Creating Graphs from Progress Reports

Follow the steps in this tutorial to create graphs from your semi-annual OVW program progress reports using Microsoft Excel. The graphs in the tutorial show one way program data may be presented visually; choose information that best tells your program's story. Once your graphs are created, they can be included in program websites, reports, or printed out for distribution to Tribal Councils.
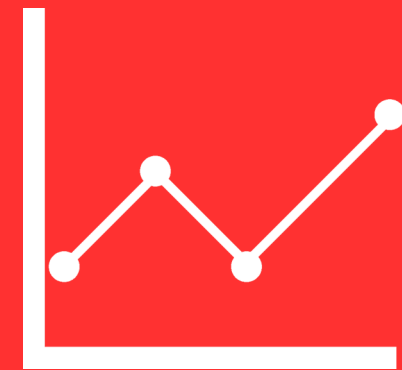
Pie Charts

Compare parts of a whole.

See page 2.

Bar Charts

Compare groups or show large changes over time.

See page 7.

Line Graphs

Show small or large changes over time.
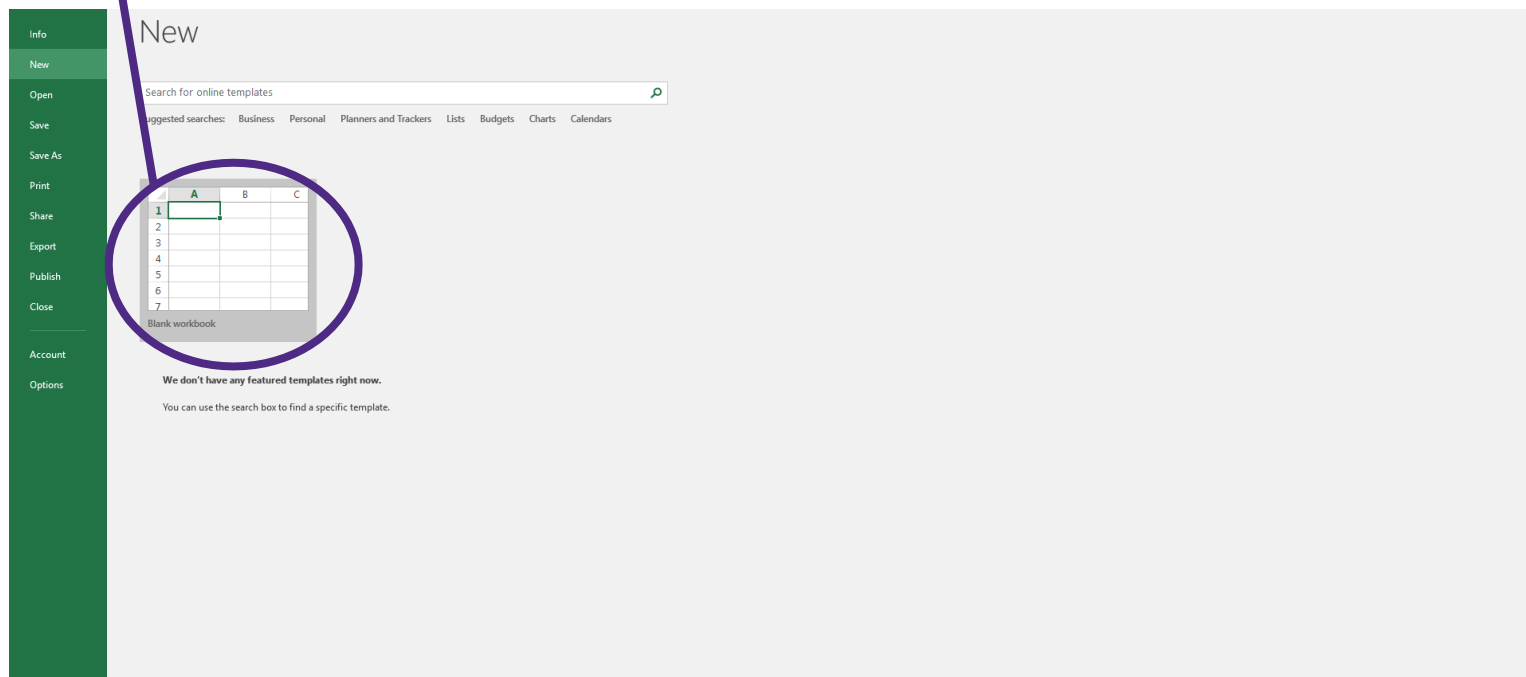
See page 13.

