CTPS Accessible Document FAQs

The purpose of this document is to provide answers to frequently asked questions regarding the production of documents that are accessible to persons with disabilities. This document contains hyperlinks to additional information that can be found on the Internet and on the CTPS intranet site. In addition, some links also take the reader to other FAQs within the document that relate to the same topic. To activate any of the links in this document, press the Ctrl key and click on the link.

Contents

A. Accessible Document Policies and Procedures

1. **Q: What is accessibility and why do CTPS and the Boston Region MPO have to be concerned with producing documents that are accessible to persons with disabilities?**

   A: For CTPS and the Boston Region MPO, document accessibility encompasses the various ways in which the needs of persons with disabilities are accommodated so that they can participate in the transportation planning work conducted by these organizations. In the case of an individual who has limited vision, an accessible document might be produced in a large-size, easy-to-read font (typically a sans serif font). In the case of an individual who is blind, an accessible document might be produced in Braille, be formatted to interact with a screen reader, or be read onto tape or CD. The key to making the document and the information it conveys accessible is to provide an individual with the format that works best for him or her.

   CTPS and the Boston Region MPO are endeavoring to make all documentation (in both print and electronic form) accessible to the public, including persons with disabilities. Federal laws require all subrecipients of federal funding to comply with a number of laws and regulations that require all documentation to be accessible. The Commonwealth of Massachusetts has adopted the federal requirements and included compliance in its own Enterprise Standards. In addition, the contracts that fund the work done by CTPS and the MPO require compliance with Section 508 of the Federal Rehabilitation Act (which governs electronic media and documentation).

2. **Q: What is an accessible format?**

   A: An accessible format is simply defined as a format that meets the needs of its user. Documentation that appears on a website is considered to be accessible when it can successfully interact with a screen reader. The screen reader is a software application used by individuals who cannot read the computer screen due to full or partial blindness, some types of learning disabilities, or illiteracy. The screen reader will identify what is displayed on the screen and "read" it to the individual using audible text-to-speech translation, sound icons, or a Braille output device. CTPS uses an HTML file format for this purpose. Another accessible format used by CTPS on the website is a PDF document. Individuals with low vision can enlarge documents in both the PDF and HTML formats on their computer screens for online reading.

   If a document posted online has images (images include maps, tables, graphs, charts, and other types of figures and exhibits) that cannot be read by a screen reader, alternative text (also called "alt text") that describes the image is imbedded in the document. A screen reader can read this text to give the user a verbal description of what is represented in the image.

If a user prefers a different accessible format, such as a Braille printout or an audiotape, CTPS will provide it, upon request.

3. **Q: What visual characteristics do accessible documents have?**

A: Documents are easier for individuals with low vision to read if they are created with a sans serif font and minimal use of all caps, small caps, and italics. In addition, if background and/or text shading or colors are used, there should be a high contrast between the text and the background.

- **Print documents** are made accessible by enlarging them for easier reading by individuals with low vision.

- **Documents on the MPO website** are posted in both PDF and HTML formats. Individuals with low vision can enlarge both of these formats on their screen for easier viewing. In addition, HTML documents (and to some degree PDFs) can be read by a screen reader for people who cannot see the screen.

4. **Q: Do all documents need to be made accessible?**

A: Yes, with the exception of those that will be used only for internal purposes, all documents should be accessible. Although documents that are for internal use only (that is, documents that will not be sent to a recipient outside of CTPS and will not appear on the website) do not technically need to be accessible, authors should get in the habit of making every document accessible by starting with a CTPS template, as it may save time and effort in the long run.

5. **Q: When do I need to create documents in large-print, Braille, or audio recording, and should I always take a large-print version of handouts to a meeting?**

A: In general, documents only need to be produced in these formats in response to a specific request through which the individual can specify their particular needs in terms of accessibility.

All public meeting notices must inform potential attendees that, if they wish to receive handouts in accessible formats at the meeting, they should contact CTPS in advance to inform us of their specific needs. It is, therefore, not necessary to create large-print versions of all meeting hand-outs. However, if there is a reasonable expectation that someone attending the meeting will need a large-print version, you can produce copies that meet the minimum acceptable size for large print (Arial 16 point). If this is not sufficient, the individual can let you know, and, if possible, you can enlarge the document for them at that time, or you can send it to them after the meeting.

