

## GUIDE TO USING PIVOT TABLES and PIVOT CHARTS in EXCEL 2016 (BUSINESS AND ECON APPLICATIONS)

Please refer to the “Business and Econ Data Sheet” Excel file. You will see a “SBA Disaster Loan” sheet, as well as a “Sales” Data sheet for a small fictitious office supply company. Use this data to practice creating Pivot Tables and Pivot Charts.

**Session Goal:** To orient users on how to use: 1) Pivot Tables to analyze worksheet data, and 2) Pivot Chart to create visualization of complex data sets.

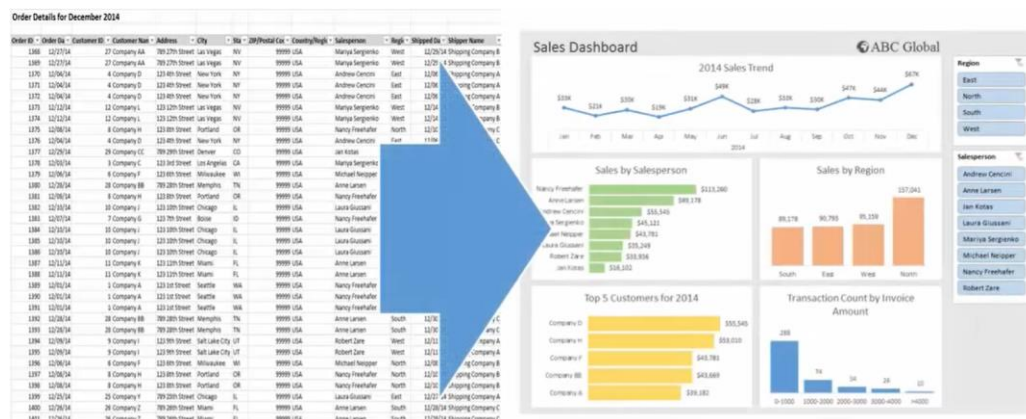
**About Pivot Table:** Pivot tables are used to summarize, sort, reorganize, group, count, total or average data stored in a database. Users can transform columns into rows and rows into columns (hence the term “pivot table”). Users can query large amounts of data in user-friendly ways, subtotal and aggregate numerical data, and summarize data by categories and subcategories. (Users can also filter, sort, group and conditionally format useful and interesting subsets of data.) So, with Pivot Table, you are able to “slice and dice data” to present it in a meaningful way.

Damaged Property, City, Name	Claim Date	Damaged Property, Zip Code	Damaged Property, County, Parish, Name	Damaged Property, State, Code	Total Approved Loan Amount	Approved Amount EIDL
BATESVILLE	1/23/2017	47906	REPLEY	IN	158,000.00	158,000.00
CINCINNATI	1/28/2017	45948	HAMBLETON	OH	158,000.00	158,000.00
FLORENCE	2/6/2017	40142	BOONE	KY	158,000.00	158,000.00
KEANSSET	2/17/2017	42940	CLAY	MO	279,000.00	279,000.00
LAWRENCEBURG	2/28/2017	40523	DEARBORN	IN	158,000.00	158,000.00
SANT JORDIS	2/27/2017	42959	SANT JORDIS	MS	22,000.00	22,000.00
PORT ALLEN	3/4/2017	70767	WEST BATON ROUGE	LA	38,400.00	38,400.00
LUMBERTON	3/13/2017	28160	REHOBOTH	NC	22,000.00	22,000.00
VIRGINIA BEACH	3/28/2017	23453	VIRGINIA BEACH CITY	VA	10,000.00	10,000.00
BUNNELL	3/27/2017	42110	FLAGLER	FL	25,000.00	25,000.00
DELTONA	4/2/2017	32124	VERMILION	IL	20,000.00	20,000.00
FLAGLER BEACH	4/10/2017	32136	FLAGLER	FL	24,600.00	24,600.00
ORMOND BEACH	4/17/2017	32176	VERMILION	IL	20,000.00	20,000.00
BLUFFTON	4/24/2017	29510	BEAUFORT	SC	144,200.00	144,200.00
HELTON BRAD ISLAND	5/1/2017	20526	BEAUFORT	SC	20,000.00	20,000.00
SILAS	5/8/2017	36019	CHOCTAW	AL	51,500.00	51,500.00
CHESAWE	5/15/2017	36011	MORRIS	AL	60,000.00	60,000.00
CLIF	5/22/2017	36017	BARBOUR	AL	187,100.00	187,100.00
FEYLAULA	5/28/2017	36027	BARBOUR	AL	187,100.00	187,100.00
FEYLAULA	6/5/2017	36072	BARBOUR	AL	374,200.00	374,200.00
GEORGETOWN	6/12/2017	36054	QUINTMAN	GA	15,400.00	15,400.00
MCBENSVILLE	6/19/2017	37110	WARREN	TN	15,400.00	15,400.00
POLOCK	6/26/2017	29148	CAMPBELL	SD	150,000.00	150,000.00
HOOD RIVER	7/3/2017	97031	HOOD RIVER	OR	89,100.00	89,100.00