Pie Charts

When to create a pie chart:

Use a pie chart to show or compare parts of a whole, meaning the sum total should equal 100%. Pie charts are most helpful when you want to compare 2-3 categories. They do not show changes over time.

Example:

Deer Nation wants to compare the number of survivors by victimization who were served by their program in the year 2020. Follow the steps below to make this chart.

Open a new workbook in Excel.

To start, you need to enter a label to describe what information is being presented in the graph. For this example, we are going to type "Total Served and Partially Served" in cell B1 (leave A1 blank). The title you place here will show up as the name of your graph

	A	B	C
1		Total Served and Partially Served	
2	Sexual Assault	92	
3	Domestic Violence/Dating Violence	106	
4	Stalking	4	

The first column (A) will show the victimization categories. "Sexual Assault" is typed in A2; "Domestic Violence/Dating Violence" in A3; "Stalking" in A4. Type your total number of served and partially served for each category in column (B).

Highlight all of the data you entered by clicking and dragging over the filled cells.

	A	B
1		Total Served and Partially Served
2	Sexual Assault	92
3	Domestic Violence/Dating Violence	106
4	Stalking	4

Then click the Insert tab in the top left corner of the application. The Insert ribbon has a section for charts. Click the pie chart, then select the first option in the drop down menu.

To include the victimization labels (chart legend) and percentages on the pie chart, click the "Design" tab, then select the chart style with the percentages on the pie chart. Your pie chart is complete! To put your pie chart in a Word document, right click on the chart, and select "copy" .

Open a new document in Word, right click in on the page, and select "paste". The same steps also work in PowerPoint presentations.

The pie chart below compares the number of survivors by victimization who were served by Deer Nation in the year 2020.

Bar Charts

When to create a bar chart:

Bar charts are used to compare differences between groups or to show changes over time. However, when trying to measure change over time, bar charts are best when the changes are larger.

Example:

Deer Nation wants to compare the number of survivors by race/ethnicity who were served/partially served by their program in the year 2020. Follow the steps below to make this chart.