6. **Q: How do I make a print document accessible?**

   A: The CTPS document templates have been created so that the print version of a document can be easily enlarged to the minimum acceptable size for large print, or larger (Arial 12 point can be converted to 16 point if enlarged 134%).

7. **Q: How do I make a document that will be placed on the MPO website accessible?**

   A: You must use one of the CTPS document templates when you create your document. Embedded in each template are instructions for all of the steps that you, as the author, need to follow to ensure that your document can be made accessible. If your document will be posted on the MPO's website, follow the instructions in the Accessible Document Production Process: Flowchart and the Work Scope Development and Accessible Document Production Process: Flowchart.

B. Roles and Responsibilities

8. **Q: What is the author's role in the creation of accessible documents?**

   A: It is the responsibility of all authors to follow the procedures that will ensure that all of the documents they produce can be made accessible. ***This includes all content—text, alternative text, images, maps, tables, graphs, charts, figures, and exhibits.***

   For additional information on creating accessible documents, please see the Purpose, Methods, and Responsibilities: Memo from Executive Director, the Accessible Document Production Process: Flowchart, and the Work Scope Development and Accessible Document Production Process: Flowchart.

9. **Q: What role does the Graphics staff play in the creation of accessible documents?**

   A: It is the responsibility of the Graphics staff to produce accessible versions of the properly prepared documents provided to them by CTPS authors. The Graphics staff reviews each document to check for the proper application of styles and placement of tables, maps, figures, and exhibits prior to converting the document into PDF and HTML files. If the Graphics staff finds that the author has not applied styles correctly, the author will be asked to correct the problem(s) in the original source document.

   For additional information on creating accessible documents, please see the Purpose, Methods, and Responsibilities: Memo from Executive Director, the Accessible Document Production Process: Flowchart, and the Work Scope Development and Accessible Document Production Process: Flowchart.

10. **Q: How do authors, reviewers, and others involved in implementing the policy charge their time?**

A: Editing of the document and all associated alternative text for describing images, maps, tables, graphs, charts, figures, and exhibits will be charged to the project budget. The Graphics staff will charge their post-document-production accessibility work to a specified budget other than the project budget.

C. Creating Accessible Documents Using Templates and Styles

11. **Q: How do authors create accessible documents?**

A: Authors should ALWAYS use one of the CTPS templates that have been developed for many of the various kinds of documents produced by CTPS. The templates contain specific styles and other formatting that is necessary for creating documents that can be made accessible (in other words, readable by a screen reader or in a format that can be easily enlarged on paper or on the computer screen).

Not all document templates on the CTPS intranet site have been modified to incorporate accessibility features. This is a work in progress, and the IT&S Group is proceeding on this as expeditiously as possible. In order to provide you with clear guidance, the links associated with the templates have been colored coded to indicate whether the template incorporates all CTPS standards, including all of those needed for accessibility; incorporates the CTPS standards for appearance and content but does not yet fully support accessibility; or is obsolete and requires major updating. Instructions and other helpful hints and comments appear within each template.

While every effort has been made to perfect the templates and automate various processes for the author, *the author must still utilize the templates in a knowledgeable and purposeful manner*.

12. **Q: Where do I find templates for creating accessible documents?**

A: All of the templates can be found on the CTPS intranet site under Templates/Forms: Documents and Graphics. Document templates appear alphabetically on that page.

13. **Q: If I have downloaded a template from the intranet, can I use it to create multiple documents?**

A: No, each time you start a new document, you should download the appropriate template from the "Documents and Graphics" page on the CTPS intranet site, as the templates continue to be refined. Downloading the template before you begin will ensure that you are using the latest version.

14. **Q: How do I determine color combinations that look good in figures, whether I can use text colors and/or colors behind text, and whether there is enough contrast between the colors that I would like to use for figures, text, or background?**

A: You should always ask the Graphics staff, preferably before you begin your work, to give you advice on the colors and combinations of colors that are visually appealing and provide the correct amount of contrast for individuals with low vision.

15. **Q: Are we always limited to Arial and Trebuchet fonts?**

A: The CTPS templates use Arial for body text and Trebuchet for headings, as they are both sans serif fonts that are widely available across platforms and by most Web browsers. You are not necessarily limited only to the use of these fonts; however, at the very least, you should consult with Graphics staff before using other fonts. Graphics staff are best equipped to advise you on the availability of your desired fonts to all readers, as well as how the fonts fit within the established "look" of CTPS documents. Because CTPS templates are designed to save you time in the long run, it is advisable to start with them, even if you will be modifying the fonts they use.

