Residential Instability, Calls for Service, and Crime in Toledo, Ohio: A 10-Year Lookback

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February 10, 2025

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Executive Summary

The aim of this study was to identify observable indicators that could be associated with crime in neighborhoods to ultimately inform community and justice agencies in developing and implementing proactive responses to lessen crime and disorder. Residential instability is an indicator that may have an observable effect on crime such that areas with higher residential turnover and/or less occupied housing tend to have higher crime rates. In addition, the variety of reasons for which people might call for assistance—including legal issues, emergencies, maintaining order, and other service-related concerns—can influence how often the police respond to incidents in neighborhoods. This is particularly relevant when it comes to crimes. Residential instability may also influence the frequency of calls for police services. Neighborhoods undergoing demographic changes might see an increase in the need for formal police assistance. This is because the usual informal community-based methods of maintaining order, such as neighbors looking out for one another, may be less effective or harder to establish in these changing environments.

To determine the significance of these indicators, we examined calls for service, crime incidents, and residential instability measures (i.e., the percentage of vacancies, renter occupied housing units, and residents living in same house one year ago) across 92 census tracts in the city of Toledo from 2010-2019. For these analyses, several datasets were utilized, including over 1.6 million calls for service and 500,000 crime incidents as reported by the Toledo Police Department, which were broken down into several categories (see table to the right). Residential and vacancy information from the United States Department of Housing and Urban Development (HUD), and demographical characteristics per census tract from the 2010 Census Bureau and the American Community Survey (ACS) were considered.

Neighborhoods in this study are delineated by census tracts boundaries. We compared the census tracts to one another for each of the 10 years (i.e., between tracts) and then we examined the carryover effect of the residential instability and calls for service variables on crimes over consecutive timepoints (i.e., within each tract). In the latter analyses, we included cross-lags (i.e., time-lagged relationships) into the model to see how past values of these variables are related to future crime incidents. Cross-lags, or cross-lagged effects (i.e., time-lagged/lagged effects), refer to the relationships between two or more variables measured at multiple time points, where the value of one variable at an earlier time point is used to estimate change in the value of another variable at a later time point. This approach clarifies the direction and reciprocal influence between variables over time (i.e., from one year to the

Call and Crime Categories	
Calls for Service	**Crimes**
Part 1 Personal	
Agg. Assault, Homicide, Mass Casualty Disaster, Rape, & Sexual Assault.	Agg. Assault, Homicide, Rape, & Sexual Assault.
Part 1 Property	
Arson, Burglary, Break-in, Robbery, & Property and Vehicle Theft.	Arson, Burglary, Property and Vehicle Theft, & Robbery.
Part 2 Personal	
Assault, Child Abuse, Domestic Violence, Harassment, Hostage/Kidnapping, Hit and Run, Person Shot/Stabbed, Hate Crimes, Stalking, & Physical Threat.	Abduction, Agg. Harassment/ Menacing, Agg. Trespassing Assault, Abuse of Corpse, Child Abuse, Domestic Violence, Endangerment, Extortion, Importuning, Intimidation, Kidnapping, Other Sexual Offenses, Stalking, Terrorism, Trafficking, Violate Protection Order, & Voyeurism.
Part 2 Property	
Bad Checks, Criminal Damage, Forgery, Hit and Run – Property, Purse Theft, Shoplifting, & Tampering with Vehicle.	Bad Checks/Credit Card, Counterfeiting, Computer Crime, Criminal Damaging, Defraud, Disposing Stolen Property, Embezzlement, Falsification, Forgery, Fraud, Identity Fraud, Property Offenses, Unauthorized Use of Property, Vandalism, & Welfare Fraud.
Substance-Related	
DUI, Drunk Call, & Drug Complaint or Violation.	Child - Possession/Use, Disorderly Conduct – Intoxication, Drug/Liquor Violation, Open Container, & Vehicle Operation Under Influence.
Public Order	
Alarms, Animal Problems, Argument/Fight, Bomb Threat, City Violation, Custody Dispute, Dangerous Substance, Disorderly Conduct, Domestic Argument, Gunshots, Illegal Gambling/Hunting, Juvenile Problem, Loitering, Menacing, Noise, Person Wanted by Police, Prostitution, Prowler, Reckless Operation, Speed Complaint, Suicide/Attempt, Traffic Offense, Trespassing, Unwanted Entry, & Weapons Call.	Bomb Threat, Bribery, Carrying Concealed Weapon, Coercion, Conspiracy, Criminal Child Enticement, Criminal Trespass, Cruelty to Animals, Curfew, Deception, Disorderly Conduct, Escape, Failure to Register, Fireworks, Fugitive, Gambling, Harassment/Menacing, Impersonation, Indecent Behavior, Inducing Panic, Interference with Civil rights/Custody, Juvenile Gang Activity, Littering, Loitering, Missing Juvenile, Misuse of 911, Obstruction, Pandering Obscenity, Perjury, Prostitution, Public Indecency, Resisting Arrest, Riot, Telecommunications Harassment, Truancy, Unruly Juvenile, & Weapon Violation.
Service – Non-Crime – *Calls for Service Only*	
Abandoned/Disabled Vehicle, Assist, Check Safety of Person, Death, Emergency, Escort, Found Property, House Check, Labor Dispute, License Plate/Registration, Mental Crisis, Missing Person, Parking Violation, Peculiar Circumstance – Person/Property, Person Down, Police-Citizen Communication, Problem Person, Screams, Secure Property, Slumped Driver, Traffic Accident, Traffic Flow Problem, & Utility Problems.	

next). For example, in this study, we examined the relationship between residential instability and crime and the relationship between calls and crime types from 2010 to 2019. Cross-lags helped us assess if residential instability and/or call type measures at one time point (e.g., 2010) influence the level of crime at a later time point (e.g., 2011).

Among the three residential mobility variables studied, vacancies (i.e., the percentage of vacant addresses in each census tract), were found to be the most common correlate associated with a significant increase in calls for service and crime incidents. This increase was observed across various offense categories including Part 1 personal and property crimes, Part 2 personal and property crimes, public order, substance offenses, and non-crime related calls over the 10-year study period. We also examined how calls for service influenced crimes while taking into consideration the effect of vacancies on crime as a separate analysis.

The major findings noted below present the average increment values of crimes, calls, and percent vacant addresses where we found significant changes between tracts and within tracts rounded to the nearest whole number. The *between tract* findings compare data from one tract to data from another tract at the same point in time. The *within tract* findings compare changes within a single tract from one year to the next over the 10-year period (i.e., how things have changed internally within that same tract over time). Thus, between tract findings compare data between different tracts for each year under study while within tract findings focus on year-to-year changes within a single tract over the decade. Results from between tracts and within tract are presented in incremental increases and decreases such that for every time an independent variables increases/decreases by a certain amount, the dependent variable will increase/decrease proportionally. For example, a 9% incremental increase in the percentage of vacant addresses corresponded to an additional 13 Part 1 property crimes. Predicting further increases, if the percentage of vacancies were to double to 18% (which is 2 times 9%), we would expect the number of additional Part 1 property crimes to also double to 26 (which is 2 times 13). Thus, there is a linear relationship between the percentage of vacant addresses and the number of Part 1 property crimes: as the percentage of vacancies increases, the number of Part 1 property crimes increases proportionally. Additional findings, study limitations, and future research recommendations are presented in the full report.

Major Findings

- Overall, we found that residential instability as measured by the percentage of vacancies had significant influences on the number of crimes and calls for service when comparing census tracts to one another (i.e., between tracts) and within the census tracts themselves over the 10-year study period. This is particularly evident when the percentage of vacant addresses is higher.
- Between Tracts
    - Every 9% increase in vacant addresses was associated with an average increase of 193 calls for service and 84 crime incidents of any kind.
    - Specifically, Part 1 and 2 personal, Part 1 and 2 property, public order, and substance offenses increased as the percentage of vacant addresses increased.
- Within Tracts
    - When vacancies increased by 9%, we can expect an additional 16 crimes from one year to the next.
    - Part 1 personal and substance offenses increased as the percentage of vacancies rose by 9%, corresponding to 1 and 12 crime incident count, respectively.

In sum, vacancies had the most substantial influence on the number of calls and crime incidents, while the other measures of residential instability (i.e., the percentage of renter occupied housing and geographic mobility) had more limited and varied impacts over time.

Key Terminology and Definitions

The report that follows is complex, examining numerous variables and utilizes advanced analyses that may be challenging to navigate. To aid in understanding the study, we have identified key terms in blue font and included a comprehensive glossary of these terms in Table 1. Additionally, we provide a detailed description of the datasets, variables, and statistical methods employed, offering clarity on the techniques and processes used in this study in the section that follows. These supplementary materials are designed to navigate the report's content and results.

Table 1. Glossary of Key Terms

Term	Description
Introduction, Literature Review, and Data Description	
Aggregate	Combination of many units (i.e., total).
Census Tract	Relatively small geographical regions, which are defined by the U.S. Census Bureau, for the purpose of collecting and analyzing data. Tracts average about 4,000 inhabitants. Toledo census tracts are the main unit of analysis in used in this study.
Correlate	An association between two or more variables.
Decennium	A decade.
Hierarchy Rule	When more than one offense occurs, only the most serious crime is reported and contributed to a police agency's crime total.
Racial Heterogeneity	The varying composition of different races in a specified area.
Reciprocal Relationship	When two or more variables mutually influence each other.
Residential Instability	When an area experiences a high rate of residents moving in and out.
Residential Turnover	Occurs when a residency is sold, or the ownership is transferred.
Self-Initiated Call	Calls made by law enforcement officers to dispatch. Officers may call dispatch to report an incident, request assistance, for administrative and training purposes, or to track their activity.
Social Control	The regulations and systems that influence an individual's behavior to fit group norms, values, and expectations.
Social Disorganization	A theoretical perspective suggesting that some neighborhoods are unable to achieve shared values and goals or address community problems due to neighborhood characteristics and the breakdown of communal institutions. Areas experiencing increased social disorganization are often associated with increased crime.
Spatial Proximity	The location of areas relative to one another (i.e., how neighborhoods are situated in a city).
Transitionary Nature	Lasting for a short period of time.
Methods, Discussion, and Appendix	
Control Variable	A variable that is not of interest to the study's objective but is considered because it could influence the outcomes of the study.
Cross-lagged Panel Model	A research design where the unit of analysis is repeatedly measured at two or more different time points.
Dependent Variable	The change that results from the manipulation of the independent variable.
Estimates	An approximation of a value.
Generalizability	Refers to how applicable the results of a study are to a broader group of people or situations.
Independent Variable	The variable being manipulated within a study.

Inverse/Negative Relationship	A relationship between two variables in which an increase in one variable causes a decrease in another, and vice versa.
Margin of Error	The range of uncertainty around an estimate or value.
Mean	A numeric value representing the average of a collection of numbers.
Multivariate	Involving two or more variables.
Outcome Variable	A synonym for the dependent variable.
Positive Relationship	A relationship between two variables in which an increase in one variable causes an increase in another, or a decrease in one variable causes the other variable to decrease.
Regression Analyses	Statistical technique to model how the typical value of the dependent variable changes when any one of the independent variables is altered, while the other independent variables are held constant.
Significant Variable	A variable that is found to have an impact on the outcome variable after being analyzed.
Standard Deviation	A measure of how dispersed the data is in relation to the mean.
Standardized	Refers to the process of defining variables and procedures such that all values in the study are treated the same within their group.
Time Series Model	A method of analyzing a sequence of data points that are collected over a period of time. This analysis is used to help predict future values based on previously observed values.
Trend Line	A line that depicts the general direction of data points over time.
Unit of Analysis	The main parameter being considered in the research project (i.e., census tracts).
Crime/Call Classifications - Guided by the Uniform Crime Report of the Federal Bureau of Investigation	
Part 1 Personal	The most serious offenses against a person, or group of individuals, involving physical violence, the threat of harm, or the endangerment of another person(s).
Part 1 Property	The most serious offenses against one's property including the theft, defacement, or destruction of property.
Part 2 Personal	Crimes that are committed against a person, or group of individuals, but that are considered less serious than Part 1 personal crimes.
Part 2 Property	Crimes that are committed against one's property, but that are considered less serious than Part 1 property crimes.
Substance Offense	Offenses relating to controlled or non-controlled substances, including the use, possession, manufacture, distribution, trafficking, or other related behavior of a substance.
Public Order	Offenses that interfere with the operations of society or the ability for others to function in society effectively.
Service – Non-Criminal Calls for Service	Situations that require police intervention or assistance but are not criminal or disorderly in nature.

