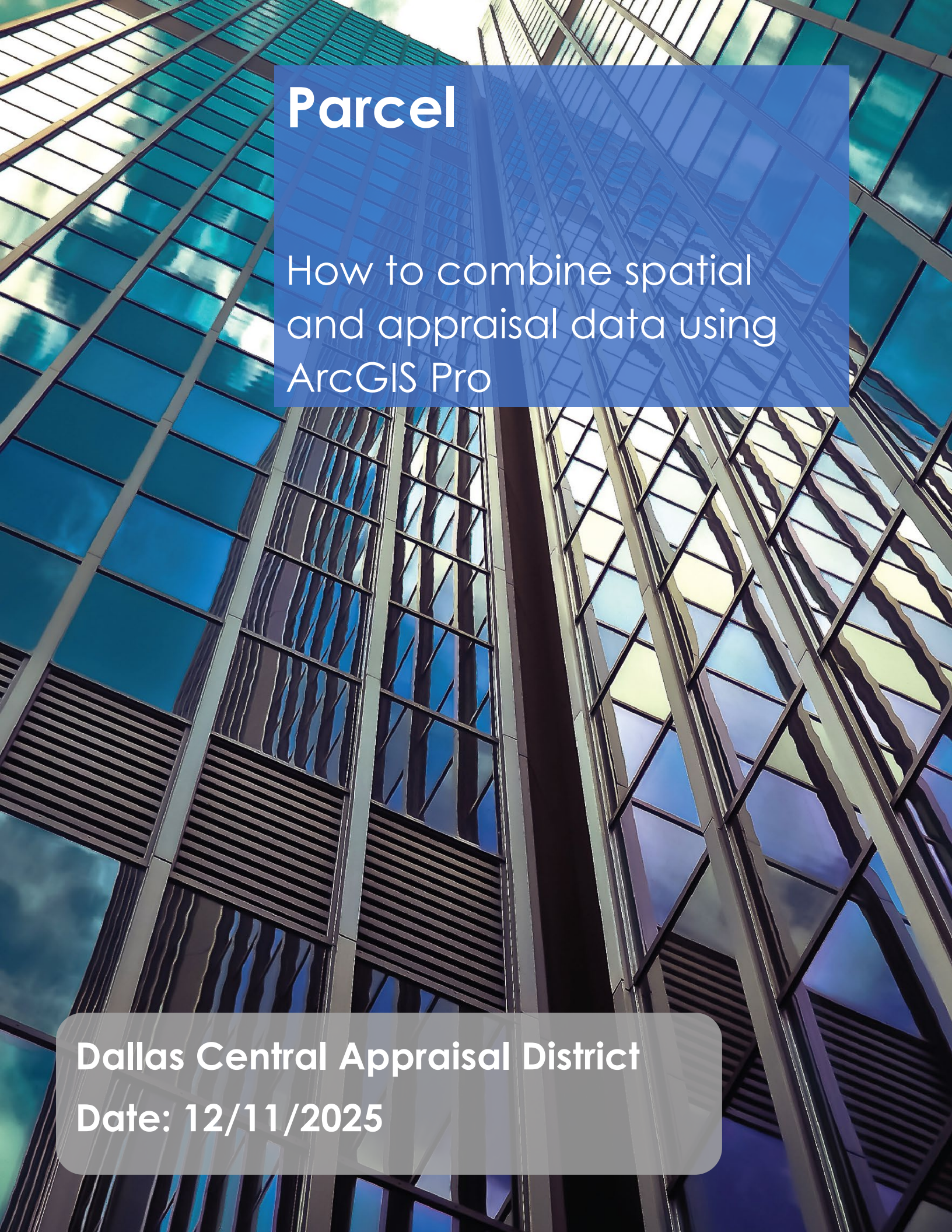


# Parcel

How to combine spatial and appraisal data using ArcGIS Pro

**Dallas Central Appraisal District**

**Date: 12/11/2025**

# Purpose

This document will help users of Dallas Central Appraisal District shapefile and appraisal roll data understand the approach for combining files downloaded from the website. These instructions are for importing files into mainstream GIS application software, ArcGIS Pro 3.x.

# Locate the Data

Go to the main DCAD website at: https://www.dallascad.org/. You can locate the appraisal roll data by viewing the links in the blue navigation bar on the left. Figure 1 displays the navigation bar on the website. In the red box, you can see the title of the page containing appraisal roll downloads.


*Figure 1: Top portion of the main dallascad.org website's navigation link side bar.*

## Appraisal Roll Downloads

There are multiple options for appraisal roll data information. Many of these files have account number identifiers that will link to parcel ids provided with spatial data downloads. These help users provide reports for a variety of property types and purposes.

*IMPORTANT: During the Appraisal Review Board (ARB) period, DCAD is unable to settle some property values. DCAD marks these properties with a Value in Dispute (VID) status. DCAD does not include these properties in many of the downloadable archives. To access all properties, regardless of VID status, download the YYYY Data Files (No Values – Most Current Ownership) file.*

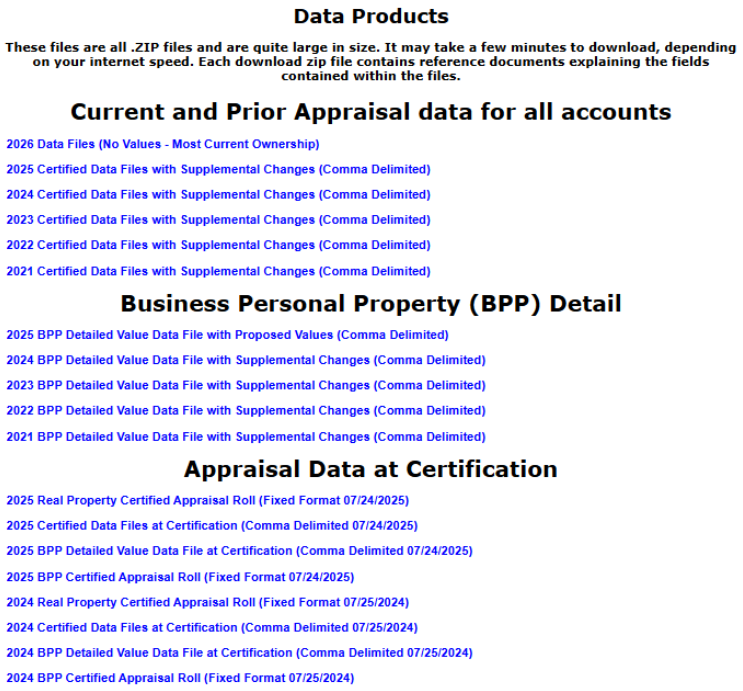



*Figure 2: Appraisal data download options on the Data Products page.*

DCAD makes these downloads available in zip file format and compresses multiple .csv files in the archives that users can open in spreadsheets or any software that allows you to edit text. The table below lists the title and description of each type of download file. Instead of specific dates, the replacement text MM represents a two-digit month, DD represents a two-digit day, and YYYY represents a four-digit year. Real property is associated with residential and commercial property such as land or buildings or a combination of both. Business personal property represents assets that generate income such as auto dealer car inventories or leased copiers. When extracting the downloads, please read any documentation that DCAD provides in the archive.

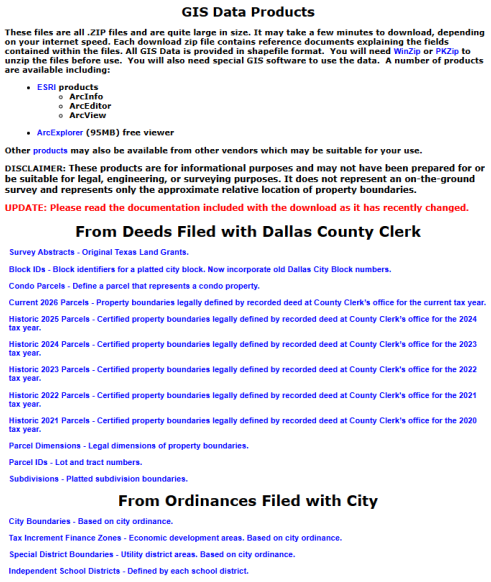
*Table 1: Title and descriptions of each type of appraisal roll download file.*

