

Pivot Table Guide

Non-resident Student Research Tool



**CENTER FOR EDUCATIONAL
PERFORMANCE AND INFORMATION**

Center for Educational Performance & Information (CEPI)

The Center for Educational Performance and Information (CEPI) is pleased to release the Non-resident Student Research Tool interactive data set. Creating specialized public data sets is part of CEPI's mission to provide data and reports to state and local policymakers as well as the citizens of the state to allow them to make informed policy decisions and assess the return on their investment in the education system of Michigan.

This data set shows, at a point in time, the number of students who reside within one local education agency (LEA) district's boundaries, but attend school in another LEA district or Public School Academy (PSA), either through Schools of Choice programs or other cooperative agreements. This data set can be created only by examining the statewide individual student data that are maintained by CEPI via the Single Record Student Database (SRSD).

The release of this data set is a means to provide useful information to stakeholders and to satisfy multiple, frequent data requests. The CEPI advisory committee designated a group of district volunteers to help the CEPI team define characteristics of the data set. The Macomb Intermediate School District worked collaboratively with CEPI to develop the documentation that accompanies this data set. CEPI would like to thank the advisory committee, Macomb Intermediate School District, and pilot user volunteers. CEPI would appreciate feedback from users on the data set, so please send e-mail responses to cepi@michigan.gov.

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Chapter 1 - Pivot Tables & Project Overview

Pivot Tables

When information is being tracked, there are often hundreds or thousands of records in the source data. It is difficult, or maybe impossible, to look through the data and see the trends. A better solution is to use a set of tools, like **Pivot Table Reports and Charts** to help you summarize and analyze the trends from the data.

Pivot Tables and Charts help to extract meaning from large data sources. Three benefits of using pivot table tools to organize data are:

- Summarizing large volumes of information
- Finding relationships within the data
- Charting the data to see the trends at a glance

The pivot table tools provide an interactive environment where information from the source data can be re-organized in a variety of different ways. The source data remains the same, but several different views of the source data can be created by dragging and dropping fields within the report.

The Project

The **Center for Educational Performance and Information (CEPI)** collects data about K-12 schools and students in Michigan. One of the projects CEPI has initiated tracks students who receive educational services in a district other than their district of residence. This project is called **Non-resident Student Research Tool**.

Some of the fields that are tracked in this project include:

- **Operating District**
(the district where the non-resident student attends school)
- **Operating Building**
(the building where the non-resident student attends school)
- **Operating District Type**
(ISD, LEA or PSA)
- **Resident LEA**
(the resident district of the student who attends elsewhere)
- **Student Grade**
- **Student Count**
(students who live in one district or county and attend school in another)

The data source for this project is very large. However, it is possible to use Pivot Tables and Charts to summarize the project data and find meaningful trends and relationships.

Some of the questions that can be answered using the pivot table with this data include (questions courtesy of CEPI):

1. How many students are living in one ISD and attending school in another ISD?

- Does this vary by grade?
- Is this a trend that has increased or decreased over the years?

2. How many students are living in one district and attending school in another district?

- Does this vary by grade?
- Is this a trend that has increased or decreased over the years?

3. How many students live in a specific district and attend school in another district?

- What districts are they attending?
- What district type are they attending (LEA, PSA or ISD)
- What is the trend over the years?

4. How many non-resident students attend school in a specific district?

- Where are they from?
- What grade are they in?
- What schools are they attending?
- What is the trend over the years?

Next Steps

The remainder of this tutorial will guide you through the steps involved with:

- Getting started by creating a pivot table based on the CEPI data
- Analyzing the data (and answering the questions above) with the pivot table
- Formatting pivot tables
- Creating charts based on the pivot table numbers

Chapter 2 – Getting Started

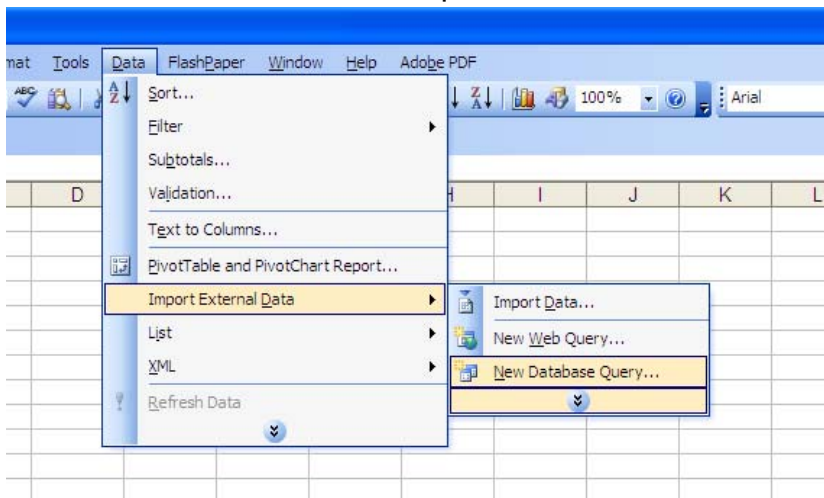
Creating the Pivot Table

The file from CEPI that contains the data for the **Non-resident Student Research Tool** is housed in a data file called **2007NonResident.cub**.

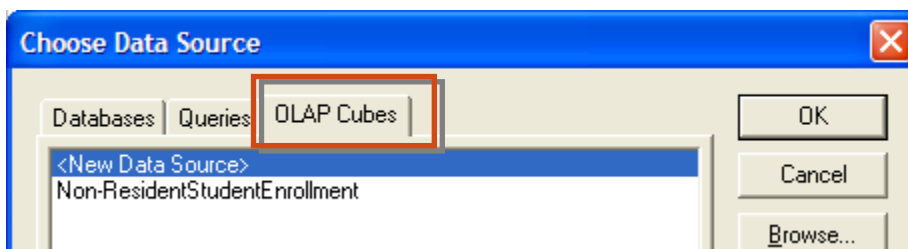
*The state provides the file in zipped format. You will need to unzip the **2007NonResident.zip** file and save **2007NonResident.cub** prior to proceeding with the steps below.*

Once the file is unzipped and **2007NonResident.cub** is saved the following steps will create the Pivot Table interface (courtesy of CEPI):

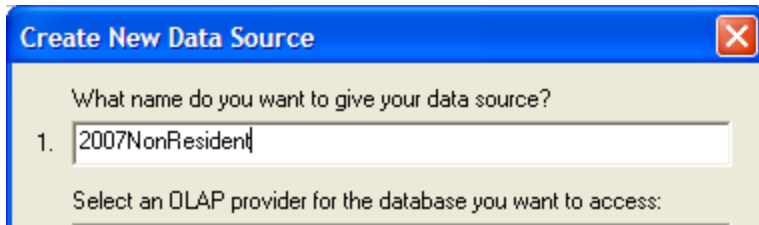
1. Open a new Excel workbook.
2. From the Data menu, select Import External Data→New Database Query...



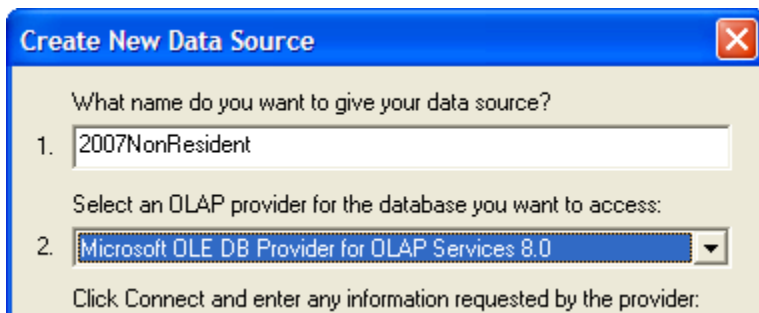
3. In the **Choose Data Source** dialog box, select the **OLAP Cubes** tab and select **<New Data Source>**. Press **OK**.



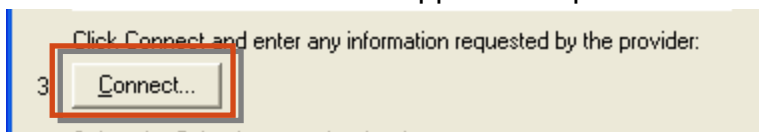
- The **Create New Data Source** dialog box will appear asking for 2 pieces of information – the name of the data source and the OLAP provider. Any name can be used, but it makes sense to use a name consistent with the filename such as **2007NonResident**



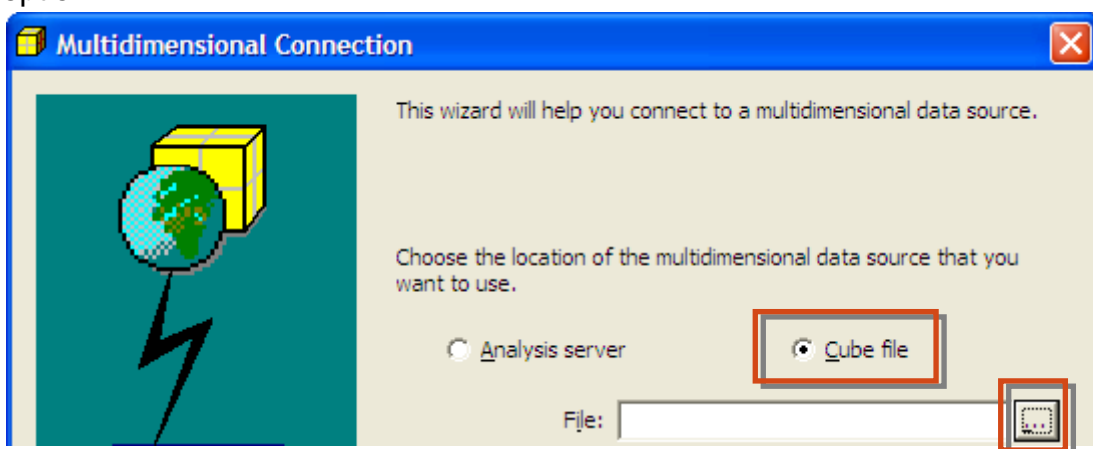
- Opposite step 2 in the dialog box select the OLAP provider. The correct provider to choose is **Microsoft OLE DB Provider for OLAP Services 8.0**.



- Click the **Connect...** button opposite step 3 in the dialog box.