Months	AL	AR	CA	CO	FL	GA
Jan	\$0	\$0	\$0	\$0	\$7,138,300	\$745,900
Feb	\$45,700	\$0	\$0	\$0	\$1,188,800	\$566,100
Mar	\$0	\$0	\$0	\$0	\$2,766,600	\$123,500
Apr	\$11,500	\$64,500	\$684,100	\$654,700	\$5,331,100	\$1,143,500
May	\$689,300	\$0	\$9,525,300	\$0	\$27,091,600	\$25,456,900
Jun	\$974,200	\$0	\$2,473,300	\$183,000	\$106,198,500	\$4,115,200
Jul	\$299,700	\$55,100	\$504,400	\$0	\$116,909,100	\$2,553,400
Aug	\$0	\$9,600	\$582,100	\$83,600	\$162,883,800	\$1,948,900
Sep	\$62,700	\$9,300,700	\$1,521,700	\$13,000	\$141,378,200	\$7,622,100
Oct	\$0	\$1,925,800	\$9,109,700	\$0	\$90,550,000	\$759,400
Nov	\$4,100	\$526,100	\$800,900	\$217,900	\$7,663,900	\$686,300
Dec	\$0	\$0	\$0	\$0	\$4,100,300	\$2,236,800
Totals	\$1,487,200	\$5,881,800	\$13,201,500	\$1,050,200	\$693,200,200	\$47,958,000

**About Pivot Chart:** Pivot charts complement PivotTables by adding visualizations to the summary data created in a PivotTable. Bar graphs, histograms, line charts allow you to easily see comparisons, patterns, and trends. Pivot Charts can be used to produce “dashboard” summaries for reports.



(Note: there are many ways to use Pivot Table and Pivot Chart in Excel to analyze data. Users are encouraged to practice in “playing with” Excel to find alternate, perhaps more efficient ways to get to the desired output.

### SETTING UP YOUR DATA IN EXCEL

1. Provide named headers for your columns (and indicate units of measure).
2. Insure no duplicate rows.
3. Insure no blank cells.

