

Using Excel to Troubleshoot EMIS Data



1

The Ohio Department of Education funds development of EMIS training materials as part of the EMIS Alliance grant. There is an expectation that ITCs will utilize these materials in training provided to your districts. That said, there are restrictions on use of the EMIS Alliance materials as follows: Materials developed as part of the EMIS Alliance program must be provided at no cost to your training participants. If you utilize the EMIS Alliance training materials – in whole or in part – you must not charge participants a fee to attend the class where the materials are used. Likewise, you may not use the materials or any portion thereof in any event where a fee is charged to attend. Exceptions must be approved in writing by the Department of Education in advance of scheduling/promoting any event which may violate these restrictions.

Questions regarding appropriate use of EMIS Alliance materials, or requests for exception to the restrictions noted above, should be directed to Melissa Hennon [Melissa.Hennon@education.ohio.gov].



2

2

Overview

- Basic, Intermediate, and Advanced 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



3

3

Outline

- Enrollment Headcount Summary Report
 - Best Practices
- Enrollment Headcount Detail Report
 - PivotTable Ideas
- FTE Detail Report
 - PivotTable Example



4

4

Enrollment Headcount Summary Report



5

5

Preview/Submission/Review Files

- Depending on the collection status and location within the data collector, the files are called-
 - Preview files
 - Submission files
 - Review files
- Files contain data from your LEA only
- For open collections, the data in the report will be as current as the source data used, and the date it was collected and prepared
- For closed collections, the data will represent the last time the data was prepared



6

6

Files Containing Data from your SIS

File	Submission 11		
	Valid	Invalid	Total
Counts of DN Records Excluded.csv			3
Enrollment Headcount Detail Report (Current Students).csv			891
Enrollment Headcount Detail Report (Future Students).csv			0
Enrollment Headcount Detail Report (Prior Students).csv			37
Enrollment Headcount Summary Report (Current Students).csv			120
Excluded Records.csv			64
Missing Report - Organization Attribute (DN).csv			0
Missing Report - Student.csv			1
Organization General Information Record (DN).csv		2	5
Student Attributes Effective Date Record (FD).csv	1032	0	1032
Student Attributes No Date Record (FN).csv	928	0	928
Student Demographic Record (GI).csv	928	0	928
Student Program Record (GQ).csv	644	0	644
Student Race Detail Record (G).csv	33	0	33
Student Special Education Graduation Requirement Record (FE).csv	1	0	1
Student Special Education Record (GE).csv	152	0	152
Student Standing Record (FS).csv	949	0	949
Student Summer Withdrawal Record (FL).csv	0	0	0
Student Withdrawal Override Record (FC).csv	0	0	0
Total counts:	4670	2	5788

Each type of collection has a unique set of preview files, this is from a student collection not SCR

Reviewing these files can aid in verifying your SIS data for accuracy and completeness

Remember, there's not an error for everything that is incorrect or incomplete!



7

7

Enrollment Headcount Summary (Current Students)

File	Submission 11		
	Valid	Invalid	Total
Counts of DN Records Excluded.csv			3
Enrollment Headcount Detail Report (Current Students).csv			891
Enrollment Headcount Detail Report (Future Students).csv			0
Enrollment Headcount Detail Report (Prior Students).csv			37
Enrollment Headcount Summary Report (Current Students).csv			120
Excluded Records.csv			64
Missing Report - Organization Attribute (DN).csv			0
Missing Report - Student.csv			1
Organization General Information Record (DN).csv	3	2	5
Student Attributes Effective Date Record (FD).csv	1032	0	1032
Student Attributes No Date Record (FN).csv	928	0	928
Student Demographic Record (GI).csv	928	0	928
Student Program Record (GQ).csv	644	0	644
Student Race Detail Record (G).csv	33	0	33
Student Special Education Graduation Requirement Record (FE).csv	1	0	1
Student Special Education Record (GE).csv	152	0	152
Student Standing Record (FS).csv	949	0	949
Student Summer Withdrawal Record (FL).csv	0	0	0
Student Withdrawal Override Record (FC).csv	0	0	0
Total counts:	4670	2	5788

Start by opening the Enrollment Headcount Summary Report



8

8

Prepare the Report

- Open Enrollment_Headcount_Summary_Report_(Current_Students)
 - Wrap text header row
 - Freeze top row
 - Expand all columns
 - Apply filters
 - Better yet, run your macro!
- To learn how to record a macro, prior year EMIS Alliance Excel sessions can be found here
 - <https://community.mcoecn.org/display/EM/EMIS+Alliance+Public+Space>



9

9

Enrollment Headcount Summary Report (Current Students)

- Prepare – don't have to submit, just collect up-to-date data and prepare to get the updated numbers as of "today"
- Captures current students by both headcount and by percent of time
- Filtering can be done to narrow the summary data down into building and grade level data



