

# Using Excel to Troubleshoot EMIS Data

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# 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

- Simple formulas to troubleshoot student FTEs
- VLOOKUP to add LEA names to a report
- Macro to format an FTE Detail report
- Concatenation and conditional formatting to verify calendar data and student data



# Use Simple Formulas to Troubleshoot Student FTEs

# Simple Formulas

- In this section we are going to use simple formulas to identify differences between
  - Original FTEs and Adjusted FTEs
  - Adjusted FTEs and Special Education Adjusted FTEs
- We will filter and highlight those differences to aid in troubleshooting the FTE Detail report

# FTE Detail Report

Open the most recent version of the FTE Detail Report

**Do not format/prepare the report**

**1. Add two new columns by selecting column S and column T, then right click and select "Insert"**

**2. Drag to widen, then name the two new columns**

Q	R	S	T	U
ADJSTD FT	ADJSTD SF	ORIG vs ADJ	ADJ vs Sp Ed	LEGAL DIS ST
1				044180
0.491228				044180

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	First Name	Middle Name	LEA IRN	LEVEL 2 RE	RESULT CC	RESULT CC	FTE FUND	ENRL STAF	ENRL END	ORIG FTE	ADJSTD FT	ADJSTD SF	LEGAL DIS	ST	
2	First	Middle	011506	FTED-001	FT0000	FTE Detail	STEM	07/01/201	12/31/250	1	1		044180		
3	First	Middle	011506	FTED-001	FT0000	FTE Detail	STEM	08/15/201	01/06/201	0.491228	0.491228		044180		
4	First	Middle	000236	FTE							1		044180		
5	First	Middle	000577	FTE							1		044180		
6	First	Middle	000297	FTE							1	0.6	044180		
7	First	Middle	009957	FTE							1		044180		
8	First	Middle	045054	FTED-001	FT0000	FTE Detail	OPDD	05/28/201	12/31/250	0.048088	0.048088		044180		
9	First	Middle	000241	FTED-001	FT0000	FTE Detail	COMM	07/01/201	12/31/250	1	1		044180		
10	First	Middle	050078	FTED-001	FT0000	FTE Detail	IRN	08/01/201	01/05/30/201	1	1		044180		
11								01/06/201	0.490798	0.387564	0.387564		044180		
12								12/31/250	1	1			044180		
13								01/05/31/201	0.92	0.92			044180		
14								11/23/250	1	1			044180		
15								11/06/30/201	1	1			044180		

# Add Simple Formulas

## Subtract ADJSTD FTE from ORIG FTE

In cell S2 type an equal sign then click into cell P2. Type a minus sign. Click into cell Q2 and press enter

=P2-Q2

	K	L	M	N	O	P	Q	R	S	T
L 2 RE	RESULT CC	RESULT CC	FTE FUND	ENRL STAF	ENRL END	ORIG FTE	ADJSTD FT	ADJSTD SF	ORIG vs ADJ	ADJ vs Sp Ed
-001	FT0000	FTE Detail	STEM	07/01/201	12/31/250	1	1		=P2-Q2	
-001	FT0000	FTE Detail	STEM	08/15/201	01/06/201	0.491228	0.491228			
-001	FT0000	FTE Detail	COMM	08/27/201	05/31/201	1	1			

Double click, or click and drag the bottom right corner of cell S2 to populate the cells below

=P2-Q2

	K	L	M	N	O	P	Q	R	S	T
L 2 RE	RESULT CC	RESULT CC	FTE FUND	ENRL STAF	ENRL END	ORIG FTE	ADJSTD FT	ADJSTD SF	ORIG vs ADJ	ADJ vs Sp Ed
-001	FT0000	FTE Detail	STEM	07/01/201	12/31/250	1	1		0	
-001	FT0000	FTE Detail	STEM	08/15/201	01/06/201	0.491228	0.491228			
-001	FT0000	FTE Detail	COMM	08/27/201	05/31/201	1	1			

Here we can see if there is a difference between the original and adjusted FTE

# Add Simple Formulas, cont'd

Subtract ADJSTD SPECED from ADJSTD FTE

1. In cell T2 type an equal sign then click into cell Q2. Type a minus sign. Click into cell R2 and press enter

=Q2-R2

	K	L	M	N	O	P	Q	R	S	T
L 2 RE	RESULT CC	RESULT CC	FTE FUND	ENRL STAF	ENRL END	ORIG FTE	ADJSTD FT	ADJSTD SF	ORIG vs ADJ	ADJ vs Sp Ed
-001	FT0000	FTE Detail	STEM	07/01/201	12/31/250	1	1		0	=Q2-R2
-001	FT0000	FTE Detail	STEM	08/15/201	01/06/201	0.491228	0.491228		0	
-001	FT0000	FTE Detail	COMM	08/27/201	05/31/201	1	1			

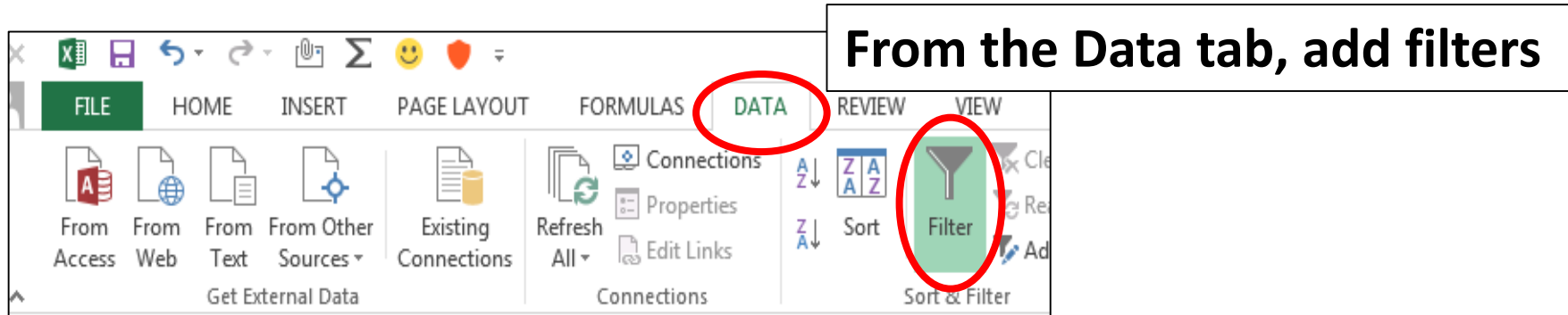
Here we can see if there is a difference between the adjusted FTE and adjusted special education FTE

2. Double click, or click and drag the bottom right corner of cell S2 to populate the cells below

	Q	R	S	T
L 2 RE	RESULT CC	RESULT CC	FTE FUND	ENRL STAF
-001	FT0000	FTE Detail	STEM	07/01/201
-001	FT0000	FTE Detail	STEM	08/15/201
-001	FT0000	FTE Detail	COMM	08/27/201
-001	FT0000	FTE Detail	COMM	08/27/201



# Filter and Highlight ORIG vs ADJ Data



	H	I	J	K	L	M	N	O	P	Q	R	S
1	Middle	LEA IRN	LEVEL 2	RESULT	RESULT	FTE FU	ENRL S	ENRL E	ORIG F	ADJSTD	ADJSTD	ORIG vs AD
2	Middle	011506	FTED-001	FT0000	FTE Detail	STEM	07/01/201	12/31/250	Sort Smallest to Largest			
3	Middle	011506	FTED-001	FT0000	FTE Detail	STEM	08/15/201	01/06/201	Sort Largest to Smallest			
4	Middle	000236	FTED-001	FT0000	FTE Detail	COMM	08/27/201	05/31/201	Sort by Color			
5	Middle	000577	FTED-001	FT0000	FTE Detail	COMM	08/13/201	12/31/250	Clear Filter From "ORIG vs ADJ"			
6	Middle	009957	FTED-001	FT0000	FTE Detail	COMM	07/01/201	12/31/250	Filter by Color			
7	Middle	045054	FTED-001	FT0000	FTE Detail	OPDD	05/28/201	12/31/250	Number Filters			
8	Middle	000241	FTED-001	FT0000	FTE Detail	COMM	07/01/201	12/31/250	Search			
9	Middle	052878	FTED-001	FT0000	FTE Detail	JPSN	08/20/201	05/30/201	(Select All)			
10	Middle	009957	FTED-001	FT0000	FTE Detail	COMM	07/01/201	12/31/250	<input type="checkbox"/> 0			
11	Middle	054239	FTED-001	FT0000	FTE Detail	JPSN	09/19/201	05/31/201	<input checked="" type="checkbox"/> 1E-06			
12	Middle	046128	FTED-001	FT0000	FTE Detail	OPDD	08/15/201	12/31/250	<input checked="" type="checkbox"/> 0.001088			
13	Middle	052803	FTED-001	FT0000	FTE Detail	JPSN	07/01/201	06/30/201	<input checked="" type="checkbox"/> 0.002222			
14	Middle	044180	FTED-001	FT0000	FTE Detail	RGJV	07/01/201	12/31/250	<input checked="" type="checkbox"/> 0.010001			
15	Middle	044180	FTED-001	FT0000	FTE Detail	RGJV	07/01/201	12/31/250	<input checked="" type="checkbox"/> 0.030075			
16	Middle	044180	FTED-001	FT0000	FTE Detail	RGJV	07/01/201	12/31/250	<input checked="" type="checkbox"/> 0.077992			
17	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	07/01/201	12/31/250	<input checked="" type="checkbox"/> 0.213682			
18	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	07/01/201	11/08/201	<input checked="" type="checkbox"/> 0.247754			
19	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	11/07/201	12/31/250				
20	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	03/04/201	05/23/201				

Filter on column S, "ORIG vs ADJ", unselect "0" and click OK

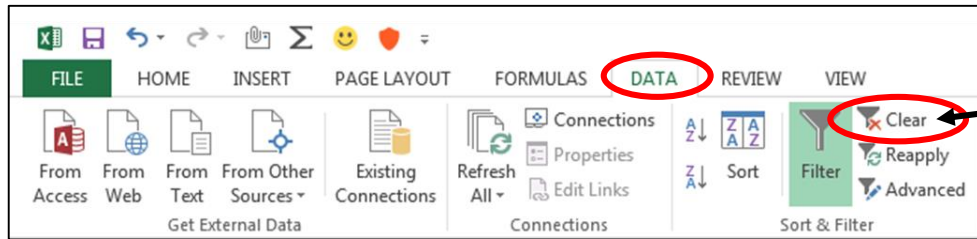
# Filter and Highlight ORIG vs ADJ Data, cont'd

Select cells in column S "ORIG vs ADJ", right click and highlight in yellow

Note that the appearance of IE-06 happens when the difference is 0.000001. This can be corrected by formatting the column to be "Custom" with a value of "0.000000"

H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	
1	Middle	LEA IRN	LEVEL 2	RESULT	RESULT	FTE FU	ENRL S	ENRL E	ORIG F	ADJSTC	ADJSTC	ORIG vs ADJ	ADJ vs Sp E	LEGAL E	STDNT	SENT P
17	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	07/01/201	12/31/250	1	0.465974	0.387956	0.534026	0.0775	0.044180	50	
									0.465974	0.387982						
									1	0.6						
									1	0.5						
									1	0.354879		0.645121	0.35			
									1	0.6		0.4				
									0.461538	0.247856	0.147943	0.213682	0.09			
									0.827068	0.579314	0.279861	0.247754	0.29			
									0.180451	0.150376	0.150376	0.030075				
									0.296673	0.286672		0.010001	0.28			
									0.374299	0.373211		0.001088	0.37			
									0.483179	0.483178		1E-06	0.48			
									0.192308	0.192307	0.192307	1E-06				
									0.295455	0.293233	0.293233	0.002222				
									1	0		1		0	044180	100
									1	0		1		0	044180	100

# Filter and Highlight ADJ vs Sp Ed Data



From the Data tab, clear filters

R	S	T	U	V	W	X	Y	Z	AA	AB	AC
ADJSTD	ORIG vs AD	ADJ vs Sp E	LEGAL	STDNT	SENT R	SENT R	SENT R	SENT R	STATE E	DISAB C	SPECE
	0	1 044180		90 PS	10		Sort A to Z				*
	0	0.491228 044180		100 -			Sort Z to A				*
	0	1 044180		100 -			Sort by Color				*
	0	1 044180		100 -			Clear Filter From "DISAB CNDTN CODE"				*
	0	1 044180		100 -			Filter by Color				*
	0	0.048088 044180		100 -			Text Filters				*
	0	1 044180		100 -			Search				2
	0	1 044180		100 -			(Select All)				2
	0	0.92 044180		100 -			**				*
	0	1 044180		100 -			01				*
	0	1 044180		100 -			03				2
	0	1 044180		100 -			05				*
	0	1 044180		100 -			06				*
	0	1 044180		100 -			08				*
	0	1 044180		100 -			10				1
	0	1 044180		100 -			12				5
	0	1 044180		100 -			14				6
	0	1 044180		100 -			15				2
	0	1 044180		100 -			16				2
	0	1 044180		100 -			(Blanks)				*
1	0	0 044180		100 -			OK			Cancel	*
0.387956	0.534026	0.078018 044180		50 -							1
0.254876	0	0.091278 044180		50 -							*
0.676692	0	0 044180		50 -							2
0.278195	0	0.045113 044180		50 -							2
	0	0.027839 048736		50 -							*
	0.077992	0.387982 048736		50 -							*
1	0	0 044180		50 -							1

Select filter in column "DISAB CNDTN CODE", unselect "\*\*" and "(Blanks)" then click "OK"



# Filter and Highlight ADJ vs Sp Ed Data, cont'd

The screenshot shows the Microsoft Excel interface with the 'DATA' tab selected. A data table is displayed with columns H through T. Column T is filtered, and the filter dropdown menu is open. The dropdown menu shows a search bar and a list of values. The value '0' is unselected, and the 'OK' button is highlighted with a red circle. The data table contains the following information:

	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	Middle	LEA IRN	LEVEL 2	RESULT	RESULT	FTE FU	ENRL S	ENRL E	ORIG F	ADJSTD	ADJSTD	ORIG vs AD	ADJ vs Sp E
16	Middle	044180	FTED-001	FT0000	FTE Detail	RGJV	07/01/201	12/31/250	1				
17	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	07/01/201	12/31/250	1	0.40			
18	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	07/01/201	11/08/201	0.346154	0.34			
19	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	11/07/201	12/31/250	0.676692	0.67			
20	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	03/04/201	05/23/201	0.323308	0.32			
23	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	07/01/201	12/31/250	1				
27	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	03/13/201	12/31/250	0.284615	0.28			
31	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	07/01/201	12/31/250	1				
32	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	12/17/201	04/10/201	0.360902	0.36			
33	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	01/08/201	12/31/250	0.511278	0.51			
37	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	04/11/201	12/31/250	0.180451	0.18			
38	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	02/25/201	04/10/201	0.172932	0.17			
39	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	07/01/201	05/06/201	0.923077	0.92			
40	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	05/07/201	12/31/250	0.076923	0.07			
41	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	07/01/201	12/13/201	0.461538	0.24			
42	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	12/14/201	12/31/250	0.538462	0.53			
43	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	07/01/201	12/31/250	1				
46	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	07/01/201	12/31/250	1				
47	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	12/10/201	12/31/250	0.571429	0.57			
49	Middle	044180	FTED-001	FT0000	FTE Detail	PSNR	10/08/201	05/08/201	0.729323	0.72			