## TERMINOLOGY TO KNOW

**Data**

Damaged Property, County, Parish Name	Damaged Property State Code	Total Approved Loan Amount	Approved Amount EIDL
RIPLEY IN	IN	158,000.00	158,000.00
HAMILTON OH	OH	158,000.00	158,000.00
BOONE KY	KY	158,000.00	158,000.00
CLAY MO	MO	279,600.00	279,600.00
DEARBORN IN	IN	158,000.00	158,000.00
SAIN PATRONS LA	LA	38,400.00	38,400.00
WEST BATON ROUGE LA	LA	25,000.00	25,000.00
ROBESON NC	NC	10,000.00	10,000.00
VIRGINIA BEACH CITY VA	VA	10,000.00	10,000.00
FLAGLER FL	FL	24,600.00	24,600.00
VOLUSIA FL	FL	20,000.00	20,000.00
FLAGLER FL	FL	24,600.00	24,600.00
VOLUSIA FL	FL	10,000.00	10,000.00
BEAUFORT SC	SC	144,200.00	144,200.00
BEAUFORT SC	SC	25,000.00	25,000.00
CHOCTAW AL	AL	51,500.00	51,500.00
MOBILE AL	AL	60,000.00	60,000.00
BARBOUR AL	AL	187,100.00	187,100.00
BARBOUR AL	AL	374,200.00	374,200.00
BARBOUR AL	AL	374,200.00	374,200.00
QUITMAN GA	GA	187,100.00	187,100.00
WARREN TN	TN	15,400.00	15,400.00
CAMPBELL SD	SD	150,000.00	150,000.00
HOOD RIVER OR	OR	89,100.00	89,100.00
HOOD RIVER OR	OR	22,200.00	22,200.00

**Simple PivotTable Summarizes Data**

Property State	Sum of Total Approved Loan Amount
AL	1047000
GA	111600
FL	187100
IN	316000
KY	158000
LA	38400
MO	279600
NC	25000
OH	158000
OR	111300
SC	169200
SD	150000
TN	15400
VA	10000
Grand Total	2776600

**More Sophisticated PivotTable**

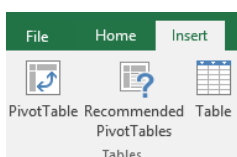
State and County	Sum of Total Approved Loan Amount
AL	1047000
BARBOUR	935500
CHOCTAW	51500
MOBILE	60000
FL	111600
FLAGLER	49600
SAIN JOHNNS	32000
VOLUSIA	30000
GA	187100
QUITMAN	316000
IN	158000
DEARBORN	158000
RIPLEY	158000
KY	158000
BOONE	158000
LA	38400
WEST BATON ROUGE	38400
MO	279600
CLAY	279600
NC	25000
ROBESON	25000
OH	158000
HAMILTON	158000
OR	111300
HOOD RIVER	111300
SC	169200
BEAUFORT	169200
SD	150000
CAMPBELL	150000
TN	15400
WARREN	15400
VA	10000
VIRGINIA BEACH CITY	10000
Grand Total	2776600

## CREATING A PIVOT TABLE

1. Select/highlight the cells from your data sheet (including the field names) you want to create a PivotTable from. To highlight all of the cells in a data set quickly you can click on upper left cell hold down CTRL and SHIFT, and press → and then ↓.)

