

# Using Excel to Troubleshoot EMIS Data

# Overview

- Basic Excel techniques can be used to analyze EMIS data from Student Information Systems (SISs), from the Data Collector, and on ODE EMIS reports
- This session will demonstrate Excel functions and practical applications that can be helpful in all phases of the EMIS data review process

# Outline

- Create a Macro to Format a Spreadsheet
- Calendar Data Verification
- Create a Dropdown List in Excel
- FTE Detail Report Subtotaling

# Create a MACRO to Format a Spreadsheet

# Create a Macro

- A macro can be created to complete spreadsheet set ups with one click
  - Freeze Top Row
  - Wrap Text in the Header Row
  - Justify column width
  - Apply Filters
- Create it once and use it over and over
- Start by opening any FTE Report from the Data Collector

# Begin Creating a Macro

From the View tab, select the down arrow under Macros and select “Record Macro”

The screenshot shows the Microsoft Excel interface with the 'VIEW' tab selected. The 'Macros' dropdown menu is open, and the 'Record Macro...' option is highlighted. A tooltip for 'Record Macro' is displayed, indicating that recording will begin. Red boxes and arrows highlight the 'VIEW' tab, the 'Macros' dropdown arrow, and the 'Record Macro...' option.

Select the down arrow

This begins the recording

	I	J	K	L	M	N	O	P	Q	R	V	W
File N	LEA IRN	LEVEL 2 R	RESULT C	RESULT C	FTE FUNC	ENRL STA	ENRL ENI	ORIG FTE	ADJSTD	FADJS	NT REA	SENT RI
File N	012664	FTED-001	FT0000	FTE Deta	ATSM	07/01/20	12/31/25	1	1		-	-
File N	012664	FTED-001	FT0000	FTE Deta	ATSM	09/26/20	12/31/25	0.85714	0.85714	0.85	-	-
File N	133333	FTED-001	FT0000	FTE Deta	COMM	08/21/20	12/31/25	1	1		040404	100 -
File N	133333	FTED-001	FT0000	FTE Deta	COMM	03/02/20	12/31/25	0.05525	0.05525		040404	100 -
File N	000444	FTED-001	FT0000	FTE Deta	COMM	07/01/20	12/31/25	0.42778	0.42778		040404	100 -

# Record Macro Prompt

Set up the prompt

Record Macro

Macro name: Macro1

Shortcut key: Ctrl+ t

Store macro in: Personal Macro Workbook

Description:

OK Cancel

Enter a Macro name or leave as the default value

Enter a unique Shortcut key value  
Tip- enter a value that you don't typically use as a Ctrl command (don't use values such as Ctrl A, Ctrl C, Ctrl V, etc.)

Select "Personal Macro Workbook" from the "Store macro in" dropdown menu then click OK




# Recording the Macro

- Macro is now recording
- Ready status and a small square icon show at bottom left

31	040404	042222	I	TW26248	Emis ID	Last Nam	First Nam	Middle N	040404	FTED-001	FT0000
32	040404	042222	I	XG702135	Emis ID	Last Nam	First Nam	Middle N	040404	FTED-001	FT0000
33	040404	011606	I	DD84801	Emis ID	Last Nam	First Nam	Middle N	011606	FTED-001	FT0000
34	040404	011606	I	LS693436	Emis ID	Last Nam	First Nam	Middle N	011606	FTED-001	FT0000
35	040404	011606	I	FL311036	Emis ID	Last Nam	First Nam	Middle N	011606	FTED-001	FT0000
36											
37											
38											

Hovering over the icon will generate the message-  
"A macro is currently recording. Click to stop recording."

READY 



# Recording the Macro, cont'd

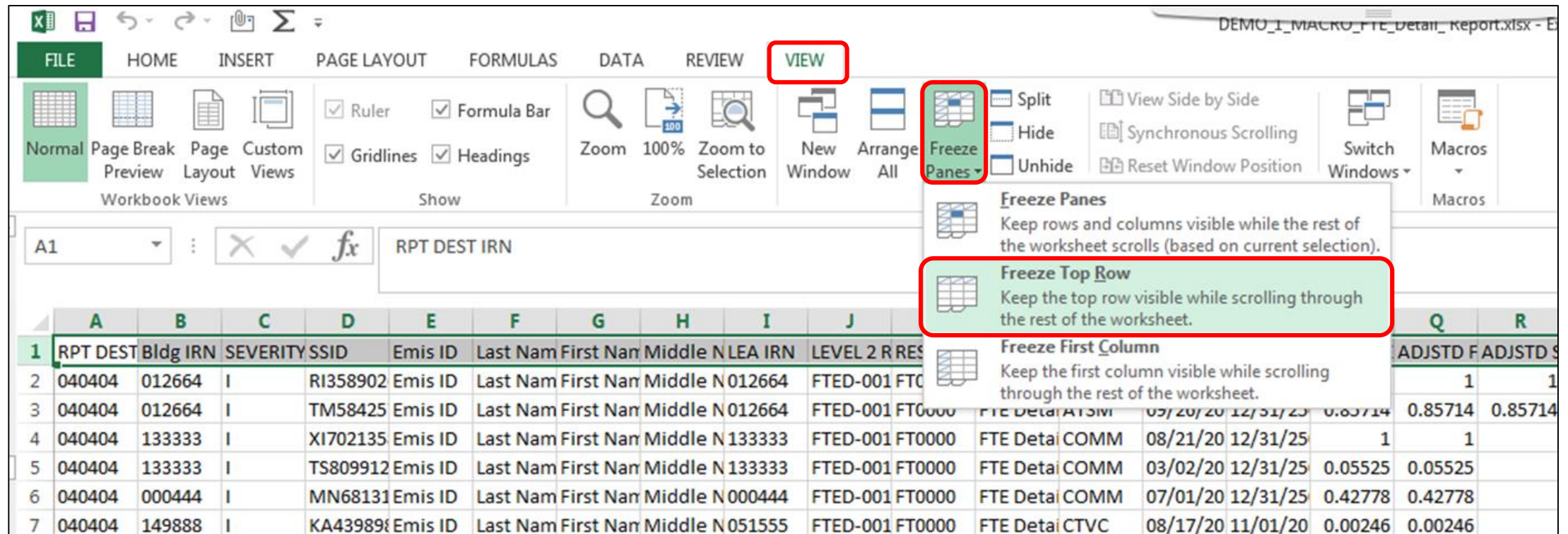
Start by selecting the top row

The screenshot shows the Microsoft Excel interface with the 'VIEW' ribbon selected. The ribbon includes options for Ruler, Formula Bar, Gridlines, and Headings. The Zoom is set to 100%. The 'Macros' button is visible in the bottom right of the ribbon. The active cell is A1, containing the formula 'RPT DEST IRN'. The data table below has the first row highlighted in green. A callout box with an arrow points to the '1' in the row header, containing the text 'Click on the "1" to select the first row'.

1	RPT DEST	Bldg IRN	SEVERITY	SSID	Emis ID	Last Nam	First Nam	Middle N	LEA IRN	LEVEL 2 R	RESULT C	RESULT C	FTE FUNC	ENRL STA	ENRL EN	( ORIG FTE	ADJSTD F	ADJSTD S
2	040404	012664	I	RI358902	Emis ID	Last Nam	First Nam	Middle N	012664	FTED-001	FT0000	FTE Detai	ATSM	07/01/20	12/31/25	1	1	1
3	040404	012664	I	TM58425	Emis ID	Last Nam	First Nam	Middle N	012664	FTED-001	FT0000	FTE Detai	ATSM	09/26/20	12/31/25	0.85714	0.85714	0.85714
4	040404	133333	I	XI702135	Emis ID	Last Nam	First Nam	Middle N	133333	FTED-001	FT0000	FTE Detai	COMM	08/21/20	12/31/25	1	1	
5	040404	133333	I									COMM	03/02/20	12/31/25	0.05525	0.05525		
6	040404	000444	I									COMM	07/01/20	12/31/25	0.42778	0.42778		
7	040404	149888	I	KA43989	Emis ID	Last Nam	First Nam	Middle N	051555	FTED-001	FT0000	FTE Detai	CTVC	08/17/20	11/01/20	0.00246	0.00246	
8	040404	149888	I	GM78917	Emis ID	Last Nam	First Nam	Middle N	051555	FTED-001	FT0000	FTE Detai	CTVC	08/22/20	10/19/20	0.00191	0.00191	

# Recording the Macro, cont'd

From the View tab, select “Freeze Panes” and “Freeze Top Row”

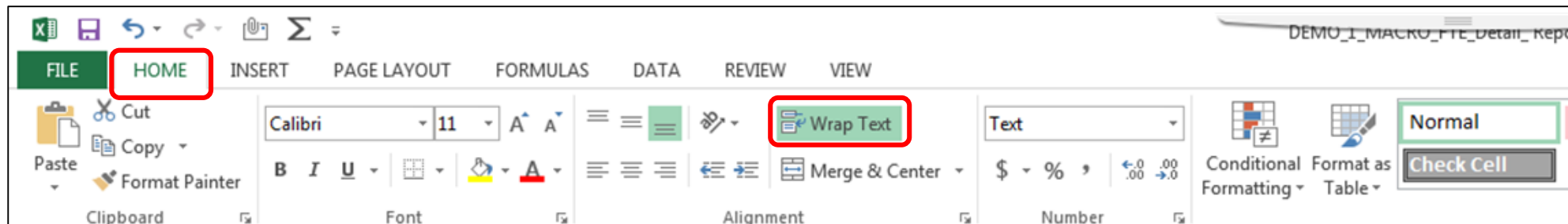


The screenshot shows the Microsoft Excel interface with the 'VIEW' tab selected on the ribbon. The 'Freeze Panes' button is highlighted with a red box. A dropdown menu is open, showing three options: 'Freeze Panes', 'Freeze Top Row', and 'Freeze First Column'. The 'Freeze Top Row' option is highlighted with a red box. The spreadsheet below shows a table with columns A through R and rows 1 through 7. The first row is highlighted in green.

	A	B	C	D	E	F	G	H	I	J	Q	R				
1	RPT DEST	Bldg IRN	SEVERITY	SSID	Emis ID	Last Nam	First Nam	Middle N	LEA IRN	LEVEL 2 R RES						
2	040404	012664	I	RI358902	Emis ID	Last Nam	First Nam	Middle N	012664	FTED-001 FT0000						
3	040404	012664	I	TM58425	Emis ID	Last Nam	First Nam	Middle N	012664	FTED-001 FT0000						
4	040404	133333	I	XI702135	Emis ID	Last Nam	First Nam	Middle N	133333	FTED-001 FT0000	FTE Detai	COMM	08/21/20	12/31/25	1	1
5	040404	133333	I	TS809912	Emis ID	Last Nam	First Nam	Middle N	133333	FTED-001 FT0000	FTE Detai	COMM	03/02/20	12/31/25	0.05525	0.05525
6	040404	000444	I	MN68131	Emis ID	Last Nam	First Nam	Middle N	000444	FTED-001 FT0000	FTE Detai	COMM	07/01/20	12/31/25	0.42778	0.42778
7	040404	149888	I	KA43989	Emis ID	Last Nam	First Nam	Middle N	051555	FTED-001 FT0000	FTE Detai	CTVC	08/17/20	11/01/20	0.00246	0.00246

# Recording the Macro, cont'd

From the Home Tab, select "Wrap Text"



The screenshot shows the Microsoft Excel ribbon with the 'HOME' tab selected. The 'Wrap Text' button in the Alignment group is highlighted with a red box. The formula bar shows 'RPT DEST IRN' in cell A1. The spreadsheet below contains a table with columns for RPT DEST, SEVERIT, LEA IRN, and various FTE details.

