Running head: IS IT REALLY CRIME-FREE?
Is It Really Crime Free? An Analysis on the Efficacy of the Crime Free Multi Housing Program for
Crime Prevention in California
Alexandra Baker
Pepperdine University School of Public Policy
April 29th, 2021
A Capstone project submitted to Pepperdine University School of Public Policy to meet the Master of Public Policy requirements

Executive Summary

Crime Free Multi-housing programs are the Crime Prevention Through Environmental Design programs that city and county police departments teach and certify landlords, so they then enforce standards of criminality, like not having arrests or criminal records, on tenants at their rental properties. Consequences for tenants tend to be evictions and consequences for property owners for not enforcing the program are being sued or fined by the local government and courts. Sometimes municipalities just have the programs which tend to be similar and in other cases the programs are further enforced by Crime Free Rental Housing Ordinances that enforce participation of all rental properties in the municipality.

The concern for crime free housing laws are their impacts on housing insecurity for Black and Latino residents and residents of lower income who are disproportionately impacted by nuisance and crime free laws because of the higher rates incarceration and poverty among Black and Latinos (Pettit & Gutierrez, 2018, Gradín, 2012) and the racially motivated use of "nuisance" that historically excluded people of color from space (Henderson, 2019). It applies especially for the accessibility of public housing for low-income families (Krueger, 2010). These laws even encourage the type of short leases that allow property managers to quickly get rid of tenants by not renewing their leases (Krueger, 2010).

This study used UCR panel data for California Counties between the years 1991 to 2018 to conduct and panel data fixed effect analysis to determining if Crime Free Multi-Housing (CFMH) programs were associated with a reduction in crime as had been cited in service call data released by police departments using within subject analysis. With a panel data fixed

effects regression analysis, this study found that the CFMH program was associated with a statistically significant decrease in reported property and violent crime at the 5% level.

Considering the public support and supportive data for these programs, it is recommended that policymakers keep these programs while making adjustments to them to account for potential Fair Housing Act violations and adding to term limits to or limiting the type of crimes it can be used to enforce against so that some of the housing disparity that it causes is addressed.

Introduction

What is the Crime Free Rental Housing Ordinance?

The Crime Free Rental Housing Ordinances is a type of local government policy that tries to prevent crime from happening in rental housing by imposing anti-criminal activity standards on tenants and making landlords enforce it. Proponents of this ordinance say that it makes rental housing safer and better maintained because it does not allow people who commit crime to live on the property and gives local government and landlords the means to quickly end leases for tenants who do commit crime. Police departments also like it because it can lessen the amount of calls they get. This type of policy operates on the theory of Crime Prevention Through Environmental Design (CPTED) that began in the 1970s (Clarke, 1980, pg. 137). The theory is that communities can take proactive measures to prevent crime from happening by changing the space. Examples of this include adding street lights, fences, security cameras, or blocking off unused space (Olajide et al., 2015). The rationale behind why CPTED works is that crime does not happen equally across space (Levin, 2017), therefore, crime can be interrupted by targeting certain places in a city or county. An analysis of crime using 2000 to 2014 Uniform Crime Reporting (UCR) from the FBI found that 50% of violent and property crimes happen in just 5% of places in a city even if those high crime areas change over time (Levin, 2017). This means that cities can focus their interventions on very specific areas and be successful.

The first Crime Free Housing program started in Arizona in 1992 but quickly gained popularity within the decade and is still prevalent (Krueger, 2010). According to the Crime Free Association, over 3,000 cities internationally have Crime Free Multi-Housing programs, the programs that are enforced by the Crime Free Rental Housing Ordinances, mostly in the US and Canada. The program works in three ways. First, the municipality has landlords get certified in its Crime Free Housing training program, held by a local police department, to teach them about CPTED strategies, how to screen tenants, enforcing the Crime Free lease addendum, an addition to the lease agreement for their tenants that states that any criminal or illegal activity would be grounds for eviction, (Zehring, 1994). They also learn about the consequences of not enforcing the new lease agreement. This leads to the second part. The city or county can hold the property owner liable for making sure that they evict tenants that do illegal activities even outside the home (Krueger, 2010). They usually enforce it on landlords by threatening to sue or fine, and in severe cases, arrest the landlord for not ending the tenant's lease (Zehring, 1994) Lastly, there is the law enforcement component that works in partnership with the other landlords and the municipality to report tenants, track evictions and evict quickly (Zehring, 1994).

Despite the potential for benefits to the community for this type of policy, it also has a number of issues that it needs to address. Because the ordinances are written locally and can differ depending on the terms, they sometimes violate the federal Fair Housing Act that the Department of Housing and Urban Development (HUD) enforces. The Fair Housing Act "prohibits discrimination in the sale, rental or financing of dwellings and in other housing-related activities on the basis of race, color, religion, sex, disability, familial status, or national

origin," (42 U.S.C. §§ 3601-19) even if the violation was unintentional (Kanovsky, 2016). HUD found that many Crime Free laws dissuaded the necessary use of emergency services and unfairly punished the victims of domestic violence (Office of General Counsel Guidance on Application of Fair Housing Act Standards to the Enforcement of Local Nuisance and Crime Free Housing Ordinances Against Victims of Domestic Violence, Other Crime Victims, and Others Who Require Police or Emergency Services, 2016; Gavin, 2015; Arnold & Slusser, 2015; Fais, 2008). With severe terms, cities have even been known to file against properties without criminal convictions, like in domestic violence cases, first time arrests, and "excessive" nuisance incidents like service calls to Emergency Medical Services (EMS) even for valid reasons (Office of the General Counsel, 2016). Depending on the municipality's definition, "excessive" can be characterized by a short period of time. For example, in Hesperia, CA three calls in a year were deemed excessive and grounds for eviction (Hesperia Crime Free Lease Addendum; Hesperia, Cal. Health and Safety Code § 8.20.50 2015). Additionally, these laws can also create housing insecurity for Black and Latino residents and residents of lower income who are disproportionately impacted because of the higher rates incarceration and poverty among Black and Latinos (Pettit & Gutierrez, 2018, Gradín, 2012, Barajas et al., 2020; Dillon, 2020; Krueger, 2010; Ramsey, 2018; Roy et al., 2020; Silverstein, 2020; Tang, 2020). Additionally, Crime-Free laws reinforce the racially motivated use of "nuisance" in laws that historically excluded people of color from space (Henderson, 2019). It applies especially for the accessibility of public housing for low-income families (Krueger, 2010). These laws even encourage the type of short leases that allow landlords to quickly get rid of tenants by not renewing their leases (Krueger, 2010). Furthermore, the most common wording of the lease addendums say that

even a single violation is grounds for eviction and criminal conviction is not needed to end the lease (Crime Free Association, n.d.). Once a tenant has gone through the formal eviction process, the eviction stays on the individual's record, making it even harder for the tenant to find housing in the future, even in municipalities that do not have the Crime Free Rental Housing Ordinances since looking for records of evictions for potential tenants is standard practice.