SHA Disaster Numbr	Damaged Property City Name	Claim Date	Damaged Property Zip Code	Damaged Property County/Parish Name	Damaged Property State Code	Total Approved Loan Amount	Approved Amount EIDL
ZZ-00011	BATESVILLE	1/23/2017	57066	RIPLEY	IN	158,000.00	158,000.00
ZZ-00012	CINCINNATI	1/30/2017	55208	HAMILTON	OH	158,000.00	158,000.00
ZZ-00012	FLORENCE	2/6/2017	41042	BOONE	KY	158,000.00	158,000.00
ZZ-00012	KEARNEY	2/13/2017	64060	CLAY	MO	279,600.00	279,600.00
ZZ-00012	LAWRENCEBURG	2/20/2017	57025	DEARBORN	IN	158,000.00	158,000.00
ZZ-00012	SAIN JOHNNS	3/27/2017	65259	SAIN JOHNNS	FL	32,000.00	32,000.00
LA-00068	PORT ALLEN	3/6/2017	70767	WEST BATON ROUGE	LA	38,400.00	38,400.00
NC-00085	LUMBERTON	3/13/2017	27560	ROBESON	NC	25,000.00	25,000.00
NC-00085	VIRGINIA BEACH	3/20/2017	23453	VIRGINIA BEACH CITY	VA	10,000.00	10,000.00
FL-00124	BUNNELL	3/27/2017	32110	FLAGLER	FL	25,000.00	25,000.00
FL-00124	DELTONA	4/3/2017	32725	VOLUSIA	FL	20,000.00	20,000.00
FL-00124	FLAGLER BEACH	4/10/2017	32136	FLAGLER	FL	24,600.00	24,600.00
FL-00124	ORMOND BEACH	4/17/2017	32176	VOLUSIA	FL	10,000.00	10,000.00
SC-00044	BLUFFTON	4/24/2017	29910	BEAUFORT	SC	144,200.00	144,200.00
SC-00044	HILTON HEAD ISLAND	5/1/2017	29926	BEAUFORT	SC	25,000.00	25,000.00
AL-00076	SILAS	5/8/2017	36919	CHOCTAW	AL	51,500.00	51,500.00
AL-00079	CHICKASAW	5/15/2017	36611	MOBILE	AL	60,000.00	60,000.00
AL-00080	CLIO	5/22/2017	36017	BARBOUR	AL	187,100.00	187,100.00
AL-00080	EUFULA	5/29/2017	36027	BARBOUR	AL	374,200.00	374,200.00
AL-00080	EUFULA	6/5/2017	36072	BARBOUR	AL	374,200.00	374,200.00
AL-00080	GEORGETOWN	6/12/2017	36854	QUITMAN	GA	187,100.00	187,100.00
TN-00102	MCMENNVILLE	6/19/2017	37110	WARREN	TN	15,400.00	15,400.00
ND-00039	POLLACK	6/26/2017	57648	CAMPBELL	SD	150,000.00	150,000.00
OR-00085	HOOD RIVER	7/3/2017	97031	HOOD RIVER	OR	89,100.00	89,100.00
OR-00085	MOUNT HOOD PARKDALE	7/10/2017	97041	HOOD RIVER	OR	22,200.00	22,200.00
OR-00085	STEVENSON	7/17/2017	96648	SKAMANIA	WA	9,100.00	9,100.00
CA-00270	GROVELAND	7/24/2017	95321	TUOLUMNE	CA	21,900.00	21,900.00
CA-00271	GROVELAND	7/31/2017	95321	TUOLUMNE	CA	18,000.00	18,000.00
ID-00064	WEINER	8/7/2017	83672	WASHINGTON	ID	4,700.00	4,700.00
ID-00066	TREMONTON	8/14/2017	83337	BOX ELDER	UT	200,000.00	200,000.00
ND-00053	HETTINGER	8/21/2017	58639	ADAMS	ND	200,000.00	200,000.00

2. Select **Insert > PivotTable**.



- Under **Choose the data that you want to analyze**, select **Select a table or range**.

The screenshot shows the 'Create PivotTable' dialog box with the following settings:

- Choose the data that you want to analyze:**
  - Select a table or range
  - Table/Range: Sheet1!\$A\$5:\$H\$4080
  - Use an external data source
  - Choose Connection... (button)
  - Connection name:
  - Use this workbook's Data Model
- Choose where you want the PivotTable report to be placed:**
  - New Worksheet
  - Existing Worksheet
  - Location: (empty field)
- Choose whether you want to analyze multiple tables:**
  - Add this data to the Data Model

Buttons: OK, Cancel

- In **Table/Range**, verify the cell range.
- Under **Choose where you want the PivotTable report to be placed**, select **New worksheet** to place the PivotTable in a new worksheet or **Existing worksheet** and then select the location you want the PivotTable to appear.
- Select **OK**.