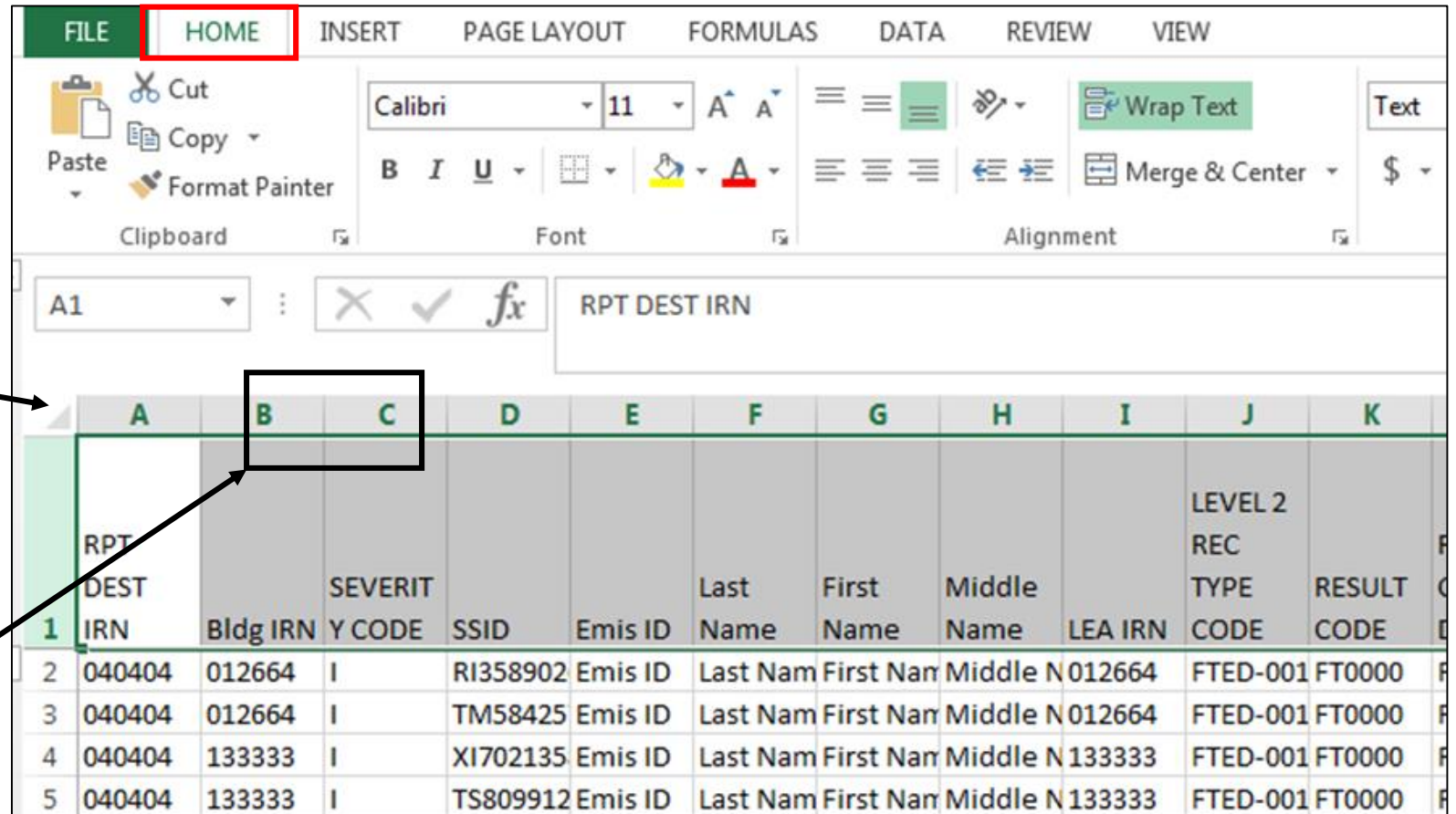
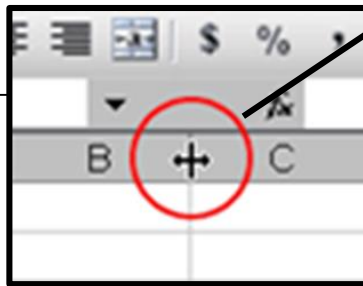
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
	RPT DEST IRN	Bldg IRN	SEVERIT Y CODE	SSID	Emis ID	Last Name	First Name	Middle Name	LEA IRN	LEVEL 2 REC TYPE	RESULT CODE	RESULT DESCR	FTE FUND PTTRN CODE	ENRL START DATE	ENRL END DATE	ORIG FTE	ADJSTD FTE
1																	
2	040404	012664	I	RI358902	Emis ID	Last Nam	First Nan	Middle N	012664	FTED-001	FT0000	FTE Deta	ATSM	07/01/20	12/31/25	1	1
3	040404	012664	I	TM58425	Emis ID	Last Nam	First Nan	Middle N	012664	FTED-001	FT0000	FTE Deta	ATSM	09/26/20	12/31/25	0.85714	0.85714
4	040404	133333	I	XI702135	Emis ID	Last Nam	First Nan	Middle N	133333	FTED-001	FT0000	FTE Deta	COMM	08/21/20	12/31/25	1	1
5	040404	133333	I	TS809912	Emis ID	Last Nam	First Nan	Middle N	133333	FTED-001	FT0000	FTE Deta	COMM	03/02/20	12/31/25	0.05525	0.05525



# Recording the Macro, cont'd

Click on the triangle between Column A and Row 1 to select the entire spreadsheet

Place cursor between any two column headers and double click

A screenshot of the Microsoft Excel interface. The 'HOME' tab is selected on the ribbon. The spreadsheet grid shows columns A through K and rows 1 through 5. The first row (row 1) is highlighted in green, indicating it is selected. The first column (column A) is also highlighted in green. The formula bar shows the formula 'RPT DEST IRN'. The data in the spreadsheet is as follows:

	A	B	C	D	E	F	G	H	I	J	K
1	RPT DEST IRN	Bldg IRN	SEVERIT Y CODE	SSID	Emis ID	Last Name	First Name	Middle Name	LEA IRN	LEVEL 2 REC TYPE CODE	RESULT CODE
2	040404	012664	I	RI358902	Emis ID	Last Nam	First Nan	Middle N	012664	FTED-001	FT0000
3	040404	012664	I	TM58425	Emis ID	Last Nam	First Nan	Middle N	012664	FTED-001	FT0000
4	040404	133333	I	XI702135	Emis ID	Last Nam	First Nan	Middle N	133333	FTED-001	FT0000
5	040404	133333	I	TS809912	Emis ID	Last Nam	First Nan	Middle N	133333	FTED-001	FT0000

# Recording the Macro, cont'd

From the Home tab, select “Sort & Filter” and then “Filter”

The screenshot shows the Microsoft Excel interface. The 'HOME' tab is selected in the ribbon. The 'Sort & Filter' dropdown menu is open, and the 'Filter' option is highlighted. The spreadsheet contains data with columns for RPT DEST IRN, Bldg IRN, SEVERIT Y CODE, SSID, Emis ID, Last Name, First Name, Middle Name, LEA IRN, LEVEL 2 REC TYPE, and RESULT CODE.



	A	B	C	D	E	F	G	H	I	J	K
1	RPT DEST IRN	Bldg IRN	SEVERIT Y CODE	SSID	Emis ID	Last Name	First Name	Middle Name	LEA IRN	LEVEL 2 REC TYPE	RESULT CODE
2	040404	012664	I	R1358902	Emis ID	Last Nam	First Nam	Middle N	012664	FTED-001	FT000
3	040404	012664	I	TM58425	Emis ID	Last Nam	First Nam	Middle N	012664	FTED-001	FT000

# Stop the Recording

Click on the small square icon at the bottom left to stop the recording

28	040404	014444	I	JH2231564	Emis ID	Last Name	First Name	Middle Name	051555	FTED-
29	040404	011777	I	MM3506602	Emis ID	Last Name	First Name	Middle Name	040404	FTED-
30	040404	042222	I	KS2624834	Emis ID	Last Name	First Name	Middle Name	051555	FTED-
31	040404	042222	I	TW2624834	Emis ID	Last Name	First Name	Middle Name	040404	FTED-
32	040404	042222	I							FTED-
33	040404	011606	I							FTED-
34	040404	011606	I							FTED-
35	040404	011606	I							FTED-
36										

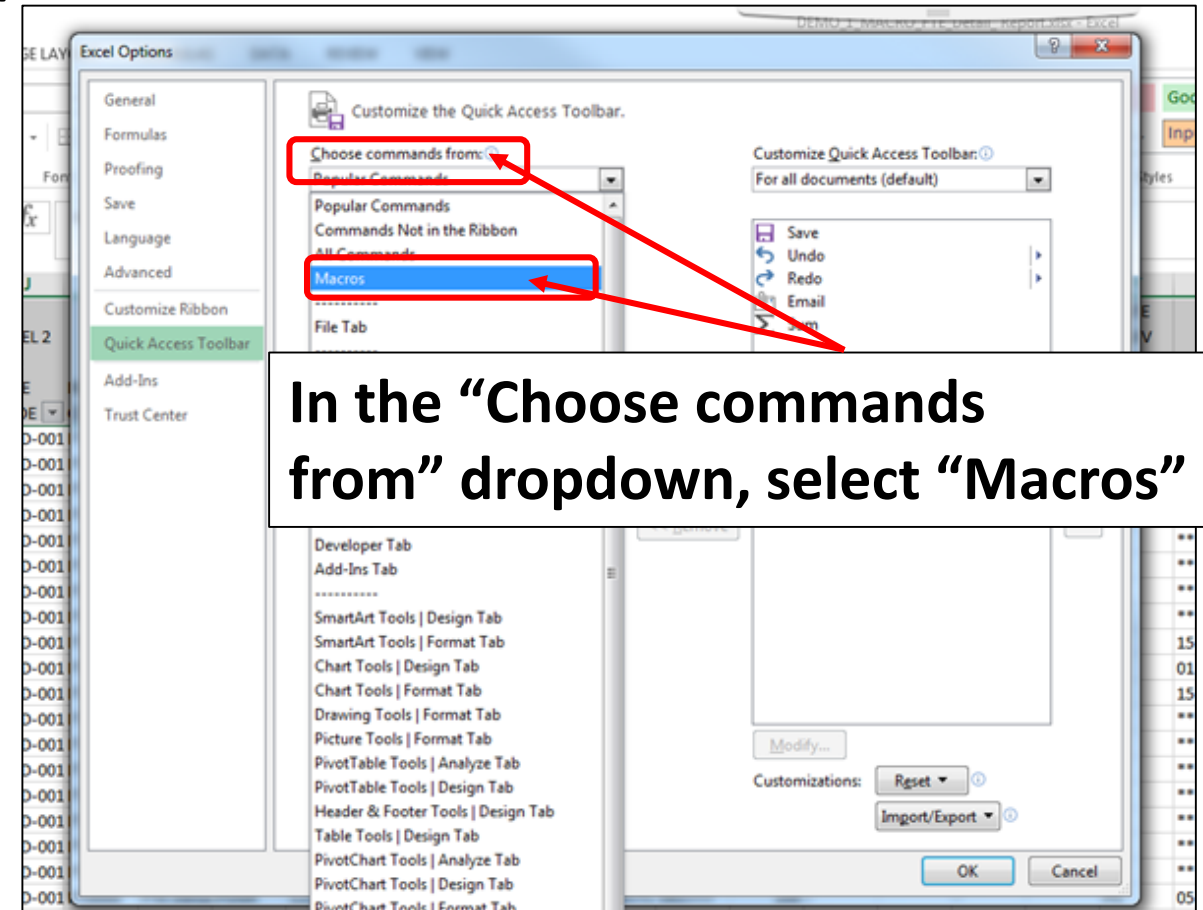
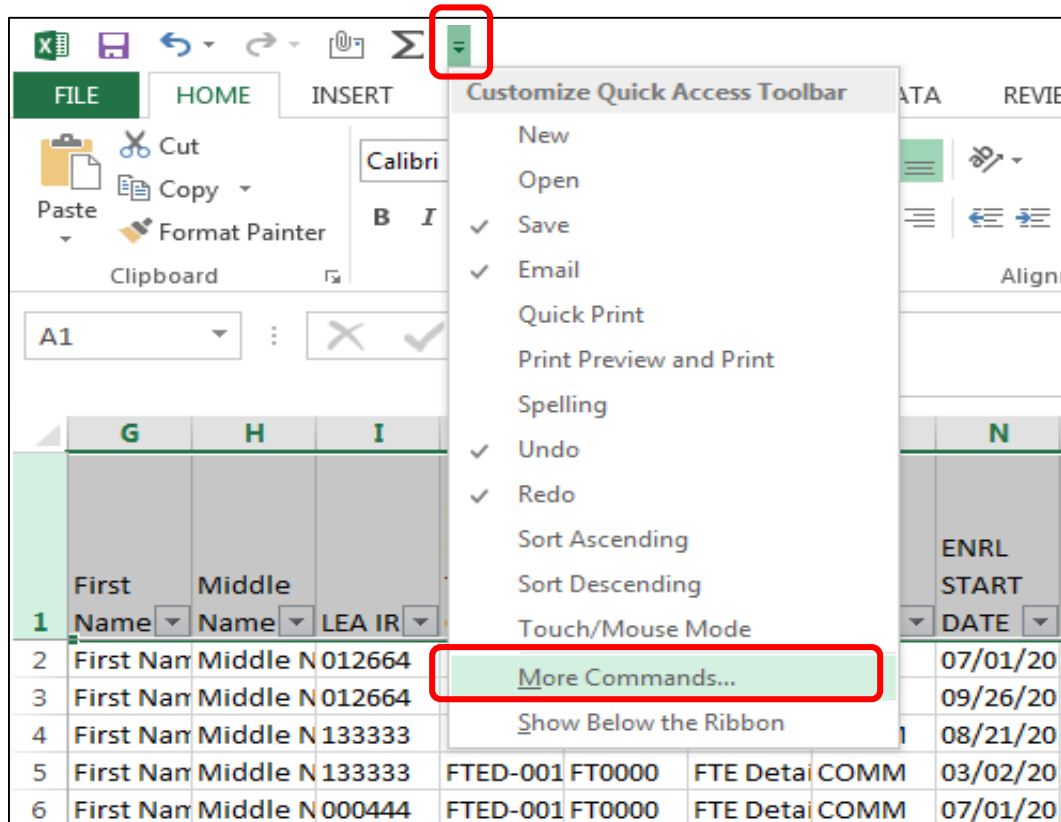
The appearance of the icon will change and a hover message will appear. "No macros are currently recording. Click to begin recording a new macro."

