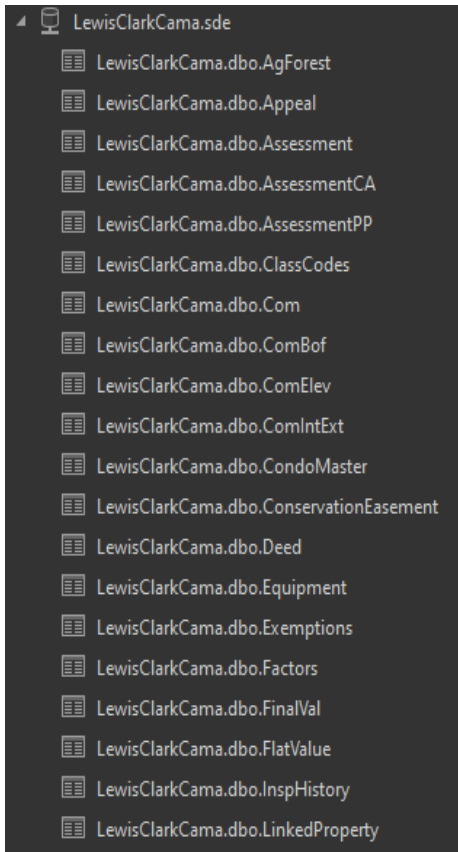
- a. To find your server name within SQL Server Management Studio, click Connect within your Object Explorer pane and click **Database Engine**. You will find that the below screenshot appears. Copy the Server name (shown in the green box below).



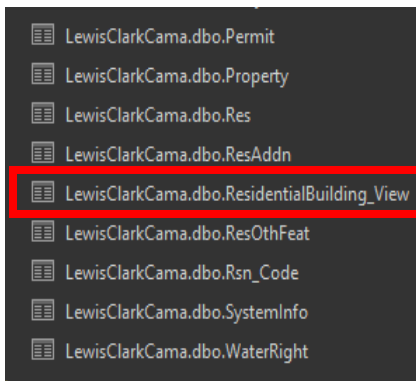
- b. Copy that into your Database Connections setup as the instance (shown in the red box).



- c. Change the Authentication Type to **Operating system authentication**.
 - d. By default, either a previous Database name or nothing will appear in the Database box initial, you may have to click on the dropdown arrow to refresh it, and you should get a list of the databases you have connected within your SQL Express instance. Select the appropriate database name that your loaded in SQL Server Management Studio. Click **Ok**.
3. The new database connection will appear under the Database folder within the Catalog pane. It may prompt you to name the connection, name it the same database name you had in management studio (ie LewisClark Cama).



- a. A list of tables will be included in your database. Scroll down to confirm that the view you created in **Loading and Viewing a County SQL Database** → **Creating a Database View** appears amongst the list of tables
- b. The view you created, **ResidentialBuilding_View**, as shown in the screenshot below, should appear amongst the list of tables.