| Title | Description |
|---|---|
| **YYYY Data Files (No Values – Most Current Ownership)** | This contains comma delimited appraisal roll information that has the most up to date ownership information for properties. DCAD does not provide taxable or market values in this dataset. |
| **YYYY Certified Data Files with Supplemental Changes (Comma Delimited)** | This contains comma delimited appraisal roll information with property ownership, taxable and market values. DCAD applies these values at the certification date (i.e., approximately July 25). When DCAD settles protested values in supplemental hearings, the organization adds these properties and their updated values to this file at each supplemental date. |
| **YYYY BPP Detailed Value Data File with Proposed Values (Comma Delimited)** | This contains comma delimited business personal properties only. DCAD provides proposed values representing the district's value estimate prior to certification. |
| **YYYY BPP Detailed Value Data Files with Supplemental Changes (Comma Delimited)** | This contains comma delimited appraisal roll information with business personal property ownership, taxable and market values. DCAD applies these values at the certification date (i.e., approximately July 25). When DCAD settles protested values in |

| | |
|---|---|
| | supplemental hearings, the organization adds these properties and their updated values to this file at each supplemental date. |
| **YYYY Real Property Certified Appraisal Roll (Fixed Format MM/DD/YYYY)** | This contains comma delimited appraisal roll information with real property ownership, taxable and market values. DCAD applies these values at the certification date (i.e., approximately July 25). Rather than comma delimited, DCAD applies an alternative fixed formatting by spacing data columns by character length. |
| **YYYY Certified Data Files at Certification (Comma Delimited MM/DD/YYYY)** | This contains comma delimited appraisal roll information with property ownership, taxable and market values. DCAD applies these values at the certification date (i.e., approximately July 25). |
| **YYYY BPP Detailed Value Data File at Certification (Comma Delimited MM/DD/YYYY)** | This contains comma delimited appraisal roll information with business personal property ownership, taxable and market values. DCAD applies these values at the certification date (i.e., approximately July 25). |
| **YYYY BPP Certified Appraisal Roll (Fixed Format MM/DD/YYYY)** | This contains comma delimited appraisal roll information with business personal property ownership, taxable and market values. DCAD applies these values at the certification date (i.e., approximately July 25). Rather than comma delimited, DCAD applies an alternative fixed formatting by spacing data columns by character length. |

# Spatial Data Downloads

Below the appraisal roll data products is the link to the GIS data download page. DCAD maintains multiple spatial data layers that users may import into geographic information system (GIS) software. A commonly used GIS application is ArcGIS Pro. These instructions demonstrate how to import DCAD spatial data files and combine them with appraisal data files using ArcGIS Pro. When extracting the downloads, please read any documentation that DCAD provides in the archive.



**GIS Data Products**

These files are all .ZIP files and are quite large in size. It may take a few minutes to download, depending on your internet speed. Each download zip file contains reference documents explaining the fields contained within the files. All GIS Data is provided in shapefile format. You will need WinZip or PKZip to unzip the files before use. You will also need special GIS software to use the data. A number of products are available including:

- ESRI products
  - ArcInfo
  - ArcEditor
  - ArcView
- ArcExplorer (95MB) free viewer

Other products may also be available from other vendors which may be suitable for your use.

DISCLAIMER: These products are for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.

UPDATE: Please read the documentation included with the download as it has recently changed.

**From Deeds Filed with Dallas County Clerk**

Survey Abstracts - Original Texas Land Grants.

Block IDs - Block identifiers for a platted city block. Now incorporate old Dallas City Block numbers.

Condo Parcels - Define a parcel that represents a condo property.

Current 2026 Parcels - Property boundaries legally defined by recorded deed at County Clerk's office for the current tax year.

Historic 2025 Parcels - Certified property boundaries legally defined by recorded deed at County Clerk's office for the 2024 tax year.

Historic 2024 Parcels - Certified property boundaries legally defined by recorded deed at County Clerk's office for the 2023 tax year.

Historic 2023 Parcels - Certified property boundaries legally defined by recorded deed at County Clerk's office for the 2022 tax year.

Historic 2022 Parcels - Certified property boundaries legally defined by recorded deed at County Clerk's office for the 2021 tax year.

Historic 2021 Parcels - Certified property boundaries legally defined by recorded deed at County Clerk's office for the 2020 tax year.

Parcel Dimensions - Legal dimensions of property boundaries.

Parcel IDs - Lot and tract numbers.

Subdivisions - Platted subdivision boundaries.

**From Ordinances Filed with City**

City Boundaries - Based on city ordinance.

Tax Increment Finance Zones - Economic development areas. Based on city ordinance.

Special District Boundaries - Utility district areas. Based on city ordinance.

Independent School Districts - Defined by each school district.

**Helpful Tip**

Currently, downloads include all properties within DCAD's assessment district. If you are interested in properties within a specific municipality or taxing district, use the other spatial data files representing these administrative units to apply a spatial filter. You may also filter by taxing district attribute when included in the file.

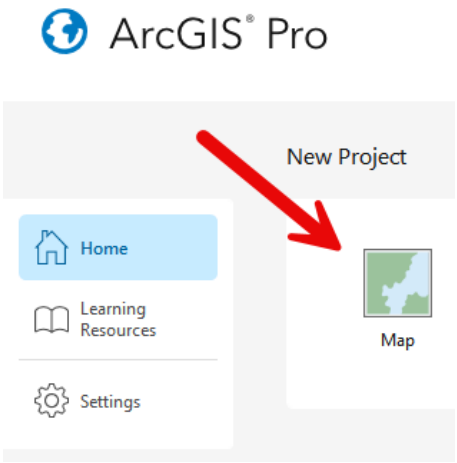
*Figure 3: Spatial data download options on the GIS Data Products page.*

# Combining Appraisal and Spatial Data

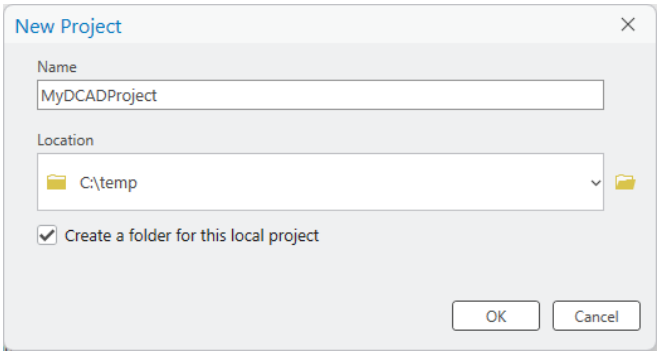
Using ArcGIS Pro, users can import appraisal data download files and combine them with unique parcel identifiers within spatial data download files. The following step-by-step instructions will guide users to generate a spatial appraisal database of properties. This document assumes you have downloaded appraisal roll and spatial data files, installed and configured ArcGIS Pro 3.x and have applied the appropriate license for the required tasks. For the purposes of this guide, we have downloaded and extracted the 2026 Data Files (No Values – Most Current Ownership) appraisal roll download and the 2026 current parcel shapefile and saved them each in the C:\temp\downloads folder.