Given the potential benefits and deficits of the Crime Free Rental Housing Ordinances, the next step is to question whether the benefits in crime reduction outweigh the costs to vulnerable groups. This paper aims to answer whether the Crime Free Housing Ordinance sufficiently prevents crime, especially in California. First it will discuss the literature regarding this topic. Next, it will set up and conduct an econometric analysis using recent California crime data in relation to the Crime Free Rental Housing Ordinance. Then it will discuss the policy implications given the results of the analysis and other similar studies.

Literature Review

Do Crime Free Multi-Housing Programs Reduce Crime?

Mesa, Arizona was the first city to implement a Crime Free Multi-Housing (CFMH) program and reported an almost immediate 90% reduction in calls in high crime areas and 20% reduction in low ones with an overall average reduction of 37% of service calls for the 21 properties in the sample and a reduction in paperwork of 48% (Jusiewicz, 2012; Graves, 2011).

Based on the findings of this one study, this program spread throughout North America quickly from the 1990s to the 2010s. It was surprising because despite the spectacular results, it was not a study that was easy to replicate and had a small sample size.

Another four-year study with a small sample size of 17 out of 650 buildings in Arlington, Texas that had certification found an overall reduction in service calls although there was an uptick in five of the 17 CFMH program certified buildings (Olajide et al., 2015). This study had more lackluster results compared to the first although it used cross sectional pre and post data of 911 service calls in residential buildings as a measure for crime. Similar data has come out of municipalities in Canada since the CFMH program is popular there as well. The average reduction in service calls decreased by 38% in five years according to a study that included several cities in Victoria and New Westminster (Graves, 2011). Similarly, Ottawa claims a 70% decrease in service calls in the 30 buildings they surveyed in the year 2004 although they did not make their data available to the public (Graves, 2011).

In fact, it is a trend that other municipality police departments have claimed results without making their data available. What makes this data hard to replicate is that they are all based on police service calls, calls to police asking them to intervene in a situation, which can vary based on reporting and municipality priorities. For example, New Westminster tracked all Emergency Medical Service and Fire calls while Ottawa did not track domestic disturbance calls (Graves, 2011). They are also all based on small sample sizes on the individual (buildings being the individual) level of analysis and data might not be publicly available such as the list of buildings that participate in the program, the dates of when buildings completed their

certification, resources spent on paperwork, and service call data (which might be available depending on the municipality's open data sharing and tracking). These studies also listed that they track different types of crime that might be relevant for their municipalities like theft, graffiti, domestic disturbances, or just general emergency service calls without the specification of crime (Graves, 2011).

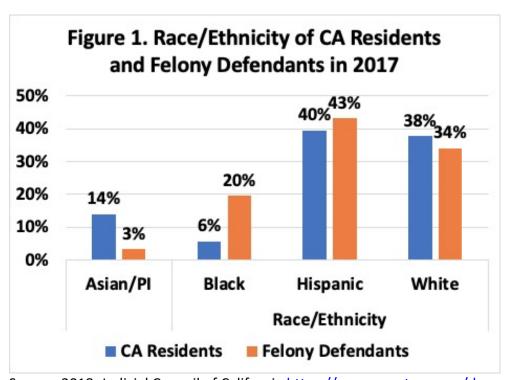
The consensus among the studies is that Crime Free Rental Housing ordinance and its associated CFMH programs can prevent crime. That said, although these studies all purport the benefit of Crime Free Multi-Housing programs, their data cannot be easily compared through a standard metric. For that purpose, a 2011 report through the University of Regina suggested a standard tracking system to make CFMH program data more comparable (Graves, 2011). To compare broader sets of data with more standardized metrics, I am going to use Uniform Crime Reporting (UCR) data. That said UCR data has similar tracking issues in that the data available is only what was reported so if data was not reported, it would not be included. For example, from 2014 onwards, rape data in UCR was categorized differently, changing its reporting.

Another thing to note is that oftentimes service calls were the substitute measure used to determine crime but did not always have to do with crimes. For that reason, this paper aims to examine the impact of California's Crime Free Multi-Housing programs at the county level on crime to determine if the impact on crime is notable as a broadened unit of analysis. Since this study is using UCR data, it will focus on the categories of property and violent crime.

The California Context

California alone has the Crime Free Multi-Housing (CFMH) program in a third of its cities and counties with 110 of them being enforced by ordinance, making participation mandatory for all rental properties. It has another 35 of them that are enforced on a building-by-building basis through voluntary participation for a total of 145 cities and counties out of the 539 with the program (Dillon, 2020; Barajas et al., 2020).

The crime rates in California reflect the national statistics with 1 in 3 adults, or 8 million out of the 39 million, having a criminal record (US Census Bureau, 2019). Also mirroring national trends, people who identify as Black and Hispanic tend to be overrepresented in California prisons (see Figure 1).



Source: 2018, Judicial Council of California https://www.courts.ca.gov/documents/lr-2019-JC-disposition-of-criminal-cases-race-ethnicity-pc1170 45.pdf

Similarly, that Crime Free Ordinances California seem to disproportionately impact Black and Latinos. These laws are present in 85% of the California cities with the largest influx of Black people (Barajas et al., 2020). At the same time, the LA Times conducted another study that tracked eviction data from four major cities in California from 2015 to 2019 and found that 80% of evictions were for people of color (Barajas et al., 2020). For people with criminal convictions, the Crime Free Rental Housing policy exacerbates an already fraught housing struggle in California. According to the California Department of Corrections and Rehabilitation (CDCR), incarcerated people experience homelessness at 10 times the rate of the average citizen (CDCR, 2019). They are even more likely to experience extreme poverty and homelessness prior to conviction (CDCR, 2019). That is because incarceration is intrinsically linked to poverty. In fact, families that made less than \$14,00 annually were 20 times more likely to experience incarceration compared to rich families earning \$143,000 and more (Looney & Turner, 2018). California already had the third most segregated schools after New York and Illinois. In the 2018-2019 school year, only 5% of students in the state were black but they attended 95% minority schools (Orfield & Jarvie, 2021). This means policies that negatively impact housing for disadvantaged groups can perpetuate the cycle of incarceration and resource instability for future generations who grow up in these conditions (Looney & Turner, 2018).

