For my final project, I chose to create a narrative visualization looking at the trends in CTA ridership from 2010 to 2025.

**Messaging:** A few months ago, it was announced that the CTA was facing a $800 million budget gap that if not addressed, could result in cutting services by 40% and even eliminating some bus and rail lines. The proposed cuts would primarily effect southside serving lines in the city. As a result of this, I wanted to tell a story exploring CTA ridership data to quantify the effect that these cuts would have on Chicagoans who rely on the CTA for daily transportation. I want to showcase just how many people would be affected by the proposed CTA cuts.

**Narrative Structure:** I chose to follow the martini glass structure. In my narrative visualization, the first three scenes are completely author led, and the user does not have the ability to explore or manipulate the data. In the last scene, the user can explore the data for specific rail lines and years and see how monthly ridership peaked based on their filters.

**Visual Structure:** Each scene follows the same format of a line chart with total monthly riders on the y-axis and dates on the x-axis. I chose to follow the same graph layout for all the scenes so that it is easy for the user to transition between scenes and fully understand how the data changes from scene to scene. In each scene, I chose a combination of colors and annotations to highlight important data. Since the CTA rail lines are named by color, I chose to color their ridership data by the color of the line so that is clear to the viewer which line is being depicted. Since the goal of my project is to tell a story on how many people would be affected by the CTA cuts, I chose to add annotations to show the peak ridership and ridership differences to emphasize how many Chicagoans would be affected. Since I kept the same graph layout for each scene, it is easy for the viewer to tell what data changed between scenes.

**Scenes:** There are four distinct scenes in my narrative visualization. The first scene looks at overall CTA ridership from 2010-2025. The second scene adds ridership data by each rail line to show the different lines’ ridership data over the same period of time. The third scene indicates how much CTA ridership would change if the proposed line cuts were enacted. In this scene, the original data from the previous scene is made gray if the line is closed or a lighter color if the line only has some stops removed. Then, I overlayed the hypothetical ridership numbers with a brighter color to show how much monthly riders would decrease. The last scene allows users to explore certain lines to understand their individual peak monthly riders. I chose to order it in this way because I felt like it was the clearest way to see the impact both overall for the CTA and for each specific line. By first introducing the current data, it makes the change from the proposed cuts even more impactful on the viewer.

**Annotations:** For my annotations, in most scenes, I chose to highlight maximum and minimum monthly ridership. Since one of the goals of my visualization is to emphasize how many people rely on the CTA, I thought it would be a good idea to highlight the maximum ridership by showing the actual number. It is more impactful for the viewer to see the number 18,000,000 than just looking at the peak point on the graph. In the graph looking at the impact of the proposed cuts, I chose to add an annotation quantifying just how many riders are “left behind.”

**Parameters:** Since I chose to use a slideshow for my narrative visualization, the parameters I used are the scenes. Each scene is one parameter with four total scenes. Therefore, the current state of the narrative visualization is determined by the type of scene that it is on.

**Triggers:** There are two main types of triggers present in my narrative visualization. First, the user is able to click “Previous” and “Next” to navigate between scenes. These buttons are at the top right by the title so it is easy for the user to see and understand them. They can go forwards and backwards at their own pace. Second, the user is able to choose a CTA line and a Year to examine in the last scene using two separate dropdowns. I use instructions that say “Select a (CTA Line/Year) to explore their trends,” so it is clear to the user what the drop downs are for.