

# Informing the Debate

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Michigan Applied Public Policy Brief

## Homicide, Home Vacancies, and Population Change in Detroit

Authors

Meghan E. Hollis



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# Informing the Debate

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# Informing the Debate

MAPPR Policy Research Brief

## Homicide, Home Vacancies, and Population Change in Detroit

### **Authors**

Meghan E. Hollis, Ph.D.  
Principal Investigator

### **Sponsor**

The Institute for Public Policy and Social Research  
Matthew Grossmann, Ph.D., Director  
Associate Professor, Department of Political Science  
Michigan State University

### **Series Editors**

Ann Marie Schneider, M.S.  
Institute for Public Policy and Social Research  
Michigan Applied Public Policy Research (MAPPR) Grant Program  
Administrator  
Michigan State University

Emily Stanewich  
Institute for Public Policy and Social Research  
Communications Assistant  
Michigan State University

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## Abstract

The city of Detroit has maintained steady and high rates of violence over a long period of time. Forbes named Detroit the most dangerous city in the United States for the seventh year in a row in 2015 (Fisher, 2012; 2015). This report examines the relationship between population change, home vacancies, citizen perceptions, and homicide rates in Detroit. Population decline has led to important changes in Detroit. It is essential to understand how those changes have related to crime patterns as well as what the current resident perceptions of their environment are. The findings indicate that the population outmigration combined with the increasing volume of vacant homes is strongly related to the high violence rates and tries to explain why these high violence rates are concentrated in some census tracts. Summary results from the survey are discussed as well.

## INTRODUCTION

Detroit has remained the city named the “most dangerous city in the United States” for seven years (Fisher, 2012; 2015). Detroit has also experienced dramatic population change in the past half century. Some cities in the United States have experienced population decline (e.g., Detroit, Michigan) when others have experienced population growth (e.g., Fort Worth, Texas and Austin, Texas). Detroit is unique in that it has experienced massive population outmigration and other forms of population change during a period marked by growth in many other major American cities. This raises important questions about the relationship between population decline and crime – particularly given Detroit’s consistently high ranking as America’s most dangerous city.

The population outmigration in Detroit has resulted in an extremely disadvantaged population concentrated in Detroit (which has become characteristic of much of the city) providing the city without a substantial tax base and other forms of support for needed social welfare programming. The disadvantaged populations are further concentrated in select neighborhoods within the city. Furthermore, there has been little or no influx of new populations, except in the downtown area, which has been the target of community revitalization efforts.

While research has examined the influence of immigration on homicide trends, research has not thoroughly examined what happens when cities experience emigration. Immigrants appear to bypass areas where the economy is in decline seeking out areas with job growth (or at least job availability) (e.g., Martinez, 2000; 2002; 2010). Furthermore, cities (i.e., Detroit, Michigan; Cleveland, Ohio; Pittsburgh, Pennsylvania; and Gary, Indiana) where there have been negative economic changes either face consistent or widening racial disparities in living conditions and access to jobs, often leading to increased emigration from the community (see, e.g., Sugrue, 2005). It is important from both a theoretical and a policy perspective to examine how the combination of economic decline, increasing racial tension and disparity, and low or non-existent immigration combined with emigration of selected populations relate to homicide trends. In other words, what is the relationship between population change and homicide in cities that have faced recent population outmigration?

The key research question that this paper seeks to address is: What is the relationship between the patterns of population change and homicide in Detroit neighborhoods? This paper is an attempt to examine contextual features that may have influenced homicide patterns in Detroit. This question is particularly important, as it allows an examination of a former manufacturing hub in an effort to understand the unique characteristic features that differentiate Detroit from other urban areas, and how those differences might lead to different homicide trends. This research is an attempt to situate the unique homicide trends in Detroit in a context that allows for theoretical development and refinement. The key concern here is the relationship between emigration from the city, increasing home vacancy rates and economic change, and homicide trends. While immigration and/or economic revitalization have been seen in some areas, this is not the case in Detroit. As the city is devoting significant resources into the demolition of vacant homes, it is becoming clear that the city of Detroit has never fully recovered from the dislocation of the manufacturing industry.

## STUDYING DETROIT – LOCAL CONTEXT, EXPERIENCE, AND CHANGE

Detroit, Michigan has experienced significant population and economic decline in recent years. Once the 4<sup>th</sup> largest city in the nation, Detroit now is in an extreme state of decay. Many homes are vacant, vandalized, and falling apart, and this once-flourishing metropolis now appears post-apocalyptic<sup>1</sup>. As manufacturing jobs have declined, residents have fled the city for the suburbs to be closer to other job opportunities. This out-migration has changed the character of the city.

As mentioned previously, Detroit was once the 4<sup>th</sup> largest city in the county, however the changing economic landscape has resulted in dramatic population decline since the 1950s<sup>2</sup>. These changes have resulted in dramatic shifts to the population composition over the last century. The population of Detroit started climbing fairly rapidly in the early 1900s. Deindustrialization led to population decline starting in the 1950s and 1960s. This population decline has continued to the present in Detroit (see Sugrue, 2005). At the beginning of the population decline, this represented the flight of the affluent white population to the suburbs. This eventually spread to the middle class white population as well as many of the upper lower class whites. Finally, the black upper and middle classes fled the city for the suburbs and other locations. The population that remains is characterized by disadvantage. There are racial dimensions to this population change –

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<sup>1</sup> The observations highlighted here were revealed through ethnographic observations and field notes in the study city.

<sup>2</sup> The source for the data and information presented in this paragraph was developed from data from the United States Census Bureau obtained using the American Factfinder at [www.census.gov](http://www.census.gov). This information and data is part of a larger research effort examining changes in Detroit over time. The data presented in the current paper is cross-sectional and does not examine the influence of changes over time.

particularly in recent years – that should be acknowledged (for a more detailed discussion of the population changes in Detroit see Sugrue, 2005 or Thomas, 2013).

Starting in the 1920s and accelerating in the late 1950s to 1960s, the white population dramatically decreased in Detroit. In 1900 Detroit was nearly 100 percent white, but sixty years later whites comprised 71 percent of the population. The time frame from 1960 to 1970 starts the white flight with the white population comprising 55.5 percent of the population in 1970. This dramatic decline continues in 1980 (34.38 percent white) and 1990 (21.63 percent white). This white flight resulted in the city becoming majority black (63.07 percent) by 1980 (and even more so today – 82.69 percent black in 2010) (see Sugrue, 2005 and Thomas, 2013 for further discussion of the population changes in Detroit). Today, the city is only 10.61 percent white.

The population composition in Detroit has been undergoing steady change over the last fifty years with the proportion of the population that is Black steadily increasing as the proportion of the population that is White has been steadily decreasing. Simultaneously, the Hispanic/Latino and foreign born populations have remained relatively small. The Hispanic/Latino population was originally attracted to Detroit (and other areas of Michigan) for three primary reasons: (1) the employment of Mexican track hands by the railroad industry, (2) the growth of the automotive industry (namely the introduction of the \$5.00 work day by Ford Motor Company), and (3) the growth of the sugar beet industry (Baba and Abonyi, 1979). Hispanic/Latinos did not start to move to the city of Detroit in significant numbers until the 1970s. Today they only represent 6.82 percent of the population<sup>3</sup>. The majority of this population is concentrated in southwest Detroit in an area referred to as “Mexican Town” (see Baba and Abonyi, 1979).

Similarly, the percent foreign born in Detroit has also rapidly declined. In 1900 the percent foreign born was at a high of 33.7 percent. The percent foreign born was cut in half by 1950 (14.9 percent), and today represents a very small portion of the population (5.1 percent)<sup>4</sup>. While other areas in the United States have been experiencing an influx of immigrant populations (that some argue contributes to economic revitalization), Detroit has seen outmigration and disinvestment. This makes Detroit an intriguing contrast to cities that have been examined in previous research where there is significant immigration and population expansion (i.e., Miami, San Antonio, and Chicago).

Prior research on the relationship between immigration/ethno-racial composition and crime has focused primarily on communities where immigration is high (in Miami see Martinez, 2003; Martinez and Lee, 2000; in Miami and San Antonio see Martinez and Stowell, 2012; in California see Feldmeyer and Steffensmeier, 2009; in Chicago see Chavez and Griffiths, 2009). As seen above, Detroit makes an interesting contrast in that immigration levels are either low or non-existent and the city has experienced significant population decline. This provides an interesting contribution to the research literature on the immigration/racial segregation/homicide connection.

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<sup>3</sup> This data was collected as a part of the longitudinal data set that is currently being collected for the city of Detroit.

<sup>4</sup> This data is a part of the larger longitudinal dataset that is currently being collected for this research site.

## The Impact of the Changing Economy in Detroit

Deindustrialization began in the 1960s, however significant impacts in Detroit are seen in the 2000s. As the previous section showed, deindustrialization resulted in population decline and changing population composition in Detroit. The deindustrialization process “stalled the expansion of opportunities” and “nonwhites were particularly harmed by this long-term trend because they were disproportionately employed in the traditional manufacturing industries” (Peterson and Krivo, 2010: 3). This was evident in Detroit where work was heavily concentrated in the automotive manufacturing plants until recently (Sugrue, 2005).