As of 2020, only 32% of Californian households can afford to buy a house (Cimini, 2020). To mitigate the issues with such policies, in 2015 California Assembly Member Jones-Sawyer tried to introduce measure AB-396 that would make it illegal for rental housing to discriminate based on criminal record. It would have added criminal history as a Fair Housing protected class

in the state. After a year of amendments, the bill eventually died. It was important because although it failed, it shows how criminal justice reforms are trending in California politics and members of California's government are also considering how to create greater equity for constituents with criminal records.

Data Description

The variables in this study came from five sources and were collected at the county level of analysis. The main policy variable is reported violent crime and property crime data by California County Sheriff's department from the Federal Bureau of Investigation's Uniform Crime Reporting (UCR) system. I chose this variable because it was an alternate crime measure that was used in the literature for researchers who did not use service calls. I chose not to do service calls because it was a type of data that was not accessible for all of the locations that I wanted to use, especially for a more aggregated unit of analysis like counties. It has the added benefit of crime being measurable in comparable terms which made the service call based studies in the literature difficult to compare because they included and excluded different things based on priorities of the municipality. For example, one city used domestic disturbance calls, but the neighboring city did not. In yet another study calls for service from police were not distinguished from EMS calls. The UCR crime counts were continuous variables that I converted from counts to crime rates per 100,000 cases. I chose reported crime as opposed to cleared crime because crime may be cleared in a different year than when the crime was initially reported. In this case, reported crime is a more accurate time measure. The violent crime data is the aggregate of the various violent types of crime that UCR tracks including homicide, rape,

robbery, and aggravated assault. Property crime is the aggregate of burglary, arson, larceny theft, and motor vehicle theft. Because the claim that the Crime Free Multi-Housing program reduces crime, I ran the regression analysis with property crime and violent crime individually as the dependent variables to see if it decreases crime. I used data for all 58 counties except for San Francisco since it did not submit data to UCR.

The data ranged from the years 1997 to 2018 because of data restrictions for some of the control variables. I went back to 1997 because the first CFMH ordinance was implemented at the county level in 1998. The main independent variable was the Crime Free Multi-Housing Program recorded as a binary dummy variable for "yes, it existed" or "no, it did not exist." For example, the CFMH program was implemented in Los Angeles County in 2013 so for the years 1997 to 2012 the variable is listed as zero and as one from 2013 onwards. Out of the 57 counties, excluding San Francisco County, 9 had CFMH programs. I used the LA Times data list compiled by LA Times Data Reporter Ben Poston that linked back to each California city and county code of ordinances as reference for the implementation dates.

Although most of the literature was at the individual building level of analysis per city, the police departments that conducted the studies had access to demographic information in their service calls. Also, since this policy was said to have a disproportionate impact on Black and Hispanic residents as well as tenants with low socioeconomic status, I decided to include demographic variables. Ideally I would have liked to find a migration by demographic characteristics to see if in fact, the Crime Free policy was displacing people. Instead, I found the overall demographic characteristics by county and used the correlation matrix in Table 5. to

determine how race and ethnicity counts were changing over time. I found that the population of White and Black residents decreased overtime while the population of Hispanic and Asian and Pacific Islander residents increased. I sourced these control variables from the US Census American Community Survey. The racial categories that are included are Black or African-American, White, and Asian & Pacific Islander which are categorized together until 1999. I chose these variables because they were the most discussed in the literature. I considered using Native American instead of Asian and Pacific Islander because it was mentioned in one of the studies as a racial group that was also criminalized at disproportionately high rates but because of the low counts, I decided to omit it to avoid issues of multicollinearity. I also included Hispanic because it was frequently mentioned in the literature about incarcerated people. The variables were converted from counts to percentages by dividing them by the population estimate per county.

I also included rental housing types by count from the California State Association of Counties and again converted the counts into the percentages by dividing the count per type by the total rental units per county. I included single family and multi-family units because they were the most common types of units and also the ones that Crime Free rules usually apply to. I excluded mobile homes to avoid multicollinearity.

Lastly, I included the economic variables median household income and the percentage of people in poverty by different age groups including minors ages 0-17 and people of all ages. I got this data from the US Census Small Area Income and Poverty Estimates (SAIPE). I did not have to do any conversion of these variables because poverty was already measured as the

proportion of people in poverty over the total population. These were the primary economic factors available at the county level, I had to reduce the number of years in my analysis to 1997-2018. Interestingly poverty and median household income both increased over time.

An element that will contribute to noisy data is that cities and counties may have CFMH programs available but not require properties by ordinance to undergo the certification process. Similarly, although a lot of cities in a particular county may have the program, it might not exist at the county level of enforcement. For example, around half of the cities in Riverside County have CRMH programs but it is not enforced at the county level. For a complete list of variables and their labels please see Table 4 in the appendix.

Methodology

In approaching this research question, I would like to answer whether or not the CFMH policy is achieving its intended goal of reducing crime. I will determine a statistically significant value at the 5% level or lower (i.e., 1% significance level) for my main policy variable CrimeFree for CFMH program with an inverse relationship to support the previous literature and anything else to not be supportive. Since the Crime Free program was said to help reduce both types of crime, I will examine the impact on two variables separately. I am looking at primarily three tables, the first will be a summary statistics table to describe the data, the next will be a correlation matrix that will look at the significance and magnitude of the relationships between two variables, and lastly I will use regressions. For the regression analysis, I am using panel data

fixed effects regressions since the dependent variable was continuous and I had the available data to cluster by location and year. The basic equations are the following:

log of property crime rate = CFMH program x + Black X + White X + Asian X + Hispanic X + Single Family X + Multi-Family X + Median Household Income X+ Poverty Percentage Ages 0-17 X+ Poverty Percentage All Ages + E

log of violent crime rate = CFMH program x + Black X + White X + Asian X + Hispanic X +Single Family X + Multi-Family X + Median Household Income X + Poverty Percentage Ages 0-17 X + Poverty Percentage All Ages E

From there, I will determine what will be the best policy response given the negative impacts to Black, Latino, and low socioeconomic status residents. This method relies on the assumption that differences among locations and different time periods will be controlled for even if I do not have all of the variables needed for this study. I am also assuming that controlling for the variables that I have selected makes the differences in crime more attributable to the actual program. I am also assuming accurate crime reporting per county.

