

## **Introduction**

The purpose of this report is to discuss the design process and qualitative evaluation of two visualizations on disability issues in the United States. The visualizations include an interactive map displaying the percentage of people with disabilities in each state and a timeline showing the number of ADA Title III lawsuits filed each year.

## **Learning Objectives**

The primary learning objectives of the visualizations are to provide an understanding of the commonality of disabilities across different states and the legal and policy changes related to disability care in the United States. The interactive map aims to convey that disabilities are common in the United States and highlight the differences between states, while the timeline illustrates the increasing number of lawsuits related to ADA Title III and the trends in legal and policy frameworks related to disability care.

## **Design Process**

To create the visualizations, I started with initial sketches of the map and timeline to establish the basic layout and features. I then researched and gathered data to use for the visualizations. For the interactive map, I used data from the United States Census Bureau and incorporated it into a web-based map using the altair cloud. I also added a click feature that displays the exact percentage of disabled people in each state in the form of a pie chart. For the timeline, I add the rate of increase of each year in the plot. The number of lawsuits is plotted as a bar chart instead. The original plot in the initial sketch only contains the number of lawsuits, which can't show how much different the number is between each year.

## **Qualitative Self-Evaluation**

Overall, I feel that the visualizations effectively convey the intended information and achieve the learning objectives outlined above. The interactive map provides a clear and engaging representation of disability prevalence across different states, and the click feature allows for easy access to exact percentage values. The timeline effectively illustrates the increasing trend in ADA Title III lawsuits over time and provides insight into broader legal and policy changes related to disability care.

However, I recognize that there are areas for improvement in both visualizations. For example, the interactive map could benefit from additional context and information about the types of disabilities represented and relevant policies or programs in each state. The timeline could also be enhanced by adding annotations or labels for key events related to disability rights.