For the current research, the economic changes of the 21<sup>st</sup> century are particularly important. They started with the economic impact of the September 11<sup>th</sup> attacks, and continued as the country moved into a recession later in the 2000s. From 2007-2009 the United States began a period of economic decline. As the United States moved into a recession, industrial and manufacturing cities faced dramatic economic decline as well. The subprime mortgage crisis fed a global financial crisis leading to failure and collapse in many of the financial institutions as well as a major crisis in the automobile industry. Many automotive plants were forced to lay off workers and others were forced to close their doors. In Detroit, this local decline initially led to massive job loss as manufacturers (particularly in the automotive industry) were forced to lay off large numbers of workers. As the automotive plants closed, many in Detroit were left unemployed and the city lost a major source of revenue.

The population decline in Detroit escalated as the recession progressed. As both the population and economy were in decline, the homicide rate started to increase. As the rest of the country saw a steady decline in homicide rates, Detroit had a steady high homicide rate. The current research focuses on homicides from 2007-2013 in Detroit in an attempt to understand why, when the rest of the nation experienced declining homicide rates, Detroit saw a steady homicide rate.

As the national and local economic declines continued, many industrial centers (both locally and nationally) were forced to shut down entirely or move to different locations where operating costs and expenses were lower. As industrial complexes shut down and left the city, many of the suppliers (also located in the city) left with them or went out of business. The residents who could afford to leave and follow the jobs did. The ones who were left behind were the marginalized and disadvantaged who could not afford to follow (Sugrue, 2005). With no jobs left in the city, there was no attraction for immigrants or other groups who could have revitalized the economy of the city. With no new population providing financial and other resources and no jobs, unemployment and poverty escalated in the city.

A period of rapid out-migration ended with those who could not afford to leave being left behind leading to a mix of high vacancy rates and concentrated disadvantage. Homes were left standing empty with no one to care for them. Over time they became rotted

shells<sup>5</sup>. No jobs and high rates of vacant properties meant that the city lost its tax base (Thomas, 2013). This lost tax base then led the city to declare bankruptcy. The economic outlook got even worse as the city could not afford to invest in neighborhoods, quality of life concerns, and schools. Only the most severely disadvantaged populations remained in the city with no resources to support or assist them (Thomas, 2013). This in turn means that there is no social welfare support for this disenfranchised population.

These economic and social characteristics combined in Detroit and led to a much different picture than what was seen in the rest of the nation. The changing economy and social character of the city led to white flight and concentrated disadvantage within a population that has been historically disadvantaged (Sugrue, 2005). The demographic changes in recent years have been pivotal to changes in the social structure of the city and have led to increasing violence. The combination of resource deprivation, political turmoil, systemic racism, and disinvestment has created an environment conducive to increased violence (in a similar manner to that seen in Shaw and McKay, 1969; Bursik and Grasmick, 1993; and Sampson, *et al.*, 1997). This makes Detroit an intriguing place to examine the relationships between population change, deprivation, and homicide.

An examination of population changes in Detroit in recent years is informative. As of 2013 Detroit's population was 688,701. The population decreased by 24.95 percent from 2000 to 2010, and decreased by 27.60 percent from 2000 to 2013. In the United States, the population increased by 9.70 percent from 2000 to 2010. As of 2010, 22.8 percent of homes were vacant in Detroit, and the number of vacant homes has been steadily increasing in recent years. Only 11.4 percent of homes were vacant in the United States at the same time. The median household income in Detroit as of 2013 was \$26,955 which is more than \$20,000 less than the national median household income of \$53,046. Further examination of the economic situation in Detroit reveals that 28.1 percent of Detroit residents lived below the poverty threshold in 2010. This is nearly double the national rate of 14.9 percent. Furthermore, while 6 percent of United States residents are unemployed, 17.7 percent of Detroit residents are. This is nearly triple the national unemployment rate. Finally, while 2.7 percent of United States residents are on public assistance, the rate for Detroit is more than triple that (8.9 percent).

The trends related to race, ethnicity, and emigration in Detroit provide important context for the current study. While the United States population is 72.4 percent white, the Detroit population is only 10.6 percent white. The Detroit population is 82.7 percent black compared to the United States rate of 12.6 percent. Finally, while 16.3 of the United States population is Hispanic or Latin@, only 6.8 percent of Detroit's population is Hispanic or Latin@. It is also important to note that only 5.1 percent of Detroit residents are foreign born compared to 12.89 percent of United States residents. These contrasts to the national trend make Detroit an intriguing place to study.

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<sup>5</sup> Observations discussed here are based on extensive ethnographic field work and observation in the study site.



## COMMUNITIES AND CRIME

Much of the current communities and crime research and literature is rooted in the structural perspective that emerged from the Chicago-school. Structural theories explaining crime indicate that socioeconomic and other structural (e.g., class, race) conditions can be used to explain group differences in crime and violence (Peterson and Krivo, 2005). The structural perspective is rooted in the work of Merton (1938) and Shaw and McKay (1942).

Social disorganization theory (as developed by Shaw and McKay, 1969) provides the foundation for the current research. The theory emerged as a part of a movement away from individual explanations of criminality to a focus on place-based (social) influences on crime rates. Kubrin and Weitzer (2003: 374) state: "*Social disorganization* refers to the inability of a community to realize common goals and solve chronic problems." The theory indicates that a variety of neighborhood structural characteristics combine to weaken social networks and decrease the community's ability to control public (and private) behaviors resulting in an increase in crime.

In Shaw and McKay's (1969) work, they found that three groups of socio-demographic indicators correlated highly with concentrations of juvenile delinquent residences. These indicators were used to differentiate between areas of varying levels of social disorganization. In other words, the combination of low socioeconomic status, high levels of residential mobility, and ethnic heterogeneity lead to the disruption of community levels of social organization. This, in turn, leads to increased propensity for criminal and delinquent activity.

Kornhauser's (1978) critique of these theories was quite useful in the development of the current research and further aided in development and revival of these theoretical approaches. The publication of this assessment marked the revival of these theories in criminological research. This led to the refinement of the theory into a more complex "systemic model" incorporating both intra- and extra-neighborhood factors and specifying clear links between these and the structural indicators (Bursik and Grasmick, 1993). Sampson and Groves (1989) used Kornhauser's (1978) critique to inform their expanded examination of social disorganization theory. This was further developed in the seminal Sampson *et al.* (1997) piece which introduced measures of collective efficacy that expanded on the measures used in Sampson and Groves (1989). Kubrin and Weitzer (2003) highlight the importance of these intervening mechanisms stating "Central to social disorganization theory are the neighborhood mechanisms that reduce crime and disorder. Foremost among these are residents' social ties and the degree to which people exercise social control in their neighborhoods" (p. 375). An examination of the various resulting indicators commonly used in social disorganization research is informative.

## COMMONLY USED INDICATORS

### Socioeconomic Status

Three groups of socio-demographic indicators have been tested in previous social disorganization research. The first of these, low socioeconomic status, is often assessed via measures of poverty and inequality such as percent of households below the poverty level, median household income, and the Gini index of income inequality (e.g., Block, 1979; Curry and Spergel, 1988; Messner and Tardiff, 1986; Sampson, 1985; 1986; 2004; Sampson *et al.*, 1997). Research has demonstrated mixed results with respect to the connection between neighborhood socioeconomic status and crime (Sampson, 2004). Some research indicates a strong relationship between poverty of places and violence (Block, 1979; Curry and Spergel, 1988). Other research indicates that this relationship is weak (Messner and Tardiff, 1986; Sampson, 1985; 1986; 2004). Smith and Jarjoura (1988) found that the relationship between levels of poverty and violence in neighborhoods is dependent on the level of population mobility in a neighborhood where higher levels of population mobility and poverty in neighborhoods are correlated with higher rates of violent crime than in those neighborhoods characterized by high socioeconomic status and high mobility or low socioeconomic status and low mobility levels.

### Population Mobility

Population mobility measures community change or the impermanence of neighborhood residents. This is typically measured through variables such as renter or owner occupancy, length of tenure in a home, and dominance of vacant residences. Research has consistently demonstrated a moderate-to-strong negative correlation between residential stability and violent crime (Block, 1979; Sampson, 1985; Taylor and Covington, 1988).

### Ethnic Heterogeneity and Racial Segregation

The ethnic heterogeneity and racial segregation constructs *can be* somewhat controversial indicators when used in research. Often their interaction with the other indicators can become problematic (see, e.g., Peterson and Krivo, 2010). Originally intended to measure the mixture of different European immigrant groups in the same neighborhood (and therefore unable to develop common control mechanisms due to language and cultural barriers) (Shaw and McKay, 1969), today researchers are more likely to incorporate measures of racial segregation/concentration and isolation. Shaw and McKay (1969) demonstrated that rates of delinquent residences were highest in areas that were either predominantly black or foreign-born. However, areas that were over 70 percent black or foreign-born had rates of delinquency that were more than double those of areas of maximum heterogeneity (Sampson, 2004).

Wilson (1987) applied a structural perspective drawing on the social disorganization (Shaw and McKay, 1942) framework in his research. This work found that differences in crime and other social problems by race are rooted in the differential community characteristics whites and blacks live in. As the high concentrations of black poverty emerged in confined geographic areas in the 1970s and 1980s, Wilson (1987) indicates

that this led to the social isolation of certain groups resulting in a lack of access to jobs (see also, Wilson, 1996), weakened social connections and controls, and community deterioration. This indicates a potential interaction effect between ethnic and racial composition of neighborhoods and poverty. This interaction is further supported in Peterson and Krivo's (2010) work.

