



Transcript: Tagging Map PDFs

Hi, my name is Brad Neuhauser. I'm with the State of Minnesota Accessible Maps Community. This presentation is about basic tagging of map PDFs with the professional version of Adobe Acrobat.

Before we get started, know that only a professional version of Adobe Acrobat can tag. Acrobat Reader cannot perform these functions. This presentation uses Acrobat Pro DC. It is recommended that you save a new version of your map document before you begin and save after each major step. There is no undo button.

Once you've opened your map document in Adobe Acrobat Pro, open the Accessibility Tool. It should be in the Tools panel to the right. If it isn't, you can add it from Tools tab in the top bar.

Next, open the Reading Order panel located at the bottom of the Accessibility Tools. If you are working with a document that is not already properly tagged, you might want to clear the page structure. The Clear Page Structure button in the Reading Order panel will clear all tags from any visible pages. A clean map can make tagging easier.

Select the map by dragging your cursor around the entire map. Include all the visual map elements: map legend, scale, etc. Do not include the map title.

Once the map is selected, the map features will likely appear as separate polygons. Choose Figure from the Reading Order panel. It will tag everything you selected as a single figure.

Each map should have a unique identifier. This can be a major title or a figure title if it is part of the larger document. It needs to be tagged separately from the map. Select the text by making a box around it with your cursor. Then select the appropriate heading or text/ paragraph tag from the Reading Order panel. The tag you select depends on the structure of your document. Repeat with other descriptive text such as captions.

Next, you'll need to check the tags. Open the Tags panel by selecting the tag icon located on the left side of your screen. You may need to select the arrow to make the icons visible.

The Tags panel sets the order that assistive technology, like screen readers, will read the document content. If you do not have a tag icon, right click the leftmost bar and double click the tags icon.

In this example, the title is tagged as Heading 1, text as a Paragraph, and the map as Figure. If necessary, reorder the tags so that the first thing to be read is first on the tag tree, followed by the next item to be read, and so forth. If you expand the arrows next to the tags in the Tags panel, you can see the associated content. In the case of the map figure tag, paths, polygons, and labels are picked up in PDF exports from GIS applications. You won't see this with maps exported as images.

Next, add alt text to your map images to describe the map for screen reader users. Back in the Accessibility tool, select Set Alternative Text. Then select OK when the dialogue box appears. The Set Alternate Text dialogue box will find any images in your document that lack alternative text. Simply click the arrow button to scroll through them.

The current image that is highlighted in the Set Alternate Text dialogue box is indicated in the document by a blue shaded box. Enter the map's alternative text into the dialogue text box. Select the arrow button above the text box to move to the next image. For tips on creating alt text for your maps, see the Alt Text Tips module.

If an image is merely decorative and not relevant to the message, select the Decorative Figure check box in the dialogue box. The figure will be ignored by assistive technology. Decorative figures include items like borders, banners, decorative graphics, and repetitive logos.

The next step is to enter the document properties. Document properties provide basic information about the document such as title, author, subject, and keywords. This is what search engines used to find your document on the web.

You can access the document properties by going to File and then Properties. Or use the keyboard shortcut CTRL+ D. Under the Description tab in the Document Properties dialogue box, you should always enter the title and author, but subject and keywords are also helpful.

The title should match the title of the document. It's usually the first thing a search engine looks for. The author is usually the agency or division. It will depend on agency policy. The subject helps to summarize what the document is about. Keywords are anything that someone might use in a search. Be sure to include alternative or former names things are known by.

Next, we need to set the name that shows in the tab at the top of your document. In the Document Properties dialogue box, open the Initial View tab. Under the Window Options section, you'll find a drop-down menu labeled Show. Choose Document Title. It is more recognizable than a strange file name. As you can see in this example, upon selecting Document Title in the initial view, the document is now visually labeled in the top ribbon by the document title instead of the file name.

You also need to select the appropriate language in the Document properties. This ensures proper pronunciation for screen readers. In the Document Properties dialog box, open the Advanced tab. Under the Reading Options section, you'll find a drop down menu labeled Language. Select the Document language. In this example, it is English.

Finally, you need to run an accessibility check to see if there are any accessibility errors. To do this, select the Accessibility Check option in the Accessibility Tools. An Accessibility Checker Options dialogue box will open. Select Start checking an accessibility checker panel with the results of the accessibility checker will open to the left of your document.

Here are some tips for fixing a few common accessibility errors that appear in the checker.

- Logical reading order is the order in which the document will be read. Review in the Tag tree.
- Primary language fails if it wasn't selected in the metadata. You can find this setting in Properties under the Advanced tab.

- Title fails if it wasn't entered into the metadata. This is also in Properties under the Description tab.
- Color contrast needs to be manually checked. See the Map Design Guide for tools to use during map creation.
- The alternative text error means images are missing all text.

Go back and fix things. Save and run the checker again. There could be more errors, but that is another course.

We'll conclude with some troubleshooting tips for tagging maps in Adobe Acrobat Pro.

Export without layers. Layers mess with PDF accessibility. If you need layers for any reason or a Geo reference PDF, post a version of each.

Geo referenced PDFs (Geo PDFs). These cannot be tagged without removing the spatial properties. Complete the document properties. Post two versions where appropriate.

Overlapping elements. Try to design items for easy selection: in rectangles that don't overlap. If they do, select larger outer items first, then smaller items within. Delete any extra tagged elements that pop up.

Scanned items. If you can't select anything, your map is likely scanned or exported as an image. Run the scan and OCR tool (Optical Character Recognition). This will try to recognize the items as text or images and give you something to tag.

Thank you for joining me today as we discussed tagging PDF maps. For more information on map accessibility, visit the Minnesota IT Services Map Accessibility webpages at mn.gov/mnit/about-mnit/accessibility/maps.