Apply a second filter on column T, "ADJ vs Sp Ed", then unselect "0", and click "OK"

# Filter and Highlight ADJ vs Sp Ed Data, cont'd

The screenshot shows an Excel spreadsheet with the following data in columns H through X:

	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
1	Middle	LEA IRN	LEVEL 2	RESULT	RESULT	FTE FU	ENRL S	ENRL E	ORIG F	ADJSTD	ADJSTD	ORIG vs AC	ADJ vs Sp E	LEGAL I	STDNT	SENT R	SENT R
17	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	07/01/201	12/31/250	1	0.465974	0.387956	0.534026	0.078018	044180	50	-	-
18	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	07/01/201	11/08/201	0.346154	0.346154	0.254876	0	0.091278	044180	50	-	-
20	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	03/04/201	05/23/201	0.323308	0.323308	0.278195	0	0.045113	044180	50	-	-
32	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	12/17/201	04/10/201	0.360902	0.360902	0.249763	0	0.11				
33	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	01/08/201	12/31/250	0.511278	0.511278	0.348762	0	0.16				
41	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	07/01/201	12/13/201	0.461538	0.247856	0.147943	0.213682	0.099				
49	Middle	044180	FTED-001	FT0000	FTE Detail	PSNR	10/08/201	05/08/201	0.729323	0.729323	0.654865	0	0.074458	048694			
62	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	02/07/201	12/31/250	0.407692	0.407692	0.245638	0	0.162054	044180			
70	Middle	044180	FTED-001	FT0000	FTE Detail	PSRD	10/01/201	12/31/250	0.827068	0.579314	0.279861	0.247754	0.299453	044180			

Select cells in column T, right click and highlight in green

# Remove Filters, View Highlighted Cells, and Save

From the Data tab click on “Filter” to remove all filters from the report

Notice that the highlighted cells are showing the amount of Original FTE (yellow) and Special Education weighted FTE (green) that is not being funded

Investigate if the FTE is fundable and if there is an appropriate corrective action. Refer to the FTE Adjustment report for Result Codes

Last Name	First Name	Middle Name	LEA IRN	LEVEL 2 RE	RESULT CC	RESULT CC	FTE FUND	ENRL STAF	ENRL END	ORIG FTE	ADJSTD FT	ADJSTD S	ORIG vs ADJ	ADJ vs Sp Ed	LEGAL DIS	STDNT PC	SENT RE
Last	First	Middle	011506	FTED-001	FT0000	FTE Detail STEM	07/01/2012	12/31/250	1	1	0	0	0	0.491228	044180	100	-
Last	First	Middle	044180	FTED-001	FT0000	FTE Detail RGJV	07/01/2012	12/31/250	1	1	0	0	0	0.091278	044180	50	-
Last	First	Middle	044180	FTED-001	FT0000	FTE Detail RGJV	07/01/2012	12/31/250	1	1	0	0	0	0.045113	044180	50	-

## Quick Check

Focusing on differences in original FTEs, adjusted FTEs, and special education adjusted FTEs can aid in troubleshooting FTE report data. Since many FTE Detail reports are quite large, highlighting can make the effected FTEs more obvious.

- Are you able to add columns and perform simple formulas?
- Are you able to filter and highlight adjusted values that should be investigated?
- Are you looking at the FTE Adjustment report to identify the causes of the adjustments?



# Use VLOOKUP to add LEA Names from OEDS to a Report

# Adding LEA Names

- Most EMIS reports contain IRNs and no LEA names which can make troubleshooting difficult
- This section will add LEA names to the FTE Detail report for a more user friendly outcome
- We will begin by running a report of LEA IRNs and names from OEDS and will perform a VLOOKUP to add the LEA names to the FTE Detail report

# Use OEDS Data to Create a Source File

<https://oeds.ode.state.oh.us/SearchOrg>

LEA data can be pulled into Excel using the OEDS Data link

The screenshot shows the Ohio Department of Education's OEDS Data search interface. At the top, the Ohio Department of Education logo is on the left, and navigation links for HOME, ABOUT ODE, STATE AGENCIES, and ONLINE SERVICES are on the right. A LOGIN button and a session timeout indicator (00:29:47) are also present. Below this is a dark red navigation bar with links for HOME, CREATE ORGANIZATION, SEARCH ORGANIZATION, and OEDS DATA. The OEDS DATA link is circled in red. The main content area is titled "Search Organizations" and features a search form with two tabs: "SEARCH BY NAME(OR) IRN" and "SEARCH BY ADDRESS". The "SEARCH BY NAME(OR) IRN" tab is active, showing a search input field with the placeholder "Org Name, IRN, County, City" and a "Search by Organization Type" dropdown menu with "Please select ..." as the current selection. There are "RESET" and "SEARCH" buttons at the bottom of the search form. To the right of the search form is a "Search Tip" box with a bell icon, containing text that explains that searches are not case sensitive and return all organizations matching the search term in any part of the organization's name, city, or county of its address, or its IRN. An example is given: searching for "colu" will show all schools and districts with "Columbus" in their name, all schools and districts in Columbiana county, etc.

# Select LEA Types

## Select District LEA Types to Include

The screenshot displays the 'OEDS Reports' interface. At the top, there is a navigation bar with 'Search Organization' and 'Public Extract Data'. Below this is a header for 'OEDS Reports' and a sub-header for 'PUBLIC EXTRACT DATA'. The main content area is titled 'Select Organization Types By Categories'. On the left, under the 'DISTRICT' category (circled in red), there are several options: 'All District types' (unchecked), 'Public District' (checked), 'Tech Prep. Regional Centers' (unchecked), 'Career Technical Planning District' (unchecked), 'Nonpublic District' (checked), and 'Joint Vocational School District' (checked). Below this are sections for 'SCHOOL', 'INFORMATION TECHNOLOGY CENTER', and 'POLITICAL DISTRICT'. On the right, there is an 'Instructions' box and a 'What Will Be Included In The Report' section. The 'SELECTED LIST' section shows 'REPORT INCLUDES' with a list of 'SELECTED LIST OF ORGANIZATION TYPES' (circled in red): 1. PUBLIC DISTRICT, 2. NONPUBLIC DISTRICT, and 3. JOINT VOCATIONAL SCHOOL DISTRICT. A text box with an arrow points to this list, stating 'Selected District LEA types will appear here'.



# Select School LEA Types

## Select School LEA Types to Include

**Select Organization Types By Categories**

**DISTRICT** +

**SCHOOL** -

- All School types
- Nonpublic School
- Public School
- Night/Adult School
- Vocational School
- Community School
- Science, Technology, Engineering and Mathematics
- 

**INFORMATION TECHNOLOGY CENTER** +

**POLITICAL DISTRICT** +

**MEDIA** +

**Instructions**

Select the organization types and click Generate Report to view OEDS data.

**What Will Be Included In The Report**

**SELECTED LIST**

**REPORT INCLUDES**

**SELECTED LIST OF ORGANIZATION TYPES**

- 1 PUBLIC DISTRICT
- 2 JOINT VOCATIONAL SCHOOL DISTRICT
- 3 NONPUBLIC SCHOOL
- 4 PUBLIC SCHOOL
- 5 COMMUNITY SCHOOL

**Selected School LEA types will appear here**

# Select More LEA Types and Generate Report

PUBLIC EXTRACT DATA

Select Organization Types By Categories

DISTRICT	+
SCHOOL	+
INFORMATION TECHNOLOGY CENTER	+
POLITICAL DISTRICT	+
MEDIA	+
UNIVERSITY/COLLEGE	+
<b>SERVICE CENTER</b>	+
CHILDCARE/PRESCHOOL	+
STATE ORGANIZATION	+
<b>STATE SUPPORTED ORGANIZATION</b>	+
<b>OTHER ORGANIZATION</b>	+
CHILD NUTRITION ORGANIZATION	+

**Educational Service Center**

**State Supported Organization  
State Supported School  
Developmental Disabilities  
Organization**

**Scholarship Provider  
Unclassified OEC Service Provider**

**Click on "Generate Report"**

Instructions

Select the organization types and click Generate Report to view OEDS data.

What Will Be Included In The Report

SELECTED LIST

REPORT INCLUDES

SELECTED LIST OF ORGANIZATION TYPES

- 1 PUBLIC DISTRICT
- 2 JOINT VOCATIONAL SCHOOL DISTRICT
- 3 PUBLIC SCHOOL
- 4 COMMUNITY SCHOOL
- 5 SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS
- 6 EDUCATIONAL SERVICE CENTER

**GENERATE REPORT**

# Prepare the Source File

Delete the top row

The screenshot shows an Excel spreadsheet with a table. The top row (row 1) is selected and highlighted in green. A context menu is open over this row, with the 'Delete' option circled in red. A text box overlay with a black border and white background contains the text: "Select the top row, right click, and select 'delete'".

1	Generated on 7/25/2019 10:57:13 AM				
2	IRN	ORGANIZ	SCHOOL T	GRADE SP.	ORGA
3	132746	Summit A	Elementa	K-6	Com
4	132746	Summit A	Communi	K-6	Com
5	132761	Summit A	Elementa	K-12	Com
6	132761	Summit A	Communi	K-12	Com
7	132779	Summit A	Middle Sc	6-8	Com
8	132779	Summit A	Communi	6-8	Com
9	132795	Cliff Park	High Scho	9-12	Com



# Sort Both Files

**1. Select all data on the report by clicking on the triangle between row 1 and column A or use CTRL A**

**2. From the Data tab, choose Sort**

**3. In the Sort prompt, sort by IRN and click OK. If a sort warning appears, click OK**

**4. Repeat this sort on the LEA IRN column on the FTE Detail Report**

IRN	ORGANIZ/SCHOOL T	GRADE SP.	ORGANIZ/ ORGANIZ/	STATUS	DESIGNAT	WEB URL	ORG EMAI	ORG MAIL	ORG PHOT	ORG FAX	SUPERINT	SUPERINT	SUPERINT	TREA		
055210	St Jude	Elementar	K-8	Nonpublic	School	Open	Hamilton	http://ww	eichhold.l	5940 Bridg	(513) 598-	(513) 598-	N/A	N/A	N/A	N/A
055228	St Lawren	Elementar	P,K-8	Nonpublic	School	Open	Hamilton	http://ww	klus@ctla	1020 Cars	(513) 921-	(513) 921-	N/A	N/A	N/A	N/A
055103	St James	Elementar	K-8	Nonpublic	School	Open										Jeffr
036350	Elida ELEM	Elementar	K-4	Public Sch	School	Open										N/A
011916	Riverdale	Elementar	K-2	Public Sch	School	Open										N/A
044826	Steubenvi	N/A	N/A	Public Dis	District	Open										Kayl
060889	Trinity Ev	Elementar	P,K-8	Nonpublic	School	Open										N/A
040279	Wellsville	High Scho	8-12	Public Sch	School	Open										N/A
012971	Garfield E	Elementar	K-3,P	Public Sch	School	Open										N/A
052993																N/A
052951																N/A
054320																N/A
048355																N/A
049353																N/A
018135																N/A
038265																N/A
020594	Van Wert	Middle Sc	6-8	Public Sch	School	Open	Van Wert	N/A	m	bagley	10694 Stat	(419) 238-	(419) 238-	N/A	N/A	N/A

# Adding LEA Names to FTE Detail Report

**1. Select the column to the right of the LEA IRN column, right click and select "Insert". Label the new column "LEA Name"**

**2. Place cursor in the first open cell in the new column, then select the function icon**

	F	G	H	I	J	K	L	M
1	Last Name	First Name	Middle Name	LEA IRN				
2	Last	First	Middle	011506				
11	Last	First	Middle	054239				
12	Last	First	Middle	046128				
13	Last	First	Middle	052803				
14	Last	First	Middle	044180				
15	Last	First	Middle	044180				

	J	K	L	M
1	Detail STEM	08/15/201	01/06/201	0.491228
2	Detail COMM	08/27/201	05/31/201	1
3	Detail COMM	08/13/201	12/31/250	1
4	Detail COMM	07/01/201	12/31/250	1
5	Detail OPDD	05/28/201	12/31/250	0.048088
6	Detail COMM	07/01/201	12/31/250	1
7	Detail JPSN	08/20/201	05/30/201	1
8	Detail COMM	07/01/201	12/31/250	1
9	Detail JPSN	09/19/201	05/31/201	0.92
10	Detail OPDD	08/15/201	12/31/250	1
11	Detail JPSN	07/01/201	06/30/201	1
12	Detail RGJV	07/01/201	12/31/250	1



# Begin the VLOOKUP

	F	G	H	I	J	K	L	M	N
1	Last Name	First Name	Middle Name	LEA IRN	LEA Name				
2	Last	First	Middle	011506	=				
3	Last	First	Middle	011506					
4	Last	First	Middle	000236					
5	Last	First	Middle	000577					
6	Last	First	Middle	009957					
7	Last	First	Middle	045054					
8	Last	First	Middle	000241					
9	Last	First	Middle	052878					
10	Last	First	Middle	009957					
11	Last	First	Middle	054239					
12	Last	First	Middle	046128					
13	Last	First	Middle	052803					
14	Last	First	Middle	044180					
15	Last	First	Middle	044180					
16	Last	First	Middle	044180					
17	Last	First	Middle	044180					
18	Last	First	Middle	044180					
19	Last	First	Middle	044180					
20	Last	First	Middle	044180		FTED-001	FT0000	FTE Detail PSRD	03/04/201 05/23/201 0.323308 0.323308
21	Last	First	Middle	044180		FTED-001	FT0000	FTE Detail RGIV	08/22/201 09/04/201 0.027839 0.027839

**Insert Function**

Search for a function:  
Type a brief description of what you want to do and then click Go

Or select a category: Most Recently Used

Select a function:  
VLOOKUP  
CONCATENATE  
IF  
SUM  
MMULT  
PRODUCT  
PROPER

VLOOKUP(lookup\_value,table\_array,col\_index\_num,range\_lookup)  
Looks for a value in the leftmost column of the table\_array, sorted in an ascending order.