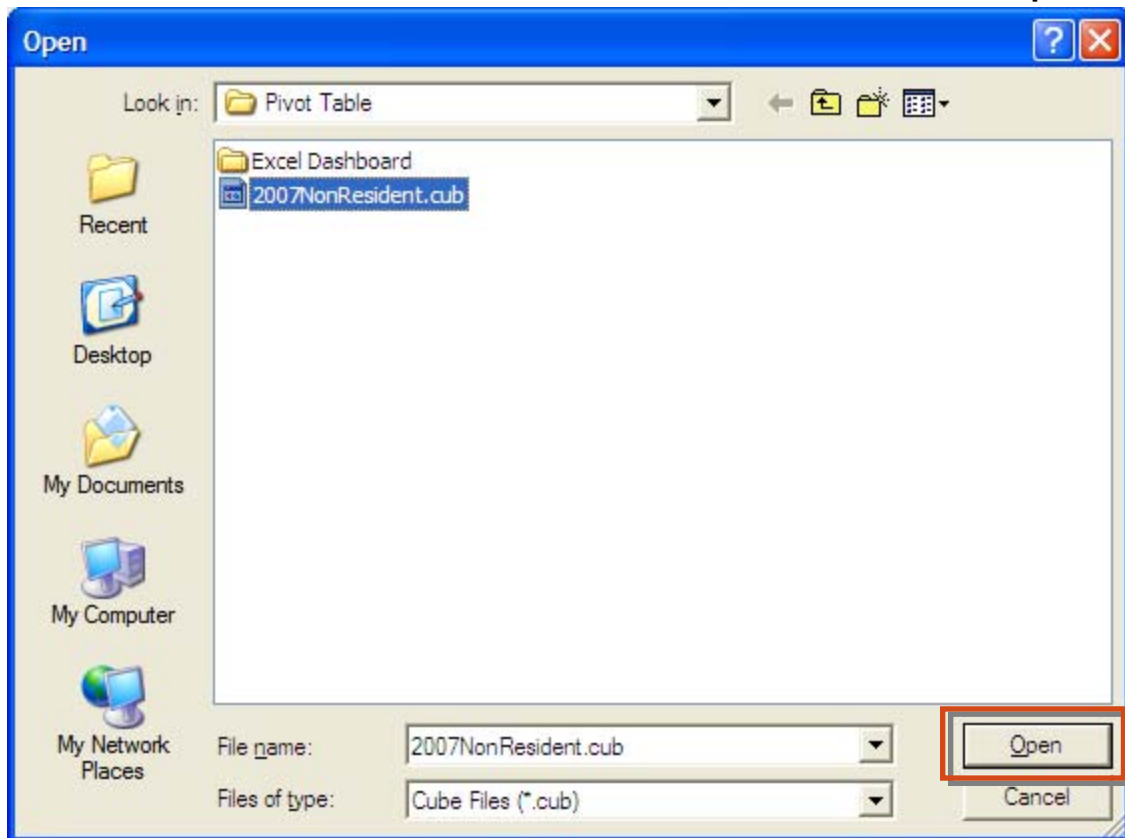


- The **Multidimensional Connection** dialog box will appear. Select the **Cube File** option.

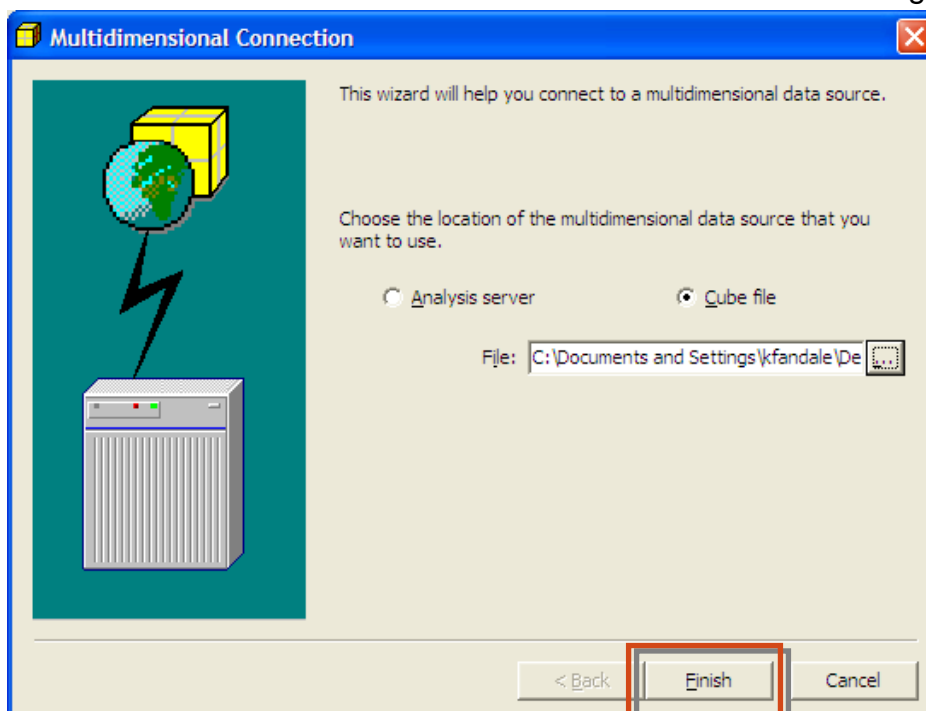


- Opposite the **File:** option in the dialog box click the  button.

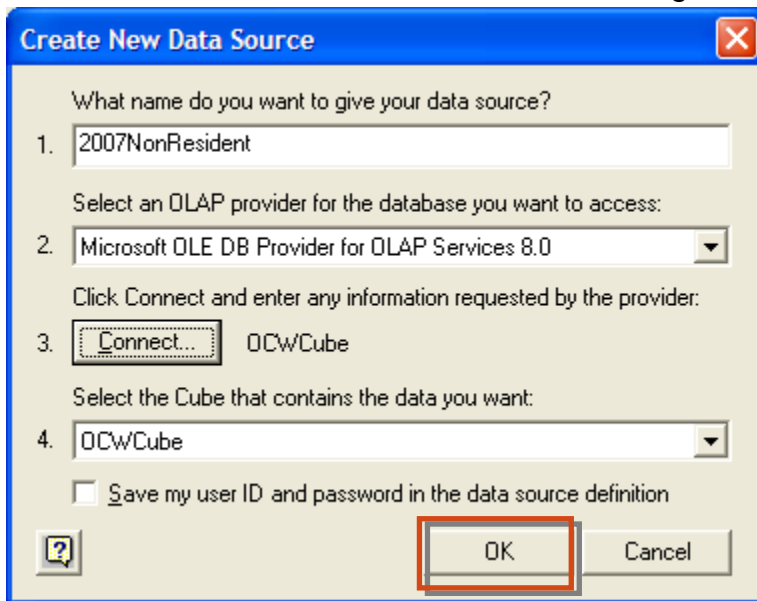
9. The **Open** dialog box will appear. Browse to the location where you have saved the **2007NonResident.cub** file from the state. Select the file and click **Open**.



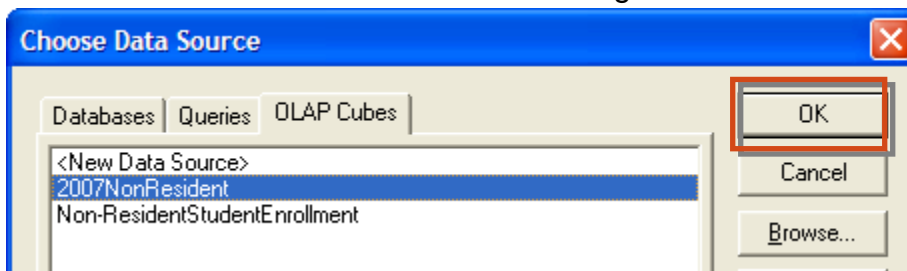
10. Click the **Finish** button in the Multidimensional Connection dialog box.



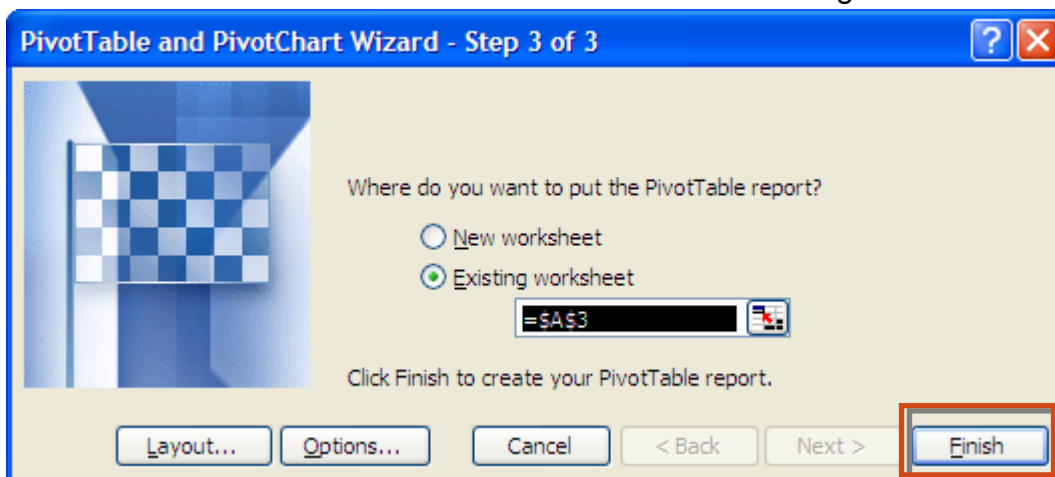
11. Click **OK** in the **Create New Data Source** dialog box.



12. Click **OK** in the **Choose Data Source** dialog box.



13. Click **Finish** in the **Pivot Table and Pivot Chart Wizard** dialog box.



14. The blank pivot table is now created in Excel, and it is ready to be used to summarize and analyze the data.

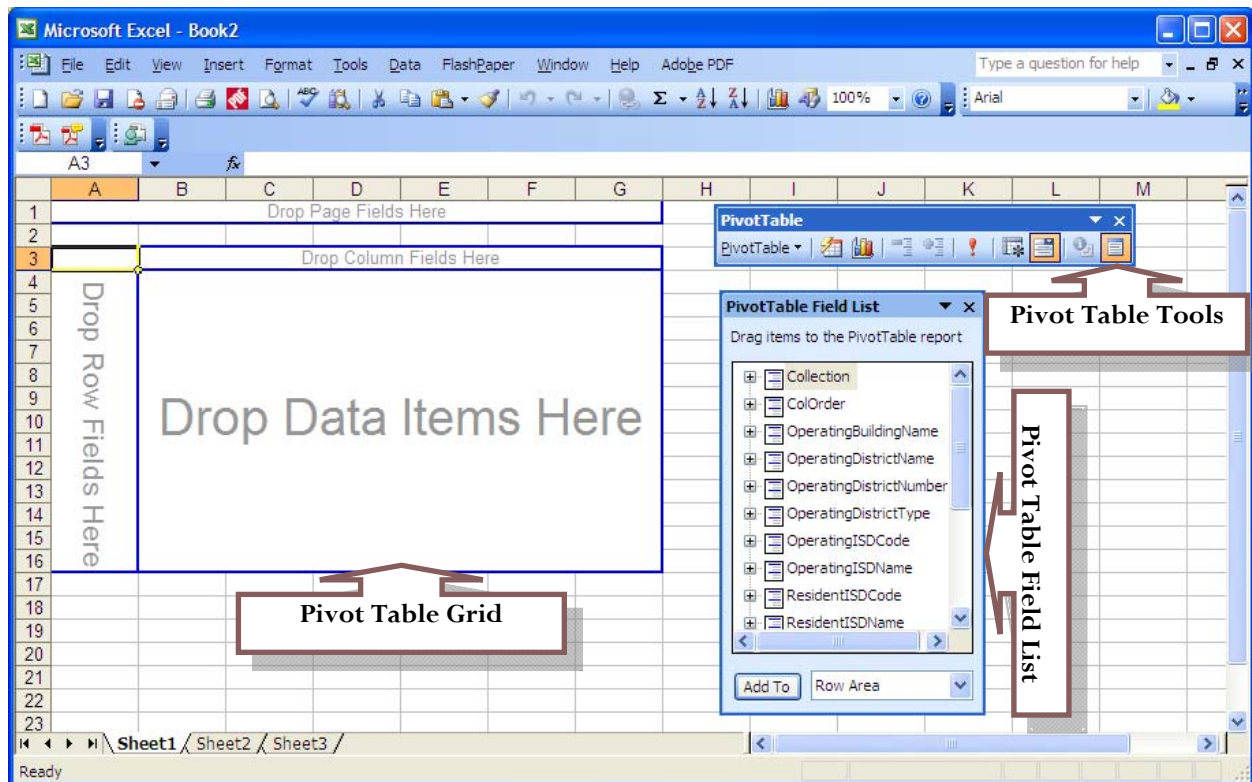
Chapter 3 – Analyzing Data

Pivot Table Layout

The pivot table is an interactive worksheet table that can be modified by dragging and dropping fields from the field list into various locations on the table.

