Group 4: Ziyu Fan, Shipeng Ji, Gengchen Zhang, Yiqing Wang

**What is your specific area of interest?**

Our group would like to study the relationship between the visiting pattern of restaurants and COVID-19 policy in Boston. For example, the change of visitor patterns during the release of different COVID-19 policy, the visitor count of a restaurant in different time periods, the average length visitors tend to stay in the restaurants, the average distance from home of visitors of a restaurant, etc.

**Why is it more important than other areas?**

Because going to the restaurant is one of the most common activities people do in their spare time. We are interested in how COVID-19 affects visitor patterns in restaurants, especially the time people spend in the restaurant for each meal. We would like to investigate the difference of time people spend on average dining-in affected by the changes in COVID-19 related policies, and whether the time has returned to pre-COVID-19 level after the relaxation of policies. By conducting this research, we hope that we could provide useful advice to help restaurant owners to readjust their business strategy.

**Why is the cell phone tracking data fit for your interest?**

For this particular situation, the cell phone tracking data would be the most accurate source. When we are considering the pattern of restaurants, it is important to know what is the population that visits these places. Since, almost everyone carries cell phones nowadays. We would have a good estimate on how many people visited these restaurants in a specific duration of time. Moreover, there are many statistics that would only be available in cell phone data: dwelling time in specific location, related location and visitor’s country of origin. These are dimensions hard to obtain for traditional methods, yet they are a detrimental part of our analysis.