## Create the ArcGIS Pro Project

1. Open ArcGIS Pro 3.x and create a new project (or start without a project template). Click on the new Map Template.

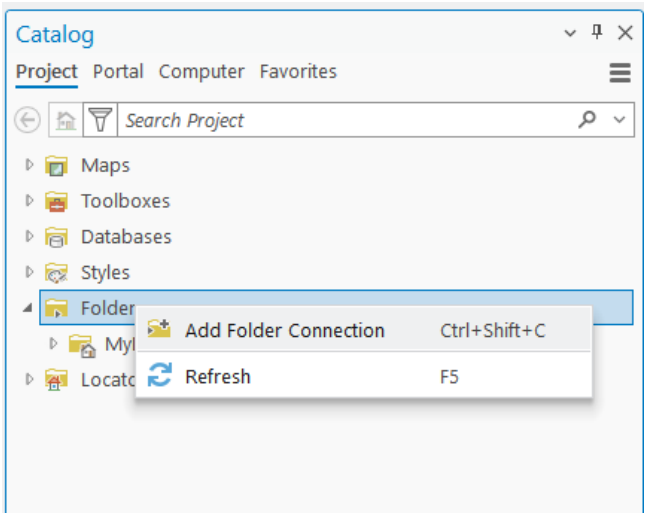



2. Save the project in a location where you may access it again later. Click **OK**.

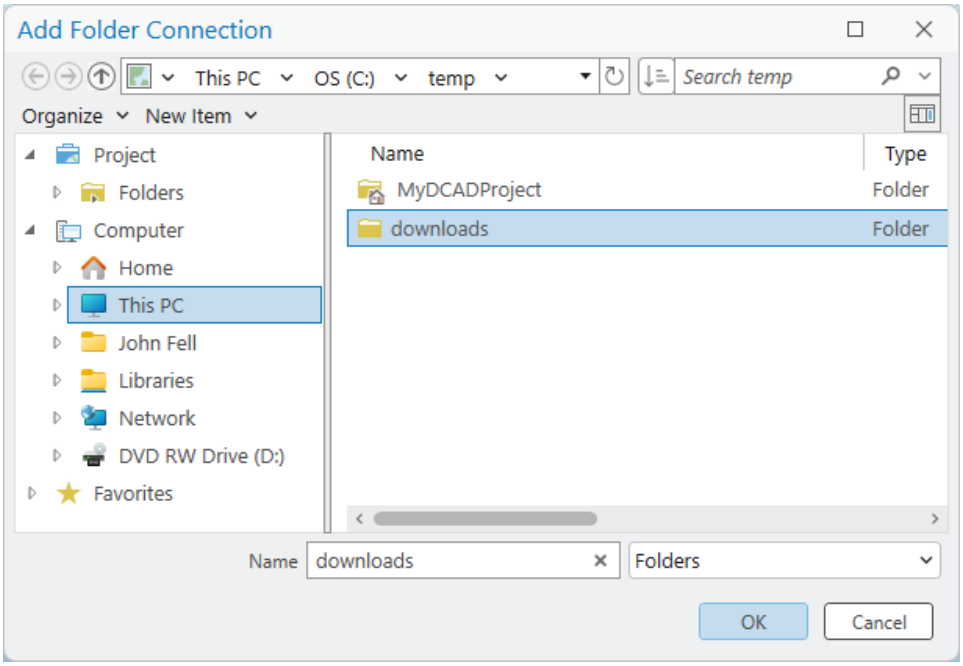


# Add the data in ArcGIS Pro

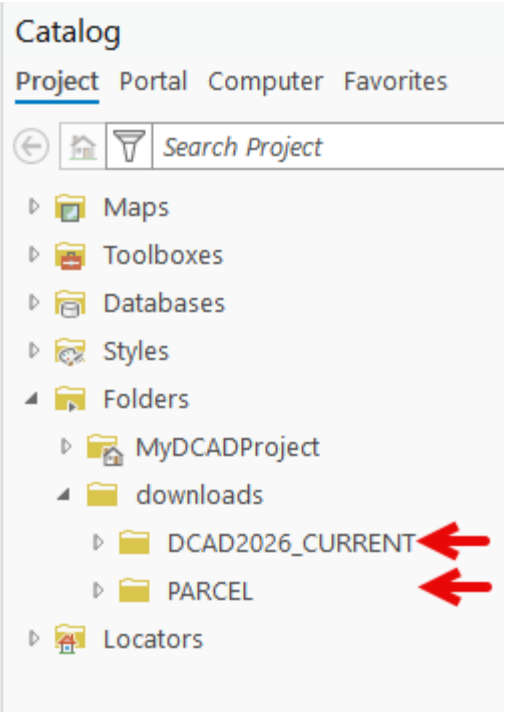
3. After the project opens, locate the catalog pane (usually to the right) and expand the Folders connection container. You will see the directory for your recently created project titled "MyDCADProject." Right-click on the Folders collection and select **Add folder connection**.



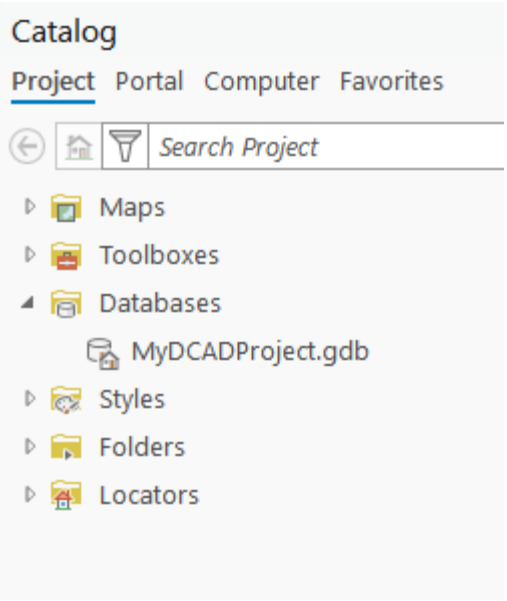

4. Select the downloads folder. Click **OK**. You should now see the downloads directory in your Folders container of the catalog pane.



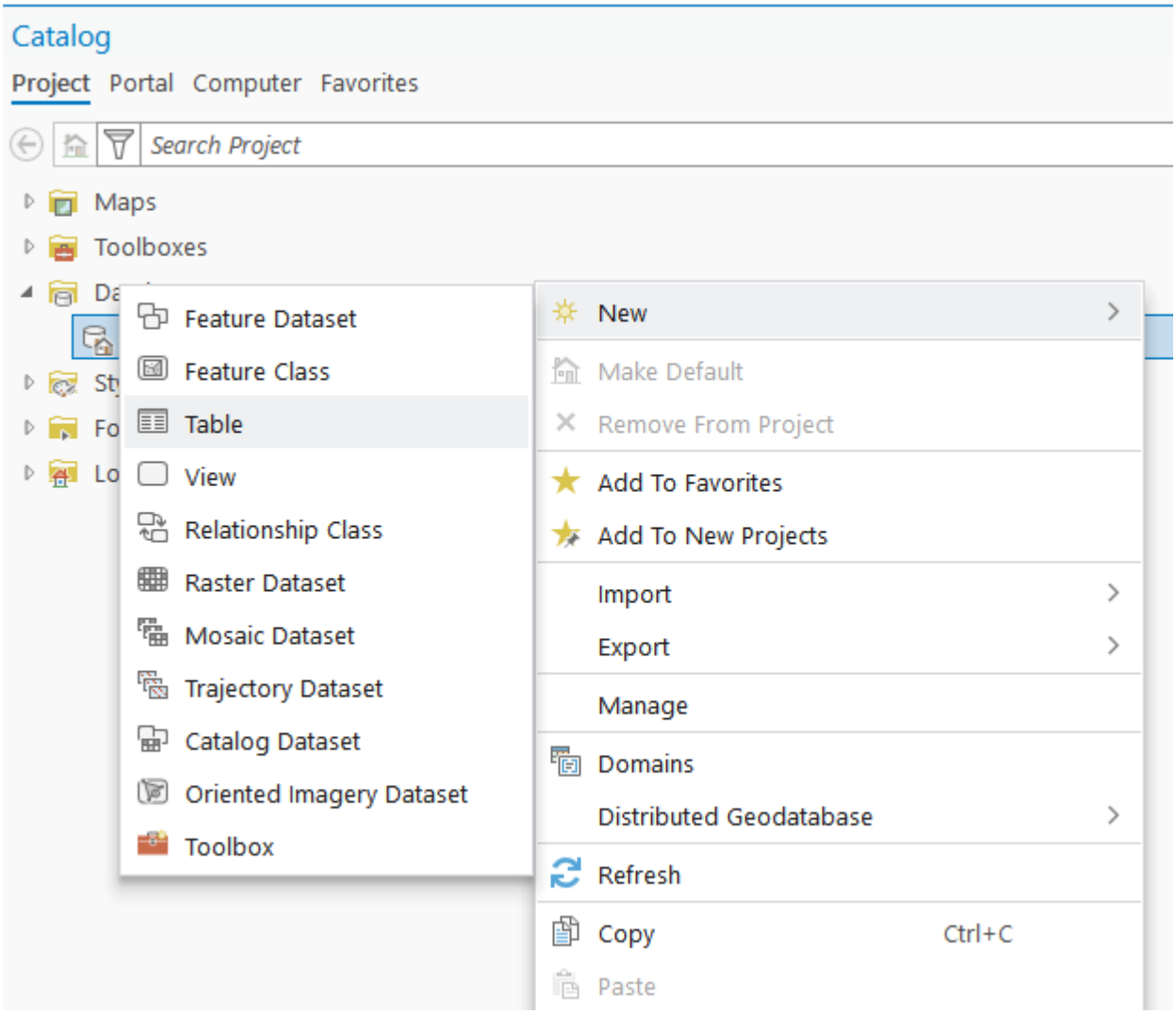
5. You will now see the directories of the appraisal roll and parcel downloads you extracted earlier. These will allow you to import the raw data into a new file geodatabase.