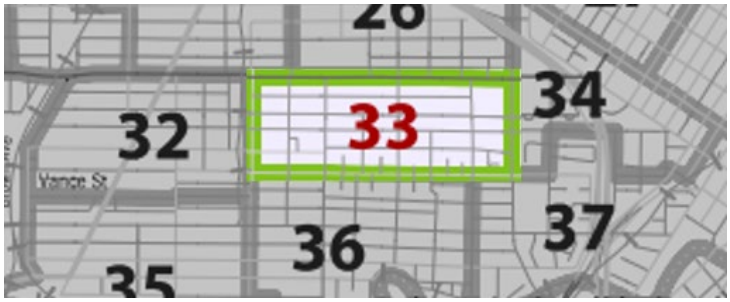
Note: Terms presented in this table are represented in blue font throughout the following report.

The major findings noted below present the average increment values of crimes, calls, and percent vacant addresses where we found significant changes between tracts and within tracts rounded to the nearest whole number. The *between tract* findings compare data from one tract to data from another tract, which is illustrated on a small scale in Figure 1 such that tract 79.02 is being compared to 59.02. In this study, between tract analysis compares each of the 92 tracts to one another. The statistical analyses are conducted each year in the study period separately, thus, some results may only be significant for certain years, rather than across the entire 10-year period. For example, for every 20% increase in the percentage of renter-occupied housing units,

13 additional Part 2 personal crime incidents occurred in 2018 but not in the other years. *Within tract* findings compare changes within a single tract from one year to the next over the 10-year period (i.e., how things have changed internally within that same tract over time), as depicted in Figure 2. For example, within tract 33, the values for the variables in tract 33 for 2010 are being compared to 2011 tract 33 values, and then to 2012 tract 33 values, and so forth, not to the other 91 tracts. Thus, between tract findings compare data between different tracts for each year under study while within tract findings focus on year-to-year changes within a single tract over the decade.

Figure 1. Between Tract Analyses

Figure 2. Within Tract Analyses



Also note that between tracts and within tract findings are presented in incremental increases and decreases such that for every time an independent variable increases/decreases by a certain amount, the dependent variable will increase/decrease proportionally. For example, a 9% incremental increase in the percentage of vacant addresses corresponded to an additional 13 Part 1 property crimes. Predicting further increases, if the percentage of vacancies were to double to 18% (which is 2 times 9%), we would expect the number of additional Part 1 property crimes to also double to 26 (which is 2 times 13). Thus, there is a linear relationship between the percentage of vacant addresses and the number of Part 1 property crimes: as the percentage of vacancies increases, the number of Part 1 property crimes increases proportionally.

Introduction

Scholars have identified neighborhood characteristics that contribute to community crime. One notable relationship presented in the literature is the association between residential instability, social control, and crime. Neighborhoods riddled with physical disorder, civil unrest, and social disorganization have been found to experience increased residential turnover and crime (Perkins & Taylor, 1996; Steenbeek & Hipp, 2011; Nobles et al., 2016). Additionally, members of these neighborhoods may be less likely to contribute to the common good or rely on police intervention to solve community problems (Benson et al., 2003; Gau, 2014). Examining the relationship between neighborhood characteristics and crime may provide insight on how various environmental and societal factors may contribute to crime and inform targeted intervention strategies to reduce crime and disorder within a community.

Residential Instability and Crime

Social disorganization theory, a recognized structural theory of crime, alludes that crime often occurs in communities that are disorganized and unstructured. Members of disorganized communities are less likely to interact with other community members, share similar values or goals, and to conform to community norms (Kubrin, 2009). Further, these communities may display physical cues of disorganization, such as graffiti, broken windows, and vacant housing. When examining the link between social disorganization and neighborhood crime, researchers have identified a variety of neighborhood characteristics that influence community crime and repeat victimization (Kirk & Hyra, 2012; Nobles et al., 2016). Some characteristics include residential instability, racial heterogeneity, spatial proximity, residential vacancy, limited resources and services, and physical disorder (Chamberlain & Hipp, 2015; Nobles et al., 2016; Roth 2019; Chen & Rafail, 2020). Increased residential instability and vacancies contribute to neighborhood crime as it limits economic resources, weakens informal social control, yields crime opportunity, and draws offenders into the community (Gau, 2014; Nobles et al., 2016). As a result, crime increases, social control dissipates, social networks are broken down, and participation within the community dissolves (Boggess & Hipp, 2010). Further, the level of disorder experienced in a neighborhood may influence the likelihood that community members will rely on police intervention (Gau, 2014). Residents may be more hesitant to call for police intervention because they have weak ties to their neighborhood, do not find it customary to contribute to the common good, or may feel that they are expected to "mind their business" (Benson et al., 2003).

Residential areas comprised of rentals have traditionally been linked to higher crime rates. Vacant rentals have been found to be positively associated with property offenses including burglary, larceny, and robbery. This relationship remains evident even when rentals are occupied for a short period of time (Roth, 2019). While not as strongly associated, vacant homes are also linked to an uptick in community crime and violence (Chen & Rafail, 2020). Roth (2019) advised that residential areas with vacant rentals might experience more crime than areas with vacant homes because communities with more homes tend to be better maintained, while areas with vacant rentals often display more physical cues of disorder. However, both vacant rentals and homes have been associated with increased crime, which suggests that generally, vacant residencies are a robust correlate of crime (Chen & Rafail, 2020).

Some prior research suggests that the linkage between neighborhood crime and residential instability is a reciprocal relationship. Boggess and Hipp (2010) found that residential instability, community disadvantage, and political influence contribute to neighborhood crime. Communities with higher rates of violent crime also experienced higher rates of residential turnover (Boggess & Hipp, 2010). However, studies examining the relationship between neighborhood crime and residential instability as a reciprocal relationship is limited within the literature.

Calls for Service and Crime Incidents

Exploring and identifying factors that contribute to neighborhood crime may be helpful in predicting and reducing community crime. O'Brien et al. (2021) highlighted that exploring characteristics that contribute to community crime without considering differences within the community can be challenging. Traditionally, communities experience an uneven distribution of crime as influenced by a variety of factors including demographic make-up, routine activities of the residents, level of pedestrian and commercial traffic, and vulnerability of the area (i.e., areas with subsidized housing versus those without). As a result, crime may occur at higher rates in some areas of a community, even at street level, than others (Lee et al., 2017; O'Brien et al., 2021). Exploring the relationship between community factors, including residential instability, and crime at a more granular level, such as census tracts, may provide specific detail about where crime occurs in a community.

Another way to explore where crime and disorder occur within a community is by considering how often community members call the police and what those calls are for. Calls for service data can provide additional information on temporal and spatial crime patterns, community fear of crime, and police presence, which may be lacking when solely analyzing crime incident data (Barnett-Ryan, 2022). Thus, utilizing calls for service and crime incident data may be helpful at leveraging police knowledge on where and when crime occurs in a community, which may contribute to the development and implementation of predictive policing programs (Fitzpatrick et al., 2019) and prosocial social service and community initiatives to reduce crime and disorder and support residential stability.

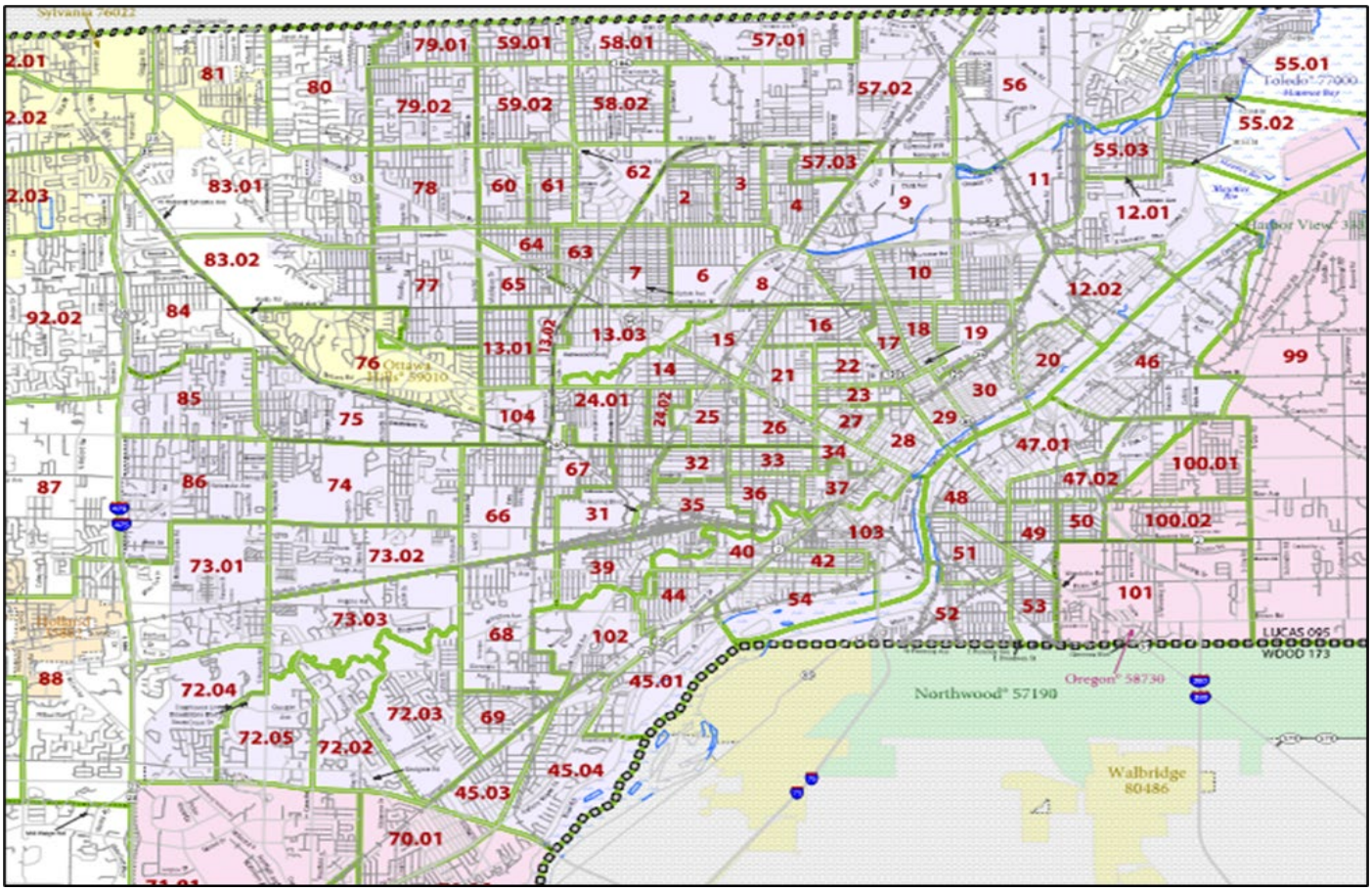
Data and Methods

The present study examined how the transitionary nature experienced in some Toledo neighborhoods affected the relationship with police and crime. Accordingly, calls for service, crime incidents, demographic information, and residential instability were examined across 92 census tracts in the City of Toledo from 2010 through 2019. For this analysis, several datasets were considered, including over 1.6 million calls for service and 500,000 crime incidents provided by the Toledo Police Department (TPD). Further, residential information, vacancies, and demographic characteristics per census tract were collected from the United Stated Department of Housing and Urban Development (HUD) department, the 2010 Census Bureau, and the American Community Survey (ACS). The following sections discuss our data collection process and the methods of this study.

2010 Census Tract Geographical Borders

For the purposes of this study, data were examined on the census tract level, which provides a finer unit of analysis compared to other levels such as neighborhoods or police sectors (Smith & Blizard, 2021). Tracts included in the final sample were identified by the 2010 Census and were included only if they completely fell within the 2010 city limits of Toledo. A 2010 map (see Figure 3) depicting the overlap of Toledo city limits and the corresponding census tracts was referenced to determine the inclusion of tracts in the final sample. Overall, tracts were discarded if they (1) housed the University of Toledo, (2) contained the village of Ottawa Hills, (3) did not fall completely within the 2010 city limits of Toledo, or (4) were in Lucas County, but not the City of Toledo. A total of 35 tracts were removed resulting in a final sample of 92 census tracts.

Figure 3. 2010 Toledo Census Tracts



Note: light purple shading indicates the city of Toledo. Green lines outline each census tract.

Calls for Service and Crime Incident Data

Toledo Police Department's (TPD) Intelligence and Special Investigations Bureau provided the calls for service and crime data from 2010 through 2019. The original calls for service data included the following variables: initial call type, final call type, disposition, address, and date and time of the incident, while the crime incident data included the variables: crime type, address, and date and time of the incident. It should be noted that the crime data used for this project only includes crime incidents reported by law enforcement at TPD, and does not contain information on arrests, citations, or other actions taken by the Toledo police. TPD did indicate that they conducted an initial cleaning process using their Computer Aided Dispatch (CAD) browser prior to providing the CJR data. The following describes the cleaning and recoding process conducted by the TPD and the CJR of the calls for service and crime data.