Research has demonstrated that the percentage of the neighborhood population who identify themselves as black has a strong positive correlation with violent crime rates in the neighborhood (Block, 1979; Messner and Tardiff, 1986; Sampson, 1985; Roncek, 1981; Smith and Jarjoura, 1988). Research has also demonstrated that the influence of racial composition on crime is decreased when controls are introduced for family structure and socioeconomic status (Block, 1979; Messner and Tardiff, 1986; Sampson, 1985). Peterson and Krivo (1993) found that residential segregation was related to higher levels of violence among black populations. They examined this further, finding that these segregated communities often have higher levels of concentrated disadvantage which then lead to higher violence rates. The key to understanding the various indicators relies on an assumption that these lead to weakened social ties and social controls. Unfortunately, earlier social disorganization research was unable to examine these constructs directly.

### **The Development of the Collective Efficacy Construct**

Early social disorganization research simply assumed that social ties/ social control had a direct effect on variation in crime rates. It was not until the Sampson and Groves (1989) study that researchers began to attempt direct measurement of social ties and control and examination of the relationship between these constructs and crime outcomes. Measurement of these constructs began with Sampson and Groves' (1989) examination of local friendship networks, participation in formal and voluntary organizations, and community abilities to supervise and control teenage peer groups. Further research has continued to support the incorporation of these constructs (e.g., Bellair, 1997; 2000; Elliott, *et al.*, 1996; Markowitz *et al.*, 2001; Sampson *et al.*, 1997).

The movement toward attempts to examine the social ties and social control effects eventually led to the development of the collective efficacy construct (Sampson, 1997; Sampson *et al.* 1997). Collective efficacy can be defined as the ability to intervene effectively in problems in the neighborhood and the ability to maintain public order through residential supervision and controls. The use of the collective efficacy construct has received a great deal of support in the research literature (e.g., Sampson, *et al.*, 1997; Sampson *et al.*, 1999; Morenoff, *et al.*, 2001; Browning, 2002; Markowitz, *et al.*, 2011).

### **Understanding Potential Interactions and Combinations of Common Indicators**

Prior research has examined homicide and violence trends in urban areas in an effort to better understand the combined effects of the previously discussed indicators. Peterson and Krivo (2010) examined homicide in urban areas with a goal of determining whether racial composition affected crime rates differentially in white and nonwhite neighborhoods when differences in economic conditions were controlled for. They found that even after controlling for economic conditions there were still significant differences in violent crime

rates in white and non-white areas. Cooney (1998, p. 40) suggests an explanation, stating that low-status individuals must “exist largely without the protection of the state” as they have less access to law enforcement and other public services. This leads them to “use aggressive tactics – fighting, burning, seizing, killing, and so forth – to resolve their conflicts.” (Cooney, 1998: 40). Furthermore, marginalized populations typically don’t get the response they want from law enforcement (Brunson, 2007; Carr, *et al.*, 2007). This can lead to frustration with law enforcement entities and often results in low status individuals turning to self-help to deal with conflict. This often, in turn, leads to violent solutions. Sampson (1987) similarly found that black neighborhoods tend to be characterized by excessive levels of disadvantage. He argued that the primary mechanism through which disadvantage impacts local violence involves the disruption of family ties and social controls. This led to the recommendations of Sampson and Wilson (1995) which integrated Wilson’s (1987) work on structural transformation, social disorganization (as seen in the work of Shaw and McKay, 1942; Kornhauser, 1978; Sampson and Groves, 1989), and work on cultural adaptation (Anderson, 1978; 1999). Sampson and Wilson (1995) found that structural barriers combined with social isolation gives rise to a series of cultural responses. This further highlights the differential community contexts by socioeconomic status and race.

Lee’s (2000) work has also examined the relationship between structural (socioeconomic and race) features of communities and violence. This work demonstrates that disadvantage and concentrated poverty have a statistically significant effect on violence, but this effect was similar across racial groupings. The age distribution/concentration of the community, housing density, and region were also found to have significant effects on violence, but these effects only emerged for certain racial groupings.

The emergence of Peterson and Krivo’s body of research further highlights this important social structural element of violence. Krivo and Peterson (1996) found that the effect of disadvantage on violence does not significantly differ when comparing white and black communities. Krivo and Peterson (2000) further found that when disadvantage is more widespread, there may be a threshold effect where structural factors may appear to have less of an impact. In other words, in areas where disadvantage is widespread there may be variations within the disadvantaged populations that become more influential than more simple advantaged/disadvantaged comparisons. (see also, McNulty, 2001).

### **Immigration and Homicide Patterns**

Research on the impact of immigration on homicide is well established. MacDonald and Sampson (2012: p. 7) indicate that “Political debates on U.S. immigration policy frequently connect immigrants to a variety of social ills, including crime, lower educational attainment, moral decline, and the lowering of human capital skills.” However, they (and others) find that areas with higher concentrations of immigrants today tend to see less crime.

A significant body of research has shifted the focus from race, disadvantage and crime to the relationship between immigration and crime – particularly violence. Much of this research applies the previously discussed framework examining links between race, social structure/disadvantage, and violence to the examination of Latino immigration and violence. Martinez (and colleagues) has examined Latino homicides finding support for the racial invariance hypothesis (e.g., Martinez, 1996; 1997; 2000; 2002; 2003; Martinez and Lee, 2000; Lee *et al.*, 2001; Lee and Martinez, 2002). Martinez (2003) further found that the connections between deprivation and homicide are similar across non-white ethno-racial groups. Other research has resulted in similar findings with respect to the immigration and crime connection (Alaniz *et al.*, 1998; Hagan and Palloni, 1999).

Recent research efforts have found fairly consistent results on the relationship between homicide and immigration. Akins *et al.* (2009) found that, once they controlled for the structural predictors of homicide, recent immigration was not associated with homicide in Austin, Texas. Martinez and colleagues (see, e.g., Martinez and Stowell, 2012; Martinez, 2010; Martinez *et al.*, 2010) have examined the relationship between immigration and Latino homicides. This body of research has consistently found that in areas with higher numbers of immigrants there are lower volumes of homicides. Furthermore, Martinez (2014) has consistently indicated that over time homicides decrease in areas characterized by increased immigration.

While previous research has examined the relationship between race and violence and immigration and violence, no research has examined the influence of population and economic decline on violence. While the body of research on immigration and crime has discussed what happens when there are population increases, there is not a comparable literature on what happens when populations leave a city. The research presented in this paper addresses this important gap in the literature by examining the relationship between population decline and homicides in Detroit.

## METHODS

Using a social disorganization theory (Shaw and McKay, 1969) orientation the current effort examines the relationship between traditional structural features and homicide with a focus on understanding the importance of the impact of population change (resulting from the emigration of different groups) on violence in Detroit. The underlying hypothesis is that increasing emigration from neighborhoods disrupts the social fabric of the community resulting in higher violence rates that remain unchecked by neighborhood social controls. In order to examine this hypothesis, we start by examining the relationship between traditional socio-demographic indicators of social disorganization (socioeconomic status, population mobility, and immigration/ethnic composition) and violence. We then build on these models by incorporating measures of population change and outmigration.

## Data Sources

This report is based on a study that used three sources of data. The unit of analysis used in the primary component of the study is the census tract, and there were 291 total census tracts included in the analysis. Homicide data were collected and cleaned through an examination of the Detroit Police Department police records. The independent variables in this study were collected from the United States Census Bureau website using American Fact Finder ([www.census.gov](http://www.census.gov)). The current study uses data from the 2010 census data collection period (and 2000 census data collection period to calculate change scores). Finally, a community survey was distributed to 2,500 residential addresses. Of those, 374 (14.96 percent) were not deliverable. There were 355 completed surveys, resulting in a 16.70 percent response rate.

## HOMICIDE AND POPULATION CHANGE ANALYSES

### Independent Variables

The independent variables were collected based on previous communities and crime research traditions. The variables collected and calculated included: percent unemployed, percent below the poverty threshold, percent on public assistance, percent of families with a female head of household, percent black, percent of homes that are renter occupied, percent of people who have moved in the past 5 years (since 2005), percent Hispanic or Latin@, percent foreign born, percent of homes that are vacant (for both 2000 and 2010), and total population (for both 2000 and 2010) for each census tract (see Table 1). The variables were then combined into three indices based on previous research efforts (i.e., Griffiths, 2013; Lee *et al.*, 2001; Martinez *et al.*, 2010; Martinez and Stowell, 2012; Morenoff and Sampson, 1997).

**Table 1.** Descriptive Statistics by Census Tract

	n	Minimum	Maximum	Mean	Standard Deviation
Number of Homicides from 2007 to 2013	291	0	28	8.92	5.39
Percent Male Between 15 and 34	291	0.00	66.00	29.15	8.39
Percent Nonwhite	291	32.99	100.00	89.82	14.84
Percent Black	291	1.50	100.00	84.39	24.37
Percent Hispanic/Latino	291	0.00	85.10	5.88	16.76
Percent Vacant	291	3.40	59.40	26.33	10.82
Percent Renter Occupied	291	2.20	100.00	46.81	19.29
Percent Unemployed	291	2.00	41.50	13.97	5.50
Percent Below Poverty Threshold	291	1.80	75.10	35.89	14.54
Percent Female Head of Household	291	3.70	64.80	31.07	11.67
Percent of People with More than High School Education	291	32.45	99.01	75.88	11.79

Percent Non-Citizens	291	0.00	40.40	3.31	7.66
Percent Moved Since 2005	291	5.90	74.25	33.80	12.02
Percent Foreign Born	291	0.00	48.80	4.69	9.71
Percent on Public Assistance	291	0.00	33.10	9.78	5.72

### Independent Variables – Development of Indices

Each index was developed based on the valid measures used in previous research (i.e., Griffiths, 2013; Lee *et al.*, 2001; Martinez *et al.*, 2010; Martinez and Stowell, 2012; Morenoff and Sampson, 1997), although the methods of scale development vary from one study to another (i.e., principal components analysis or the use of z scores). The socioeconomic deprivation index was developed using principal components analysis. The index includes the percent of people who live below the poverty threshold, the percent of people who are unemployed, the percent of households that are headed by females, the percent of people on public assistance, and the percent black. This index has a Cronbach’s alpha of 0.69.