The blank pivot table framework looks something like the picture below with 3 related components:

- Pivot Table Grid
- Pivot Table Field List
- Pivot Table Tools



The **Pivot Table Grid** has 4 locations where fields can be dropped. There is the:

- **Row** area which shows the items in the field as row labels
- **Column** area which shows the items in the field as column labels
- **Page** area which shows the data for one item at a time in the table
- **Data** area to summarize the values in the body of the table

The **Row**, **Column** and **Page** fields usually contain text values. The **Data** field typically contains numeric data used for summarizing.

*With the **Non-resident Student Research Tool** data source, the most likely value for the **Data** area will be **Sum of Student Count**.*

Using the Pivot Table

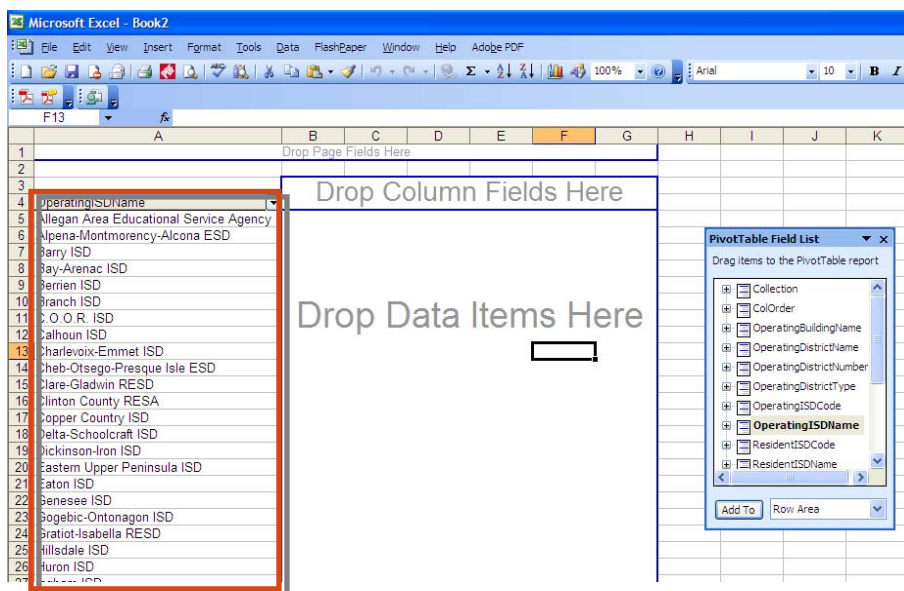
The best way to make use of the Pivot Table is to begin with a question in mind, then set up the **Page**, **Row**, **Column** and **Data** fields to answer the question.

Question 1

1. How many students are living in one ISD and attending school in another ISD?
 - Does this vary by grade?
 - Is this a trend that has increased or decreased over the years?

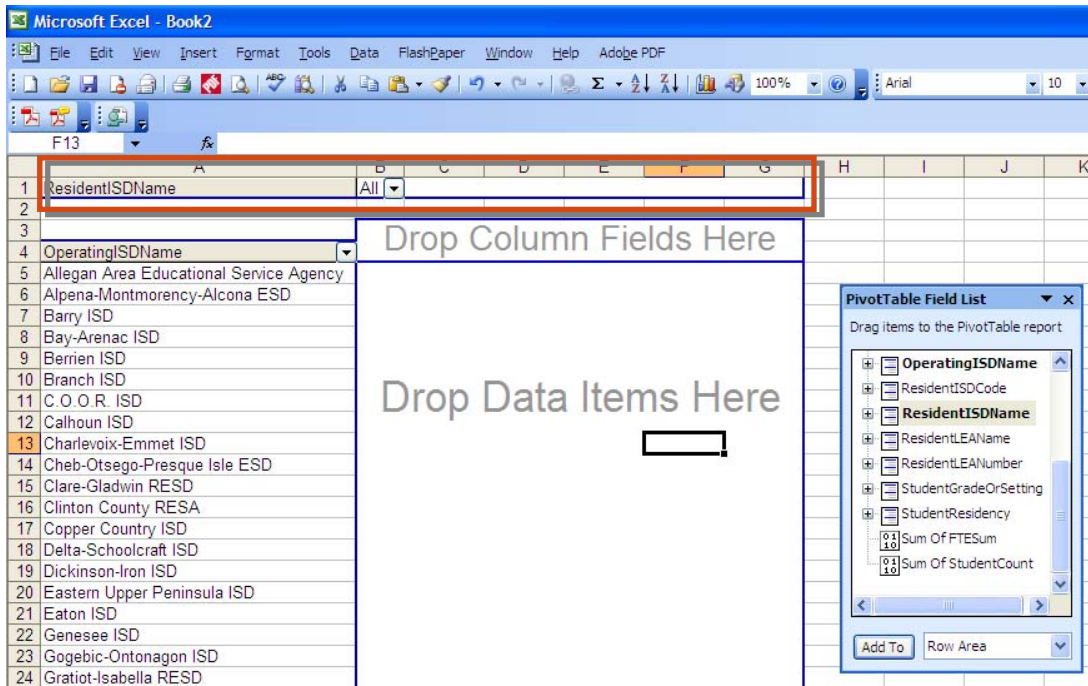
In our examples the 4 questions posed earlier will be used.

1. There are a variety of different ways that this question can be answered using the pivot table.
2. The first step might be to drag the **OperatingISDName** to the **Row** area on the **Pivot Table Grid** to get something that looks like this:

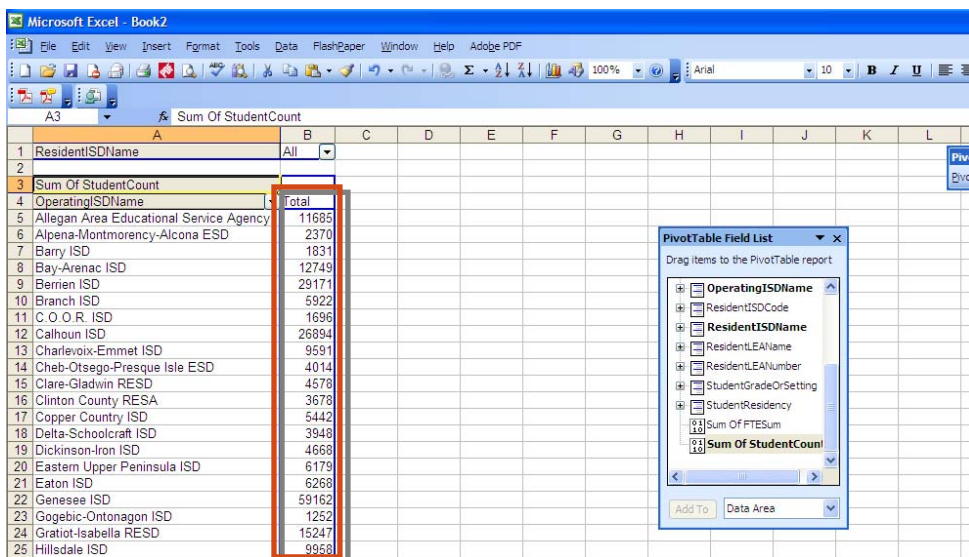


*If you click outside of the **Pivot Table Grid**, the **Field List** will disappear. To get the **Field List** back simply click inside the **Grid** again.*

- The **ResidentISDName** could be pulled to the Column area in this example, but that is going to create a very wide table that may be difficult to analyze. Instead, the **ResidentISDName** can be pulled to the **Page** area to see the results for one ISD at a time.



- Finally, the Sum of Student Count can be pulled into the Data area.



This data displays the number of students over 5 years (Fall of 2002 through 2007) within each Operating ISD who lived in one district (or ISD) and attended school in another.

- To further analyze this data it will be helpful to select a specific **ResidentISDName** from the page area. This can be accomplished by selecting the drop-down arrow next to the word **All**, then clicking the **Plus Sign** next to the word **All** in the dialog box.

	ResidentISDName	All
1	ResidentISDName	All
2		
3	Sum Of StudentCount	
4	OperatingISDName	
5	Allegan Area Educational Service Agency	
6	Alpena-Montmorency-Alcona ESD	
7	Barry ISD	

- A list of **ResidentialISDNames** will be displayed. Select one, and then click **OK**.

	ResidentISDName	All
1	ResidentISDName	All
2		
3	Sum Of StudentCount	
4	OperatingISDName	
5	Allegan Area Educational Service Agency	
6	Alpena-Montmorency-Alcona ESD	
7	Barry ISD	
8	Bay-Arenac ISD	
9	Berrien ISD	
10	Branch ISD	
11	C. O. O. R. ISD	
12	Calhoun ISD	
13	Charlevoix-Emmet ISD	
14	Cheb-Otsego-Presque Isle ESD	
15	Clare-Gladwin RESD	4578
16	Clinton County RESA	3678
17	Copper Country ISD	5442
18	Delta-Schoolcraft ISD	3948

This data displays the number of students over 5 years (Fall of 2002 through 2007) who were residents of a Macomb ISD district and attended school outside of that district (or outside of the ISD).

- At this point there are fields in the **page** and **row** areas of the table. To add a field to the **column** area it would be dragged to the area outlined in red below (above the word **Total**).

