

EXCEL TABLES AND DATA MANAGEMENT

Agenda

Creating and Formatting
Excel Tables

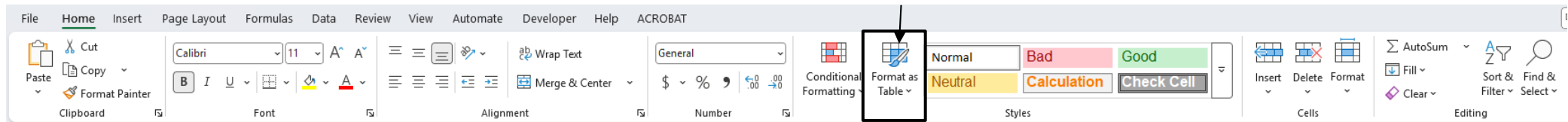
Using Slicers for Interactive
Filtering

Referencing table data within
Formulas and Functions

Creating and Formatting Excel Tables

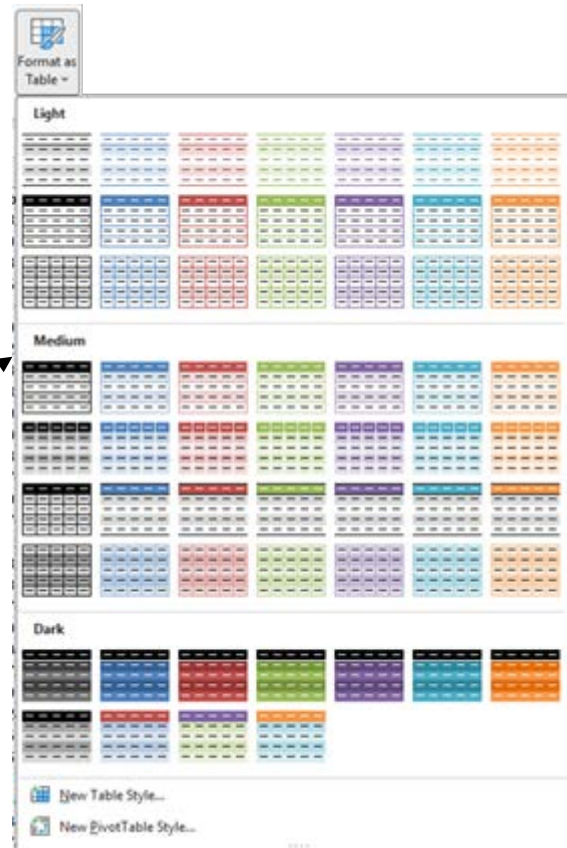
- Excel Tables are a specific built-in object in Microsoft Excel used to manage and analyze data in a structured way.

Easy to create, select just one cell anywhere within the table, then click this button



Creating and Formatting Excel Tables

The exact color you choose is irrelevant; they all work the same and are easily changed later. Just pick one of them to create the Excel Table.



Creating and Formatting Excel Tables

There is now a new, context sensitive Ribbon for Excel Tables.

Table Name: Table1

Table Style Options

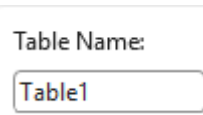
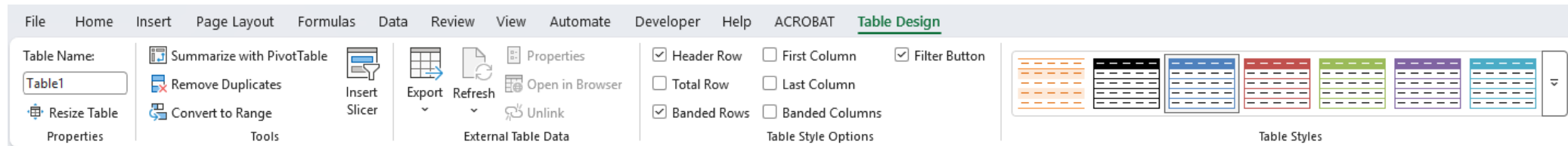
Table Styles

