ENGW 1111: Accessibility by Design Michael McCluskey Accessibility in Knight Lab StoryMaps Developed by: Anna Zhang, DITI Research Fellow

Accessible Design

Data visualizations, including StoryMaps and infographics, should be accessible to everyone in your audience, including readers with disabilities. This usually entails considering accessibility for the following categories: visual, auditory, physical, and neurological. Keeping these categories in mind, you can then consider how your audience will interact with your content and identify any aspects of your content that may serve as barriers to accessibility. This handout will discuss best practices for creating accessible StoryMaps.

Choosing Color and Formatting Content

- When choosing a color palette, a higher color contrast between the foreground and background will make the text more accessible for vision-impaired readers.
- Avoid using images with low color contrast, or using red and green as colors for differentiation, and avoid red-to-green palettes. These may create barriers for colorblind readers.
- Check how your map and graphics look in grayscale to see if you are relying on hue rather than color contrast for differentiation. This can be tested using the Monochromacy option in the Colorblindly Chrome extension linked below.
- While there is no set length for how long a paragraph should be, try to avoid using either huge blocks and paragraphs or single lines of text in your descriptions, as they can create a choppy visual effect and be disorienting to readers.
- Limit the number of visual categorizations, such as map icons, to no more than three or four.

Images and Embedded Media

- Avoid using images that contain text, especially text that provides relevant information. The text cannot be picked up by screen readers and may be difficult to view depending on the reader's bandwidth.
- You can provide a description of images through captions or alt text. While alt text allows you to provide a brief description of an image, more detailed image descriptions can be provided through captions.
- If you are graphs or diagrams, your captions should include complete text equivalents to the information being shown in the graphs/diagrams.
- When embedding videos, try to select videos that have audio captions or transcripts available.

- If no audio captions are available, include a description of what information is presented in the video.
- When available, you can link to a transcript or include it in the description.

Resources

Note that using these tools on your StoryMap may show you accessibility issues that are beyond the scope of design choices you can make on the Knight Lab StoryMap platform. These tools are useful to check accessibility features and make accessible design choices when creating digital projects.

- Colorblindly allows you to check if your color palette is accessible for colorblind readers:
 - https://chrome.google.com/webstore/detail/colorblindly/floniaahmccleoclneebhh mnigdfiigg
- Webaim Contrast Checker allows you to input a foreground and background color value and check for sufficient color contrast:
 - https://webaim.org/resources/contrastchecker/
- WAVE Web Accessibility Evaluation Tool: https://wave.webaim.org/
- Northeastern Library's Resources on Accessible Design: https://subjectguides.lib.neu.edu/dataviz/accessibility/tutorial

Visit the Bad Design StoryMap and try to find as many inaccessible design choices as possible. What design choices could you make to improve accessibility?

• Link to the Bad Design StoryMap: https://uploads.knightlab.com/storymapjs/20ba7ae2b66fcabb411500e7b4ab6b29 /bad-design-storymap/index.html

	Identify an inaccessible design on this slide	What design choice would you make to improve accessibility?
Title Slide	Example: Low contrast font against the background color	Change the background color to a dark, neutral color OR Change the font color
Slide 1: Northeastern University		
Slide 2: NU Toronto		
Slide 3: NU London		