	A	B
1	ResidentISDName	Macomb ISD
2		
3	Sum Of StudentCount	
4	OperatingISDName	Total
5	Allegan Area Educational Service Agency	1
6	Barry ISD	1
7	Calhoun ISD	34
8	Genesee ISD	11
9	Gratiot-Isabella RESD	2
10	Delta-Schoolcraft ISD	12

8. To see if **Grade** is a factor in the choice to attend school outside of the district, the **StudentGradeorSetting** field can be dragged into the **Column** area.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T		
1	ResidentISDName	Macomb ISD																				
2																						
3	Sum Of StudentCount																					
4	OperatingISDName	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	20	30	Grand Total			
5	Allegan Area Educational Service Agency																					
6	Barry ISD														1					1		
7	Calhoun ISD		3	3	2	1	2	1		3	1						3	14		34		
8	Genesee ISD			1	1				1	1		1	4		1				1	11		
9	Gratiot-Isabella RESD										1								1	2		
10	Hillsdale ISD								1	2	4	1	3	1						12		
11	Ingham ISD										1									1		
12	Kalamazoo R.E.S.A.				1							13								14		
13	Kent ISD		2			1		1			1	2	1							8		
14	Lapeer ISD		13	6	4	4	3	3	1	4	4	9	10	7	11	3		4	3	89		
15	Livingston ESA											1								1		
16	Macomb ISD		50	5050	4852	4578	4211	4023	3722	3636	3351	3128	3689	3737	5193	5883	2875	6635	2132	1829	68574	
17	Mecosta-Osceola ISD									1		1								2		
18	Menominee ISD			1																1		
19	Midland County ESA													1		1				2		
20	Monroe ISD															1				1		
21	Oakland Schools		4	151	137	124	106	95	87	94	80	77	100	219	150	297	546	21	506	8	2802	
22	Sanilac ISD																			1	2	
23	St. Clair County RESA		3	31	47	44	36	41	34	35	30	30	29	28	44	48	11	1	2		494	
24	Washtenaw ISD			2		1	1	1	1	1	1	1					5				14	
25	Wayne RESA			96	94	76	78	73	59	51	40	34	92	63	77	72	25	1	919		1850	
26	Grand Total		57	5349	5140	4829	4439	4239	3907	3821	3511	3278	3941	4066	5475	6318	3465	6661	3580	1840		73916

Grade Level information:

- 00 – Kindergarten
- 01-12 – Grade 1 through grade 12
- 14 – Special education setting
- 20 – Adult education
- 30 – Early Childhood/Early On

9. To see the trend over the years (between Fall 2002 and Fall 2007) drag the **StudentGradeorSetting** out of the **Column** area back to the **Field List**.

10. Drag the **Collection** field to the **Column** area.

	A	B	C	D	E	F	G	H	I	J
1	ResidentISDName	Macomb ISD								
2										
3	Sum Of StudentCount	Collection								
4	OperatingISDName	Fall2002	Fall2003	Fall2004	Fall2005	Fall2006	Fall2007	Grand Total		
5	Allegan Area Educational Service Agency									
6	Barry ISD			1						1
7	Calhoun ISD		8	7	7	5	5	2		34
8	Genesee ISD				5		3	3		11
9	Gratiot-Isabella RESD		1				1			2
10	Hillsdale ISD					5	7			12
11	Ingham ISD			1						1
12	Kalamazoo R.E.S.A.					1		13		14
13	Kent ISD		1				1	6		8
14	Lapeer ISD		12	8	9	10	22	28		89
15	Livingston ESA							1		1
16	Macomb ISD		8270	9348	10911	11778	13158	15109		68574
17	Mecosta-Osceola ISD			2						2
18	Menominee ISD					1				1
19	Midland County ESA						2			2
20	Monroe ISD			1						1
21	Oakland Schools		394	430	414	423	546	595		2802
22	Sanilac ISD					1		1		2
23	St. Clair County RESA		46	52	76	80	112	128		494
24	Washtenaw ISD		7	1	1	3	2			14
25	Wayne RESA		64	168	186	356	491	585		1850
26	Grand Total		8803	10019	11610	12663	14350	16471		73916

Question 2

- How many students are living in one district and attending school in another district?
 - What district type are they attending (LEA, PSA or ISD)
 - Does this vary by grade?
 - Is this a trend that has increased or decreased over the years?

For this question, districts from just one ISD will be analyzed at one time. To do this, the **ResidentISDName** will be kept in the **Page** area. The **SumofStudentCount** will also be kept in the **Data** area.

- Drag **OperatingISDName** from the **Row** area back to the **Field List**.
- Drag **ResidentLEAName** from the **Field List** into the **Row** area.

	A	B	C
1	ResidentISDName	Macomb ISD	
2			
3	Sum Of StudentCount		
4	ResidentLEAName	Total	
5	Anchor Bay School District	1988	
6	Armada Area Schools	418	
7	Center Line Public Schools	2183	
8	Chippewa Valley Schools	5256	
9	Clintondale Community Schools	4401	
10	East Detroit Public Schools	7037	
11	Fitzgerald Public Schools	2013	
12	Fraser Public Schools	2260	
13	Lake Shore Public Schools (Macomb)	3049	
14	Lakeview Public Schools (Macomb)	1727	
15	L'Anse Creuse Public Schools	4107	
16	Macomb ISD	8	
17	Mt. Clemens Community School District	4900	
18	New Haven Community Schools	2573	
19	Richmond Community Schools	2050	
20	Romeo Community Schools	1139	
21	Roseville Community Schools	6884	
22	South Lake Schools	2037	
23	Utica Community Schools	7144	
24	Van Dyke Public Schools	3950	
25	Warren Consolidated Schools	6611	
26	Warren Woods Public Schools	2181	
27	Grand Total	73916	
28			

- To see the **OperatingDistrictType** that these students are attending, the **OperatingDistrictType** can be pulled into the **Row** area (as a second **Row** area field) to give results displayed like this:

	A	B	C	D	E
1	ResidentISDName	Macomb ISD			
2					
3	Sum Of StudentCount				
4	ResidentLEAName	OperatingDistrictType	Total		
5	Anchor Bay School District	Intermediate School Dist./Eductnl. Service Agency	462		
6		Local Education Agency (District)	1033		
7		Public School Academy (District)	493		
8	Anchor Bay School District Total		1988		
9	Armada Area Schools	Intermediate School Dist./Eductnl. Service Agency	96		
10		Local Education Agency (District)	274		
11		Public School Academy (District)	48		
12	Armada Area Schools Total		418		
13	Center Line Public Schools	Intermediate School Dist./Eductnl. Service Agency	294		
14		Local Education Agency (District)	1635		
15		Public School Academy (District)	254		
16	Center Line Public Schools Total		2183		
17	Chippewa Valley Schools	Intermediate School Dist./Eductnl. Service Agency	1154		
18		Local Education Agency (District)	3121		
19		Public School Academy (District)	981		
20	Chippewa Valley Schools Total		5256		
21	Clintondale Community Schools	Intermediate School Dist./Eductnl. Service Agency	291		
22		Local Education Agency (District)	3490		
23		Public School Academy (District)	620		
24	Clintondale Community Schools Total		4401		
25	East Detroit Public Schools	Intermediate School Dist./Eductnl. Service Agency	636		
26		Local Education Agency (District)	5041		

- An alternative is to drag the **OperatingDistrictType** into the **Column** area to provide results displayed like this:

	A	B	C	D	E	F
1	ResidentISDName	Macomb ISD				
2						
3	Sum Of StudentCount	OperatingDistrictType				
4	ResidentLEAName	Intermediate School Dist./Eductnl. Service Agency (District)	Local Education Agency (District)	Public School Academy (District)	Grand Total	
5	Anchor Bay School District	462	1033	493	1988	
6	Armada Area Schools	96	274	48	418	
7	Center Line Public Schools	294	1635	254	2183	
8	Chippewa Valley Schools	1154	3121	981	5256	
9	Clintondale Community Schools	291	3490	620	4401	
10	East Detroit Public Schools	636	5041	1360	7037	
11	Fitzgerald Public Schools	304	1440	269	2013	
12	Fraser Public Schools	310	1724	226	2260	
13	Lake Shore Public Schools (Macomb)	332	2536	181	3049	
14	Lakeview Public Schools (Macomb)	219	1326	182	1727	
15	L'Anse Creuse Public Schools	835	2568	704	4107	
16	Macomb ISD	2	3	3	8	
17	Mt. Clemens Community School District	412	3359	1129	4900	
18	New Haven Community Schools	208	1278	1087	2573	
19	Richmond Community Schools	162	1275	613	2050	
20	Romeo Community Schools	306	733	100	1139	
21	Roseville Community Schools	741	4667	1476	6884	
22	South Lake Schools	220	1718	99	2037	
23	Utica Community Schools	1626	4105	1413	7144	
24	Van Dyke Public Schools	499	2910	541	3950	
25	Warren Consolidated Schools	1152	3759	1700	6611	
26	Warren Woods Public Schools	211	1561	409	2181	
27	Grand Total	10472	49556	13888	73916	
28						

This data displays the number of students over 5 years (Fall of 2002 through 2007) who were residents of the listed LEA within Macomb county but attended school outside of that district (or outside of the ISD).

- To see if **Grade** is a factor in the choice to attend school outside of the district, the **Operating District Type** can be dragged back to the field list and the **StudentGradeorSetting** field can be dragged into the **Column** area.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	ResidentISDName	Macomb ISD																		
2																				
3	Sum Of StudentCount																			
4	ResidentLEAName		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	20	30	Grand Total
5	Anchor Bay School District																			
6	Armada Area Schools		22	18	14	12	13	10	11	10	11	13	21	25	102	46	72	4	14	418
7	Center Line Public Schools	4	76	88	99	90	83	75	70	72	72	136	174	332	372	110	118	156	56	2183
8	Chippewa Valley Schools	7	435	373	329	306	291	262	205	202	191	182	177	260	414	451	743	201	227	5256
9	Clintondale Community Schools		406	341	339	308	303	291	307	280	245	288	243	350	319	86	152	83	60	4401
10	East Detroit Public Schools	3	590	561	517	496	502	438	430	408	385	534	510	409	405	294	384	84	87	7037
11	Fitzgerald Public Schools	8	128	120	112	98	82	66	78	67	68	128	198	240	222	109	173	67	49	2013
12	Fraser Public Schools	1	109	113	100	104	95	88	102	87	92	127	125	234	364	153	224	100	42	2260
13	Lake Shore Public Schools (Macomb)	1	109	178	178	168	172	174	172	193	216	167	175	413	395	62	209	31	36	3049
14	Lakeview Public Schools (Macomb)	2	95	75	78	80	74	71	60	53	57	127	115	221	260	91	156	69	43	1727
15	L'Anse Creuse Public Schools		356	317	288	238	237	210	182	154	156	228	229	280	271	166	536	123	136	4107
16	Macomb ISD	2												1	3	1				8
17	Mt. Clemens Community School District		375	400	389	360	344	324	321	286	241	285	244	241	262	302	265	216	45	4900
18	New Haven Community Schools		283	275	277	234	210	197	146	130	118	135	113	147	113	25	107	23	40	2573
19	Richmond Community Schools		80	123	120	122	117	107	97	92	70	112	151	352	331	28	106	16	26	2050
20	Romeo Community Schools	1	85	60	61	54	62	52	51	63	53	58	62	67	126	19	205	23	37	1139
21	Roseville Community Schools	3	592	561	520	490	452	397	383	346	322	419	372	348	427	361	512	230	149	6884
22	South Lake Schools		72	86	88	94	92	70	98	91	98	136	158	241	268	157	189	62	37	2037
23	Utica Community Schools	7	377	414	402	373	351	335	323	258	249	160	204	325	502	350	983	1203	328	7144
24	Van Dyke Public Schools	3	305	284	258	214	206	197	218	228	166	240	257	404	356	201	287	77	49	3950
25	Warren Consolidated Schools	5	530	465	414	349	334	335	353	285	279	284	302	253	369	334	807	727	186	6611
26	Warren Woods Public Schools	9	117	135	118	125	117	116	116	103	100	105	150	245	323	24	166	24	88	2181
27	Grand Total	57	5349	5140	4829	4439	4239	3907	3821	3511	3278	3941	4066	5475	6318	3465	6661	3580	1840	73916

- To see only specific column headings, click on the **list arrow** opposite **StudentGradeorSetting**. Uncheck those grades you would prefer to leave out of the table.