The screenshot shows the 'PivotTable Fields' task pane with the following elements:

- Choose fields to add to report:** (The word 'fields' is circled in red)
  - Search: (empty search bar)
  - Fields list (all unchecked):
    - SBA Disaster Number
    - Damaged Property City Name
    - Claim Date
    - Damaged Property Zip Code
    - Damaged Property County/Parish Name
    - Damaged Property State Code
    - Total Approved Loan Amount
    - Approved Amount EIDL
- Drag fields between areas below:** (The word 'areas' is circled in red)
  - Filters: (empty area)
  - Columns: (empty area)
  - Rows: (empty area)
  - Values: (empty area)
- Defer Layout Update
- Update (button)

- To build out your PivotTable, select name of the field you want from the **PivotTables Fields** pane by checking the box. Some fields are added to their default areas. Generally, non-numeric fields are added to **Rows**, numeric fields are added to **Values**. You can direct how you set up your table by dragging the name of the field to **Rows**, **Columns**, or  $\Sigma$  **Values**.
  - To move a field from one area to another, drag the field to the target area.

- b. If you drag a quantitative variable into  $\Sigma$  Values area you will default to SUM; if you drag a qualitative variable into  $\Sigma$  Values area you will default to COUNT (i.e., frequency data). Note that you can change how this data is handled by going to the field area for “ $\Sigma$  VALUES” and click on the drop down menu to open up window to select the last entry -- “Value Field Settings” to then select the value you want (e.g., count, average, min, max, etc.).
- c. To set up multiple subcategories in your table rows by dragging the name of the fields into **Rows**, and then you can order the subcategories in one of two ways: 1) you can click on the drop down menu to the right of the field you have placed in the Row area and move it up or down, or 2) you can click and drag that field up or down relative to other fields you have in the Row area.

Below is shown the general set up.

Sum of Total	Column Labels	Gill	Howard	Jardine	Jones	Kivell	Morzan	Smith	Sorvino	Thompson	Grand Total	
Qtr1		413.54		249.5	19.96		1305	139.93			2127.93	
Qtr2		131.34	787.57	479.04		625					2022.95	
Qtr3			9.03		309.38	1005.9	686.95	976.24			2987.5	
Qtr4		157.78		1933.95					1139.43	3231.16		
Grand Total		289.12	1210.14	479.04	2183.45	329.34	1630.9	686.95	1305	1116.17	1139.43	10369.54

Now let's try some Examples using the “Business and Econ Data Set” (start with the “SBA Disaster Loan sheet”)

- A. To view total approved loan amount, move it to the  $\Sigma$  values area.

Sum of Total Approved Loan Amount
2863802700

- B. To view the total approved loan amount by month of claim, move claim date to the Rows area. Here, and for more sophisticated analyses where you might want to display data in bar graph or histogram, think of your y-axis (dependent-variable) data going into Values area and x-axis (independent variable) data going to Rows area. (Notice that when you click on “claim data” the default is to show in Row area with “months” and “claim date” automatically appearing. The table you created is now interactive, in that if you click on the + to the left of any month to see data for every day of the month for which there is data. If you only want information for the months, you can now right click on that claim date and delete that from the Row area, which now leaves your claims data summarized by month.

**PivotTable Fields**

Choose fields to add to report:

Search

SBA Disaster Number

Damaged Property City Name

**Claim Date**

Damaged Property Zip Code

Damaged Property County/Parish Name

Damaged Property State Code

**Total Approved Loan Amount**

Approved Amount EIDL

Drag fields between areas below:

Filters

Columns

Rows

Months

Claim Date

Σ Values

Sum of Total Approve...