10

10

Summary Data

	A	B	C	D	E	F	G	H
	IRN	Org Nan	Student Grouping	District Relation ship	Student Grouping Value	Headcount	Total % of Time / 100	Student Enrolled As of Date
2	40404	LEA Name	District Enrollment Headcount	1 --		831	804.26	12/18/2019
3	40404	LEA Name	District Enrollment Headcount	2 --		1	0	12/18/2019
4	40404	LEA Name	District Enrollment Headcount	3 --		119	2.76	12/18/2019
5	30303	LEA Name	Building Enrollment Headcount	1 --		369	356.76	12/18/2019
6	30303	LEA Name	Building Enrollment Headcount	3 --		72	1.76	12/18/2019
7	20202	LEA Name	Building Enrollment Headcount	1 --		462	447.5	12/18/2019
8	20202	LEA Name	Building Enrollment Headcount	2 --		1	0	12/18/2019
9	20202	LEA Name	Building Enrollment Headcount	3 --		47	1	12/18/2019
17	40404	LEA Name	District: By Grade Level	1	8	53	52.04	12/18/2019
18	40404	LEA Name	District: By Grade Level	1	9	81	78.96	12/18/2019
19	40404	LEA Name	District: By Grade Level	1	10	78	74.87	12/18/2019
20	40404	LEA Name	District: By Grade Level	1	11	45	43.79	12/18/2019
21	40404	LEA Name	District: By Grade Level	1	12	42	38.54	12/18/2019
22	40404	LEA Name	District: By Grade Level	1	KG	41	41	12/18/2019
23	40404	LEA Name	District: By Grade Level	1	PS	66	51.5	12/18/2019
24	40404	LEA Name	District: By Grade Level	2	PS	1	0	12/18/2019

Headcount and Total of Percent of Time

District Relationship –
1- Educating
2- Services, no Instruction
3- No Services or Instruction

Students Enrolled As of Date –
This file is from the close of FY20 Beginning of the Year Student Collection



Filter on District Relationship 1

	A	B	C	D	E	F	G	H
	IRN	Org Nan	Student Grouping	District Relation ship	Student Grouping Value	Headcount	Total % of Time / 100	Student Enrolled As of Date
2	40404	LEA Name	District Enrollment Headcount	1 --		831	804.26	12/18/2019
5	30303	LEA Name	Building Enrollment Headcount	1 --		369	356.76	12/18/2019
7	20202	LEA Name	Building Enrollment Headcount	1 --		462	447.5	12/18/2019
10	40404	LEA Name	District: By Grade Level	1	1	43	43	12/18/2019
11	40404	LEA Name	District: By Grade Level	1	2	63	63	12/18/2019
12	40404	LEA Name	District: By Grade Level	1	3	64	63	12/18/2019
13	40404	LEA Name	District: By Grade Level	1	4	55	53	12/18/2019
14	40404	LEA Name	District: By Grade Level	1	5	68	68	12/18/2019
15	40404	LEA Name	District: By Grade Level	1	6	61	61	12/18/2019
16	40404	LEA Name	District: By Grade Level	1	7	71	68.96	12/18/2019
17	40404	LEA Name	District: By Grade Level	1	8	53	52.64	12/18/2019
18	40404	LEA Name	District: By Grade Level	1	9	81	78.96	12/18/2019
19	40404	LEA Name	District: By Grade Level	1	10	78	74.87	12/18/2019
20	40404	LEA Name	District: By Grade Level	1	11	45	43.79	12/18/2019
21	40404	LEA Name	District: By Grade Level	1	12	42	38.54	12/18/2019
22	40404	LEA Name	District: By Grade Level	1	KG	41	41	12/18/2019
23	40404	LEA Name	District: By Grade Level	1	PS	66	51.5	12/18/2019
40	30303	LEA Name	Building: By Grade Level	1	7	70	67.96	12/18/2019
41	30303	LEA Name	Building: By Grade Level	1	8	53	52.64	12/18/2019
42	30303	LEA Name	Building: By Grade Level	1	9	81	78.96	12/18/2019
43	30303	LEA Name	Building: By Grade Level	1	10	78	74.87	12/18/2019
44	30303	LEA Name	Building: By Grade Level	1	11	45	43.79	12/18/2019
45	30303	LEA Name	Building: By Grade Level	1	12	42	38.54	12/18/2019

Filter on District Relationship 1

See headcounts and counts by percent of time, by district, building, and grade level for students your LEA is educating