Descriptive Statistics

Table 1. Crime Free Multi-housing Ordinance Summary Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
CrimeFree	1,254	0.062201	0.241617	0	1
PropertyRate	1,254	907.7708	1158.477	29.47095	12751.68
ViolentRate	1,254	178.7419	191.4983	5.511238	2392.739
AsianPl	1,254	0.066362	0.069671	0.002518	0.386995
Black	1,254	0.404327	0.409412	0	0.960628
Hispanic	1,254	0.269526	0.168934	0.039214	0.845623

White	1,254	0.84106	0.092551	0.498155	0.974617
Single Unit Home	1,254	0.716484	0.081417	0.405012	0.913433
Multi-Unit Home	1,254	0.188995	0.10005	0.0286	0.519026
Mobile Home	1,254	0.09452	0.071318	0.011401	0.321133
Poverty Percentage Ages 0-17	1,254	20.44673	7.28499	6.3	44
Poverty Percentage Ages 5-17	1,254	19.36866	7.180631	5.4	41.8
Poverty Percentage All Ages	1,254	14.81659	4.937172	5.1	31.9
Median Household Income	1,254	50033.87	15385.57	23359	125933

I first created a summary table of the different variables in my analysis. In my dataset, I had 1,254 observations including data from 57 counties from the years 1997 to 2018 (see Table 1). White (84.11%) was the most common race demographic in the sample followed by Black (40.4%) then Asian and Pacific Islander (6.64%) (see Table 1). Interestingly, only 27% of the people were Hispanic which I would have expected to be much higher. Most rental properties were single family units (71.65%), multi-family (19%), then mobile homes (9.5%) (see Table 1). The average property crime rate was 1054 cases per 100,000 people (see Table 1). The average violent crime rate was significantly less at 196 cases per 100,000 people which makes sense realistically since violent crimes are more severe (see Table 1).

The skew of the dependent variables, as with all counts, heavily skewed right for both property and violent crime, meaning it was more likely to have a low incidence of crime in a given year. To correct this skew, I created new variables to use the natural log of the crime. Figure 2 in the Appendix shows the strong relationship between the Log of the two types of crimes in graph form with a two-way scatter plot. As expected, they are closely related which is displayed by how tightly the data points are packed together along a line. Looking at the next two two-way scatter plots in Figure 2. It's apparent that both types of crime are decreasing over

time in general. This brings up the question of whether crime would have decreased anyways without intervention.

Table 2. Pairwise Correlation of Property and Violent Crime with Crime Free Multi-Housing

Program at 0.05 Significance Level

	Log of Violent Crime Rate	Log of Property Crime Rate	Crime Free Multi- Housing Program
Log of Violent Crime Rate	1		
Log of Property Crime Rate	0.7402*	1	
Crime Free Multi-Housing Program	-0.2253*	-0.3410* 0	1

Because proponents of the ordinances say that the Crime Free Multi-Housing program reduces property and violent crime, I expected to see an inverse relationship between crime and the program. Meaning that if the program is present, represented by the binary dummy variable 1, then the regression coefficient would be negative. Given crime data in relation to demographic information, I would associate White race, Black race and Hispanic ethnicity to have a positive relationship given the overrepresentation of African Americans and Latinos who are incarcerated or were formerly incarcerated in California. I would expect to see a negative relationship for Asian race given the low incarceration rates. Because both types of crime have steadily decreased in most CA counties regardless of if they had the program active, especially

violent crime, I would expect the relationship between the program and crime to be weak for violent crime and stronger for property crime given the increasingly disproportionate wages and cost of living in California (see Figure 5 in Appendix).

Property and violent crime were highly correlated at 74.02% (see Table 2). There was also a promising negative correlation between the crime rates and the CFMH programs.

Unexpectedly, there was a positive relationship between single family units and the crime rates but a negative relationship between crime rates and multi-family units (see table 5 in the appendix). The demographic information was also unexpectedly correlated. Black and Hispanic were negatively correlated with the crime rates while it was positive with White. The only variables that behaved as expected were Asian and Pacific Islander, negative relation with crime and mobile homes, positive relationship. Also, it was expected the median household income would have a negative relationship with both crime variables and that the poverty percentages would all have a positive relationship, meaning that when poverty goes up so do both types of crime. Both of those findings are consistent with the literature.

Table 3. Regressions 1997-2018	FE Property	FE Violent
	0.007	0.155
	-0.087	-0.155
Crime Free	(0.040)*	(0.068)*
	0.016	-0.171
Black	-0.022	(0.037)**
	4.973	0.86
White	(0.762)**	-1.304
	2.604	0.924

Asian & Pacific	(1.062)*	-1.818			
Islander					
	-1.286	-2.221			
Hispanic	(0.329)**	(0.564)**			
Cinala Hait	-1.262	0.687			
Single Unit Rental	-0.765	-1.309			
Multi-Unit	-5.539	1.508			
Rental	(1.084)**	-1.855			
Median	0.0000	0.0000			
Household					
Income	(0.000)**	0			
Poverty	-0.004	0.014			
Percentage	0.005	0.000			
Ages 0-17	-0.005	-0.008			
Poverty	0	-0.026			
Percentage All					
Ages	0.007	(0.042)*			
	-0.007	(0.012)*			
_cons	4.618	3.93			
	(1.169)**	(2.000)*			
SER	0.47	0.08			
R^2	1,254	1,254			
Adjusted R^2					
N					
* p<0.05; ** p<0.01					

The fixed effect (FE) panel data regressions are set by county and year so should help control some difference between places and time. The inverse relationships from the correlation matrix maintains through both regressions in tables 3. The R-squared was significantly higher for property crime, accounting for 47% of the variation according to the model compared to the violent crime which was only 8%. This was surprising given the high and statistically significant relationship between the two crime variables. It was also surprising

because property crime has a lot more variables with statistical significance. Both types of crime are statistically significant at the 5% significance level and both maintain their inverse relationship with the Crime Free variable. The results indicate that when the Crime Free Multi-Housing program is present, property crime decreases by 0.09% and violent crime decreases by 0.16%.

White and Asian & Pacific Islander flip signs to have a positive relationship with property crime. All variables stay statistically significant at the 1% significance level for all variables besides Asian & Pacific Islander for both types of crime. Considering that the majority of California's population is White, it might explain why it develops a positive relationship however the same is not true for Asian and Pacific Islander. Interestingly Black has a positive relationship with Property crime but the magnitude was small, and it was not statistically significant. However, it had an inverse relationship with Violent crime that was statistically significant at the 1% level with a comparatively bigger magnitude at -0.17. This finding could indicate how Black people are overrepresented in prisons but have a very small population in the state that is actually less likely to be associated with violent crime. Hispanic actually has a negative relationship with both crime variables and both are strongly statistically significant at the 1% significance level which once again indicates the gap in incarceration rates compared to actual crime. Of the type of rental housing units, only multi-units had a statistical significance, and it was a strong relationship at the 1% significance level for property crime. Realistically this makes sense since cities report more crime at their multi-housing units like apartment complexes. Median Household income has significance at the 1% level for property crime which makes sense when thinking about the relationship between income and crime. What was

strange however was that the magnitude was so small for the study that it registered as 0. Of the poverty measures, poverty for all age groups had a negative relationship with violent crime at the 5% significance level. Given some of the unexpected results for race, ethnicity, poverty, and income some of the difference could also have to do with the crime variables being reported crime. It could be that people with less money and Black and Hispanic people are less likely to report crimes to the police. This is an alternate explanation for the results. Also, if could be because the number of observations is small with only a few thousand. Trends could just be clearer with bigger samples. There might also just be a clearer relationship between rental properties and property crime whereas violent crime might not have as much to do with rental housing. This would explain why most of the variables lost statistical significance for violent crime.