[Help on this function](#)

If VLOOKUP does not appear in the list of functions, search for VLOOKUP and select "Go"

Select VLOOKUP from the "Select a Function" list and click "OK"

# Build the VLOOKUP

**1. Be sure that your cursor is in the field next to "Lookup\_value"**

**2. Select cell I2 in the "LEA IRN" column**

**3. See that I2 appears in the Lookup\_value field**

**4. Place cursor in the Table\_array field**

	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	Last Name	First Name	Middle Name	LEA IRN	LEA Name	LEVEL 2 RE	RESULT CC	RESULT CC	FTE FUND	ENRL STAF	ENRL END	ORIG FTE	ADJSTD FT	ADJSTD SF	ORIG vs ADJ
2	Last	First	Middle	011506	VLOOKUP(I2)	FTE									
3	Last	First	Middle	011506	FTE										
11	Last	First	Middle	054239	FTE										
12	Last	First													
13	Last	First													
14	Last	First													
15	Last	First													
16	Last	First	Middle	044180	FTE										
17	Last	First	Middle	044180	FTE										
18	Last	First	Middle	044180	FTE										



# Build the VLOOKUP, cont'd

- Toggle to your OEDS Data spreadsheet and place your cursor in cell A2
- While holding down the Shift and CTRL keys at the same time, press right arrow then down arrow

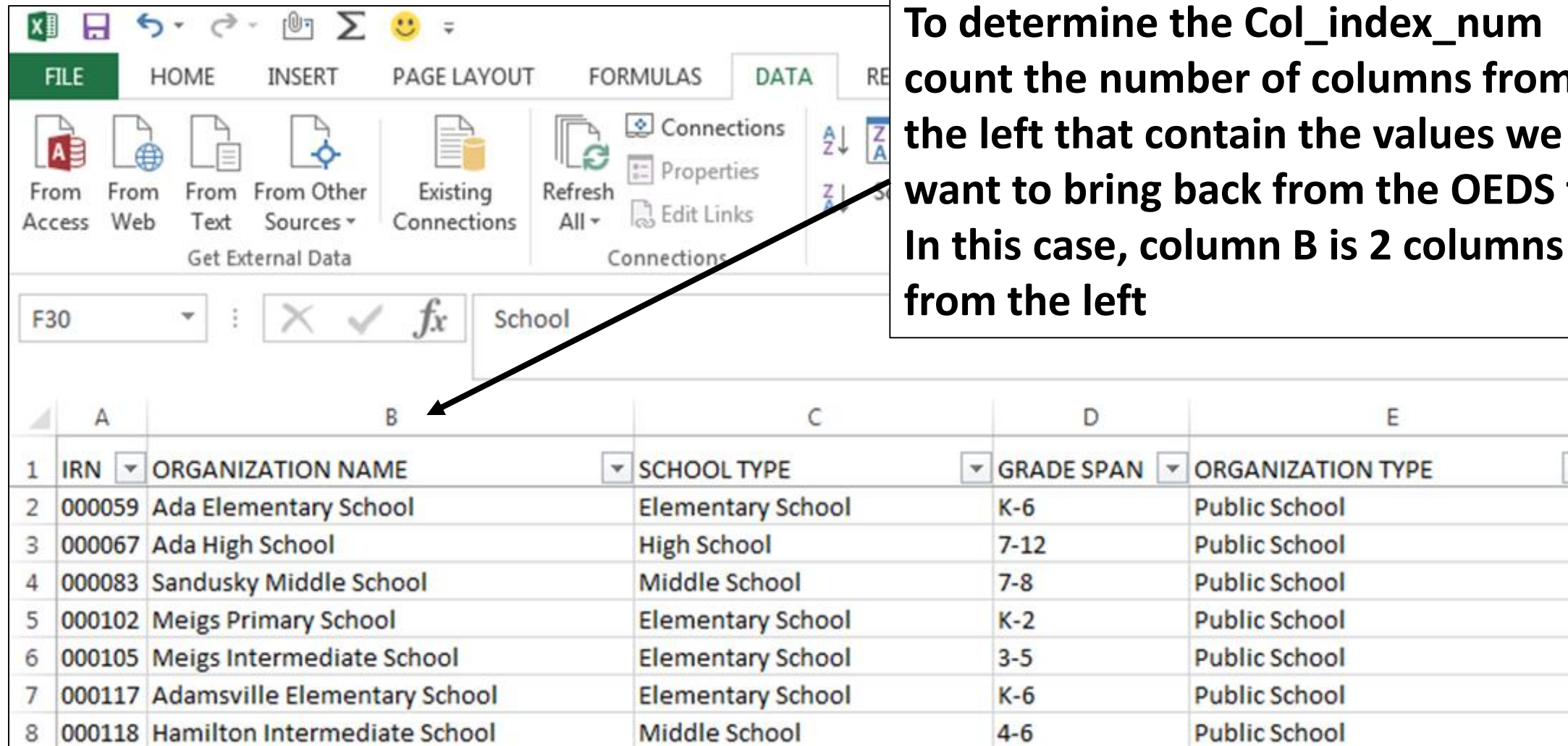
This will populate the Table\_array field

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P		
6283	148981	Tomorrow	Dropout R	6-12	Communi	School	Open	Morrow	http://the	N/A	3700 Cour	(419) 718-	N/A	amie Byr	jbyrne@t	(740) 341-	Step	
6284	148999	Mahoning	High Scho	4-12	Communi	Sch											tle (330) 533-	Blais
6285	148999	Mahoning	Communi	4-12	Communi	Sch											tle (330) 533-	Blais
6286	148999	Mahoning	Virtual Sci	4-12	Communi	Sch											tle (330) 533-	Blais
6287	148999	Mahoning	Dropout R	4-12	Communi	Sch											tle (330) 533-	Blais
6288	149047	Goal Digit	High Scho	K-12	Communi	Sch											s@ (419) 775-	Step
6289	149047	Goal Digit	Communi	K-12	Communi	Sch											@ (419) 775-	Step
6290	149047	Goal Digit	Virtual Sci	K-12	Communi	Sch												
6291	149047	Goal Digit	Dropout R	K-12	Communi	Sch												
6292	149088	Fairborn	High Scho	9-12	Communi	Sch												
6293	149088	Fairborn	Communi	9-12	Communi	Sch												
6294	149088	Fairborn	Virtual Sci	9-12	Communi	Sch												
6295	149088	Fairborn	Dropout R	9-12	Communi	Sch												
6296	149302	Life Skills	High Scho	9-12	Communi	Sch												
6297	149302	Life Skills	Communi	9-12	Communi	Sch												
6298	149302	Life Skills	Dropout R	9-12	Communi	Sch												
6299	149328	Foxfire Hi	Ungraded	4-12,UNG	Communi	Sch												
6300	149328	Foxfire Hi	Communi	4-12,UNG	Communi	Sch												
6301	151175	West Cen	High Scho	9-12	Communi	School	Open	Allen	http://wc	N/A	522 W Nor	(419) 227-	(419) 227-	Mindy Sch	mindy.sch	(419) 222-	Karl	
6302	151175	West Cen	Communi	9-12	Communi	School	Open	Allen	http://wc	N/A	522 W Nor	(419) 227-	(419) 227-	Mindy Sch	mindy.sch	(419) 222-	Karl	
6303	151175	West Cen	Dropout R	9-12	Communi	School	Open	Allen	http://wc	N/A	522 W Nor	(419) 227-	(419) 227-	Mindy Sch	mindy.sch	(419) 222-	Karl	
6304	151175	West Cen	Blended S	9-12	Communi	School	Open	Allen	http://wc	N/A	522 W Nor	(419) 227-	(419) 227-	Mindy Sch	mindy.sch	(419) 222-	Karl	

Place cursor into Col\_Index\_Num field



# Build the VLOOKUP, cont'd



The screenshot shows the Microsoft Excel interface with the DATA tab selected. The ribbon includes options for 'Get External Data' (From Access, From Web, From Text, From Other Sources, Existing Connections) and 'Connections' (Refresh All, Properties, Edit Links). The formula bar shows 'School' in cell F30. Below the ribbon is a table with 5 columns: A (IRN), B (ORGANIZATION NAME), C (SCHOOL TYPE), D (GRADE SPAN), and E (ORGANIZATION TYPE). The table contains 8 rows of data.

	A	B	C	D	E
1	IRN	ORGANIZATION NAME	SCHOOL TYPE	GRADE SPAN	ORGANIZATION TYPE
2	000059	Ada Elementary School	Elementary School	K-6	Public School
3	000067	Ada High School	High School	7-12	Public School
4	000083	Sandusky Middle School	Middle School	7-8	Public School
5	000102	Meigs Primary School	Elementary School	K-2	Public School
6	000105	Meigs Intermediate School	Elementary School	3-5	Public School
7	000117	Adamsville Elementary School	Elementary School	K-6	Public School
8	000118	Hamilton Intermediate School	Middle School	4-6	Public School

To determine the Col\_index\_num count the number of columns from the left that contain the values we want to bring back from the OEDS file. In this case, column B is 2 columns from the left

# Build the VLOOKUP, cont'd

The complete VLOOKUP function appears here

1. Insert 2 in the Col\_index\_num and FALSE in the Range\_lookup

2. Note that the first match appears in the prompt

3. Click OK

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	RPT DEST	Bldg IRN	SEVERITY	SSID	Emis ID	Last Name	First Name	Middle Name	LEA IRN	LEA Name	LEVEL 2 RE	RESULT CC	RESULT CC	FTE FUND EN
2	040404	011111	I	RV666862	123456789	Last	First	Middle	011506	,FALSE)	FTED-001	FT0000	FTE Detail	STEM 07/
3	040404	011111	I	RV902466	123456795	Last	First	Middle	011506	FTED-001				
4	040404	011111	I											
5	040404	011111	I											
6	040404	011111	I											
7	040404	011111	I											
8	040404	011111	I											
9	040404	011111	I	PH284246	123456856	Last	First	Middle	052878	FTED-001				
10	040404	011111	I	LF0022882	123456875	Last	First	Middle	009957	FTED-001				
11	040404	011111	I	TZ8002486	123456919	Last	First	Middle	054239	FTED-001				
12	040404	011111	I	TT4424462	123456937	Last	First	Middle	046128	FTED-001				
13	040404	011111	I	TJ2262602	123456973	Last	First	Middle	052803	FTED-001				
14	040404	011111	I	VV420086	123456981	Last	First	Middle	044180	FTED-001				
15	040404	011111	I	DZ844484	123456982	Last	First	Middle	044180	FTED-001				
16	040404	011111	I	XF022024	123456983	Last	First	Middle	044180	FTED-001				
17	040404	011111	I	BP860648	123457010	Last	First	Middle	044180	FTED-001				
18	040404	011111	I	TF842486	123457022	Last	First	Middle	044180	FTED-001				
19	040404	011111	I	DT680828	123457027	Last	First	Middle	044180	FTED-001				



# View LEA Names then Save Changes

**See the first LEA Name appear, then double click or drag down to populate cells below**

LEA Name	LEA IRN	LEA Name	LEVEL 2 RE RESULT	FT0000
Dayton Regional STEM School	011506		FTED-001	FT0000
Dayton Regional STEM School	011506		FTED-001	FT0000
Ohio Connections Academy In	000236		FTED-001	FT0000
Emerson Academy	000577		FTED-001	FT0000

**Widen the LEA Name column as needed**

Middle Name	LEA IRN	LEA Name	LEVEL 2 RE RESULT	CC RESULT
Middle	011506	Dayton Regional STEM School	FTED-001	FT0000
Middle	011506	Dayton Regional STEM School	FTED-001	FT0000
Middle	000236	Ohio Connections Academy In	FTED-001	FT0000
Middle	000577	Emerson Academy	FTED-001	FT0000
Middle	009957	Klepinger Community School	FTED-001	FT0000

**Before sending this report to others, change the formulas in column J to values. Right click column J and choose "Copy", then right click and paste values**

## Quick Check

Using data from OEDs to populate LEA names into an FTE Detail report can make the report easier to troubleshoot. Consider doing the VLOOKUP on other columns in the FTE Detail report or on other EMIS reports.

- Are you able to generate an LEA report from OEDS?
- Are you able to perform a VLOOKUP to add LEA names to the FTE Detail report?
- What other EMIS reports could be made more user friendly by populating LEA names into the report?

# Create MACROs to Format Spreadsheets

# Create a Macro

- A macro can be created to complete spreadsheet set ups with one click
- Create it once and use it over and over
- Continue using the same FTE Detail Report that we have used in previous exercises
  - If you are using the same FTE Detail report from the last segment, remove filters before beginning the recording
  - Note that we are not going to record the simple formulas exercise or the VLOOKUP to add LEA names

# Macro Steps

- Freeze Top Row
- Wrap Text in the Header Row
- Justify column width
- Apply Filters
- Sort
- Subtotal then highlight subtotaled rows

# 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' button is highlighted, and its dropdown menu is open. The 'Record Macro...' option is highlighted with a red box. Two callout boxes with arrows point to the down arrow and the 'Record Macro...' option.

H	I	J	K	L	M	N	O	P	Q	AD.
Middle Na	LEA IRN	LEA Name	LEVEL 2 RE	RESULT CC	RESULT CC	FTE FUND	ENRL STAF	ENRL END	ORIG FTE	AD.
Middle	011506	Dayton Regional STEM School	FTED-001	FT0000	FTE Detail	STEM	07/01/201	12/31/250	1	
Middle	011506	Dayton Regional STEM School	FTED-001	FT0000	FTE Detail	STEM	08/15/201	01/06/201	0.491228	0.4
Middle	000236	Ohio Connections Academy In	FTED-001	FT0000	FTE Detail	COMM	08/27/201	05/31/201	1	
Middle	000577	Emerson Academy	FTED-001	FT0000	FTE Detail	COMM	08/13/201	12/31/250	1	
Middle	009957	Klepinger Community School	FTED-001	FT0000	FTE Detail	COMM	07/01/201	12/31/250	1	

Select the down arrow

This begins the recording



# Record Macro Prompt

Set up the prompt

The screenshot shows the 'Record Macro' dialog box with the following fields:

- Macro name:** Macro1
- Shortcut key:** Ctrl+ t
- Store macro in:** Personal Macro Workbook
- Description:** (empty text box)

Buttons: 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

# Begin 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

Start by selecting the top row

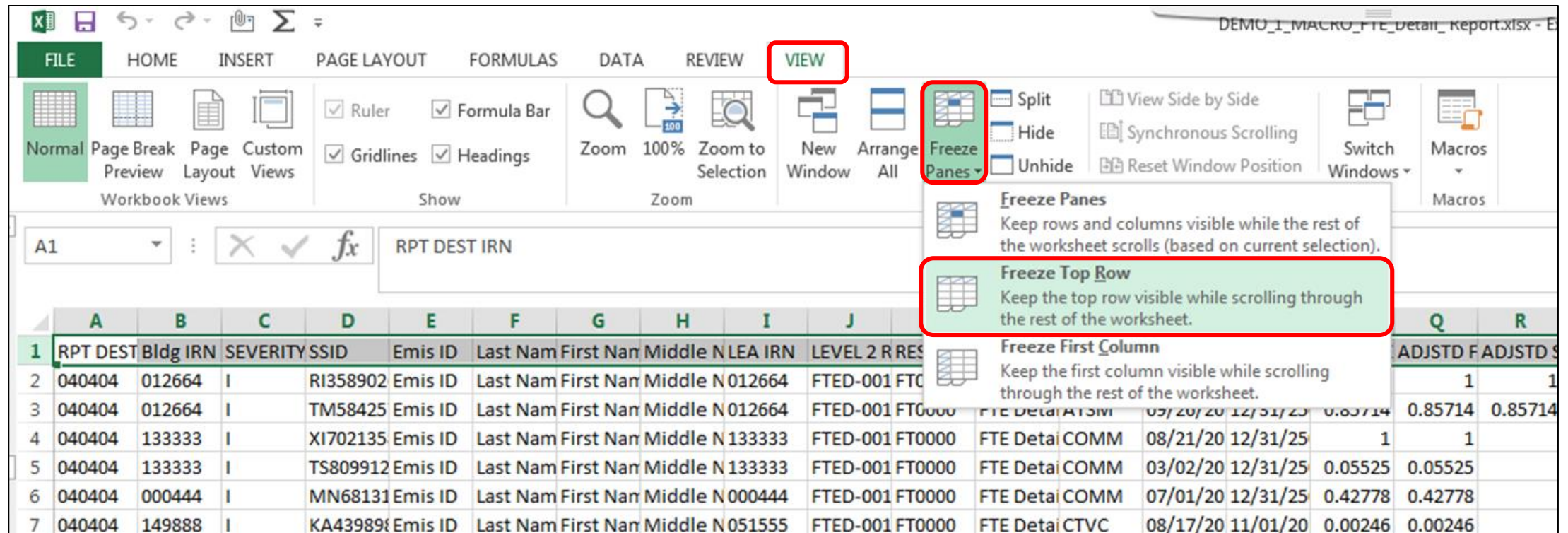
The screenshot shows the Microsoft Excel interface with the 'VIEW' ribbon selected. The spreadsheet below the ribbon has the first row highlighted. A callout box with the text 'Click on the "1" to select the first row' points to the '1' in the first column header.