The screenshot shows a PivotTable field list for the 'StudentGradeOrSetting' field. A list of grades from 00 to 14 is displayed with checkboxes next to each. The 'Show All' option is selected. The background shows a PivotTable with columns for grades 03 and 04.

- You will then see the numbers and totals for just those grades you are interested in including with the results.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	ResidentSDName	Macomb IS														
2																
3	Sum Of StudentCount	StudentGra														
4	ResidentLEAName	0	01	02	03	04	05	06	07	08	09	10	11	12	Grand Total	
5	Anchor Bay School District	207	155	126	124	102	92	97	103	89	77	66	67	114	1459	
6	Armada Area Schools	22	18	14	12	13	10	11	10	11	13	21	25	102	282	
7	Center Line Public Schools	76	88	99	90	83	75	70	72	72	136	174	332	372	1739	
8	Chippewa Valley Schools	435	373	329	306	291	262	205	202	191	182	177	260	414	3627	
9	Clintondale Community Schools	406	341	339	308	303	291	307	280	245	288	243	350	319	4020	
10	East Detroit Public Schools	590	561	517	496	502	438	430	408	385	534	510	409	405	6185	
11	Fitzgerald Public Schools	128	120	112	98	82	66	78	67	68	128	198	240	222	1607	
12	Fraser Public Schools	109	113	100	104	95	88	102	87	92	127	125	234	364	1740	
13	Lake Shore Public Schools (Macomb)	109	178	178	168	172	174	172	193	216	167	175	413	395	2710	
14	Lakeview Public Schools (Macomb)	95	75	78	80	74	71	60	53	57	127	115	221	260	1366	
15	L'Anse Creuse Public Schools	356	317	288	238	237	210	182	154	156	228	229	280	271	3146	
16	Macomb ISD							1					1	3	5	
17	Mt. Clemens Community School District	375	400	389	360	344	324	321	286	241	285	244	241	262	4072	
18	New Haven Community Schools	283	275	277	234	210	197	146	130	118	135	113	147	113	2378	
19	Richmond Community Schools	80	123	120	122	117	107	97	92	70	112	151	352	331	1874	
20	Romeo Community Schools	85	60	61	54	62	52	51	63	53	58	62	67	126	854	
21	Roseville Community Schools	592	561	520	490	452	397	383	346	322	419	372	348	227	5629	
22	South Lake Schools	72	86	88	94	92	70	98	91	98	136	158	241	268	1592	
23	Utica Community Schools	377	414	402	373	351	335	323	258	249	160	204	325	502	4273	
24	Van Dyke Public Schools	305	284	258	214	206	197	218	228	166	240	257	404	356	3333	
25	Warren Consolidated Schools	530	465	414	349	334	335	353	285	279	284	302	253	369	4552	
26	Warren Woods Public Schools	117	135	118	125	117	116	116	103	100	105	150	245	323	1870	
27	Grand Total	5349	5140	4829	4439	4239	3907	3821	3511	3278	3941	4066	5475	6318	58313	

- To see the trend over the years (between Fall 2002 and Fall 2007) drag the **StudentGradeorSetting** out of the **Column** area back to the **Field List**. Drag the **Collection** field to the **Column** area.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	ResidentSDName	Macom	SD													
2																
3	Sum Of StudentCount	Collect														
4	ResidentLEAName	Fall2002	Fall2003	Fall2004	Fall2005	Fall2006	Fall2007	Grand Total								
5	Anchor Bay School District	281	279	296	334	389	409	1988								
6	Armada Area Schools	62	62	64	83	61	86	418								
7	Center Line Public Schools	247	253	457	372	425	429	2183								
8	Chippewa Valley Schools	660	744	823	889	921	1219	5256								
9	Clintondale Community Schools	443	624	739	742	873	980	4401								
10	East Detroit Public Schools	670	885	1008	1215	1503	1756	7037								
11	Fitzgerald Public Schools	177	208	314	378	453	483	2013								
12	Fraser Public Schools	330	333	338	416	382	461	2260								
13	Lake Shore Public Schools (Macomb)	471	503	527	481	498	569	3049								
14	Lakeview Public Schools (Macomb)	243	264	287	284	308	341	1727								
15	L'Anse Creuse Public Schools	507	573	680	716	738	893	4107								
16	Macomb ISD	8						8								
17	Mt. Clemens Community School District	387	628	666	967	1047	1205	4900								
18	New Haven Community Schools	291	324	395	410	471	682	2573								
19	Richmond Community Schools	241	229	340	373	433	434	2050								
20	Romeo Community Schools	152	141	151	159	185	351	1139								
21	Roseville Community Schools	915	974	1081	1153	1317	1444	6884								
22	South Lake Schools	348	346	309	292	355	387	2037								
23	Utica Community Schools	1036	1067	1143	1227	1369	1302	7144								
24	Van Dyke Public Schools	398	457	590	687	791	1027	3950								
25	Warren Consolidated Schools	717	859	1045	1099	1372	1519	6611								
26	Warren Woods Public Schools	219	266	357	386	459	494	2181								
27	Grand Total	8803	10019	11610	12663	14350	16471	73916								

Question 3

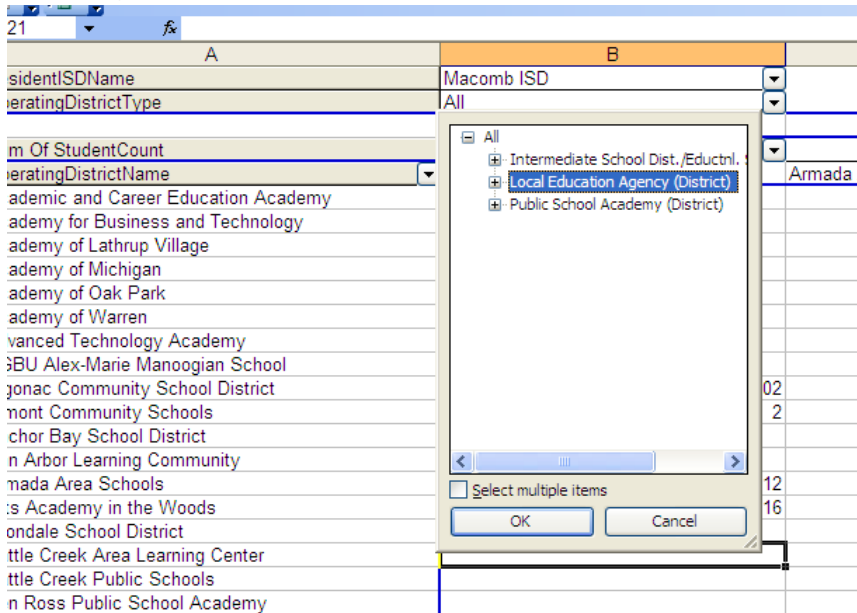
3. How many students live in a specific district and attend school in another district?
- What districts are they attending?
 - What is the trend over the years?

For question 3 the **ResidentISDName** will remain in the **Page** area and the **SumofStudentCount** in the **Data** area.

1. Dragging the **OperatingDistrictName** into the **Row** area and the **ResidentLEAName** into the **Column** area provides these results:

OperatingDistrictName	ResidentLEAName			
Academic and Career Education Academy				
Academy for Business and Technology				
Academy of Lathrup Village				
Academy of Michigan				
Academy of Oak Park				2
Academy of Warren				4
Advanced Technology Academy				
AGBU Alex-Marie Manoogian School				
Algonac Community School District		102		
Almont Community Schools		2	10	
Anchor Bay School District			1	1
Ann Arbor Learning Community				
Armada Area Schools		12		
Arts Academy in the Woods		16	4	37
Avondale School District				
Battle Creek Area Learning Center				
Battle Creek Public Schools				
Ben Ross Public School Academy				6
Benjamin Carson Academy				
Berkley School District				
Birmingham City School District				
Blanche Kelso Bruce Academy				
Bloomfield Hills School District				
Blue Water Learning Academy		2		
Bradford Academy				
Bridge Academy				
Brown City Community Schools				
Business Entrepreneurship, Science, Tech, Academy				

- The list (in the example above) of **OperatingDistrictNames** is rather lengthy. One option is to view only the **LEA OperatingDistrictTypes**. This can be accomplished by dragging **OperatingDistrictType** into the **Page** area and selecting **Local Education Agency** from the list:



- The list of **OperatingDistrictNames** will now be limited to **LEAs**.

	A	B	C	D	E
1	ResidentSDName	Macomb ISD			
2	OperatingDistrictType	Local Education Agency (District)			
3					
4	Sum Of StudentCount	ResidentLEAName			
5	OperatingDistrictName	Anchor Bay School District	Armada Area Schools	Center Line Public Schools	Chippewa Valley Schools
6	Algonac Community School District		102		
7	Almont Community Schools		2	10	1
8	Anchor Bay School District			1	43
9	Armada Area Schools		12		1
10	Avondale School District				1
11	Battle Creek Public Schools				
12	Berkley School District				1
13	Birmingham City School District				2
14	Bloomfield Hills School District				3
15	Brown City Community Schools				
16	Capac Community School District			10	2
17	Carney-Nadeau Public Schools				
18	Carsonville-Port Sanilac School District				
19	Center Line Public Schools				8
20	Chippewa Valley Schools		17	7	8
21	City of Harper Woods Schools				
22	Clarenceville School District				
23	Clarkston Community School District		2		
24	Clawson Public Schools				1
25	Clintondale Community Schools		113	3	102
26	Dansville Schools				
27	Dearborn City School District				
28	Delton-Kellogg School District				
29	Detroit City School District				14
30	Dexter Community School District				32

- To focus on just one district, the **OperatingDistrictType** can be removed from the **Page** area and the **ResidentLEAName** moved to the **Page** area. Then the District of interest can be selected.

