How to Create Accessible Excel Documents

Excel documents are generally accessible. When considering how to design an Excel document, however, there are a few things to keep in mind in order to ensure that it is as accessible as possible for everyone, especially those using a screen reader to access the information contained in the document.

In this guide, we will cover those considerations:

1. Formatting

A. Font Style and Size

When deciding which fonts to use, keep a few things in mind in order to make your Excel document as easy to read as possible:

- Use the same font consistently throughout your document.
- Choose a clean, easy to read font such as Arial or Times New Roman.
- Use at least 12 point font. You may want to set headers as well as column and row subheadings to be one to two sizes bigger.
- Limit the use of font variations such as **bold**, *italics*, and ALL CAPITAL LETTERS.
- Don't rely on the appearance of the font (color, shape, font variation, placement, etc.) to convey meaning.
- Use real text rather than text within graphics.
- Avoid blinking or moving text.

B. Cell Formatting

Empty cells can cause someone using a screen reader to think the spreadsheet has ended, so avoid using them for formatting. You should also avoid merging cells, as this can cause confusion. If the data exceeds the space in a cell, either adjust the width of your cells individually, or set your sheet to "wrap text." Wrapped text will automatically adjust the height of each cell to accommodate the information in it.

To wrap text, click on the arrow in the upper left hand corner of the Excel sheet. Then right click anywhere in the sheet and click "Format Cells." In the "Format Cells" window that pops up, click on the "Alignment" tab, check the box next to "Wrap Text" and then click "OK."
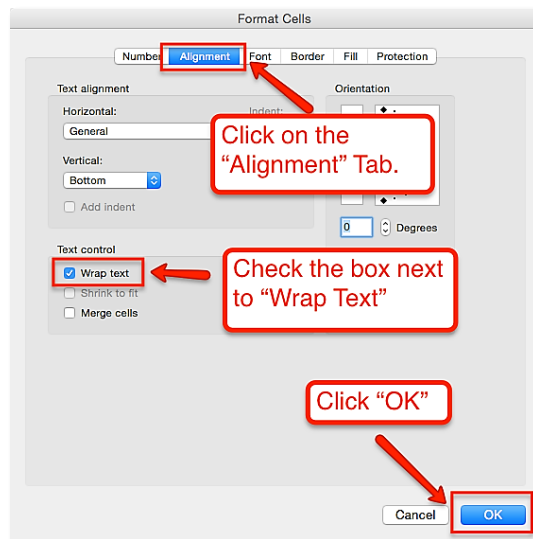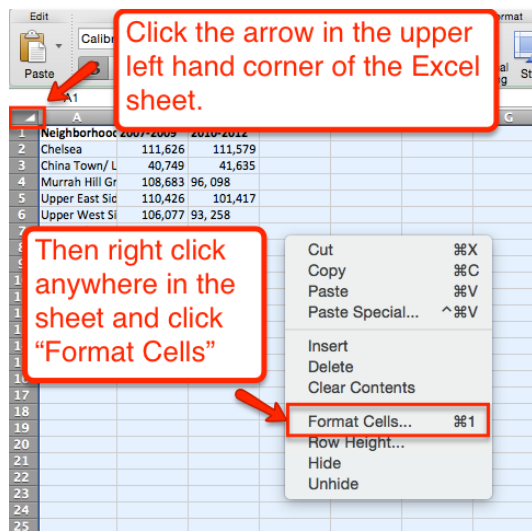
2. Appropriate Labeling

Your spreadsheet must be created as a table in order to be accessible. To create your spreadsheet as a table, check if the "Table" tab appears on top of your excel screen. If it doesn't, put your cursor anywhere in the table and click CTRL+A (or CMD+A) to mark the entire table. Then, click the Insert tab and then Table. In the pop-up window, make sure to enable "My table has headers" before clicking ok.