1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	
	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 ADJ	STD 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 background shows a worksheet with columns A through R and rows 1 through 7. The formula bar shows 'RPT DEST IRN'.

	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	0.05714	0.85714	0.85714
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 interface with the Home tab selected. The 'Wrap Text' button in the Alignment group is highlighted with a red box. Below the ribbon, the formula bar shows 'RPT DEST IRN'. The spreadsheet contains a table with the following data:

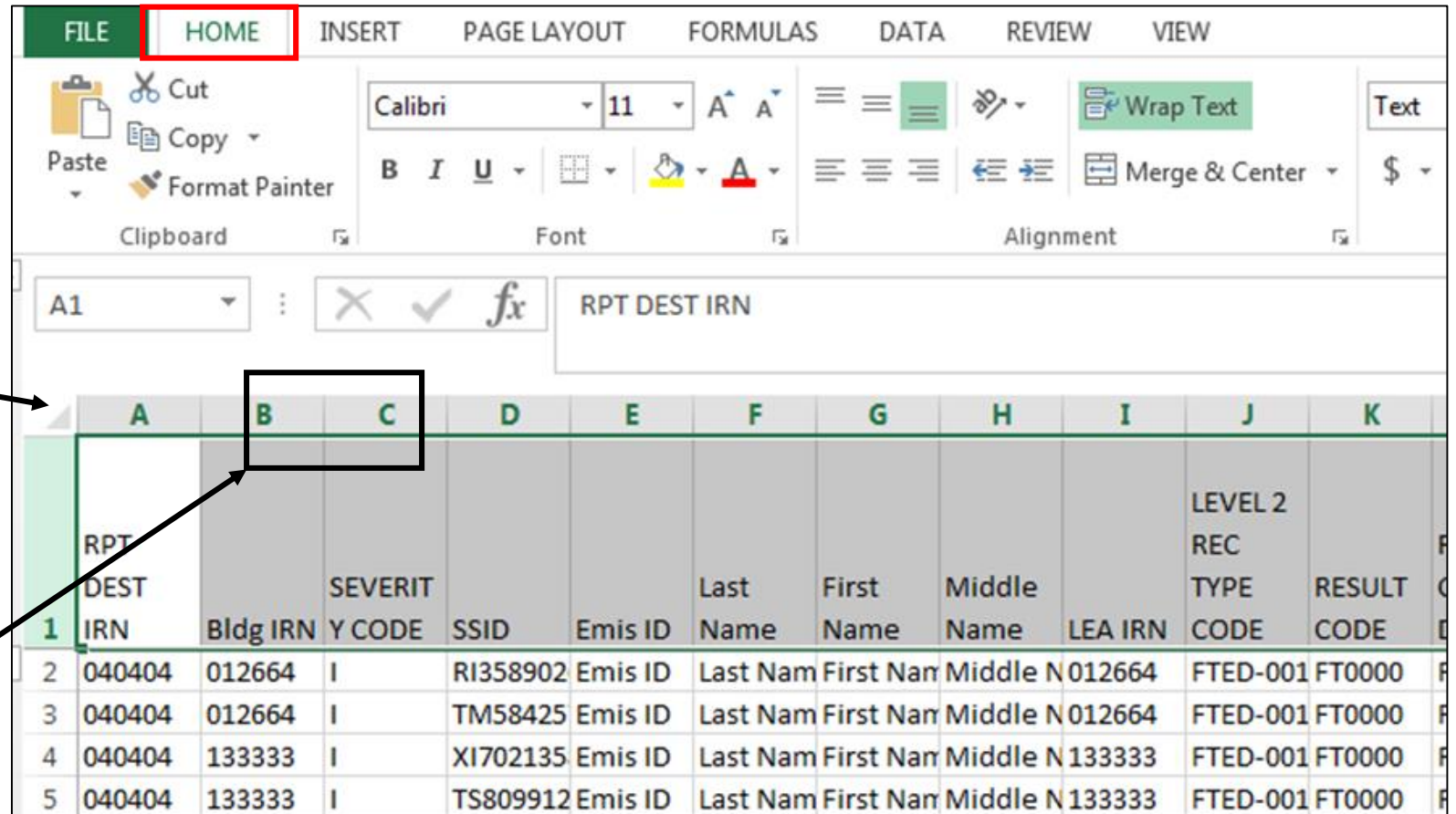
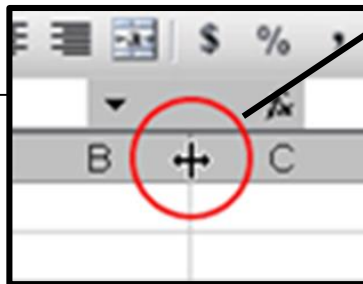
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
	RPT DEST IRN	Bldg IRN	SEVERIT Y CODE	SSID	Emis ID	Last Name	First Name	Middle Name	LEA IRN	LEVEL 2 REC TYPE	RESULT CODE	RESULT DESCR	FTE FUND PTTRN CODE	ENRL START DATE	ENRL END DATE	ORIG FTE	ADJSTD FTE
1																	
2	040404	012664	I	RI358902	Emis ID	Last Nam	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



The screenshot shows the Microsoft Excel ribbon with the 'HOME' tab selected. The ribbon includes the Clipboard, Font, and Alignment groups. The spreadsheet grid is visible below the ribbon, showing columns A through K and rows 1 through 5. The formula bar contains the text 'RPT DEST IRN'. The grid data 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”

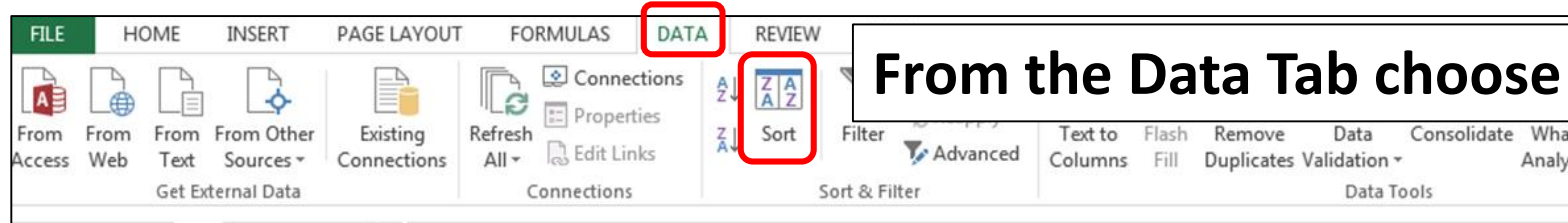
The screenshot shows the Microsoft Excel interface. The Home tab is selected on the ribbon. The Sort & Filter group is highlighted, and the Filter icon is selected, opening a dropdown menu. The Filter option is highlighted in the menu.

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

W	X	Y	Z	AA	AB	AC	AD	AE	AF	
SENT REASON 2	SENT REASON 2 PCT	STATE EQUIV GRADE LEVEL CODE	DISAB CNDTN CODE	SPECED CAT CODE	ECON DISADV FLAG	LEP CODE	FTE INCL CODE	CAL DIST IRN	CAL BLDG IRN	CA GF LE
-	-	KG	12	6	N	N	FULL	999999	999999	**
-	-	03	12	6	N	N	FULL	999999	999999	**

# Recording the Macro, New Steps

## Sort by SSID, then by Enrollment Start Date



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

RPT DEST	SEVERITY	SSID	Emis ID	Last Name	First Name	Middle Name	LEA IRN	CODE	CODE	DESCR	CODE	DATE		
1	IRN	Bldg IRN	CODE	AF5330185	EMIS ID	Last Name	First Name	Middle Name	40404	FTED-001	FT0000	FTE Detail	NFRG	08/01/20
2	40404	101010	F	AF9794373	EMIS ID	Last Name	First Name	Middle Name	40404	FTED-001	FT0000	FTE Detail	NERG	07/01/20
3	40404	101010	F	AF9794373	EMIS ID	Last Name	First Name	Middle Name	40404	FTED-001	FT0000	FTE Detail	NERG	07/01/20
4	40404	101010	I	AG3444498	IS7050894	IS7050894	KJ3857778	KJ9471903	KJ9471903	KL6339882	KL6339882	KL8833970	KL8833970	KL9685822

If a sort warning appears, click OK



# Apply Subtotals

From the Data Tab select Subtotal

The screenshot shows the Microsoft Excel interface. The ribbon is set to the 'DATA' tab, and the 'Subtotal' button is highlighted with a red box. Below the ribbon, a data table is visible with columns for RPT DEST, SEVERITY, SSID, Emis ID, and Name. A Subtotal dialog box is open, showing settings for 'At each change in: SSID', 'Use function: Sum', and 'Add subtotal to: ORIG FTE, ADJSTD FTE, and ADJSTD SPECED CAT FTE'.

RPT DEST	SEVERITY	SSID	Emis ID	Last	First	Middle	LEA IF	
1 IRN								
2 040404	011111	I	BF8442646	123463667	Last	First	Middle	044180
3 040404	011111	I	BJ0082484	123463241	Last	First	Middle	044180
4 040404	011111	I	BJ6408068	123457795	Last	First	Middle	044180
5 040404	011111	I	BN0024228	123463197	Last	First	Middle	044180
6 040404	011111	I	BN2282646	123461615	Last	First	Middle	044180
7 040404	011111	I	BN6204622	123457306	Last	First	Middle	044180
8 040404	011111	I	BN6608042	123457361	Last	First	Middle	044180
9 040404	011111	I	BP4286864	123463226	Last	First	Middle	044180
10 040404	011111	I	BP8606484	123457010	Last	First	Middle	044180
11 040404	011111	I	BR6260824	123463229	Last	First	Middle	044180
12 040404	011111	I	BV6024606	123463225	Last	First	Middle	044180
13 040404	011111	I	BV6084064	123457681	Last	First	Middle	044180
14 040404	011111	I	BV6084064	123457680	Last	First	Middle	044180
15 040404	011111	I	BX2640686	123463242	Last	First	Middle	044180
16 040404	011111	I	BX2844844	123457534	Last	First	Middle	044180
17 040404	011111	I	BX6684204	123456829	Last	First	Middle	009957

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"

# Filter and Highlight

**1. Filter on the “RPT DIST IRN” column and select only “Blanks” then click “OK”**

**2. From the Home Tab select highlight and choose a color**

**3. Choose the filter on the “RPT DIST IRN” column again and check “Select All” then click “OK”**

RPT DEST	SEVERITY	Last	First	Middle	LEA IF
1 IRN		Nan	Man	Man	LEA IF
2 040404		Last	First	Middle	044180
3 040404		Last	First	Middle	044180
4 040404		Last	First	Middle	044180
5 040404		Last	First	Middle	044180
6 040404		Last	First	Middle	044180
7 040404		Last	First	Middle	044180
8 040404		Last	First	Middle	044180
9 040404		Last	First	Middle	044180
10 040404		Last	First	Middle	044180
11 040404		Last	First	Middle	044180
12 040404		Last	First	Middle	044180
13 040404		Last	First	Middle	044180
14 040404		Last	First	Middle	044180
15 040404		Last	First	Middle	044180
16 040404		Last	First	Middle	044180
17 040404		Last	First	Middle	044180
18 040404		Last	First	Middle	044180




# 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."

(FTED-001) FTE Detail043968-201

READY 

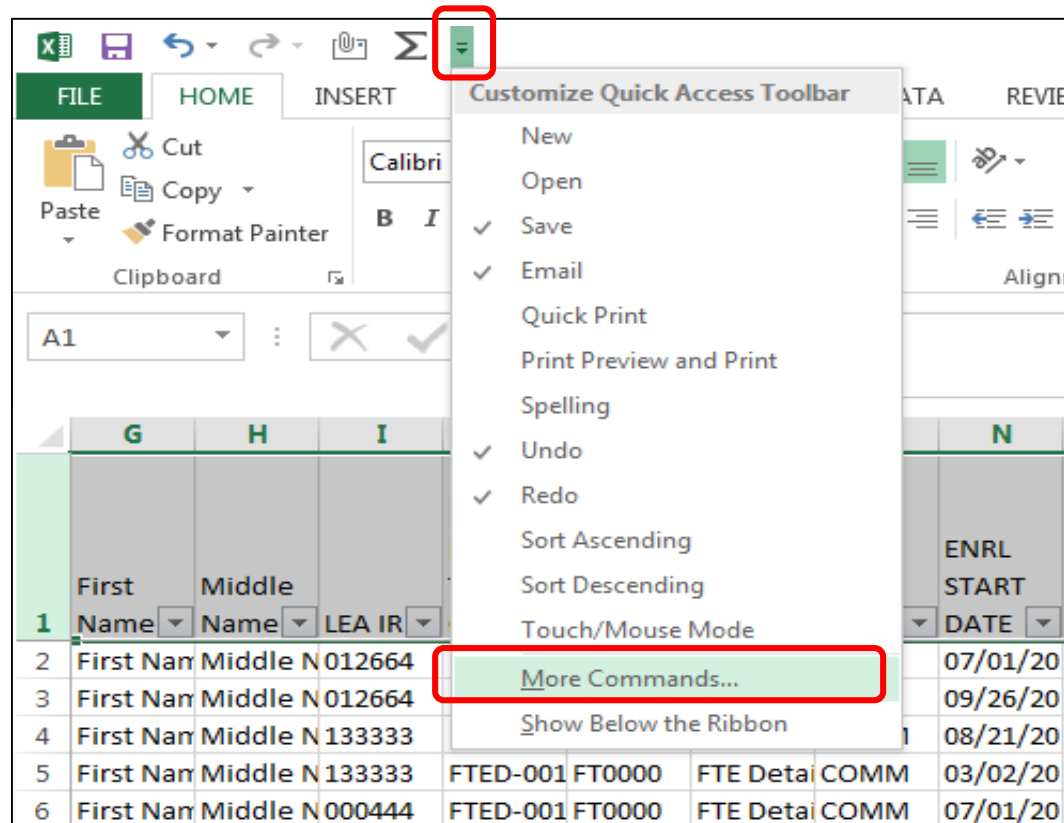
# Sorted, Subtotaled, and Highlighted Report