Parcel Number	Parcel Class	SubdivDescr	Occupancy	Main_Style_Descr	Gross_Bldg_Area	Main_Condition_Descr	Main_Basement_Area	Main_Air_Conditioning_Descr	Total_Acres
13-0007100	Residential	NOVA	Single-Family / Owner Occupied	1 Story Frame	1232	Normal	1232.0	Yes	9.3
44-0182150	Residential	CLYDE SUBDIVISION	Single-Family / Owner Occupied	Mfd Home (Single)	960	Normal	0.0	Yes	1.1
11-0147000	Residential	CROSS S SUBDIVISION	Single-Family / Owner Occupied	Mfd Home (Multi-Section)	2280	Normal	0.0	Yes	10.0
52-0190000	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	Mfd Home (Multi-Section)	1456	Normal	0.0	Yes	7.0
52-0190100	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	Mfd Home (Multi-Section)	2316	Good	0.0	Yes	8.9
52-0190300	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	1 Story Frame	1509	Normal	1482.0	Yes	8.9
52-0190400	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	1 Story Frame	1823	Normal	1508.0	Yes	11.0
52-0190600	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	Mfd Home (Multi-Section)	1680	Normal	0.0	Yes	10.4
52-0190700	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	Mfd Home (Multi-Section)	1232	Normal	0.0	Yes	12.6
52-0190800	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	1 Story Frame	1203	Normal	1189.0	Yes	13.0
52-0190900	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	1 Story Frame	1406	Above Normal	1392.0	Yes	19.2
52-0191000	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	Mfd Home (Multi-Section)	1988	Normal	0.0	Yes	10.0
52-0191100	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	1 1/2 Story Frame	2276	Normal	1144.0	Yes	17.8
52-0191200	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	1 Story Frame	2398	Normal	789.0	Yes	19.7
52-0191300	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	Mfd Home (Multi-Section)	1876	Normal	0.0	Yes	12.4
52-0192100	Residential	HIGH COUNTRY ESTATES 3RD	Single-Family / Owner Occupied	1 Story Frame	1512	Normal	1512.0	Yes	28.3
52-0192200	Residential	HIGH COUNTRY ESTATES 3RD	Single-Family / Owner Occupied	1 Story Frame	1132	Normal	1132.0	Yes	20.0
52-0192300	Residential	HIGH COUNTRY ESTATES 3RD	Single-Family / Owner Occupied	1 Story Log-Pine	2730	Above Normal	1134.0	Yes	20.0
52-0192400	Residential	HIGH COUNTRY ESTATES 3RD	Single-Family / Owner Occupied	1 Story Frame	1476	Normal	1460.0	Yes	25.5
52-0192500	Residential	HIGH COUNTRY ESTATES 3RD	Single-Family / Owner Occupied	1 Story Frame	1400	Normal	1400.0	Yes	14.9
52-0193100	Residential	HIGH COUNTRY EST 3RD REPLAT LOTS 6-9	Single-Family / Owner Occupied	Mfd Home (Multi-Section)	1904	Normal	0.0	Yes	12.1
52-0193300	Residential	HIGH COUNTRY EST 3RD REPLAT LOTS 6-9	Single-Family / Owner Occupied	1 Story Frame	1472	Normal	1472.0	Yes	11.3
51-0145000	Residential	ENTZEL ACRES 11TH SUBDIVISION REPLAT	Single-Family / Owner Occupied	1 Story Frame	2091	Normal	2091.0	Yes	10.3
51-0145140	Residential	ENTZEL ACRES 11TH	Single-Family / Owner Occupied	1 Story Frame	1824	Normal	1824.0	Yes	1.5
51-0145120	Residential	ENTZEL ACRES 11TH	Single-Family / Owner Occupied	1 Story Frame	1350	Normal	1350.0	Yes	1.6
51-0145100	Residential	ENTZEL ACRES 11TH	Single-Family / Owner Occupied	1 Story Frame	2267	Normal	1146.0	Yes	1.6
51-0145080	Residential	ENTZEL ACRES 11TH	Single-Family / Owner Occupied	1 Story Frame	2017	Normal	2017.0	Yes	1.6
51-0145060	Residential	ENTZEL ACRES 11TH	Single-Family / Owner Occupied	1 Story Frame	2414	Normal	1934.0	Yes	1.5
51-0145040	Residential	ENTZEL ACRES 11TH SUBDIVISION REPLAT	Single-Family / Owner Occupied	1 Story Frame	1934	Normal	1934.0	Yes	2.0
52-0250005	Residential	WINDSOR ESTATES 1ST	Single-Family / Owner Occupied	Mfd Home (Multi-Section)	1974	Normal	0.0	Yes	7.0
52-0250010	Residential	WINDSOR ESTATES 1ST	Single-Family / Owner Occupied	Mfd Home (Multi-Section)	2089	Above Normal	1113.0	Yes	7.0
52-0250015	Residential	WINDSOR ESTATES 1ST	Single-Family / Owner Occupied	Split Level Frame	1740	Normal	1740.0	Yes	7.0
52-0250020	Residential	WINDSOR ESTATES 1ST	Single-Family / Owner Occupied	Mfd Home (Multi-Section)	1736	Above Normal	0.0	Yes	8.5

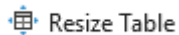
You will also notice our table is now colored according to the color chosen.

Filter buttons are automatically turned on.

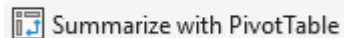
Creating and Formatting Excel Tables



Give table a name (no spaces allowed). Not required for temporary tables but I do recommend for permanent or long-term tables

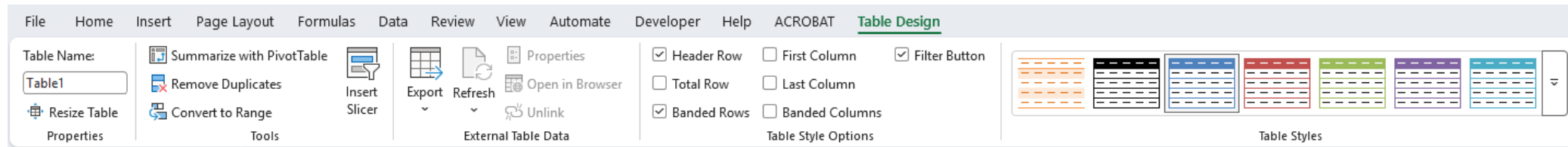


Resize the Excel table. Rarely needed but if Excel doesn't automatically size you may need to use it



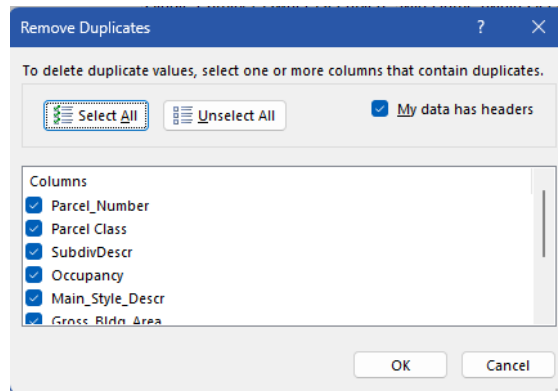
Create a PivotTable using this table as the data source (this will be covered in the Pivot Table and Pivot Chart class.

