**DOR** DEPARTMENT of

# About Disability Access Services

**Centralized Resource and Information on Disability Access**

Disability Access Services provides technical assistance and informational guidance to promote the civil rights and equality for persons with disabilities in the following areas:

Employment
Reasonable Accommodation
Physical Access of built environments
Access to private sector goods and services
Digital Access of electronic and information technology
Access to government programs, services, and activities

# Disability Access Services Website
## www.dor.ca.gov/disabilityaccessinfo

**Disability Access Services**
CA Department of Rehabilitation
721 Capitol Mall, 4th Floor
Sacramento, CA 95814

**DAS Email:** DASinfo@dor.ca.gov
Voice (916) 558-5755
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Telecommunications Relay Service 711

# Promoting an Accessible Future through Education and Information

# Introduction

It is estimated that up to 4% of the population relies on some sort of Assistive Technology to access electronic documents and Web pages. Assistive Technology includes; Screen Reading software, Refreshable Braille displays, and Screen Magnifiers. In the United States alone that equals 12.5 million people. If electronic documents are not created with accessibility issues in mind, they become very difficult if not impossible to read or navigate for this large number of people.

Accessibility to electronic documents is a right that is protected by both Federal and State law. Creating accessible electronic documents is important to ensure access to persons with disabilities and the company or agency is protected against legal action. Additionally, it is just good business, when a very large segment of the population can equally participate and take advantage of the products or services that the company or agency provides.

# Accessible PowerPoint Slideshows

The steps outlined in this paper will show how to make PowerPoint presentations more accessible if they are to be distributed electronically. It is often recommended, however, that a more accessible way of distributing PowerPoint slideshows is by exporting them into either Portable Document Format  (PDF) or HyperText Markup Language (HTML). Both of these other formats can be made to be more accessible for persons using assistive technologies, and they are smaller file sizes for downloading. Instructions on how to export to these file formats is provided later in this document.

# Usability of PowerPoint

PowerPoint can be an effective tool to use during live demonstrations, presentations or webinars, but is not the best file format to use when taking into consideration both accessibility and usability issues. When preparing a presentation, first consider developing a lengthier and more complete Word file to most effectively convey the information. Then from that document develop a PowerPoint slideshow highlighting 'bullet' points and an outline of the ideas in the live presentation.

# Step One: Establish the Slide Layout

PowerPoint contains a collection of pre-set accessible slide layouts. In order to ensure that the slideshow is maximally accessible use these pre-set templates when constructing the slideshow. The correct slide layout is probably the most significant step that can be taken to ensure that the slideshow will be accessible.

To use a pre-set slide layout, in the **Home** tab, choose **New Slide**, then pick one of the layouts that makes sense for that slide.
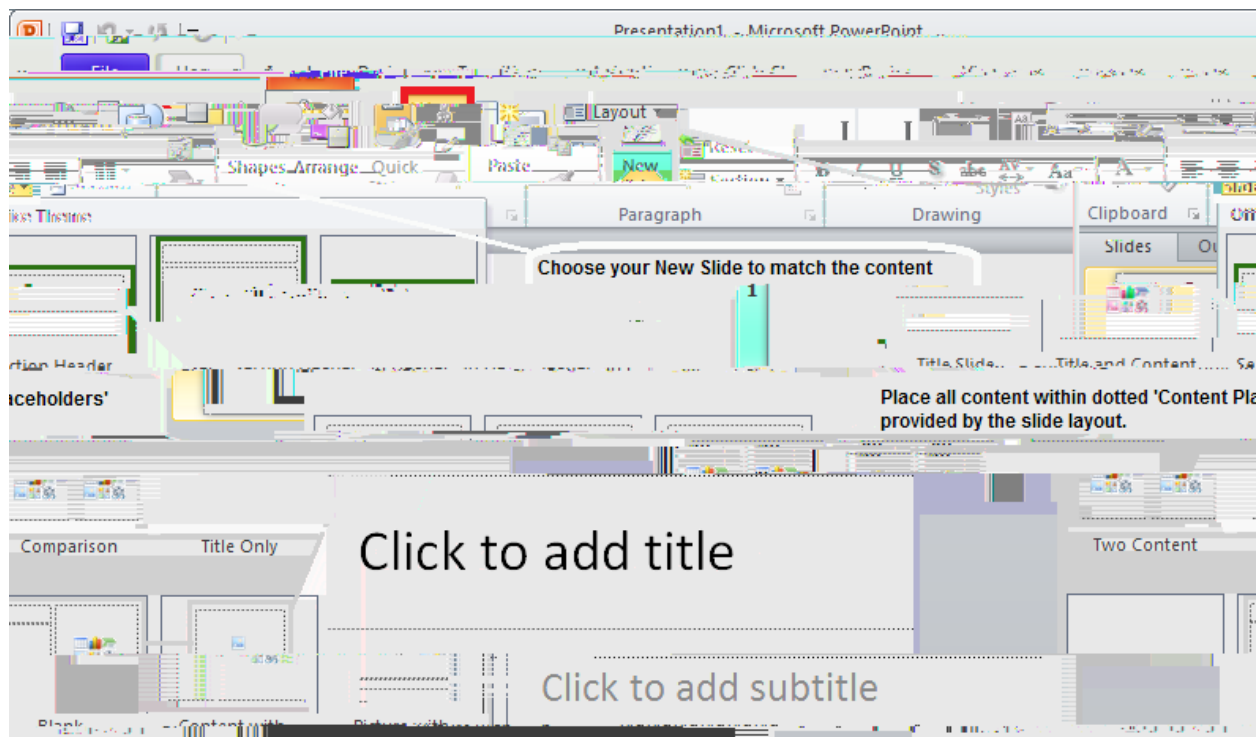
## Use of Text Boxes