1	IRN	Bldg IF	SEVERITY CODE	SSID	Emis ID	Last	First	Middle	LEA IF	LEA Name	LEVEL 2 REC TYPE	RESULT CODE	FUND	ENRL	ENRL END	ADJUSTD	ADJUSTD	ADJUSTD	LEGAL	STNDT	SE		
29	040404	011111	I	BX2844844	123457534	Last	First	Middle	044180	Kettering City School District	FTED-001	FT0000	FTE Detail	PSRD	07/01/2018	12/31/2500	0.461538	0.247856	0.147943	0.213682	0.099913	044180	50
30	BX2844844 Total															1	1	1					
31	040404	011111	I	BX6684204	123456829	Last	First	Middle	009957	Klepinger Community School	FTED-001	FT0000	FTE Detail	COMM	07/01/2018	12/31/2500	1	1		0	1	044180	100
32	BX6684204 Total															1	1	0					
33	040404	011111	I	BZ2468460	123457421	Last	First	Middle	044180	Kettering City School District	FTED-001	FT0000	FTE Detail	PSRD	07/01/2018	12/13/2018	0.461538	0.247856	0.147943	0.213682	0.099913	044180	50
34	040404	011111	I	BZ2468460	123457422	Last	First	Middle	044180	Kettering City School District	FTED-001	FT0000	FTE Detail	PSRD	12/14/2018	12/31/2500	0.538462	0.538462	0.538462	0	0	044180	50
35	BZ2468460 Total															1	0.786318	0.686405					
36	040404	011111	I	DB2042480	123457195	Last	First	Middle	044180	Kettering City School District	FTED-001	FT0000	FTE Detail	PSRD	03/13/2019	12/31/2500	0.284615	0.284615	0.284615	0	0	044180	50
37	DB2042480 Total															0.284615	0.284615	0.284615					
38	040404	011111	I	DB2042480	123457195	Last	First	Middle	044180	Kettering City School District	FTED-001	FT0000	FTE Detail	CTVC	07/01/2018	05/15/2019	0.4245	0.4245		0	0.4245	043737	43
39	DB2042480 Total															0.4245	0.4245	0					
40	040404	011111	I	DB2042480	123457195	Last	First	Middle	044180	Kettering City School District	FTED-001	FT0000	FTE Detail	RGJV	07/01/2018	12/31/2500	1	0.6		0.4	0.6	043844	100
41	DB2042480 Total															1	0.6	0					
42	040404	011111	I	DB2042480	123457195	Last	First	Middle	044180	Kettering City School District	FTED-001	FT0000	FTE Detail	RGJV	08/15/2018	12/31/2500	0.5	0.5		0	0.5	043844	50
43	DB2042480 Total															0.5	0.5	0					
44	040404	011111	I	DB2042480	123457195	Last	First	Middle	044180	Kettering City School District	FTED-001	FT0000	FTE Detail	PSRD	07/01/2018	12/31/2500	1	1	1	0	0	044180	50
45	DB2042480 Total															1	1	1					
46	040404	011111	I	DB2042480	123457195	Last	First	Middle	044180	Kettering City School District	FTED-001	FT0000	FTE Detail	NFRG	07/01/2018	12/31/2500	1	0		1	0	044180	100
47	DB2042480 Total															1	0		1	0			

Original FTEs, Adjusted FTEs, and Special Education FTEs, have been subtotaled and appear chronological order

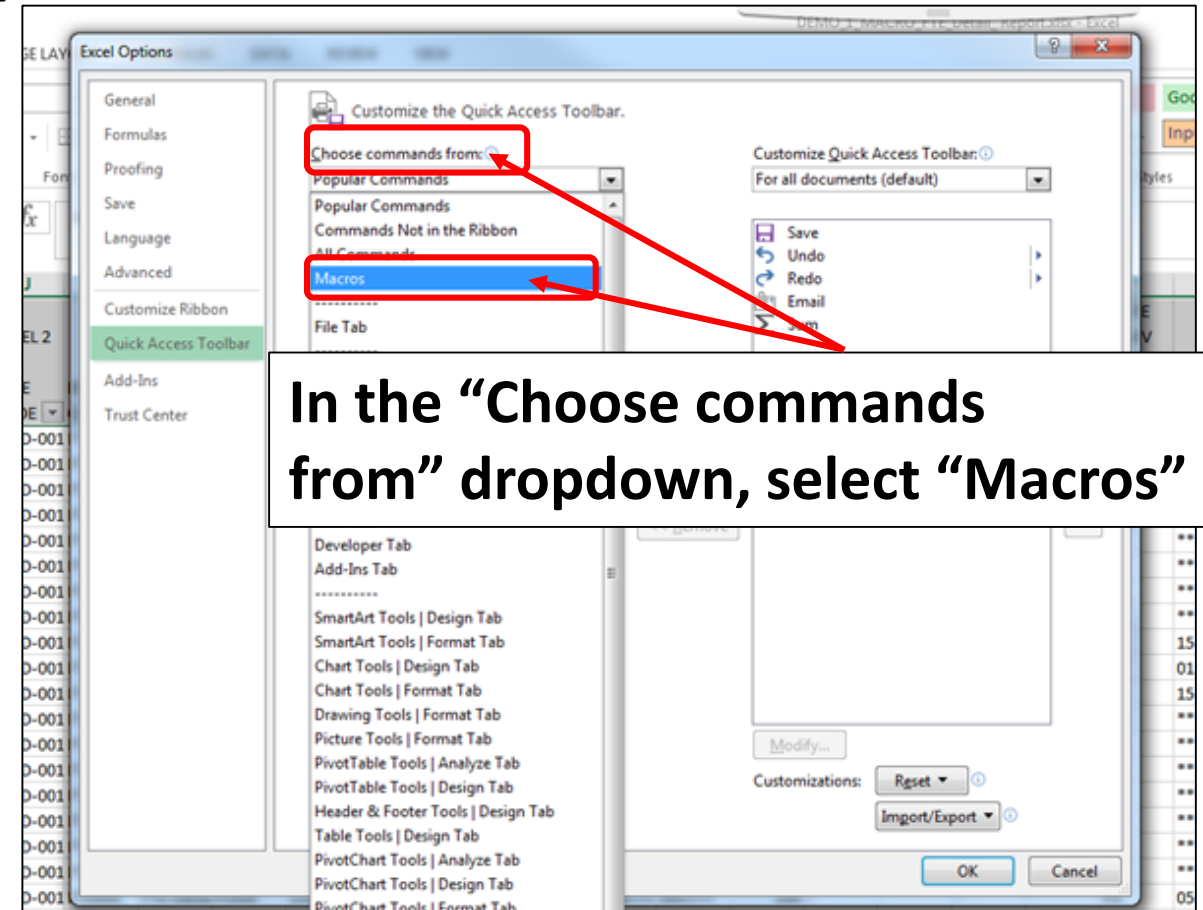
# Make the Macro a Quick Link

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



The screenshot shows the Excel ribbon with the Quick Access Toolbar (QAT) dropdown menu open. The QAT icons (Save, Undo, Redo) are visible. The dropdown menu lists various commands, with "More Commands..." highlighted in green. A red box highlights the dropdown arrow on the QAT.

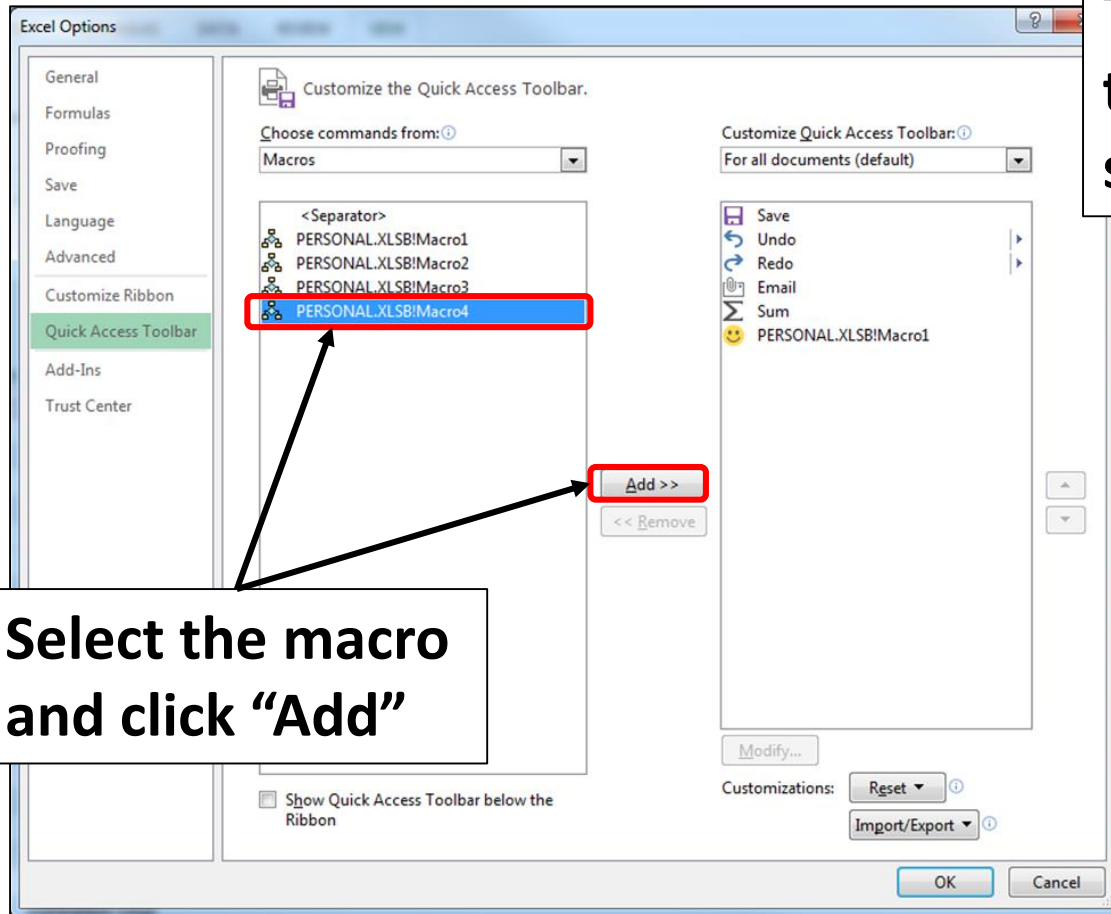
	G	H	I		N
	First	Middle	LEA IR		ENRL
1	Name	Name	LEA IR		START
2	First Nam	Middle N	012664		DATE
3	First Nam	Middle N	012664		07/01/20
4	First Nam	Middle N	133333		09/26/20
5	First Nam	Middle N	133333	FTED-001 FT0000	FTE Deta
6	First Nam	Middle N	000444	FTED-001 FT0000	FTE Deta



The screenshot shows the "Excel Options" dialog box, specifically the "Customize Quick Access Toolbar" tab. The "Choose commands from:" dropdown menu is open, and "Macros" is selected. A red box highlights the dropdown menu, and a red arrow points to the "Macros" option. A text box below the dialog box contains the instruction: "In the 'Choose commands from' dropdown, select 'Macros'".

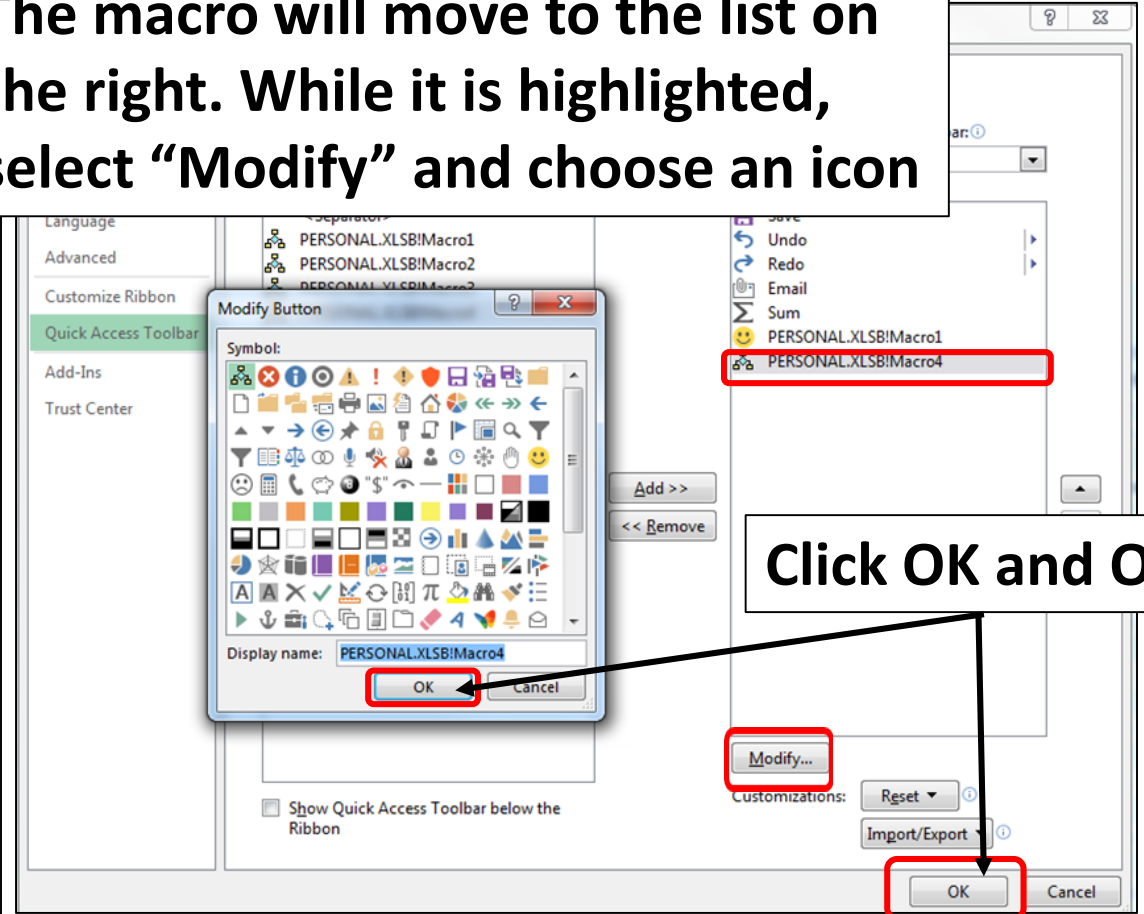
**In the "Choose commands from" dropdown, select "Macros"**

# Make the Macro a Quick Link



Select the macro and click "Add"