Given the small magnitudes but statistically significant results for both crimes, I would support the claims from police departments that they experience beneficial impacts like reduced crime from Crime Free Multi-Housing programs. My results say nothing of displacement of people of color nor people with criminal convictions, as those were not measures in my study. Ideally, there would be a measure for how many people with criminal records or arrests live in a county, migration of people with different demographics characteristics. It would be even more beneficial if these measures tracked at the city or individual level.

Policy Analysis

The problem with the Crime Free Rental Housing ordinance and associated Crime Free Multi-Housing Program is that although they work to reduce workload for local law enforcement and reduce crime, they also create discriminatory conditions for groups that already struggle to find rental housing in California, since it disproportionately impacts Black and Latino residents and residents of low socioeconomic status. The issues to consider are keeping the needs of police departments, landlords, tenants without convictions, and tenants with convictions in mind. The commonality that all parties want is a safe and peaceful environment. In this situation, police officers are looking for less service calls to high crime areas so policies that increase service calls or day-to-day police vigilance will not work. Similarly, landlords want tenants that they can trust to take good care of their properties and also like the enforcement power that a Crime Free Lease Addendum gives them to have control over their property quality. Similarly, there is a selling point for tenants without convictions that the buildings that participate in the CFMH program will be safer as they practice CPTED policies. Tenants with prior convictions want the chance to also live in safe and peaceful housing regardless of their past. Keeping these considerations in mind, future policies should 1) limit workload for officers, 2) still give landlords enforcement tools to maintain their properties, 3) create a safe environment for tenants, and 4) open up housing opportunities for people with criminal records. I would also add 5) that the policy should be fiscally responsible.

Considering the evidence from my findings and multiple studies that CFMH programs may reduce crime in municipalities and the above considerations, I do not think that new policies should aim to terminate these programs altogether. With those policies in mind, there are primarily three options to consider. First, the programs can continue as they are without

changes. Second, the programs can start to create additional conditions and limits for enforcement. Third, the ordinances and/or the CFMH programs can be discarded.

The benefits of the first option are that it recognizes the widespread popularity of these programs with police departments and does not create additional work for them, so it satisfies the condition of limiting the workload for officers. It also satisfies the condition of providing an enforcement tool for landlords; however, some landlords might still be unhappy with this option if they are pressured by the city or county with the threat of lawsuits and fines. Unfortunately, this option is not responsive to the findings of multiple studies and the guidelines of the Department of Housing and Urban Development (HUD) to create housing protections for certain groups such as victims of domestic violence. While this option keeps the benefits of the third criteria in reality, it can still be used as a means to evict tenants regardless of their criminal history or if they have ever been arrested. So, in that sense it somewhat meets the third criteria. This option does not satisfy the condition of opening housing for people with criminal records. In fact, if the laws are not changed there is a good chance that HUD will sue municipalities in order to get compliance. They have already begun suing multiple cities in California for violating the Fair Housing Act and other municipalities, in preparation of getting sued, have preemptively terminated their Crime Free Housing Ordinances. As things stand, a lot of people would suffer from discriminatory housing practices even after HUD has already identified them as discriminatory. This policy does however satisfy the condition of limiting costs since, police departments would not anticipate additional costs by maintaining business as usual.

The second option is to keep the ordinances but make changes to them. One example of this is to create term limits for how long the program can be used to deny people with criminal histories housing. Municipalities can also choose the limits by type of offenses committed and how much time it's been since the conviction. After all, having a criminal record does not automatically make someone a danger to the community. A criminal record is really meant to be a proxy for determining new crime. For programs that evict based on new arrests, municipalities can choose what type of charges they most want to enforce against. For example, a lot of CFMH programs focus on gang or narcotic drug-related offenses that have the potential to negatively impact others in the community but may not follow up to evict a Driving Under the Influence charge or charges that do not negatively impact other community members. Another way to do this is to remove the wording about "criminal convictions not being needed to have their leases immediately terminated". It is this ambiguous wording that further victimizes victims of domestic violence, people who need emergency services, and even gives landlords and municipalities the means to evict for very minor reasons or discriminate against tenants without explicitly needing proof. This wording can explicitly include protections for the above mentioned groups.

Based on the criteria, if amendments are made to the ordinances, the ordinances would still be maintained in some form which would not significantly impact the workload of police officers. Similarly, it would still provide an enforcement tool for landlords and municipalities.

This option is fairer to tenants and the costs of implementation would be minimal since the changes would be primarily to the ordinance itself.

The third option of making the programs voluntary rather than mandatory, would make the effectiveness less prominent but still be available as a tool for landlords if they want an enforcement mechanism. Already some cities in California had to stop their ordinances after 2016 because they were sued by HUD or at risk of getting sued for violating the Fair Housing Act. So far there has not been any remarkable change in those cities in crime so it is possible that this option will not significantly increase the workload of officers, nor will it cost more to implement. The discriminatory issues could still persist however if the terms remain the same.

There is the fourth option of getting rid of the programs altogether. With its complete removal, the Crime Free ordinance will stop providing discriminatory means of eviction and has the best chance of opening up more housing for people with criminal records. In this case the option would be to implement a completely different policy. This option is also the most likely to attract backlash from proponents of the Crime Free ordinance including police officers, local government, and landlords because they would lose an enforcement tool and tenants might fear that their housing will become unsafe. In implementing this option, an alternative policy is necessary. One alternative would be to focus patrolling (Levin, 2017) or surveillance in high crime areas. This would likely also not go over well with police as it would increase their workload. Surveillance could be set through technological means in which case, monitoring could potentially be done by a system. It could even be replaced by other Crime Prevention Through Environmental Design options like increasing street lighting, security cameras, and keeping up building maintenance. These methods have also been effective at crime reduction although they have more of a capital cost. New policies might also mean having to invest in new infrastructure.