It is important to orient your readers to the content of your Excel document by using relevant labels for files, sheets, and columns. So, be sure to give your file a meaningful name; add a header for each column; and label sheet tabs at the bottom of the page clearly. To change sheet tab titles, double click on the title. A cursor will appear that will allow you to enter in the label you prefer. Labeling appropriately also makes creating charts easier, because the column labels will automatically be used in your chart's legend.
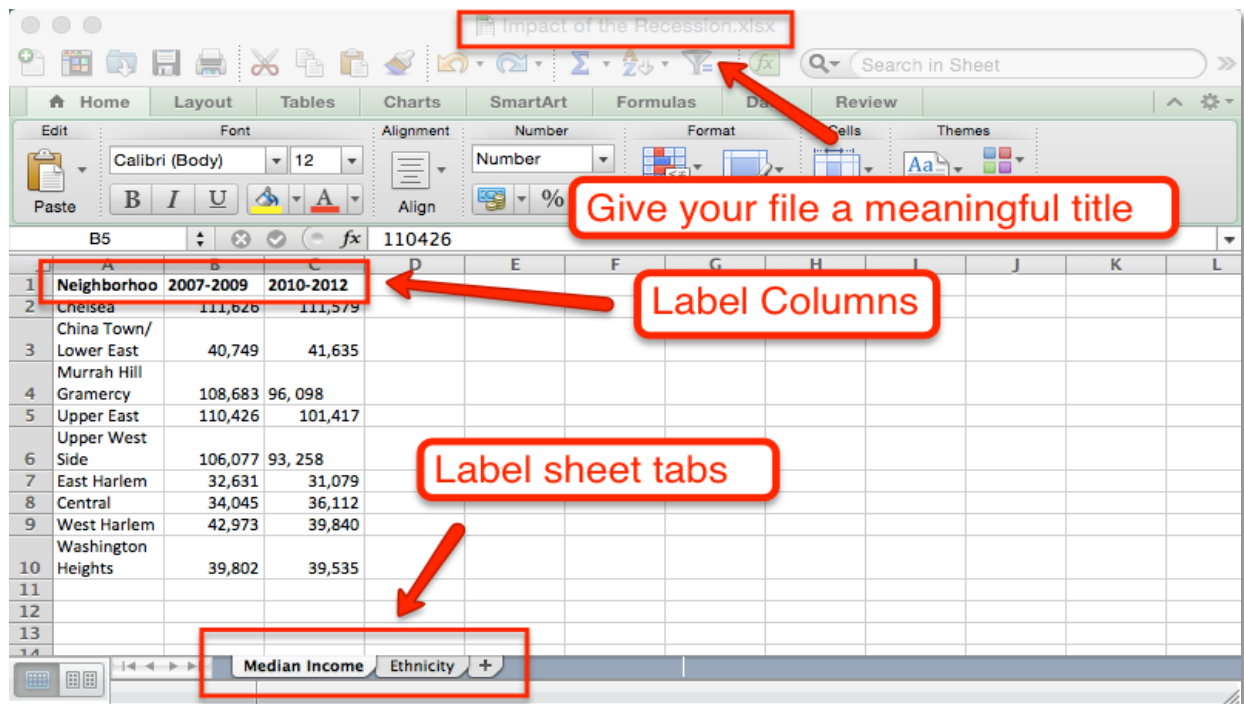
3. Charts/ Graphs

Excel spreadsheets are often used to show relationships between two or more variables. Excel charts can help you provide multiple means of presenting your course materials by also visualizing the relationship between the variables.