The macro will move to the list on the right. While it is highlighted, select "Modify" and choose an icon

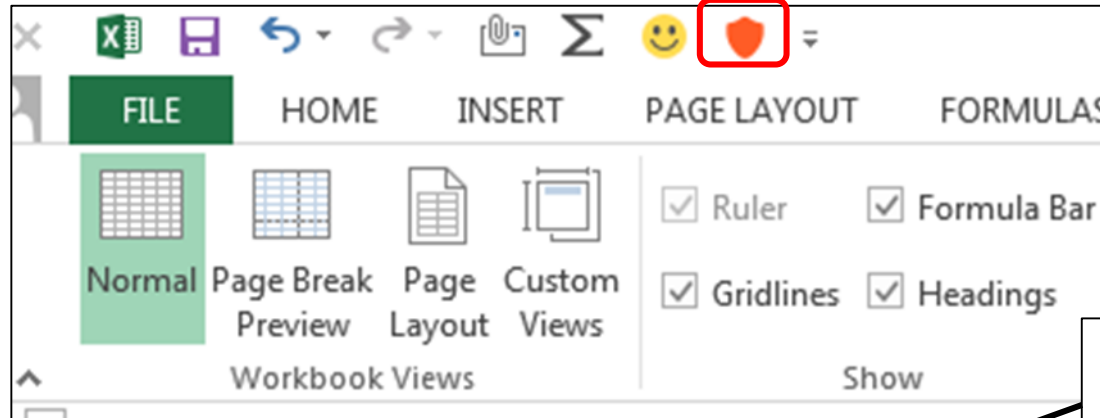


Click OK and OK

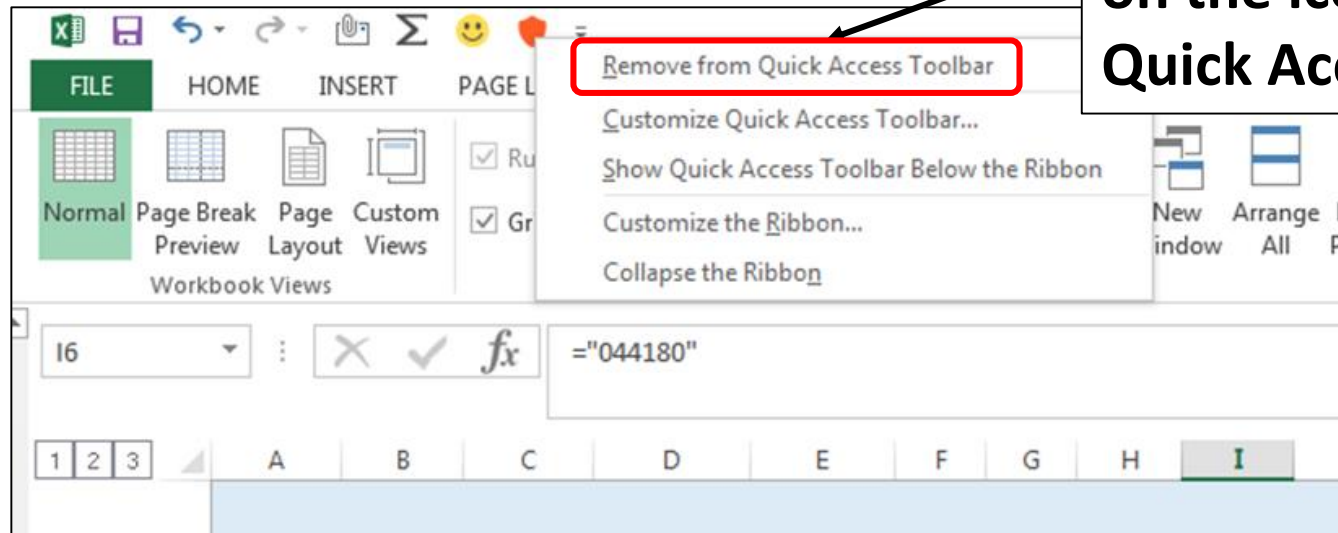


# Quick Link

New Quick Link now appears



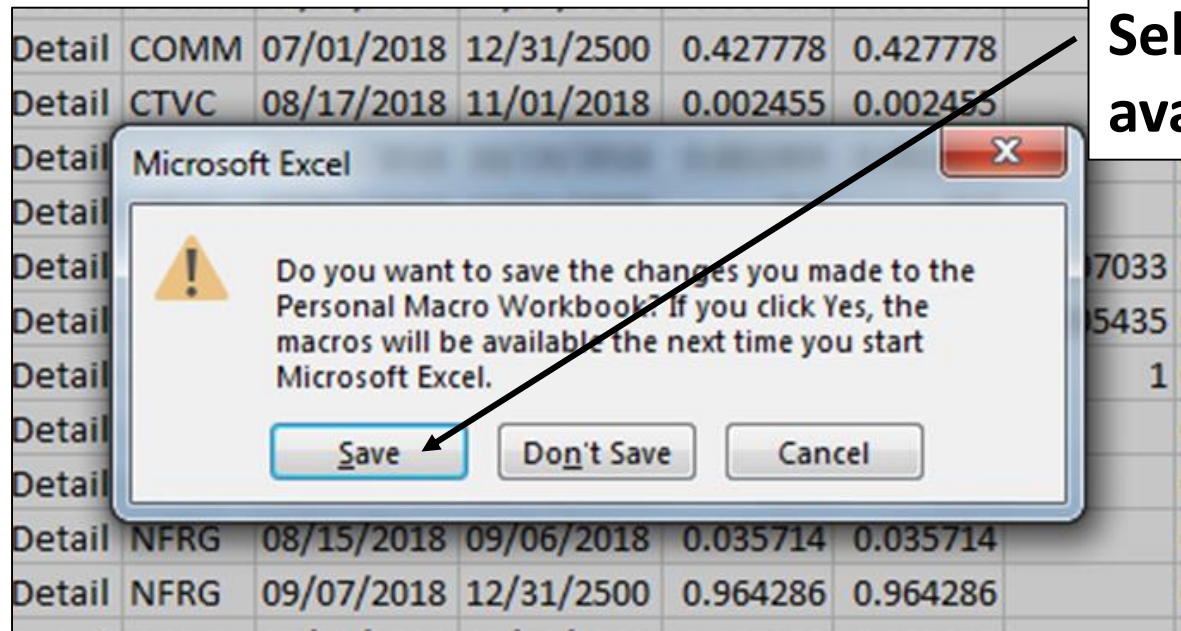
To remove the Quick Link, right click on the icon and select “Remove from Quick Access Toolbar”





# 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

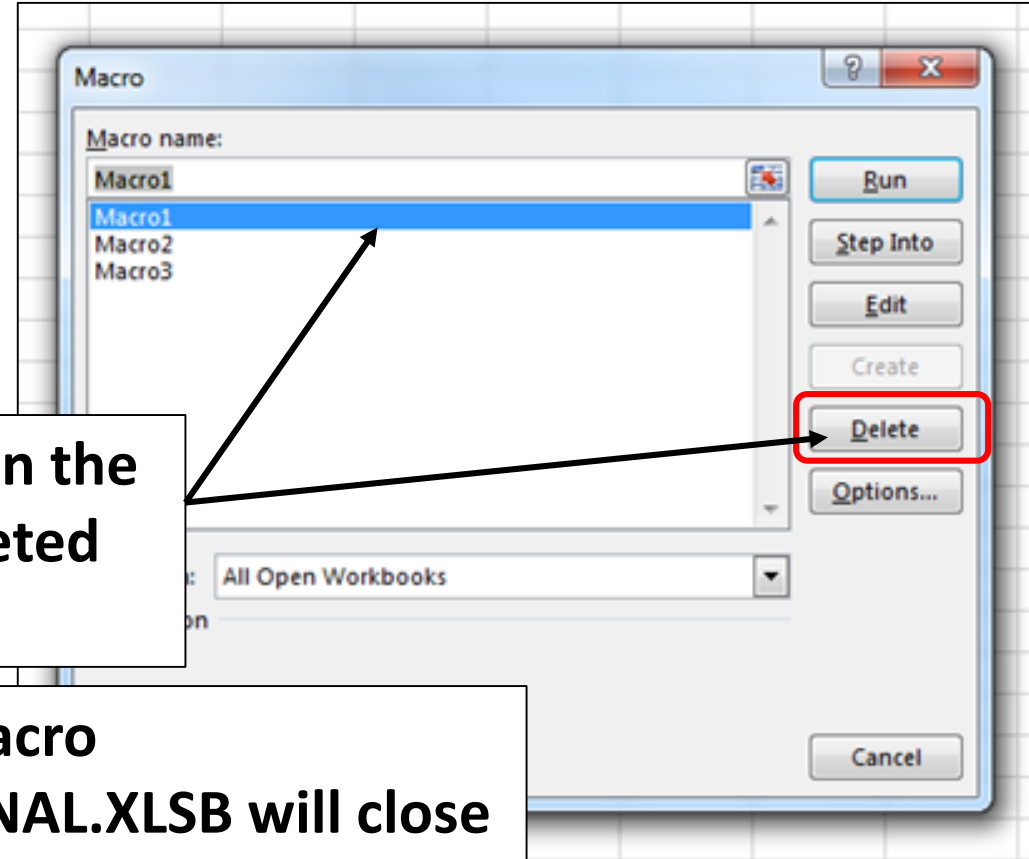
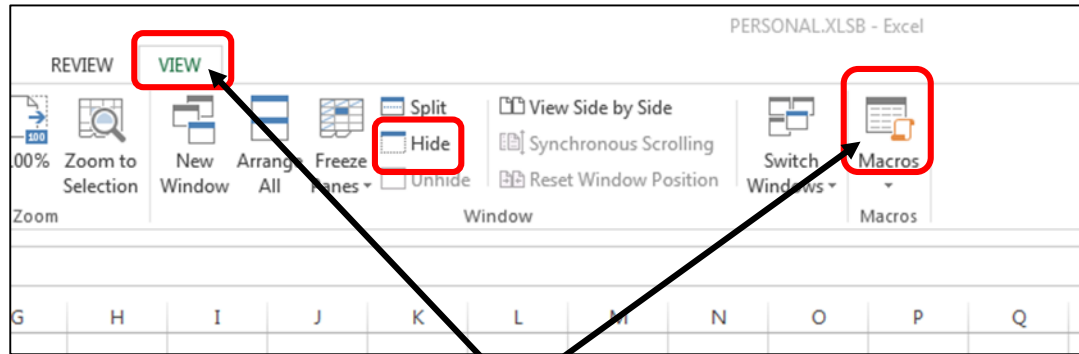
From a new or existing spreadsheet select "Unhide" from the View tab

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

	A	B	C		L	M	
1	RPT DEST	Bldg IRN	SEVERITY	SSII	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
5	040404	133333	I	TS809912	Emis ID	Last Nam First Nam Middle N 133333 FTED-001 FT0000 FTE Detai	COMM
6	040404	000444	I	MN68131	Emis ID	Last Nam First Nam Middle N000444 FTED-001 FT0000 FTE Detai	COMM

# 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"

**IMPORTANT!** 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?



# Using Concatenation and Conditional Formatting to Verify Calendar Data and Student Data

# Data Comparison

- Compare the Calendar Display report to the Student Attributes Effective Date Record (FD)
- Look for students who have no matching calendar in the calendar collection
- Look for calendars being reported to EMIS that have no students assigned to them
- Result will be cleaner data and correct calendar assignments on the FTE Detail report

# Calendar Display Report

Find the Calendar Display report that aligns with the current student collection

- In this example we will use the Final Calendar Collection for FY19 and compare it to the End of Year Student Collection for FY19

**Calendar Collection - Final (FY19)**  
FY19-C-Cal Final: The Final Calendar Collection is required for all EMIS reporting entities educating students in 2019. Source files for DL And DN re...

Submissions: October  
Version: 1  
Status: The coll  
Submission Status: Process  
Submission Number: 3 (atter  
Actions: [Start C](#)  
[Add Ne](#)  
[Set Def](#)

Prepare Outputs: [Level 1 Validations](#)  
[View submission 3 Data](#)

**End of Year Student Collection (FY19)**  
FY19-S-TRAD Final: Collection required for all Traditional Districts, JVSs, ESCs, and State Supported Schools. Source file(s) for D, GI, FS, FD, FB,...

Submissions: May 03, 2019 - July 17, 2019 (closed)      Data only available via Reports > Received Files: in 501 days  
Version: 6      From ODE: [Level 2 Reports](#)  
Status: The collection was submitted July 09, 2019 at 01:03:59 PM by  
Submission Status: Processing Completed (July 09, 2019 at 01:03:39 PM)  
Submission Number: 4 (attempt 1)  
Actions: [Start Collection](#)  
[Add New Scheduled Collection](#)  
[Set Default Collection properties](#)

Prepare Outputs: [Level 1 Validations](#)  
[View submission 4 Data](#)

**Select "View submission # Data" and find the Calendar Display Report and the Student Attributes Date Effective (FD) file**

# Prepare the Calendar Display Report

- Run macro to prepare the report (original macro from FY19, not new subtotaling macro) or prepare the report manually
- Filter Row Number column to include only Row 1