Creating and Formatting Excel Tables



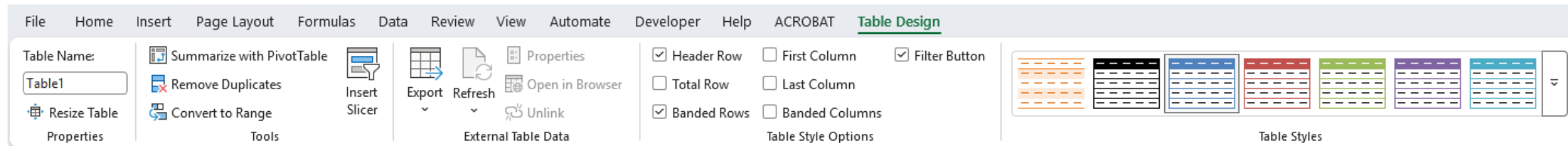
 Remove Duplicates

Remove duplicate records within the Excel Table



Gives you an option dialog to define criteria for duplicates

Creating and Formatting Excel Tables



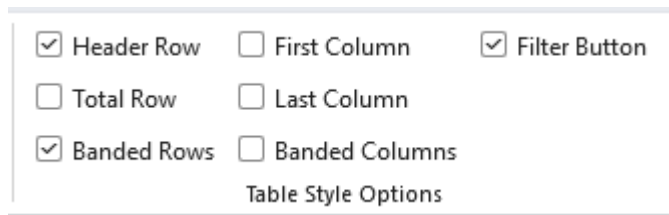
Convert to Range

Convert Excel Table back to range



Insert
Slicer

Insert Slicers (more on these coming up)



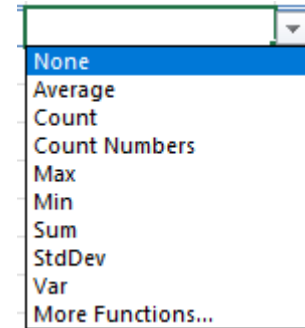
Turn on or off formatting options for Excel Table

- Total Row – Turn on by checking the Total Row box

[illegible]

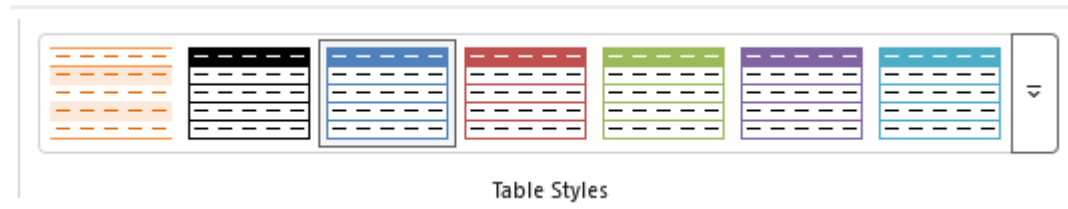
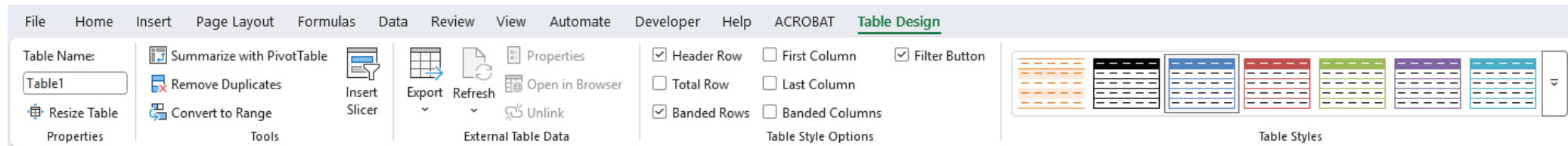
Creating and Formatting Excel Tables

- You can choose the function for each column in the total row

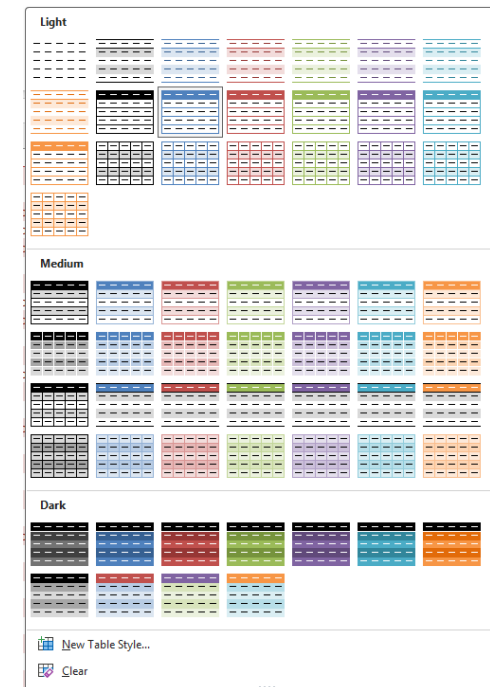


- Note: These functions are subtotals making them respond to filtering and re-calculate based on the filters chosen.