READY  (FTED-001) FTE Detail043968-201 



# Make the Macro a Quick Link

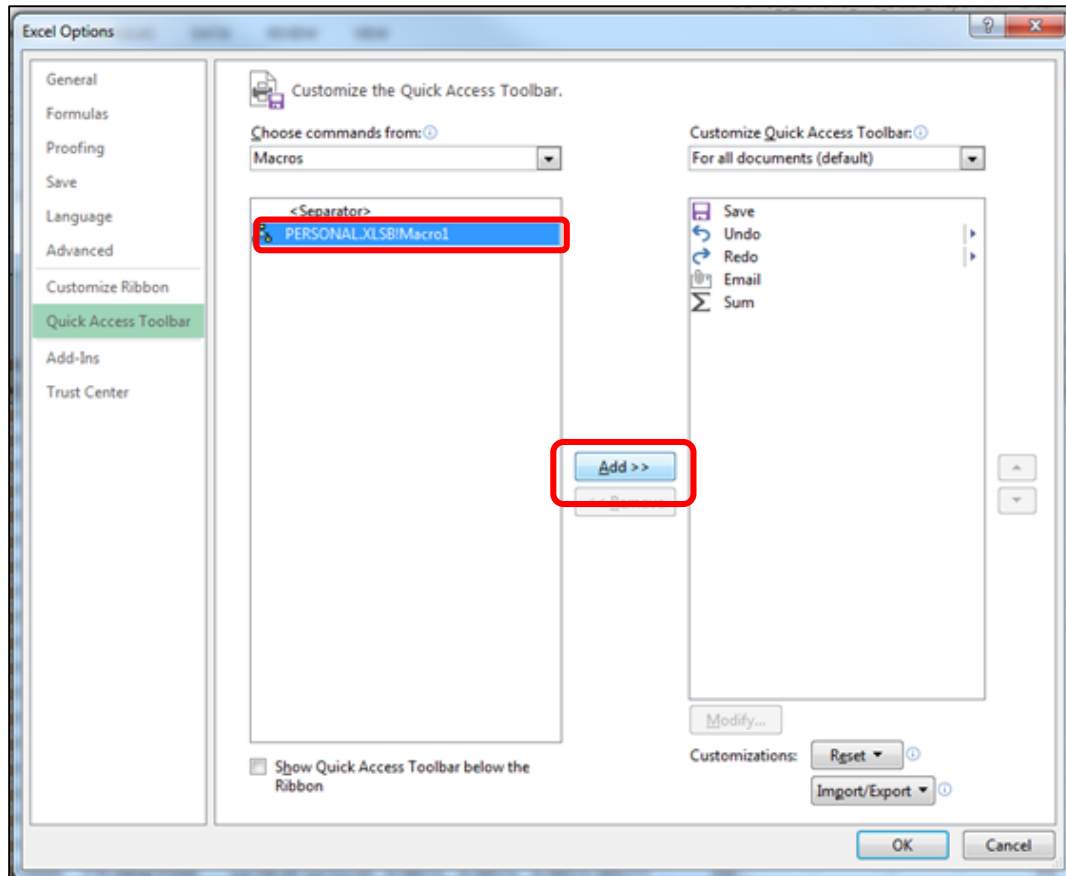
Select the Quick Link dropdown arrow, then “More Commands”



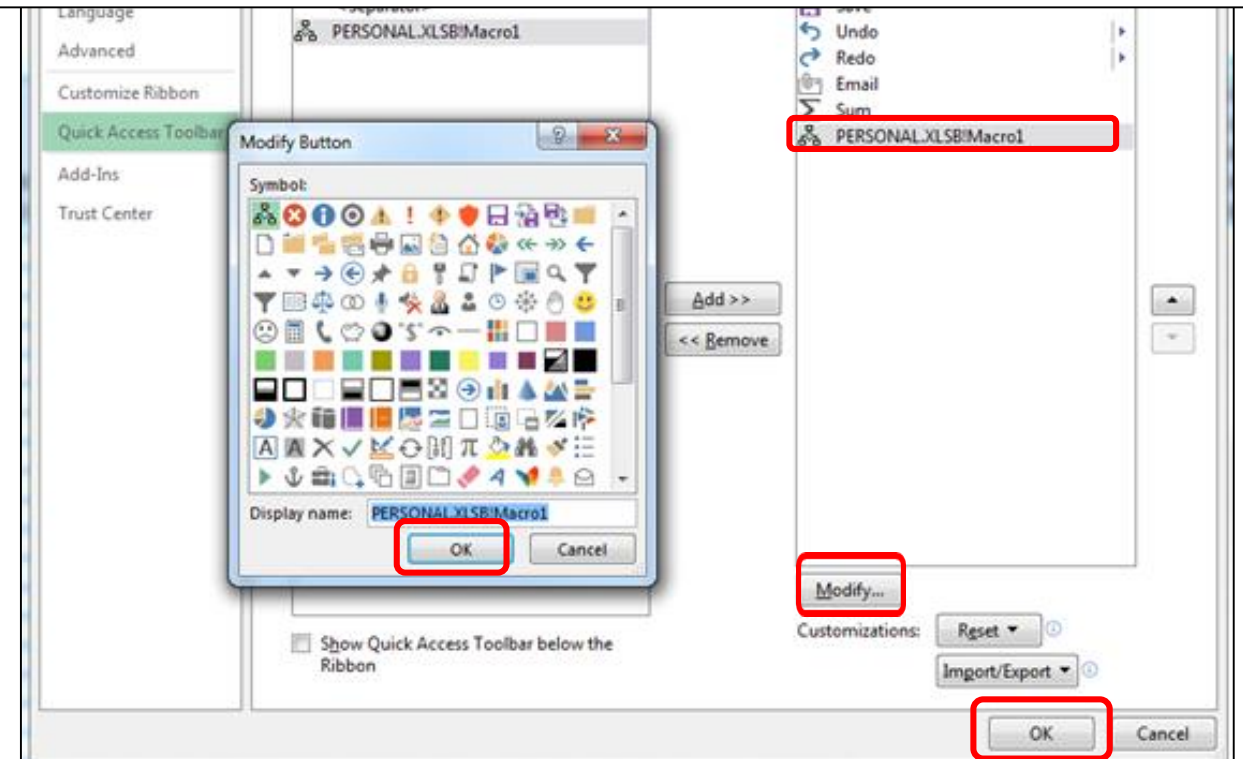
In the “Choose commands from” dropdown, select “Macros”

# Make the Macro a Quick Link

Highlight your macro from the list and click “Add”

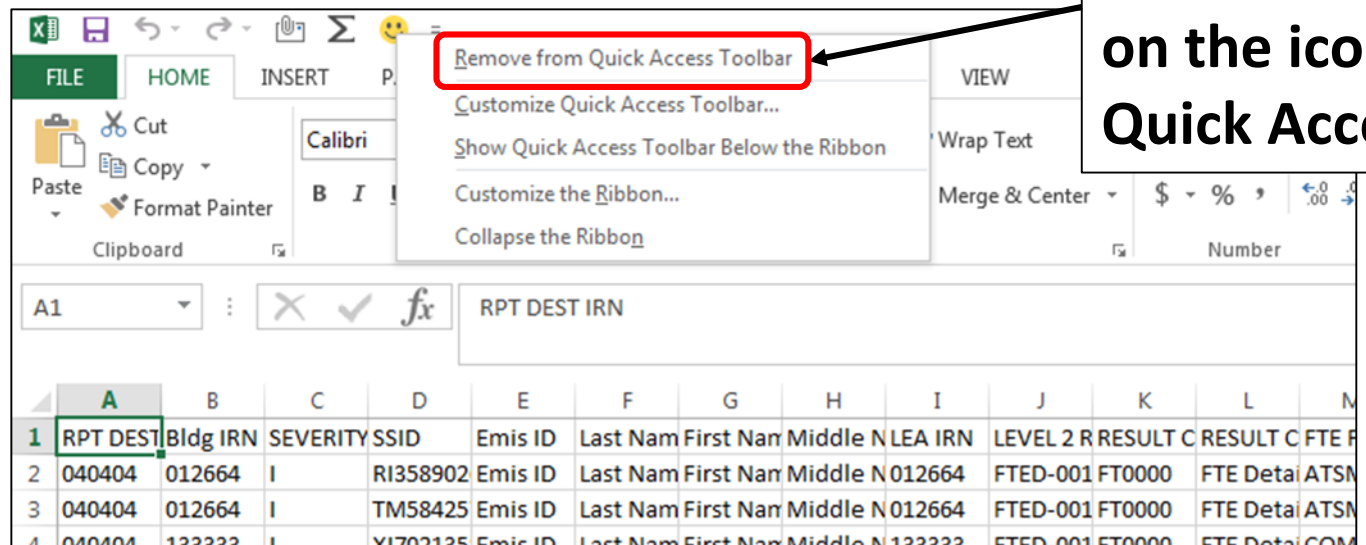
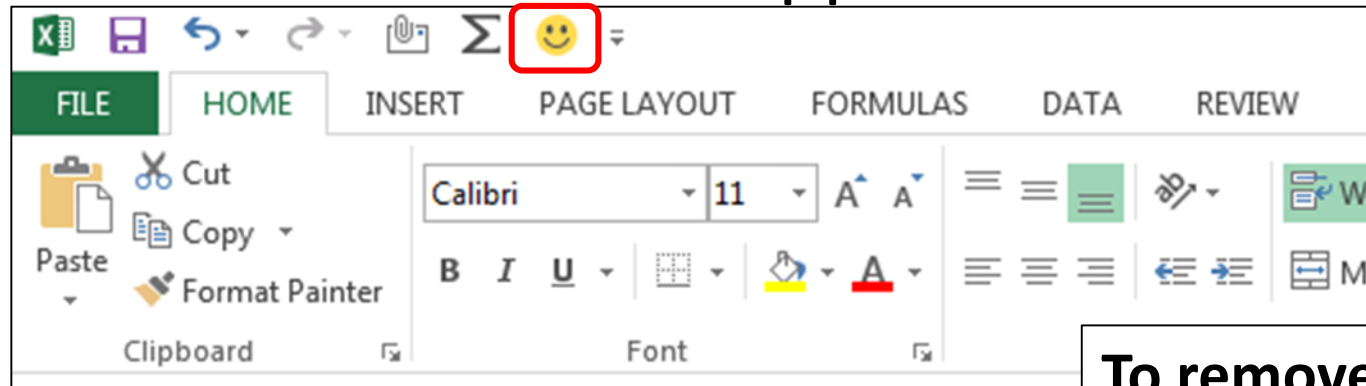


The macro will move to the list on the right. While it is highlighted, select “Modify” and choose an icon that you like. Click Ok and Ok.



