

# Creating an Overlapping Bar Chart in Excel

## For comparing two related things



Think about the two things you want to compare. Identify which data should be overlaid on the other and which sequence of data makes sense (smallest to largest, largest to smallest, or some other order).

### 1. Sort data using filters

- a. Select the row of variable names → Home → Sort & Filter → Filter → Select menu in column you want to sort → Sort in the reverse order in which you want data to display (e.g., if comparing a city's results to countywide statistics, set up spreadsheet so that row 1 has county data and row 2 contains city data)

### 2. Insert a bar graph

- a. Select data to be included in bar graph → Insert → Bar → 2D bar → Clustered bar (1<sup>st</sup> chart layout)

### 3. Overlap bars

- a. Format embedded bars → Select bars you want to display in foreground (more important data) → Right click → Select Format Data Series → Plot Series → Select Secondary Axis →
- b. Format background bars → Without closing pop up window, select visible portion of other colored bars → Change gap width as desired. → Don't close pop up window

### 4. Differentiate emphasis

- a. Within Format Data Series → Right click on background bars → Paint bucket → Select pale color
- b. Still within Format Data Series → Select foreground bars → Paint bucket → Select darker/deeper color

### 5. Correct axes values

Notice that the bars don't actually reflect the data in the spreadsheet. This is because your two axes have different maximum values.

- a. To correct this → Select the inaccurate scale needs adjusting → Right click → Format Axis → Maximum Value → Fixed → Enter correct value
- b. Delete upper axis → Right clicking → Format Axis → Labels → None  
(if you just delete the axis labels, sometimes it changes the scale)

## 6. De-emphasize gridlines

- a. Select gridlines → Right click → Format Gridlines → Color → Select appropriate shade of grey from Paint Bucket menu

## 7. Insert title and legend

- a. Insert legend →
- b. Insert chart title → Chart Tools → Design → Add Chart Element (at far left) → Chart Title → Type headline using sentence style → Left align title → Select title text → Left align → Drag title field to top left corner of chart

## 8. Change font size/style as needed

- a. Select chart area → Home → Select a condensed font from Font menu
- b. Select desired font size → Font size menu

## Resources

- Stephanie Evergreen blog, books, and Evergreen Data Academy: <http://stephanieevergreen.com/>
- Ann Emery workshops, blog, and other evaluation resources: <http://annkemery.com/workshops/>
- Mike “excelisfun” Girvin’s YouTube video tutorials: <https://www.youtube.com/user/ExcelsFun>
- Mr. Nystrom YouTube videos on Stats <https://www.youtube.com/user/MrNystrom>
- American Evaluation Association courses: [http://comm.eval.org/coffee\\_break\\_webinars/estudy](http://comm.eval.org/coffee_break_webinars/estudy)
- Tobacco Control Evaluation Center: [www.tobaccoeval.ucdavis.edu](http://www.tobaccoeval.ucdavis.edu) or 530-752-9951