Crime is a complex topic, and there is no academic (or popular) consensus on either the reasons for criminal behavior or the appropriate interventions to curtail such behavior. One theoretical intervention is reducing crime via changing the “built environment”—incorporating a spatial element to crime. This broadly ranges from land policy (zoning) to more targeted planning and landscaping interventions that focus on surveillance, access control, and target hardening (see Carter et al, 2003 and Katyal, 2002). The later has a long history: in 1285, King Edward I decreed that bushes should be removed along highways to deter robbery (Anderson et al., 2013). Controlling crime via the built environment is an attractive policy, as a zoning change might be more efficient (or more politically palatable) than throwing more resources into enforcement and punishment.

Theoretically, exclusionary zoning practices can help create concentrations of poverty, which *could* create an environment where crime is more likely. The actual academic literature on the interaction between land policy and crime do find some associations (generally surrounding the debate over the merits of mixed-use residential zoning), but there are few empirical studies (Anderson et al. blame this on a lack of data). One of the more influential non-empirical works is Jane Jacobs’ 1961 book *The Death and Life of Great American Cities*, which advocated for including commercial businesses in residential areas to reduce crime. Empirical investigations produced mixed results. Anderson et al.’s (2013) study of Los Angeles finds that commercial-only zoned areas are associated with higher crime rates, and that zoning changes that including residential parcels in prior commercial-zoned areas is associated with a reduction in crime. Browning et al. (2010) finds a curvilinear association between density – both commercial and residential – and assault and homicide.

The current housing crisis has caused many cities, and even states, to either consider or enact zoning reform. These reforms often effectively eliminate single-family residential zoning by allowing multi-family development (ranging from ‘granny suites’ to triplexes) in what was formally single-family residential neighborhoods. This push is also coming from the White House; the Biden infrastructure bill includes incentives for municipal zoning reform. Are these zoning changes associated with any changes in crime, at either the state or individual municipal level?

Our primary data comes from two sources: the FBI and the University of California, Berkely. We use the FBI’s crime data to observe crime at a state and city level for the years 2020-2022. This dataset has variables on population, total crime, and a further breakdown of types of crime (generally sorted in to personal, social, and property). We then merge the University of California, Berkeley’s data on municipal-level zoning reform for the year 2021 onto this crime dataset.

Due to data limitations from the FBI dataset, we are restricted to the years 2020 to 2022. Furthermore, the Covid-19 pandemic deeply impacted the reporting at a state-wide level. For example, California does not have consistent data from 2020-2022. In fact, none of their cities report crime statistics for 2020. After we filtered for having crime statistics in all three years, we are left with 44 states. However, the distribution of cities within these states is not consistent. Some states, such as Michigan, are very well documented; while others, like Illinois and Pennsylvania have one and two reporting cities, respectively. Future research might look for more data, in order to capture better the prior trends, as well as look at the long-term impact of zoning changes.

We also used secondary data sources on state-wide zoning changes (Meyershohn) and city latitude/longitude data (). \*crime per capita\* \*add in lat/long\* \*plot cities\* \*log transform pop as sep\*

The data cleaning processes consisted of merging the three years of FBI data and converting into tidy format. We then determined which cities had data for all three years of our event study and filtering for only those cities. We then merged on the zoning data, which we had cleaned and verified. This comprises our master dataset. Then, we merged on data on state-wide zoning changes to our master dataset.

Citations

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