# Quick Link

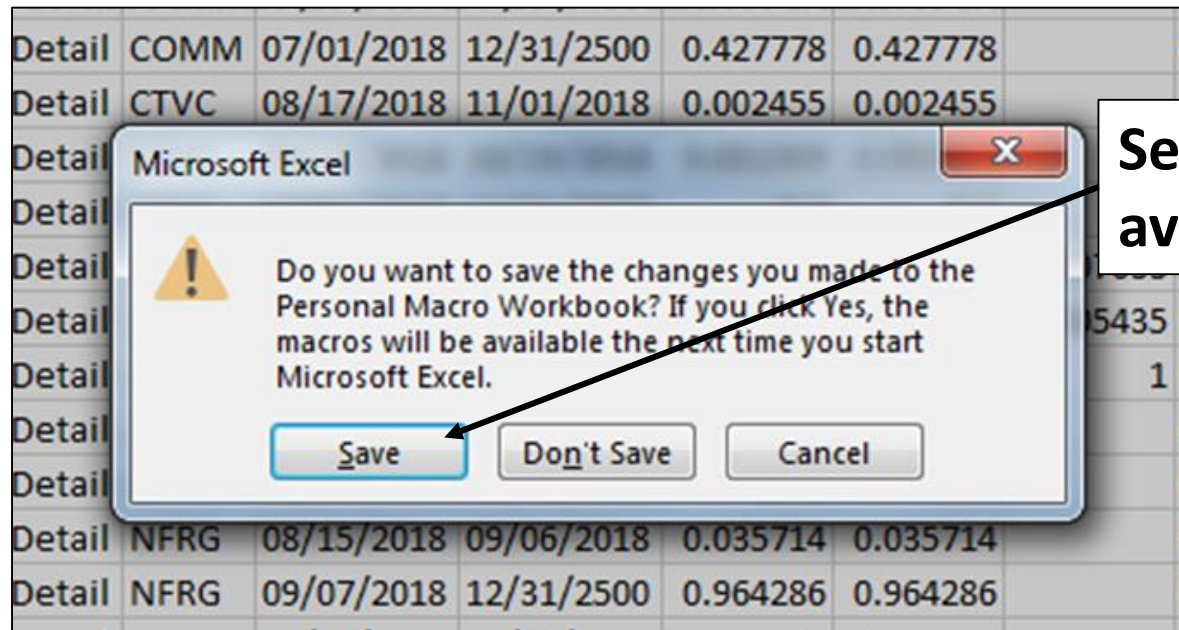
New Quick Link now appears



To remove the Quick Link, right click on the icon and select “Remove from Quick Access Toolbar”

# Save the Macro

- You can choose to save or not save your spreadsheet
- A second prompt will ask if you want to save the changes made to your Personal Macro Workbook



**Select Save so that the macro will be available to use on future spreadsheets**



# Delete a Macro

Once a Macro is created a few extra steps are needed to delete it if needed

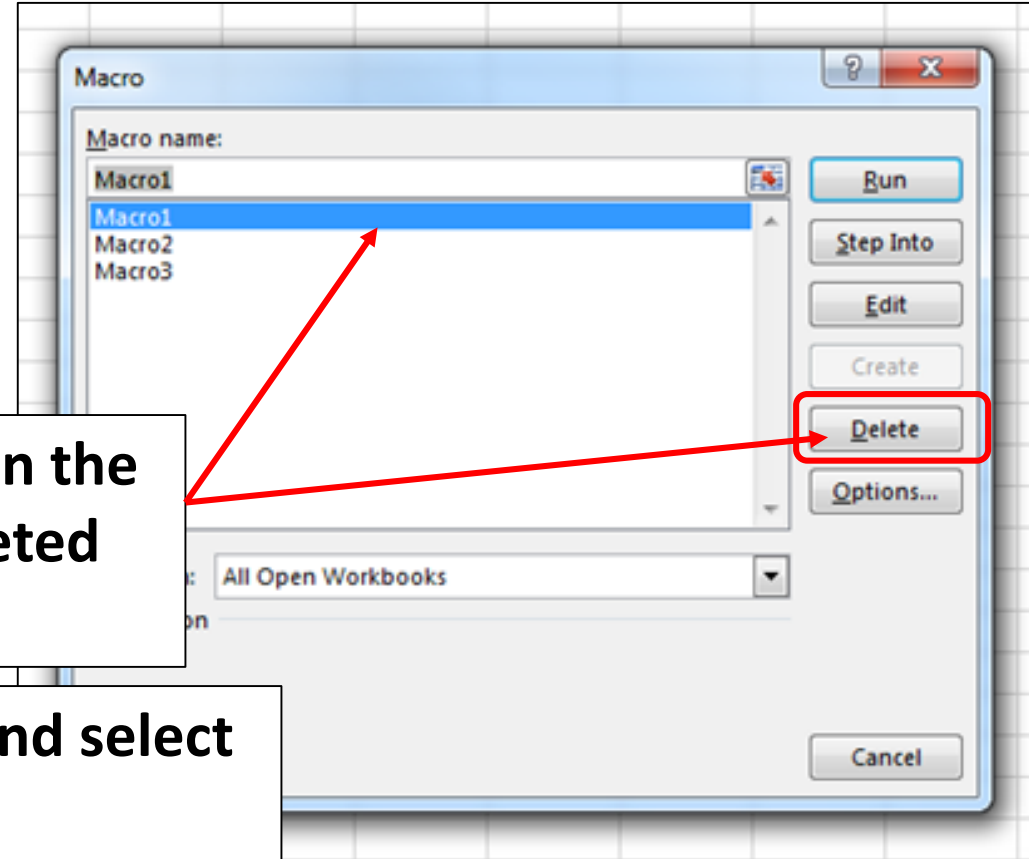
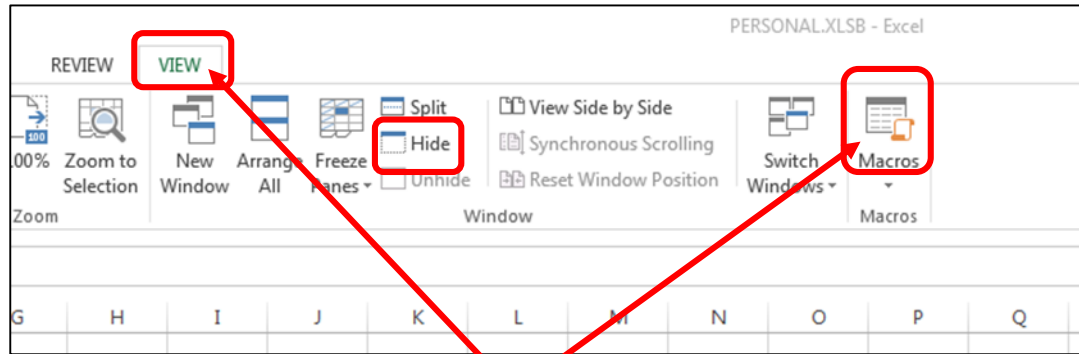
From a new or existing spreadsheet select "Unhide" from the View tab

In the Unhide prompt with PERSONAL.XLSB selected, click OK

	A	B	C		L	M	
1	RPT DEST	Bldg IRN	SEVERITY	SSIR	RESULT C FTE		
2	040404	012664	I	RI3	FTE Detai	ATSI	
3	040404	012664	I	TM58425	Emis ID	Last Nam First Nam Middle N012664 FTED-001 FT0000 FTE Detai	ATSI
4	040404	133333	I	XI702135	Emis ID	Last Nam First Nam Middle N 133333 FTED-001 FT0000 FTE Detai	COMM 08/21/20 12/31/25 1 1
5	040404	133333	I	TS809912	Emis ID	Last Nam First Nam Middle N 133333 FTED-001 FT0000 FTE Detai	COMM 03/02/20 12/31/25 0.05525 0.05525
6	040404	000444	I	MN68131	Emis ID	Last Nam First Nam Middle N000444 FTED-001 FT0000 FTE Detai	COMM 07/01/20 12/31/25 0.42778 0.42778

# Delete a Macro, cont'd

A blank spreadsheet named PERSONAL.XLSB will open



Select "Macros" from the View tab, then in the Macro prompt select the macro to be deleted select "delete"

When finished, close the Macro prompt and select "Hide" and the PERSONAL.XLSB will close



## Quick Check

Macros are a quick way to turn a multi-step process in Excel into one click. Creating a quick link macro does not embed the macro into the spreadsheet. This macro is for use on the machine where it is created.

- Are you able to record and save your macro?
- Can you think of other instances where a macro can save time?
- Are you able to find and manage your macros?

# Calendar Data Verification

# Calendar Display Report & Exceptions

- Calendar Display Report
  - Preview/Review report in the data collector
  - Separate calendars for each unique combination of District IRN, Building IRN, Grade Level, and Attendance Pattern
- Each day in session will display total student hours
- Exceptions will show attribute name with total student hours
- Using Excel, we can use this report to verify all exceptions have been entered

# Calendar Display Report

**Calendar Collection - Final (FY19)**  
Submission Number 1 (attempt 1), LEA:

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Select the options and click on the Generate Preview link to create the preview.

**Last Prepared:** Yesterday at 02:32:59 PM

**Preview Types**

- Calendar Display
- Detail

**Output Options**

**Zip File:**  Download file as a compressed .zip (for faster downloads)

**File Format:**  HTML  
 CSV

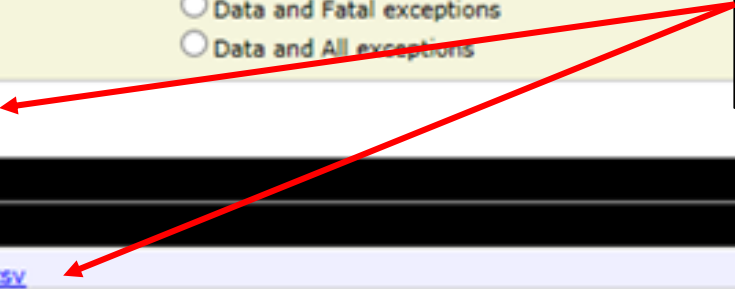
**Include in CSV files:**  Data only  
 Data and Fatal exceptions  
 Data and All exceptions

[Generate Preview](#)

	Submission 1			Sub 0
File	Valid	Invalid	Total	Valid
<a href="#">Calendar_Display.csv</a>			532	
<a href="#">Excluded_Records.csv</a>			0	
<a href="#">Grade_Schedule_Record_(DL).csv</a>	7	0	7	0
<a href="#">Organization_General_Information_Record_(DN).csv</a>	218	0	218	0
<b>Total counts:</b>	<b>225</b>	<b>0</b>	<b>757</b>	

**From the Collection Request Tab, Calendar Collection, select “Preview Prepared Data” or “Submission data”**

**Generate Preview/Review Data  
Open Calendar\_Display.csv**



# Format the Report

Prepare the report by running the macro we created in the last section, then remove filters

	A	B	C	D	E	F	G	H	I
1	Calendar For: Dist- Bldg-Grade-AP	Row Number	Month	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
2	054321-000001-**-**	01	Jul-18						
3	054321-000001-**-**	02		01	02	03	04	05	06
4	054321-000001-**-**	03		08	09	10	11	12	13
5	054321-000001-**-**	04		15	16	17	18	19	20
6	054321-000001-**-**	05		22	23	24	25	26	27
7	054321-000001-**-**	06		29	30	31			
8	054321-000001-**-**	07	Aug-18						
9	054321-000001-**-**	08					01	02	03
10	054321-000001-**-**	09		05	06	07	08	09	10
11	054321-000001-**-**	10		12	13	14	15	16	17
12	054321-000001-**-**	11		19	20	21	22	23	24
13	054321-000001-**-**	12		26	27	28	29	30	31
14	054321-000001-**-**	13	Sep-18						
15	054321-000001-**-**	14							

# Report Contents

- Column A contains the calendar name, aka attendance pattern
- Column B contains the row number
  - The first 76 rows each contain one week on the calendar
  - Calendars can contain two additional rows for parent-teacher conference and professional development hours
- Column C contains the month and year
- Columns D-I contain the day of the week and the date of the month

	A	B	C	D	E	F	G	H	I	J	K
1	Calendar For: Dist- Bldg-Grade-AP	Row Number	Month	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Days
2	054321-000001-**-**	1	18-Jul								
3	054321-000001-**-**	2		1	2	3	4	5	6	7	
4	054321-000001-**-**	3		8	9	10	11	12	13	14	
5	054321-000001-**-**	4		15	16	17	18	19	20	21	
6	054321-000001-**-**	5		22	23	24	25	26	27	28	