Open a new workbook in Excel.
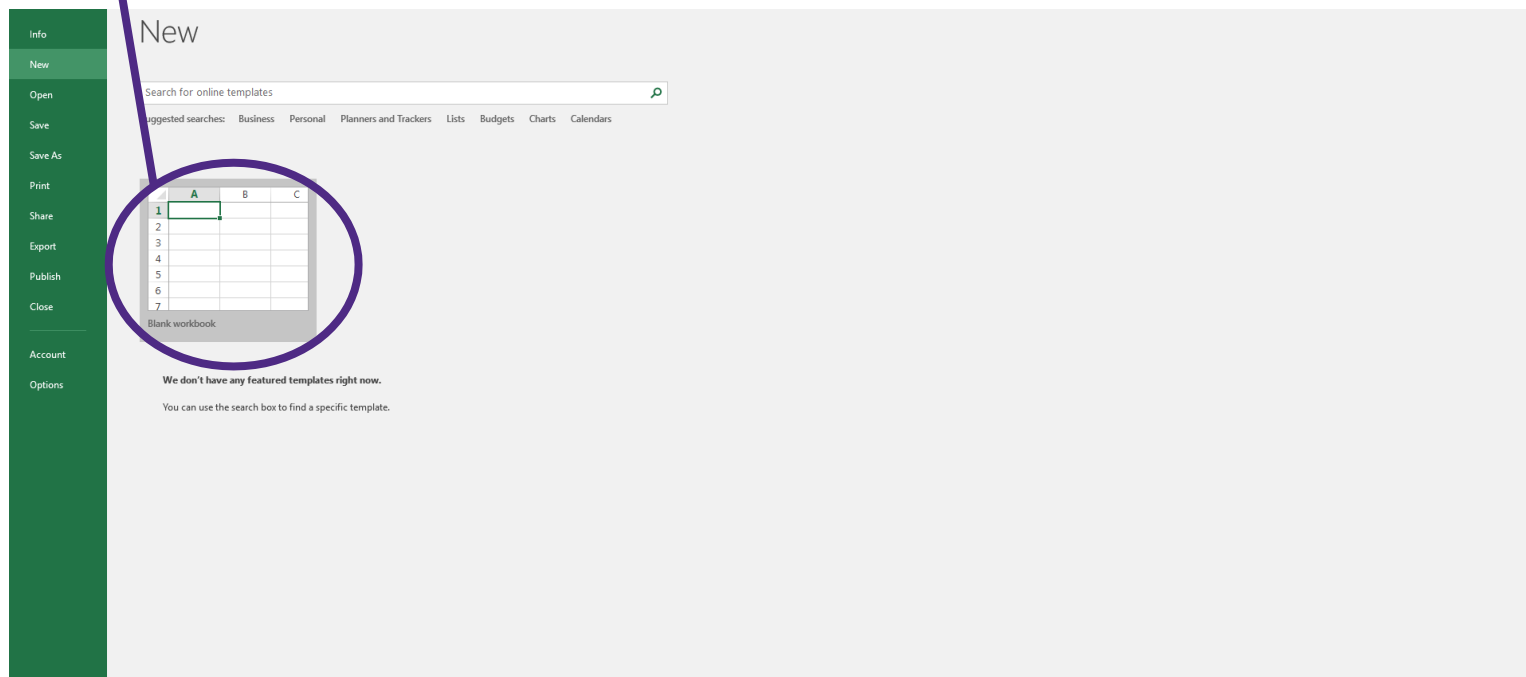
To start, you need to enter a label to describe what information is being presented in the chart. For this example, we are going to type "Victims/Survivors by Race/Ethnicity" in cell B1 (leave A1 blank). The title you place here will show up as the name of your chart.

	A	B
1		Victims/Survivors by Race/Ethnicity
2	American Indian and/or Alaska Native	103
3	Asian	1
4	Black or African American	7
5	Hispanic or Latino	42
6	Native Hawiian and other Pacific Islander	2
7	White	65
8	Unknown	8

The first column (A) will show the race/ethnicity categories. Type all of the race/ethnicity categories in column A, in cells A2-A8, then type your total number of served and partially served for each category in column (B).

Highlight all of the data you entered by clicking and dragging over the filled cells.