In **Excel 2013 and 2016**, click on the "Insert" tab, and then choose the type of chart you'd like to create from the "Charts" area.
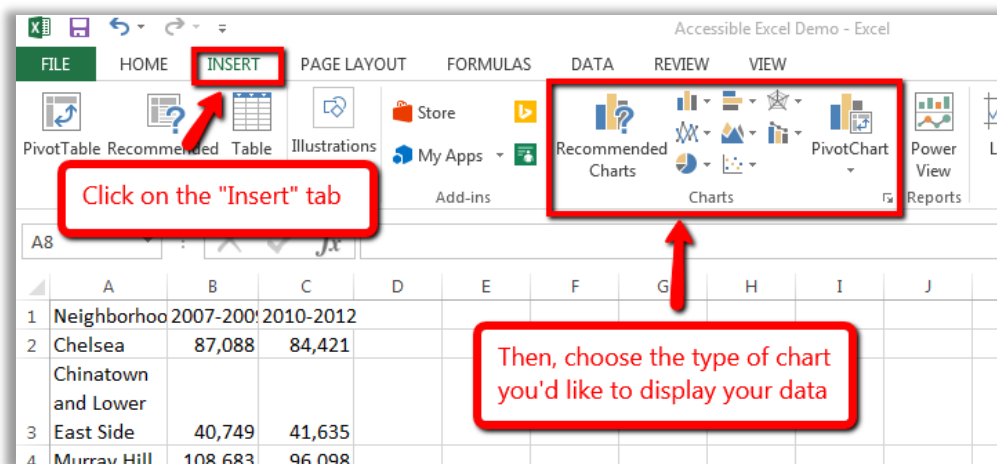
In **older Excel versions or Excel for Mac,** highlight the information you would like included in your chart, click on the "Charts" tab, and then choose a chart type from the options in the toolbar.
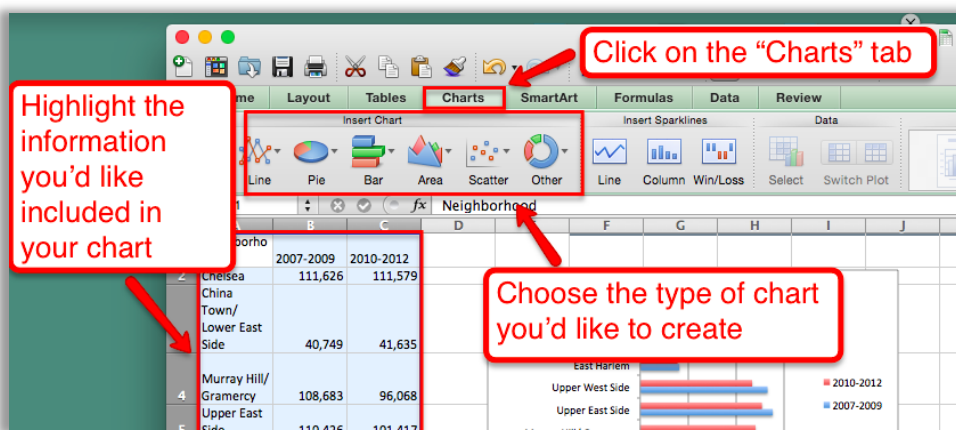

Keep in mind, however, that charts can be confusing if they are not labeled correctly, or if high contrast is not maintained in their colors. Also, screen readers do not recognize charts, so you should include Alt Text to ensure that everyone can access the information. If you label the columns of your excel sheet, those labels will automatically be used in your chart's legend.

A. Color

Be sure to use a strong contrast in your charts. Avoid using red or green, as people with color blindness cannot see them.