Additional Summary Data

	A	B	C	D	E	F	G	H
1	IRN	Org Name	Student Grouping	District Relation	Student Grouping	Headcount	Total % of Time /	Students Enrolled As of Date
86	30303	LEA Name	Building: By Received Reason		3	9	6	1.76 12/18/2019
87	20202	LEA Name	Building: By Received Reason		1 *		351	341.5 12/18/2019
88	20202	LEA Name	Building: By Received Reason		1	9	90	89.5 12/18/2019
89	20202	LEA Name	Building: By Received Reason		1 B		2	2 12/18/2019
90	20202	LEA Name	Building: By Received Reason		1 C		2	2 12/18/2019
91	20202	LEA Name	Building: By Received Reason		1 D		2	2 12/18/2019
92	20202	LEA Name	Building: By Received Reason		1 E		15	10.5 12/18/2019
93	20202	LEA Name	Building: By Received Reason		2 I		1	
94	20202	LEA Name	Building: By Received Reason		3 *		47	
95	40404	LEA Name	District: By Sent Reason 1		1 ES		4	
96	40404	LEA Name	District: By Sent Reason 1		1 FC		1	
97	40404	LEA Name	District: By Sent Reason 1		1 JV		78	
98	40404	LEA Name	District: By Sent Reason 1		1 NA		718	703.86 12/18/2019
99	40404	LEA Name	District: By Sent Reason 1		1 PS		30	29.28 12/18/2019
100	40404	LEA Name	District: By Sent Reason 1		2 NA		1	
					AU		1	
					CI		1	0 12/18/2019
					ES		10	0 12/18/2019
					FC		7	0 12/18/2019
					IP		1	0 12/18/2019

After clearing filters, scroll down the report and see summary data by building and district by Received Reason and Sent Reason 1

This summary information can be helpful, however if this data is in question, it would be necessary to refer the detail version of this report

It is important to note that a student will be counted in the Received Reason Section and the Sent to 1 Section



Adding Borders

The screenshot shows the Excel Home tab with the 'Borders' icon in the Font group highlighted. A dropdown menu is open, showing various border options. Below the menu, a table from the previous slide is shown with borders applied to its cells. The table data is as follows:

	A	B	C	D	E	F	G	H
1	IRN	Org Name	Student Grouping	District Relation	Student Grouping	Headcount	Total % of Time /	Students Enrolled As of Date
95	40404	LEA Name	District: By Sent Reason 1		1 ES		4	
96	40404	LEA Name	District: By Sent Reason 1		1 FC		1	
97	40404	LEA Name	District: By Sent Reason 1		1 JV		78	
98	40404	LEA Name	District: By Sent Reason 1		1 NA		718	703.86 12/18/2019
99	40404	LEA Name	District: By Sent Reason 1		1 PS		30	29.28 12/18/2019
100	40404	LEA Name	District: By Sent Reason 1		2 NA		1	

Select all data by placing cursor in cell A1, hold down Shift and Ctrl keys and then hit right arrow then down arrow

This can be excellent, up-to-date data to send to others in your district

- Data as of Source Data/Prepare date
- May need to translate EMIS coding using the Student Standing (FS) section of the EMIS Manual

From the Home tab, add borders to make the report more user friendly



Quick Check

The Enrollment Headcount Summary Report can provide up-to-date enrollment numbers quickly. Enrollment numbers are available as headcounts and percent of time. Data is also broken out by Received Reason and Sent to 1 Reason.

- Are you processing updated SIS data in the Data Collector on a regular basis?
- Are you able to format and filter the Enrollment Headcount Summary Report?
- Who in your district might benefit from seeing this data on a regular basis?



Enrollment Headcount Detail Report



Enrollment Headcount Detail (Current Students)

- Provides a quick and comprehensive set of data
 - Contains elements from multiple record types
 - Contains only data from your LEA's SIS
 - Contains data as of a specific date (date of the data/prepare)
- Based on enrollment as of "today" so running a prepare after the school year ends could give skewed results
- Available in closed collections such as Beginning of Year and Midyear for "snapshots" of data based on the last prepare (Mid-December/End of April)
- Consider saving this report regularly as it will be overwritten with each prepare



17

17

Create your own Summary Data

File	Submission 11			Sub 10
	Valid	Invalid	Total	Valid
Counts of DN Records Excluded.csv			3	
Enrollment Headcount Detail Report (Current Students).csv			891	
Enrollment Headcount Detail Report (Future Students).csv				
Enrollment Headcount Detail Report (Prior Students).csv				
Enrollment Headcount Summary Report (Current Students).csv				
Excluded Records.csv				
Missing Report - Organization Attribute (DN).csv				
Missing Report - Student.csv				
Organization General Information Record (DN).csv	3	2	5	3
Student Attributes Effective Date Record (FD).csv	1032	0	1032	1032
Student Attributes No Date Record (FN).csv	928	0	928	928
Student Demographic Record (GI).csv	928	0	928	928
Student Program Record (GQ).csv	644	0	644	644
Student Race Detail Record (GJ).csv	33	0	33	33
Student Special Education Graduation Requirement Record (FE).csv	1	0	1	1
Student Special Education Record (GE).csv	152	0	152	150
Student Standing Record (FS).csv	949	0	949	949
Student Summer Withdrawal Record (FL).csv	0	0	0	0
Student Withdrawal Override Record (FC).csv	0	0	0	0
Total counts:	4670	2	5788	