16. **Q: Can I use all caps or italics?**

A: For individual words or short phrases, all caps, small caps, and italics can be used. However, for large chunks of text, it is preferable not to use them, as they are more difficult for individuals with low vision or certain types of learning disabilities to read.

17. **Q: Can the text in a document be formatted in multiple columns?**

A: No, using multiple columns does not adhere to accessibility criteria.

18. **Q: If I have a legacy document that I am updating to publish and distribute, how do I make it follow our current templates?**

A: There are two approaches available to you.

- **Approach 1:** If the document was created using Word styles and, in particular, if document headings were formatted using Word's heading styles, it may be easiest to import the current CTPS template styles into the document. Instructions for Using Styles from CTPS Templates in Other Documents are available on the CTPS intranet site. Bear in mind that this approach still requires manual re-creation of page-level formatting such as margins, headers, and footers. In reports especially, headers and footers can be quite complex to set up properly, so the second approach, below, may turn out to be easier.

- **Approach 2:** Copy and paste the text of your original document into the appropriate template. After you have finished pasting in the text, you should position the cursor inside each paragraph (it is not necessary to highlight the entire paragraph) and apply the appropriate style from the template document styles.

19. **Q: What if my document requires a style that is not in the template (for example, a multilevel list with different bullets, or different numbering styles)? Can I update the styles in the template myself?**

   A: Word *lists* are a bear to work with—very touchy indeed. It is recommended that you seek the help of IT&S staff if you need to add a style for a bulleted or numbered list. If you want to change the appearance of other types of text, you should be able to modify or add to the template's Word styles yourself.

20. **Q: Are there some other documents that cannot be made fully accessible, and, if so, what should I do when creating such a document?**

   A: In some instances, documents cannot be made fully accessible. For example:

   - Currently the TIP tables must conform to formatting that is defined by MassDOT. This formatting is not fully accessible or navigable by the screen reader. Because this formatting cannot be changed by CTPS, we have developed a way to add alternative text in the first cell of the table that cannot be seen by sighted individuals, but that can be read by a screen reader.

   - Microsoft Project Gantt charts cannot be made accessible, nor can the text in a Gantt chart be exported in an accessible way to PDF or HTML. However, an accessible table can be produced from the Gantt chart and referenced by it.

   - Sometimes a form that the MPO is required to use by a federal agency cannot be made accessible (for example, the FTA Title VI Certifications and Assurances form). When this is the case, the text of the document in which the form appears should inform the reader that the form is not accessible and provide the reader with instructions regarding who they can contact for assistance.

   As is illustrated by these examples, when faced with a document that cannot be made fully accessible, we will determine and use the next best alternative in terms of providing accessibility. If you have questions about specific documents and whether and how they can be made accessible, please consult with Robin Mannion or Liz Moore.

21. **Q: What should I do if a client wants me to post a document on the MPO's website that is not accessible?**

   A: It is our policy not to post documents from other sources that cannot be made accessible. If requested to do so, we will work with the client to provide guidance on how they can make their documents accessible.

   Sometimes documents from other sources that are not accessible will be presented and discussed at an MPO meeting. In such cases, the documents will not be posted on the MPO's website. They will be sent via email to MPO members for their review before the meeting and will, if requested, be enlarged for individuals who may be attending the MPO meeting.

22. **Q: How do I format text in my document that has a particular appearance for sighted readers but for which there is no style in the CTPS templates (for example, a long quote that is indented at both margins or a paragraph with a hanging indent)? Will it be accessible?**

   A: Styles may be added to Word documents by authors who need formatting that is particular to their document. For example, if you have evaluated multiple intersections for a report and include a recommendation for each intersection styled as a hanging-indent paragraph in italics, you may create a new style to help in formatting each occurrence. (However, you should first consider whether your repeated element can be implemented with one of the heading levels available in the templates.) Although the new style will aid comprehension for sighted readers, authors should be aware that screen reading software will not distinguish between the new style and plain text, so accessibility will not be improved for non-sighted readers. Therefore, don't rely solely on visual formatting to convey the context of content in your document. Spell out the context in the document's text. In the example given above, "Recommendation:" could precede each recommendation. A long quote could be introduced as such ("…according to the following extract from the *MUTCD*:").