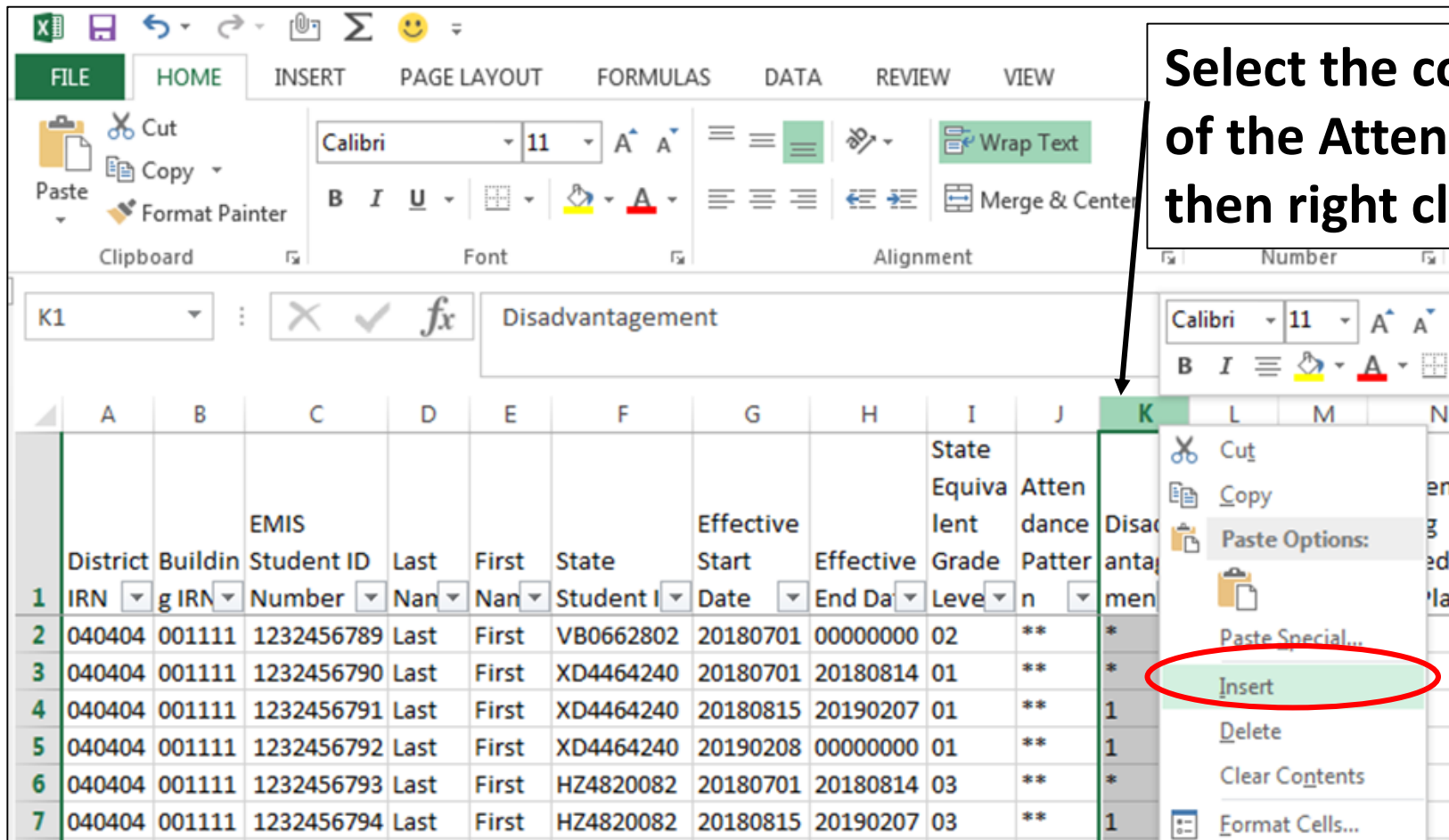
	A	B	C	D	E	F	G	
	Calendar For: Dist-Bldg-	Row						
1	Grade-AP	Numb	Mont	Sund	Monday	Tuesday	Wednesday	Thursday
2	040404-001111-01-**	01	Jul-18					
80	040404-001111-02-**	01						
158	040404-001111-03-**	01						
236	040404-001111-04-**	01						
314	040404-001111-05-**	01	Jul-18					
392	040404-001111-KG-HA	01	Jul-18					
470	040404-001111-KG-HP	01	Jul-18					
548	040404-001111-KG-WC	01	Jul-18					
625	040404-008888-01-**	01	Jul-18					
703	040404-008888-02-**	01	Jul-18					

**The result will be an unduplicated list of calendars that are being reported to EMIS**



# Prepare the Student Attributes (FD) Report

Run macro to prepare the report (original macro from FY19, not new subtotalling macro) or prepare the report manually



The screenshot shows an Excel spreadsheet with the following columns: District, Buildin, EMIS Student ID, Last, First, State, Effective Start, Effective End, State, Equiva, Atten, Disadvantage. The 'Atten' column is highlighted in green. A context menu is open over column K, with the 'Insert' option highlighted in red. A callout box points to column K with the instruction: "Select the column to the right of the Attendance Pattern column, then right click and select 'insert'".

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	District	Buildin	EMIS Student ID	Last	First	State	Effective Start	Effective End	State	Equiva	Atten	Disadvantage		
1	IRN	g IRN	Number	Nan	Nan	Student I	Date	End Da	Level	n	men			
2	040404	001111	1232456789	Last	First	VB0662802	20180701	00000000	02	**	*			
3	040404	001111	1232456790	Last	First	XD4464240	20180701	20180814	01	**	*			
4	040404	001111	1232456791	Last	First	XD4464240	20180815	20190207	01	**	1			
5	040404	001111	1232456792	Last	First	XD4464240	20190208	00000000	01	**	1			
6	040404	001111	1232456793	Last	First	HZ4820082	20180701	20180814	03	**	*			
7	040404	001111	1232456794	Last	First	HZ4820082	20180815	20190207	03	**	1			

# Concatenate Calendar Data

Name the new column (i.e. Calendar) and expand width of column

The screenshot shows the Microsoft Excel interface. The 'Insert Function' dialog box is open, displaying a list of functions. 'CONCATENATE' is selected in the list. The 'OK' button is circled in red. The spreadsheet below shows a table with columns for District, Building, Student ID, Last Name, First Name, State, Effective Start Date, Effective End Date, Level, and Attendance Pattern. A new column labeled 'Calendar' is being added to the right of the 'Attendance Pattern' column. The formula bar shows the start of a formula: '=

District	Buildin	EMIS Student ID	Last	First	State	Effective Start	Effective End Da	Leve	n	Calendar	
1	IRN	g IRN	Number	Nan	Nan	Student	Date	End Da	Leve	n	Calendar
2	040404	001111	1232456789	Last	First	VB0662802	20180701	00000000	02	**	=
						701	20180814	01	**		
						815	20190207	01	**		
						208	00000000	01	**		
						701	20180814	03	**		
						815	20190207	03	**		
						208	00000000	03	**		
						701	00000000	04	**		
						701	00				
11	040404	001111	1232456798	Last	First	TJ2800886	20180701	00			
12	040404	001111	1232456799	Last	First	XB8644622	20180701	20			
13	040404	001111	1232456800	Last	First	XB8644622	20190516	20			
14	040404	001111	1232456801	Last	First	XB8644622	20190517	00			
15	040404	001111	1232456802	Last	First	TR4282260	20180701	00			

1. Place cursor into cell K2 then select the Insert Function Wizard

2. If CONCATENATE does not appear in the list of functions, search for CONCATENATE and select "Go"

3. Select CONCATENATE from the "Select a Function" list and click "OK"



# Concatenate Function Arguments

Using the CONCATENATE Wizard, select the cells to include

- Place cursor in Text1 field
  - then select cell A2
- In Text 2 enter a dash
- Place cursor in Text3 field
  - then select cell B2
- In Text4 enter a dash
- Place cursor in Text5 field
  - then select cell I2

Function Arguments

CONCATENATE

Text1	A2	= "040404"
Text2	-	= "-"
Text3	B2	= "001111"
Text4	-	= "-"
Text5	I2	= "02"

Joins several text strings into one text string.

Text5: text1,text2,... are 1 to 255 text strings to be joined into a single text string and can be text strings.

Formula result = 040404-001111-02

[Help on this function](#)

Click the down arrow to see more fields

16	040404	001111	1232456803	Last
17	040404	001111	1232456804	Last
18	040404	001111	1232456805	Last
19	040404	001111	1232456806	Last
20	040404	001111	1232456807	Last

# Concatenate Function Arguments, cont'd

The screenshot shows an Excel spreadsheet with a data table and a 'Function Arguments' dialog box. The data table has columns for District, Building, Student ID, Last Name, First Name, State, Effective Start Date, Effective End Date, Grade Level, Attendance Pattern, and Calendar. The 'Function Arguments' dialog box for the CONCATENATE function shows the following arguments:

Text	Value	Result
Text3	B2	"001111"
Text4	"-"	"-"
Text5	I2	"02"
Text6	"-"	"-"
Text7	J2	"***"

The preview of the result is: "040404-001111-02-\*\*\*".

**Function Arguments**

CONCATENATE

Text3: B2 = "001111"

Text4: "-" = "-"

Text5: I2 = "02"

Text6: "-" = "-"

Text7: J2 = "\*\*\*"

Preview of results: "040404-001111-02-\*\*\*"

OK

Cancel

Formula result = 040404-001111-02-\*\*\*

on this function

- In Text6 enter a dash
- Place cursor in Text7 field
  - then select cell J2
- Click "OK"

Preview of results



# Concatenated Calendar Data

Data from all four cells is joined together with dashes in the same format at the data on the Calendar Display report

K2 : X ✓ fx =CONCATENATE(A2,"-",B2,"-",I2,"-",J2)

	A	B	C	D	E	F	G	H	I	J	K	L	M
	District	Buildin	EMIS	Last	First	State	Effective	Effective	State	Atten			
1	IRN	g IRN	Student ID	Nan	Nan	Student I	Date	End Da	Level	n	Calendar		
2	040404	001111	1232456789	Last	First	VB0662802	20180701	00000000	02	**	040404-001111-02-**	*	N
3	040404	001111	1232456790	Last	First	XD4464240	20180701	20180814	01	**	040404-001111-01-**	*	N
4	040404	001111	1232456791	Last	First	XD4464240	20180815	20190207	01	**	040404-001111-01-**	1	N
5	040404	001111	1232456792	Last	First	XD4464240	20190208	00000000	01	**	040404-001111-01-**	1	N
6	040404	001111	1232456793	Last	First	HZ4820082	20180701	20180814	03	**	040404-001111-03-**	*	N
7	040404	001111	1232456794	Last	First	HZ4820082	20180815	20190207	03	**	040404-001111-03-**	1	N
8	040404	001111	1232456795	Last	First	HZ4820082	20190208	00000000	03	**	040404-001111-03-**	1	N
9	040404	001111	1232456796	Last	First	TR8026626	20180701	00000000	04	**	040404-001111-04-**	1	N
10	040404	001111	1232456797	Last	First	TT6282640	20180701	00000000	02	**	040404-001111-02-**	1	N
11	040404	001111	1232456798	Last	First	TJ2800886	20180701	00000000	05	**	040404-001111-05-**	*	N
12	040404	001111	1232456799	Last	First	XB8644622	20180701	20190515	KG	HA			N
13	040404	001111	1232456800	Last	First	XB8644622	20190516	20190516	KG	**		*	N
14	040404	001111	1232456801	Last	First	XB8644622	20190517	00000000	KG	HA		*	N
15	040404	001111	1232456802	Last	First	TR4282260	20180701	00000000	04	**		1	N
16	040404	001111	1232456803	Last	First	TR2088620	20180701	00000000	04	**		*	N
17	040404	001111	1232456804	Last	First	TR2442646	20180701	20181031	KG	HA		*	N

Double click or drag to copy into cells below



# Remove Duplicates

The screenshot shows the Microsoft Excel interface with the 'DATA' tab selected in the ribbon. The 'Remove Duplicates' button is highlighted in the 'Data Tools' group. A callout box points to the 'Select All' button in the 'Remove Duplicates' dialog box. Another callout box points to the 'Calendar' column in the 'Columns' list of the dialog box. A third callout box points to the 'OK' button in the dialog box.

District	Building	EMIS Student ID	Last	First	State	Effective Start	Effective End	Grade	Attendance	Calendar
040404	001111	1232456789	Last	First	VB0662802	20180701	00000000	02	**	040404-001111-02-**
040404	001111	1232456790	Last	First	XD4464240	20180701	20180814	01	**	040404-001111-01-**
040404	001111	1232456791	Last	First	XD4464240	20180815	20190207	01	**	040404-001111-01-**
040404	001111									040404-001111-04-**
040404	001111									040404-001111-KG-HP
040404	001111									040404-001111-KG-HA
040404	001111									040404-001111-KG-**

Select all data

From the Data tab, select "Remove Duplicates"

From the Remove Duplicates prompt, click "Unselect All" and check the box for the column containing the concatenated data, then click "OK"

# Duplicates Removed

**2. With duplicates removed, the report now contains an unduplicated list of calendars assigned to students**

District IRN	Building IRN	Student ID Number	Last Name	First Name	State	Start Date	Effective Date	Grade Level	Pattern	Calendar	Disadvantage	Preschool Poverty Level	Disability Condition	Student being served by a 504 Plan	Homeless	Unaccompanied Youth	Limited English Proficiency
040404	001111	1232456789	Last	First	VB0662802	20180701	00000000	02	**	040404-001111-02-**	*	N	**	N	*	N	N
040404	001111	1232456790	Last	First	XD4464240	20180701	20180814	01	**	040404-001111-01-**	*	N	**	N	*	N	L
040404	001111	1232456793	Last	First	HZ4820082	20180701	20180814	03	**	040404-001111-03-**	*	N	**	N	*	N	L
040404	001111	1232456796	Last	First	TR8026626	20180701	00000000	04	**	040404-001111-04-**	1	N	**	N	*	N	N
040404	001111	1232456798	Last	First	TJ2800886	20180701	00000000	05	**	040404-001111-05-**	*	N	**	N	*	N	N
040404	001111	1232456799	Last	First	XB8644622	20180701	20190515	KG	HA	040404-001111-KG-HA	*	N	**	N	*	N	N
040404	001111	1232456800	Last	First	XB8644622	20190516	20190516	KG	**	040404-001111-KG-**	*	N	**	N	*	N	N
040404	001111	1232456804	Last	First	TB2442646	20180701	20181022	KG	HP	040404-001111-KG-HP							
040404	001111	1232456808	Last	First	NV2006822	20190402	00000000	02	DN	040404-001111-02-DN							
040404	001111	1232456839	Last	First	RH2444200	20180701	00000000	04	DN	040404-001111-04-DN							
										01111-05-DN							
										01111-KG-DN							
										01111-03-DN							
040404	001111	1232457118	Last	First	ZH8648262	20190117	20190207	KG	WC	040404-001111-KG-WC							
040404	001111	1232457207	Last	First	XT0828600	20180701	20180702	01	DN	040404-001111-01-DN							