	A	B	C
1	ResidentSDName	Macomb ISD	
2	ResidentLEAName	Chippewa Valley Schools	
3			
4	Sum Of StudentCount		
5	OperatingDistrictName	Total	
6	AGBU Alex-Marie Manoogian School		28
7	Almont Community Schools		1
8	Anchor Bay School District		43
9	Armada Area Schools		1
10	Arts Academy in the Woods		34
11	Avondale School District		1
12	Berkley School District		1
13	Birmingham City School District		2
14	Blanche Kelso Bruce Academy		1
15	Bloomfield Hills School District		3
16	Blue Water Learning Academy		2
17	Capac Community School District		2
18	Center Line Public Schools		8
19	Central Academy		4
20	Clawson Public Schools		6
21	Clintondale Community Schools		456
22	Conner Creek Academy		9
23	Conner Creek Academy East		30
24	Covenant House Life Skills Center East		1
25	Detroit City School District		32
26	East China School District		7
27	East Detroit Public Schools		39
28	Edison-Oakland Public School Academy		1
29	Ferndale Public Schools		3
30	Fitzgerald Public Schools		4
31	Fraser Public Schools		288
32	Great Oaks Academy		6

- To view the trends over years, the **Collections** field can be moved to the **Column** area.

	A	B	C	D	E	F	G	H
1	ResidentSDName	Macomb ISD						
2	ResidentLEAName	Chippewa Valley Schools						
3								
4	Sum Of StudentCount	Collected						
5	OperatingDistrictName	Fall2002	Fall2003	Fall2004	Fall2005	Fall2006	Fall2007	Grand Total
6	AGBU Alex-Marie Manoogian School							
7	Almont Community Schools	1						1
8	Anchor Bay School District	5	9	11	4	3	11	43
9	Armada Area Schools	1						1
10	Arts Academy in the Woods	5	7	6	4	6	6	34
11	Avondale School District	1						1
12	Berkley School District			1				1
13	Birmingham City School District				1	1		2
14	Blanche Kelso Bruce Academy						1	1
15	Bloomfield Hills School District			1	1		1	3
16	Blue Water Learning Academy				1		1	2
17	Capac Community School District					1	1	2
18	Center Line Public Schools		1			2	5	8
19	Central Academy	2	1	1				4
20	Clawson Public Schools	2	1		1	1	1	6
21	Clintondale Community Schools	48	58	87	79	84	100	456
22	Conner Creek Academy	5	4					9
23	Conner Creek Academy East	4	1	1	2	12	10	30
24	Covenant House Life Skills Center East				1			1
25	Detroit City School District		7	3	5	5	12	32
26	East China School District			4	3			7
27	East Detroit Public Schools	6	8	5	5	5	10	39
28	Edison-Oakland Public School Academy		1					1
29	Ferndale Public Schools					2	1	3
30	Fitzgerald Public Schools			2		1	1	4
31	Fraser Public Schools	37	37	54	52	53	55	288
32	Great Oaks Academy			1	2		3	6
33	Hazel Park City School District				2			2
34	Huron Academy	34	48	41	37	36	29	225

Question 4

- How many non-resident students attend school in a specific district?
 - Where are they from?
 - What grade are they in?
 - What schools are they attending?
 - What is the trend over the years?

For question 4 leave the **SumofStudentCount** in the **Data** area.

- Drag **OperatingDistrictName** to the **Page** area and choose the **District** of interest.

	A	B	C
1			
2	OperatingDistrictName	Center Line Public Schools	
3			
4	Sum Of StudentCount	Total	
5	Total		952
6			
7			
8			
9			
10			

This data displays the number of students over 5 years (fall of 2002 through 2007) who attended school in the OperatingDistrict listed but were not residents of that district.

- To see the trend over time of students coming from other districts, drag the **Collection** field to the **Column** area.

	A	B	C	D	E	F	G	H
1								
2	OperatingDistrictName	Center Line Public	hools					
3								
4	Sum Of StudentCount	Collection						
5		Fall2002	Fall2003	Fall2004	Fall2005	Fall2006	Fall2007	Grand Total
6	Total	26	59	95	172	203	397	952
7								
8								
9								
10								

- To see the trend over time for students coming from other districts to all districts in a particular ISD, drag the **OperatingDistrictName** to the **Row** area. Drag the **OperatingISDName** to the page area and select the **OperatingISD** of interest.

OperatingISDName	Collection	Fall2002	Fall2003	Fall2004	Fall2005	Fall2006	Fall2007	Grand Total
Academy of Warren			430	657	657			1744
Anchor Bay School District		207	193	282	255	299	321	1557
Armada Area Schools		222	248	242	279	283	296	1570
Arts Academy in the Woods		163	262	297	348	377	349	1796
Ben Ross Public School Academy				477	809	952	683	2921
Center Line Public Schools		26	59	95	172	203	397	952
Chippewa Valley Schools		92	133	154	168	201	353	1101
Clintondale Community Schools		1373	1460	1827	1658	2110	2125	10553
Conner Creek Academy		673	578	881	642	872	766	4412
Conner Creek Academy East		634	686	775	826	873	849	4643
East Detroit Public Schools		208	148	245	163	136	227	1127
Eaton Academy		260	269	705	256	476	482	2448
Fitzgerald Public Schools		77	105	238	291	327	468	1506
Fraser Public Schools		382	512	637	675	828	859	3893
Great Oaks Academy				164	296	505	623	1588
Huron Academy		446	487	479	458	485	408	2763
Lake Shore Public Schools (Macomb)		577	636	561	582	698	728	3782
Lakeview Public Schools (Macomb)		697	841	892	897	928	1044	5299
L'Anse Creuse Public Schools		516	548	390	591	701	1004	3750
Macomb Academy		76	95	101	109	114	120	615
Macomb ISD		1652	1651	1759	1737	1797	1857	10453
Merritt Academy		174	201	395	426	513	513	2222
Mt. Clemens Community School District		429	472	472	465	412	416	2666
Mt. Clemens Montessori Academy			154	217	245	261	275	1152
New Haven Community Schools		3	4	12	17	21	39	96
Prevail Academy				175	438	591	598	1802
Richmond Community Schools		21	11	12	15	28	60	147
Romeo Community Schools		39	39	50	75	50	40	293
Roseville Community Schools		342	718	803	806	673	622	3964
South Lake Schools		206	251	282	338	349	653	2079
Utica Community Schools		26	110	182	325	480	1310	2433
Van Dyke Public Schools		227	232	221	179	187	156	1202

- To see what grades students are in who come from other districts, replace the **Collection** field with the **StudentGradeorSetting** field (in the **Column** area).

OperatingISDName	Student	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	20	30	Grand Total
Academy of Warren																			1744
Anchor Bay School District		76	80	90	98	97	100	100	99	95	123	155	125	132	163	1	23		1557
Armada Area Schools		125	93	85	77	79	74	76	73	68	238	206	198	176					1570
Arts Academy in the Woods											600	571	390	235					1796
Ben Ross Public School Academy		363	360	320	293	269	259	329	412	316									2921
Center Line Public Schools		6	155	99	59	41	32	25	22	15	15	25	38	172	203			45	952
Chippewa Valley Schools		143	147	124	119	97	92	80	54	51	43	39	32	62	16	2			1101
Clintondale Community Schools		92	87	95	100	111	117	127	161	188	242	417	718	776	5078	23	2196	25	10553
Conner Creek Academy		371	363	388	382	400	401	422	424	400	381	265	145	70					4412
Conner Creek Academy East		437	425	422	425	423	415	420	403	381	347	254	185	106					4643
East Detroit Public Schools		22	10	14	5	7	6	9	11	5	145	156	147	165	174	11	240		1127
Eaton Academy		190	181	125	128	115	129	24			487	421	353	295					2448
Fitzgerald Public Schools		4	11	5	11	8	8	17	16	21	26	253	307	420	368	12		19	1506
Fraser Public Schools		408	392	382	342	360	310	307	280	228	232	194	142	131			5	180	3893
Great Oaks Academy		226	212	195	235	209	187	154	113	57									1588
Huron Academy		418	409	432	366	319	296	259	146	102	16								2763
Lake Shore Public Schools (Macomb)		174	152	150	149	143	136	167	171	166	269	290	465	528	395	112	291	24	3782
Lakeview Public Schools (Macomb)		236	444	463	452	460	466	535	513	527	259	263	360	313		8			5299
L'Anse Creuse Public Schools		181	140	117	120	110	100	99	101	72	109	152	545	674	699	1	481	49	3750
Macomb Academy													495	120					615
Macomb ISD		88	96	136	166	185	214	241	290	297	339	330	276	199	6328		1268		10453
Merritt Academy		274	308	301	278	245	239	192	180	129	55	21							2222
Mt. Clemens Community School District		483	309	253	224	213	185	116	89	107	218	168	147	141		13			2666
Mt. Clemens Montessori Academy		345	264	207	156	114	66												1152
New Haven Community Schools		10	4	4	1		3	3	2	4	10	9	18	24			2		96
Prevail Academy		259	289	259	228	221	206	176	112	52									1802
Richmond Community Schools		10	6	4			8	4	9	5	7	20	27	18	26		3		147
Romeo Community Schools		25	13	12	12	8	8	4	5	6	7	17	19	63	82	6	6		293
Roseville Community Schools		224	234	246	249	265	254	271	313	334	337	374	394	437	31	1			3964
South Lake Schools		5	132	164	152	160	162	159	124	119	116	151	124	292	218				2079
Utica Community Schools		252	256	229	214	224	168	187	212	232	189	117	65	53		15		20	2433

- To find out what residential districts students are from, drag the **OperatingDistrictName** to the page area and the **ResidentLEAName** to the Row area.

1		
2	OperatingDistrictName	Utica Community Schools
3		
4	Sum Of StudentCount	
5	ResidentLEAName	Total
6	Algonac Community School District	1
7	Almont Community Schools	10
8	Anchor Bay School District	26
9	Armada Area Schools	14
10	Avondale School District	4
11	Berkley School District	1
12	Birmingham City School District	1
13	Bloomfield Hills School District	1
14	Center Line Public Schools	21
15	Chippewa Valley Schools	413
16	Clintondale Community Schools	183
17	Detroit City School District	14
18	East Detroit Public Schools	79
19	Fitzgerald Public Schools	18
20	Fraser Public Schools	84
21	Grosse Pointe Public Schools	4
22	Hazel Park City School District	1

- To find out what school the non-resident students are attending within the district, replace the **ResidentLEAName** with **OperatingBuildingName** to see the results.