Open the Enrollment Headcount Detail Report (Current Students)



18

18

Prepare the Report

- Open Enrollment_Headcount_Detail_Report_(Current_Students)
 - Wrap text header row
 - Freeze top row
 - Expand all columns
 - Apply filters
 - Better yet, run your macro!
- To learn how to record a macro, prior year EMIS Alliance Excel sessions can be found here
 - <https://community.mcoecn.org/display/EM/EMIS+Alliance+Public+Space>



19

19

Report Contents

This report contains a unique set of EMIS elements that is created each time data is prepared. If source data is timely, this report could reflect data as of today

District IRN
Building IRN
Student's Enrolled
as of Date

Student Demographic (GI)

Last Name
First Name
Gender
Summative Race
EMIS ID
SSID

Student Standing (FS)

Legal District of Residence
How Received Reason
How Received IRN
District Relationship
Percent of Time
Sent To Reason (1&2)
Sent To IRN (1&2)
Sent to Percent of Time (1&2)
Admission Date
Effective Start Date
Effective End Data (Blank)
Withdrawal Reason (Blank)

Student Attributes – Date (FD)

State Equivalent Grade Level
Disability Condition
Disadvantage
Limited English Proficiency



20

20

Why Pivot Tables?

- Pivot Tables
 - Create a quick summary view of a detailed report
 - No formulas needed
 - Make changes on the fly
 - Drill down to the details
 - Great way to present data to others in the district
 - Will get easier to setup the more you use them



21

21

Create a PivotTable

From the "Insert" tab select "PivotTable"

Leave the "Create PivotTable" prompt as defaulted and select OK

	E	F	G	H	I	J
2	40404	77777	1.23E+08	Last	First	TT228264E
3	40404	77777	1.23E+08	Last	First	UR86404
4	40404	77777	1.23E+08	Last	First	VW0662
5	40404	77777	1.23E+08	Last	First	LP24282
6	40404	77777	1.23E+08	Last	First	VE60024
7	40404	77777	1.23E+08	Last	First	QE88008
8	40404	77777	1.23E+08	Last	First	KW4624
9	40404	77777	1.23E+08	Last	First	PO82048
10	40404	77777	1.23E+08	Last	First	TU22604
11	40404	77777	1.23E+08	Last	First	VW6240
12	40404	77777	1.23E+08	Last	First	GN2082
13	40404	77777	1.23E+08	Last	First	TP84446
14	40404	77777	1.23E+08	Last	First	VH80244
15	40404	77777	1.23E+08	Last	First	TR08488
16	40404	77777	1.23E+08	Last	First	XY24806
17	40404	77777	1.23E+08	Last	First	ZY88244
18	40404	77777	1.23E+08	Last	First	NZ68844
19	40404	77777	1.23E+08	Last	First	UL84468



22

22

New Tab and Next Step

This section contains the column headers from your spreadsheet

The next step is to decide what we want to include in our PivotTable and how we want it to look

We are now on a new tab in the workbook

EMIS Alliance 23

PivotTable Boxes

Moving one or more column headers into this box will create a filter(s) above your PivotTable

Moving one or more column headers into this box will create columns across the top of your PivotTable using the values from those columns on your spreadsheet

Moving one or more column headers into this box will create a row or rows on the left side of your PivotTable using the values from the columns on your spreadsheet

Column headers placed in this box will represent the values that appear in the body of the PivotTable. Values can be summed, averaged, counted, etc.

EMIS Alliance 24

Grade Level by Building

Click and drag fields into the PivotTable boxes

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
1	District Relationship	(All)															
2																	
3	Count of State Student ID	Column Labels															
4	Row Labels		1	2	3	4	5	6	7	8	9	10	11	12	KG	PS	Grand Total
5	44444							54	68								122
6	77777		55	59	45	68	62	64						73	107		533
7	88888									66	56	64	50				236
8	Grand Total		55	59	45	68	62	64	54	68	66	56	64	50	73	107	891

Watch the PivotTable take shape as fields are added to the PivotTable blocks



Grade Level by Building, cont'd

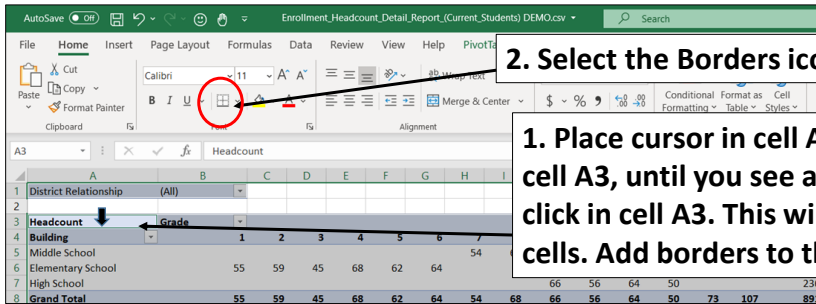
Update headers names to make the PivotTable more user friendly