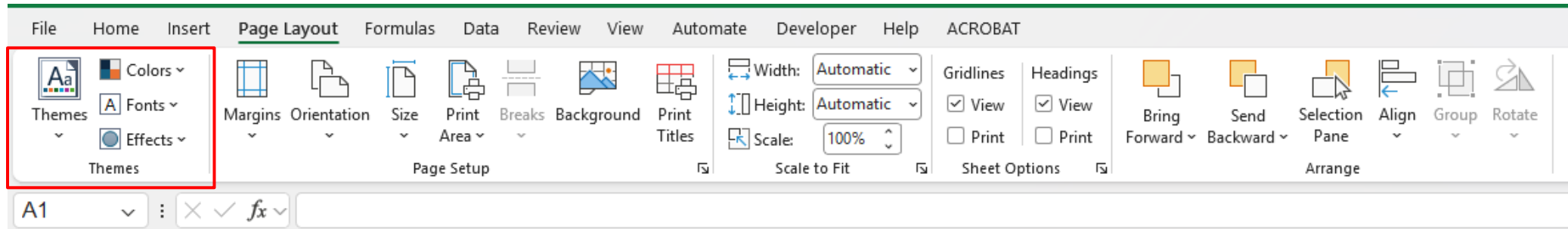
Creating and Formatting Excel Tables



Change table color or even create your own table color styles

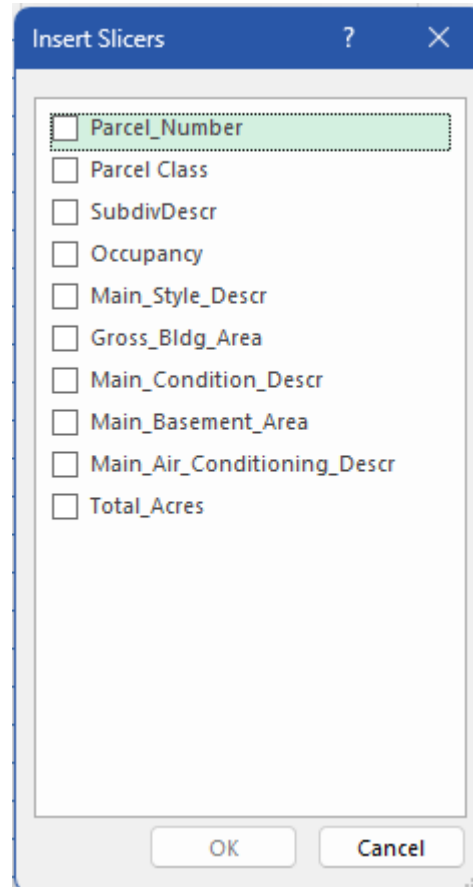


Creating and Formatting Excel Tables



You can get more colors by choosing a different Theme or use the Colors button. This will change the color options available for applying to Excel Tables or Pivot Tables.

Using Slicers for Interactive Filtering



Turning Slicers on is easy. Just click the button and choose which fields you want slicers for.

You can add more so don't feel you need to check every box right now.

Using Slicers for Interactive Filtering

File Home Insert Page Layout Formulas Data Review View Automate Developer Help ACROBAT Slicer									
Slicer Caption: Main_Air_Conditioning		Report Connections		Slicer Styles			Arrange		
Slicer		Buttons			Size				
Main_Air_Conditioning		Columns: 1		Height: 2.76"		Width: 2"			
Main_Air_Conditioning		Height: 0.26"		Width: 1.81"					
A	B	C	D	E	F	G	H	I	J
Parcel Number	Parcel Class	SubdivDescr	Occupancy	Main_Style_Descr	Gross_Bldg_Area	Main_Condition_Descr	Ma		
13-0007100	Residential	NONE	Single-Family / Owner Occupied	1 Story Frame	1232	Normal	123		
44-0182150	Residential	CLYDE SUBDIVISION	Single-Family / Owner Occupied	Mfd Home (Single)	960	Normal	0.0		
11-0147000	Residential	CROSS S SUBDIVISION	Single-Family / Owner Occupied	Mfd Home (Multi-Section)	2280	Normal	0.0		
52-0190000	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	Mfd Home (Multi-Section)	1456	Normal	0.0		
52-0190100	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	Mfd Home (Multi-Section)	2316	Good	0.0		
52-0190300	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	1 Story Frame	1509	Normal	148		
52-0190400	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	1 Story Frame	1823	Normal	150		
52-0190600	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	Mfd Home (Multi-Section)	1680	Normal	0.0		
52-0190700	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	1 Story Frame	2	Normal	0.0		
52-0190800	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	1 1/2 Story A-Frame	3	Normal	118		
52-0190900	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	1 1/2 Story Brick	6	Above Normal	139		
52-0191000	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	1 1/2 Story	8	Normal	0.0		
52-0191100	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	1 1/2 Story		Normal	114		
52-0191200	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	1 1/2 Story		Normal	789		
52-0191300	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	1 1/2 Story		Normal	0.0		
52-0192100	Residential	HIGH COUNTRY ESTATES 3RD	Single-Family / Owner Occupied	1 1/2 Story		Normal	151		
52-0192200	Residential	HIGH COUNTRY ESTATES 3RD	Single-Family / Owner Occupied	1 1/2 Story		Normal	113		
52-0192300	Residential	HIGH COUNTRY ESTATES 3RD	Single-Family / Owner Occupied	1 3/4 Story		Excellent	113		
52-0192400	Residential	HIGH COUNTRY ESTATES 3RD	Single-Family / Owner Occupied	1 3/4 Story		Fair	146		
52-0192500	Residential	HIGH COUNTRY ESTATES 3RD	Single-Family / Owner Occupied	1 3/4 Story		Good	140		
52-0193100	Residential	HIGH COUNTRY EST 3RD REPLAT LOTS 6-9	Single-Family / Owner Occupied	1 Story A-Frame		Normal	0.0		
52-0193300	Residential	HIGH COUNTRY EST 3RD REPLAT LOTS 6-9	Single-Family / Owner Occupied	1 Story A-Frame		Normal	147		
51-0145000	Residential	ENTZEL ACRES 11TH SUBDIVISION REPLAT	Single-Family / Owner Occupied	1 Story Frame		Observed	209		
51-0145140	Residential	ENTZEL ACRES 11TH	Single-Family / Owner Occupied	1 Story Frame		Poor	182		
51-0145120	Residential	ENTZEL ACRES 11TH	Single-Family / Owner Occupied	1 Story Frame			135		
51-0145100	Residential	ENTZEL ACRES 11TH	Single-Family / Owner Occupied	1 Story Frame			114		
51-0145080	Residential	ENTZEL ACRES 11TH	Single-Family / Owner Occupied	1 Story Frame			201		
51-0145060	Residential	ENTZEL ACRES 11TH	Single-Family / Owner Occupied	1 Story Frame			193		
51-0145040	Residential	ENTZEL ACRES 11TH SUBDIVISION REPLAT	Single-Family / Owner Occupied	1 Story Frame			193		
52-0250005	Residential	WINDSOR ESTATES 1ST	Single-Family / Owner Occupied	Mfd Home (Multi-Section)	1774	Normal	0.0		
52-0250010	Residential	WINDSOR ESTATES 1ST	Single-Family / Owner Occupied	Mfd Home (Multi-Section)	2089	Above Normal	111		
52-0250015	Residential	WINDSOR ESTATES 1ST	Single-Family / Owner Occupied	Split Level Frame	1740	Normal	174		
52-0250020	Residential	WINDSOR ESTATES 1ST	Single-Family / Owner Occupied	Mfd Home (Multi-Section)	1726	Above Normal	0.0		