The original calls for service data had over 2 million cases and was provided to the CJR team in a secured Microsoft Access file. This data houses all calls for service for Toledo from 2010 through 2019, along with dispatch calls across Lucas County. Thus, the data also included calls for non-emergency situations, fire, and medical calls. Prior to providing the data, using their Computer Aided Dispatch (CAD) browser, TPD removed duplicate cases (i.e., if there were multiple calls for one incident), cancelled calls, cases with missing addresses, and calls that were self-initiated in nature. The call data received by the CJR had a total of 358 unique call type codes. Along with the data, TPD provided law, medical, and fire codebooks, which provided a description of most of the call types, and indicated which emergency service is the prioritized responder for each call code. It should be noted that not all call codes were included in the provided codebooks as they are considered "no-brainers" for dispatch. For codes that required additional information, the CJR corresponded with TPD for

clarification. Calls in the fire and medical codebooks, and those that were self-initiated in nature or were administrative codes (i.e., police car maintenance or training codes), were removed from the sample.

The crime data provided by TPD, with over 800,000 incidents, went through a similar initial cleaning process. Crime incident data considered in this study are based off of police reports, thus, the hierarchy rule does not apply (i.e., if more than one crime was committed at an address, all incidents were reported separately). Further, the data does not indicate the outcome of each incident, such as arrests or citations given. The crime data contained a total of 257 crime codes. Unlike the calls for service data, the crime type codes were clear. 112 crime types were removed from the data as these crime types aligned with traffic incidents, were incidents marked as an offense but not of a criminal nature, or that would not have the potential to result in an arrest or citation.

Referencing the provided law codebook from Toledo and the crime classifications outlined by the Uniform Crime Report (UCR) of the Federal Bureau of Investigation (FBI) and the National Incident-Based Reporting System (NIBRS), the calls for service codes and crime incidents were collapsed into the following classifications: Part 1 personal, Part 1 property, Part 2 personal, Part 2 property, public order, and substance offenses. According to the UCR, Part 1 offenses "are serious crimes, they occur with regularity in all areas of the country, and they are likely to be reported to the police" (UCR, 2019, p. 1). The FBI collects more in-depth information on Part 1 offenses, including the outcome of the incidents (i.e., arrest or cleared by exceptional means) and demographic data of the arrested. Part 2 offenses are considered less serious crimes yet occur more often than Part 1 offenses, but the FBI only collects arrest data for Part 2 crimes. The CJR recategorized the calls and crime data based on the FBI's definitions and classifications of Part 1 and Part 2 offenses.

Based on NIBRS classifications, the calls and crime data were further categorized as being personal, property, public order, or substance offenses. Personal offenses are those where the victim is an individual, while property offenses result in damage to property or that is committed with the intent to obtain money, opportunity, or some other benefit. NIBRS' third classification, crimes against society, "represent society's prohibition against engaging in certain types of activity; they are typically victimless crimes in which property is not the object" (NIBRS, 2018, p.1). Accordingly, a majority of the calls and crime incidents in TPD's data are considered crimes against society. To provide a more detailed analysis of the calls and crime incidents occurring withing Toledo, these types of incidents were categorized as either being a public order or substance offense. Lastly, an additional category, non-crime service calls, was added to the calls for service data to include calls where police services were needed, but where there was not a criminal nature to the incident (e.g., abandoned vehicle, house check, or safety check). These calls were included in the final sample as they provide insight on the willingness of some community members to call the police for service. Table 3 and 4 provide detailed information of the classifications and the call and crime codes that are included in each.

After this initial cleaning process, the calls for service and crime data were separated into multiple Excel files containing 10,000 cases each. Each file was submitted to the online Census Geocoder. The Census Geocoder is an address look-up tool that allows users to submit a batch of addresses or location coordinates to match geographical locations and entities. After processing, the Geocoder provides the following variables: Tiger output address, interpolated longitude and latitude, TIGER/Line ID, TIGER/Line ID side, Census Tract, Census Block, and GEOIDS. Geoids are the Census' official identification for each tract, which are in numerical format. Each Geoid provides the following information: state code, county code, and tract code. After all cases were processed through the Geocoder, it was revealed that several addresses provided by TPD had formatting issues. Formatting issues included misspelled addresses, missing information, additional spaces, and the use of "+" instead of "and." These errors were corrected to the best of the research team's abilities, and the cases were

resubmitted to the Geocoder. Cases that came back as “no-match” or “tie” meant that the Geocoder was unable to locate census tract information for that particular address. As a result, those cases were removed from the datasets.

Finally, calls for service and crimes that took place in a census tract not in our interest area were removed from the data. All calls for service and crime incidents were then separated into different Excel files by year, and the Excel files were converted into SPSS for further analysis. The final samples consisted of a total of 1,618,537 calls for service and 548,154 crime incidents. Table 1 depicts the total crimes per year.

Table 2. Total Calls for Service and Crime Incidents Per Year

Year	**Calls for Service**	**Crimes**
2010	166,791	55,529
2011	175,324	55,687
2012	175,348	54,691
2013	162,308	53,890
2014	168,112	54,495
2015	157,454	53,232
2016	157,417	55,436
2017	158,143	54,686
2018	150,413	55,133
2019	147,227	55,375
Total	**1,618,537**	**548,154**

Table 3. Recoded Categorizations for Calls for Service Incidents

Part 1 Personal		Part 1 Property	
Aggravated Assault Homicide Mass Casualty Disaster Rape Sexual Assault		Arson Bank Robbery Break-in Burglary –Commercial/Residential Motor Vehicle Theft	Property Theft Robbery – Commercial/Private Citizen/Residential Robbery with Injury
Part 2 Personal		**Part 2 Property**	**Substance-Offense**
Assault Offenses Child Abuse Child Molestation – Under 13 Domestic Violence Harassment Hit and Run with Injury Hostage Incident	Kidnapping Person Shot Person Stabbed Racial/Religious/Ethnically Based Incidents -Hate Crimes Shots Fired at Person Stalking Threat of Physical Injury	Bad Checks/Credit Cards Criminal Damaging Criminal Damage – All Property/ Commercial/Residential/Vehicle Forgery or Counterfeiting Hit and Run – Property Damage Purse Theft/Pocket Picking Shoplifting Tampering with a Motor Vehicle	Driving Under the Influence Drug Complaint Drug Violation "Drunk" Call Marijuana Law Violation
Public Order		**Non-Crime Service Calls**	
Alarm – Including Burglary/Robbery Animal Problems Bomb Threat City Violation Civil Disorder/Riot Custody Dispute Disorderly Conduct Domestic Argument Excessive Speed Complaint Gambling Gunshot Gunshot Heard Illegal Hunting Investigate Dangerous Device/Substance Juvenile Problem Keep the Peace/Prevent Argument Loitering Menacing Neighbor Trouble Noise Complaint/Disturbance Obscene Activity Person with Gun Person Wanted by Police Physical Fight in Progress Prostitution Prowler Public Argument Reckless Operation of MV Shots Fired Suicide Suicide Attempt Trespassing Unauthorized Use of Motor Vehicle Unwanted Entry/Presence Violation of City Ordinance Violation of Traffic Offense Weapon Violation – Person with Gun or Knife Weapon Call		Abandoned Vehicle Adult Subject of Police Concern Assist – Citizen/Lockout/Outside Agency Bad License Plate/Registration Check Safety of Person – Adult/Juvenile Death/Dead Body Disabled Vehicle Door Check/Securing Property Driver Slumped at the Wheel Emergency – Unknown Emergency Escort Found Property – Lost/Stolen General Broadcast – Information of Police Concern House Check Labor Dispute Meet Complainant Mental Health Crisis/Disorder Missing – Adult Patient/Child/Person Missing Vehicle Plate Motor Vehicle/Traffic Accident – Pedestrian Struck/Property Damage/Injury Motorcycle Accident/Injury Open Door/Window Parking Complaint/Violation Peculiar Circumstances Person Down Person Wants to Give Information Problem Person – Patient/ Restraint Needed/Student Railroad Crossing Blocked Recovered Stolen Vehicle Roadblock Screams Heard Suspicious – Person/Property/Unattended Vehicle Traffic Flow Problems Traffic Signal/Sign Disorder Utility Problem "Wagon Call" – Transporting Detainees/Prisoners	

Table 4. Recoded Categorizations for Crime Incidents

Part 1 Personal	Part 1 Property
Aggravated Assault Homicide – Aggravated/Vehicular Involuntary Manslaughter Murder Rape Sexual Assault	Arson Burglary Larceny Theft Motor Vehicle Theft Property Theft Robbery

Part 2 Personal		Part 2 Property	
Abduction Aggravated Harassment/Menacing Aggravated Trespassing Assault Assault of a Police Officer Abuse of Corpse Child Abuse Child Stealing Corruption of Minor (Sexual) Domestic Dispute Domestic Violence Endangerment Adult/Child/Elder/Mental Extortion Importuning	Intimidation Kidnapping Other Sexual Offenses Safe School Assault Sex Battery Sexual Imposition Stalking Terrorism Trafficking - Persons Unlawful Restraints Vehicular Assault Violation of Protection Order Voyeurism	Confidence Game/False Pretense/Swindle Counterfeiting Computer Crimes/Misuse Credit Card/Atm Fraud Criminal Damaging Criminal Mischief Criminal Simulation Defraud Innkeeper/Livery/Restaurant Defrauding Creditors Disposing Stolen Property Embezzlement False Info to a Police Officer Issuing Ticket Falsification Food Stamp Trafficking	Forgery Fraud Identity Fraud Misc. Property Offense Misuse of Credit Card Passing Bad Check(s) Property Damage Property Stolen Receiving Stolen Property Retaining Stolen Property Safe Cracking Secure Writings by Deception Telecommunications Fraud Unauthorized Use of Motor Vehicle/Property Vandalism Welfare Fraud

Public Order		Substance Offense
Begging/Loitering/Soliciting Bomb Threat Bribery Carrying Concealed Weapon Coercion Complicity Comply with Order of a Police Officer Compounding a Crime Conduct, All Else Conspiracy Contribute to the Delinquency of a Minor Criminal Trespass Conveying Contraband Criminal Child Enticement Cruelty to Animals Deception Discharging Fireworks Disorderly Conduct/Disturbance Disseminating Matter Harmful to Juveniles Drop Item from Bridge Elude/Flee Escape, Aiding Escape, Detain Elsewhere/Local Escape, from Officer Failure to Appear/Contempt Failure to Aid Police Officer Failure to Report Crime Failure to Secure Dangerous Ordinance Failure to Send Child to School Fugitive Gang, Juvenile Harassment/Menacing Harboring a Juvenile	Illegal Gambling Immigration Laws Impersonating an Officer Impersonation Improper Compensation/Solicitation Improper Discharge Improper Handling in Motor Vehicle Indecent Behavior - Juvenile Present Inducing Panic Interference with Civil Rights Interfering with Custody Juvenile Curfew Violation Keep Peace/Peace Bond Littering Missing/Runaway Juvenile Misuse of 911 System Obstruction Paint, Juvenile Buy/Possessing Spray Pandering Obscenity Park Curfew Violation Participating in Criminal Activity Perjury Possession of Criminal Tools Prostitution Public Disturbance Public Indecency Resisting Arrest Riot – Aggravated/Incite Safe School Sex Offender, Fail to Register Tampering Telecommunications Harassment Truancy Unruly Juvenile Weapon Violation	Child Possession/Purchase/Use Disorderly Conduct - Intoxication Drug Violation Liquor Violation Operating a Motor Vehicle Under the Influence of Alcohol/Drug Open Container Violation Permit Drug Abuse- Owner/Operator Permit Use of Vehicle

HUD Data

To measure residential instability, 2010 through 2019 data were collected from the United States Department of Housing and Urban Development (HUD), which is a department of the U.S. Federal Government administering federal housing and urban development laws. HUD provides both public and private data. For this project, data were gathered from the "HUD Aggregated USPS Administrative Data on Address Vacancies." This private dataset, accessed using the CJR's HUD account, was created in 2005 as HUD entered an agreement with the United States Postal Service (USPS) to receive quarterly aggregate data on addresses that have been identified by the USPS as being "vacant" or "no-stat" in the previous quarter. Addresses are identified as being "Vacant" when USPS workers on urban routes identify the address as being unoccupied. USPS workers make this determination if the mail at the address has not been collected for 90 days or longer. Addresses are identified as "no-stat" for the following reasons: (1) rural route addresses that have been vacant for 90 days or longer, (2) addresses for businesses or home under construction and not yet occupied, or (3) addresses in urban areas identified by a carrier as not likely to be active for some time. HUD updates this data every three months and is reported on the census tract level.