I would recommend never adding Text Boxes. But, if you or your team has decided to add Text Boxes to a slide, make sure the reading order of the Text Box(es) makes sense. Text Boxes are always read by a screen reader after all content placed in the pre-existing 'Content Placeholders'. More than one Text Box will really complicate predicting their reading order.

Also know that text placed in Text Boxes will not appear in the Outline view therefore complicating converting your PowerPoint to HTML.

# Step Two: Other Slide Design Considerations

## Slide Design

Use the built-in designs offered in PowerPoint, however please know that not all of these design options have 'accessible' color contrast or other design elements. Please ensure that whatever design is chosen meets all the design considerations discussed in this section.

To access these design choices, go to the **Design** tab, and scroll through the options. The number of choices may be expanded by using the drop down menu highlighted below. From the Design tab menu, color selection and font choices can also be controlled.

**Figure 2: Slide Design option menu ribbon.**

If navigating via the Keyboard, go to the Design tab - Alt, G.

From there:
 H will access the drop down menu for more slide design choices.

## Use of Color and Contrast

Do not use color as the only way to convey content.

Provide sufficient color contrast on all of the slides. To ensure the contrast used is sufficient, refer to the free tools provided on the References page.

## Animations and Transitions

# Step Three: Use Slide and Outline Views

On the left hand side of a PowerPoint screen are two tabs: Slides and Outline. The Slides tab will display thumbnails of all of the slides with the design elements that have been added.
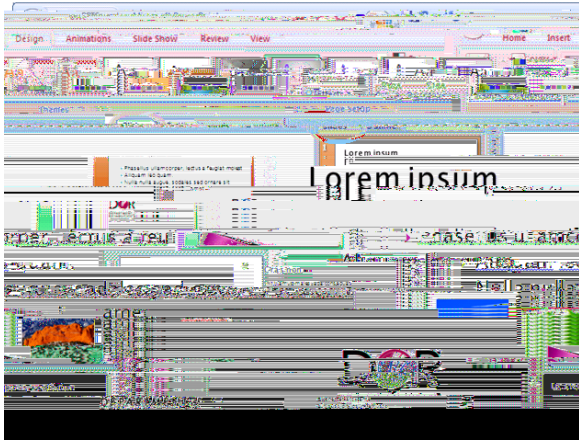


**Figure 3: Slides view of presentation.**

To ensure that the Title and body text are identified correctly in each slide, choose the Outline view. In this view the text and the order in which it will be read by a screen reader can be seen. Text can also be changed directly in the Outline view. Notice that tables, graphics and pictures will not show in Outline view. Any text not in pre-existing Content Placeholders (text placed in text boxes that are manually added to the slide) or in the 'notes' section will not appear in the Outline view. Text in text boxes will be read by screen readers, but not always in the correct order. Text in 'notes' can be read if requested, but will not be automatically read by a screen reader.
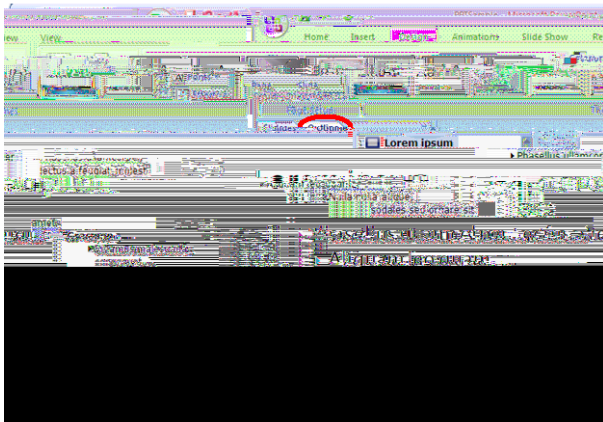


**Figure 4: Outline view showing only text**

## Create HTML slides or outline

Some versions of PowerPoint have a **Save As Web Page** option. This will NOT create accessible HTML content.

For anyone skilled in HTML and Cascading Style Sheets (CSS), consider creating slides in HTML.

To create an HTML version:

1. Select and copy the contents of the Outline panel (remember text in Text Boxes will not be in the Outline panel, nor will anything from your Notes section)
2. Paste it into an HTML editor such as Dreamweaver
3. Clean up the content
4. Add additional information to the outline, such as images
5. Create 'next' and 'previous' buttons and make sure the links are accurate