Slicers hover over the data
so they can be placed
anywhere

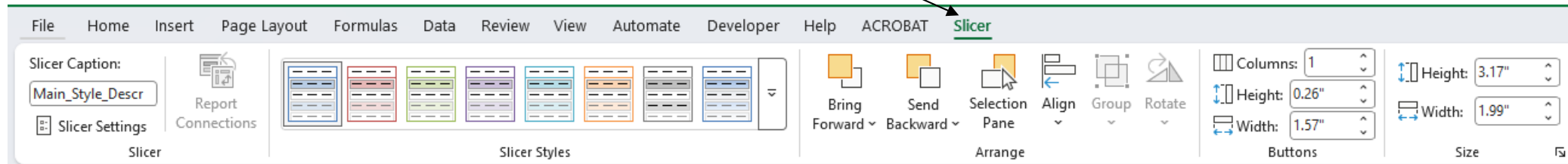
Using Slicers for Integrative Filtering

WINDSOR ESTATES 1ST						
	Parcel Number	Parcel Class	SubdivDescr	Occupancy	Main_Style_Descr	Gross_Bldg_Area
1	13-0007100	Residential	NONE	Single-Family / Owner Occupied	1 Story Frame	1232
2	44-0182150	Residential	CLYDE SUBDIVISION	Single-Family / Owner Occupied	Mld Home (Single)	960
3	11-0147000	Residential	CROSS S SUBDIVISION	Single-Family / Owner Occupied	Mld Home (Multi-Section)	2280
4	52-0190000	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	Mld Home (Multi-Section)	1456
5	52-0190100	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	Mld Home (Multi-Section)	2316
6	52-0190300	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	1 Story Frame	1509
7	52-0190400	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	1 Story Frame	1823
8	52-0190600	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	Mld Home (Multi-Section)	1680
9	52-0190700	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	Mld Home (Multi-Section)	1232
10	52-0190800	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	1 Story Frame	1203
11	52-0190900	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	1 Story Frame	1406
12	52-0191000	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	Mld Home (Multi-Section)	1988
13	52-0191100	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	1 1/2 Story Frame	2276
14	52-0191200	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	1 Story Frame	2398
15	52-0191300	Residential	HIGH COUNTRY ESTATES	Single-Family / Owner Occupied	Mld Home (Multi-Section)	1876
16	52-0192100	Residential	HIGH COUNTRY ESTATES 3RD	Single-Family / Owner Occupied	1 Story Frame	1512
17	52-0192200	Residential	HIGH COUNTRY ESTATES 3RD	Single-Family / Owner Occupied	1 Story Frame	1132
18	52-0192300	Residential	HIGH COUNTRY ESTATES 3RD	Single-Family / Owner Occupied	1 Story Log-Pine	2730
19	52-0192400	Residential	HIGH COUNTRY ESTATES 3RD	Single-Family / Owner Occupied	1 Story Frame	1476
20	52-0192500	Residential	HIGH COUNTRY ESTATES 3RD	Single-Family / Owner Occupied	1 Story Frame	1400
21	52-0193100	Residential	HIGH COUNTRY EST 3RD REPLAT LOTS 6-9	Single-Family / Owner Occupied	Mld Home (Multi-Section)	1904
22	52-0193300	Residential	HIGH COUNTRY EST 3RD REPLAT LOTS 6-9	Single-Family / Owner Occupied	1 Story Frame	1472
23	51-0145000	Residential	ENTZEL ACRES 11TH SUBDIVISION REPLAT	Single-Family / Owner Occupied	1 Story Frame	2091
24	51-0145140	Residential	ENTZEL ACRES 11TH	Single-Family / Owner Occupied	1 Story Frame	1824
25	51-0145120	Residential	ENTZEL ACRES 11TH	Single-Family / Owner Occupied	1 Story Frame	1350
26	51-0145100	Residential	ENTZEL ACRES 11TH	Single-Family / Owner Occupied	1 Story Frame	2267
27	51-0145080	Residential	ENTZEL ACRES 11TH	Single-Family / Owner Occupied	1 Story Frame	2017
28	51-0145060	Residential	ENTZEL ACRES 11TH	Single-Family / Owner Occupied	1 Story Frame	2414
29	51-0145040	Residential	ENTZEL ACRES 11TH SUBDIVISION REPLAT	Single-Family / Owner Occupied	1 Story Frame	1934
30	52-0250005	Residential	WINDSOR ESTATES 1ST	Single-Family / Owner Occupied	Mld Home (Multi-Section)	1974
31	52-0250010	Residential	WINDSOR ESTATES 1ST	Single-Family / Owner Occupied	Mld Home (Multi-Section)	2089
32	52-0250015	Residential	WINDSOR ESTATES 1ST	Single-Family / Owner Occupied	Split Level Frame	1740
33	52-0250020	Residential	WINDSOR ESTATES 1ST	Single-Family / Owner Occupied	Mld Home (Multi-Section)	1736
34	52-0250025	Residential	WINDSOR ESTATES 1ST	Single-Family / Owner Occupied	Mld Home (Multi-Section)	2128
35	52-0250030	Residential	WINDSOR ESTATES 1ST	Single-Family / Owner Occupied	Mld Home (Multi-Section)	1792
36	52-0250035	Residential	WINDSOR ESTATES 1ST	Single-Family / Owner Occupied	2 Story Frame	2546
37	52-0250040	Residential	WINDSOR ESTATES 1ST	Single-Family / Owner Occupied	1 Story Frame	1320
38	52-0250045	Residential	WINDSOR ESTATES 1ST	Single-Family / Owner Occupied	1 Story Frame	1641