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
1	District Relationship	(All)															
2																	
3	Headcount	Grade															
4	Building		1	2	3	4	5	6	7	8	9	10	11	12	KG	PS	Grand Total
5	Middle School								54	68							122
6	Elementary School		55	59	45	68	62	64						73	107		533
7	High School									66	56	64	50				236
8	Grand Total		55	59	45	68	62	64	54	68	66	56	64	50	73	107	891

Select columns C through O and drag to widen them equally, all at the same time



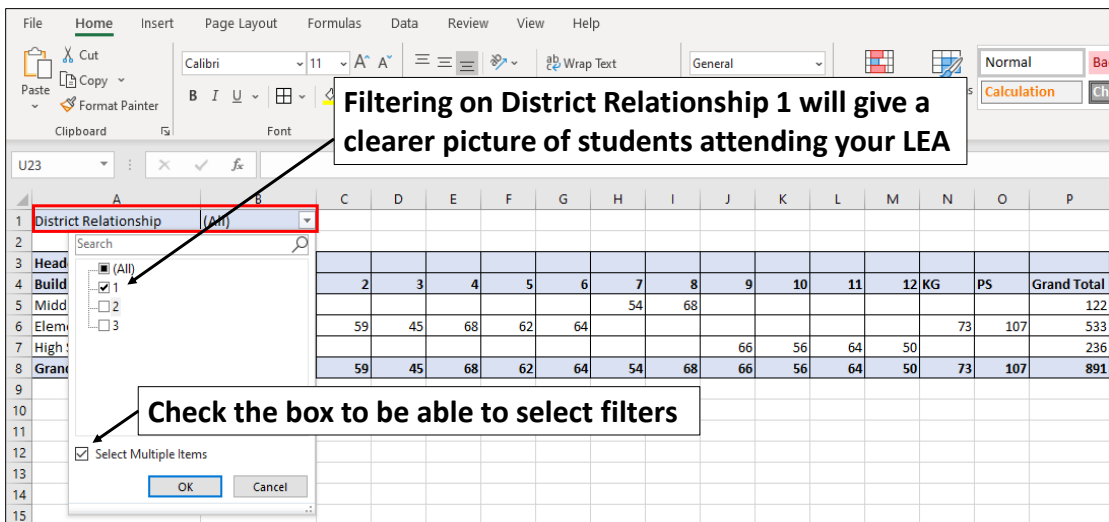
Add Gridlines



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P		
1	District Relationship	(All)																
2																		
3	Headcount	Grade																
4	Building		1	2	3	4	5	6	7	8	9	10	11	12	KG	PS	Grand Total	
5	Middle School								54	68							122	
6	Elementary School		55	59	45	68	62	64								73	107	533
7	High School										66	56	64	50			236	
8	Grand Total		55	59	45	68	62	64	54	68	66	56	64	50	73	107	891	



Filter on District Relationship



District Relationship 1 - Educating

This PivotTable now shows attending students by building and grade level as of the date of the Data Source data and Prepare

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	District Relationship	1														
2																
3	Headcount	Grade														
4	Building	1	2	3	4	5	6	7	8	9	10	11	12	KG	PS	Grand Total
5	Middle School							50	64							114
6	Elementary School	53	56	42	60	58	57							69	93	488
7	High School									60	54	42	38			194
8	Grand Total	53	56	42	60	58	57	50	64	60	54	42	38	69	93	796

Double click into a cell on the PivotTable to view the students who are included in the count



