Cynthia Bourjac Gerrlyn Gacao UP206A - Intro to GIS & Spatial Science 10/18/20

Project Proposal

Research Question

Is there a spatial correlation between cases of COVID-19 with eviction rates in the city of Los Angeles?

The outbreak of the pandemic alongside the standstill of many employment sectors has resulted in a widespread loss of jobs. We are interested in understanding the impacts of COVID-19 to people's abilities to pay their rent. To better understand this impact, we will be conducting a spatial analysis to determine whether the high concentration of COVID-19 cases in regions throughout Los Angeles have a spatial relationship with the rates of residential evictions in the overlapping areas.

An explanation of why it is important to you, why it matters to others, and what is at stake

As students in the MURP program, housing stability is at the forefront of interest because we understand the importance of people's relation to place, housing as a human right, and the housing crisis that is affecting the most marginalized and vulnerable communities. COVID-19 has not only become a health crisis, but it shut down workplaces which came to affect people's incomes and ability to pay their rents. As residents and students of Los Angeles, we are interested in understanding how deeply COVID-19 infection intersects with eviction rates in the same area.

This is an important matter to the community because it will help to clarify the relationship between COVID-19 infection rates with displacement through a pandemic that has come to disproportionately affect people of color and working-class communities. It will also show whether being infected with COVID-19 has a relationship with eviction by allowing us to understand whether people's physical inability to work because of illness might increase their likelihood of being evicted.

Spatial scope and why space and/or time matters for your project

The spatial analysis of COVID-19 and eviction rates will be done for the city of Los Angeles before and during the eviction moratorium. We will be gathering the most recent data to determine the current eviction rates after the eviction moratorium began in LA. It will also be useful to analyze eviction rates leading up to the eviction moratoriums to be able to see the effects of COVID-19 infection on the most impacted areas. We will compare the eviction rates in Los Angeles during the same timeframe in a preceding year to have a better understanding of the direct impact of COVID-19 infections to evictions. We will account for the fluctuating eviction rates that occur throughout the year by comparing the current rates with those of the same months in 2019 and 2018 as the data permits.

Data sources

Racial demographics in LA County by census tract, American Community Survey, 2018 5-year estimates:

https://data.census.gov/cedsci/table?t=Race%20and%20Ethnicity&g=0400000US06.140000&tid=ACSDT5Y2018.B02001&hidePreview=false

Income levels across LA County by census tract, American Community Survey, 2018 5-year estimates:

https://data.census.gov/cedsci/table?t=Income%20%28Households,%20Families,%20Individuals%29%3AIncome%20and%20Earnings&g=0500000US06037.140000&tid=ACSST5Y2018.S1901&hidePreview=false

California counties and cities COVID-19 infection rates https://github.com/datadesk/california-coronavirus-data/blob/master/latimes-county-totals.csv

Scope of data and intended analysis

This research aims to pursue a comparative analysis of residential eviction levels or patterns across the City of Los Angeles prior to COVID-19 and now. It seeks to visualize this comparison by creating two maps for both time periods that identify where potential eviction hotspots were or might be, and what the demographics (race, income, age) of those affected residents are. By overlaying this data with that of positive COVID-19 cases across the same geography, this research will also explore the potential relationship between effects of Los Angeles' housing and health crises during the pandemic. Datasets will be extracted from several different sources at the census tract level, including the American Community Survey and LA Times. Pulling related data at this geographic scope will allow for more detailed analysis at the neighborhood level. Because the American Community Survey's residential demographic data from 2018 was the most recent that could be found currently, we may need to compare eviction rates in 2018 with those found after March of 2020 unless data from 2019 is available and accessible.

Insights and research implications

Completion of this research may provide a deeper understanding of the ways in which tenants have been particularly impacted during this time. Although it may not explain whether any spatial patterns of COVID-19 cases and evictions are correlated, we hope this will still provide a platform in which to explore the potential intersection further. This can also enrich our perspectives of the negative impacts that tenants and neighborhoods with higher tenant populations are particularly vulnerable to during the pandemic, which are in addition to any pre-existing systemic inequities that they already face. Additionally, we hope that it will create a baseline of analysis that we can continue digging further into in terms of reasoning and other ways tenants are being affected during the pandemic. There may also be policy implications that we hope to learn from this research: illustrating what areas have been most impacted by both housing instability and COVID-19 can signal where resources need to be directed or redirected in order to support those communities. Finally, as research is always constrained by the data available, we anticipate our project to reveal obstacles to performing comprehensive and conclusive analyses for this kind of topic.