I recommend the second option. This option makes use of existing infrastructure and is among the most likely to avoid public backlash while also building in the capacity to address concerns. Ordinances are frequently amended so it would not be a difficult or unusual process. First, lawmakers should restructure the ordinances to be compliant with federal law. The next strongest consideration is to include term limits and changing the wording so that it cannot be used for minor reasons like nuisance calls or be used to attack protected groups by the Fair Housing Act. Municipalities can choose to set them according to the type of offense. Additionally, since it is standard practice to run background checks on potential tenants to weed them out before they sign leases, I would suggest the implementation of a policy in which a criminal record cannot be used to deny people housing. There could be exceptions for crimes that community members feel might attract more crime like drug, gang, human trafficking activity. There is not a really good rationale for excluding people from communities in perpetuity especially if they have already completed their service to society. Housing laws do not need to take on the work of the criminal justice system, by further punishing people who have already served their time. As mentioned earlier, a California Assembly member tried to pass this bill earlier and recently, there has been a lot of political will and public interest in policies that better the lives of people with criminal convictions.

Conclusions

The results of this study support the claim that the Crime Free Multi-Housing program is related to lessen crime rates. The weakness of this analysis is that it was not in the same metric of service calls as the majority studies because there was not enough public data to complete

such an analysis on a wide scale. I would have also liked to have access to a migratory flow of people by demographic information and criminal status to see definitively the causes of displacement. A long term eviction database also does not exist. I found one from 2019 that did not include other years. Similarly, this paper had too small of a sample size to make and definitive comparisons. It measured 9 counties with CFMH programs versus 48 that did not have the program. The analysis was further contaminated by the fact that 136 cities throughout the state had CFMH programs, so the comparison was not directly comparing treatment to control. It was more comparing crime from counties that had implemented it at the county level versus those that might have enacted ones at a smaller scale. Also, I did not separate out the programs at the county level that were made mandatory by ordinance versus counties that just offered it. Also, the year they started offering the program was not necessarily the year they would have made it enforceable by law. Another factor that could have made the data noisy is that ordinance on the books does not tell you how strongly the county enforced it. There could also be a lot of variability in that respect. All of those factors likely had an impact on internal validity.

This data analysis had many strengths as well. It used Uniform Crime Reporting data that allowed direct comparisons across municipalities which is something that other studies were not able to do because they did not have comparable data. Also, it looked at the impact on actual reported crime as opposed to service calls which would represent crime or something else like an EMS or nuisance call. Other studies only took data within their municipalities so they had much smaller sample sizes with data that could not be used to replicate the results. On the other hand, all of the data that I used is publicly available, making it easy for others to

use the same approach I did to see if they got similar results. Another strength was the Panel Data fixed effects that was able to control for some of the differences for places and times.

This study can also be expanded using data from other states and can be attempted at the city level although many of the control variables would be to be different. A city level analysis could be attempted if using cross sectional data. A related field that would benefit from this line of research would be examining nuisance laws that lead to evictions through econometric means.

References

42 U.S.C. §§ 3601-19.

- Archer, D. N. (2019). The Housing Segregation: The Jim Crow Effects of Crime Free Housing Ordinances. Mich. L. Rev., 118, 173.
- Arnold, G. & Slusser, M. (2015). Silencing Women's Voices: Nuisance Property Laws and Battered Women, L.&SOC.INQ. 15-17.

 http://nhlp.org/files/001.%20Silencing%20Women's%20Voices%20Nuisance%20Property%20Laws%20and%20Battered%20Women%20%20G%20Arnold%20and%20M%20Slusser.pdf
- Barajas, J., Dillon, L., Poston, B. (2020, November) Black and Latino Renters Face Eviction,

 Exclusion amid Police Crackdowns in California. Los Angeles Times.

 www.latimes.com/homeless-housing/story/2020-11-19/california-housing-policies-hurt-black-latino-renters
- Barajas, J., Dillon, L., Poston, B. (2020, November) Here's How We Found Places in California with Rules about "Crime Free Housing". Los Angeles Times. latimes.com/homeless-housing/story/2020-11-19/where-is-Crime Free-housing-policies-california-spread
- California Department of Corrections and Rehabilitation. (2019, March 19). Homelessness,

 Mental Illness & Justice-Involvement. Retrieved April 30, 2021, from

https://www.cdcr.ca.gov/ccjbh/wp-content/uploads/sites/172/2019/10/CCJBH-homessless-fact-sheet_10.16.19WCAG.pdf

- Clarke, R. V. (1980). Situational crime prevention: Theory and practice. Brit. J. Criminology, 20, 136.
- Cimini, K. (2020, May 19). 'Not the Golden State anymore': Middle- and low-income people leaving California. CalMatters.
- https://calmatters.org/california-divide/2020/01/not-the-golden-state-anymore-middle-and-low-income-people-leaving-california/.Dillon, L. (2020, December) "Gimme Shelter":

 How 'Crime Free Housing' Rules Prevented a Family from Renting. Los Angeles Times.

 www.latimes.com/homeless-housing/story/2020-12-09/gimme-shelter-how-Crime

 Free-housing-rules-prevented-a-family-from-renting

Crime Free Association. Crime Free Lease Addendum, Arizona Version Sample, Lease Addendum, lease agreement. (n.d.). http://www.crime-free-association.org/lease_addendums_az_english.htm.

- Dillon, L. (2020, December). LA Times Today: Crime Free Housing Programs Hurt Black and Latino Renters. Los Angeles Times. www.latimes.com/homeless-housing/00000176-3ef2-d939-a576-bff6ef390000-123
- Fais, C. (2008). Denying Access to Justice: The Cost of Applying Chronic Nuisance Laws to Domestic Violence, 108 COLUM.L.REV. 1181, 1189.

https://heinonline.org/HOL/Page?handle=hein.journals/clr108&div=33&g_sent=1&casa_token=uStHvNBvUz0AAAAA:LlnvM8qHsgmneW9gjRTFCmT9S5-6_UlBTO7hWVyMy-uDu7VTcdN3JmV0vLvpFQaAiJ0s3w7a0g&collection=journals

Gavin, A. (2015). Chronic Nuisance Ordinances: Turning Victims of Domestic Violence into

"Nuisances" in the Eyes of Municipalities, 119 PENN ST.L.REV. 257, 260.

https://heinonline.org/HOL/Page?handle=hein.journals/dlr119&div=8&g_sent=1&casa_token=RaC597_ImycAAAAA:
b4V1QBOLpZYqnThq2Wzi4cDvnWE7Et06tLnwF8kbnXJRXO5RlAUorXmUZNTq3JBFxSFyrn

K6w&collection=journals

Graves, D. (2011). (rep.). Crime Free Multi-Housing Program: Community Development Research and Report April 2011. Retrieved from https://ourspace.uregina.ca/bitstream/handle/10294/3392/CFMH%20Final%20Report.pd f?sequence=1&isAllowed=y

Gradín, C. (2012). Poverty among minorities in the United States: Explaining the racial poverty gap for Blacks and Latinos. *Applied Economics*, *44*(29), 3793-3804.

