Proposal 1

Introduction

Human mobility and the spread of pandemic diseases have close relationship with each other. With the onset of COVID-19, human change their activities as well as movement. At the same time, human travel will influence the development trend of COVID-19 by interaction mechanism. This study will analyze the pandemic's influence on human mobility in New York City and discuss social equity.

Methods

This study will use the SafeGraph mobility pattern data to construct a range of mobility indicators. Compared with travel behaviors before COVID-19, I will analyze the spatio-temporal changes of human mobility during the pandemic. Combined with ACS census data and COVID-19 cases data, we discuss the impact of COVID-19 for people from different income/race groups and make policy implications

Dataset

1. SafeGraph: smart-phone based pattern data
2. ACS census data
3. COVID-19 case data

Excepted Results

My final deliverable will be a research paper with spatio-temporal analysis.