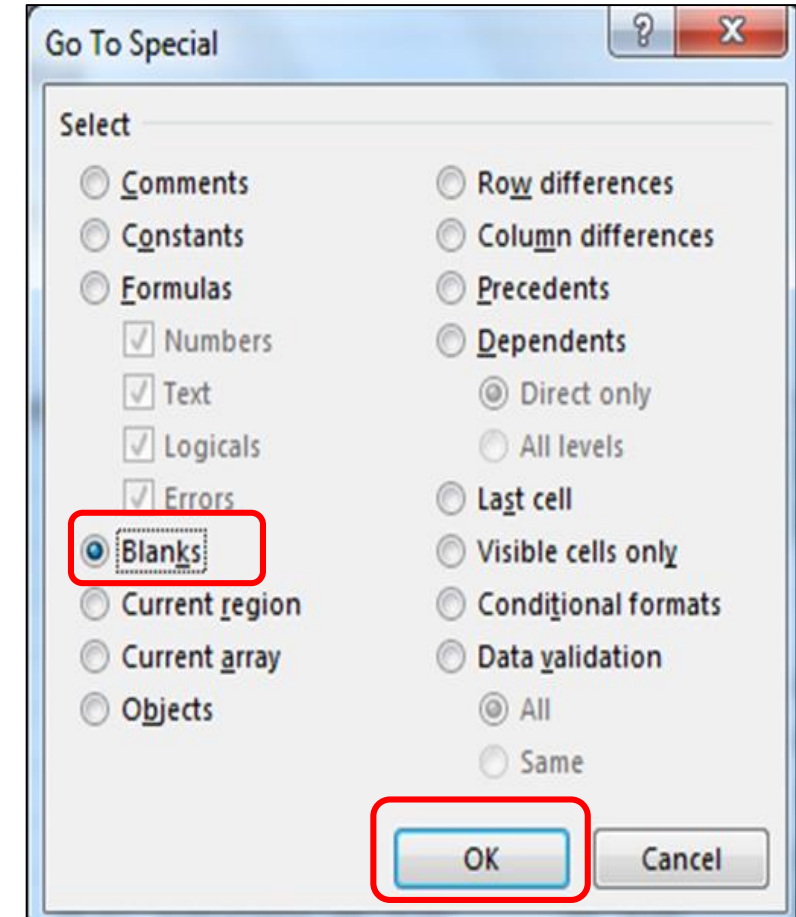
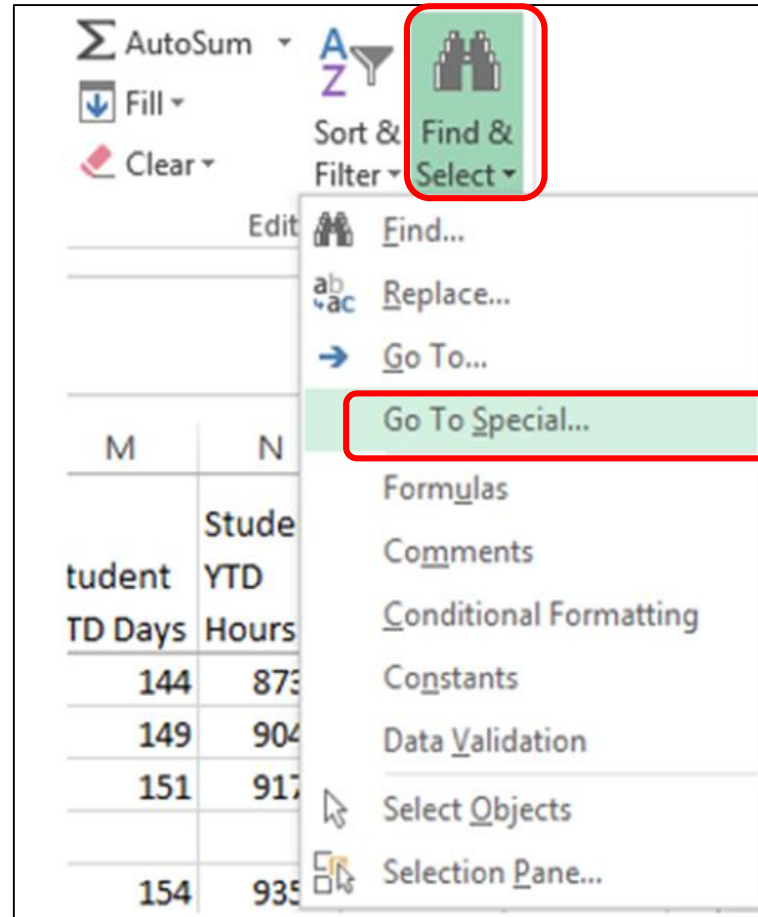
# Formatting

- Column C is formatted to display the month and year only on the first row of the month
- We are going to fill this in for the rest of the rows to make it easier to read
- Select cell C2
- Scroll to the very bottom the Column C
- Hold SHIFT and select the last cell in the report in column C

	A	B	C
94	054321-000003-**-**	57	
95	054321-000003-**-**	58	Apr-19
96	054321-000003-**-**	59	
97	054321-000003-**-**	60	
98	054321-000003-**-**	61	
99	054321-000003-**-**	62	
00	054321-000003-**-**	63	
01	054321-000003-**-**	64	May-19
02	054321-000003-**-**	65	
03	054321-000003-**-**	66	
04	054321-000003-**-**	67	
05	054321-000003-**-**	68	
06	054321-000003-**-**	69	
07	054321-000003-**-**	70	Jun-19
08	054321-000003-**-**	71	
09	054321-000003-**-**	72	
10	054321-000003-**-**	73	
11	054321-000003-**-**	74	
12	054321-000003-**-**	75	
13	054321-000003-**-**	76	
14			

# Formatting, cont'd

- From the Home tab, click on “Find and Select”
- Choose “Go To Special”
- From the Go To Special prompt, click on the radio button for “Blanks” and then click OK



# Formatting, cont'd

- Your spreadsheet should show Column C as still highlighted, but the cells with actual data are not highlighted
- Make sure the sheet remains like this for the Fill-Down process to work correctly

	A	B	C
	Calendar For: Dist- Bldg-Grade-AP	Row Number	Month
1			
2	054321-000001-**-**	01	Jul-18
3	054321-000001-**-**	02	
4	054321-000001-**-**	03	
5	054321-000001-**-**	04	
6	054321-000001-**-**	05	
7	054321-000001-**-**	06	
8	054321-000001-**-**	07	Aug-18
9	054321-000001-**-**	08	
10	054321-000001-**-**	09	
11	054321-000001-**-**	10	
12	054321-000001-**-**	11	
13	054321-000001-**-**	12	
14	054321-000001-**-**	13	Sep-18
15	054321-000001-**-**	14	
16	054321-000001-**-**	15	
17	054321-000001-**-**	16	
18	054321-000001-**-**	17	
19	054321-000001-**-**	18	
20	054321-000001-**-**	19	
21	054321-000001-**-**	20	Oct-18
22	054321-000001-**-**	21	
23	054321-000001-**-**	22	

**It is correct that cell C3 is blank**

# Formatting, cont'd

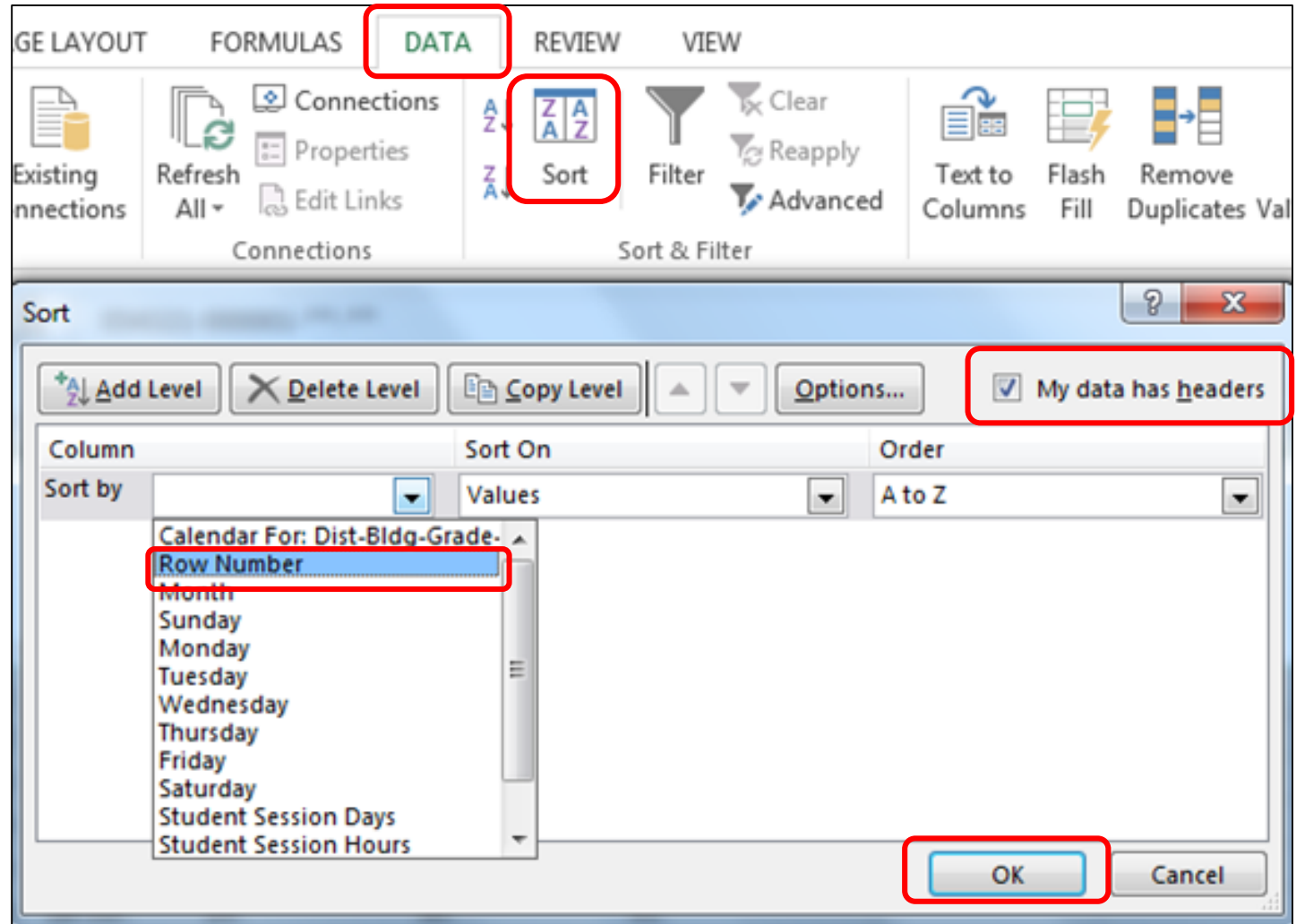
- Your cursor will be in cell C3, do not click into the cell
- Type an equal sign and then press the up Arrow Key
- Hold down the Control (Ctrl) Key and press the Enter key
- This will fill in the blanks with the value found above it, so now every row will reflect the Month/Year on your Calendar

	A	B	C
	Calendar For: Dist- Bldg-Grade-AP	Row Number	Month
1			
2	054321-000001-**-**	01	Jul-18
3	054321-000001-**-**	02	=C2
4	054321-000001-**-**	03	
5	054321-000001-**-**	04	
6	054321-000001-**-**	05	
7	054321-000001-**-**	06	
8	054321-000001-**-**	07	Aug-18
9	054321-000001-**-**	08	

	A	B	C
	Calendar For: Dist- Bldg-Grade-AP	Row Number	Month
1			
2	054321-000001-**-**	01	Jul-18
3	054321-000001-**-**	02	Jul-18
4	054321-000001-**-**	03	Jul-18
5	054321-000001-**-**	04	Jul-18
6	054321-000001-**-**	05	Jul-18
7	054321-000001-**-**	06	Jul-18
8	054321-000001-**-**	07	Aug-18
9	054321-000001-**-**	08	Aug-18
10	054321-000001-**-**	09	Aug-18
11	054321-000001-**-**	10	Aug-18
12	054321-000001-**-**	11	Aug-18
13	054321-000001-**-**	12	Aug-18
14	054321-000001-**-**	13	Sep-18
15	054321-000001-**-**	14	Sep-18
16	054321-000001-**-**	15	Sep-18
17	054321-000001-**-**	16	Sep-18

# Sort the Report

- From the Data tab, select Sort
- Verify that “My data has headers” is checked
- Sort by Row Number and click OK





# Verify Exceptions cont'd

- View the same row for each calendar type together
- Verify all day values for all appropriate attendance patterns

170	054321-000001-**-**	22	Oct-18	07	08 - 0.00 (PDO)	09 - 6.20	10 - 4.20 (PHS)	11 - 6.20	12 - 6.20
171	054321-000002-**-**	22	Oct-18	07	08 - 0.00 (PDO)	09 - 6.20	10 - 4.20 (PHS)	11 - 6.20	12 - 6.20
172	054321-000002-12-**	22	Oct-18	07	08 - 0.00 (PDO)	09 - 6.20	10 - 4.20 (PHS)	11 - 6.20	12 - 6.20
173	054321-000002-12-**	22	Oct-18	07	08 - 0.00 (PDO)	09 - 6.25	10 - 6.25	11 - 6.25	12 - 6.25
174	054321-000003-KG-**	22	Oct-18	07	08 - 0.00 (PDO)	09 - 6.25	10 - 6.25	11 - 6.25	12 - 6.25
175	054321-000003-PS-A1	22	Oct-18	07	08 - 0.00 (PDO)	09 - 5.00	10 - 0.00 (PDO)	11 - 5.00	12 - 0.00
176	054321-000003-PS-P2	22	Oct-18	07	08 - 0.00 (PDO)	09 - 5.00	10 - 5.00	11 - 5.00	12 - 0.00
177	054321-000003-**-**	22	Oct-18	07	08 - 0.00 (PDO)	09 - 6.20	10 - 4.20 (PHS)	11 - 6.20	12 - 6.20



## Quick Check

Formatting and sorting the Calendar Display report can bring data issues to the surface. Districts that have many calendars to maintain throughout the school year will find this process very effective in verifying that all calendar hours for each day are being reported correctly.