In **Excel 2013 and 2016**, click on your chart and then select the "Design" or "Chart Design" tab. Then, click on "Change Colors" and choose the colors you'd like to use from the drop down menu.
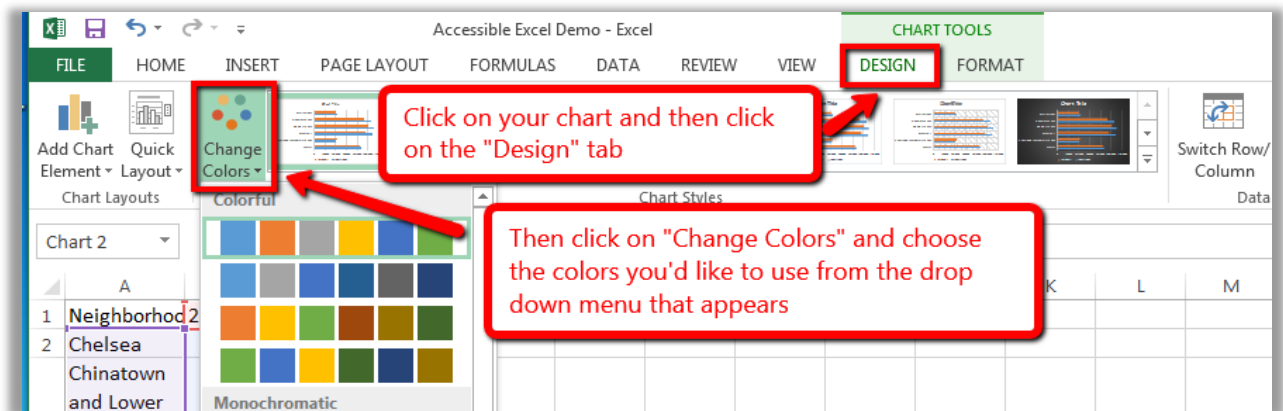
In **older Excel versions**, you can change the color by clicking on the graph, and then clicking on "Chart Styles" in the upper right hand corner.
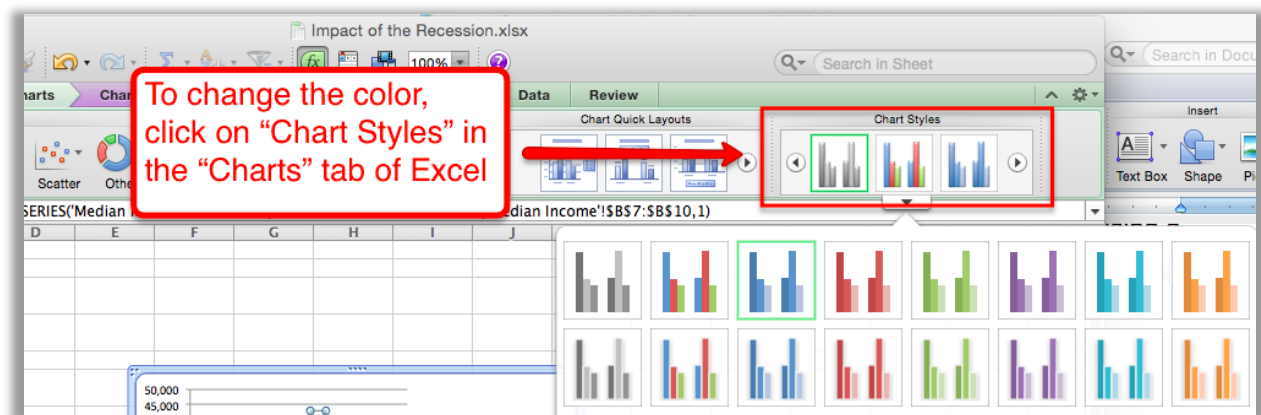
B. Alt Text

In order to allow those using screen readers to access information contained in images, charts or graphs, it is important to add a title and description for these items as Alt Text, which will be read aloud by a screen reader.

When adding Alt Text, use the same title for the chart that you used for the associated table; you might add what type of chart it is as well (i.e. bar, pie, etc.). The Alt Text description for the chart depends on whether or not an associated data table is included in the same document:

- If the associated data table is adjacent to the chart, simply refer your reader to the table by entering its title and location in the Alt Text description field.
- If no data table is available, or it is located on a different sheet, explain each of the values displayed in the chart in the Alt Text description field.

In **Excel 2013 and 2016**, right-click on the chart (the blank area next to its title) and select "Format Chart Area" from the list. On the toolbar to the right, click the "Size & Properties" icon and then "Alt Text". (In **older Excel versions or Excel for Mac**, right-click on the chart and select "Format Chart Area" from the list. In the pop-up window, click "Alt Text.")
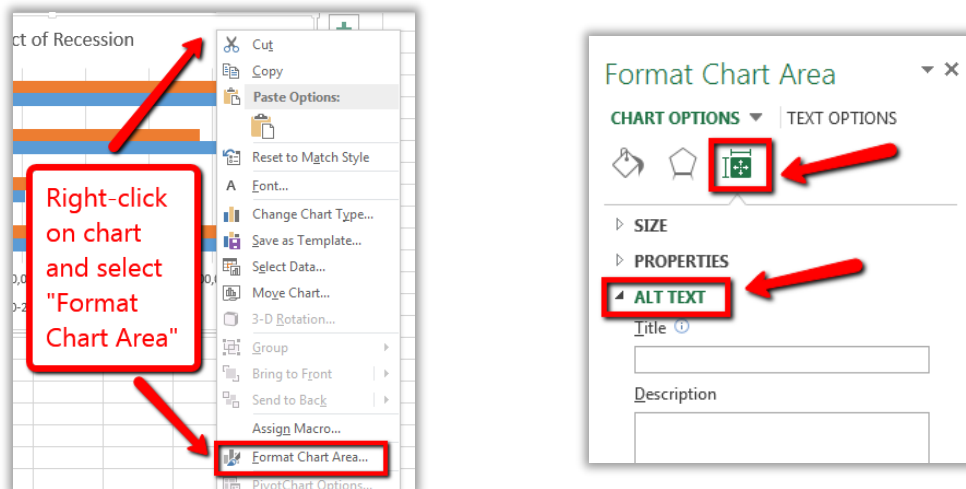