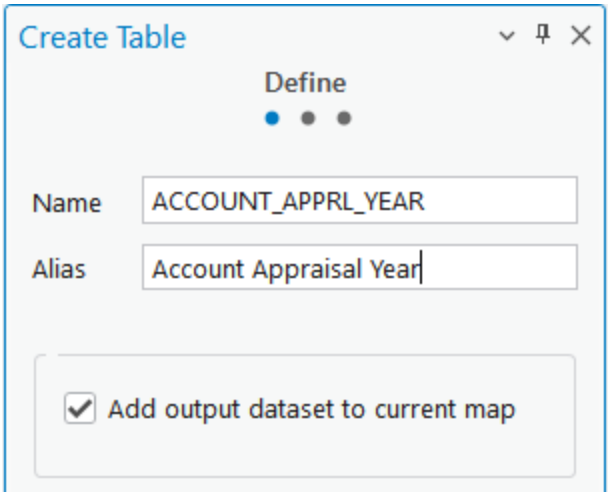

6. Expand the Databases container. Notice the default file geodatabase you will use for this project (or you may create a new file geodatabase or add an existing geodatabase).



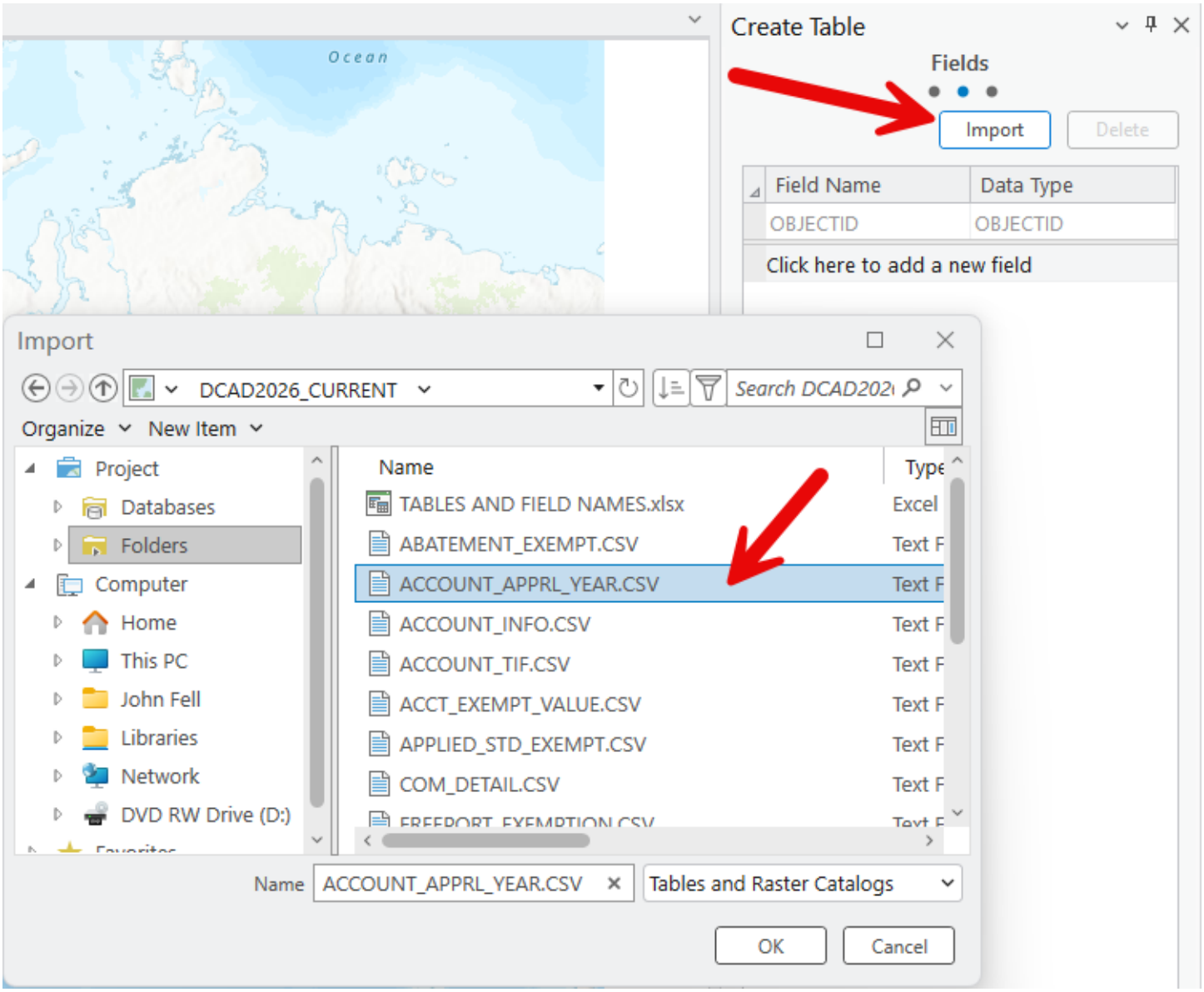

7. Right-click the file geodatabase you will use to combine the appraisal roll and spatial data and select **New → Table**. This table represents a container that you will use to import data from one of the .csv appraisal roll download files.




8. Name the table after the .csv file you would like to import (e.g., ACCOUNT_APPRL_YEAR). You may optionally provide an alias. Click **Next**.

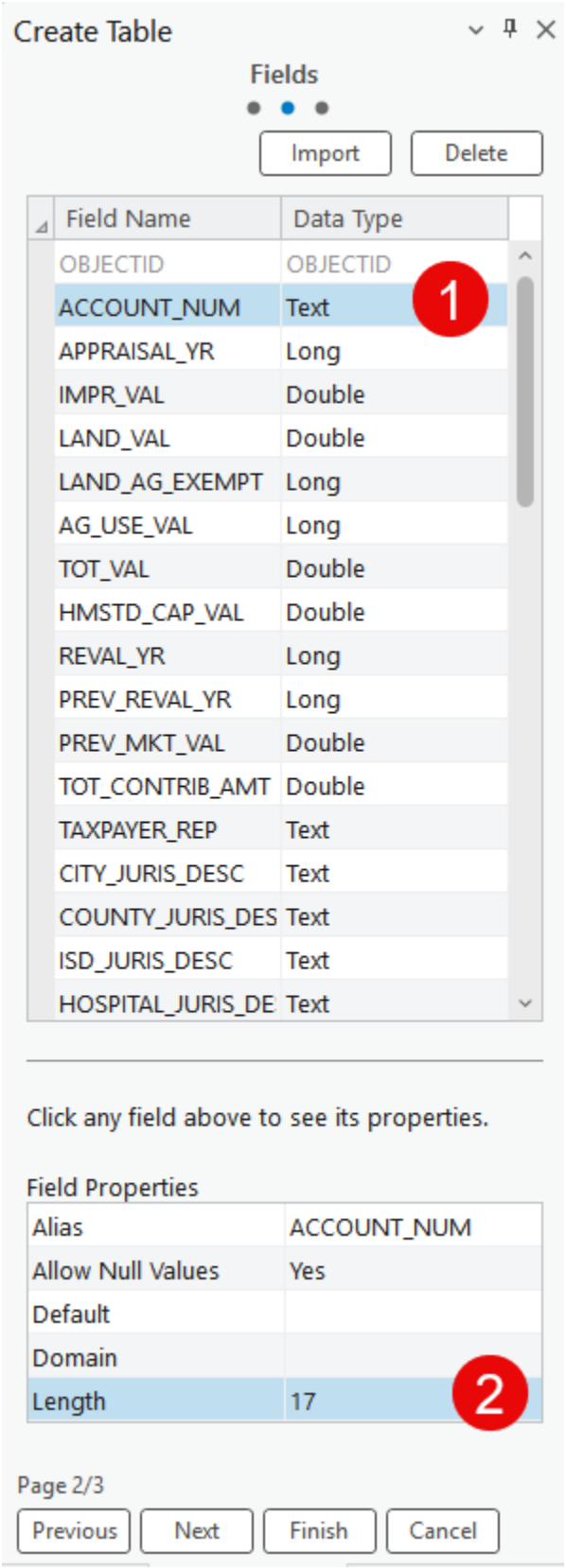


9. Click the import button and select the .csv file that contains the schema (or column definitions) you would like to use as the basis for your new table. Click **OK**.