1		
2	OperatingDistrictName	Chippewa Valley Schools
3		
4	Sum Of StudentCount	
5	OperatingBuildingName	Total
6	Algonquin Middle School	84
7	Cherokee Elementary School	73
8	Cheyenne Elementary School	50
9	Chippewa Valley Adult and Mohegan Alt. Educ.	16
10	Chippewa Valley High School	90
11	Clinton Valley Elementary School	197
12	Dakota High School	86
13	Erie Elementary School	92
14	Fox Elementary School	19
15	Huron Elementary School	53
16	Iroquois Middle School	36
17	Miami Elementary School	58
18	Mohawk Elementary School	19
19	Ojibwa Elementary School	23
20	Ottawa Elementary School	87
21	Seneca Middle School	26
22	Sequoyah Elementary School	8
23	Shawnee Elementary School	45
24	Wyandot Middle School	39
25	Grand Total	1101
26		
27		

Chapter 4 – Creating Charts

Creating Charts

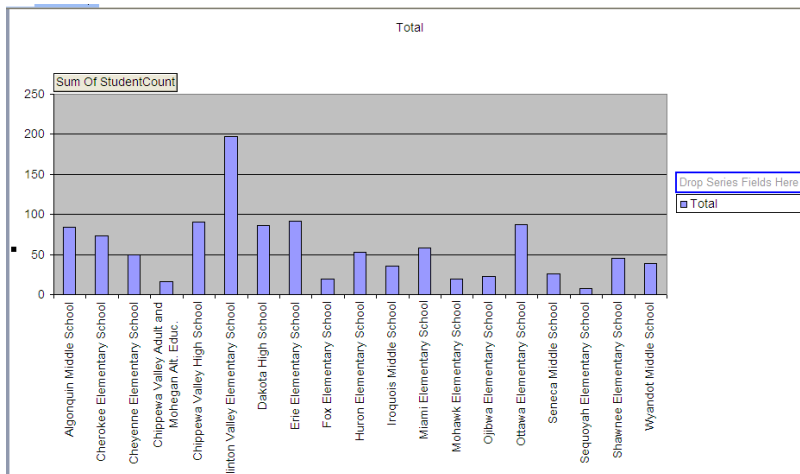
It is easy to create charts from the Pivot Table results. Simply click the **Chart** button on the **Pivot Table Toolbar** when the results are displayed that you would like to chart.



If this is the Pivot Table being displayed:

1		
2	OperatingDistrictName	Chippewa Valley Schools
3		
4	Sum Of StudentCount	
5	OperatingBuildingName	Total
6	Algonquin Middle School	84
7	Cherokee Elementary School	73
8	Cheyenne Elementary School	50
9	Chippewa Valley Adult and Mohegan Alt. Educ.	16
10	Chippewa Valley High School	90
11	Clinton Valley Elementary School	197
12	Dakota High School	86
13	Erie Elementary School	92
14	Fox Elementary School	19
15	Huron Elementary School	53
16	Iroquois Middle School	36
17	Miami Elementary School	58
18	Mohawk Elementary School	19
19	Ojibwa Elementary School	23
20	Ottawa Elementary School	87
21	Seneca Middle School	26
22	Sequoyah Elementary School	8
23	Shawnee Elementary School	45
24	Wyandot Middle School	39
25	Grand Total	1101
26		
27		

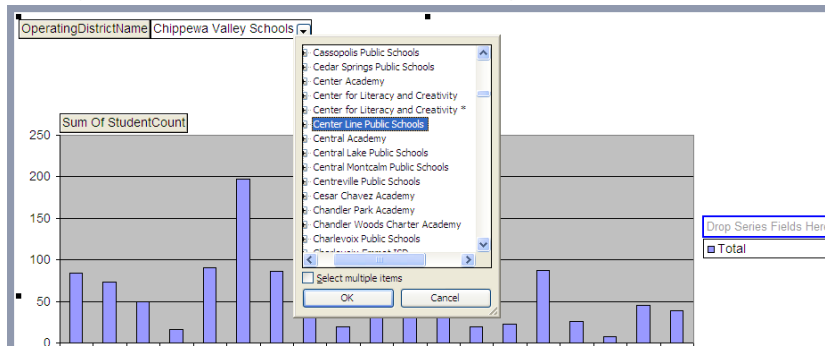
When the Chart Button is clicked this will be the **Chart** created:



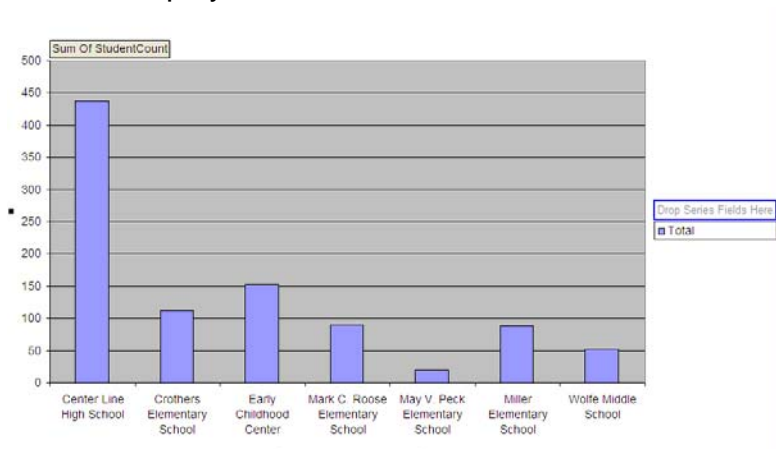
Modifying Charts

The information contained in the chart can be modified in a number of ways.

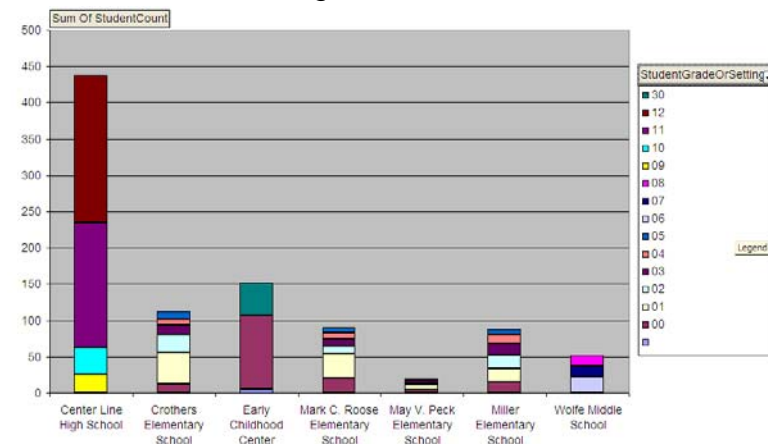
1. The drop down list (from the **Page** area of the Pivot Table) can be used to change the selection (The OperatingDistrictName in this instance).



2. This will display information related to the chosen selection.




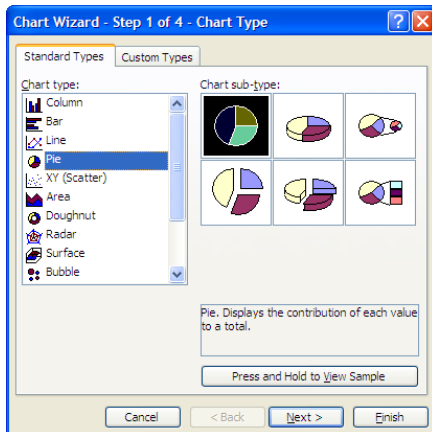
3. Fields can also be dragged onto the Legend (at the right) to add more information to the chart. This is an example of dragging the StudentGradeOrSetting to the chart.



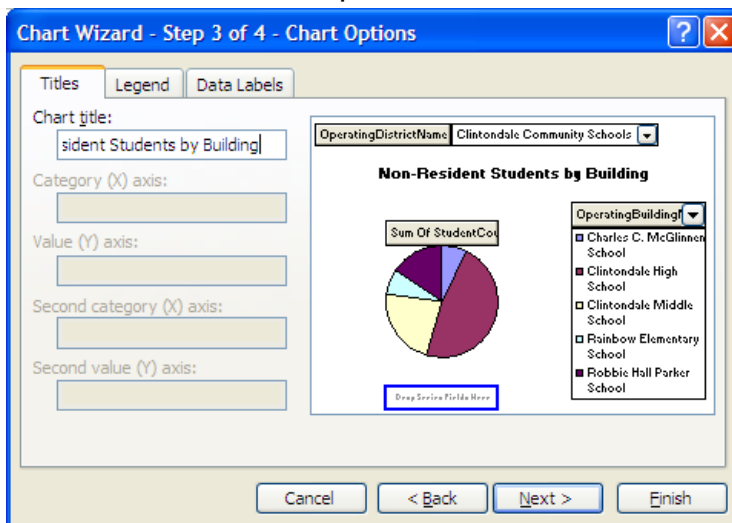
Embedding Chart on Worksheet

It is possible to embed a chart on the same worksheet as the pivot table by following the steps below:

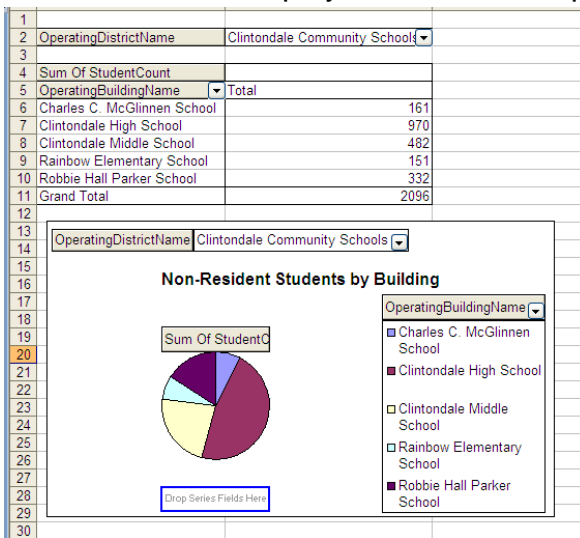
1. Click outside the pivot table.
2. Click the **Excel Chart Wizard** on the standard toolbar. 
3. Choose the pie chart in the first step of the wizard:



4. Add a Title in the 3rd step of the wizard. Click **Finish**.



- The chart will be displayed on the same page as the pivot table.

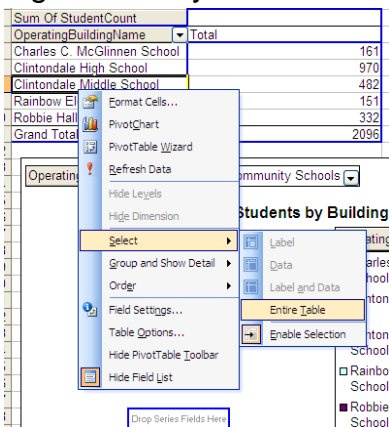


Creating Standard Excel Charts from Pivot Tables

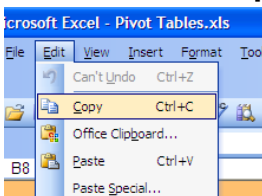
It is possible to create a traditional Excel chart from pivot table information, one that does not display the pivot table features as part of the chart. The way to accomplish this is to paste the values from the pivot table to a new worksheet.

Copy & Paste Pivot Table Data

- Right-click anywhere in the pivot table. Choose **Select**→**Entire Table**.

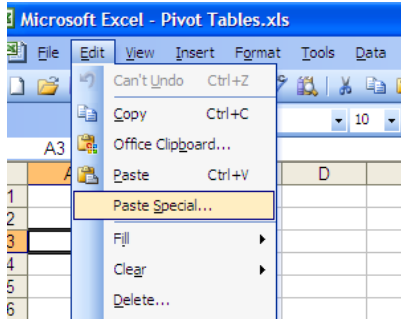


- Choose **Edit**→**Copy** from the menu.