In the description field, include all information you want readers to get from the image or table. Only add a title if the description is detailed or very long.
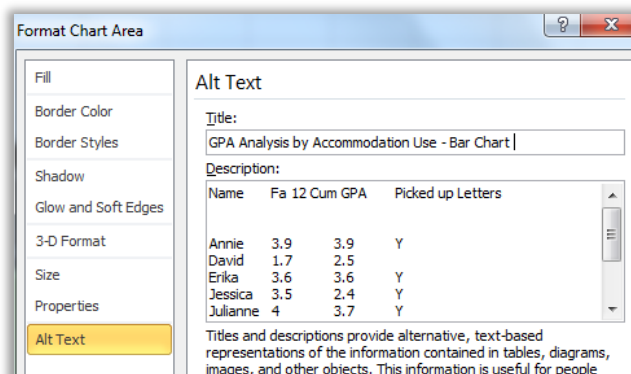
4. Hyperlinks

Hyperlinks allow you to direct your readers to a webpage from within your Excel sheet. Screen readers can skip from hyperlink to hyperlink and will read the entire link, so it is important to use meaningful titles that will indicate what you are linking to and not simply "click here" or the entire URL.

To create a hyperlink, enter the title for the link in the cell where you'd like the hyperlink to appear. Right click that cell, and select "Hyperlink" from the list.
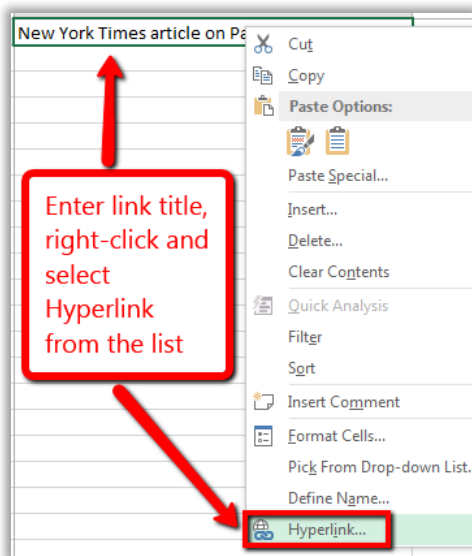

In the pop-up window, your link title will be listed in the "Text to display" field. Enter (or cut & paste) the link's web address into the "Address" field, and click OK to save.
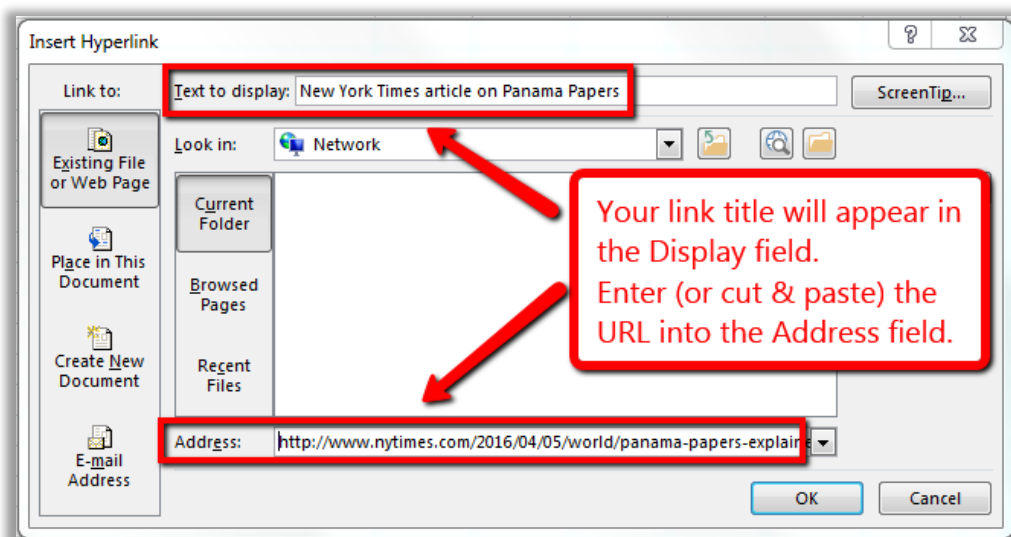
5. Accessibility Checker