The mobility index includes measures of the percent of residents who have moved in the last five years and the percent of homes that are renter occupied. This index has a Cronbach’s alpha of 0.77. Initially, the percent of homes that are vacant was included in this index. Unlike in previous research efforts, in the process of completing the factor analysis for this study the percent of homes that are vacant emerged as a separate factor. This is a deviation from findings of previous researchers indicating that this variable does not contribute to the mobility construct in this context. This warrants further examination and contributed to the development of the current line of inquiry.

The final index is the immigration index. This index includes measures of the percent of residents who are foreign born and the percent of residents classified as Hispanic or Latin@. This is in line with the previous work of Martinez and colleagues on immigration as cited above. This index has a Cronbach’s alpha of 0.79.

### Independent Variables – Other Measures

The current study is focused on the influence of population change, and more specifically population outmigration, and its influence on crime outcomes. In order to examine the influence of population outmigration on homicide counts in census tracts, three additional variables were included in the analyses for this study. As discussed previously, the percent of homes that are vacant emerged as a separate factor from the mobility factor in the scale development and analysis. The most likely explanation for this deviation from prior research is that the number of vacant homes, while steadily increasing, is indicative of the history of outmigration and not indicative of new/recent population movement or current mobility patterns. Instead, vacant homes are potentially indicative of chronic flight from the city without any influx of new populations. Based on this, the percent of homes that are vacant was included as a separate measure in the analyses.

Another key area of interest relates to the overall population change in the city. Detroit has been in a steady state of decline since the mid-20<sup>th</sup> century. In order to assess these changes, the percent change in the total population per census tract from 2000 to 2010 was

included to examine the influence of population change (and outmigration) on homicide rates.

A third measure was introduced to examine the impact of more recent home vacancies. In order to assess this, a new variable was developed to examine change in home vacancies. This involved calculation of the percent change in the vacant home rate from 2000 to 2010. This allows us to control for change in vacancy rates over time. .

In accordance with previous research, a control variable is included in each model. As is common with spatial analyses, there are indications of spatial autocorrelation in the current study. In order to account for the influence of spatial autocorrelation, the models presented here include a control in the form of a spatially lagged count of homicides from 2007 to 2013 for each census tract. This is in line with procedures used in previous research (Brown, 1982; Roncek and Maier, 1991; Mencken and Barnett, 1999; Morenoff *et al.*, 2001; Baller *et al.*, 2001;).

### **Dependent Variable - Homicide**

Homicide data were hand collected by the author from the Detroit Police Department crime databases. These data were then coded through an examination of the homicide police reports in the system. For this study, the homicides were geocoded using ArcGIS and aggregated at the census tract level (as a count of the number of homicides per census tract). The current study uses a sum of all homicides from 2007 to 2013 to account for historical and seasonal influences. This procedure is in line with approaches from previous homicide and communities and crime research (see, e.g., Martinez and Stowell, 2012; Shihadeh and Barranco, 2013).

### **Analysis Strategy**

Since homicides are relatively rare events, there are often many zero or near zero observations following either a Poisson or Negative Binomial distribution. The count-level dependent variable makes standard ordinary least squares (OLS) regression inappropriate due to the violation of some underlying assumptions (Osgood, 2000; Osgood and Chambers, 2000). After running a series of diagnostics, it was determined that the negative binomial model was the most appropriate model for the data in this study. Variance inflation factors (VIF) were estimated to check for multicollinearity by estimating the models in OLS. No VIFs were observed above 2.3, and most were well below that threshold. The models were developed with an initial replication of previous research with similar goals (communities and crime research discussed previously), followed by expanded models to test the influence of the important independent variables discussed above. Finally, an offset is included in all models to control for the influence of population size in each census tract.



## RESULTS

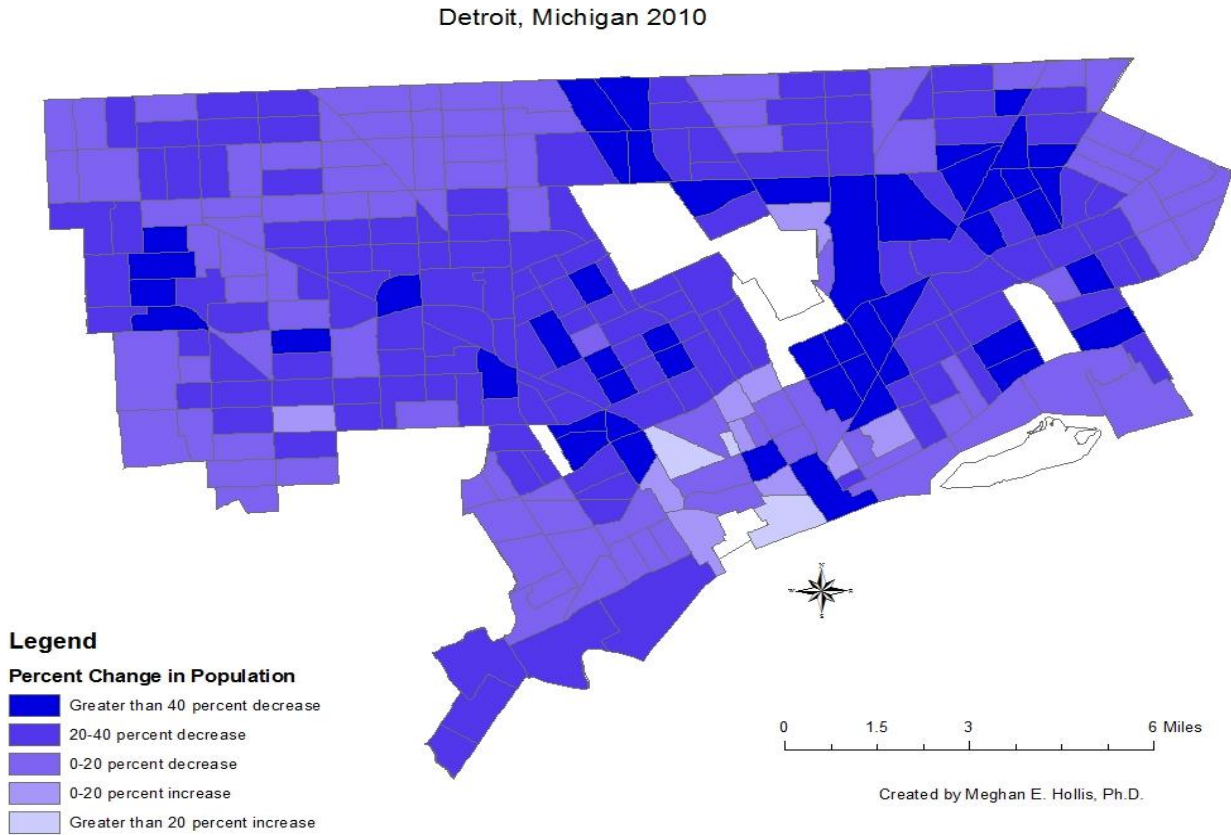
### Descriptive Statistics and Geographic Patterns

Table 1 presents the descriptive statistics for all variables. The number of homicides from 2007 through 2013 varied from a minimum of 0 to a maximum of 28 per census tract with an average value of 8.92 homicides over the study period. Very few census tracts had a zero count. The percent below the poverty threshold varied from a minimum of 1.80 percent to a maximum of 75.10 percent, with an average of 35.89 percent. The percent black varied widely from a minimum of 1.50 percent to a maximum of 100.00 percent with an average of 84.39 percent, and the percent renter occupied varied from a minimum of 2.20 percent to a maximum of 100.00 percent with an average of 46.81 percent. Two interesting variables are the percent Hispanic or Latin@ and the percent foreign born.

While the percent Hispanic or Latin@ varies from a minimum of 0.00 percent to a maximum of 85.10 percent, the average is only 5.88 percent. This indicates that the Hispanic and Latin@ population is heavily concentrated in a small number of census tracts. Similarly, the percent foreign born varied from a minimum of 0.00 percent to a maximum of 48.80 percent with an average of 4.69 percent. Again, this indicates that this population is heavily concentrated in a small number of census tracts.

Figure 1 provides a map of the percent change in population from 2000 to 2010 by census tract. This change variable varied from a decrease of 63.20 percent of the population to an increase of 493.20 percent with an average of a -23.15 percent change in the population per census tract. The map shows that the increases are concentrated in one area of the city. This is the downtown area where there have been recent attempts at economic revitalization and reinvestment. It is not clear if this trend will be maintained moving forward, nor is it clear if residents will choose to stay in this area.