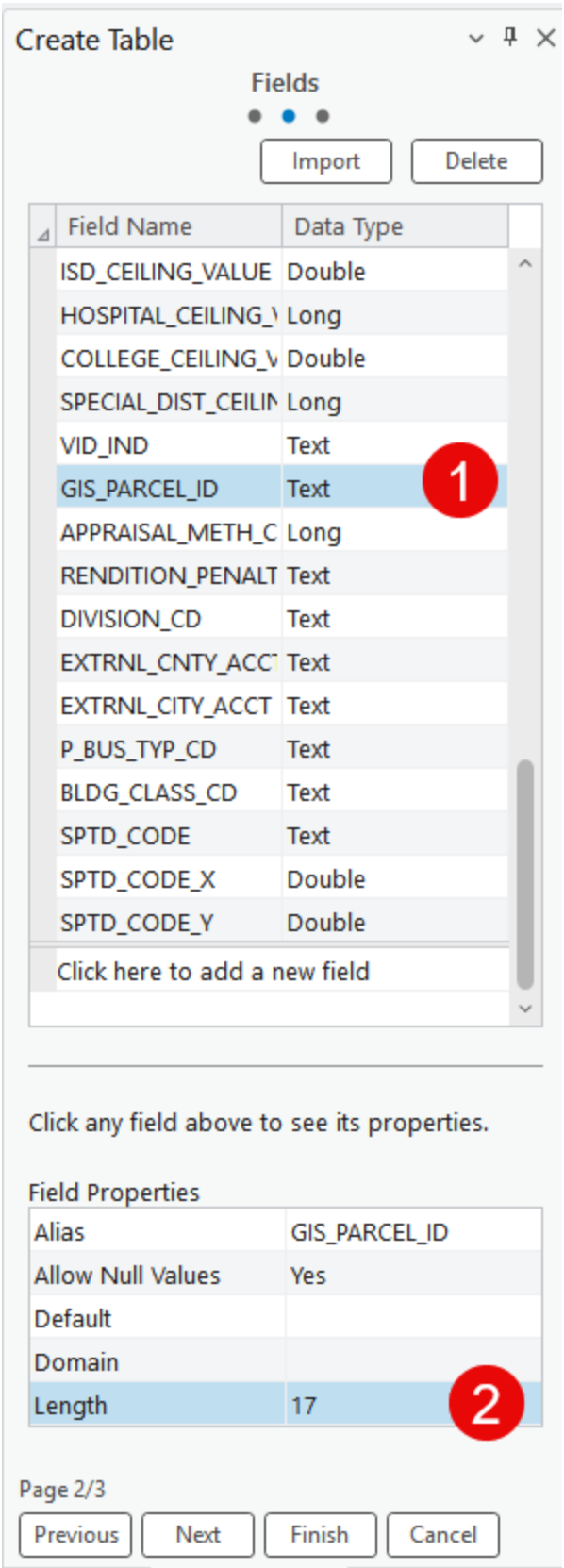

10. The field control will populate based on headers and values found in the .csv file. There are two fields that are important for combining appraisal and spatial data: ACCOUNT_NUM (which represents the DCAD account number) and GIS_PARCEL_ID (which represents the unique DCAD parcel identifier). Account numbers represent unique properties and are a combination of characters that define different location components (e.g., lot and block for platted properties). The GIS Parcel ID uniquely identifies a parcel within the district. This will be used to combine appraisal roll records with parcel shapefile records. Some parcels merge multiple geometries as well, but these represent only one property. These identifiers can be either a seventeen-digit numeric or alphanumeric value. Some, but not all, identifiers may contain letters as well as numbers. This can lead to abnormal results in some software

applications that try to interpret the DCAD Account Number or GIS Parcel ID data type based on a subset of values in the data column.




Notice in the field control of the Create Table tool that ArcGIS Pro infers many of the data types from a subset of the data within the .csv file.

In the field control, select the ACCOUNT_NUM column. Make sure the data type selected is **Text**. In the field properties dialogue at the bottom, change the text length to seventeen.




Scroll down within the field control and select the GIS_PARCEL_ID column. Repeat the process for the GIS_PARCEL_ID column making sure to apply the **Text** data type and assign a length of seventeen characters.

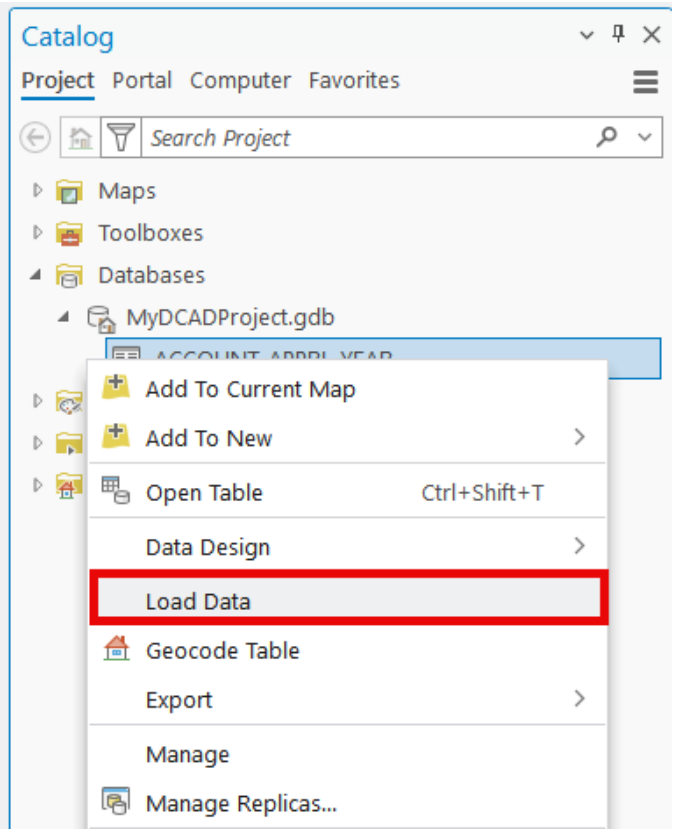
Using the scroll bar review the data types for each of the other fields. If you see **Big Integer** for any of the fields in the field control, change them to Long or Double because ArcGIS Pro may produce an error when processing this data type.

Click **Next**.

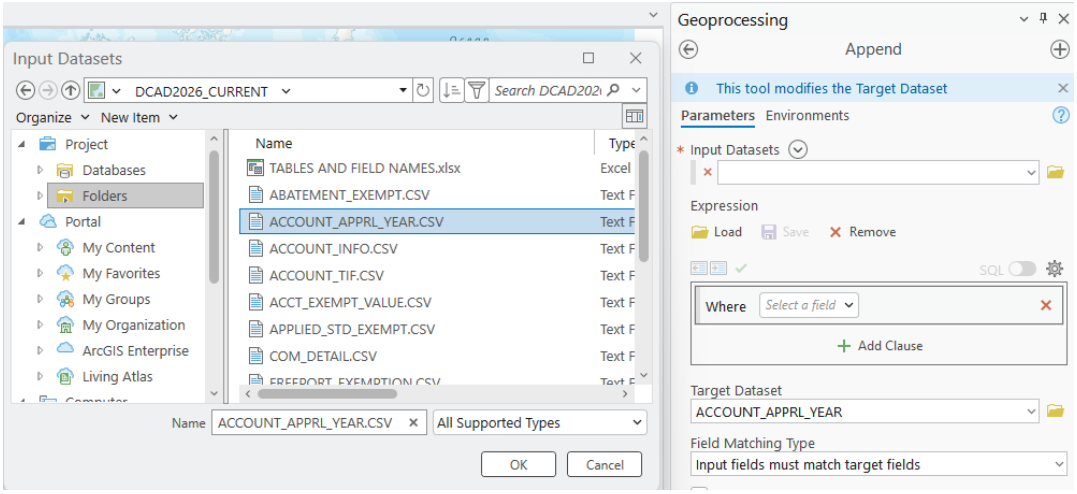
Leave the default configuration keyword on the subsequent dialogue and click **Finish**.