Based on population changes, the Census Bureau moves and redefines the outline of some tracts per decennium. Being that HUD reports on the census tract level, HUD transitioned from using the 2000 census to the 2010 census beginning in 2012. Minor changes were made from the 2000 to the 2010 census for the tracts of our interest. In 2000, tract 102 was tracts 43.01 and 43.02. In 2010, these two tracts were combined to form tract 102. Similarly, the 2010 tract 103 was tracts 38 and 41 in 2000. In both instances, the two tracts were simply combined to create a new tract while the area of land remained the same. To account for this transition, the research team aggregated the HUD information for the former tracts for years 2010-2011 to consistently represent tracts 102 and 103 throughout the data. This change negligibly impacted the crime data, and Social Explorer automatically updates tract information. As a result, "tract 102" and "tract 103" cover the same area throughout all 10 years and in all sets of data.

To acquire HUD data, the research team downloaded quarterly values from the "HUD Aggregated USPS Administrative Data on Address Vacancies" files for years 2010 through 2019. After downloading, data for the tracts of interest were extracted and relocated to an Excel file. Only two variables were obtained from the HUD data and utilized in this study, (1) AMS_RES, which reports the total count of residential addresses per tract, and (2) RES_VAC, which conveys the total count of vacant residential addresses per tract. To determine percent vacancy per census tract (i.e., the vacancies variable), the following formula was used: (RES_VAC) / (AMS_RES). The data were cleaned, recoded, and compiled into an Excel file for further analysis.

Demographic Data

Using Social Explorer, demographic data per tract were gathered from the American Community Survey (ACS) 5-Year Estimates. Social Explorer is an online research tool that provides census data and other sources of demographic information using organized reports, charts, and maps. ACS demographic data were collected on the tract level from 2010 through 2019 from Social Explorer. Table 5 provides an outline of the final demographic and residential instability variables used for this project.

Table 5. Description of Residential Instability and Demographic Variables

Variable	Description
Total Population	Total population of the specified census tract.
Population Density	Population density (per Sq. Mile) – found by using the following formula: (census tract total population)/ (land area). Population density indicates how many people would live within one square mile if the U.S. population were evenly distributed across an area. Areas that are more densely populated, such as cities, have higher population densities.
Age	Percentage of the population aged 15 to 24.
Racial/Ethnic heterogeneity	Herfindahl Index of racial/ethnic heterogeneity. Representation of human diversity with higher scores representing more diverse populations.
Female-Headed Household	Percentage of households headed by females (i.e., no male presence).
Education	Percentage of persons aged 25 and over with less than a high school education. Higher values equate to a greater percentage with less than a high school education.
Unemployment	Unemployment rate for civilian population in labor force 16 years and over. Variable represents percent unemployed, with larger values indicating a higher unemployment rate.
Median Income	Median household income for the past 12 months. Dollars adjusted to match 2021 value to account for inflation.
Gini Index	A measure of income inequality with higher values indicating greater income inequality.
Poverty	Percentage of people, 18 and over, living below poverty with higher values indicating more people living below the poverty line.
Supplemental Government Assistance (SGA)	Percentage of people living in a household with supplemental security income (SSI) in the past 12 months, including cash public assistance income and food stamps/SNAP.
Residential Instability Variables	
Rentals	Percentage of population in renter occupied housing units. Found by using the following formula: (raw number of individuals in a renter occupied housing units) / (total population of the census tract).
Geographic Mobility	Percentage of persons in the same house as they were 1 year ago.
Vacancies	Percentage of vacant addresses

Statistical Analyses Used

We utilized descriptive, multivariate regression, and Vector Autoregressive Analysis (VAR) analyses to examine our data.

- *Descriptives:* The percentages, means, and standard deviations for all variables in the study were calculated using SPSS Statistics software.
- *Multivariate regression:* Multivariate regression was used to examine relationships between key variables (e.g., crime incidents and calls for service). This study sought to examine how calls for services or crimes are influenced by changes in residential instability variables while controlling for other

demographic factors known to contribute to calls for service and crime incidents. Multivariate regression is a statistical method used for examining the relationships between one dependent variable and one or more independent variables. It involves regressing the outcome or dependent variable (DV) on the independent variable (IV) while keeping the other IVs constant in the study (e.g., regressing Part 1 personal crimes on the percent of vacant properties while holding the influence of the other IVs on Part 1 personal crimes). The output yields coefficients for each DV on IV relationship, the value of which indicates for every unit increase in the IV, the DV will change by that amount. The sign of the coefficient, positive or negative, indicates whether there will be an increase or decrease for every unit of the IV on the DV. The *p*-value indicates whether this relationship is statistically significant, which helps to determine whether the observed effect is a true effect and not due to chance alone. Our multivariate regression analyses are based on models examining one point in time (i.e., 2010 dependent variables (DV) regressed on the 2010 independent variables (IV), 2011 DV on 2011 IVs, and so forth) and comparisons can be made **between tracts**.

- *Vector Autoregressive Analysis (VAR):* A Vector Autoregressive (VAR) Cross-Lagged Panel (i.e., time-lagged/longitudinal) design was used to examine the current time series data (e.g., residential instability and crime incidents) that was obtained from census tracts between 2010 and 2019. A VAR model is a multivariate time series model that estimates relationships between multiple variables measured at consecutive points in time. The autoregressive Part of the model accounts for time linked interdependencies between the same values. For instance, examining the carryover effect that the same variable has on itself at each consecutive timepoint. Cross-lags are incorporated into the model to examine the association between previous values of one variable to future values of another variable. For example, estimating the effect that geographic mobility in 2010 has in relation to changes in crime in 2011. Hence, this model allows for the examination of effects between each variable at the same time point (i.e., contemporaneous effects) and at the previous time point (i.e., lagged effect) **within tracts** to gain a better understanding of the directional association between two or more variables.

Descriptives and Trends

Descriptives

Table 6, starting on the following page, displays the means and standard deviations of the variables under study from 2010-2019. In general, the average values for the demographic characteristics follow a declining trend from their higher values in the early half of the 2010s and then decreasing slightly in the latter half of the decade. Though, some demographic variables experienced notable changes over the study period. The unemployment variable, representing the average percentage of those 16 and up in the labor force who are unemployed, increased from 17.5% in 2010 to 20% in 2013. Following 2013, the average percentage of those unemployed continued to decline, reaching a low in 2019 at 11.1%. The average median household income also fluctuated, dropping from $41,965 to $36,782 from 2010 to 2014. Following 2014, the average median household income continued to rise, reaching $39,588 in 2019. Lastly, the government supplemental income variable, representing the percentage of people living in a household who received supplemental income in the past 12 months, experienced an overall increase from 43.4% in 2010 to 51.1% in 2019. Trend lines based on mean totals for the variables measuring residential instability, calls for service, and crime incidents are plotted on the pages that follow.

Table 6. Descriptive Characteristics of Census Tracts (N = 92)

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Demographics – *Mean percentages/totals and (standard deviations)*										
Total Population	3035.07 (1267.75)	3005.74 (1287.45)	2985.89 (1304.34)	2960.18 (1285.01)	2934.73 (1285.75)	2914.35 (1261.82)	2897.66 (1278.70)	2885.47 (1318.72)	2872.83 (1335.67)	2854.26 (1348.73)
Population Density	4,488.6 (1,982.87)	4,417.4 (1,937.62)	4,375.6 (1,927.78)	4,332.1 (1,859.25)	4,308.6 (1,904.16)	4,271.5 (1,863.11)	4,252.0 (1,890.26)	4,224.4 (1,915.27)	4,215.2 (1,946.72)	4,184.6 (1,969.90)
Percent Population Aged 15-24	15.7% (6.15)	15.8% (6.09)	16.0% (6.11)	15.6% (6.39)	14.9% (5.70)	14.5% (5.30)	14.1% (5.21)	13.6% (4.92)	13.5% (4.77)	13.4% (4.80)
Racial/Ethnic Heterogeneity	.31 (.17)	.32 (.18)	.33 (.17)	.34 (.17)	.36 (.17)	.37 (.16)	.37 (.16)	.38 (.16)	.38 (.16)	.39 (.15)
Percent Female Headed-Households	20.6% (10.85)	21.6% (10.27)	21.6% (10.93)	21.3% (10.70)	21.6% (10.80)	21.6% (9.98)	20.8% (10.09)	21.1% (10.21)	21.0% (9.85)	20.5% (9.24)
Percent Less Than High School	18.1% (10.31)	17.7% (10.03)	17.5% (9.85)	17.9% (9.71)	17.2% (9.62)	17.3% (9.44)	17.0% (9.27)	17.1% (9.41)	18.0% (10.97)	16.2% (9.13)
Unemployment Rate	17.5% (11.26)	18.8% (10.44)	19.2% (10.41)	20.0% (10.68)	18.1% (10.03)	16.5% (9.57)	14.8% (9.00)	13.4% (8.99)	11.8% (8.55)	11.1% (7.75)
Median Household Income	$41,965 (18,375.50)	$40,638 (17,232.03)	$38,958 (17,110.38)	$37,652 (16,491.28)	$36,782 (17,135.08)	$37,017 (17,260.57)	$37,683 (17,425.45)	$38,499 (17,192.05)	$39,262 (17,634.23)	$39,588 (17063.66)
Gini Index	.42 (.07)	.42 (.07)	.43 (.07)	.44 (.08)	.44 (.07)	.44 (.07)	.45 (.07)	.44 (.07)	.44 (.08)	.38 (.24)
Percent Poverty 18 and Older	24.2% (16.62)	25.5% (16.44)	27.0% (16.12)	27.4% (15.81)	28.1% (15.62)	28.2% (15.39)	27.6% (14.97)	26.5% (14.60)	25.6% (14.62)	25.2% (13.76)
Supplemental Government Assistance	43.4% (25.13)	46.5% (23.97)	50.4% (24.19)	51.4% (24.87)	51.7% (24.08)	54.0% (24.66)	52.9% (23.92)	51.6% (24.18)	51.0% (23.96)	51.1% (24.70)
Residential Instability – *Mean percentages and (standard deviations)*										
Percent Same House 1 Year Ago (ACS)	81.1% (9.36)	81.2% (8.96)	80.9% (8.21)	81.4% (8.24)	80.9% (8.32)	79.9% (9.03)	79.6% (8.99)	80.3% (9.10)	80.3% (9.14)	81.0% (9.39)
Percent in Renter Occupied Housing Units (ACS)	41.4% (21.50)	42.7% (21.07)	43.8% (20.16)	43.5% (18.75)	44.8% (18.10)	46.5% (17.66)	46.9% (17.66)	47.3% (17.98)	48.2% (18.03)	48.5% (18.11)
Percent Vacant Addresses (HUD) Per Census Tract	11.1% (7.16)	11.5% (7.80)	11.4% (7.61)	11.9% (7.96)	11.7% (8.29)	11.4% (8.65)	11.0% (8.74)	11.6% (9.35)	12.1% (9.88)	12.5% (10.27)
Calls for Service Incidents - *Means and (standard deviations)*										
Part 1 Personal	2.4 (2.05)	2.0 (2.08)	2.3 (2.06)	2.0 (1.99)	2.3 (2.33)	2.1 (2.15)	2.5 (2.10)	2.3 (2.00)	2.5 (2.07)	2.2 (1.88)
Part 1 Property	173.6 (96.97)	194.4 (105.57)	174.0 (93.38)	149.7 (74.20)	126.8 (67.17)	95.9 (51.32)	87.8 (48.98)	90.8 (50.78)	83.6 (46.50)	78.5 (45.01)
Part 2 Personal	245.1 (153.33)	232.3 (142.93)	233.3 (141.49)	209.1 (125.25)	206.1 (124.91)	195.7 (115.58)	206.0 (119.66)	215.4 (126.80)	217.8 (125.68)	220.8 (130.10)
Part 2 Property	50.4 (44.23)	49.8 (41.96)	46.2 (37.84)	41.2 (36.20)	34.6 (32.84)	26.8 (32.40)	25.9 (31.52)	26.3 (25.84)	24.0 (23.70)	24.6 (20.20)

Table 6. Descriptive Characteristics of Census Tracts (N = 92) continued…

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Public Order	735.5 (378.68)	726.3 (379.08)	738.3 (370.73)	682.7 (334.71)	694.6 (344.59)	655.5 (325.74)	635.8 (325.01)	643.3 (343.93)	597.2 (299.72)	580.8 (292.73)
Substance Offenses	21.7 (16.10)	20.1 (12.81)	20.2 (12.42)	18.2 (11.39)	18.7 (12.99)	17.3 (12.00)	19.4 (12.24)	18.6 (12.13)	15.7 (10.42)	13.2 (8.88)
Non-Crime Related	608.0 (293.71)	613.7 (291.94)	626.9 (296.27)	606.6 (286.66)	653.96 (314.55)	614.3 (297.19)	631.4 (316.65)	623.6 (298.56)	598.5 (283.85)	589.0 (287.55)
Crime Incidents – *Means and (standard deviations)*										
Part 1 Personal	16.2 (11.34)	15.1 (10.65)	19.1 (13.46)	16.8 (11.67)	17.9 (11.57)	18.1 (11.90)	15.7 (10.87)	11.7 (8.52)	12.1 (7.94)	11.8 (8.39)
Part 1 Property	208.3 (120.41)	222.1 (129.18)	199.5 (117.09)	173.6 (104.61)	152.4 (87.94)	145.7 (92.08)	129.8 (79.68)	126.1 (75.42)	116.9 (69.25)	110.5 (66.52)
Part 2 Personal	117.2 (65.94)	112.5 (64.73)	111.3 (64.14)	119.2 (67.65)	117.8 (67.91)	123.5 (68.05)	163.6 (87.24)	165.7 (92.97)	171.9 (97.05)	180.8 (101.07)
Part 2 Property	76.6 (37.21)	75.0 (36.02)	70.4 (35.73)	71.8 (33.73)	73.9 (36.28)	73.1 (35.05)	71.9 (36.93)	75.3 (35.92)	71.8 (34.41)	72.6 (37.47)
Public Order	144.4 (81.58)	136.1 (76.54)	140.5 (79.94)	140.2 (80.36)	152.8 (86.53)	144.5 (76.55)	145.9 (81.25)	144.6 (79.09)	148.0 (76.99)	157.1 (84.65)
Substance Offenses	40.9 (31.36)	44.5 (34.55)	53.8 (40.72)	64.2 (49.72)	77.6 (59.70)	73.6 (56.68)	75.7 (56.88)	71.0 (53.49)	78.6 (60.98)	69.1 (48.39)

Trend Lines for Calls for Service with Residential Instability Measures

Depicted in the following line graphs, the residential instability variables, marked with solid lines, do not fluctuate markedly over the years. However, the percent in renter-occupied housing variable does show a continuous upward trend. The trend lines for the other two residential instability variables, namely geographic mobility and vacancies, are relatively stable aside from a slight increase in the percentage of vacant addresses after 2016. Almost half of the population in the Toledo census tracts were living in renter occupied housing units by 2019.