View Students in a New Tab

#	A	B	C	D	E	F	G	H	I
1	District IRN	Building IRN	EMIS Student ID Number	Last Name	First Name	State Student ID	District Relationship	State Equivalent Grade Level	Legal District of Residence
2	40404	88888	123457551	Last	First	XN646882			
3	40404	88888	123457536	Last	First	PW8222422			
4	40404	88888	123457533	Last	First	QP6426200			
5	40404	88888	123457532	Last	First	UX4000404			
6	40404	88888	123457524	Last	First	QX4400208			
7	40404	88888	123457520	Last	First	QV8022894			
8	40404	88888	123457517	Last	First	QX4448028			
9	40404	88888	123457503	Last	First	SG2240560			
10	40404	88888	123457487	Last	First	PC6020268			
11	40404	88888	123457486	Last	First	KM0862286			
12	40404	88888	123457483	Last	First	PV0608264			
13	40404	88888	123457454	Last	First	QP6826686			
14	40404	88888	123457450	Last	First	QX4446208			
15	40404	88888	123457412	Last	First	QL2083226			
16	40404	88888	123457411	Last	First	QL2090002			
17	40404	88888	123457388	Last	First	QI6660906			
18	40404	88888	123457387	Last	First	QI6844428			
19	40404	88888	123457386	Last	First	QI6880960			
20	40404	88888	123457384	Last	First	QI6620448			
21	40404	88888	123457383	Last	First	QI6862642			
22	40404	88888	123457350	Last	First	OY4460408			
23	40404	88888	123457349	Last	First	KZ8026226			
24	40404	88888	123457348	Last	First	OM2826454			
25	40404	88888	123457346	Last	First	OM2880440			
26	40404	88888	123457345	Last	First	OM2884446			
27	40404	88888	123457344	Last	First	OL6084404			
28	40404	88888	123457343	Last	First	OL6080068			
29	40404	88888	123457342	Last	First	OL6044244			
30	40404	88888	123457341	Last	First	OL6028080			
31	40404	88888	123457338	Last	First	OL6224048			

Leave the tab and go back to your PivotTable on Sheet1, or right click on Sheet2 and Delete

A new tab will open containing the data from the cell



Create Another PivotTable

2. From the Insert tab select PivotTable

3. Leave the "Create PivotTable" prompt as defaulted and click "OK"

1. Toggle back to the Enrollment Headcount Detail Report

31



31

Disadvantagement by Building

Set up and format PivotTable

District Relationship	(All)	1	2	3	*	Grand Total
44444	27					122
77777	160			373		533
88888	71	7	9	149		236
Grand Total	258	7	9	617		891

Headcount	Disadvantagmt Code					
Building	Economic	Academic	Both	None	Grand Total	
Middle School		27			95	122
Elementary School		160			373	533
High School		71	7	9	149	236
Grand Total	258	7	9	617		891

32



32

Grade Level by Building and Gender

Count of State Student ID	Column Labels	1	2	3	4	5	6	7	8	9	10	11	12	KG	PS	Grand Total
44444																122
F									27	35						62
M									27	33						60
77777		55	59	45	68	62	64							73	107	533
F		26	24	19	29	31	27							35	55	246
M		29	35	26	39	31	37							38	52	287
88888								66	56	64	50					236
F								30	27	30	23					110
M								36	29	34	27					126
Grand Total		55	59	45	68	62	64	54	68	66	56	64	50	73	107	891

Set up and format PivotTable

Headcount	Grade	1	2	3	4	5	6	7	8	9	10	11	12	KG	PS	Grand Total
Middle School																122
Female																62
Male																60
Elementary School		55	59	45	68	62	64							73	107	533
Female		26	24	19	29	31	27							35	55	246
Male		29	35	26	39	31	37							38	52	287
High School								66	56	64	50					236
Female								30	27	30	23					110
Male								36	29	34	27					126
Grand Total		55	59	45	68	62	64	54	68	66	56	64	50	73	107	891



Insert Slicer Instead of Filter

2. From the PivotTable Analyze Tab, select Insert Slicer

3. Select "District Relationship"

Count of State Student ID	Column Labels	1	2	3	4	5	6	7	8	9	10	11	12	KG	PS	Grand Total
44444																122
F									27	35						62
M									27	33						60
77777		55	59	45	68	62	64							73	107	533
F		26	24	19	29	31	27							35	55	246
M		29	35	26	39	31	37							38	52	287
88888								66	56	64	50					236
F								30	27	30	23					110
M								36	29	34	27					126
Grand Total		55	59	45	68	62	64	54	68	66	56	64	50	73	107	891

1. Create the PivotTable with nothing in the Filter box



Slicer on District Relationship

Much like a filter, a slicer allows the data to be shown based on a selected value

Count of State Student ID	Column Labels	1	2	3	4	5	6	7	8	9	10	11	12	KG	PS	Grand Total
44444							54	68								122
F							27	35								62
M							27	33								60
77777		55	59	45	68	62	64							73	107	533
F		26	24	19	29	31	27							35	55	246
M		29	35	26	39	31	37							38	52	287
88888									66	56	64	50				
F									30	27	30	23				
M									36	29	34	27				
Grand Total		55	59	45	68	62	64	54	68	66	56	64	50	73	107	

Right click on the Slicer to see additional settings such as a multi-select option



35

35

Quick Check

PivotTables create a quick and easy summary of data that can be very useful in troubleshooting data. Summary data is also very helpful to others in your district who monitor enrollment and attributes of students.

- Are you processing updated SIS data in the Data Collector on a regular basis?
- Are you able to format and filter the Enrollment Headcount Detail Report?
- Are you able to create PivotTables from the Enrollment Headcount Detail Report?