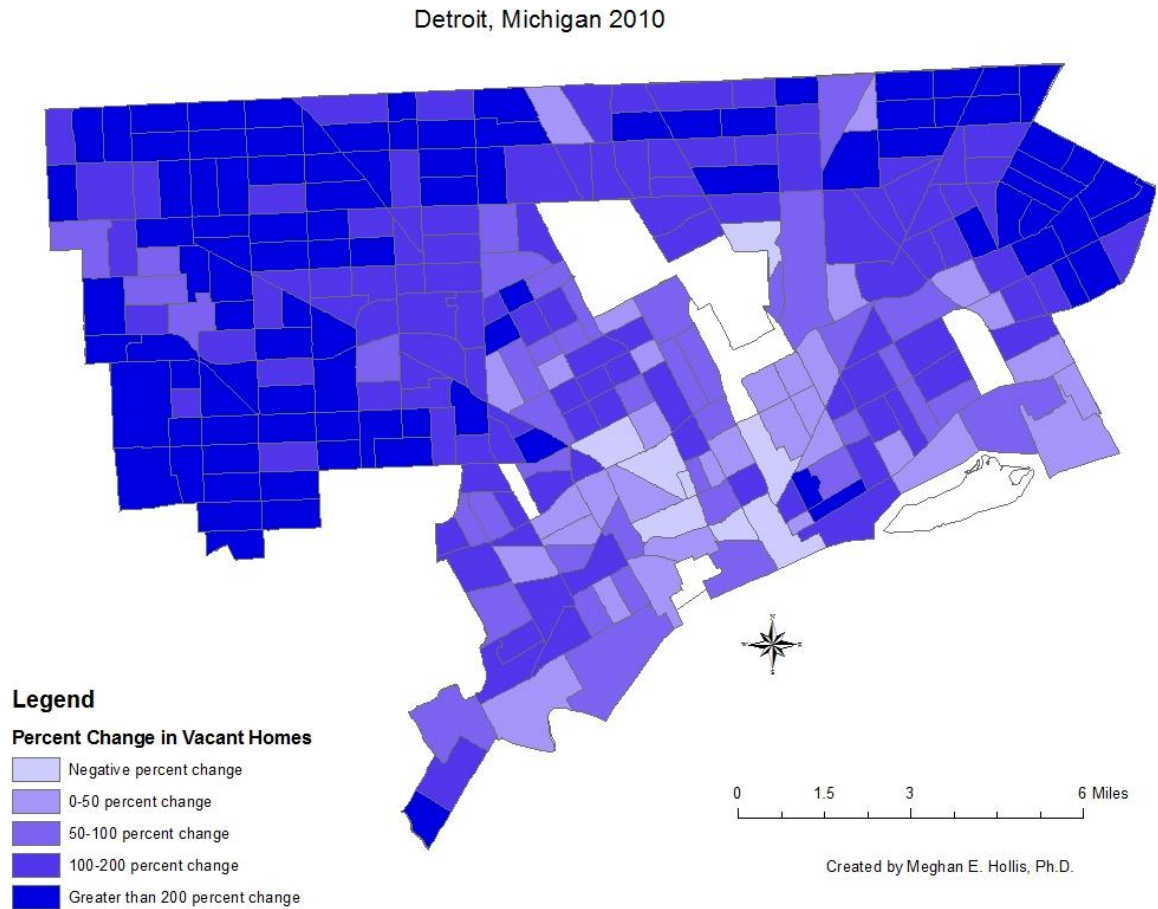
**Figure 1.** Percent Change in Population by Census Tract, Detroit 2000-2010



Vacant homes emerged as a separate factor from the mobility factor in the factor analyses (as discussed previously). This indicates a need to examine this variable. The percent of homes that are vacant varied from a minimum of 3.40 percent to a maximum of 59.40 percent with an average of 26.33 percent of homes vacant in each census tract. In an examination of the spatial distribution of home vacancy rates, lower percentages of vacant homes are seen in the downtown area, but some pockets emerge with lower numbers of vacant homes in other areas of the city (particularly on the west side). It is not clear why this is happening, and this finding warrants further consideration.

Figure 2 provides a map of the percent change in the percent of homes that are vacant from 2000 to 2010 per census tract. The change in percent of homes that are vacant varies from a decrease of 90.20 percent of vacant homes to an increase of 714.40 percent of vacant homes and an average increase of 176.70 percent of homes that are vacant. This indicates a trend in the city that warrants further examination. Again, the places where there is a negative percent change in the vacant home rate are concentrated in the downtown area, indicative of the revitalization in this area mentioned earlier. Other areas of the city seem to be experiencing rather dramatic increases in the percent of homes that are vacant.

**Figure 2.** Percent Change in Percent of Homes that are Vacant by Census Tract, 2000-2010 Detroit



### Negative Binomial Results

Table 2 presents the results of the negative binomial regression models. All models were significant at  $p < 0.001$ . All models include an offset to control for the population size of each individual census tract. The coefficient for the offset was fixed at 1.0.

The first model is the standard model in line with previous research and includes the deprivation index, the mobility index, the immigration index, and the spatially lagged control variable. Not surprisingly, higher levels of economic deprivation were associated with higher numbers of homicides. Similarly, higher mobility levels were associated with higher numbers of homicides.

**Table 2.** Results from Negative Binomial Regression Models Using Count of Homicides from 2007-2013 as the Outcome Measure.

	Model 1	Model 2	Model 3	Model 4	Model 5
Constant	-5.6332*	-6.3012*	-6.3722*	-6.0825*	-6.1617*
Deprivation Index	0.2074*	0.1087*	0.0582	0.1003*	0.0518
Mobility Index	0.0885*	0.0419	0.0716	0.0079	0.0389
Immigration Index	-0.0433	-0.0679*	-0.0533	-0.0867*	-0.0717*

Percent Vacant Homes		0.0248*	0.0172*	0.0219*	0.0148*
Percent Change in Population 2000-2010			-0.0106*		-0.0102*
Percent Change in Percent Vacant Homes 2000-2010				-0.0008*	-0.0008*
Spatial Lag	0.0779	0.0989	0.0672	0.1370	0.1047

The second model adds the percent of homes that are vacant variable to model 1. In this model, the deprivation index is still a significant predictor, however the mobility index is no longer significant. The new vacant homes variable is significant predictor indicating that increased presence of vacant properties was associated with increased homicide volume. The immigration index also becomes significant in this model with a higher percentage of immigrants correlating with decreased homicide volume.

The third model builds on model 2 by adding the percent change in population from 2000 to 2010 variable. The results for this model are surprising. Once you include both the percent vacant homes and the population change variables, neither deprivation nor mobility are significant predictors of homicide volume. The immigration index is also not significant in this model. The vacant homes variable remains a significant predictor with increases in vacant homes related to increased homicide volumes. The new population change variable is also significant, and indicates that as the population decreases in the census tract, the number of homicides increases.

The fourth model builds on model 2 by adding the percent change in the percent of homes that were vacant in a census tract between 2000 and 2010 variable to the model. In this model, the deprivation index is a significant predictor indicating that higher disadvantage predicts increased homicide volume. The immigration index is also a significant predictor, and the relationship indicates that higher immigrant presence is associated with lower numbers of homicides. The percent of homes that are vacant remained a significant predictor in this model where increases in vacant homes are related to increased homicides. The percent change in the rate of vacant homes was also significant. This indicates that as the percent of vacant homes in a census tract increases over time, the homicide rate also increases.

The final model – model 5 – is the saturated model. This model includes all variables. Once again, the deprivation index is not a significant predictor of homicides. The immigration index, percent of homes that are vacant, percent change in the population, and percent change in percent of homes that are vacant are all significant. This indicates that higher immigrant presence relates to decreases in homicide while decreases in total census tract population result in increased homicides. Finally, higher proportions of vacant homes increase homicides and places where there are increases in home vacancy rates are also related to increased homicides.

## SURVEY FINDINGS

This section reports on the findings from the survey. Survey respondents were overwhelmingly female (70.6 percent), and older (see Tables 3-8 below). Most respondents were single, never married (31.6 percent), divorced (20.8 percent) or married with children (18.1 percent). The respondents were 3.0 percent Hispanic or Latino, 17.2 percent white or Caucasian, and 84.3 percent black or African American.

**Table 3.** Sample Characteristics - Sex

	Sample		City (Census 2010)
	n	Percent	Percent
Male	102	29.4	47.3
Female	245	70.6	52.7
TOTAL	347	100.0	100.0

**Table 4.** Sample Characteristics - Age

	Sample		City (Census 2010)
	n	Percent	Percent
18-24 years	5	1.4	15.63
25-34 years	17	4.9	16.50
35-44 years	35	10.1	17.74
45-54 years	63	18.1	18.71
55-64 years	86	24.7	15.77
65 years and older	142	40.8	15.65
TOTAL (of Population 18 and older)	348	100.0	100.00

**Table 5.** Sample Characteristics - Marital Status

	n	Percent
Single, Never Married	108	31.6
Married Without Children	21	6.1
Married With Children	62	18.1
Divorced	71	20.8
Separated	14	4.1
Widowed	51	14.9
Living with Partner	15	4.4
TOTAL	342	100.0

**Table 6.** Sample Characteristics - Number of Adults and Children in Household

	n	Mean	Median	Standard Deviation	Minimum	Maximum
Number of Adults in Household	342	1.89	2.00	1.198	0	11

Number of Children in Household	322	0	0.00	1.215	0	9
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**Table 7.** Sample Characteristics – Race and Ethnicity

	Sample		City (Census 2010)
	n	Percent	Percent
Hispanic/Latino/Spanish	10	3.0	6.8
White	58	17.2	10.6
Black/African American	284	84.3	82.7
American Indian/Alaskan Native	11	3.3	0.4
Asian	8	2.4	1.1
Pacific Islander	1	0.3	0.0

**Table 8.** Sample Characteristics – Length of Residence

	n	Mean	Median	Standard Deviation	Minimum	Maximum
Length of Residence in Current Neighborhood	333	22.18	18.00	18.499	0.0	86
Length of Residence in Detroit	334	46.24	50.00	19.733	0.5	97

A summary of the key items related to each area of interest is provided in the sections that follow.