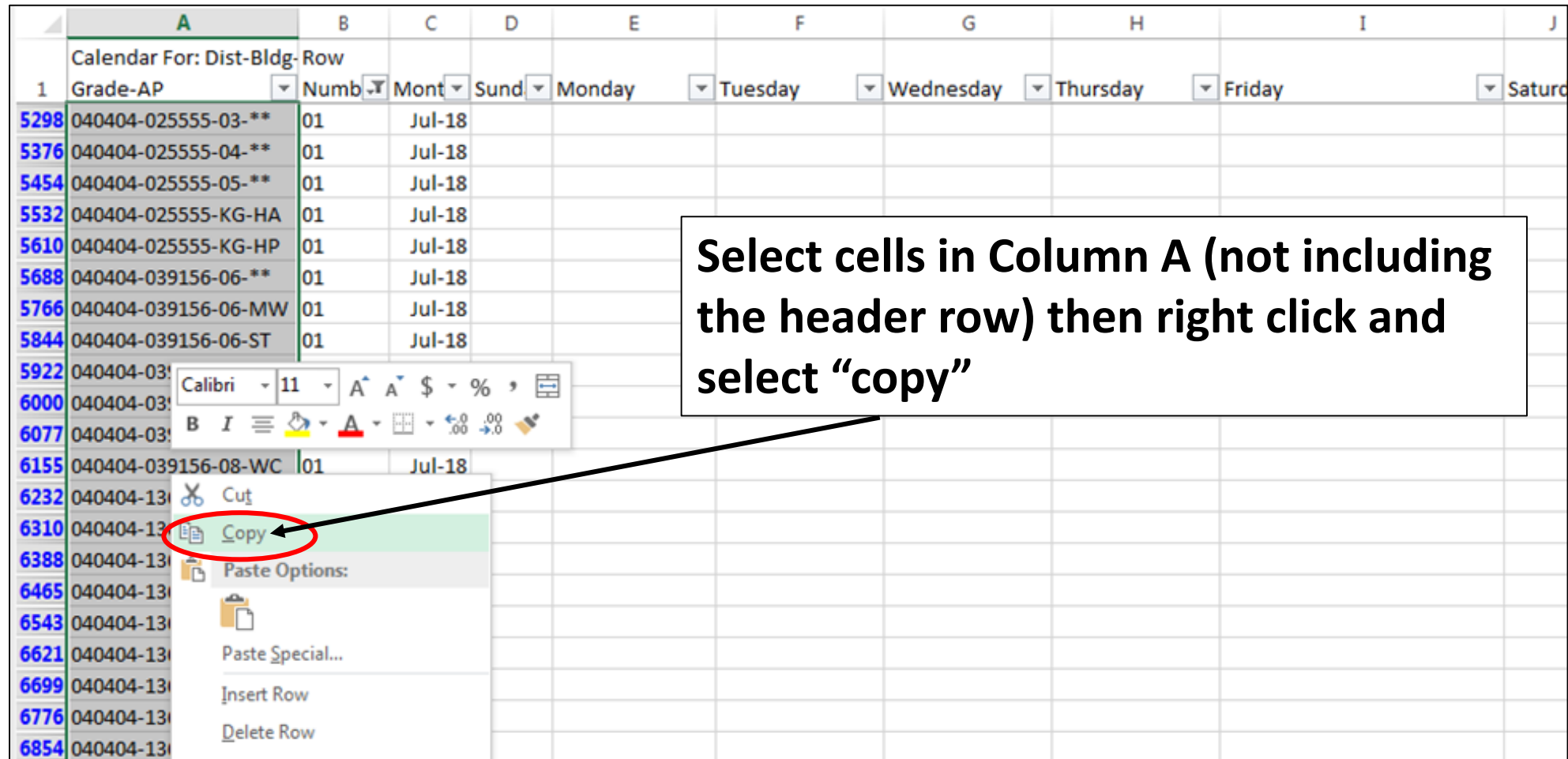
**3. Scroll to the bottom of the report**

**1. Click OK**



# Copy Data from Calendar Display Report

Toggle to the Calendar Display report



Calendar For: Dist-Bldg- Row

1	Grade-AP	Numb	Mont	Sund	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
5298	040404-025555-03-**	01	Jul-18							
5376	040404-025555-04-**	01	Jul-18							
5454	040404-025555-05-**	01	Jul-18							
5532	040404-025555-KG-HA	01	Jul-18							
5610	040404-025555-KG-HP	01	Jul-18							
5688	040404-039156-06-**	01	Jul-18							
5766	040404-039156-06-MW	01	Jul-18							
5844	040404-039156-06-ST	01	Jul-18							
5922	040404-039156-08-WC	01	Jul-18							
6000	040404-131111-01-01									
6077	040404-131111-01-01									
6155	040404-131111-01-01									
6232	040404-131111-01-01									
6310	040404-131111-01-01									
6388	040404-131111-01-01									
6465	040404-131111-01-01									
6543	040404-131111-01-01									
6621	040404-131111-01-01									
6699	040404-131111-01-01									
6776	040404-131111-01-01									
6854	040404-131111-01-01									

Select cells in Column A (not including the header row) then right click and select "copy"



# Paste Data into Student Attributes (FD) Report

Toggle to the Student Attributes (FD) report

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
	District	Buildin	EMIS	Last	First	State	Effective	Effective	State	Grade	Attendance		Disadv	ool	Disabil	Student	Home
1	IRN	g IRN	Number	Nan	Nan	Student I	Date	End Da	Level	n	Calendar	antage	Povert	ity	erved by a	ess	Unacc
134	040404	036666	1232464211	Last	First	JD0268488	20180701	20190512	KG	HA	040404-036666-KG-HA	*	N	01	N	*	N
135	040404	036666	1232464212	Last	First	JD0268488	20190513	20190513	KG	**	040404-036666-KG-**	*	N	01	N	*	N
136	040404	036666	1232464215	Last	First	VJ6624628	20180701	20180701	05	DN	040404-036666-05-DN	*	N	**	N	*	N
137	040404	036666	1232464216	Last	First	FL2622046	20180701	20180702	01	**	040404-036666-01-**	*	N	**	N	*	N
											DN	*	N	**	N	*	N
											**	*	N	**	N	*	N
											DN	*	N	10	N	*	N
											HP	*	N	05	N	*	N
											DN	*	N	10	N	*	N
											ML	*	N	08	N	*	N
											ML	*	N	08	N	*	N

**In the cell below the concatenated data column, paste the data from the Calendar Display report**

# Conditional Formatting

The screenshot shows the Microsoft Excel interface with the 'Home' tab selected. The 'Conditional Formatting' button in the 'Styles' group is highlighted with a red circle. A dropdown menu is open, showing 'Highlight Cells Rules' also highlighted with a red circle. A sub-menu is open from 'Highlight Cells Rules', with 'Duplicate Values...' highlighted with a red circle. A black arrow points from the 'Duplicate Values...' option to the 'Calendar' column in the spreadsheet. A callout box at the bottom right contains the following text:

Select column containing calendar data, then from the Home tab, select “Conditional Formatting”, “Highlight Cell Rules”, then “Duplicate Values”

	District	Buildin	EMIS	Last	First	State	Effective	Effective	State	Attenda	Calendar
1	IRN	g	Number	Nan	Nan	Student I	Date	End Da	Leve	n	
134	040404	036666	1232464211	Last	First	JD0268488	20180701	20190512	KG	HA	040404-036666-KG-HA
135	040404	036666	1232464212	Last	First	JD0268488	20190513	20190513	KG	**	040404-036666-KG-**
136	040404	036666	1232464215	Last	First	VJ6624628	20180701	20180701	05	DN	040404-036666-05-DN
137	040404	036666	1232464216	Last	First	FL2622046	20180701	20180702	01	**	040404-036666-01-**
138	040404	036666	1232464217	Last	First	XZ6886408	20180701	00000000	04	DN	040404-036666-04-DN
139	040404	036666	1232464219	Last	First	XB0244222	20180701	00000000	03	**	040404-036666-03-**
140	040404	036666	1232464234	Last	First	ZL6424448	20180701	00000000	01	DN	040404-036666-01-DN
141	040404	036666	1232464249	Last	First	NN6084222	20180701	20190512	KG	HP	040404-036666-KG-HP
142	040404	036666	1232464280	Last	First	TP2260000	20190107	00000000	03	DN	040404-036666-03-DN
143	040404	036666	1232464329	Last	First	PR8262048	20181113	00000000	02	ML	040404-036666-02-ML
144	040404	036666	1232464521	Last	First	TL2660648	20181029	20190419	05	ML	040404-036666-05-ML
145											040404-001111-01-**
146											040404-001111-02-**
147											040404-001111-03-**
148											040404-001111-04-**
149											040404-001111-05-**
150											040404-001111-KG-HA

# Conditional Formatting, cont'd

**Duplicate values will be highlighted in pink**

**Click OK**

**Cells highlighted in pink indicate a matching calendar in the calendar collection for calendar assigned to the student**

IRN	g IRN	Number	Last	First	State	Effective Start	Effective End	Level	Calendar	Disadvantage	Preschool	Disability	Student being served by a 504 Plan	Homeless	Unaccompanied Youth	Limitation
040404	036666	1232464211	Last	First	JD0268488	20180701	20190512	KG	040404-036666-KG-HA	*	N	01	N	*	N	L
040404	036666	1232464212	Last	First	JD0268488	20190513	20190513	KG	040404-036666-KG-**	*	N	01	N	*	N	L
									040404-036666-05-DN	*	N	**	N	*	N	L
									040404-036666-01-**	*	N	**	N	*	N	L
									040404-036666-04-DN	*	N	**	N	*	N	L
									040404-036666-03-**	*	N	**	N	*	N	L
									040404-036666-01-DN	*	N	10	N	*	N	L
									040404-036666-KG-HP	*	N	10	N	*	N	L
									040404-036666-03-DN	*	N	10	N	*	N	L
									040404-036666-02-ML	*	N	10	N	*	N	L
									040404-036666-05-ML	*	N	10	N	*	N	L
									040404-001111-01-**	*	N	10	N	*	N	L
									040404-001111-02-**	*	N	10	N	*	N	L
									040404-001111-03-**	*	N	10	N	*	N	L
									040404-001111-04-**	*	N	10	N	*	N	L
									040404-001111-05-**	*	N	10	N	*	N	L
									040404-001111-KG-HA	*	N	10	N	*	N	L
									040404-001111-KG-HP	*	N	10	N	*	N	L
									040404-001111-KG-WC	*	N	10	N	*	N	L
									040404-008888-01-**	*	N	10	N	*	N	L
									040404-008888-02-**	*	N	10	N	*	N	L
									040404-008888-03-**	*	N	10	N	*	N	L
									040404-008888-03-ML	*	N	10	N	*	N	L
									040404-008888-03-WC	*	N	10	N	*	N	L
									040404-008888-03-YP	*	N	10	N	*	N	L



# Filter for Mismatches

The screenshot shows the Microsoft Excel interface with the 'DATA' tab selected. A data table is displayed with columns A through O. The 'Calendar' column (J) has a filter icon. The filter menu is open, showing options like 'Sort A to Z', 'Sort Z to A', 'Sort by Color', 'Clear Filter From "Calendar"', and 'Filter by Color'. The 'Filter by Color' option is selected, and its sub-menu is open, showing 'No Fill' as the selected option. A search box is also visible in the sub-menu.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
	District	Buildin	EMIS Student ID	Last	First	State	Effective Start	Effective End Da	Grade	Calendar		Disadv	Presch	Disabil	Student
1	IRN	g IRN	Number	Nan	Nan	Student I	Date	End Da	Level	n	Calendar	men	y Lev	ion	504 Pla
193	040404	033333	1232462892	Last	First	TZ6828266	20180701	00000000	08	DI	Sort A to Z	*	N	**	N
194	040404	033333	1232463128	Last	First	RV6648040	20180701	20181207	07	ST	Sort Z to A	*	N	03	N
195	040404	033333	1232463214	Last	First	VX6486488	20180701	00000000	06	M	Sort by Color	*	N	08	N
196	040404	033333	1232464058	Last	First	VB4840266	20190415	00000000	07	W	Clear Filter From "Calendar"	1	N	**	N
197	040404	033333	1232464136	Last	First	TL6424400	20190226	00000000	08	W	Filter by Color	*	N	08	N
198	040404	036666	1232464211	Last	First	JD0268488	20180701	20190512	KG	H	Text filters				N
199	040404	036666	1232464215	Last	First	VJ6624628	20180701	20180701	05	DI	Search				N
200	040404	036666	1232464217	Last	First	XZ6886408	20180701	00000000	04	DI	(Select All)				N
201	040404	036666	1232464234	Last	First	ZL6424448	20180701	00000000	01	DI	040404-001111-01-**				N
202	040404	036666	1232464249	Last	First	NN6084222	20180701	20190512	KG	H	040404-001111-01-DN				N
203	040404	036666	1232464280	Last	First	TP2260000	20190107	00000000	03	DI	040404-001111-02-**				N
204	040404	036666	1232464329	Last	First	PR8262048	20181113	00000000	02	M	040404-001111-02-DN				N
205	040404	036666	1232464521	Last	First	TL2660648	20181029	20190419	05	M	040404-001111-03-**				N
206											040404-001111-03-DN				N
207											040404-001111-04-**				N
208											040404-001111-04-DN				N
209											040404-001111-05-**				N
210											040404-001111-05-DN				N
211											Automatic				N
212											1	N	08		N
213															
214															

Click on the filter in the column containing concatenated data then select "Filter by Color", then "No Fill"



# Troubleshoot the data

The screenshot shows an Excel spreadsheet with the following columns: District, Building, EMIS Student ID, Last Name, First Name, State, Effective Start Date, Effective End Date, State Equivalent Grade Level, Attendance Pattern, Calendar, Preschool Disadvantage, Disability Condition, Student Being Served by a 504 Plan, Homeless Status, Unaccompanied Youth, and Limited English Proficiency. The data is sorted by Calendar code.

	District	Building	EMIS Student ID	Last Name	First Name	State	Effective Start Date	Effective End Date	State Equivalent Grade Level	Attendance Pattern	Calendar	Preschool Disadvantage	Disability Condition	Student Being Served by a 504 Plan	Homeless Status	Unaccompanied Youth	Limited English Proficiency	
199	040404	036666	1232464215	Last	First	VJ6624628	20180701	20180701	05	DN	040404-036666-05-DN	*	N	**	N	*	N	N
200	040404	036666	1232464217	Last	First	XZ6886408	20180701	00000000	04	DN	040404-036666-04-DN							
201	040404	036666	1232464234	Last	First	ZL6424448	20180701	00000000	01	DN	040404-036666-01-DN							
202	040404	036666	1232464249	Last	First	NN6084222	20180701	20190512	KG	HP	040404-036666-KG-HP							
203	040404	036666	1232464280	Last	First	TP2260000	20190107	00000000	03	DN	040404-036666-03-DN							
204	040404	036666	1232464329	Last	First	PR8262048	20181113	00000000	02	ML	040404-036666-02-ML							
205	040404	036666	1232464521	Last	First	TL2660648	20181029	20190419	05	ML	040404-036666-05-ML	1	N	08	N	*	N	N
206											040404-008888-03-WC							
207											040404-019034-01-ML							
208											040404-019034-02-WC							
209											040404-019034-03-WC							
210											040404-019034-04-**							
211											040404-019034-05-ML							
212											040404-019034-KG-HA							

Students without calendars in the calendar collection

Calendars with no students in the student collection

# Troubleshoot the data

## Why do students not have a matching calendar?

- Is there something preventing a calendar from being reported, or is there no matching calendar being reported?
  - If yes, fix or create a matching calendar in the SIS and submit it to EMIS
- Is the student on a calendar that is not reportable to EMIS?
  - If yes, ignore the mismatch
- Does the student match to a calendar based on a wildcard grade level?
  - Grade level \*\* in the calendar collection is a wildcard
  - Example - District IRN-Building IRN-01-\*\* matches to District IRN-Building IRN-\*\*-\*\*
  - Match these students and calendars manually
- Check your FTE Detail Report to verify that students are being correctly assigned to calendars through the calendar determination process

# Troubleshoot the data, cont'd

## Why are there calendars with no students?

- Typically okay to report calendars with no students just be careful if the unused calendar has a start date that is before your district's earliest calendar or an end date that is after your latest calendar as this could effect some of the checks that EMIS uses such as separated staff and summer graduates
- The early start date issue can be found for any calendar in the calendar collection whether it is used for students or not
- Consider not reporting unused calendars to EMIS

## Quick Check

Calendar verification is very important since there are no checks in EMIS between the student collections and the calendar collections. This exercise will allow for a very quick comparison to identify EMIS reporting issues.

- Are you able to perform concatenation and conditional formatting?
- Do you have students with no calendar in the calendar collection?
- Do you have calendars reported to EMIS with no students assigned?



# 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?