23. **Q: What specific aspects of a document ensure that it is accessible when used with screen reading software?**

   A: All headings and lists (numbered and bulleted) must be designated as such by applying the specified Word style so that the screen reader announces them appropriately. In addition, all embedded graphics that are not purely decorative should have alternative text so that the screen reader can announce the function and purpose of the graphics. Tables should follow table guidelines so that the screen reader can read the applicable column and row headings of any cell in the tables. Finally, the title of the document should be copied from the visible text of the document and entered in the document properties (found under the "Info" section of the "File" tab, as shown in the figure below) so that the screen reader can properly announce the document title. If you follow the instructions provided

in the document templates carefully, all these aspects will be correctly addressed.
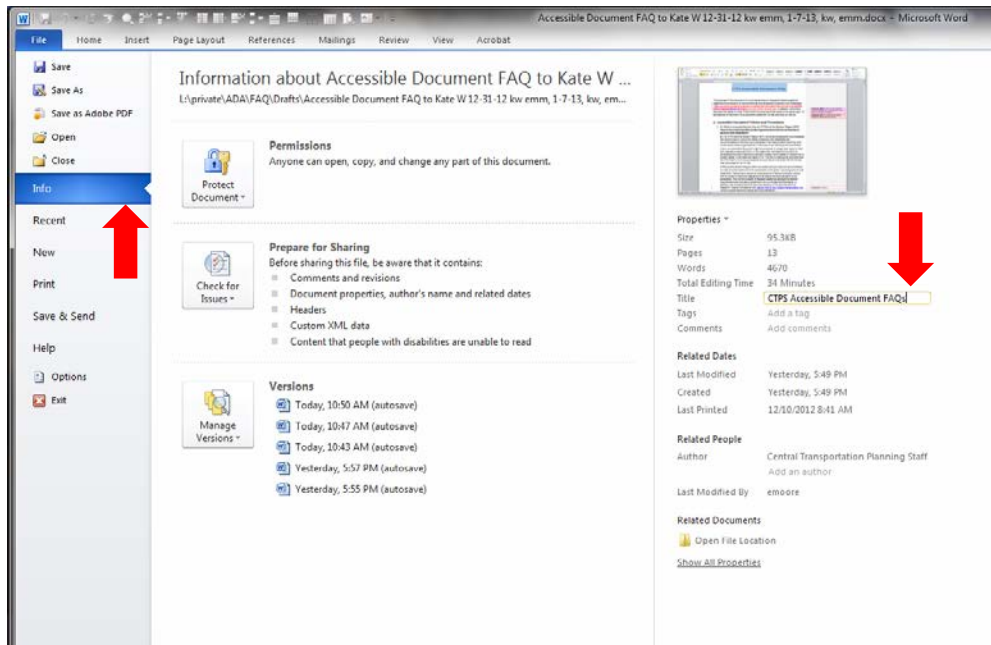
D. Images, Maps, Tables, Graphs, Charts, Figures, and Other Exhibits

24. **Q: How do I make images, maps, tables, graphs, charts, figures, and other types of exhibits accessible?**

A: Some simple tables can be read by a screen reader; however, when using most images **(for simplicity, the word "image" will be used for all of the categories mentioned in the question)** in an accessible document, alternative text must be supplied for each image *unless the image is merely decorative or the text of the main document fully describes the image or, in the case of tables, unless the table has fewer than ten rows and ten columns*. Screen reader software generally announces the presence of any image and reads aloud accompanying alternative text (which is invisible to the sighted reader) to convey the purpose and/or content of the image.

25. **Q: How do I write alternative text?**

A: Generally speaking, alternative text should:

- **Avoid redundancy:** Do not repeat an image title or caption (assuming that it is in Word and occurs above the table or figure), or other nearby text that already describes at least part of the purpose of the image.

- **Be succinct:** Omit extraneous information that is not needed to convey the purpose of showing the image. If the author believes that the image needs

a long explanation (more than 20 words), the explanation should be in the text of the main document.

- **Convey in words the same information that is communicated by the image:** Think of the alternative text as a replacement of the image rather than simply a description of its appearance. The alternative text should represent the purpose and function of the image in the context of the document. Why is this image important and what does it "say"?

  For example, an image may be used to illustrate the growth in population over a decade. The main document text may state "Below is a chart illustrating the growth in population over the last decade. It shows that there has been an annual increase of 3% during the first five years, while the second half of the decade had lower growth, at 1% per year." If the main text does not include this information, it must be provided as alternative text.