Figure 4. Part 1 Personal Calls

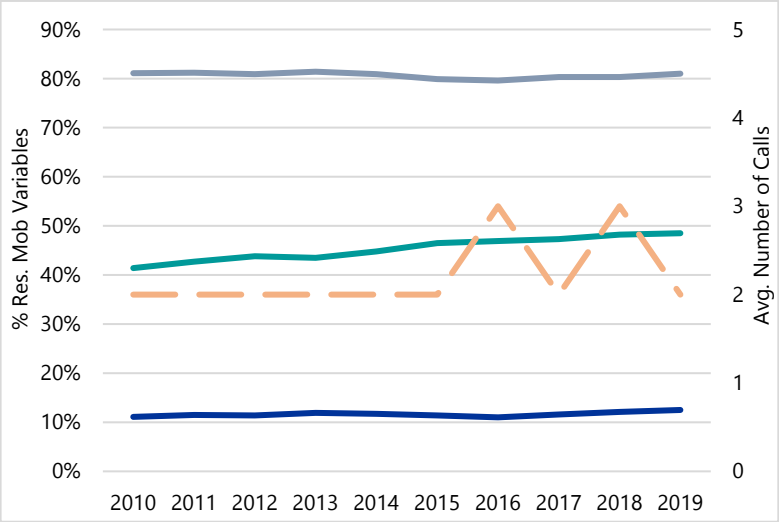
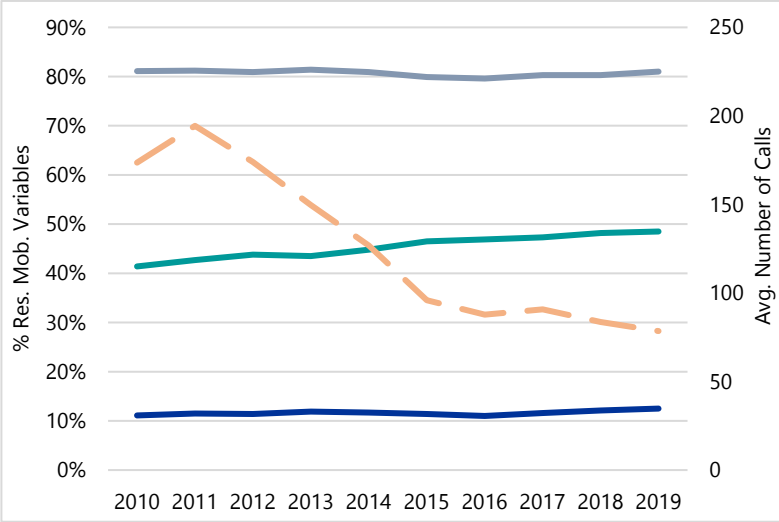


Figure 5. Part 1 Property Calls



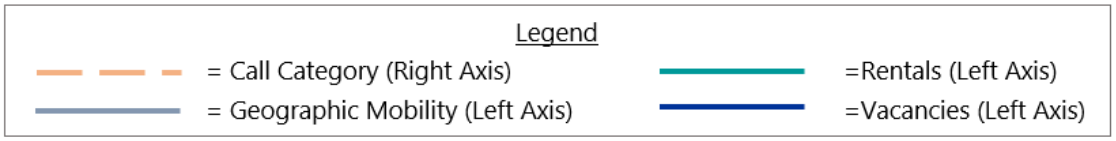


Figure 6. Part 2 Personal Calls

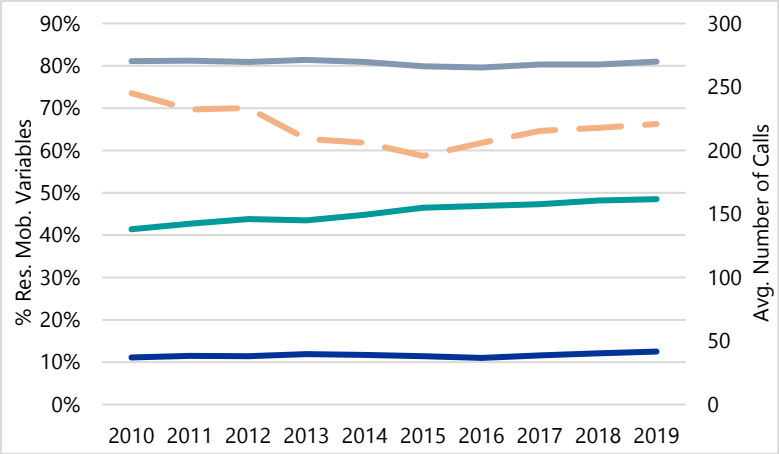
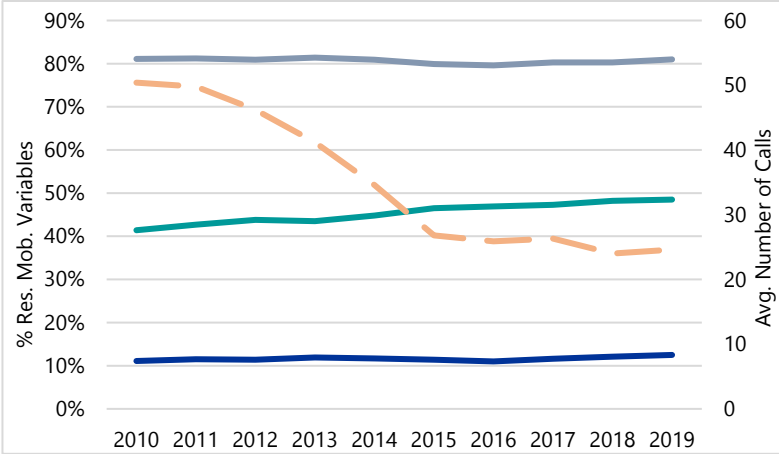


Figure 7. Part 2 Property Calls



Average values for Part 1 personal calls for service remained relatively stable at an average of two calls for each year besides 2016 and 2018, which experienced an average of three calls per year. Given the nature of these offenses and rarity at which they occur, a limited number of Part 1 personal calls would be anticipated. The trend lines for Part 1 property and Part 2 property calls followed similar patterns, excluding an increase in Part 1 property calls from 2010 to 2011. The average number of Part 1 property calls dropped by nearly half from 2011 through 2015, which was also observed for Part 2 property calls from 2010 through 2015. The average number of calls then remained relatively stable for both call types until 2019, when a slight decrease in Part 1 property calls and a slight increase in Part 2 property calls occurred. The mean calls for Part 2 personal calls declined from 2010 to 2015, with a minor increase in 2012, followed by a continuous increase from 2015 to 2019.

Figure 8. Public Order Calls

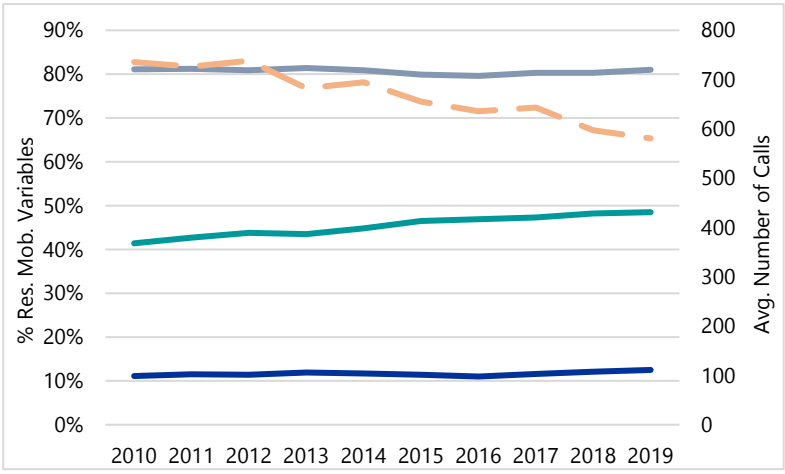


Figure 9. Substance Offense Calls

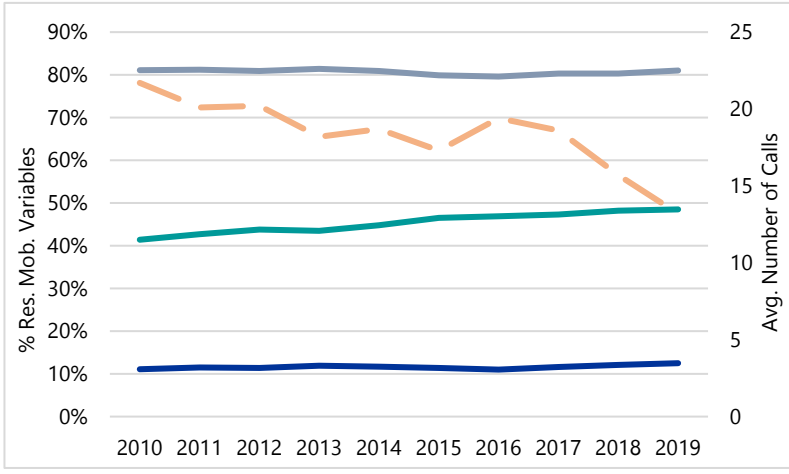
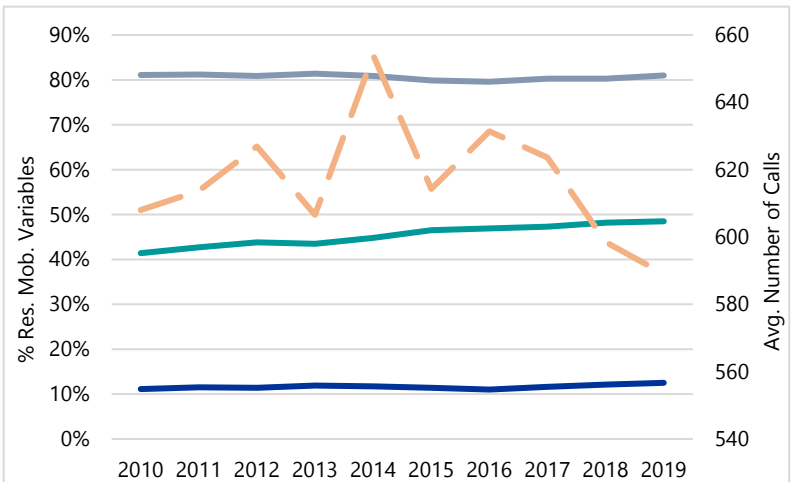
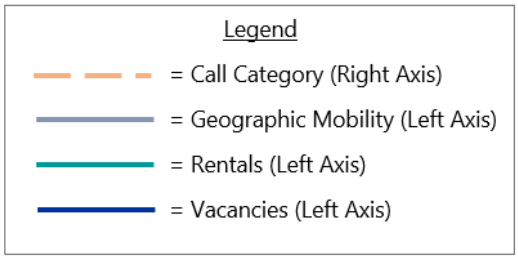


Figure 10. Non-Crime Service Calls





The average number of calls for public order continuously declined throughout the study period, except for a marginal increase in calls for years 2012, 2014, and 2017. Similarly, the trend line for calls regarding substance offenses had an overall declining trend from 2010 through 2019, though, slight increases in substance offense calls occurred in 2012, 2014, and 2016. The trend line for non-criminal service calls remained sporadic throughout the study's timeframe. Increases in the average number of non-crime related service calls were observed in 2012, 2014, and 2016, with the increase in service calls from 2013 to 2014 being the most drastic, from an approximate average of 605 calls to 655, respectively. The average number of non-criminal service calls started to decline in 2016 and continued to do so through 2019.