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Then click the Insert tab in the top left corner of the application. The Insert ribbon has a section for charts. Click the column/bar chart, then select the first option from the "2-D Column" selection, or the first option in the "2-D Bar" selection in the drop down menu. The column option will create a vertical chart, and the bar option will create a horizontal chart.
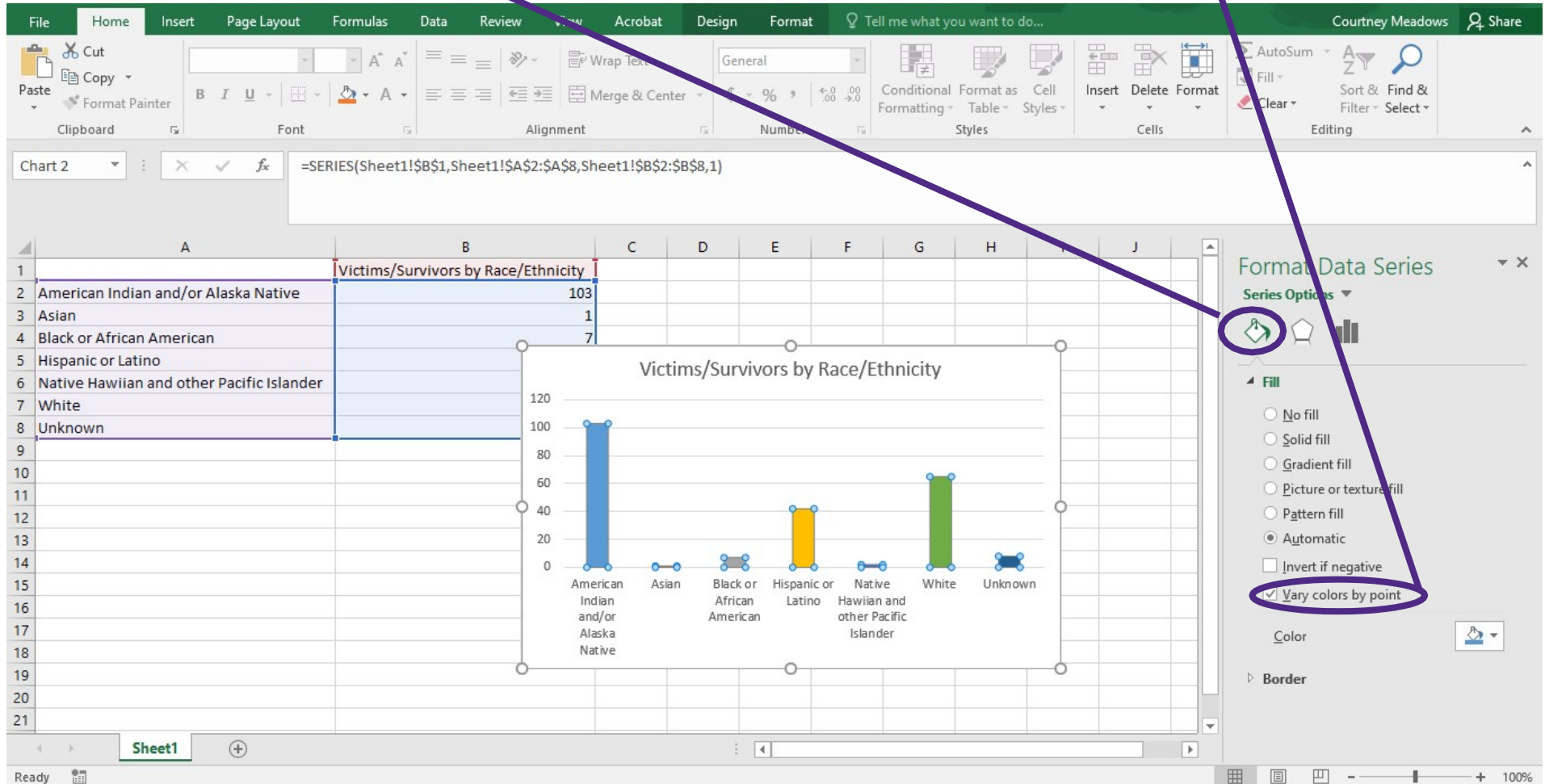
	Victims/Survivors by Race/Ethnicity
American Indian and/or Alaska Native	103
Asian	1
Black or African American	7
Hispanic or Latino	42
Native Hawiian and other Pacific Islander	2
White	65
Unknown	8

2-D Column

3-D Column

2-D Bar

3-D Bar

More Column Charts...

