## INFO 4310 Kai Barker SF Trees and Neighborhood Tree Planting

The data I was working with told an interesting story about tree planting across different neighborhoods in San Francisco and I wanted to look into different parameters that may have affected tree planting in the city. What I wanted to explore was whether wealthier neighborhoods have more trees planted to tie into broader conversations about environmental justice and equity, especially in city environments where the disparity can be very present. In the dataset, neighborhoods like Outer Richmond and Outer Sunset stood out with the most trees planted, while others like Bayview and Excelsior did not have as much green as others. The question I was trying to answer was if there existed a link between tree planting and neighborhood wealth, or if other factors might be at play.

In breaking down my approach in creating my visualization, I chose to look at the data across decades instead of individual years. I split the data by decade to see how tree planting patterns have evolved over time while also being able to be cohesive with visuals so as to not overwhelm our viewers. This also helps me if I were to expand this project, as I could denote any changes in policies or outside factors that are not wealth-based against my first visualization. I used visual encodings like color and stacking to show how trees are distributed across neighborhoods, and to demonstrate the distribution of trees in certain years. By stacking the data, I was able to highlight both the overall trend and the individual contributions of each neighborhood to the total tree count.

When it came to design, I wanted to make sure the visuals were both clear and informative. The x-axis of the chart breaks down the data by decade so you can quickly see the progression over time. The stacked bars show how each neighborhood contributes to the overall tree count for each decade, with richer neighborhoods like Outer Sunset and Pacific Heights showing higher numbers. I only chose to include the top 10 neighborhoods for clarity, and also as a reflection of the greater environment of trees. This allowed me to clearly compare how tree planting is distributed across the neighborhoods and at different points in time while ensuring the data was readable.

The story here seemed to suggest that wealthier neighborhoods, at least in the case of Outer Sunset and Outer Richmond, do tend to have more trees planted. This could reflect historical patterns where more affluent areas received more attention or resources for environmental initiatives. On the other hand, neighborhoods like Bayview and Excelsior, which are less affluent, have fewer trees planted, which could indicate disparities in investment or city priorities. Yet I believe that this project could be expanded further utilizing these parameters, and that neighborhood wealth may not be the sole proprietor of the increased planting. Even in using

the first visual, I believe one could pair it with numerous expansions of potential influence on planting and find interesting points in it. This implementation may simply goad our viewers into drawing a conclusion fit for them, but I think the tradeoff allows it to be easily paired and expanded upon for future research into other influential aspects on green areas in San Francisco.