### Neighborhood Cohesion

Several questions asked respondents about their perceptions of neighborhood cohesion where they live. These results are provided in Table 9 below. These items provided a statement and asked respondents to record their level of agreement with the statement using the categories strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree. Most respondents agreed (31.6 percent) or were neutral in their response (26.5 percent) to the statement: “If there is a problem around my neighborhood the neighbors will deal with it.” Most respondents agreed (30.5 percent) or were neutral (30.5 percent) in their response to the statement: “I live in a close-knit neighborhood.” Most respondents agreed (46.8 percent) or strongly agreed (19.0 percent) with the statement: “People around my neighborhood are willing to help their neighbors.” Most respondents disagreed (41.7 percent) or were neutral (30.9) in their response to the statement: “People in my neighborhood generally don’t get along with each other.” Most respondents agreed (31.4 percent) or were neutral (28.7 percent) in their response to the statement: “People mostly go their own way in my neighborhood.” Most respondents were neutral (33.4 percent), disagreed (25.2 percent), or agreed (20.5 percent) with the statement: “People in my neighborhood do not share the same values.” Finally, most respondents were neutral (41.2 percent) or agreed (29.5 percent) with the statement: “People in my neighborhood can be trusted.” These results are not particularly strong in any direction and reveal that many

respondents are either ambivalent or feel that there is some level of cohesion in their neighborhood.

**Table 9.** Survey Results on Neighborhood Cohesion Items

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Total
If there is a problem around my neighborhood the neighbors will deal with it.	50 (14.7)	107 (31.6)	90 (26.5)	60 (17.7)	32 (9.4)	339 (100.0)
I live in a close-knit neighborhood.	33 (9.8)	103 (30.5)	103 (30.5)	64 (18.9)	35 (10.4)	338 (100.0)
People around my neighborhood are willing to help their neighbors.	65 (19.0)	166 (46.8)	59 (17.2)	38 (11.1)	15 (4.4)	343 (100.0)
People in my neighborhood generally don't get along with each other.	3 (0.9)	24 (7.0)	106 (30.9)	143 (41.7)	67 (19.5)	343 (100.0)
People mostly go their own way in my neighborhood.	42 (12.3)	107 (31.4)	98 (28.7)	61 (17.9)	33 (9.7)	341 (100.0)
People in my neighborhood do not share the same values.	32 (9.4)	70 (20.5)	114 (33.4)	86 (25.2)	39 (11.4)	341 (100.0)
People in my neighborhood can be trusted.	19 (5.6)	101 (29.5)	141 (41.2)	57 (16.7)	24 (7.0)	342 (100.0)

### Perceptions of Safety

The next set of items relate to individual perceptions of safety in local neighborhoods (see Table 10). These were also Likert-type items using the strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree response categories. Most respondents agreed (28.3 percent) or were neutral (21.0) in their response to the statement: "The equipment and buildings in the park or playground closest to where I live are well kept." Most respondents agreed (34.7 percent) or were neutral (26.2 percent) in response to the statement: "The park or playground closest to where I live is safe during the day." Most respondents disagreed (32.1 percent) or were neutral (31.2 percent) in response to the statement: "The park or playground closest to where I live is safe at night." Most respondents agreed (27.0 percent) or were neutral (22.9 percent) in response to the statement: "Many people in my neighborhood are afraid to go out at night." Most respondents agreed (29.9 percent) or were neutral (24.6 percent) in response to the statement: "There are areas of my neighborhood where everyone knows trouble is expected." Finally, most respondents agreed (27.2 percent) or were neutral (24.9 percent) in response to the statement: "You're taking a big chance if you walk in my neighborhood alone after dark." These findings reveal that there is some level of anxiety or fear about personal safety in local neighborhoods, but these responses are relatively neutral.

Table 10. Survey Responses Related to Perceptions of Safety

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Total
The equipment and buildings in the park or playground closest to where I live are well kept.	38 (11.1)	97 (28.3)	72 (21.0)	67 (19.5)	69 (20.1)	343 (100.0)
The park or playground closest to where I live is safe during the day.	43 (12.5)	119 (34.7)	90 (26.2)	52 (15.2)	39 (11.4)	343 (100.0)
The park or playground closest to where I live is safe at night.	14 (4.1)	32 (9.3)	107 (31.2)	110 (32.1)	80 (23.3)	343 (100.0)
Many people in my neighborhood are afraid to go out at night.	60 (17.6)	92 (27.0)	78 (22.9)	73 (21.4)	38 (11.1)	341 (100.0)
There are areas of my neighborhood where everyone knows trouble is expected.	49 (14.5)	101 (29.9)	83 (24.6)	64 (18.9)	41 (12.1)	338 (100.0)
You're taking a big chance if you walk in my neighborhood alone after dark.	56 (16.4)	93 (27.2)	85 (24.9)	70 (20.5)	38 (11.1)	342 (100.0)

### Neighborhood Concerns

The third section asked respondents to reflect on some neighborhood concerns. They were given a series of items and asked to indicate if they considered that item a big problem, somewhat of a problem, or not a problem in their local neighborhood. Most respondents indicated that litter, broken glass, or trash on the sidewalks and streets was somewhat of a problem (38.3 percent) although the distribution to the other two categories is relatively even. Most respondents indicated that graffiti on buildings and walls was not a problem (49.7 percent). Most respondents indicated that vacant or deserted houses or storefronts were a big problem (43.9 percent). This is particularly interesting given the earlier analyses. Most respondents indicated that drinking in public was not a problem (53.1 percent). Most respondents indicated that people selling or using drugs was not a problem (41.6 percent). Most respondents also indicated that groups of teenagers or adults hanging out in the neighborhood and causing trouble was not a problem (53.7 percent), different social groups who do not get along with each other was not a problem (76.3 percent), and a lack of trust between local businesses and residents was not a problem (57.0 percent).



These results are provided in Table 11. Based on these analyses, it is apparent that the biggest concerns were vacant or deserted homes or storefronts and litter, broken glass, and trash on the sidewalks and streets.

**Table 11.** Survey Responses Related to Neighborhood Concerns

	A Big Problem	Somewhat of a Problem	Not a Problem	Total
Litter, broken glass, or trash on the sidewalks and streets	102 (29.6)	132 (38.3)	111 (32.2)	345 (100.0)
Graffiti on buildings and walls	66 (19.5)	104 (30.8)	168 (49.7)	338 (100.0)
Vacant or deserted houses or storefronts	151 (43.9)	107 (31.1)	86 (25.0)	344 (100.0)
Drinking in public	57 (16.8)	102 (30.8)	180 (53.1)	339 (100.0)
People selling or using drugs	77 (23.4)	115 (35.0)	137 (41.6)	329 (100.0)
Groups of teenagers or adults hanging out in the neighborhood and causing trouble	47 (13.9)	110 (32.4)	182 (53.7)	339 (100.0)
Different social groups who do not get along with each other	15 (4.6)	63 (19.1)	251 (76.3)	329 (100.0)
Lack of trust between local businesses and residents	34 (10.5)	105 (32.5)	184 (57.0)	323 (100.0)

### Perceptions of the Police

The final group of items asked respondents to indicate their perceptions to the police on a variety of items. The first set of items asked respondents to indicate whether each item is a big problem, somewhat of a problem, or not a problem as seen in Table 12 below. Most respondents indicated that police not patrolling the area was somewhat of a problem (39.4 percent), although the responses are fairly evenly distributed among the three response categories. Most respondents indicated that police not responding to calls in the area was not a problem (48.2 percent), and most respondents indicated that excessive use of force by the police was not a problem (76.9 percent).

**Table 12.** Survey Responses Related to Perceptions of the Police.

	A Big Problem	Somewhat of a Problem	Not a Problem	Total
Police not patrolling the area	89 (26.2)	134 (39.4)	117 (34.4)	340 (100.0)
Police not responding to calls in the area	75 (22.6)	97 (29.2)	160 (48.2)	332 (100.0)
Excessive use of force by the police	31 (9.4)	45 (13.7)	253 (76.9)	329 (100.0)

Table 13 provides the results of a series of items that asked respondents to read a statement and answer if they strongly agreed, agreed, neither agreed nor disagreed, disagreed, or strongly disagreed with that statement. Most respondents agreed (40.2 percent) or were neutral (31.8 percent) with the statement: “The police in my neighborhood are responsive to local issues.” Most respondents agreed (34.6 percent) or were neutral (31.6 percent) that “The police are doing a good job in dealing with problems that really concern people in this neighborhood. Most respondents were neutral (37.1 percent) or disagreed with the statement: “The police are not doing a good job in preventing crime in this neighborhood.” Most respondents were neutral (36.6 percent) or agreed (33.3 percent) that “The police do a good job in responding to people in my neighborhood after they have been victims of crime.” Finally, most respondents disagreed (40.0 percent) or were neutral (27.8 percent) that “The police are not able to maintain order on the streets and sidewalks in my neighborhood. All of these responses together indicate that most respondents are somewhat satisfied with or ambivalent about police in their local neighborhoods.