- **Describe the general organization of a table:** For example: "The MPO town at the beginning of each row is followed by columns of population and employment data."

26. **Q: How do I specify alternative text for images and tables in Microsoft Word?**

A: In Microsoft Office (Word), alternative text can be inserted by right-clicking on the image or table, selecting "Format Picture" or "Table Properties" or "Object Properties" respectively, choosing the "Alt Text" tab in the dialog box, and then entering the alternative text in the "Description" box provided (shown in the figure below).
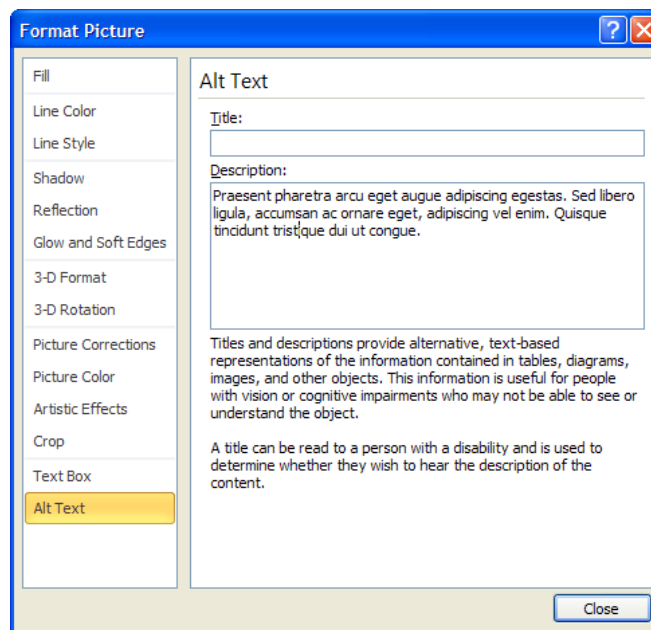
27. **Q: How do I insert alternative text for images that are NOT in a Microsoft Word document, but will be added when the PDF is created?**

A: If the images requiring alternative text are to be inserted in a Word document by Graphics staff rather than by the author, the author should enter the images' alternative text in the main document text following the images' place-holders.

If the images requiring alternative text will not be inserted into a Word document, but will be inserted into the PDF file (such as a full-page map or table), the author should place the alternative text on a blank page within the Word document where the image will be inserted. The author should also provide the name of the file that is associated with the alternative text.

Alternative text is a very important part of making a document accessible. Consult the Graphics staff if you need help using Microsoft Word to insert alternative text. For additional guidance on writing alternative text, please speak to Liz Moore or Robin Mannion. Additional information can be found on the [WebAIM website](#).

28. **Q: How do I create tables that can be read by a screen reader?**

A: First of all, if your table has more than ten columns or ten rows, you should [write alternative text](#) and [insert the alternative text for the table](#). Screen readers read tables in rows from left to right and then from top to bottom, reading the text as if no cell boundaries are present. Listeners will be disoriented if rows do not contain equal numbers of columns (as happens if some cells have been merged) or if some cells are empty (screen readers do not pause for empty cells or announce them). Therefore you should try to make your table a simple grid, with equal numbers of columns in each row and equal numbers of rows in each column. You should also supply content for each cell. If it is very important for visual clarity to leave some cells blank, consult Graphics staff for techniques to meet both demands simultaneously.

Graphics staff will make simple grid tables both readable **and navigable**: that is, the screen reading software will be able to identify, on demand, the applicable column and row headings for any cell in the table, in addition to being able to read the contents of all rows sequentially. The table below can easily be prepared for navigation by individuals using screen reading software.

Table 1

Example of a Table That is Accessible to a Screen Reader

Travel Mode	No-Build	Alternative 1	Alternative 2	Alternative 3
Automobile	8,278	8,878	8,770	8,579
MBTA bus	753	566	1,254	1,001
Rapid transit	650	879	708	889
Commuter rail	na	na	101	99
Total	**9,681**	**10,323**	**10,833**	**10,568**

na – not applicable

The most common use for merged cells within tables is to create multilevel row or column headings to avoid repeating information that is common to several row or column headings. The table below extracts words common to the last four column headings and places them in a single merged cell spanning four columns in the first row. For tables to be accessible it is preferable **not** to do this but instead to ensure that each row or column heading is fully contained within one cell for each row or column.