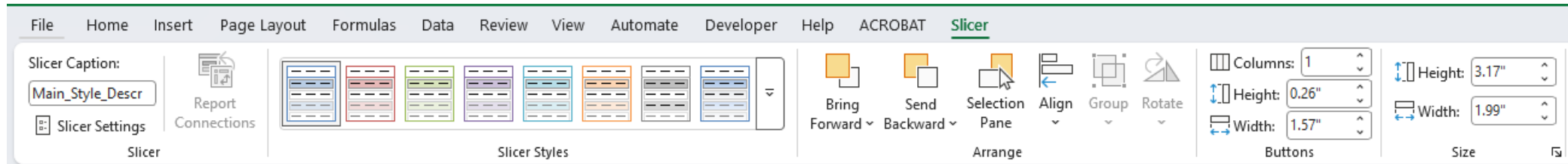
I usually insert a column to the left and dock the slicers in that column.

Using Slicers for Interactive Filtering

Another new context sensitive Ribbon bar



Using Slicers for Interactive Filtering

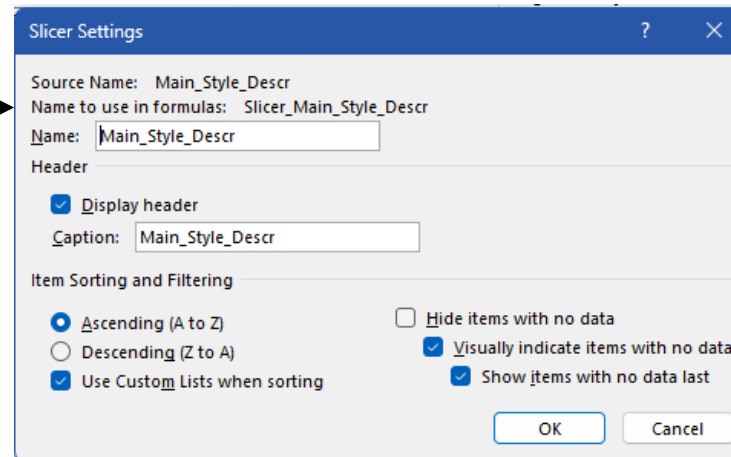


Slicer Caption:
Main_Style_Descr

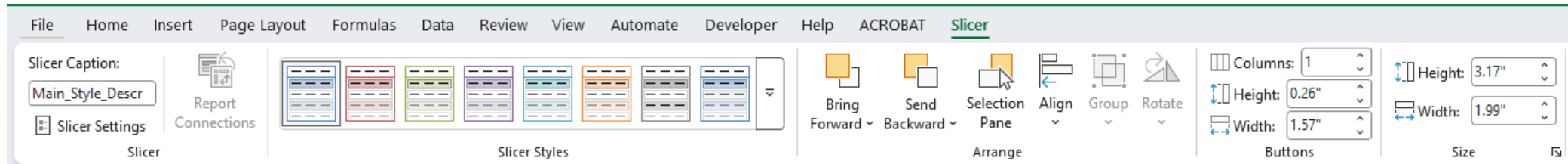
Slicer Caption at top of Slicer

Slicer Settings

Slicer Settings



Using Slicers for Interactive Filtering

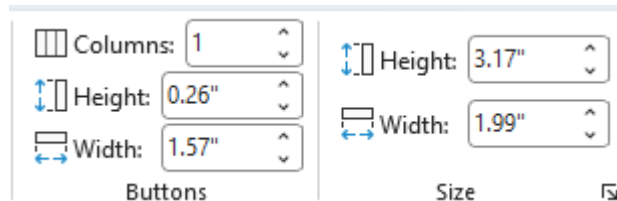
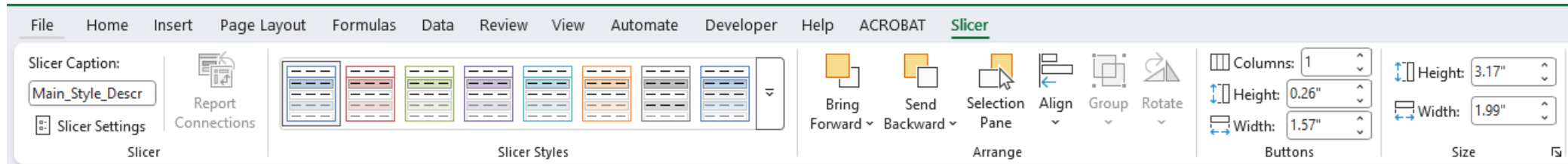