HELEN R.KANOVSKY, GENERAL COUNSEL, U.S.DEP'T OF HOUS. & URBAN DEV., Application of Fair
Housing Act Standards to the Use of Criminal Records by Providers of Housing and Real
Estate-Related Transactions (2016),

https://portal.hud.gov/hudportal/documents/huddoc?id=HUD_OGCGuidAppFHAStandC
R.pdf

Henderson, T. N. Y., & Jefferson-Jones, J. (2019). # LivingWhileBlack: Blackness as Nuisance. *Am. UL Rev.*, 69, 863.

Hesperia Crime Free Lease Addendum,

http://www.cityofhesperia.us/DocumentCenter/View/13394

HESPERIA,CAL.,HEALTH AND SAFETY CODE § 8.20.50 (2015).

https://www.municode.com/library/ca/hesperia/codes/code_of_ordinances?nodeId=TI

T8HESA_CH8.20CRFRREHOPR_8.20.050CRFRREHOPR

HUD, (2016). Office of General Counsel Guidance on Application of Fair Housing Act Standards

to the Enforcement of Local Nuisance and Crime Free Housing Ordinances Against

Victims of Domestic Violence, Other Crime Victims, and Others Who Require Police or

Emergency Services.

https://www.hud.gov/sites/documents/FINALNUISANCEORDGDNCE.PDF

- Jones, C. (2021, February 03). 'You just want to ... have a CHANCE': Ex-offenders struggle to find jobs amid COVID-19. Retrieved April 30, 2021, from https://www.usatoday.com/story/money/2021/02/03/unemployment-ex-offenders-among-many-struggling-find-work/6656724002/
- Jusiewicz, D. J. (2012). Crime Prevention Through Environmental Design: Crime Free Multi Housing In Arlington, Texas.

pdf

- Krueger, L. (2010, November). 'Crime Free Multi-Housing" and other public policy means of mass relocation. In International conference on Neighbourhood Restructuring & Resident Location: Context, Choice and Consequence, Delft, The Netherlands, November 4-5, 2010. Delft University of Technology, OTB Research Institute for the Built Environment.

 http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.839.2033&rep=rep1&type=
- Levin, A., Rosenfeld, R., & Deckard, M. (2017). The law of crime concentration: An application and recommendations for future research. Journal of quantitative criminology, 33(3), 635-647.
- Looney, A., & Turner, N. (2018, March 14). Work and opportunity before and after incarceration. Retrieved April 30, 2021, from https://www.brookings.edu/research/work-and-opportunity-before-and-after-incarceration/
- Lurigio, A. J., & Ellis, E. M. (2017). Use of Civil Abatement to Combat Public Nuisances and

 Crime. In Oxford Research Encyclopedia of Criminology and Criminal Justice.

 https://oxfordre.com/criminology/view/10.1093/acrefore/9780190264079.001.0001/acrefore-9780190264079-e-7
- Office of General Counsel Guidance on Application of Fair Housing Act Standards to the

 Enforcement of Local Nuisance and Crime Free Housing Ordinances Against Victims of

Domestic Violence, Other Crime Victims, and Others Who Require Police or Emergency Services, 2016. https://www.hud.gov/sites/documents/FINALNUISANCEORDGDNCE.PDF

- Olajide, S. E., Lizam, M., & Adewole, A. (2015). Towards a Crime Free Housing: CPTED versus CPSD. Journal of Environment and Earth Science, 5(18), 53-63.
- OPEN COMMUNITIES & SARGENT SHRIVER NATIONAL CENTER ON POVERTY LAW, Reducing the

 Cost of Being Crime Free: Alternative Strategies to Crime Free/Nuisance Property

 Ordinances in Illinois 3 (2015)

 http://povertylaw.org/sites/default/files/images/advocacy/housing/reducing-the-costof-Crime Free.pdf
- Orfield, G., & Jarvie, D. (2021, February 23). Black segregation matters: School resegregation and black educational opportunity. Retrieved April 30, 2021, from https://escholarship.org/uc/item/4jp1z62n.

Poverty in California. Public Policy Institute of California. (2020, August 18).

https://www.ppic.org/publication/poverty-in-california/.

Pettit, B., & Gutierrez, C. (2018). Mass incarceration and racial inequality. *American Journal of Economics and Sociology*, 77(3-4), 1153-1182.

Ramsey, K. (2018). One-Strike 2.0: How Local Governments Are Distorting a Flawed Federal Eviction Law. UCLA L. Rev., 65, 1146.

https://heinonline.org/HOL/Page?handle=hein.journals/uclalr65&div=31&g_sent=1&cas

- a_token=LGj48NrAFmsAAAAA:rerlzvtZC-gAoLBDRyuEbo7TdF1HvqA7pj-b1rgQn3v-juG8SQlHT8goaXG5v6lyA1qKnSORkw&collection=journals
- Roy, Ananya, et al. (2020, March). Unhousing the Poor: Interlocking Regimes of Racialized

 Policing . UCLA Luskin Institute on Inequality and Democracy.

 ucla.app.box.com/s/56m97nbng4265rn7l44k7l2jwql9zdc5
- Silverstein, E. (2020). Life, Liberty, and Rental Property: Oakland's Nuisance Eviction Program.

 Hastings J. Crime & Punish., 1, 79.

 https://repository.uchastings.edu/cgi/viewcontent.cgi?article=1004&context=hastings_j

 ournal_crime_punishment
- Tang, B. (2018) A Review of the California Unlawful Detainer Pilot Program: 2018 Update.

 California Research Bureau, California State Library.

 https://www.library.ca.gov/Content/pdf/crb/reports/Unlawful_Detainer_2018_Report.