Row Labels	Sum of Total Approved Loan Amount
Jan	68536200
Feb	30921900
Mar	31376500
Apr	89502600
May	287111100
Jun	507439400
Jul	562859300
Aug	436661500
Sep	347180600
Oct	444993600
Nov	44646500
Dec	12573500
<b>Grand Total</b>	<b>2863802700</b>

Row Labels	Sum of Total Approved Loan Amount
Jan	68536200
Feb	
1-Feb	25000
2-Feb	63100
3-Feb	92800
4-Feb	297200
5-Feb	829000
6-Feb	11894000
9-Feb	0
10-Feb	251400
11-Feb	469600
12-Feb	253900
13-Feb	1826400
14-Feb	0
15-Feb	152300
17-Feb	30300
18-Feb	0
19-Feb	631400
20-Feb	282500
21-Feb	45700
23-Feb	0
24-Feb	12366500
25-Feb	54200
26-Feb	0
27-Feb	1356600
28-Feb	0
Mar	31376500
Apr	89502600
May	287111100
Jun	507439400
Jul	562859300
Aug	436661500
Sep	347180600
Oct	444993600
Nov	44646500
Dec	12573500
<b>Grand Total</b>	<b>2863802700</b>

- C. If you now want to show this data by state (i.e., adding an additional field to your interactive table), you can add the Damaged Property State Code to Column.

Sum of Total Approved Loan Amount	Column Labels					
Row Labels	AL	AR	CA	CO	FL	GA
Jan					5038300	1487000
Feb					3891600	587500
Mar					2611900	857000
Apr		0	55100	802900	650600	983300
May	672800		4885800		43844400	542500
Jun	406300	2436100	610700	654700	112739600	23462500
Jul		9600	1702900	97400	163114800	2278800
Aug	124900	3221900	709500		134592900	4237400
Sep		80300	3555700	33600	135785200	6548500
Oct		78800	818300	217900	25313600	4910900
Nov		0	0	115700	46600	1403800
Dec	283200				4213500	769000
<b>Grand Total</b>	<b>1487200</b>	<b>5881800</b>	<b>13201500</b>	<b>1050200</b>	<b>633200200</b>	<b>47958000</b>

etc...

- D. Now assume you only want to look at the total approved loan amount by month for just the states of Florida and California. You can move the Damaged Property State Code to Filter. You now will see a drop down menu that you can use to filter this data to only include the state(s) you are interested in.

### PivotTable Fields

Choose fields to add to report:

Search

- Damaged Property City Name
- Claim Date
- Damaged Property Zip Code
- Damaged Property County/Parish Name
- Damaged Property State Code
- Total Approved Loan Amount
- Approved Amount EIDL
- Months

Drag fields between areas below:

Filters

Damaged Property St...

Columns

Rows

Months

Claim Date

Values

Sum of Total Approve...

Total Approved Loan Amount  
for states of FL and CA

Row Labels	Sum of Total Approved Loan Amount
Jan	5038300
Feb	3891600
Mar	2611900
Apr	1453500
May	48730200
Jun	113350300
Jul	164817700
Aug	135302400
Sep	139340900
Oct	26131900
Nov	1519500
Dec	4213500
<b>Grand Total</b>	<b>646401700</b>

### More Examples, this time using the “Sales” sheet

- E. Notice that the sales data is for 2019 and 2020. Assume you are interested in sales data for each representative only for 2020. Set up as shown below.

Sum of Total	Column Labels	Gill	Howard	Jardine	Jones	Kivell	Morgan	Smith	Sorvino	Thompson	Grand Total	
Qtr1	Andrews	413.54			249.5	19.96		1305	139.93		2127.93	
Qtr2		131.34	787.57	479.04		625					2022.95	
Qtr3			9.03		309.38	1005.9	686.95		976.24		2987.5	
Qtr4		157.78		1933.95						1139.43	3231.16	
Grand Total		289.12	1210.14	479.04	2183.45	329.34	1630.9	686.95	1305	1116.17	1139.43	10369.5

- F. Practice setting up subcategories of rows. View which office products (and how many, and total revenues from each) sold in each of the regions of the country. Simply check the 4 relevant boxes and see default for set up as shown below. (Notice that default was “sum of units” rather than “count” in Values area for Units. There were 7 desks sold in the Central region, but there were only 2 order dates. So, always check that your output is displaying what you want.)