- Are you able to download and prepare the Calendar Display Report?
- Are you able to verify that every calendar day contains correct values across all of your calendars?
- How often will you repeat this process throughout the year to verify that calendar data is being updated?

# Create a Dropdown List in Excel

# Gathering Data Using Excel

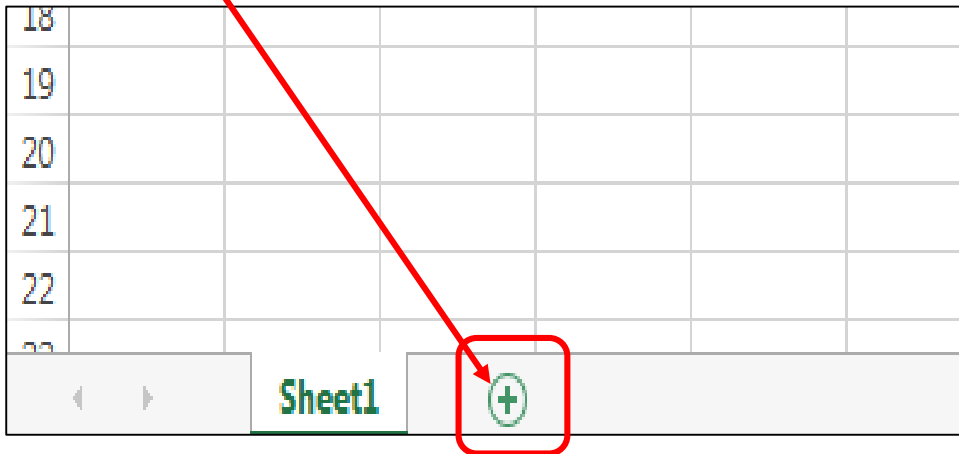
- Accurate and complete EMIS reporting starts with effective data gathering
- Providing district personnel a data collection form can improve data from the source
- Some examples of data collection processes
  - Reading Diagnostic results
  - Score Not Reported reasons
  - Staff Data
  - Retention Data
  - Graduation Data

# Create a Data Collection Form

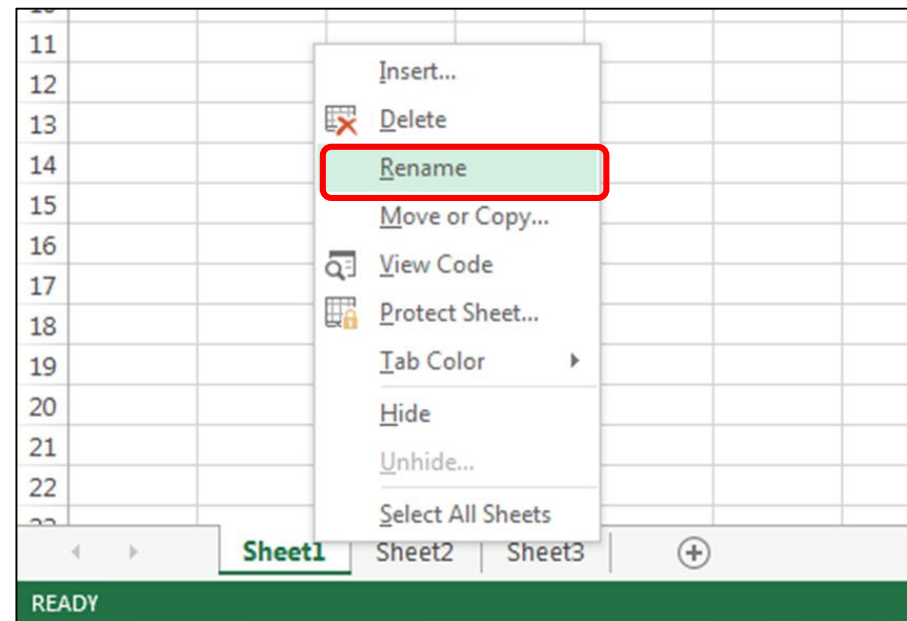
In this example we will be creating a sheet for collecting reading diagnostic results

- Open Excel and create a blank worksheet

Click the Plus sign twice to generate two new sheets

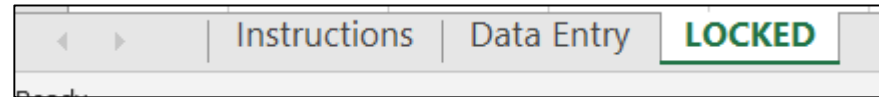


Right click and choose “Rename” on all three tabs



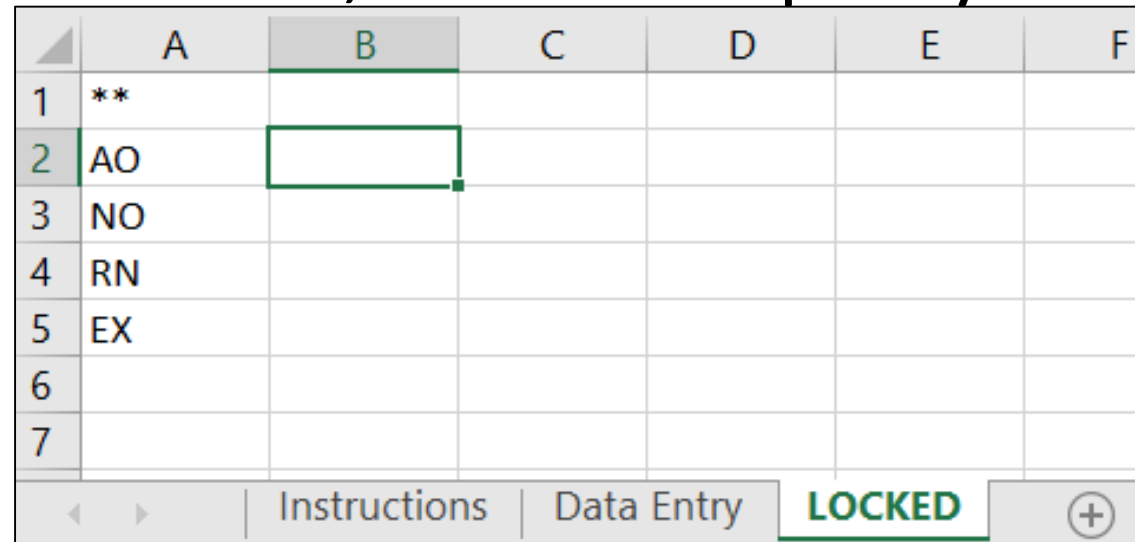
# Specify Dropdown Options

- Rename each sheet
  - Sheet 1 - Instructions
  - Sheet 2 - Data Entry
  - Sheet 3 - LOCKED



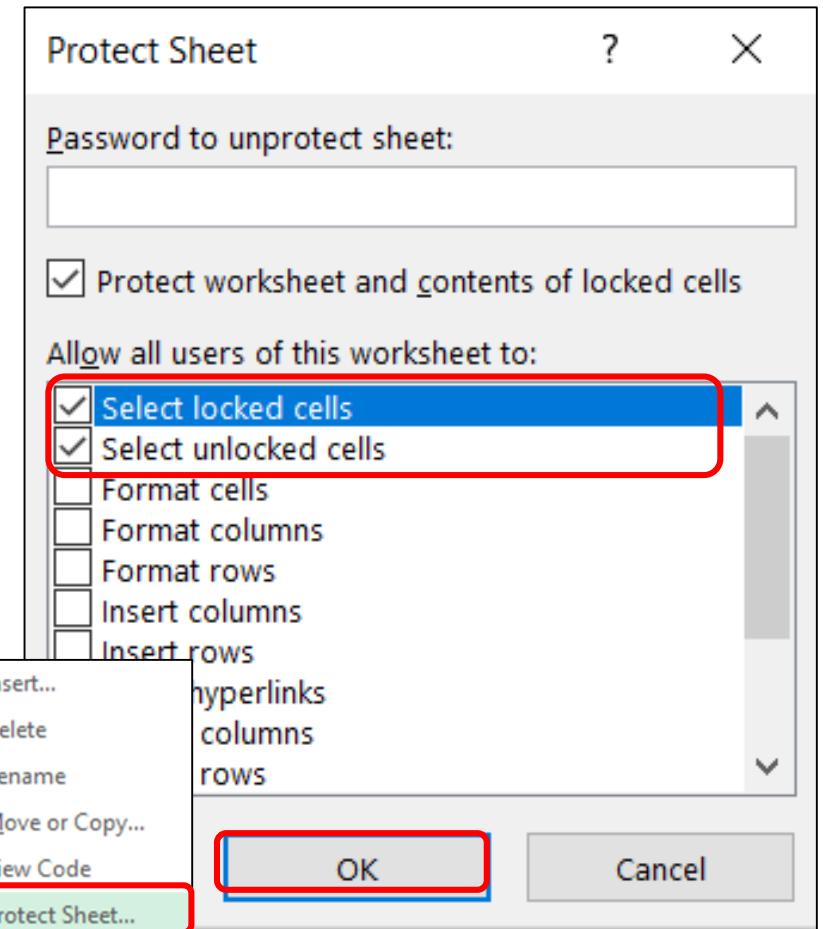
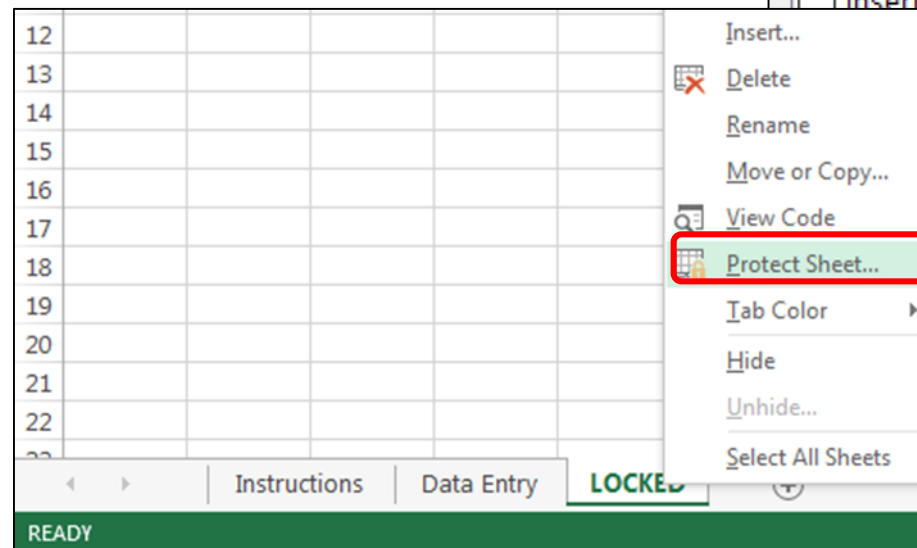
- Start with the “LOCKED” sheet, where we specify the dropdown options

- In Cell A1 Type: \*\*
- In Cell A2 Type: AO
- In Cell A3 Type: NO
- In Cell A4 Type: RN
- In Cell A5 Type: EX

A screenshot of an Excel spreadsheet. The columns are labeled A through F. The rows are numbered 1 through 7. Cell A1 contains the text "\*\*". Cell A2 contains "AO". Cell A3 contains "NO". Cell A4 contains "RN". Cell A5 contains "EX". Cell B2 is highlighted with a green border, indicating it is the active cell. The sheet tab bar at the bottom shows 'Instructions', 'Data Entry', and 'LOCKED' (highlighted with a green border and text), along with a plus sign icon for adding new sheets.