3. Select a new worksheet and click in the cell where you want the top left corner of the table.

4. Choose **Edit→Paste Special...**




5. Choose **Values** and click **OK**.



6. The labels and data from your pivot table will be displayed on the new worksheet. You may need to widen columns and add some formatting.

1				
2				
3	OperatingDistrictName	Clintondale Community Schools		
4				
5	Sum Of StudentCount			
6	OperatingBuildingName	Total		
7	Charles C. McGlinnen School	161		
8	Clintondale High School	970		
9	Clintondale Middle School	482		
10	Rainbow Elementary School	151		
11	Robbie Hall Parker School	332		
12	Grand Total	2096		
13				
14				
15				

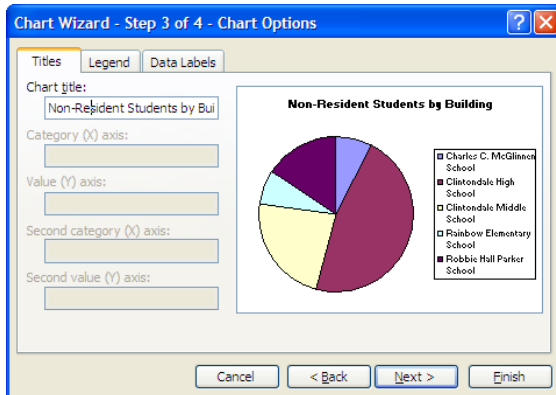
Once the new worksheet is created with data from the pivot table, it will be possible to create an Excel chart using the traditional charting tools.

7. Select the information from the new worksheet and click the **Excel Chart Wizard** button. 

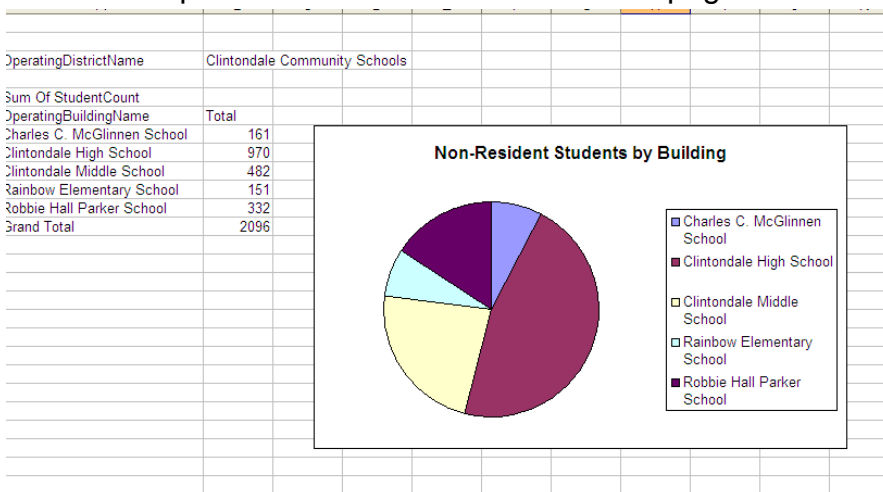
Make sure you don't include the totals with your selection.

1		
2		
3	OperatingDistrictName	Clintondale Community Schools
4		
5	Sum Of StudentCount	
6	OperatingBuildingName	Total
7	Charles C. McGlennen School	161
8	Clintondale High School	970
9	Clintondale Middle School	482
10	Rainbow Elementary School	151
11	Robbie Hall Parker School	332
12	Grand Total	2096
13		
14		

8. Choose the pie chart in the first screen of the wizard then click the **Next** button twice.
9. Add a chart title in the third step of the wizard. Click **Finish**.




10. A traditional pie chart will be embedded on the page with the worksheet.



Chapter 5 – Customizing Pivot Tables

Sorting Pivot Table Data

By default, items in the pivot table are sorted in ascending order. To change the order, click in the column of items and click the descending button on the toolbar. 

Another option is to drag the items in the list to create a new sort order. The associated number will move with the item.

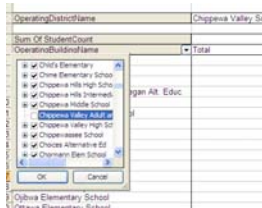
Show & Hide Options

There may be times when it is important to take an item out of the list. For example, in the list below, students coming from other districts to attend adult education classes are displayed and included in the total:

1		
2	OperatingDistrictName	Chippewa Valley Schools
3		
4	Sum Of StudentCount	
5	OperatingBuildingName	Total
6	Algonquin Middle School	84
7	Cherokee Elementary School	73
8	Cheyenne Elementary School	50
9	Chippewa Valley High School	90
10	Chippewa Valley Adult and Mohegan Alt. Educ.	16
11	Clinton Valley Elementary School	197
12	Dakota High School	86
13	Erie Elementary School	92
14	Fox Elementary School	19
15	Huron Elementary School	53
16	Iroquois Middle School	36
17	Miami Elementary School	58
18	Mohawk Elementary School	19
19	Ojibwa Elementary School	23
20	Ottawa Elementary School	87
21	Seneca Middle School	26
22	Sequoyah Elementary School	8
23	Shawnee Elementary School	45
24	Wyandot Middle School	39
25	Grand Total	1085

To limit the listing to just the elementary, middle and high schools:

1. Click the list arrow to the right of **OperatingBuildingName**.
2. Locate the building to remove from the list and click to remove the checkmark. Click **OK**.



3. The item will be removed and the total will adjust to reflect the new list.

1		
2	OperatingDistrictName	Chippewa Valley Schools
3		
4	Sum Of StudentCount	
5	OperatingBuildingName	Total
6	Algonquin Middle School	84
7	Cherokee Elementary School	73
8	Cheyenne Elementary School	50
9	Chippewa Valley High School	90
10	Clinton Valley Elementary School	197
11	Dakota High School	86
12	Erie Elementary School	92
13	Fox Elementary School	19
14	Huron Elementary School	53
15	Iroquois Middle School	36
16	Miami Elementary School	58
17	Mohawk Elementary School	19
18	Ojibwa Elementary School	23
19	Ottawa Elementary School	87
20	Seneca Middle School	26
21	Sequoyah Elementary School	8
22	Shawnee Elementary School	45
23	Wyandot Middle School	39
24	Grand Total	1085
25		

Customizing Field Names

The field names in the pivot table inherit the names used in the source document. However, it is possible to change them. For example, to change **OperatingBuildingName** in the table below to **School Building**:

OperatingDistrictName	Chippewa Valley Schools
Sum Of StudentCount	Total
Augerquin Middle School	84
Cherokee Elementary School	73
Cheyenne Elementary School	50
Chippewa Valley High School	90
Clinton Valley Elementary School	197
Dakota High School	86
Erie Elementary School	92
Fox Elementary School	19
Huron Elementary School	53
Iroquois Middle School	36
Miami Elementary School	58
Mohawk Elementary School	19
Ojibwa Elementary School	23
Ottawa Elementary School	87
Seneca Middle School	26
Sequoyah Elementary School	8
Shawnee Elementary School	45
Wyandot Middle School	39
Grand Total	1085

1. Double-click the heading (**OperatingBuildingName**) in the pivot table.
2. Type in the preferred name in the **PivotTable Field** box and click **OK**.

PivotTable Field

Name: School Building

Subtotals

Automatic

Custom

None

Sum
Count
Average
Max
Min
Product

Show items with no data

OK
Cancel
Advanced...
Layout...

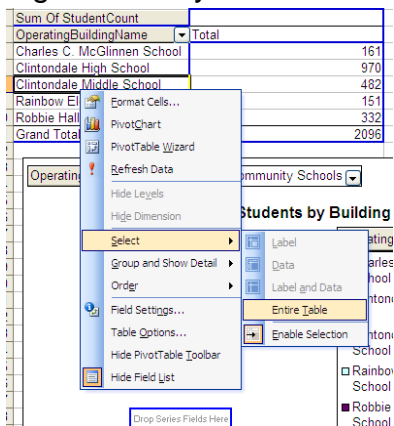
3. The new name will be displayed in place of the previous one.

OperatingDistrictName	Chippewa Valley Schools
School Building	Total
Cherokee Elementary School	73
Cheyenne Elementary School	50
Chippewa Valley High School	90
Clinton Valley Elementary School	197
Dakota High School	86
Erie Elementary School	92
Fox Elementary School	19
Huron Elementary School	53
Iroquois Middle School	36
Miami Elementary School	58
Mohawk Elementary School	19
Ojibwa Elementary School	23
Ottawa Elementary School	87
Seneca Middle School	26
Sequoyah Elementary School	8
Shawnee Elementary School	45
Wyandot Middle School	39
Grand Total	1085

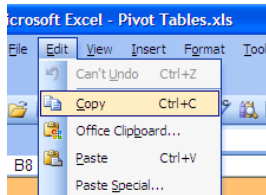
Copying & Pasting Pivot Tables

The Pivot Table can be copied and pasted to a new location. This will be especially helpful if you want to create and save several different variations of the pivot table. To copy a pivot table and maintain the pivot table look and functionality follow the steps below:

1. Right-click anywhere in the pivot table. Choose **Select→Entire Table**.



2. Choose **Edit→Copy** from the menu.



3. Select a new worksheet and click in the cell where you want the top left corner of the table.
4. Choose **Edit→Paste** to add the pivot table to the new worksheet.

*To paste the information from the pivot table without the pivot table functionality, follow steps 1-3 above. In step 4 choose **Edit→Paste Special...** and select **Values** from the dialog box.*

Chapter 6 – Formatting Pivot Tables

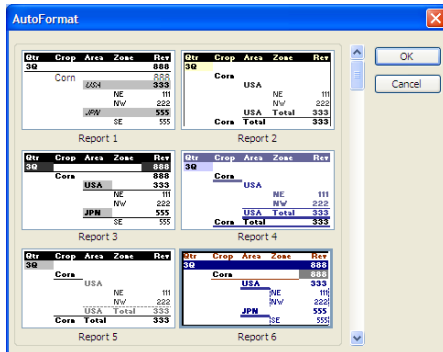
Autoformatting a Pivot Table

To enhance the look of the pivot table, there is an **AutoFormat** tool that is quick and easy to use.

1. Click inside the pivot table.
2. Choose the **Format Report** button on the **PivotTable** toolbar.



3. Select an **AutoFormat** option and click **OK**.

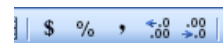


4. If the results are not great, click the **Undo** button and try again.
--or--
Apply formatting in the same way as you would with a traditional spreadsheet.

Applying Number Format

To change the formatting of the numbers in the worksheet, select the numbers then apply number formatting in the same manner as standard worksheet.

1. Select the numbers.
2. Click a number format button on the format toolbar



- or--
Choose **Format**→**Cells** and select a number format option using the **Number** tab.