Row Labels	Sum of Units	Sum of Total
<b>Central</b>	<b>1199</b>	<b>11139.07</b>
Binder	424	5762.63
Desk	7	875
Pen	27	539.73
Pen Set	243	2421.39
Pencil	498	1540.32
<b>East</b>	<b>691</b>	<b>6002.09</b>
Binder	234	2535.66
Pen	175	1354.25
Pen Set	152	1748.48
Pencil	130	363.7
<b>West</b>	<b>231</b>	<b>2486.72</b>
Binder	64	1279.36
Desk	3	825
Pen	76	151.24
Pencil	88	231.12
<b>Grand Total</b>	<b>2121</b>	<b>19627.88</b>

## How to clean up your generated Pivot Tables.

Notice the unaltered Pivot Table below.

Years	2020											
Sum of Total	Column Labels											
Row Labels	Andrews	Gill	Howard	Jardine	Jones	Kivell	Morgan	Smith	Sorvino	Thompson	Grand Total	
Qtr1		413.54		249.5	19.96			1305	139.93		2127.93	
Qtr2	131.34	787.57	479.04			625					2022.95	
Qtr3		9.03			309.38	1005.9	686.95		976.24		2987.5	
Qtr4	157.78			1933.95							1139.43	3231.16
<b>Grand Total</b>	<b>289.12</b>	<b>1210.14</b>	<b>479.04</b>	<b>2183.45</b>	<b>329.34</b>	<b>1630.9</b>	<b>686.95</b>	<b>1305</b>	<b>1116.17</b>	<b>1139.43</b>	<b>10369.54</b>	

For example, if you have financial data and you want to indicate in units of \$\$\$:

- right click on any of the cells in the column you want to show in \$
- go to “value field settings”
- click on the “number” button
- select “currency” and select the # of decimal places
- click OK

For example if you have empty cells in your table and you want them to indicate “0”, can click on any cell in the body of the table, then:

- right click to then select “pivot table options”
- select to fill empty cells with value of 0

You can highlight your table and select the DESIGN tab in the ribbon tab at the top of the page.

Years	2020											
Sum of Total	Representative											
Quarters	Andrews	Gill	Howard	Jardine	Jones	Kivell	Morgan	Smith	Sorvino	Thompson	Grand Total	
Qtr1	\$0.00	\$413.54	\$0.00	\$249.50	\$19.96	\$0.00	\$0.00	\$1,305.00	\$139.93	\$0.00	\$2,127.93	
Qtr2	\$131.34	\$787.57	\$479.04	\$0.00	\$0.00	\$625.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,022.95	
Qtr3	\$0.00	\$9.03	\$0.00	\$0.00	\$309.38	\$1,005.90	\$686.95	\$0.00	\$976.24	\$0.00	\$2,987.50	
Qtr4	\$157.78	\$0.00	\$0.00	\$1,933.95	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,139.43	\$3,231.16	
<b>Grand Total</b>	<b>\$289.12</b>	<b>\$1,210.14</b>	<b>\$479.04</b>	<b>\$2,183.45</b>	<b>\$329.34</b>	<b>\$1,630.90</b>	<b>\$686.95</b>	<b>\$1,305.00</b>	<b>\$1,116.17</b>	<b>\$1,139.43</b>	<b>\$10,369.54</b>	

You can SORT data in a column, for example to show highest to lowest values by right clicking on the cell at the top of the column and selecting SORT.

Row Labels	Sum of Total Approved Loan Amount
KS	0
ID	4700
WA	9100
IL	46000
OK	104700
OR	111300
PA	133500
NE	133600
OH	158000
WV	162000

Rows	Values
Damaged Property St...	Sum of Total Approve...