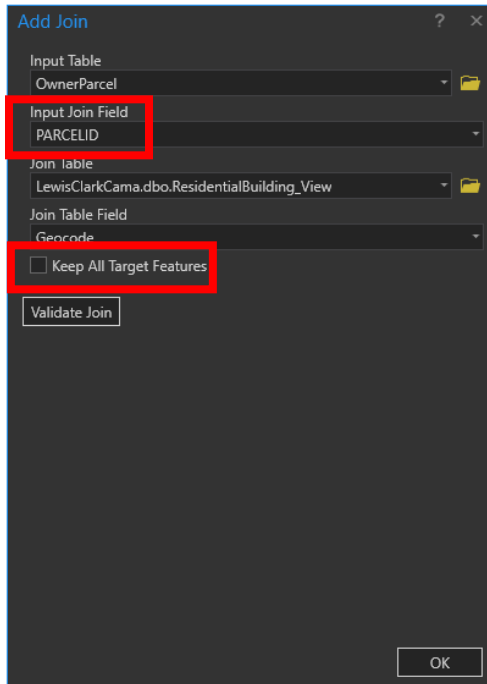


4. Add the table to your map or a new map
 - a. **Open** up the attribute table to view the data.

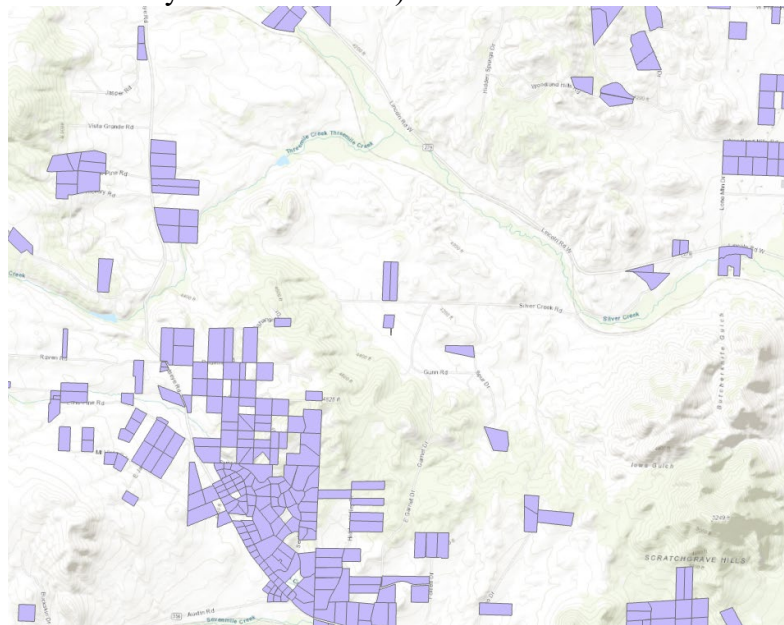
	Geocode	ResID	TaxYear	AssessmentCode	LevyDistrict	CAMA Township	Township	Range
1	05168301304010000	400044292	2022	0000008262	05-048903-0203	1683	08 N	06 W
2	05168504201060000	400055395	2022	0000008504	05-048903-0203	1685	08 N	05 W
3	05168504201110000	395033989	2022	0000033146	05-048903-0203	1685	08 N	05 W
4	05168504201150000	419668761	2022	0000008631	05-048903-0203	1685	08 N	05 W
5	05168504201170000	395034306	2022	0000033148	05-048903-0203	1685	08 N	05 W
6	05168504201210000	400034206	2022	0000026017	05-048903-0203	1685	08 N	05 W
7	05168504201230000	394900576	2022	0000008518	05-048903-0203	1685	08 N	05 W
8	05168504201250000	423253992	2022	0000009098	05-048903-0203	1685	08 N	05 W
9	05168504201250000	423253998	2022	0000009098	05-048903-0203	1685	08 N	05 W

5. Download the county's parcels that you are working within.
 - a. If you have not done so already, go to the [Montana State Library FTP](#) and download the desired county parcels that you are working within. Create some sort of **Data** folder in your **SQL_Database** folder and unzip the data within that new Data folder.
 - b. Add the **OwnerParcel** feature class to your current map.

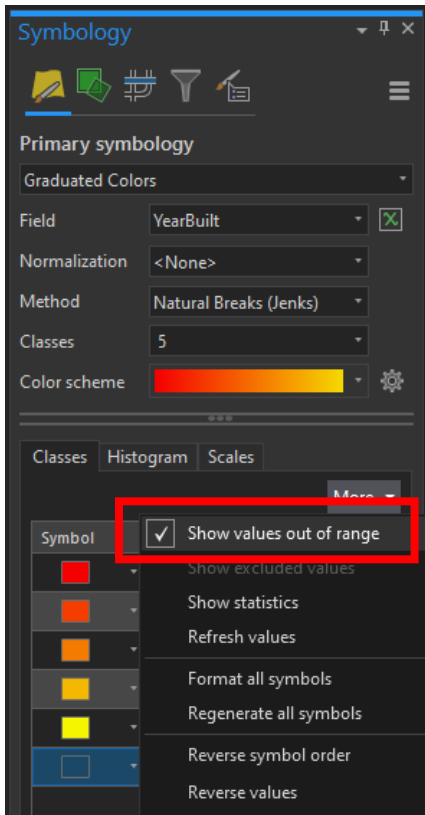
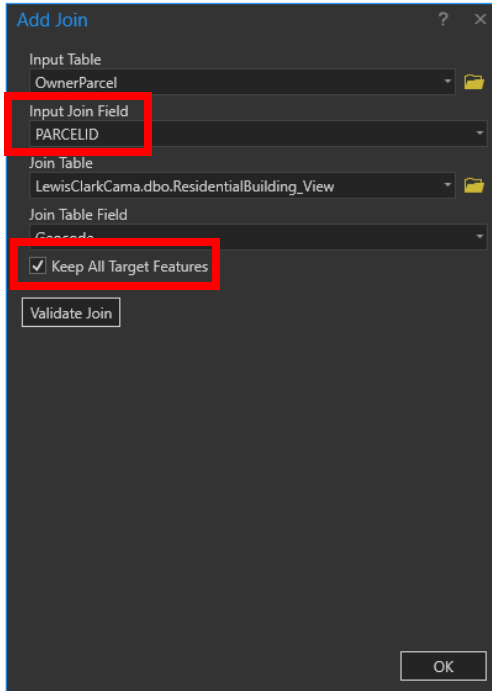
6. Perform the joining function
 - a. Open the 'Add Join' tool and join to the **ResidentialBuilding_View** table using the Geocode field.
 - b. You have **two** options with the next setting and each situation may be different so please read both options carefully.
 - i. **Uncheck** Keep All Target Features will hide, not delete, those parcel geometry that do not match a record in the joining table. **If you plan to only work with the matched data and want that data only to display on the map and the attribute, I recommend this approach.** See **Step C** for this method.
 - ii. **Check** Keep All Target Features will do just the opposite of the first option and regardless if it finds a match, the parcel geometry will remain displayed. **If you plan to symbolize the map, I recommend this approach.** See **step D** for this method.
 - c. Uncheck the **Keep All Target Features** setting, this can be optionally left on but this will hide all the OwnerParcel features that do not match up (screenshot shown below). Click **OK** to run the add join tool.








