Shane Freeborn

INFO 526

Project Proposal

1. **Have any data been collected for this study already?**

No data has been collected for this study at this time.

2. **What's the main question being asked or the hypothesis being tested in the study?**

I will determine if there is a significant relationship between free COVID-19 testing sites and

socio-economic status in a specific zip code, using public health and government organizations'

public data regarding COVID-19 testing and economic status, respectively. This is a secondary

analysis of already existing data from private and government public health associations, as well

as government data on economic status. This analysis will be done primarily by Shane Freeborn

who has not worked with the data and has not seen it previously.

3. **Describe the key dependent variable(s) specifying how they will be measured?**

I will use the dependent variable of COVID-19 testing site availability which will be a

breakdown of all testing sites by zip code. This data will be compared to socio-economic data

from the same zip codes in order to determine if there is a relationship between the availability of

test sites and the number of tests conducted at these sites. Further, the idea is to look at the

accessibility of these sites to communities in lower socio-economic scenarios. This will not be an

indicator of likeliness to contract COVID-19 based on location and socio-economic status, but it

is an indicator of how accessible these sites were to those of lower socio-economic status.

The plots that I will be using are a side-by-side bar chart or histogram that shows the differences in utilization of each site based on the zip codes proportion of COVID-19 cases at the time the data was collected. It will capture the per-case percentage of tests being conducted at each site at varying economic levels. Another plot I can see using is to show a line graph comparing the trend of the number of COVID cases in a state compared to the number of tests run in a financially disadvantaged location versus an advantaged location. Beyond, these main comparison plots, I will create many supplementary plots to support this data and help draw conclusions from it.