

Transcript: Exporting Tips for Maps

Hi, my name is Brad Neuhauser. I'm with the State of Minnesota Accessible Maps Community, here to give you some tips on exporting maps.

There are two main ways to export a map. The first is as an image, second is as a PDF. Each have their pros and cons, and your choice will depend on the situation.

Exporting to image is preferred when inserting a map into a document. Alt text is then added to the map with document programs like Microsoft Word and Adobe InDesign.

An advantage of this option is that tagging is maintained through editing and export. A disadvantage is that map text is converted to pixels so that it is not readable by assistive technology. Important text must be available through the document.

When exporting to PDF, information, such as text in the map, can be tagged. Accessibility is applied with a professional version of Adobe Acrobat (not Reader).

An advantage of this method is that it maintains the vector quality of the map and the figures and text are taggable as content. A disadvantage is that if there is a change to the master document, it must be re-exported and re-tagged from scratch. Additionally, map layers can interfere with tagging.

Let's compare the resolution between the two options. For images, export quality is dependent on resolution. It can get blurry when zoomed in and text cannot be read because it is converted to pixels. PDF exports maintain vector art that can be zoomed into indefinitely without loss of clarity. Text can be selected and read by assistive technology.

If you choose to export your map as an image, you have two main file choices: JPG and PNG. Exporting to either of these formats will give you the same general quality, but you may see differences in file size.

JPGs handle photos better: images with continuous tone and gradations of color, such as aerial photos. They also tend to have better file size compression.

PNGs handle flat color better: graphics like map lines, symbols, graphs, charts and texts. If you have a mix of images, export to both PNG and JPG and choose the one with the smaller file size.

If you choose to export your map to PDF from GIS software or Illustrator, you'll have a couple advantages. Vector graphics maintain quality and text can be read by assistive technology.

It also comes with disadvantages. All the attributes come with the map, creating larger files.

This image shows a complex map with a lot of lines and colors that give extra information. If you look under the figure tag, it includes many path tags. Each of these paths is a shape or line in the map. The list goes on into the hundreds. When looking at a PDF map in Adobe Acrobat, you'll see all the paths highlighted with blue lines. The map labels are also picked up and grouped together as run-on text. All this information can make tagging difficult and add to the file size.

When exporting to PDF, do so without layers when possible. Layers can turn off unexpectedly when tagged, making elements disappear.

To see if tagging turned off on any layers, open the layers panel by selecting the layers icon on the left side of Adobe Acrobat. An eyeball appears in the checkbox to the left of the layer name if it is visible. The checkbox will be empty if the layer is turned off.

Note: If you need layers for your purposes, it is the best practice to publish two versions, one of them being unlayered and accessible.

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