36

36

FTE Detail Report PivotTable



37

FTE Detail Report

FTE Detail Report Contains

- Funding data for students
- Your LEA's data and data from other LEAs
- Could have more than one line per student
- Each row is calculated with a base FTE
 - Each row contains a unique set of funding elements
- Gets larger as the school year progresses
- Is generated nightly by ODE with data received as of 5pm



38

FTE Detail Report

Begin by opening an FTE Detail Report

- Student Collection – Level 2

No need to prepare the report
Before creating a PivotTable



FTE Detail Report PivotTable

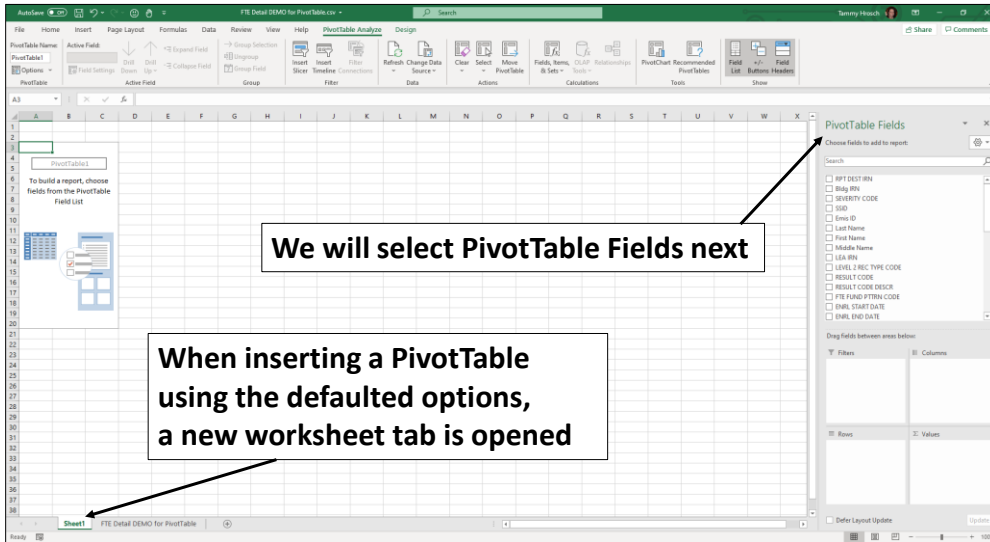
Create a PivotTable in an FTE Detail Report

From the Insert Tab
select "PivotTable"

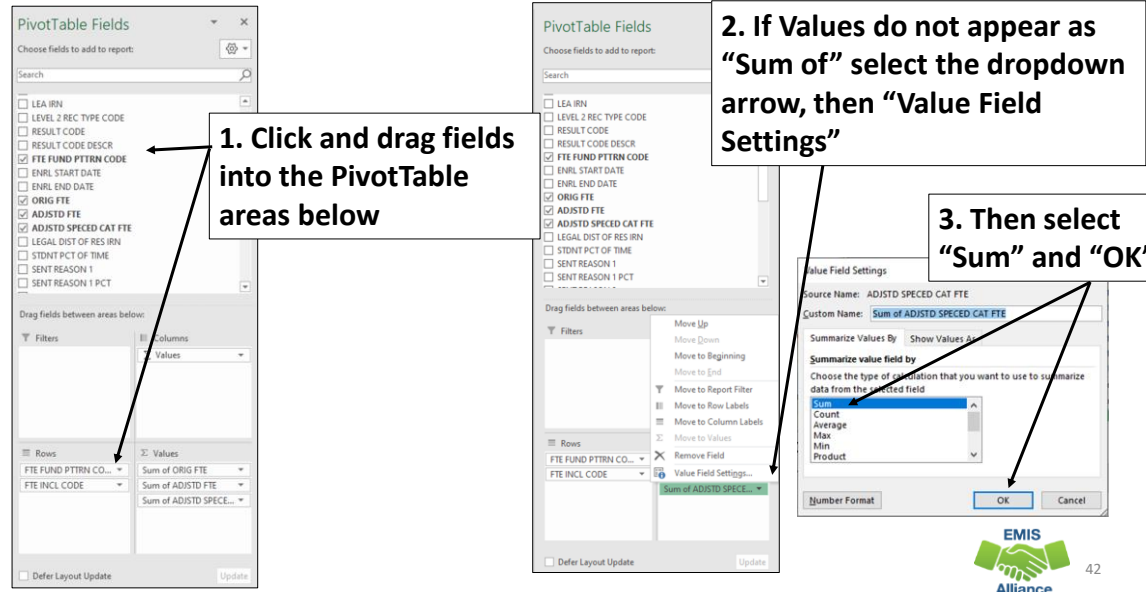
On the Create PivotTable
Prompt, select "OK"