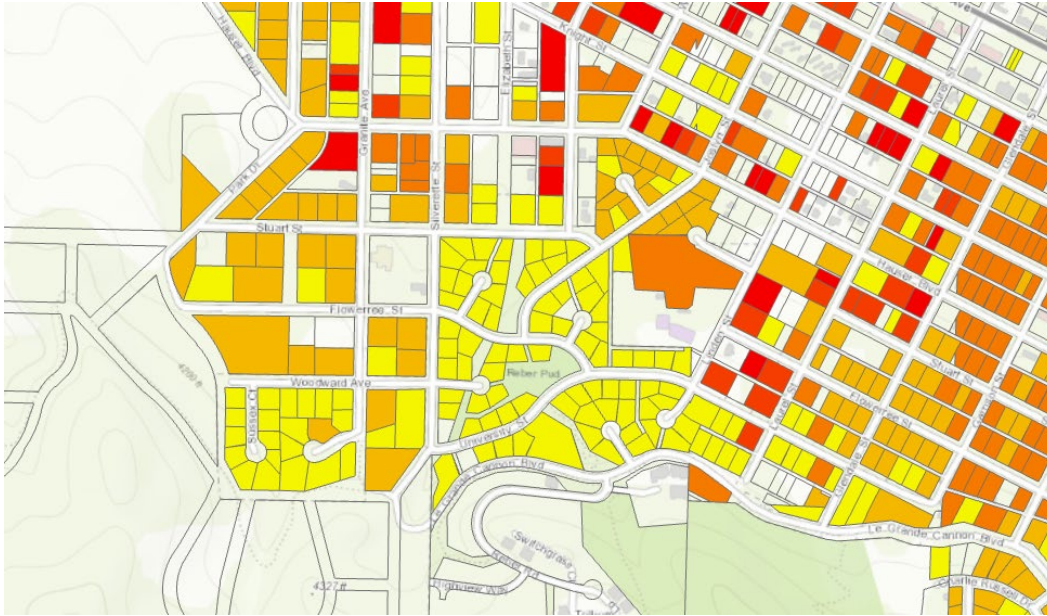
- i. Zoom to an area to see that number of parcels shown has changed. If you do not see any parcels, something went wrong and the join did not occur properly (Screenshot below, but your view will vary completely on the area you zoomed in on).



- d. The second option, if you do leave **Keep All Target Features** checked, I'd recommending symbolizing on a certain field (ie "YearBuilt") and make sure the **Show values out of range** is checked (these values will represent your areas that do not have a record in the table you're joining). Then, select no color for the fill of those values and a light gray for an outline (there are four screenshots below to assist with the setup of this task if needed).



	1944	1913 - 1944
	1968	1945 - 1968
	1991	1969 - 1991
	2021	1992 - 2021
	< out of range >	< out of ran...



Contact Information

I'd like to thank you for going through this tutorial document and I hope you found it helpful. If you have any additional questions, feel free to reach out to me and I'd be happy to set up a teleconference meeting to answer your questions or to discuss potential solutions you may be experiencing. My contact information is below:

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