Trend Lines for Crime Incidents with Residential Instability Measures

Figure 11. Part 1 Personal Crimes

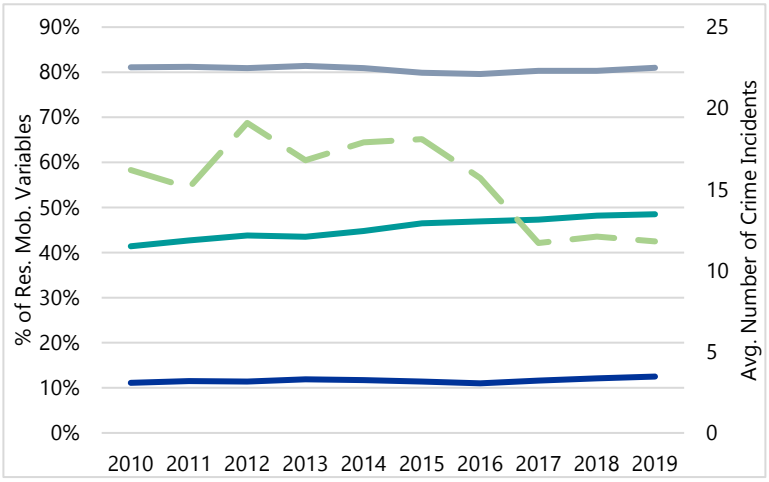


Figure 12. Part 1 Property Crimes

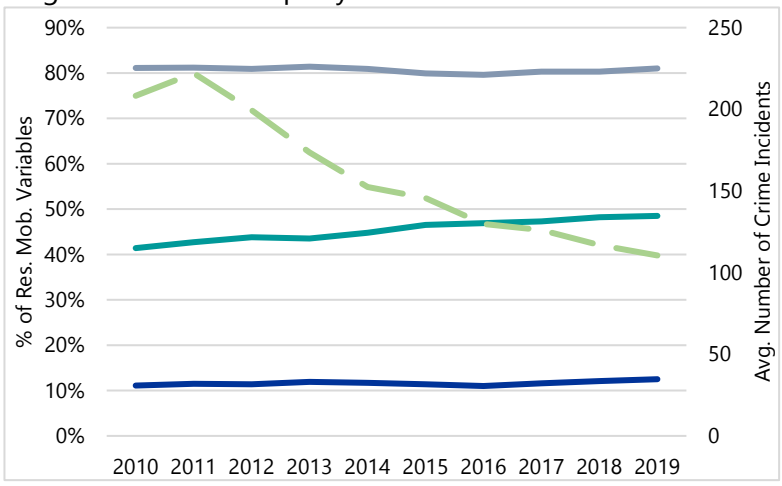


Figure 13. Part 2 Personal Crimes

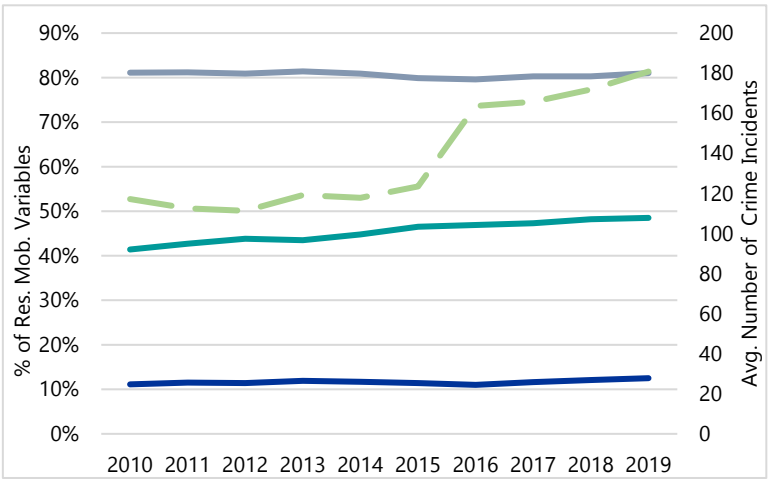
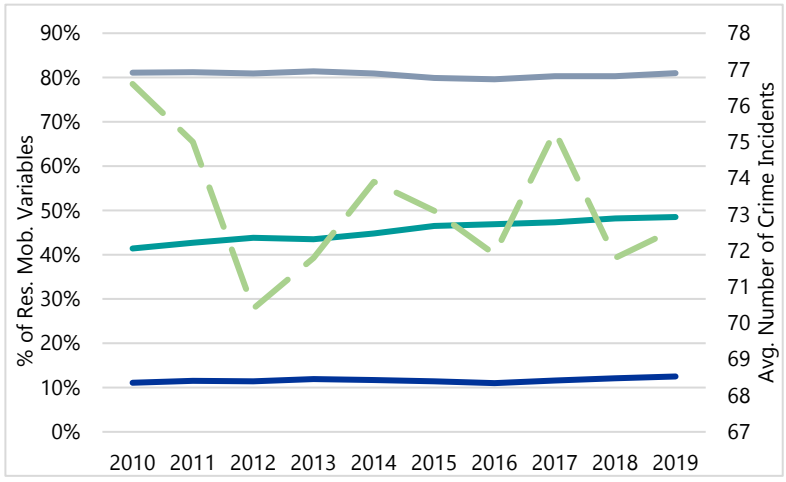
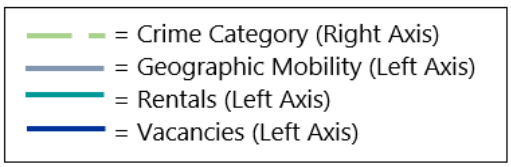


Figure 14. Part 2 Property Crimes





Mean values for Part 1 personal crimes slightly decreased from 2010-2011, followed by minor fluctuations before declining from 2015-2017 and remained stable from 2017 to 2019. Average Part 1 property incidents trends increased from 2010-2011 before steadily decreasing by more than half through 2019. Part 2 personal crimes held steady until 2015, when the trend showed a sharp increase, followed by a more gradual rise from 2016 onward. The trend line for Part 2 property crimes fluctuated greatly over the study period, reaching a low in 2012; however, the average number of incidents each year remained between 70 and 77, exhibiting an overall decline from 2010 to 2019.

Figure 15. Public Order Offenses

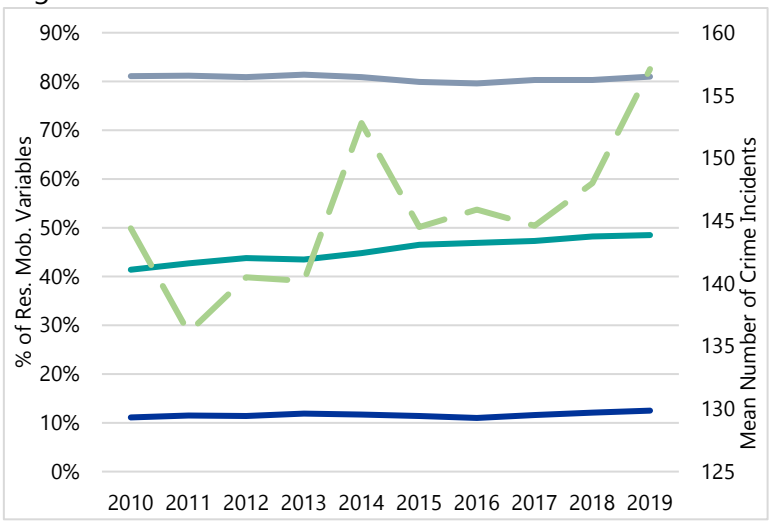
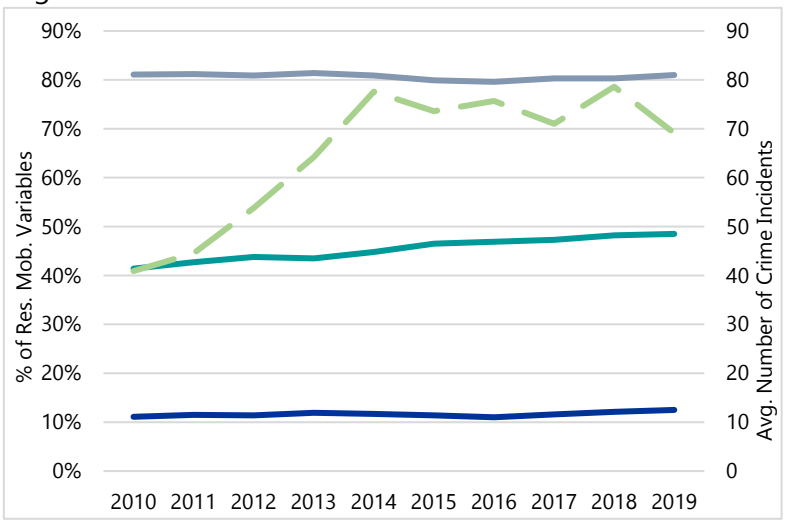
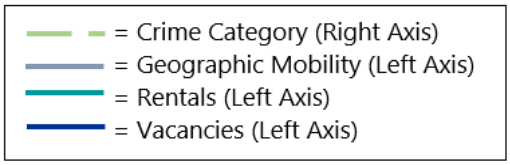


Figure 16. Substance Offenses



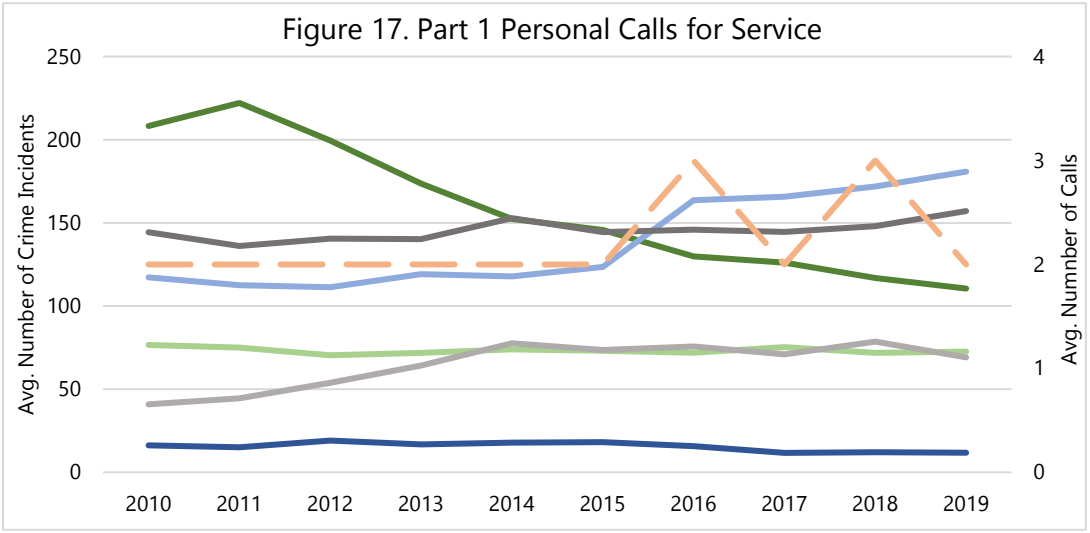


Similar to Part 2 property crimes, the trend line for public order incidents wavered. Initially, there was a decrease in these crimes from 2010-2011, followed by a slight increase through 2013. In 2014, there was a sharp spike before returning to lower averages in 2015 and continuing the gradual increase from prior years. A more dramatic incline began in 2017 and persisted through 2019. Substance offenses nearly doubled from 2010 to 2014, at which point the totals alternated yearly rising and falling slightly before showing a more notable decline starting in 2018.

