



# Color and Contrast Guidelines for PowerPoint

Use the most recent agency-created PowerPoint templates use font color and a hyperlink text color that meets color contrast requirements.

Appropriate colors and contrast are necessary for people to see words. This is particularly true for people who are colorblind or have other visual disabilities. Contrast is the difference in luminosity between the text and the background. Good contrast allows more people to read what we write. We can use different colors to draw attention to different parts of our document. But we all perceive colors differently from one another and some of us do not see color differences at all.

## Sufficient Contrast

When there is not enough contrast between the color of the text (also called the foreground) and the color of the background, it can be difficult to visually distinguish between the text and background.

For those who are color blind, certain colors (such as red and green) can appear indistinguishable from each other. In such cases, text without enough contrast can be unreadable.

To ensure that information is perceivable, [Web Content Accessibility Guidelines \(WCAG\) 2.0 Level AA](#) requires that the contrast ratio (the degree of difference between a foreground color and background color) is:

- At least 4.5:1 for “regular” sized text which is 14 points, not bolded, and smaller.
- 3:1 for large text:
  - ▶ Bold text if it is 14 points or larger.
  - ▶ If it is 18 points or larger.

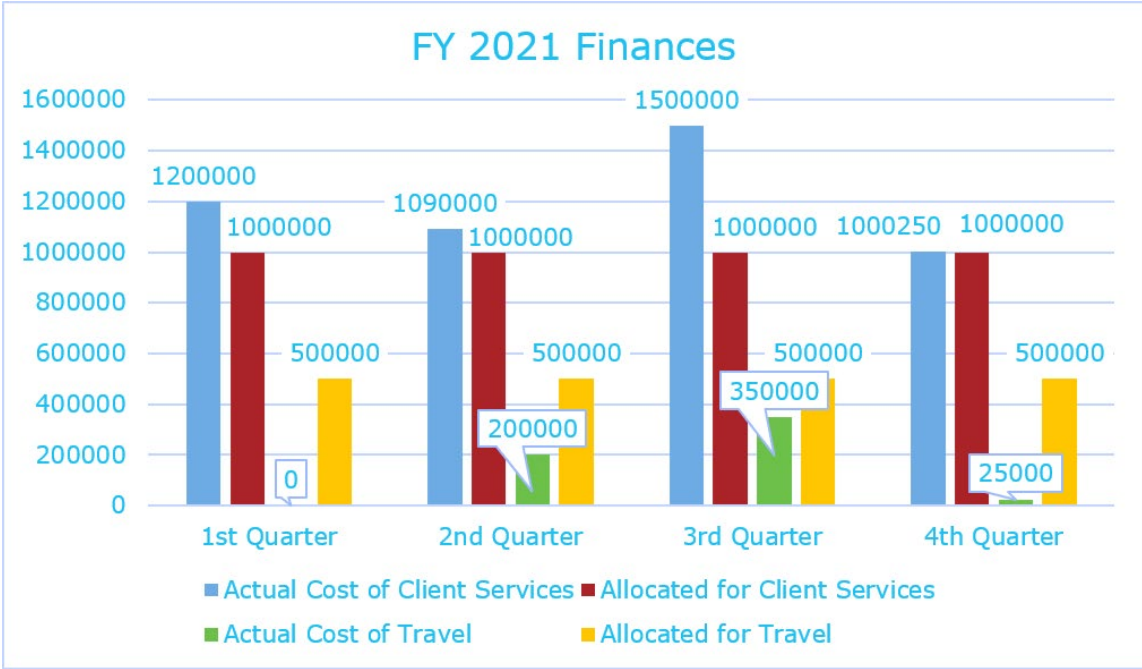
**Note:** On mobile devices, large bold text can still appear very small. The best practice is to make sure that all text has a contrast ratio above 4.5:1.