If you want the bars in the chart to be different colors, right click on a bar in the chart. Select "Format Data Series."
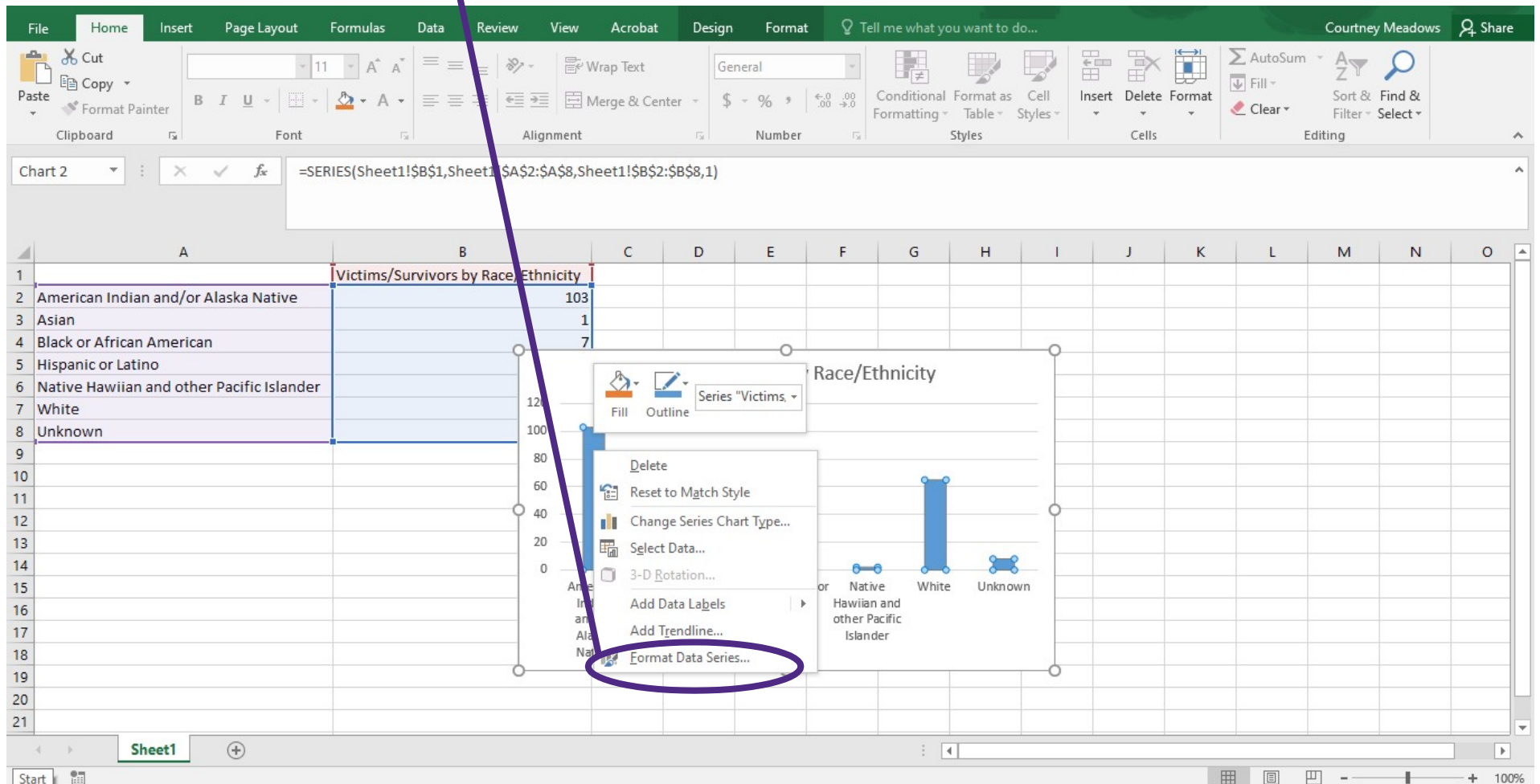
Click the paint bucket icon, then check the box next to the words, "vary colors by point". Your bar chart is complete! To put your bar chart in a Word document, right click on the chart, and select "copy".

Open a new document in Word, right click in on the page, and select "paste". The same steps also work in PowerPoint presentations.

Line Graphs

When to create a line graph:

Line graphs are used to show changes over short and long periods of time for one or more categories. Line graphs are better at showing small changes over time than bar charts are.

Example:

Deer Nation wants to compare the total number of survivors who were served/partially served by their program in the years from 2016 to 2020. Follow the steps below to make this chart.

Open a new workbook in Excel.

To start, you need to enter a label to describe what information is being presented in the graph. For this example, we are going to type "Total Served and Partially Served" in cell B1 (leave A1 blank). The title you place here will show up as the name of your graph

The first column (A) will show all years we want to show. The years 2016-2020 were typed in cells A2-A6. Type your total number of served and partially served for each year in column (B).

Highlight all of the data you entered by clicking and dragging over the filled cells.