PivotTable Fields



Select PivotTable Fields



PivotTable

3	Row Labels	Sum of ORIG FTE	Sum of ADJSTD FTE	Sum of ADJSTD SPECED CAT FTE
4	⊖ ATSM	1	1	
5	FULL	1	1	
6	⊖ COMM	6.030813	6.030813	
7	FULL	6.030813	6.030813	
8	⊖ JPSN	1	1	
9	FULL	1	1	
10	⊖ NFRG	62.823623	0	0
11	NONE	62.823623	0	0
12	⊖ OJVR	4.609997	4.609997	0.465148
13	NONE	4.153031	4.153031	0.428182
14	PART	0.456966	0.456966	0.036966
15	⊖ OPDD	224.989759	224.955585	12.959914
16	FULL	54.214431	54.21112	2.300633
17	NONE	170.775328	170.744465	10.659281
18	⊖ OPID	3.873032	3.873032	0.24
19	PART	3.873032	3.873032	0.24
20	⊖ PSET	9.994013	8.834327	8.834327
21	FULL	9.994013	8.834327	8.834327
22	⊖ PSOP	1.28	0.78	0.78
23	NONE	1.28	0.78	0.78
24	⊖ PSOT	1	0.5	0.342857
25	NONE	1	0.5	0.342857
26	⊖ PSRD	4.302174	3.1454	3.1454
27	FULL	4.302174	3.1454	3.1454
28	⊖ RGJV	609.433172	608.92514	80.844411
29	FULL	576.343107	575.835075	73.667943
30	PART	33.090065	33.090065	7.176468
31	⊖ SPCO	12.63811	12.63811	12.63811
32	FULL	8.88811	8.88811	8.88811
33	NONE	3.75	3.75	3.75
34	Grand Total	942.974693	876.292404	120.250167

Inclusions codes typically indicate where funding is initially going

- FULL and PART indicate that your LEA is initially receiving funding
- NONE indicates that the funding is initially going to another LEA

Click on specific values to drill into the detailed data

Refer to the FTE Detail Report Explanation For definitions of Fund Pattern Codes



FTE Report Explanation – FTE Fund Patterns

FTE Fund Pattern Code	FTE Fund Pattern Code Description	Detailed FTE Fund Pattern Code Description
PSIT	Preschool – ESC educating via an intermediate district, funds transferred to ESC	A resident of District means other than to an ESC. Agreed ESC.
RGJV	Regular/Other District and Regular JVSD	This is the broadest category and covers resident student and other situations such as: Foster Placement, Following District Employee, Senior Year, and also includes students coded with the 'CE' Sent Reason that are not reported Vocational.
SBDD	School age educated at County Board of Developmental Disabilities	
SPCO	Special Ed Co-Op	Students reported by...
STEM	STEM District Student	Students reported by a STEM district
****	The default value	If no other code fits, then '****' will appear in the FTE Fund Pattern Code column

This is a small section of the FTE Fund Pattern Code section of the report explanation

Use this information to learn what attending situations your LEA has and if the funding is flowing as expected



Pivot Table Filter

	Sum of ORIG FTE	Sum of ADJSTD FTE	Sum of ADJSTD SPECED CAT FTE
27	FULL	4.302174	3.1454
28	RGIV	609.433172	608.92514
29	FULL	576.343107	575.835075
30	PART	33.090065	33.090065
31	SPCO	12.63811	12.63811
32	FULL	8.88811	8.88811
33	NONE	3.75	3.75
34	Grand Total	942.974693	876.292404

Filter on Row Labels and select just the Fund Pattern Codes you would like to see, then click "OK"

	Sum of ORIG FTE	Sum of ADJSTD FTE	Sum of ADJSTD SPECED CAT FTE
4	ATSM	1	1
5	FULL	1	1
6	JPSN	1	1
7	FULL	1	1
8	SPCO	12.63811	12.63811
9	FULL	8.88811	8.88811
10	NONE	3.75	3.75
11	Grand Total	14.63811	14.63811

In this example only ATSM, JPSN, and SPCO were selected in the filter



Quick Check

PivotTables can provide a summary of a large amount of data that allows the data to be analyzed in smaller sections. Try using Recommended PivotTables to view different ways to analyze your data.

- Are you able to create a PivotTable and drill into the detailed data?
- What other fields in the FTE Report could be brought into a PivotTable?
- Can you think of other reports that could be analyzed using PivotTables?



Summary

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



47

Resources

- Access previous EMIS Alliance sessions
 - <https://community.mcoecn.org/display/EM/EMIS+Alliance+Public+Space>
- Microsoft Excel Help within Excel “?” Articles and Videos
- Google it
- Microsoft Excel Classes
- Your ITC



48

Questions?