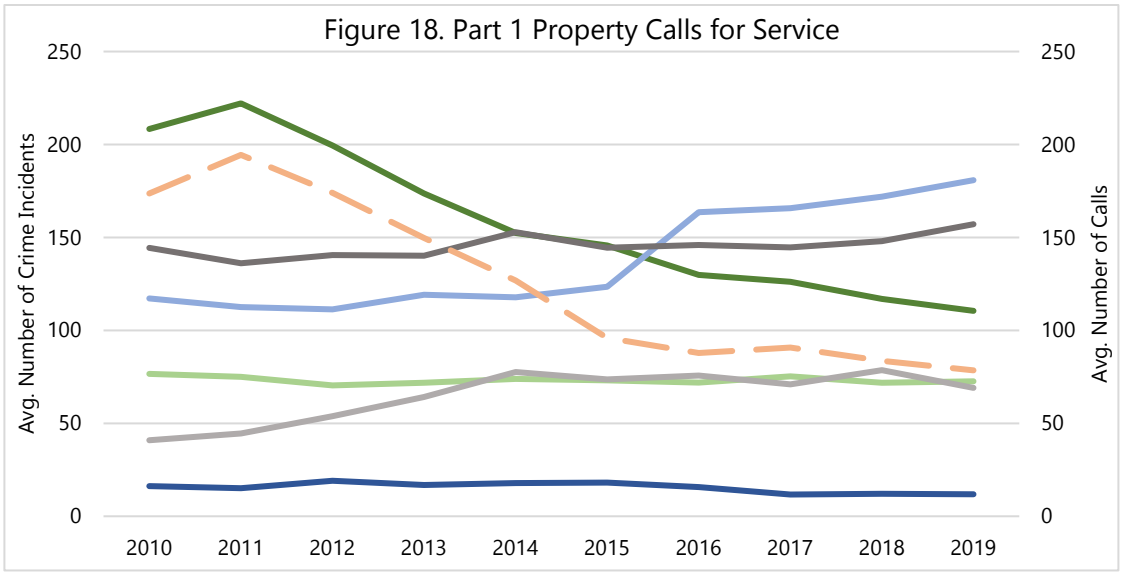
Trend Lines for Calls for Service with Crime Category Measures

In the line graphs that follow, the mean totals for the calls for service variables and crime categories are depicted. Trends for Part 1 personal and Part 2 property crimes remained stable, experiencing minimal changes throughout the study's timeframe. Average totals for Part 2 personal crime stayed relatively stable until 2015 where an upward trend started and continued through 2019, while the average for Part 1 property crimes dropped by half from 2011 to 2019. Trends for public order incidents and substance offenses experienced an increase in 2014. For the years following 2014, public order incidents saw an increase, while substance offenses remained relatively stable with a slight decrease from 2018 to 2019. More detailed information on the trends for the crime categories under study can be found in the previous section.

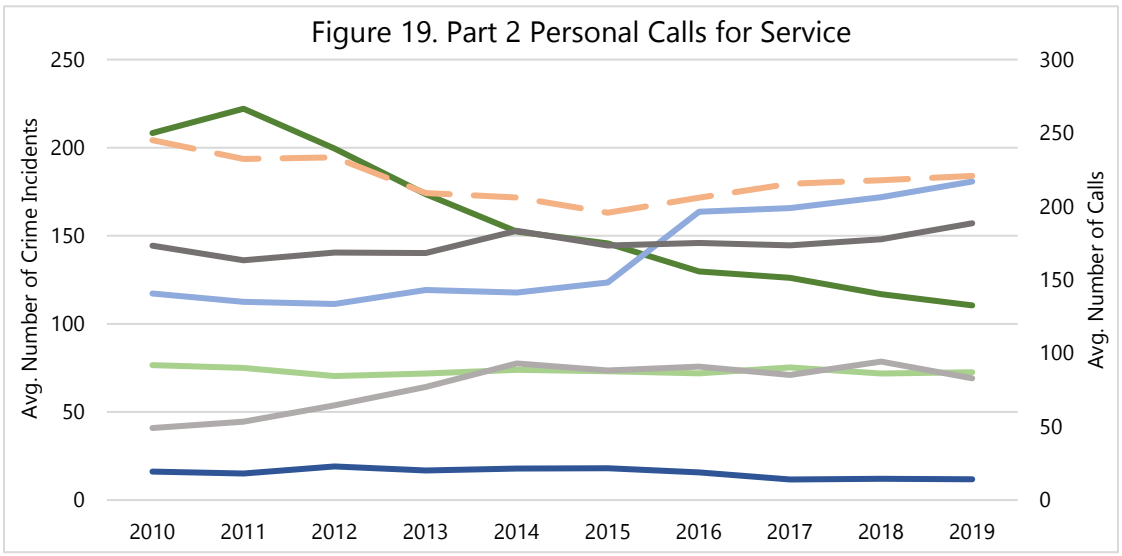
Figure 17. Part 1 Personal Calls for Service

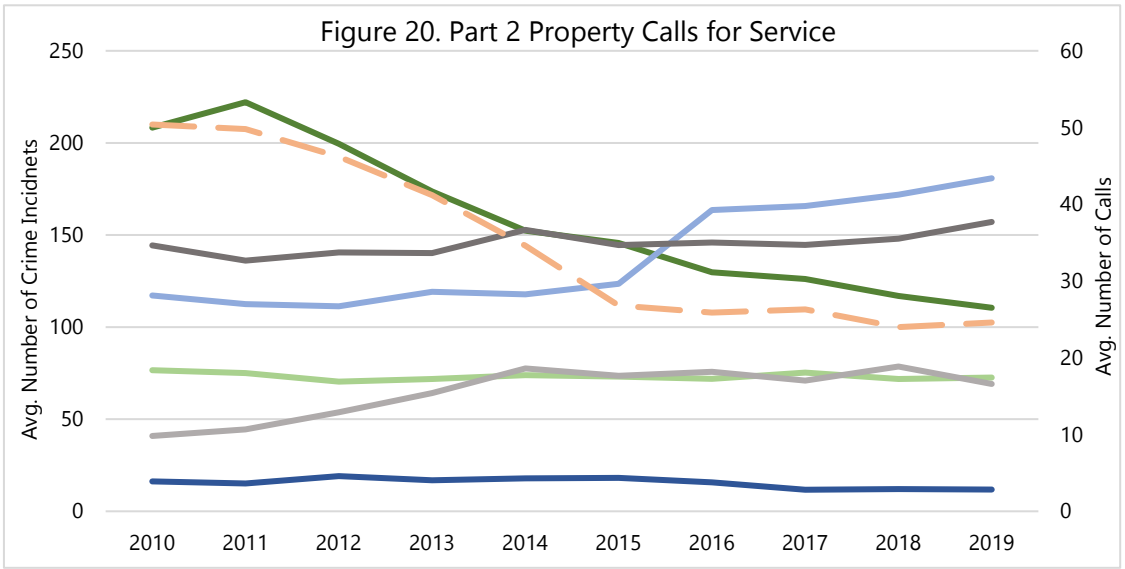


Legend	
	Calls for Service Category (Right Axis)
	Part 1 Personal Crimes (Left Axis)
	Part 1 Property Crimes (Left Axis)
	Part 2 Personal Crimes (Left Axis)
	Part 2 Property Crimes (Left Axis)
	Public Order (Left Axis)
	Substance Offenses (Left Axis)

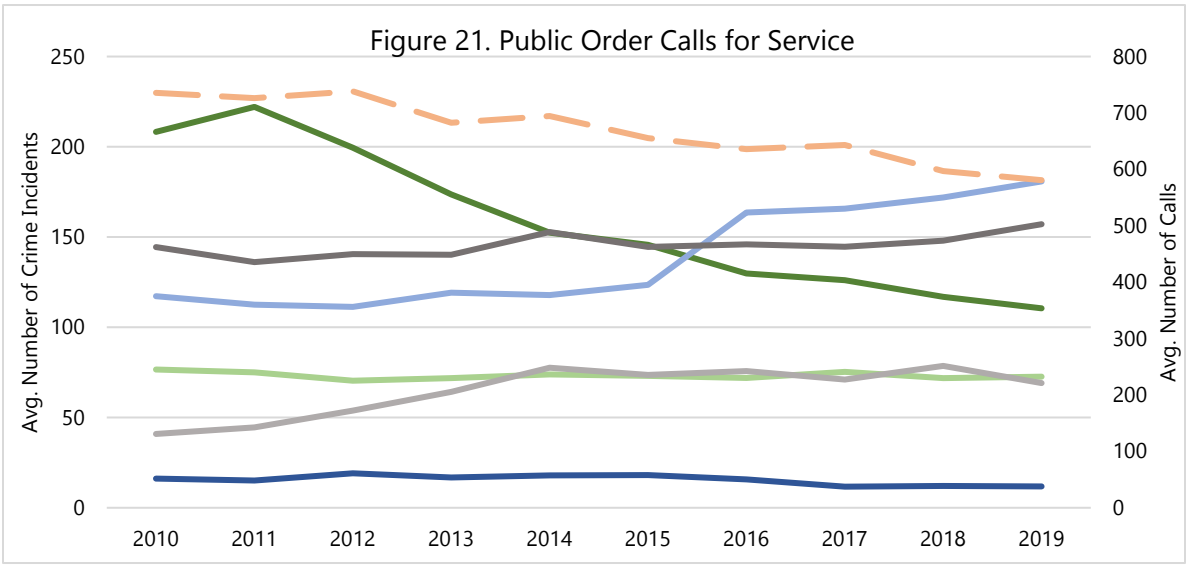


Legend	
	Calls for Service Category (Right Axis)
	Part 1 Personal Crimes (Left Axis)
	Part 1 Property Crimes (Left Axis)
	Part 2 Personal Crimes (Left Axis)
	Part 2 Property Crimes (Left Axis)
	Public Order (Left Axis)
	Substance Offenses (Left Axis)

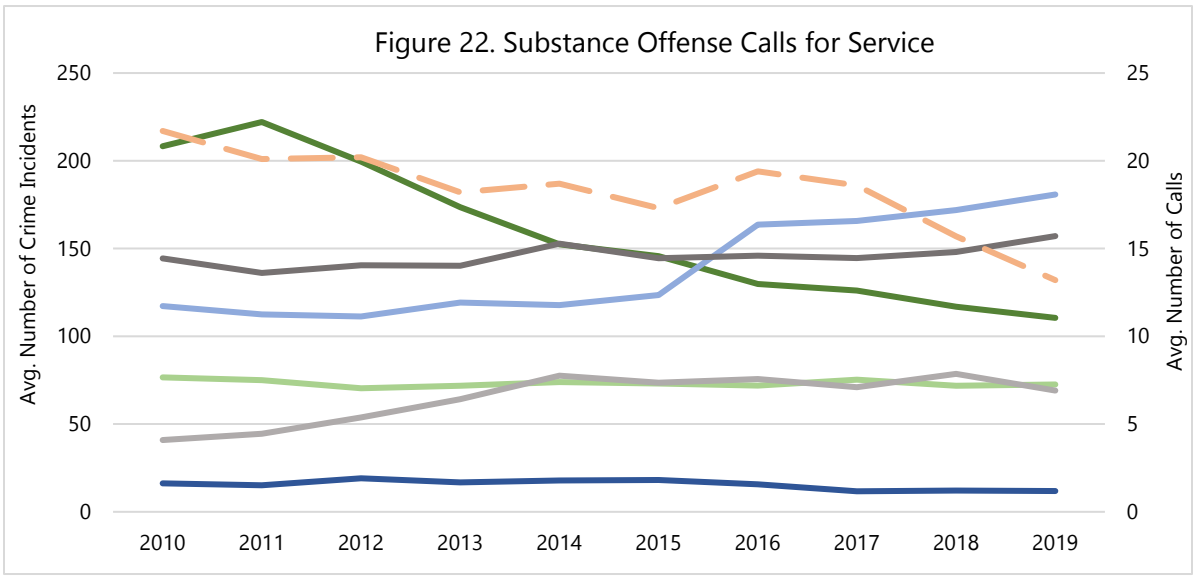


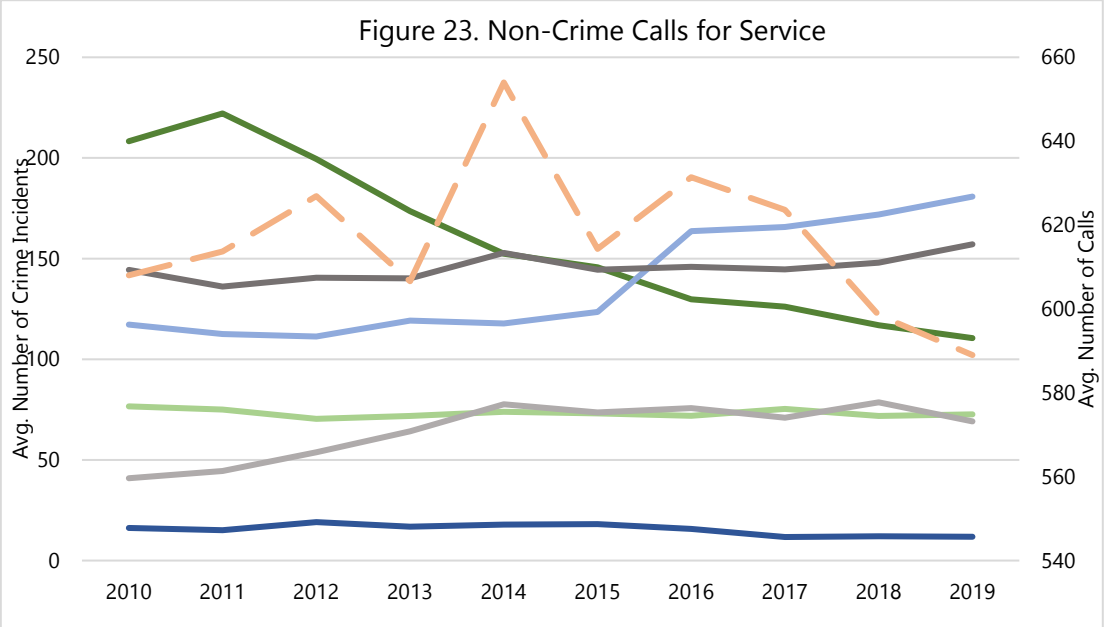


The average number Part 1 personal calls for service and crime incidents remained stable throughout the study's timeframe. Although it appeared to be spikes in Part 1 personal calls in 2016 and 2018, the increases in both years were due to only one additional call. Trends for Part 1 property calls for service and crime followed almost identical patterns. These trend lines exhibited an increase from 2010 to 2011, followed by a steady decline through 2015 and 2016. Calls and crime incidents for Part 1 property continued to decline through 2019, but at a slower rate than in previous years. The average number of Part 2 personal calls for service was higher than Part 2 personal crime incidents for all years. After an increase in Part 2 personal offenses in 2015, the averages of calls for service and crime incidents for this category became similar. Trend lines for the average calls for service and crime incidents for Part 2 property did not follow similar trends throughout the study period. The average for Part 2 property calls for service decreased by nearly half from 2010 to 2015 before leveling out. Meanwhile, trends for Part 2 property crime incidents remained consistent, ranging between 70 and 77 incidents per year. For all Part 1 and Part 2 categories, except for Part 2 personal, the average number of calls for service remained lower than the average number of crime incidents.