Some examples on a white background are:

- Pure red, RGB (255, 0, 0), has a ratio of 4:1. **I am red text.**
- Pure green, RGB (0, 255, 0), has a very low ratio of 1.4:1. **I am green text.**
- Pure blue, RGB (0, 0, 255), has a contrast ratio of 8.6:1. **I am blue text.**

These contrast requirements also apply to the text within a graphic, called "images of text" in WCAG 2.

**Example: The blue text in the image has insufficient contrast on the white background.**



**Note:** Sufficient color contrast ratios are set for most content in the HHS templates.

Examples of color contrast that you may need to check:

- Any chart that MS Word or PowerPoint offers
- Smart Art

## Color Contrast Tools

Color contrast tools tell you if the combination of colors used are accessible. Do not worry about remembering the ratios in the section above.

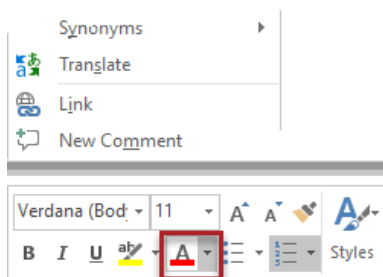
The [Colour Contrast Analyser](#) is a free download. Enter a ticket with the Help Desk to get it downloaded.

WebAIM has an informative article on, [Contrast and Color Accessibility](#).

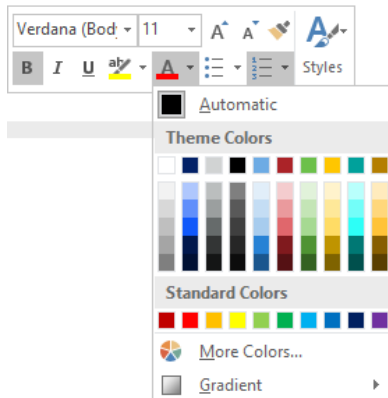
## How to Find RGB/HEX Values

Color contrast tools offer the option of using an eyedropper to identify a color. Different monitors can portray the same color differently. Because of that, an eyedropper may not correctly identify the color in the document. For consistent results, identify the color using **R**ed, **G**reen, and **B**lue or HEX values. The steps listed are an example to find the color of the text:

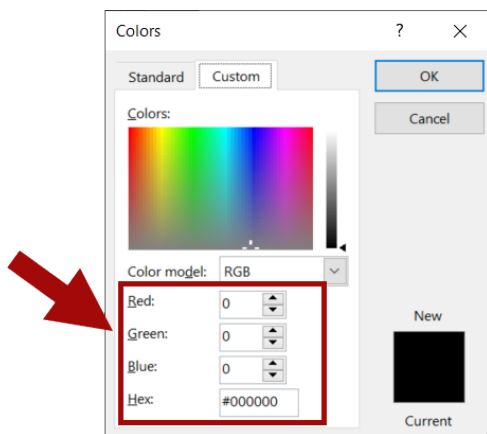
1. Highlight the text you need to check.
2. Right-click on the highlighted text. Two menu pops up. Click on the **Font Color** command that is in one of the menus.



3. The Color Palette menu pops up. Click **More Colors**.



4. A Colors window pops up. Go to the Custom tab.



5. Copy the **Red**, **Green**, and **Blue** or **HEX** values.

6. Open a color contrast tool and insert the value.

## Color Reliance

Color must not be the only way to present meaningful content or instructions. Using color alone to provide meaning creates difficulty for everyone.

## Bad Example

All statements in red below are false.

Accessibility checkers report all issues.

Only content posted to a website needs to be accessible.

It takes less time to create an accessible document when you start with accessibility.

There is a department at HHS that will make my electronic documents accessible.

## Good Example

You can emphasize text by using the color red, but it no longer holds meaning because these statements are easy to understand.

True

It takes less time to create an accessible document when you start with accessibility.

False

Accessibility checkers don't report all issues.

All content needs to be accessible.

There isn't a department at HHS that will make my electronic documents accessible.