# Protect Drop Down Options

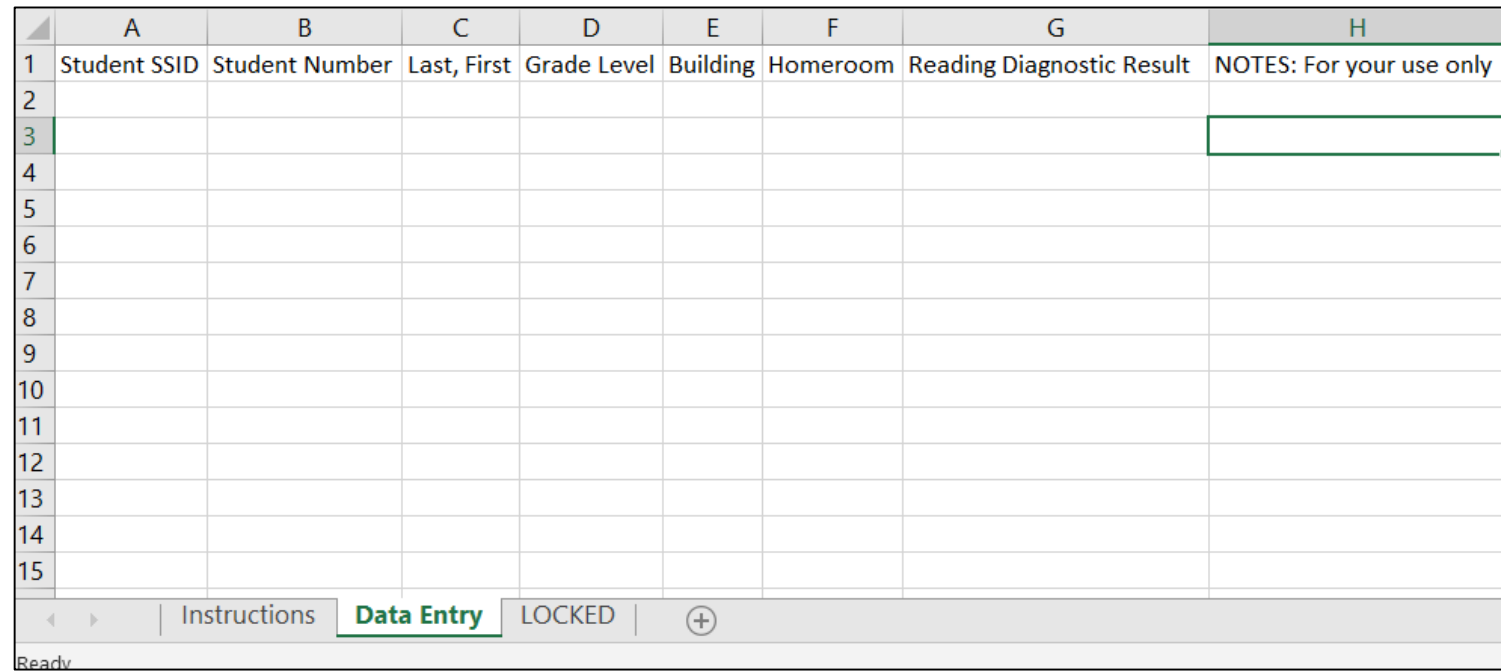
- Right click on the LOCKED Sheet name
- Choose “Protect Sheet...”
- Choose the top two options
- Specify a password if desired
- Click OK
- The sheet is now protected



# Create Data Entry Sheet

Select the data entry sheet

- Enter the data to collect
- For this example we will create the following headers
  - SSID
  - Student Number
  - Last, First
  - Grade Level
  - Building
  - Reading Diagnostic Result
  - Notes: For your use only



	A	B	C	D	E	F	G	H
1	Student SSID	Student Number	Last, First	Grade Level	Building	Homeroom	Reading Diagnostic Result	NOTES: For your use only
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								

Ready | Instructions | **Data Entry** | LOCKED | (+)



# If desired, populate student data

Generate an export from your SIS for the students and data you would like to collect the diagnostic result

- Search Criteria example: All K-3 students with a district relationship of 1
- Export Fields example - SSID, Student Number, Last First, Grade Level, Building, Homeroom

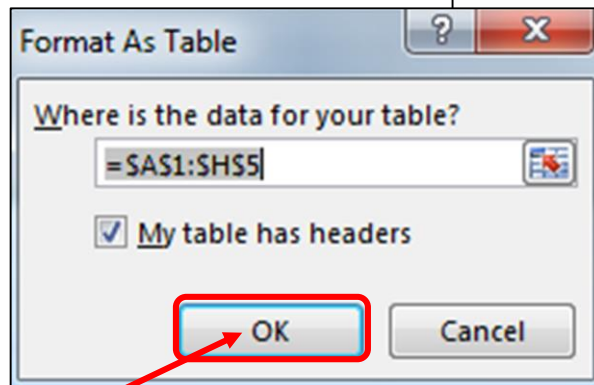
Select the columns and rows of your spreadsheet

	A	B	C	D	E	F	G	H	I
1	Student SSID	Student Number	Last, First	Grade Level	Building	Homeroom	Reading Diagnostic Result	NOTES: For your use only	
2	ZZ1234567	123456789	Doe, Jane		3 Cherry Hill	Smith			
3	ZZ1234568	123456790	Brown, Steven		2 West	Darst			
4	ZZ1234569	123456791	Stone, Beth		1 Cherry Hill	White			
5	ZZ1234570	123456792	Smith, Jackson	KG	West	Slate			
6									
7									

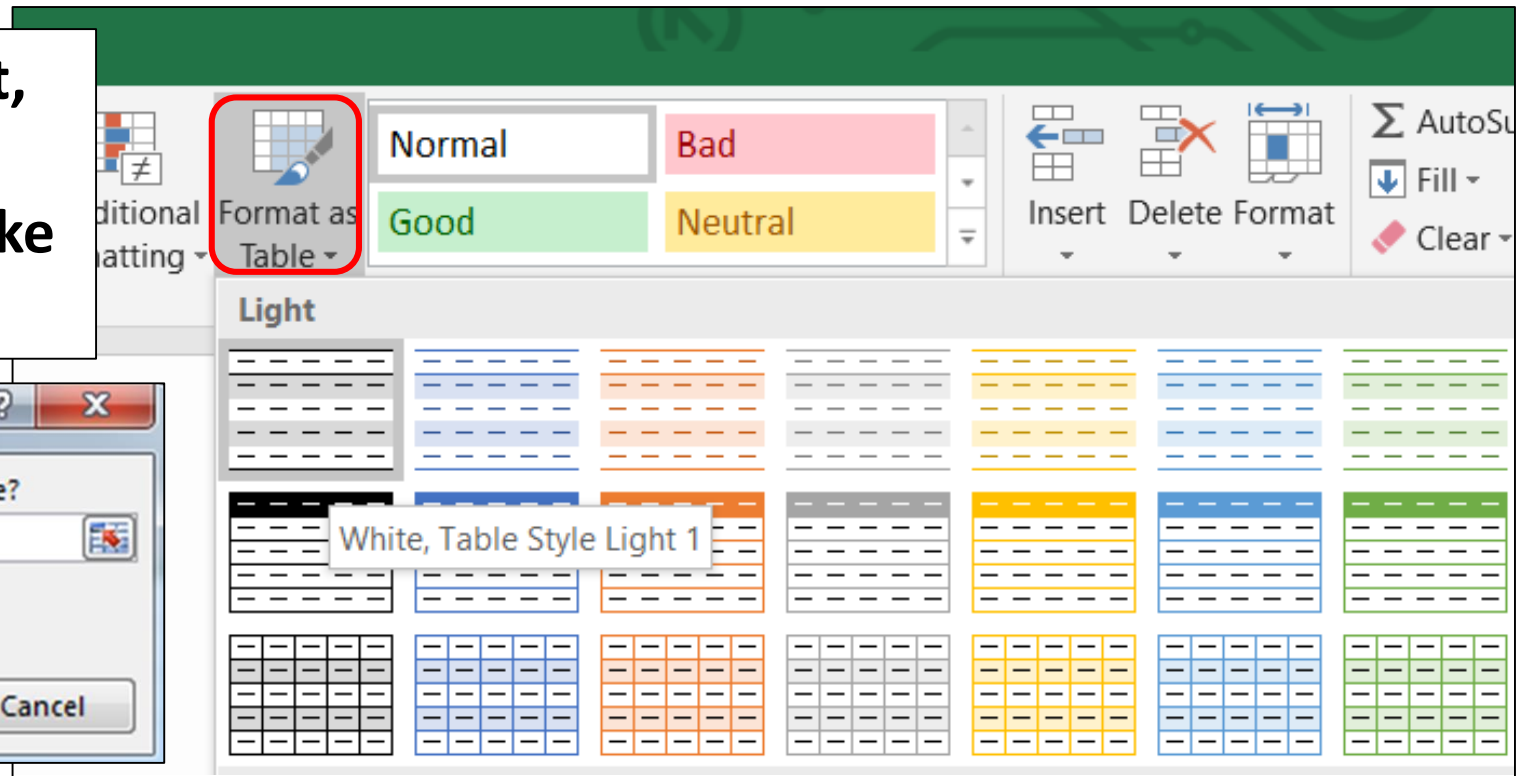
# Format Data Collection

With the cells on the spreadsheet selected

From the Home tab select, “Format as Table” button to choose a format to make for easier viewing



In the Format as Table Prompt, click OK



# Format Data Collection

Your data entry sheet should look something like this

	A	B	C	D	E	F	G	H
1	<b>Student SSID</b>	<b>Student Number</b>	<b>Last, First</b>	<b>Grade Level</b>	<b>Building</b>	<b>Homeroom</b>	<b>Reading Diagnostic Result</b>	<b>NOTES: For your use only</b>
2	ZZ1234567	123456789	Doe, Jane		3 Cherry Hill	Smith		
3	ZZ1234568	123456790	Brown, Steven		2 West	Darst		
4	ZZ1234569	123456791	Stone, Beth		1 Cherry Hill	White		
5	ZZ1234570	123456792	Smith, Jackson	KG	West	Slate		

# Populate Drop-Down Options

Place your cursor in cell G2

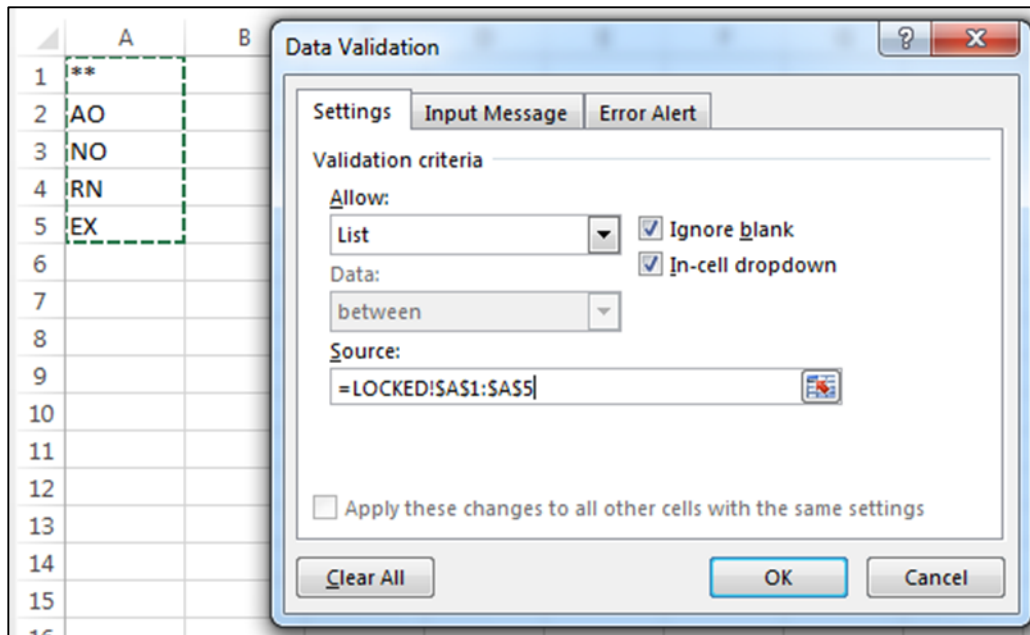
- From the Data tab, choose “Data Validation”, and “Data Validation...”

The screenshot shows the Microsoft Excel interface with the 'DATA' tab selected. The 'Data Validation' button in the ribbon is highlighted with a red box, and its dropdown menu is open, showing 'Data Validation...' also highlighted. In the spreadsheet, cell G2 is highlighted with a red box, and an arrow points to it from a text box that says 'Place cursor here first'.