**Table 13.** Survey Responses Related to Perceptions of the Police

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Total
The police in my neighborhood are responsive to local issues.	32 (9.6)	134 (40.2)	106 (31.8)	35 (10.5)	26 (7.8)	333 (100.0)
The police are doing a good job in dealing with problems that really concern people in this neighborhood.	31 (9.3)	116 (34.6)	106 (31.6)	51 (15.2)	31 (9.3)	335 (100.0)
The police are not doing a good job in preventing crime in this neighborhood.	27 (8.1)	61 (18.3)	124 (37.1)	84 (25.1)	38 (11.4)	334 (100.0)
The police do a good job in responding to people in my neighborhood after they have been victims of crime.	25 (7.5)	111 (33.3)	122 (36.6)	45 (13.5)	30 (9.0)	333 (100.0)
The police are not able to maintain order on the streets and sidewalks in the neighborhood.	17 (5.1)	33 (9.9)	93 (27.8)	134 (40.0)	58 (17.3)	335 (100.0)

## DISCUSSION AND CONCLUSIONS

The previous analyses have been an attempt to examine resident perceptions in the city of Detroit and to understand the social forces that shape community-based homicide patterns in Detroit with a focus in two areas: demographic transformation and the housing climate and changes in vacancy rates. The historical changes in Detroit, including population outmigration and increasing vacant home rates seem to have a relationship with the geographic patterns of homicides in the city.

This has been a study of the influence of population outmigration and neighborhood social ecology on homicide rates. The key research question this paper has attempted to address is as follows: *What is the relationship between the patterns of population change and homicide in Detroit neighborhoods?* This report has made some progress toward understanding the unique nature of this relationship in Detroit. Additionally, this report examined residential perceptions of local areas. Most findings indicated that respondents were somewhat ambivalent about their views of their local neighborhoods in four key areas: social and neighborhood cohesion, perceptions of safety, perceptions of neighborhood conditions, and perceptions of the police.

Several key findings emerged from this study. First, areas with higher population outmigration rates have higher numbers of homicides. This could result from the characterization of the population that is leaving these locations. For example, it is highly likely that the population that is leaving Detroit started with “white flight” – the exodus of the white upper, middle, and perhaps even lower classes – followed by the emigration of the black middle and upper classes. This likely left a highly disadvantaged population behind. Further research is required to test this new hypothesis and further develop an understanding of the emigration/social structure relationship when studying crime patterns.

A second key finding is that places with higher numbers of vacant homes are also associated with higher numbers of homicides. This is indicative of the current concerns in Detroit where populations are leaving the city in masses without any new population influx. Deindustrialization combined with the downfall of the automotive industry led to white flight, and eventually black upper and middle class flight. In other words, there is no immigration that can revitalize the city and contribute to the economy. The majority of the remaining residents are either unemployed or underemployed. The exodus of the white population and black middle class removed the main sources of the city tax base. This is further exacerbated by deindustrialization and the loss of corporate tax contributions and decreases in available job opportunities. In many ways this is the contrast to what Martinez and colleagues have found in research on Latin@ immigration and homicide and violent crime as this research examines what happens when cities experience high levels of emigration as opposed to the higher rates of immigration studied by Martinez and colleagues. This research fills the gap in the literature where an examination of places with little or no immigration, and where there are actually extreme levels of outmigration, is necessary.

This research also found that outmigration and home vacancy rates were more important than deprivation in predicting higher rates of homicide. This was an interesting and somewhat unexpected finding. This seems to suggest that outmigration and concomitant increases in housing vacancies are disruptive of community cohesion, thus potentially reducing levels of collective efficacy. It is also possible that these results could be a product of differential opportunities in leaving the city for the suburbs and other areas. It might be the case that future research efforts in Detroit need to break this down further by examining varying levels of disadvantage and further understanding who stayed in the city and who left the city to better understand this relationship. Furthermore, future research needs to examine the levels of collective efficacy for those residing in these neighborhoods as well as changes in levels of collective efficacy caused by emigration in communities.

The current project indicates that further research is needed to better understand the complex relationship among homicides/violence, disadvantage, race, and economics of the city of Detroit (and other related cities). Several key areas of research are needed moving forward. The first of these was implied in the previous discussion – the examination of variations within disadvantage to determine the relative influence of different levels of disadvantage on homicide and violence. An important next step involves the examination of changes over time in demographic, economic, and social change in the city and the impact on homicide and violence trends. This could help to further break down the causal mechanisms at play in producing the extreme violence. Further research should differentiate by different categories of homicide (i.e., drug-related, gang-related), categories of offenders (e.g., by race/ethnicity, sex, age), and categories of victims.

This project also examined resident perceptions of their local neighborhoods in four key areas: neighborhood cohesion, perceptions of safety, perceptions of neighborhood conditions, and perceptions of the police. Residents were fairly ambivalent in response to questions in all four areas. There was some indication that residents felt that their neighborhoods were somewhat cohesive and they were somewhat satisfied with policing in their neighborhoods. Key areas of concern that emerged appear to be feelings of safety at night and concerns with vacant or deserted houses or storefronts and litter on the streets and sidewalks. Of course, this could be a product of the individuals who responded to the survey. It is possible that residents who feel disenfranchised in their local neighborhoods were less likely to respond. This is reflected in the somewhat low response rates for this study.

## **POLICY RECOMMENDATIONS**

In completing this study, several policy implications emerged. The most apparent area of concern relates to the prevalence of vacant homes and growing volume of vacancies. This has a clear connection to homicide rates, and this also was a key area of concern for Detroit residents who responded to the survey. Additionally, the population outmigration patterns should be studied in more detail to better understand the impact on local neighborhoods.

The level of ambivalence in responding to key questions about local neighborhoods is also concerning. Although this could reflect the individuals who were more likely to respond, efforts to improve feelings of neighborhood cohesion, safety and security, and positive perceptions of the police would benefit these local communities. The blight, graffiti, and litter prevalent in many Detroit neighborhoods could have a detrimental impact on quality of life for local residents. This warrants further research and consideration.

## SUMMARY

In summary, it is important to understand that the dynamics that are influencing the homicide and violent crime rates in Detroit are not limited to singular influences. In other words, it is not just the history of racial tension in the city, nor is it just the recent (and not so recent) economic trends and turmoil that are contributing to the high violence and homicide rates. The results indicate that there is an interaction between race, economics, and population change that is contributing to the high violence levels in the city. This shows that the social climate is complex in the way it influences violence and homicide.

Future research needs to further examine the history of the city to understand the high violence and homicides. Additionally, further research should expand on this survey to obtain a larger and more representative sample to make better generalizations about neighborhood perceptions. It is apparent that practitioners and policymakers should further examine and respond to these areas of concern to improve quality of life in Detroit.

Additionally, a targeted strategy to stop the flow of residents out of the city and reinvest and repopulate could serve to address some of the key troubles that the city is facing. As more people have left the city, and most of those individuals are the ones of higher socioeconomic status, the tax base for the city has dropped at an extreme level. This has resulted in extreme difficulties in providing needed services at an appropriate level. These difficulties are becoming apparent in several areas, including crime trends and quality of life concerns.

## REFERENCES

- Akins, S., Rumbaut, R.G., and Stansfield, R. (2009). Immigration, economic disadvantage, and homicide: A community-level analysis of Austin, Texas. *Homicide Studies*, 13(3): 307-314.
- Alaniz, M.L., Cartmill, R.S., and Parker, R.S. (1998). Immigrants and violence: The importance of neighborhood context. *Hispanic Journal of Behavioral Science*, 20: 155-174.
- Anderson, E. (1978). *A Place on the Corner*. Chicago, IL: University of Chicago Press.
- Anderson, E. (1999). *Code of the Street: Decency, Violence, and the Moral Life of the Inner City*. New York, NY: Norton.
- Baba, M.L. and Abonyi, M.H. (1979). *Mexicans of Detroit*. Peopling of Michigan Series, Ethnic Studies, Center for Urban Studies, Detroit, MI: Wayne State University.
- Baller, R.D., Anselin, L., Messner, S.F., Deane, G., and Hawkins, D.F. (2001). Structural covariates of U.S. county homicide rates: Incorporating spatial effects. *Criminology*, 39(3): 561-588.
- Bellair, P.E. (1997). Social interaction and community crime: Examining the importance of neighbor networks. *Criminology*, 35: 677-703.
- Bellair, P.E. (2000). Informal surveillance and street crime: A complex relationship. *Criminology*, 38: 137-167.
- Block, E. (1979). *Early Warning System for Street Gang Violence Crisis Areas: Automated Hot Spot Identification in Law Enforcement*. Chicago, IL: Criminal Justice Information Authority.
- Brown, M.A. (1982). Modelling the spatial distribution of suburban crime. *Economic Geography*, 58(3): 247-261.
- Browning, C. R. (2002). The span of collective efficacy: Extending social disorganization theory to partner violence. *Journal of Marriage and Family*, 64(4): 833-850.
- Brunson, R.K. (2007). "Police don't like black people": African-American young men's accumulated police experiences. *Criminology and Public Policy*, 6(1): 71-102.
- Bursik, R.J. and Grasmick, H.G. (1993). *Neighborhoods and Crime: The Dimensions of Effective Community Control*. New York: Lexington Books.
- Carr, P.J., Mapolitano, L., and Keating, J. (2007). We never call the cops and here is why: A qualitative examination of legal cynicism in three Philadelphia neighborhoods. *Criminology*, 45(2): 445-480.