Table 2

Example of a Table that is *NOT ACCESSIBLE* to a Screen Reader

| Travel Mode | No-Build Trips | Alternative 1 Trips | Alternative 2 Trips | Alternative 3 Trips | Alternative 3 B | | | |
					Trips	Mode Share	User's Cost/ Mile	Emissions of X
Automobile	8,278	8,878	8,579	8,579	6,186	92.5%	$2.50	5.25 kg
MBTA bus	753	566	1,001	1,001	1,049	4.5%	$0.25	1.00 kg
Rapid transit	650	879	889	889	1,014	1.5%	$0.50	.75 kg
Commuter rail	na	na	101	101	99	0.5%	$0.75	.90 kg
Total/Avg.	**9,681**	**10,323**	**10,570**	**10,570**	**7,334**	**100.0%**	**$1.00**	**9.15 kg**

Another use of merged cells is in "category" header rows. For example, a table showing demographic information for the towns in the Boston Region MPO area might group the towns by subregion and include a row above each group of town names announcing the name of the subregion in a single merged cell. This construction is also very difficult to make accessible. Instead, consider breaking the table into separate tables, one for each group or category, with table titles

adjusted accordingly. If you have any difficulty figuring out how to break complex tables into simple ones, you can seek help from the Graphics staff.

29. Q: Do I need to write alternative text for the exhibit tables in work scopes?

A: No, the tables that are automatically generated from the CTPS work scope exhibit builder tool are accessible for use with a screen reader and do not need alternative text.

30. Q: Should I format tables with lines separating the rows and columns or a light color background in every other row or column?

A: When you judge that the reader will need help in not losing track of a row, you may need to give the rows horizontal borders, provide more space between the rows, or shade every other row. You should not insert blank rows or columns to add spaces between rows and columns, respectively, as doing so causes problems for the screen reader.

Vertical borders should be used only when you think the reader would have trouble grasping the organization of the table without them. If it is at all possible, avoid the use vertical borders to provide separation between columns of data that are too close together. Instead, reformat the table to solve the problem.

For more information regarding the formatting of tables, see the "Documents and Graphics" page on the CTPS intranet site.

31. Q: How do I make my Microsoft Project schedule (Gantt chart) accessible?

A: If you have any tasks or activities in the project that occur on single days (for example, a recurring meeting), edit the task description to summarize that schedule with words (e.g., "RTAC meetings monthly on the second Monday"). Then use your mouse to highlight the first three columns of the chart (the task description column, the start date column, and the end date column) for all of the task rows. Copy the highlighted cells and paste them into a Word document as a table. The Word document can be further edited to adjust the formatting and to add any necessary title or other text. Then it should be converted by Graphics into HTML. In the page header of the Microsoft Gantt chart, add text that explains that a fully accessible version of the schedule is available and provides the URL of the HTML page that Graphics created. Microsoft Project will automatically make the URL an active link.
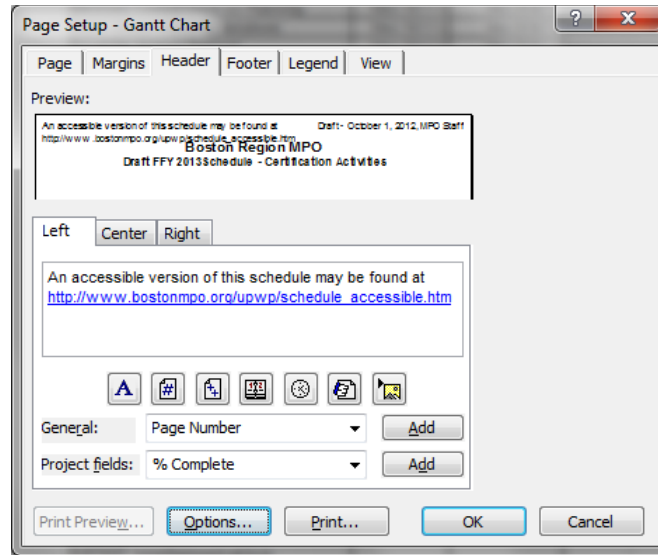
32. Q: Should all text on a page be oriented in the same direction?

A: Text should generally be oriented parallel to the top of a page unless it is rotated for aesthetic purposes. However, column headings in a table may be rotated sideways (that is, turned 90 degrees counterclockwise) if necessary to make the table fit on the page.