# Load the data in ArcGIS Pro

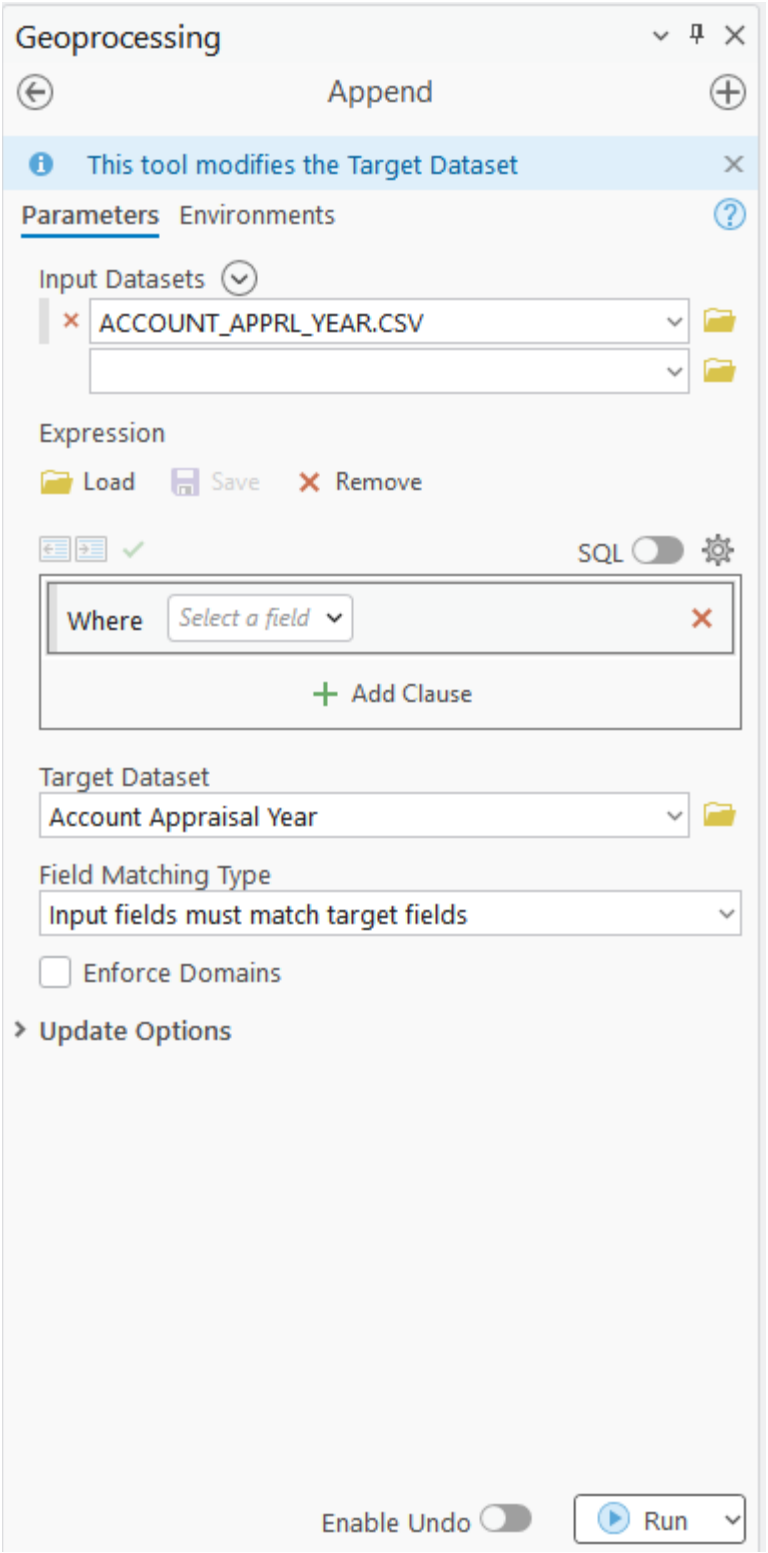
11. Right click the ACCOUNT_APPRL_YEAR table you just created within the project's file geodatabase (or file geodatabase you creates/added previously) and select **Load Data**.



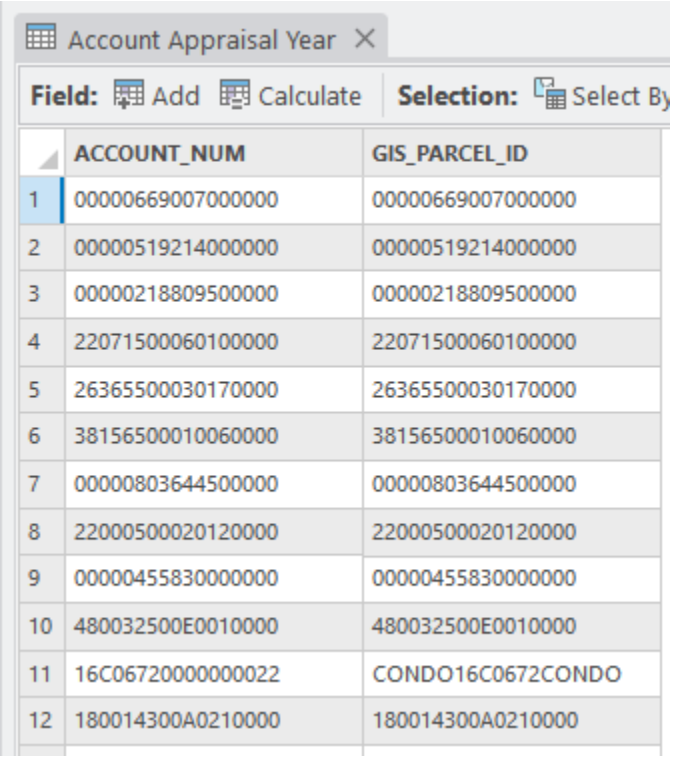

12. On the resulting Append dialogue, click on the input datasets browse button and navigate to the folder connection where the appraisal roll download .csv files are located. Select the ACCOUNT_APPRL_YEAR.csv file. Click **OK**.



13. Select the ACCOUNT_APPRL_YEAR table as the Target Dataset and leave the field matching type as the default option provided. Click **Run.** This process may take some time depending upon the available CPU and RAM resources on the device used for the Append geoprocessing tool. This is due to the volume of data rows in the .csv file.



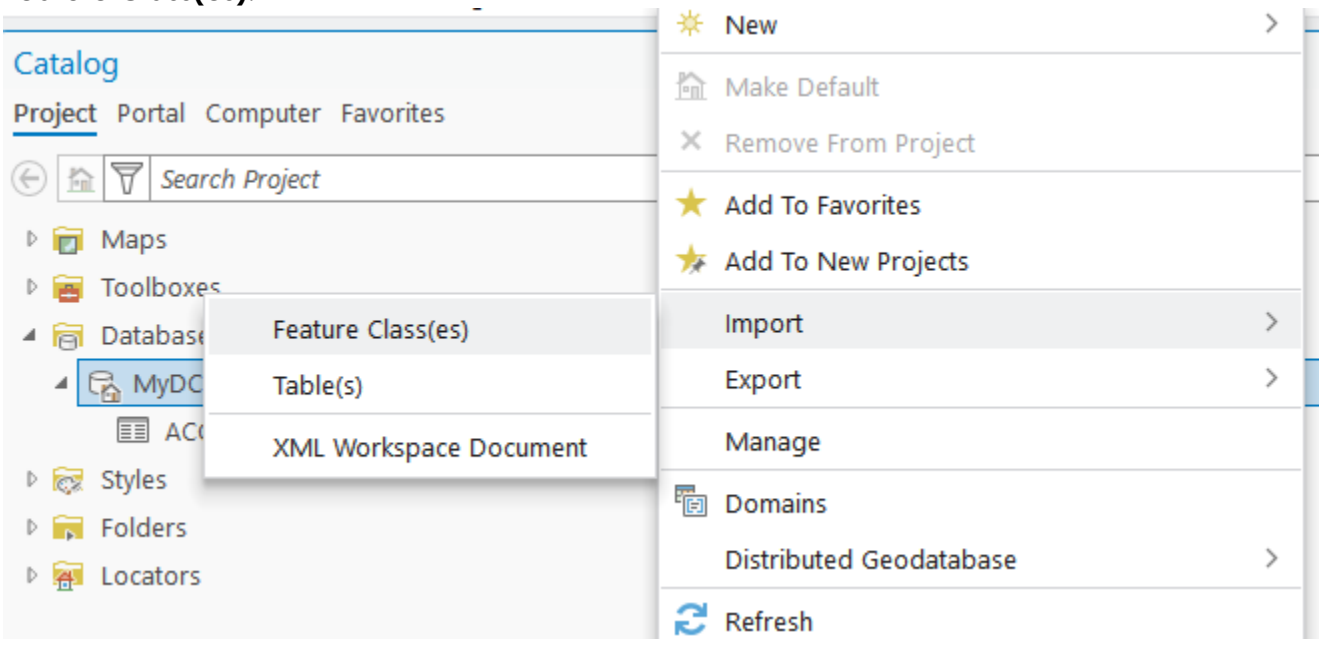
14. Open the attribute table and confirm that you formatted the ACCOUNT_NUM and GIS_PARCEL_ID columns properly. If so, you can move on to the next step. Otherwise, repeat the steps to create the appraisal roll data table until the formatting appears correct for these columns. The ACCOUNT_NUM and GIS_PARCEL_ID columns should be comparable to the formatted columns that appear in the image below.