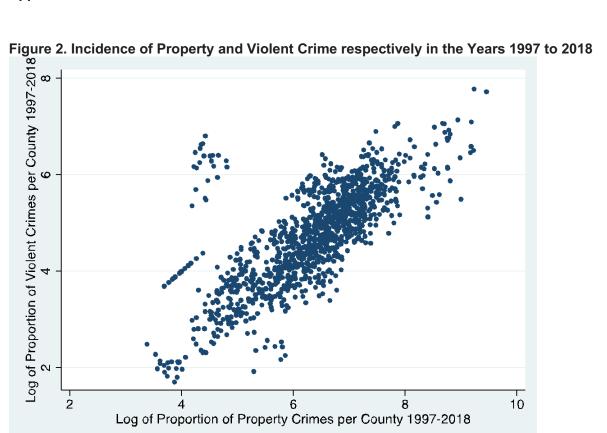
 pdf
- Zehring, T. L. (1994). The mesa Crime Free multi-housing program. FBI Law Enforcement Bulletin, 63(6), 8-15.

https://heinonline.org/HOL/Page?handle=hein.journals/fbileb63&div=39&g sent=1&ca
sa token=EPn-

LOSUq10AAAAA:Lw6 OvwxxGiVyFHQZor2VCzWqAxqRE88iRkzprbSp8pAJ8 opdI6BjkFAb udCGi-u94c-wgbXQ&collection=journals

Appendix





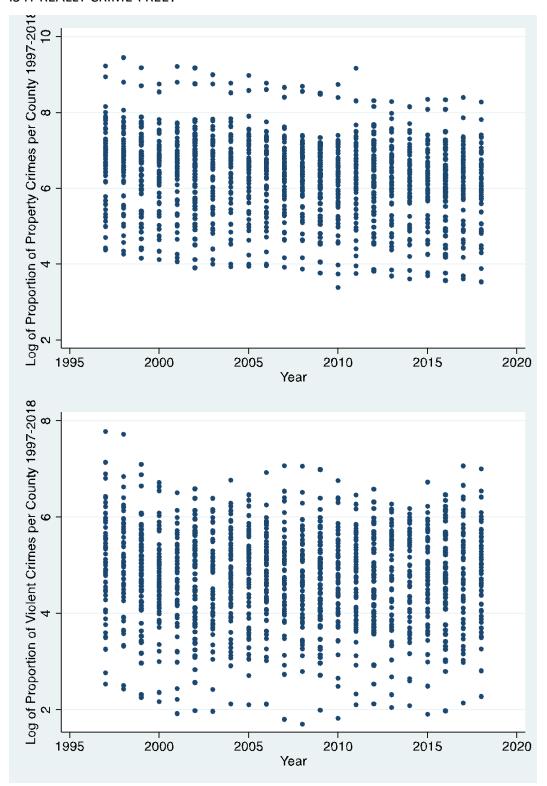


Table 4. Variable Labels

	storage	display	value	
variable name	type	format	label	variable label
Year	int	%10.0g		Year
FIPScounty	int	%10.0g		FIPS county codes
CrimeFree	byte	%10.0g		Crime Free Multi-Housing program
PropertyRate	double	%10.0g		Property Crime rate per County 1997-2018
ViolentRate	double	%10.0g		Violent Crime rate per County 1997-2019
AsianPI	double	%10.0g		Proportion of Asian and Pacific Islander Race per County
1997-2018				
	double	%10.0g		Proportion Black/African American Race per County 1997-
2018				
Hispanic	double	%10.0g		Proportion of Hispanic Ethnicity per County 1997-2018
White	double	%10.0g		Proportion White Race per County 1997-2018
PovPerAge017	double	%10.0g		Poverty Percentage Ages 0-17
PovPerAge517	double	%10.0g		Poverty Percentage Ages 5-17
PovPerAllAges	double	%10.0g		Poverty Percentage All Ages
MedianHouseho	~e long	%10.0g		Median Household Income

Table 5. Pairwise Correlation of All Variables at the 0.05 Significance Level

!	lnviol~t	lnprop~y (CrimeF~e	single	multi	mobile	Year
lnviolent	1.0000						
lnproperty	0.7402* 0.0000	1.0000					
CrimeFree	-0.2253* 0.0000	-0.3410* 0.0000	1.0000				
single	0.2047*	0.1465* 0.0000	-0.1797* 0.0000	1.0000			
multi	-0.5010* 0.0000	-0.4468* 0.0000	0.3109* 0.0000	-0.7091* 0.0000	1.0000		
mobile	0.4692* 0.0000	0.4595* 0.0000	-0.2309* 0.0000	-0.1468* 0.0000	-0.5934* 0.0000	1.0000	
Year	-0.0573* 0.0425	-0.1892* 0.0000	0.1998* 0.0000	0.0701* 0.0130	0.0181	-0.1055* 0.0002	1.0000
White	0.4246*	0.4278* 0.0000	-0.3982* 0.0000	0.3294* 0.0000	-0.5873* 0.0000	0.4478* 0.0000	-0.2099* 0.0000
Hispanic	-0.2310* 0.0000	-0.3718* 0.0000	0.1214* 0.0000	-0.0487 0.0848	0.2549* 0.0000	-0.3020* 0.0000	0.1797* 0.0000
Black	-0.0148 0.6007	0.0900* 0.0014	-0.1029* 0.0003	0.0202 0.4740	-0.0608* 0.0313	0.0622* 0.0276	-0.4318* 0.0000
AsianPI	-0.6027* 0.0000	-0.5371* 0.0000	0.3474* 0.0000	-0.2699* 0.0000	0.6084*	-0.5454* 0.0000	0.0952* 0.0007
PovPerAge017	0.4282*	0.3468* 0.0000	-0.0810* 0.0041	-0.0951* 0.0007	-0.2011* 0.0000	0.3906* 0.0000	0.0608* 0.0313
PovPerAge517	0.4254*	0.3485* 0.0000	-0.0716* 0.0112	-0.1161* 0.0000	-0.1841*	0.3908* 0.0000	0.0101 0.7216
PovPerAllA~s	0.3368*	0.2595* 0.0000	-0.0692* 0.0143	-0.0995* 0.0004	-0.1783* 0.0000	0.3638* 0.0000	0.1321* 0.0000
MedianHous~e	-0.5295* 0.0000	-0.5728* 0.0000	0.2907* 0.0000	0.0083 0.7699	0.4108* 0.0000	-0.5857* 0.0000	0.4863* 0.0000
	White	Hispanic	Black	AsianPI	PovP~017	PovP~517 1	PovPer~s
White	1.0000	-		-	_	-	
Hispanic	-0.1360* 0.0000	1.0000					
Black		-0.0634* 0.0248	1.0000				

AsianPI 	-0.8770* 0.0000	0.1638* 0.0000	-0.1153* 0.0000	1.0000			
PovPerAge017	0.1292* 0.0000	0.2953* 0.0000	-0.2312* 0.0000	-0.3074* 0.0000	1.0000		
PovPerAge517	0.1310* 0.0000	0.3027* 0.0000	-0.2536* 0.0000	-0.2886* 0.0000	0.9843* 0.0000	1.0000	
PovPerAllA~s	0.0839* 0.0029	0.3500* 0.0000	-0.2227* 0.0000	-0.2588* 0.0000	0.9516* 0.0000		1.0000
MedianHous~e 	-0.4786* 0.0000	0.0622* 0.0275	-0.1833* 0.0000	0.5869* 0.0000	-0.6550* 0.0000	-0.6643* 0.0000	-0.5980* 0.0000
!	Median~e						
MedianHous~e	1.0000						