Then click the Insert tab in the top left corner. The Insert ribbon has a section for charts. Click the line graph, then select the first option in the drop down menu.
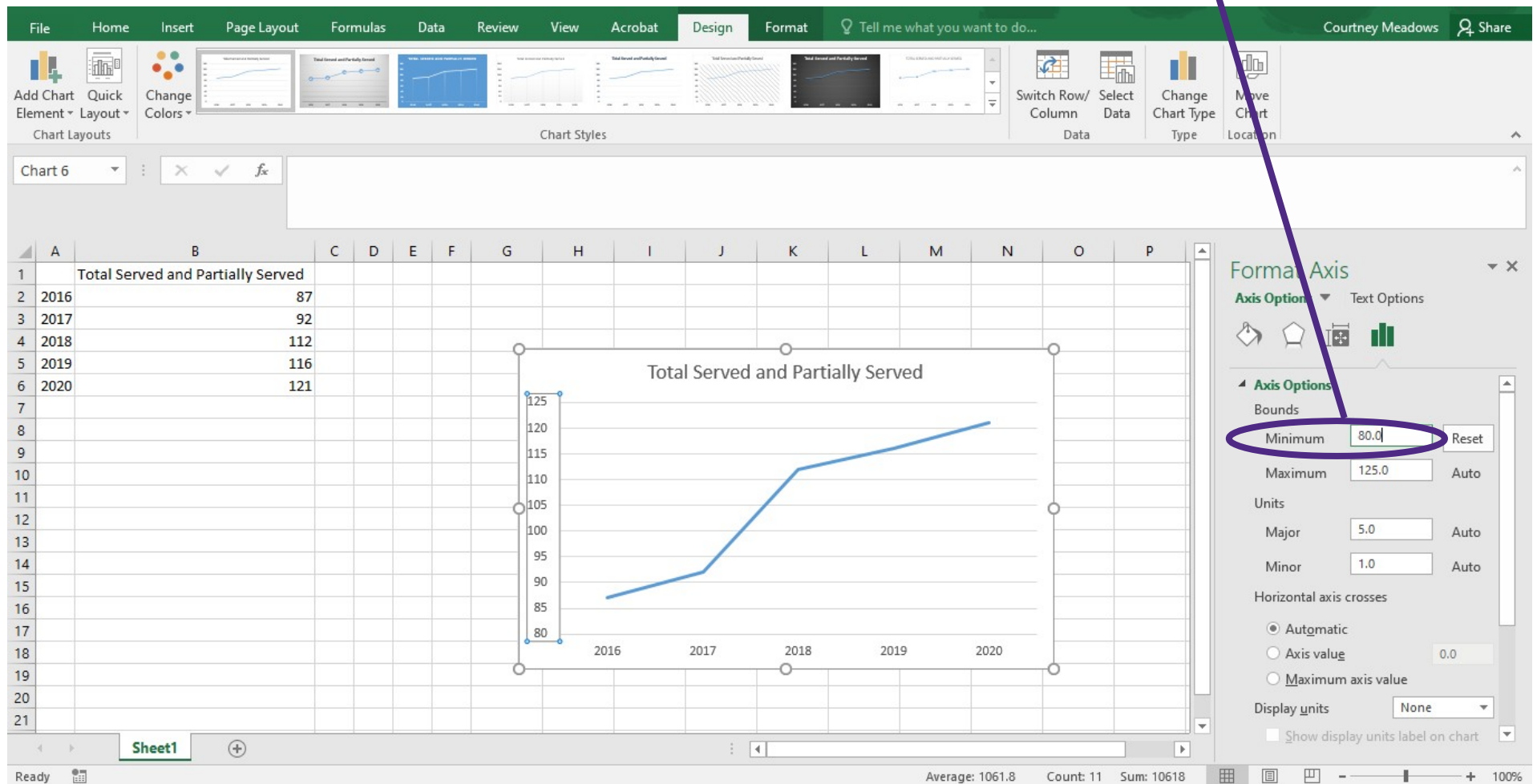
To remove the empty space below the line in the graph and make the proportions appropriate, right click on the values for "Total Served and Partially Served" on the left side of the graph. Select "Format Axis".
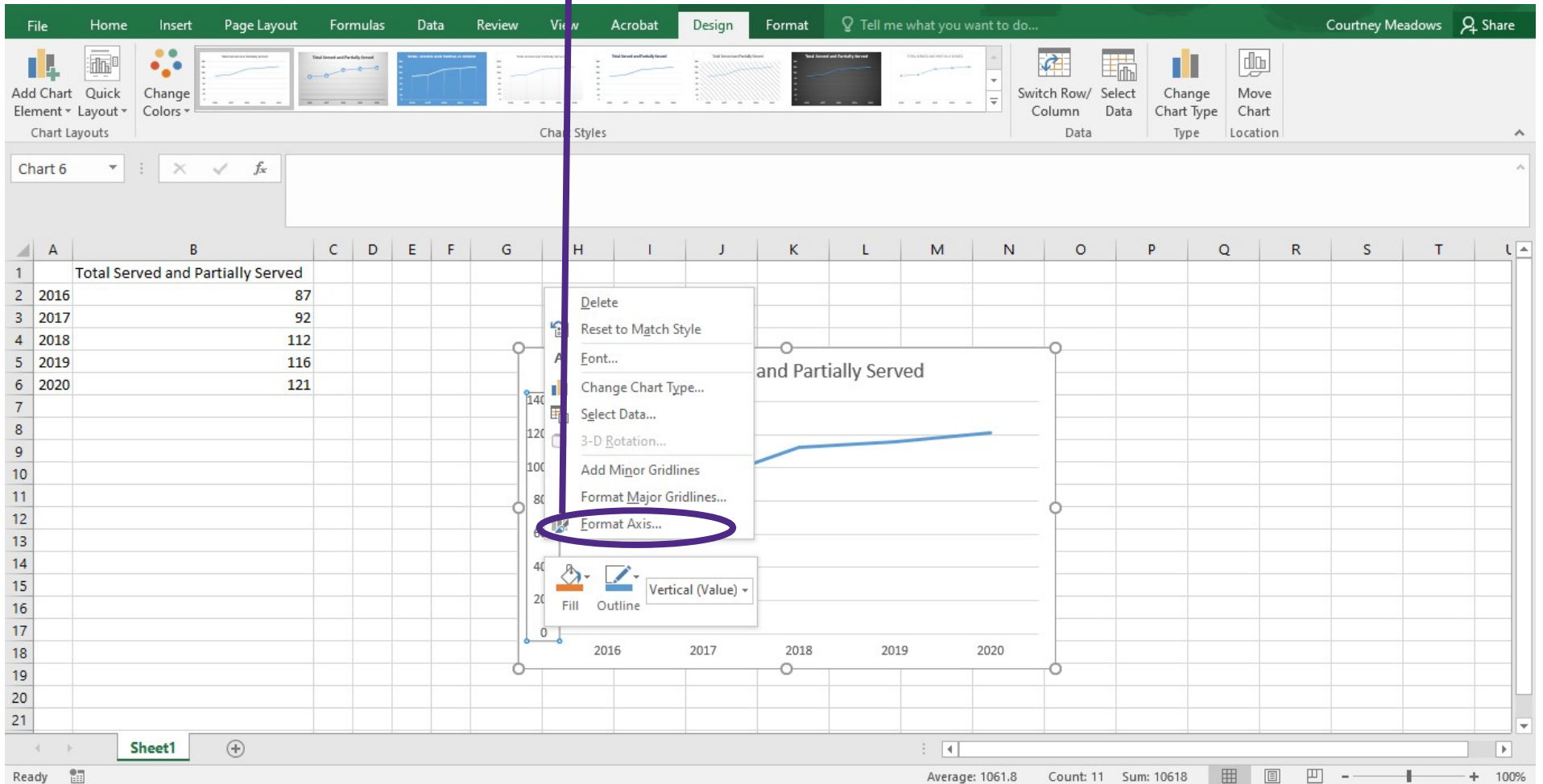
Click the textbox next to the word, "Minimum" under "Axis Options". The minimum was changed from zero to 80, since the lowest number of Served/Partially served was 87. Round your minimum to the nearest 10 below your lowest value (e.g., if your value was 8, your minimum could be zero; if the value was 12, the minimum could be 10, etc.). Your bar chart is complete! To put your bar chart in a Word document, right click on the chart, and select "copy".

Open a new document in Word, right click in on the page, and select "paste". The same steps also work in PowerPoint presentations.

Enjoy! And remember:
Behind every piece of data is a person to be honored.

Data Collection, Utilization, and Program Assessment Project