Excel 2010 and later includes a "Check Accessibility" tool that allows you to check for accessibility problems in your document. To run the accessibility checker, select the File tab, click "Info", then "Check for Issues". Select "Check Accessibility" from the drop-down list.
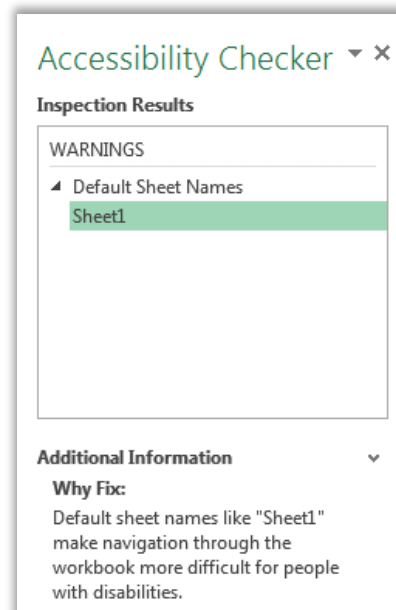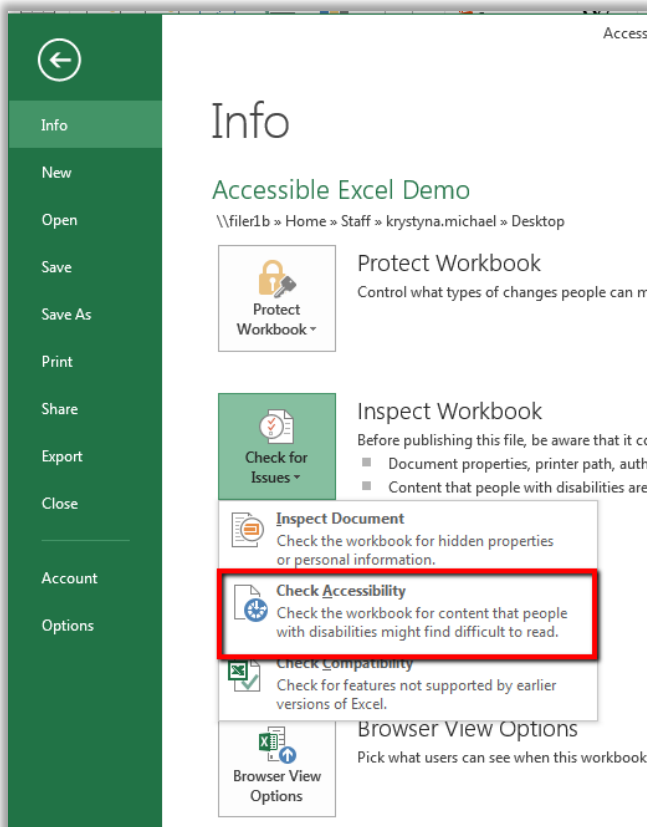
In **Excel for Mac**, click "Tools" in the upper bar and select "Check Accessibility."

The checker presents accessibility errors (e.g., images with no Alt Text), warnings (e.g., unclear link text) and tips. Selecting an item in the report will highlight the corresponding item in the document. Feedback about the importance of each item, as well as tips on how to repair it, is included.