Chris Chavez<br>New Seating Arrangements<br>MTEC 1102<br>09/21/2021

## Empathize:

- I am a frequent user of the MTA, with my own experiences and observations I was able to note the following: Passengers in the MTA are subject to very chaotic commutes, and that is especially exacerbated within the climate of COVID-19. During peak rush hours, I would be in the middle of a heavily packed car, or found with no room to move or steady myself on the vehicle. Passengers often complain about the lack of seating that is available.


## Define:

In my commutes I compiled what I noticed to be a trend among them. The main one being, there is no *safe* seating that is readily available to passengers, which can be easily accessed. In perfect conditions, MTA train cars can hold 36 seated passengers (excluding the front and back cars which can fit up to 44 passengers) This number is reduced when we take into account how middle seats are used now; as a way to keep distance between one another, this number is then reduced to an average of 20 easily seated passengers The main issue to be found is the inadequate use of space in the train. While one can argue that it allows for more passengers to enter and remain standing by holding onto the rails, however, it exacerbates the danger by creating a reservoir of people in close proximity with one another and high touch surfaces on smaller surface areas that will constantly have a person attached. All that otherwise unused space can create a decent opportunity.


## Ideation

What I propose is a rearrangement of the floor plans of the train cars' benches and seating. By rearranging the seating in a way that is both safe and accessible, it can allow for an increase of passengers taking the subway in a safe and expedient manner. Additional and strategically placed hand railings can also assist by helping distribute standing passengers throughout the car more evenly. More surface area leads to a lower concentration of people touching a smaller surface area.


Test:

Testing is a matter of constructing a prototype based off of a blueprint (similar to the drawings), and conducting test runs of a single car as part of the larger train units, in order to gauge the efficacy of the new cars, readjust sizing of the seats, and distances.