33. Q: If I have images in my report that are there for aesthetic purposes only, do I need to provide a caption and/or alternative text?

A: Alternative text should be provided for all images. If the image is decorative only, the alternative text can be a null value or it can be a simple description such as "Photograph of an Orange Line train." You should consult with Graphics if you are unsure about what is needed.

34. Q: What are the general rules for formatting maps?

A: In general, you should use the same fonts and font sizes for any text on a map that you would use for the text portion of a Word document. However, if 12-point Arial is too large to fit on the map, you should use the largest size that will fit. When doing so, you should try to make any thematic text (that is, the text that is most important to the purpose of the map) as large as possible, while placing less emphasis on the background or reference text (for example, the names of municipalities). A map's legend should always be oriented parallel to the top and bottom of the map (i.e., parallel to the title box.)

The "Documents and Graphics" page on the CTPS intranet site also has instructions for producing maps, including:

- Standards and Procedures
- Graphics and Mapping: Dos and Don'ts

- [ArcGIS Templates](#)
- Frames for Full-Page Figures (including maps) in PowerPoint

E. Posting Documents on the MPO's website

35. Q: Should I email my document to Graphics when I am ready for them to make it accessible?

A: No, as is indicated on the [Accessible Document Production Process: Flowchart](#) and the [Work Scope Development and Accessible Document Production Process: Flowchart](#), you should move your document into the prescribed folder on the network and then email all Graphics staff to alert them that the document is in the folder.

36. Q: Can anyone besides IT&S staff post documents on the MPO's website?

A: Yes, once documents have been converted to HTML and PDF and verified for accessibility by Graphics staff, the Certification Activities staff has the responsibility of posting documents that are associated with specific MPO meetings. For documents that are posted on the MPO website under "MPO/CTPS Reports," the author should notify IT&S staff when the document is available for posting. For more details, see the [Accessible Document Production Process: Flowchart](#) and the [Work Scope Development and Accessible Document Production Process: Flowchart](#).

F. Miscellaneous

37. Q: I didn't find my question in this FAQ list. Can it be added?

A: This FAQ list is intended to be as generally helpful as possible for staff members facing the task of preparing their work to be made accessible. Please contact Liz Moore to suggest inclusion of your question in the FAQ list and to obtain an answer.

G. Glossary

Accessible format

An accessible format is defined as a format that meets the needs of its user. For documents, that means a format that can be accessed by individuals who have low vision or who are blind. Text and documents that appear on a website are considered to be accessible when they can successfully interact with a screen reader for the blind or can be enlarged for individuals with low vision. Braille and audio recordings are also accessible formats for the visually impaired.

Alternative text

If a document posted online has images (images include maps, tables, graphs, charts, and other types of figures and exhibits) that cannot be read by a screen reader, alternative text (also called "alt text") that describes the image should be provided. A screen reader can read the alternative text to give the user a verbal description of what is represented in the image that cannot be otherwise made accessible.

Sans serif font

Serifs are the small lines tailing from the edges of letters and symbols in some fonts, such as **Times New Roman**. San serif fonts, like **Arial**, do not have these and are therefore easier for individuals with low vision and some types of learning disabilities to read.

Serif

Serif   San Serif

Screen reader

A screen reader is a software application used by individuals who cannot read the computer screen due to full or partial blindness, some types of learning disabilities, or illiteracy. The screen reader identifies what is displayed on the screen and "reads" it to the individual using audible text-to-speech translation, sound icons, or a Braille output device.

Styles

Microsoft Word allows the user to specify styles that automatically apply formatting to text elements in a document, such as headings, body text, and numbered and bulleted lists. Documents that are produced using styles are easier to make accessible using a screen reader, as they provide cues about the type of text that is being read. For example, if a "Heading 1" style is applied to a top-level heading in the document, the screen reader will indicate that the text being read is a top-level heading. Without styles, the screen reader will read all text continuously without giving the listener any idea about the level (heading levels, body text) of the text. In addition, the use of style elements in Microsoft Word creates the necessary tags needed by screen readers to navigate a document.

Template

> A template is a master document that has built in styles that specify the text elements, fonts, and other formatting. When a document is created using a template, the desired styles can be easily and consistently applied so that all documents made with that template have a standard look.

KQ/EMM/emm