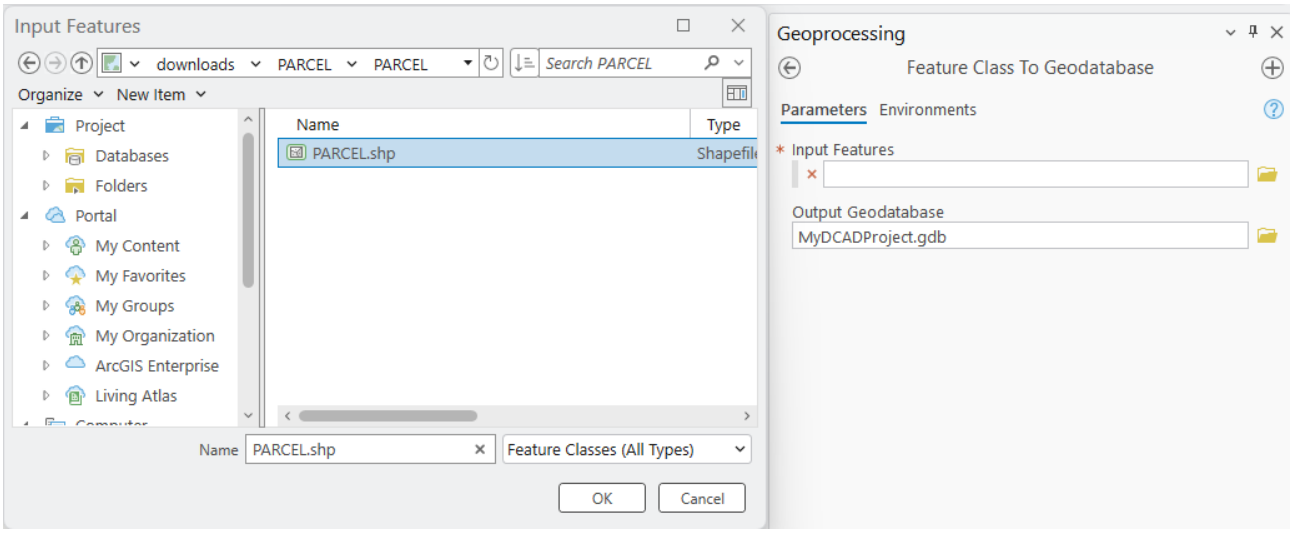

| | ACCOUNT_NUM | GIS_PARCEL_ID |
|---|---|---|
| 1 | 00000669007000000 | 00000669007000000 |
| 2 | 00000519214000000 | 00000519214000000 |
| 3 | 00000218809500000 | 00000218809500000 |
| 4 | 22071500060100000 | 22071500060100000 |
| 5 | 26365500030170000 | 26365500030170000 |
| 6 | 38156500010060000 | 38156500010060000 |
| 7 | 00000803644500000 | 00000803644500000 |
| 8 | 22000500020120000 | 22000500020120000 |
| 9 | 00000455830000000 | 00000455830000000 |
| 10 | 480032500E0010000 | 480032500E0010000 |
| 11 | 16C06720000000022 | CONDO16C0672CONDO |
| 12 | 180014300A0210000 | 180014300A0210000 |

Repeat the previous steps for adding any additional tables from .csv files to the file geodatabase. You should make sure that tables you create from .csv files with the ACCOUNT_NUM and GIS_PARCEL_ID resemble those in this image.

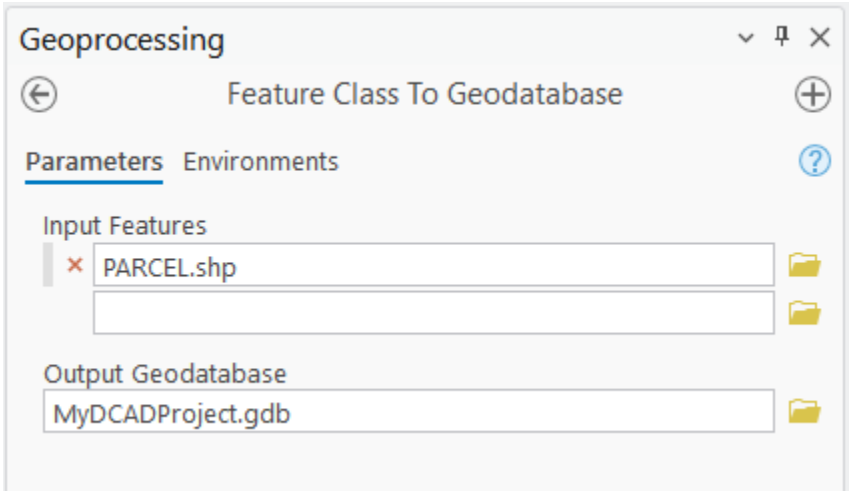
15. Import the parcel shapefile by right clicking the file geodatabase and selecting **Import → Feature Class(es)**.



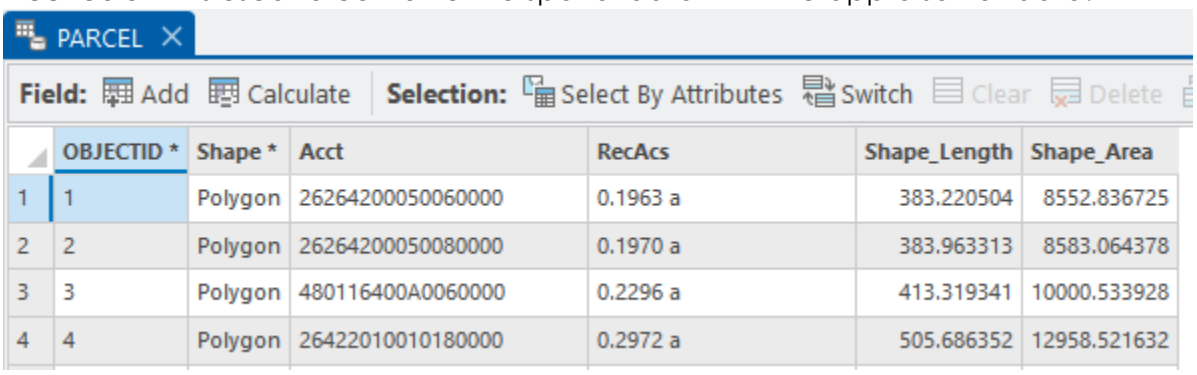
16. In the Feature Class to Geodatabase geoprocessing tool dialogue click on the Input Features browse button and navigate to the PARCEL.shp file located in the download's directory. Select the PARCEL.shp file and Click **OK.**




17. Select the PARCEL.shp file as the input features Click **Run**.



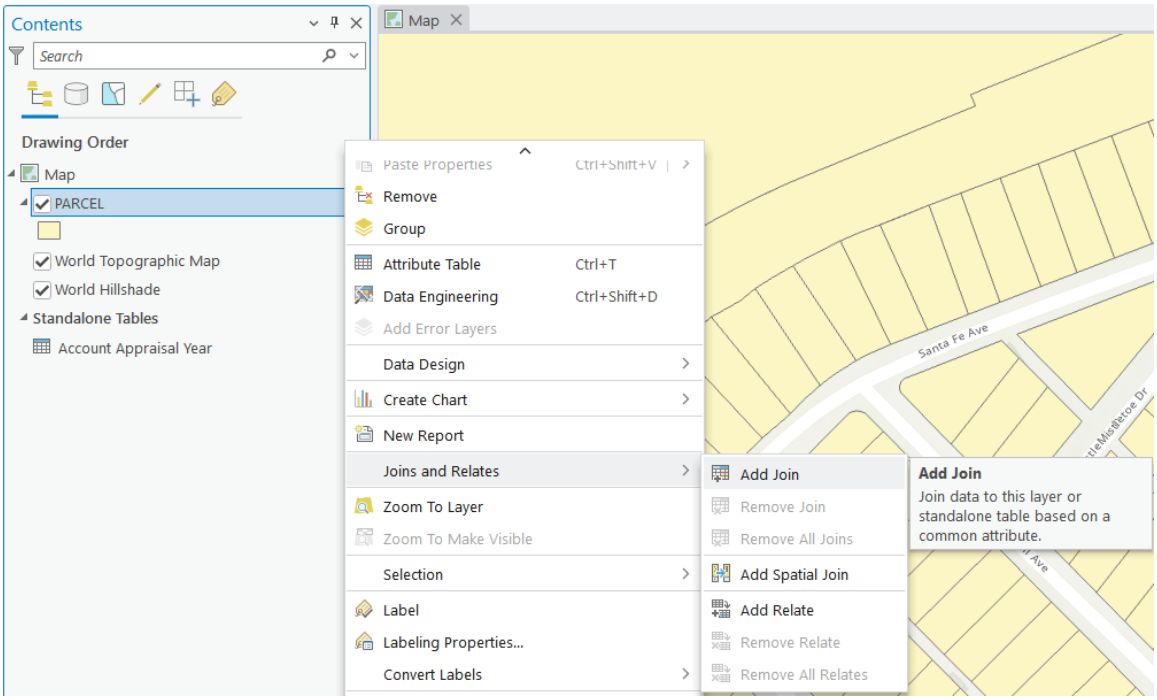

18. When the PARCEL feature class is successfully imported, open the attribute table, and confirm that you see columns formatted similarly to those in the image below. The attribute table's **Acct** column is used to combine the spatial data with the appraisal roll data.