1	Student SSID	Student Number	Last, First	Grade Level	Building	Homeroom	Reading Diagnos
2	ZZ1234567	123456789	Doe, Jane		3 Cherry Hill	Smith	
3	ZZ1234568	123456790	Brown, Steven		2 West	Darst	
4	ZZ1234569	123456791	Stone, Beth		1 Cherry Hill	White	
5	ZZ1234570	123456792	Smith, Jackson	KG	West	Slate	
6							

# Specify Drop-Down

- From the Data Validation prompt, under “Allow”, select “List”
- For “Source:” first click your cursor into the prompt
- Next, navigate to the “LOCKED” sheet and select Cells A1-A5
- Click OK





# Add Drop Down to all Cells

- See the arrow appear when to the right of cell G2
- Click the arrow and the drop down options appear

	A	B	C	D	E	F	G	H
1	Student SSID	Student Number	Last, First	Grade Level	Building	Homeroom	Reading Diagnostic Result	NOTES: For your use only
2	ZZ1234567	123456789	Doe, Jane		3 Cherry Hill	Smith		
3	ZZ1234568	123456790	Brown, Steven		2 West	Darst		
4	ZZ1234569	123456791	Stone, Beth		1 Cherry Hill	White		
5	ZZ1234570	123456792	Smith, Jackson	KG	West	Slate		
6								
7								
8								
9								
10								

- Drag the bottom right corner of the cell to populate the formula for every cell below G2 to the end of the list of students

	C	D	E	F	G	H
1	Last, First	Grade Level	Building	Homeroom	Reading Diagnostic Result	NOTES: For your use only
2	Doe, Jane		3 Cherry Hill	Smith		
3	Brown, Steven		2 West	Darst		
4	Stone, Beth		1 Cherry Hill	White		
5	Smith, Jackson	KG	West	Slate		

# Put the Workbook into use

- Use the “Instructions” sheet to direct data owners as to the correct way to complete the “Data Entry” sheet
- Save the workbook and distribute it to appropriate district data owners
  - Be certain to include a deadline for data to be returned
- Use the completed workbook to update data in your SIS, and print for records
- Submit data to EMIS and return appropriate reports back to the data owner for verification

## Quick Check

Using an Excel spreadsheet can be an efficient way to collect data from district personnel. By creating a spreadsheet with instructions and drop downs of valid options, data collected will be much more accurate and complete.

- What is the current data collection process in your district?
- Are you able to create pre-populated drop down lists?
- How could using drop down lists help you collect data?

# FTE Detail Report Subtotaling

# FTE Detail Report Subtotaling

## Subtotal the FTE Detail Report

- Sort by SSID, then by Enrollment Start Date

The screenshot shows the Microsoft Excel interface with the 'DATA' tab selected. The 'Sort' button in the 'Sort & Filter' group is highlighted with a red box. A 'Sort' dialog box is open, showing the 'Add Level' button highlighted with a red box. The dialog box is configured to sort by 'SSID' (A to Z) and then by 'ENRL START DATE' (A to Z). The 'OK' button is also highlighted with a red box. The spreadsheet data is visible in the background, showing columns for RPT DEST, SEVERITY, SSID, Emis ID, Last Name, First Name, Middle Name, and LEA IRN.

RPT DEST	SEVERITY	SSID	Emis ID	Last Name	First Name	Middle Name	LEA IRN
40404	F	AF5330185	EMIS ID	Last Name	First Name	Middle Name	404
40404	F	AF9794373	EMIS ID	Last Name	First Name	Middle Name	404
40404	I	AF9794373	EMIS ID	Last Name	First Name	Middle Name	404
40404	C	AF9794373	EMIS ID	Last Name	First Name	Middle Name	404
40404	I	AG3444498	EMIS ID	Last Name	First Name	Middle Name	404
40404	I	IS7050894	EMIS ID	Last Name	First Name	Middle Name	404
40404	I	IS7050894	EMIS ID	Last Name	First Name	Middle Name	404
40404	I	IS7998181	EMIS ID	Last Name	First Name	Middle Name	404
40404	I	KJ3857778	EMIS ID	Last Name	First Name	Middle Name	404
40404	I	KJ9471903	EMIS ID	Last Name	First Name	Middle Name	404
40404	I	KJ9471903	EMIS ID	Last Name	First Name	Middle Name	404
40404	I	KL6339882	EMIS ID	Last Name	First Name	Middle Name	404
40404	I	KL6339882	EMIS ID	Last Name	First Name	Middle Name	404
40404	I	KL8833970	EMIS ID	Last Name	First Name	Middle Name	404
40404	I	KL8833970	EMIS ID	Last Name	First Name	Middle Name	404
40404	I	KL9685822	EMIS ID	Last Name	First Name	Middle Name	404

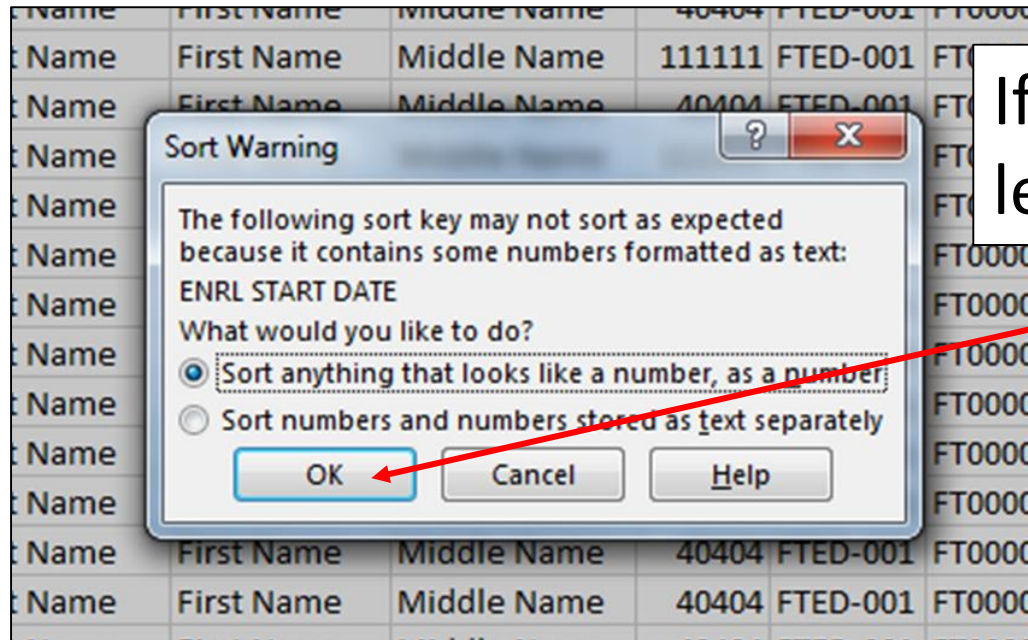
From the Data Tab choose Sort

Sort by SSID, then select "Add Level", then sort by "ENRL START DATE", then select "OK"



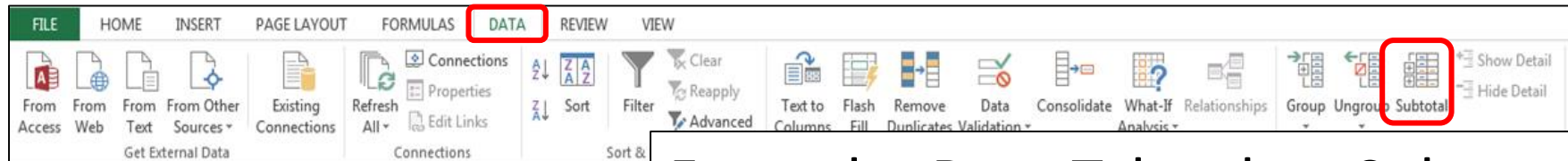
# Sort Warning

This Sort Warning is generated because the ENRL START DATE column contains some numbers that are formatted as text



If a Sort Warning is generated, leave as defaulted and select "OK"

# Apply Subtotals



From the Data Tab select Subtotal

1	RPT DEST	SEVERITY	SSID	Emis ID	Last Name	First Name	Middle Name	LEA IRN	CODE	LEVEL 2	REC TYPE
2	40404	101010 F	AF5330185	EMIS ID	Last Name	F				001	
3	40404	101010 F	AF9794373	EMIS ID	Last Name	F				001	
4	40404	101010 I	AF9794373	EMIS ID	Last Name	F				001	
5	40404	101010 C	AF9794373	EMIS ID	Last Name	F				001	
6	40404	101010 I	AG3444498	EMIS ID	Last Name	F				001	
7	40404	101010 I	IS7050894	EMIS ID	Last Name	F				001	
8	40404	101010 I	IS7050894	EMIS ID	Last Name	F				001	
9	40404	101010 I	IS7998181	EMIS ID	Last Name	F				001	
10	40404	101010 I	KJ3857778	EMIS ID	Last Name	F				001	
11	40404	101010 I	KJ9471903	EMIS ID	Last Name	F				001	
12	40404	101010 I	KJ9471903	EMIS ID	Last Name	F				001	
13	40404	101010 I	KL6339882	EMIS ID	Last Name	F				001	
14	40404	101010 I	KL6339882	EMIS ID	Last Name	F				001	
15	40404	101010 I	KL8833970	EMIS ID	Last Name	F				001	
16	40404	101010 I	KL8833970	EMIS ID	Last Name	F				001	
17	40404	101010 I	KL9685822	EMIS ID	Last Name	F				001	
18	40404	101010 I	KM8256755	EMIS ID	Last Name	F				001	

- In the Subtotal Prompt select
1. "At each change in:" SSID
  2. "Use function:" Sum
  3. "Add subtotal to:" ORIG FTE and ADJSTD FTE and ADJSTD SPECED CAT FTE
  4. Select "OK"

# FTE Detail Report Subtotaled

This student's Original FTE, Adjusted FTE, and Special Education FTE, have been subtotaled and appear chronological order

IRN	Bldg	IRN	CODE	SSID	Emis ID	Last Name	First Name	Middle Name	LEA IRN	CODE	CODE	DESCR	CODE	DATE	DATE	ORIG FTE	FTE	CAT FTE	LEGAL DI
40404	101010	F		AF5330185	EMIS ID	Last Name	First Name	Middle Name	40404	FTED-001	FT0000	FTE Detail	NFRG	08/01/2017	12/31/2500	1	0		222222
<b>AF5330185 Total</b>																			
40404	101010	F		AF9794373	EMIS ID	Last Name	First Name	Middle Name	40404	FTED-001	FT0000	FTE Detail	NFRG	07/01/2017	12/11/2017	0.376623	0		40404
40404	101010	I		AF9794373	EMIS ID	Last Name	First Name	Middle Name	111111	FTED-001	FT0000	FTE Detail	PSET	12/12/2017	12/31/2500	0.612676	0.612676	0.612676	444444
40404	101010	C		AF9794373	EMIS ID	Last Name	First Name	Middle Name	40404	FTED-001	FT0000	FTE Detail	PSRD	12/12/2017	12/31/2500	0.623377	0.387324	0.387324	40404
<b>AF9794373 Total</b>																			
40404	101010	I		AG3444498	EMIS ID	Last Name	First Name	Middle Name	111111	FTED-001	FT0000	FTE Detail	SPCO	07/01/2017	12/31/2500	1	1	1	444444
<b>AG3444498 Total</b>																			
40404	101010	I		IS7050894	EMIS ID	Last Name	First Name	Middle Name	40404	FTED-001	FT0000	FTE Detail	OPDD	07/01/2017	09/03/2017	0.020547	0.020547		333333
40404	101010	I		IS7050894	EMIS ID	Last Name	First Name	Middle Name	40404	FTED-001	FT0000	FTE Detail	OPDD	09/04/2017	12/31/2500	0.979453	0.979453		333333
<b>IS7050894 Total</b>																			
40404	101010	I		IS7998181	EMIS ID	Last Name	First Name	Middle Name	111111	FTED-001	FT0000	FTE Detail	COMM	10/17/2017	12/31/2500	0.782609	0.782609		444444
<b>IS7998181 Total</b>																			
40404	101010	I		KJ3857778	EMIS ID	Last Name	First Name	Middle Name	40404	FTED-001	FT0000	FTE Detail	OPDD	07/01/2017	12/31/2500	1	1		333333



# Undo Subtotals

The screenshot shows the Microsoft Excel interface with the 'DATA' tab selected. The 'Subtotal' dialog box is open, and the 'Remove All' button is highlighted. The background shows a spreadsheet with columns for RPT DEST, SEVERITY, and various codes and dates. The dialog box contains the following options:

- At each change in: SSID
- Use function: Sum
- Add subtotal to:
  - ENRL START DATE
  - ENRL END DATE
  - ORIG FTE
  - ADJSTD FTE
  - ADJSTD SPECED CAT FTE
  - LEGAL DIST OF RES IRN
- Replace current subtotals
- Page break between groups
- Summary below data

The 'Remove All' button is highlighted in blue, and an arrow points to it from the text box on the right.

To undo subtotals select "Subtotal" and then "Remove All"

## Quick Check

Subtotaling the FTE Detail Report provides a format for easier analysis of the data. Since many students have multiple FTEs calculated, using Excel to sum by student will allow the detail to be available while providing subtotals below each student.

- Are there students with Adjusted or Special Education FTEs that are less than the Original FTE?
- Are you using this report with your FTE Adjustment report to identify reasons for the adjustments?
- Are you saving your reports between reviews?



# Summary

- Basic Excel techniques can be very useful when troubleshooting
  - EMIS data in the Student Information System
  - EMIS reports
  - preview/review files
- These techniques should be part of your everyday practices

# Resources

- Microsoft Excel Help within Excel “?” Articles and Videos
- Google it
- Microsoft Excel Classes
- Your ITC

Questions?