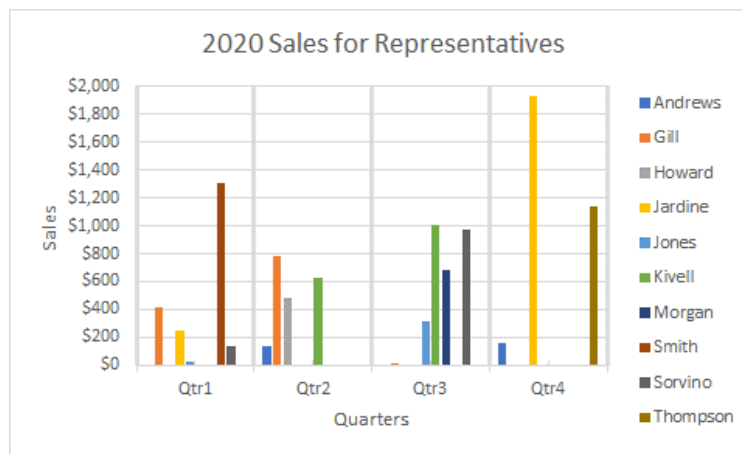
KS did not have any disaster loans.



## CREATING A PIVOT CHART:

1. Select any cell in your PivotTable.
2. From the Insert tab, click the PivotChart command.
3. The Insert Chart dialog box will appear. Select the desired chart type and layout, then click OK. ...
4. The PivotChart will appear.
5. Clean up and customize your chart.

Years	2020										
Sum of Total	Representative										
Quarters	Andrews	Gill	Howard	Jardine	Jones	Kivell	Morgan	Smith	Sorvino	Thompson	Grand Total
Qtr1	\$0.00	\$413.54	\$0.00	\$249.50	\$19.96	\$0.00	\$0.00	\$1,305.00	\$139.93	\$0.00	\$2,127.93
Qtr2	\$131.34	\$787.57	\$479.04	\$0.00	\$0.00	\$625.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,022.95
Qtr3	\$0.00	\$9.03	\$0.00	\$0.00	\$309.38	\$1,005.90	\$686.95	\$0.00	\$976.24	\$0.00	\$2,987.50
Qtr4	\$157.78	\$0.00	\$0.00	\$1,933.95	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,139.43	\$3,231.16
<b>Grand Total</b>	<b>\$289.12</b>	<b>\$1,210.14</b>	<b>\$479.04</b>	<b>\$2,183.45</b>	<b>\$329.34</b>	<b>\$1,630.90</b>	<b>\$686.95</b>	<b>\$1,305.00</b>	<b>\$1,116.17</b>	<b>\$1,139.43</b>	<b>\$10,369.54</b>



## Good Videos (length) to Take You to the Next Level:

Using slicers to filter data (:36) <https://support.office.com/en-us/article/use-slicers-to-filter-data-249f966b-a9d5-4b0f-b31a-12651785d29d>



How to build interactive Excel Dashboards (52:25) [https://www.youtube.com/watch?v=K74\\_FNnlIF8](https://www.youtube.com/watch?v=K74_FNnlIF8)  
(show min 48:45 as an example)

Excel 2016 PivotTables in Depth (3:42:27) (\$) [https://www.linkedin.com/learning/excel-2016-pivot-tables-in-depth/welcome?autoplay=true&trk=course\\_preview&upsellOrderOrigin=sem\\_src-go-pa\\_c.lil-sem-prs-b2c-gbl-eng-txt-biz-excel\\_pkw.excel%20pivot%20table%20tutorial\\_pmt.e\\_pcid.262661450863\\_pdv.c\\_plc\\_trg\\_net.g\\_learnin](https://www.linkedin.com/learning/excel-2016-pivot-tables-in-depth/welcome?autoplay=true&trk=course_preview&upsellOrderOrigin=sem_src-go-pa_c.lil-sem-prs-b2c-gbl-eng-txt-biz-excel_pkw.excel%20pivot%20table%20tutorial_pmt.e_pcid.262661450863_pdv.c_plc_trg_net.g_learnin)