Connect Slicers to reports (more on this in Pivot Tables and Pivot Charts session)



Change color of slicers

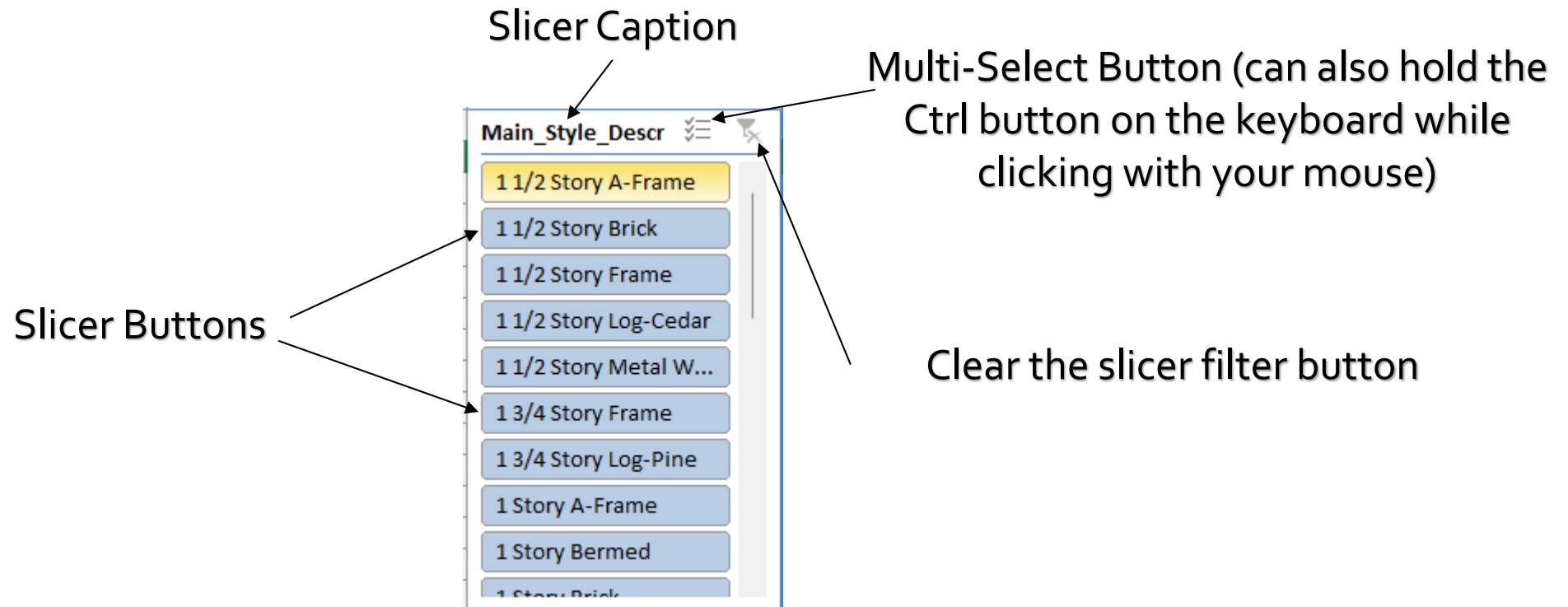
Using Slicers for Interactive Filtering



Change number of columns in slicer as well as height and width of slicer buttons.

Can also change the Height and Width of slicer but this is easier done using grab handles when slicer is selected

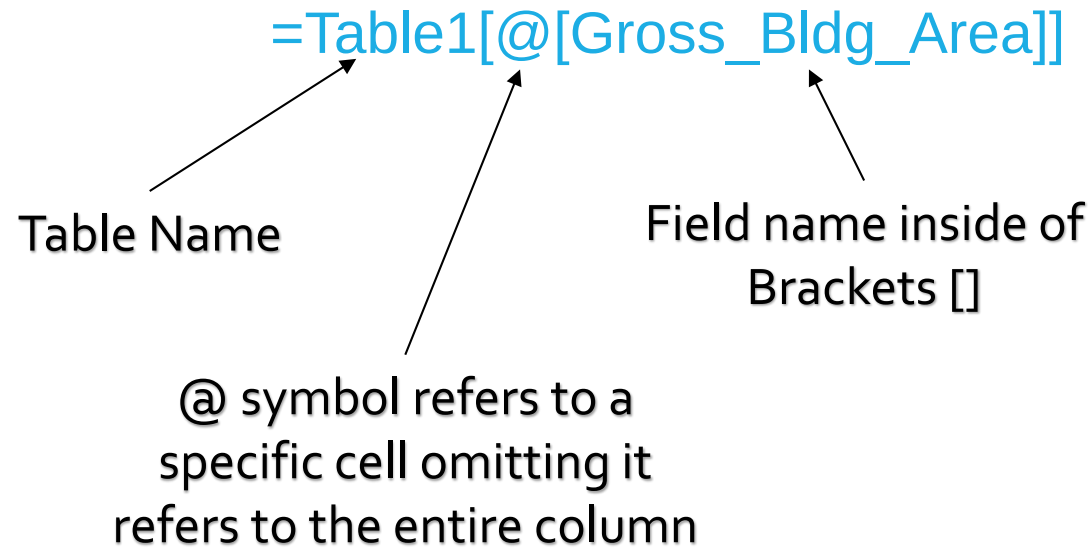
Using Slicers for Interactive Filtering



Referencing table data within Formulas and Functions

- =G2+I2
- =Table1[@[Gross_Bldg_Area]]+Table1[@[Main_Basement_Area]]
- Both formulas do the same thing, but the second one is much more readable.