- Chavez, J.M. and Griffiths, E. (2009). Neighborhood dynamics of urban violence: Understanding the immigration connection. *Homicide Studies*, 13(3): 261-273.
- Cooney, M. (1998). *Warriors and Peacemakers: How Third Parties Shape Violence*. New York, NY: New York University Press.
- Curry, G.D. and Spergel, I. (1988). Gang homicide, delinquency, and community. *Criminology*, 26: 381-406.
- Elliott, D.S., Wilson, W.J., Huizinga, D., Sampson, R.J., Elliott, A., and Rankin, B. (1996). The effects of neighborhood disadvantage on adolescent development. *Journal of Research in Crime and Delinquency*, 33: 389-426.
- Feldmeyer, B. and Steffensmeier, D. (2009). Immigration effects on homicide offending for total and race/ethnicity-disaggregated populations (white, black, and Latino). *Homicide Studies*, 13(3): 211-226.
- Fisher, D. (2012). Detroit tops the 2012 list of America's most dangerous cities. *Forbes Magazine online*. Retrieved from <http://www.forbes.com/sites/danielfisher/2012/10/18/detroit-tops-the-2012-list-of-americas-most-dangerous-cities/>.
- Fisher, D. (2015). America's most dangerous cities – Detroit can't shake number one spot. *Forbes Magazine online*. Retrieved from: <http://www.forbes.com/sites/danielfisher/2015/10/29/americas-most-dangerous-cities-detroit-cant-shake-no-1-spot/>.
- Griffiths, E. (2013). Race, space, and the spread of violence across the city. *Social Problems*, 6(4): 491-512.
- Hagan, J. and Palloni, A. (1999). Sociological criminology and the mythology of Hispanic immigration and crime. *Social Problems*, 46: 617-632.
- Kornhauser, R. (1978). *Social Sources of Delinquency*. Chicago: University of Chicago Press.
- Krivo, L.J. and Peterson, R.D. (1996). Extremely disadvantaged neighborhoods and urban crime. *Social Forces*, 75(2): 619-648.
- Krivo, L.J. and Peterson, R.D. (2000). The structural context of homicide: Accounting for racial differences in process. *American Sociological Review*, 65(4), 547-559.
- Kubrin, C.E. and Weitzer, R. (2003). New directions in social disorganization theory. *Journal of Research in Crime and Delinquency*, 40(4): 374-402.
- Lee, M.R. (2000). Concentrated poverty, race, and homicide. *Sociological Quarterly*, 41: 189-206.
- Lee, M.T. and Martinez, R., Jr. (2002). Social disorganization revisited: Mapping the recent immigration and black homicide relationship in Northern Miami. *Sociological Focus*, 35: 363-380.

- Lee, M.T., Martinez, R., Jr., and Rosenfeld, R. (2001). Does immigration increase homicide? Negative evidence from three border cities. *Sociological Quarterly*, 42: 559-580.
- MacDonald, J. and Sampson, R.J. (2012). The world in a city: Immigration and America's changing social fabric. *The Annals of the American Academy of Political and Social Science*, 641(1): 6-15.
- Markowitz, F.E., Bellair, P.E., Liska, A.E., Liu, J. (2001). Extending social disorganization theory: Modeling the relationships between cohesion, disorder, and fear. *Criminology*, 39: 293-319.
- Martinez, R., Jr. (1996). Latinos and lethal violence: The impact of poverty and inequality. *Social Problems*, 43: 131-146.
- Martinez, R., Jr. (1997). Homicide among the 1980 Mariel refugees in Miami: Victims and offenders. *Hispanic Journal of Behavioral Sciences*, 19: 107-122.
- Martinez, R., Jr. (2000). Immigration and urban violence: The link between immigrant Latinos and types of homicide. *Social Science Quarterly*, 81: 363-374.
- Martinez, R., Jr. (2002). *Latino Homicide: Immigration, Violence, and Community*. New York: Routledge.
- Martinez, R., Jr. (2003). Moving beyond black and white violence: African American, Haitian, and Latino homicides in Miami. In Hawkins, D.F. (ed.), *Violent Crime: Assessing Race and Ethnic Differences*, New York: Cambridge University Press, pp. 22-43.
- Martinez, Jr., R. (2010). Policy essay: Economic conditions and racial/ethnic variations in violence: Immigration, the Latino paradox and future research. *Criminology and Public Policy*, 9(4): 707-713.
- Martinez, Jr., R. (2014). *Latino Homicide: Immigration, Violence, and Community*, (Second Edition). New York City: Routledge Press.
- Martinez, Jr., R. and Lee, M.T. (2000). Comparing the context of immigrant homicides in Miami: Haitians, Jamaicans, and Mariels. *International Migration Review*, 34: 794-812.
- Martinez, Jr., R. and Stowell, J.I. (2012). Extending immigration and crime studies: National implications and local settings. *Annals of the American Academy of Political and Social Science*, 641(1): 174-191.
- Martinez, Jr., R., Stowell, J., and Lee, M.T. (2010). Immigration and crime in an era of transformation: A longitudinal analysis of homicides in San Diego neighborhoods, 1980-2000. *Criminology*, 48(3): 797-829.



- McNulty, T.L. (2001). Assessing the race-violence relationship at the macro level: The assumption of racial invariance and the problem of restricted distributions. *Criminology*, 39: 467-490.
- Mencken, F.C., and Barnett, C. (1999). Murder, nonnegligent manslaughter, and spatial autocorrelation in mid-south counties. *Journal of Quantitative Criminology*, 15(4): 407-422.
- Merton, R.K. (1938). Social structure and anomie. *American Sociological Review*, 3: 672-782.
- Messner, S. and Tardiff, K. (1986). Economic inequality and levels of homicide: An analysis of urban neighborhoods. *Criminology*, 24, 297-318.
- Morenoff, J.S. and Sampson, R.J. (1997). Violent crime and the spatial dynamics of neighborhood transition: Chicago, 1970-1990. *Social Forces*, 76(1): 31-64.
- Morenoff, J.S, Sampson, R.J., and Raudenbush, S. W. (2001). Neighborhood inequality, collective efficacy, and the spatial dynamics of urban violence. *Criminology*, 39: 517-559.
- Osgood, D.W. (2000). Poisson-based regression analysis of aggregate crime rates. *Journal of Quantitative Criminology*, 16: 21-43.
- Osgood, D.W. and Chambers, J.M. (2000). Social disorganization outside the metropolis: An analysis of rural youth violence. *Criminology*, 38: 81-116.
- Peterson, R.D. and Krivo, L.J. (1993). Racial segregation and urban black violence. *Social Forces*, 71: 1001-1026.
- Peterson, R.D. and Krivo, L.J. (2005). Macrostructural analyses of race, ethnicity, and violent crime: Recent lessons and new directions for research. *Annual Review of Sociology*, 31: 331-356.
- Peterson, R.D. and Krivo, L.J. (2010). *Divergent Social Worlds: Neighborhood Crime and the Racial-Spatial Divide*. New York: Russell Sage Foundation.
- Roncek, D.W. (1981). Dangerous places: Crime and residential environment. *Social Forces*, 60(1): 74-96.
- Roncek, D.W. and Maier, P.A. (1991). Bars, blocks, and crimes revisited: Linking the theory of routine activities to the empiricism of hot spots. *Criminology*, 29(4): 725-753.
- Sampson, R.J. (1985). Neighborhood and crime: The structural determinants of personal victimization. *Journal of Research in Crime and Delinquency*, 22: 7-40.
- Sampson, R.J. (1986). Neighborhood family structure and the risk of criminal victimization. In J. Byrne and R.J. Sampson (eds.), *The Social Ecology of Crime*. New York: Springer-Verlag.

- Sampson, R.J. (1987). Urban black violence: The effect of male joblessness and family disruption. *American Journal of Sociology*, 93: 348-382.
- Sampson, R.J. (1997). Collective regulation of adolescent misbehavior: Validation results from eighty Chicago neighborhoods. *Journal of Adolescent Research*, 12: 227-244.
- Sampson, R. J. (2004). The community. In J.Q. Wilson and J. Petersilia (eds.), *Crime: Public Policies for Crime Control*. Oakland, CA: ICS Press.
- Sampson, R.J. and Groves, W.B. (1989). Community structure and crime: Testing social-disorganization theory. *American Journal of Sociology*, 94: 774-802.
- Sampson, R.J., Morenoff, J.D., and Earls, F. (1997). Spatial dynamics of collective efficacy for children. *American Sociological Review*, 64: 633-660.
- Sampson, R.J., Raudenbush, S.W., and Earls, F. (1997). Neighborhoods and violent crime. *Science*, 277: 918-924.
- Sampson, R.J. and Wilson, W.J. (1995). Toward a theory of race, crime, and urban inequality. In J. Hagan and R.D. Peterson (eds). *Crime and Inequality*, Stanford, CA: Stanford University Press, pp. 37-54.
- Shaw, C. and McKay, H. (1942/1969). *Juvenile Delinquency and Urban Areas*. Chicago, IL: University of Chicago Press.
- Shihadeh, E.S. and Barranco, R.E. (2013). The imperative of place: Homicide and the new Latino migration. *The Sociological Quarterly*, 54: 81-104.
- Smith, D.R. and Jarjoura, G.R. (1988). Social structure and criminal victimization. *Journal of Research in Crime and Delinquency*, 25(1): 27-52.
- Sugrue, T.J. (2005). *The Origins of the Urban Crisis: Race and Inequality in Postwar Detroit*. Princeton, NJ: Princeton University Press.
- Taylor, R.B. and Covington, J. (1988). Neighborhood changes in ecology and violence. *Criminology*, 26(4), 553-589.
- Thomas, J.M. (2013). *Redevelopment and Race: Planning a Finer City in Postwar Detroit*. Detroit, MI: Wayne State University Press.
- Wilson, W.J. (1987). *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*. Chicago, IL: University of Chicago Press.
- Wilson, W.J. (1996). *When Work Disappears: The World of the New Urban Poor*. New York, NY: Alfred A. Knopf.

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