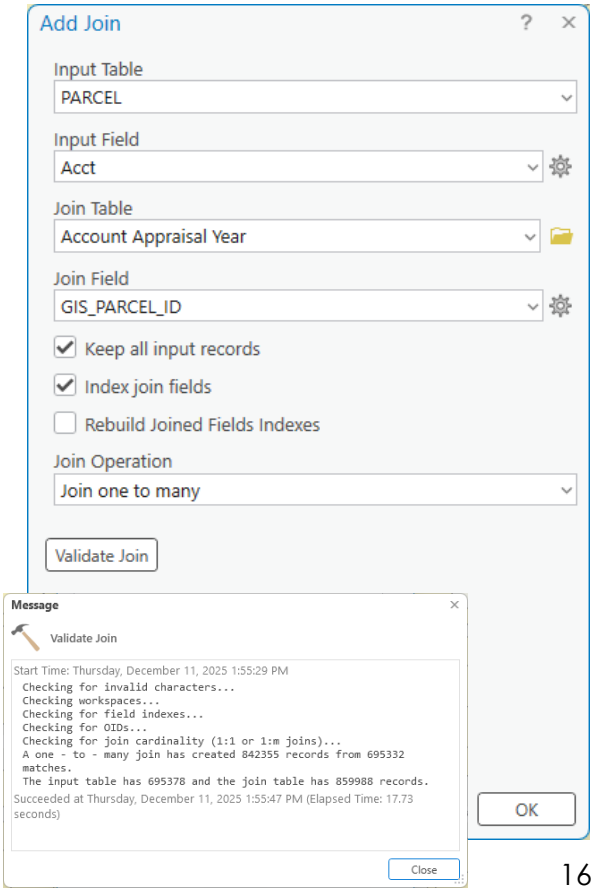

| | OBJECTID * | Shape * | Acct | RecAcs | Shape_Length | Shape_Area |
|---|---|---|---|---|---|---|
| 1 | 1 | Polygon | 26264200050060000 | 0.1963 a | 383.220504 | 8552.836725 |
| 2 | 2 | Polygon | 26264200050080000 | 0.1970 a | 383.963313 | 8583.064378 |
| 3 | 3 | Polygon | 480116400A0060000 | 0.2296 a | 413.319341 | 10000.533928 |
| 4 | 4 | Polygon | 26422010010180000 | 0.2972 a | 505.686352 | 12958.521632 |

# Combine the data in ArcGIS Pro

19. Close the parcel attribute table and right click the PARCEL feature class and select **Joins and Relates → Add Join.**

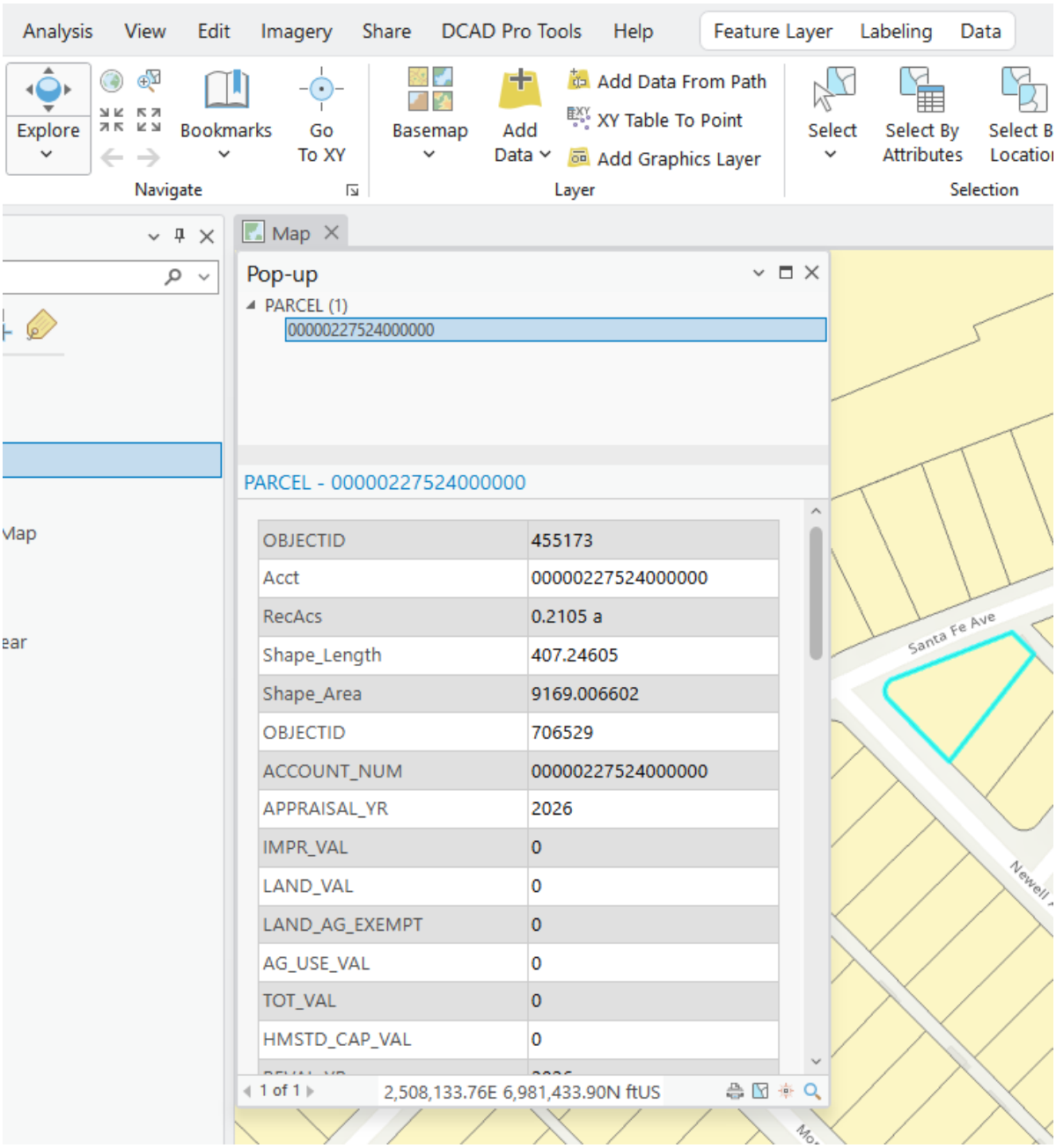



20. In the Add Join dialogue box with PARCEL as the input table, enter the input field **Acct** and select the ACCOUNT_APPRL_YEAR table if not already selected as the join table. Select the GIS_PARCEL_ID column as the join field. Check the boxes for **Keep all input records** and **index join fields**. Indexes will help to improve identification and map navigation performance. Select **Join one to many** for the join operation. DCAD models the parcel to account relationship with one polygon feature for one or more DCAD properties residing in the same location. This translates to a one-to-many, cardinal relationship, a fundamental database concept. For example, a residential parcel may represent a condiminium building with multiple units. Clicking **Validate Join** will produce a join report reporting the number of matches. Note: This operation does not present a progress indicator to the user. If the result is acceptable, close the validate join message and click **OK** on the add join dialogue.



# Identify the data in ArcGIS Pro

21. Once the join process is completed, using the Explore tool, identify or left click on a parcel. Verify that the columns in both the parcel feature class and the joined account appraisal year table are visible in the pop-up dialogue box. In this example, there are zero market values because of the data that we selected for import.



# Disclaimer

This product is for informational purposes only and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.

# Support

If you need assistance using or interpreting the Data Products, please contact PubRel@dcad.org. If you need assistance using or interpreting the GIS Data Products or importing appraisal roll and spatial data into ArcGIS Pro, please contact GisWeb@dcad.org.

# Revision History

| Author | Version | Description | Date |
|---|---|---|---|
| DCAD GIS Division | 1.0.0 | Initial Draft | 12/11/2025 |