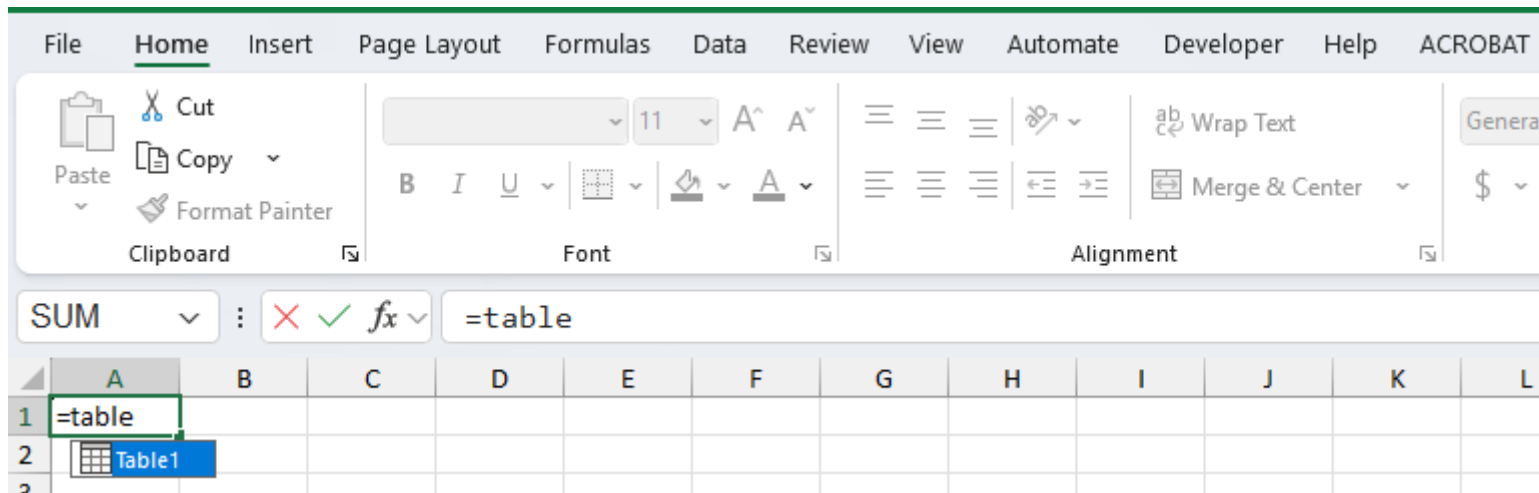
Referencing table data within Formulas and Functions



For the most part don't get to hung up on the syntax, just click the cells and Excel will put it in the way it needs to be.

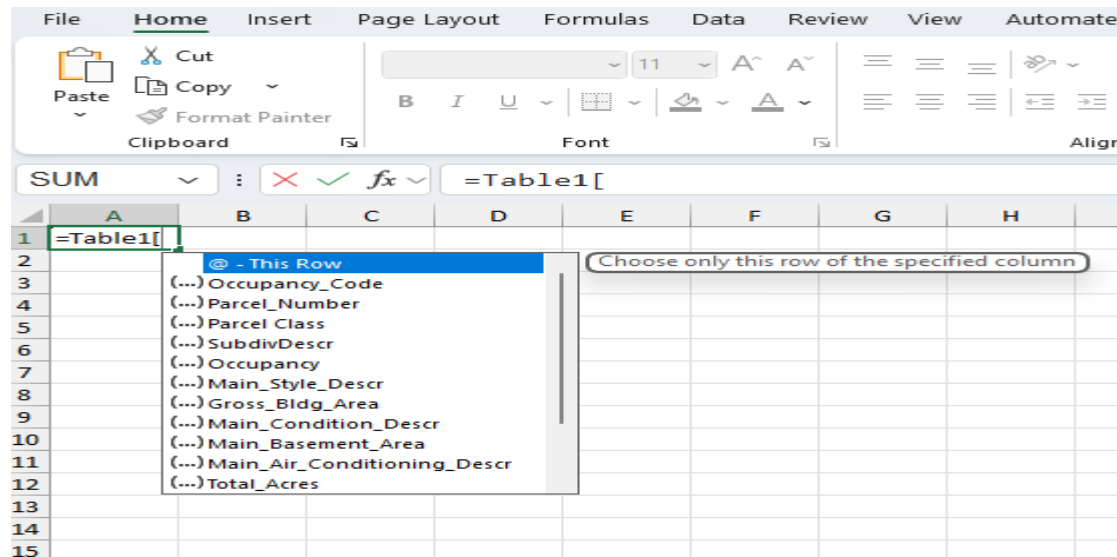
Referencing table data within Formulas and Functions

- Can also manually type table references, start by typing the table name excel will automatically figure out that you are type a table reference.



Referencing table data within Formulas and Functions

- After entering or choosing the table name type an open bracket "[" to start the field name, this will bring up a list of fields in the table where you can choose the correct one. Then end with close bracket "]". Again, if you want to refer to a single cell instead of entire column add the @ inside the [before the field name.



Contact Information

Donald LaFleur

Morton County Director of Tax Equalization

donald.lafleur@mortonnd.gov

701-667-3325