Legend	
	Calls for Service Category (Right Axis)
	Part 1 Personal Crimes (Left Axis)
	Part 1 Property Crimes (Left Axis)
	Part 2 Personal Crimes (Left Axis)
	Part 2 Property Crimes (Left Axis)
	Public Order (Left Axis)
	Substance Offenses (Left Axis)





The average number of public order calls for service remained significantly higher than the average number of public order incidents through the study period. Interestingly, while the trend line for public order calls for service steadily decreased, the overall trend line for public order crime incidents increased. The average number of calls for substance offenses generally declined, except for a marginal increase from 2015 to 2016. In contrast, the average number of substance offenses increased from 2010 to 2014, followed by minimal changes from 2014 onward. The number of calls for substance offenses was consistently lower than the number of these incidents in any given year. The trend line for non-crime calls for service fluctuated throughout the study period, with notable peaks in 2012, 2014, and 2016. While these calls do not correspond with any of the crime categories under study, the average number of non-criminal calls for service remained significantly high, indicating that a large portion of calls for service were for non-criminal reasons.

Multivariate Results - Calls

Regression – Between Tract Findings

Table 7, found on page 27, provides a summary of the specific significant variables from the regression analyses examining the relationship between the demographic and residential instability indicators on the categories of calls for service by comparing tracts to one another. To quantify the impact of each significant independent variable on the dependent variable refer to the values in the parentheses. There are two values noted in the parentheses and the numbers represent the following: the first number is the value of that independent variable's incremental effect on the calls for service category in that row; the second number is the additional number of calls for service category in that row that correspond to the first number's value. For example, to interpret these values, in 2016 an 8.74% incremental increase in the percentage of vacant addresses was associated with an additional 16.56 Part 1 property crimes between tracts. Predicting further increases, if the percentage of vacancies were to double to 17.48% (which is 2 times 8.74%), we would expect the number of additional Part 1 property crimes to also double to 33.12 (which is 2 times 16.56). Thus, there is a linear relationship between the percentage of vacant addresses and the number of Part 1 property crimes: as the percentage of vacancies increases, the number of Part 1 property crimes increases proportionally. Complete standardized regression table results are reported in the Appendix for each year under study.

The between tract results show that over the 10-year study period, tracts that had an increase in the percentage of vacant addresses had an increase in calls for service. Across all tracts, tracts with a 9%

incremental increase in the percentage of vacant addresses had an increase, on average, of 193 calls for service of any type. Specific to each call type, these were the significant findings across all tracts:

- For every 8% increase in the percentage of vacant addresses corresponded with an average increase of 34 calls for service for Part 2 personal crimes, 94 non-crime related calls for service, and 128 public order calls for service.

- Each 9% increase in the percentage of vacant addresses was associated with an average increase of 21 calls for service for Part 1 property offenses.

Regression - Within Tract Findings

A Vector Autoregressive (VAR) Cross-Lagged Panel design was used to examine the current time series data (e.g., residential instability and calls for service) that was obtained from census tracts between 2010 and 2019. Recall that a VAR model is a multivariate time series model that estimates relationships between multiple variables measured at consecutive points in time and examines the carryover effect that the same variable has on itself over each consecutive timepoint. Cross-lags are incorporated into the model to examine the association between previous values of one variable to future values of another variable. For example, within the same tract, changes in the percentage of vacancies in 2010 predict changes in the number of crimes in 2011. Hence, this model allows for the examination of effects between each variable at the same time point (i.e., contemporaneous effects) and at the previous time point (i.e., lagged effect) to gain a better understanding of the directional association between two or more variables. See Figure 24 on page 29.

Within tract findings compare tracts to themselves over the 10-year period from 2010 to 2019. Calls for service for any type were largely unaffected by changes in residential instability across all years within the same tracts with the following exceptions:

- Tracts that had an incremental 19% increase in the percentage of renter occupied housing units, compared to their average, had an increase of less than 1 Part 1 personal crime.

- Tracts that had an incremental 9% increase in the percentage of vacant addresses, compared to their average, had 12 fewer public order calls.

Table 7. Regression Summary Table: Significant Variables – Residential Instability and Calls for Service

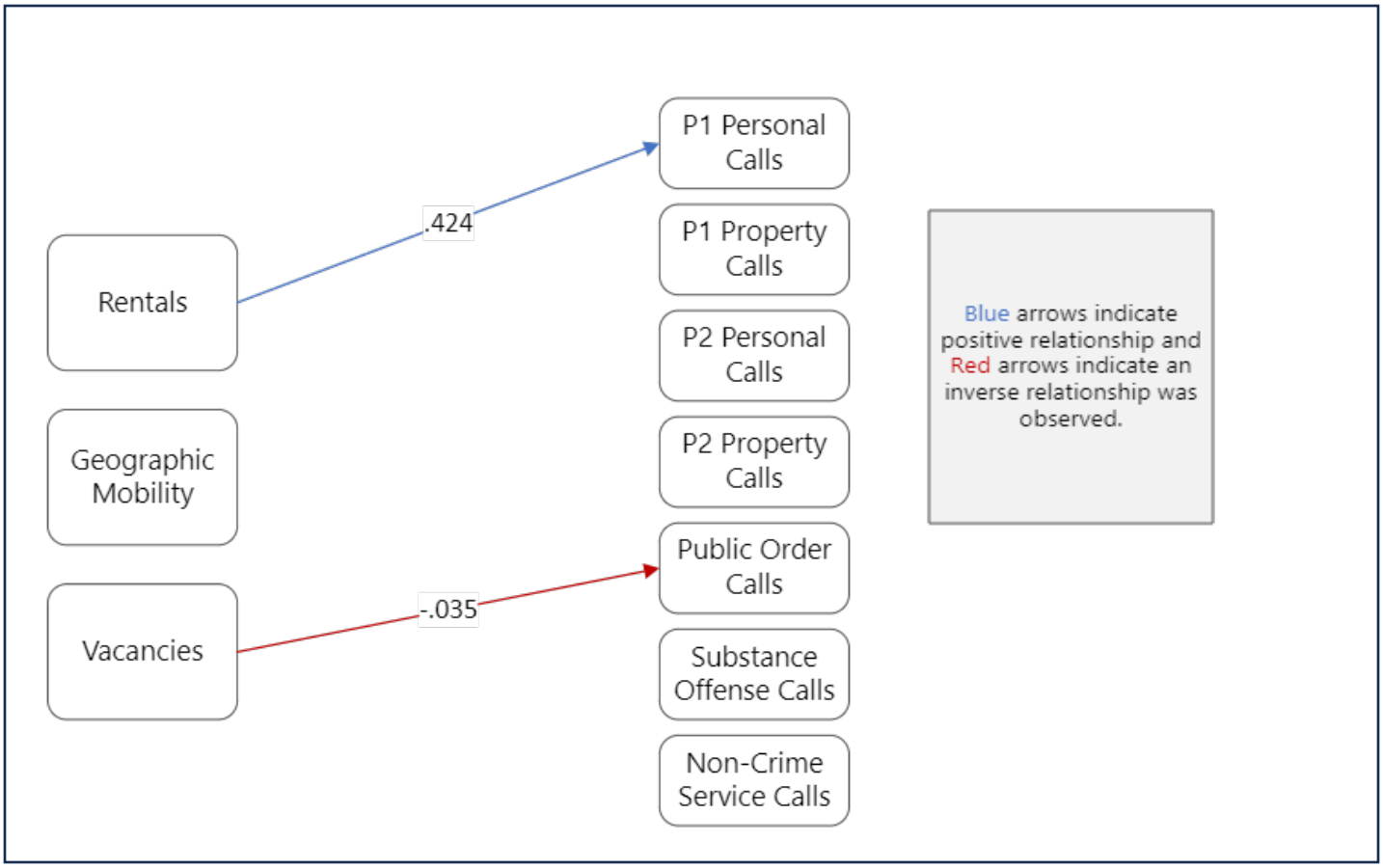
Years	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Calls for Service Categories										
Part 1 Personal	• Vacancies (7.16%, 0.59)* • Total Pop (1267.75, 0.82)		• Total Pop (1304.34, 0.74) • Pop Density (1927.27, 0.43) • Age 15-24 (6.11%, 0.62)	• Total Pop (1285.01, 0.63)	• Age 15-24 (5.7%, -0.69) • Racial/Ethnic Heterogeneity (0.17, 0.61)	• Racial/Ethnic Heterogeneity (0.16, 1.09) • Female HH (9.98%, -0.96) • Median Income ($17260.57, -1.12)	• Racial/Ethnic Heterogeneity (0.16, 0.65)	• Age 15-24 (4.92%, -0.56)	• Total Pop (1335.67, 0.61) • Age 15-24 (4.77%, -0.52) • Gov. Supplemental Income (23.96%, 0.71)	• Total Pop (1348.73, 0.71) • Poverty • (13.76%, -0.94)
Part 1 Property	• Vacancies (7.16%, 34.52) • Total Pop (1267.75, 65.07)	• Total Pop (1287.45, 61.76) • Pop Density (1937.62, 18.37)	• Vacancies (7.61%, 29.69) • Total Pop (1304.34, 61.44) • Less than High School (9.85%, 21.66)	• Vacancies (7.96%, 20.11) • Total Pop (1285.01, 51.42) • Less than High School (9.71%, 20.18)	• Vacancies (8.29%, 25.86) • Total Pop (1285.75, 44.06) • Pop Density (1904.16, 9.27) • Less than High School (9.62%, 25.26)	• Vacancies (8.65%,19.96) • Total Pop (1261.82, 32.02) • Gini Index (0.07, -12.06)	• Vacancies (8.74%, 16.56) • Total Pop (1278.7, 28.56) • Racial/Ethnic Heterogeneity (0.16, 10.48)	• Vacancies (9.35%, 12.80) • Total Pop (1278.7, 28.56) • Racial/Ethnic Heterogeneity (0.16, 12.54) • Gini Index (0.07, -10.77)	• Vacancies (9.88%, 14.37) • Total Pop (1335.67, 32.50) • Age 15-24 (4.77, -8.00)	• Vacancies (10.27%, 16.25) • Total Pop (1348.73, 33.17)
Part 2 Personal	• Vacancies (7.16%, 36.64) • Total Pop (1267.75, 86.17) • Pop Density (1982.87, 33.27) • Less than High School (10.31%, 50.29)	• Total Pop (1287.45, 72.03) • Pop Density (1937.62, 26.87) • Less than High School (10.03%, 51.02)	• Vacancies (7.61%, 27.87) • Total Pop (1304.34, 78.80) • Pop Density (1927.78, 28.02) • Less than High School (6.11%, 41.88)	• Vacancies (7.96%, 31.31) • Total Pop (1285.01, 64.50) • Pop Density (1859.25, 22.42) • Less than High School (9.71%, 42.86)	• Vacancies (8.29%, 40.47) • Total Pop (1285.75, 70.20) • Pop Density (1904.16, 19.61)	• Vacancies (8.65%, 37.91) • Total Pop (1267.82, 58.95) • Pop Density (1863.11, 21.04)	• Vacancies (8.74%, 35.18) • Total Pop (1278.70, 60.67) • Pop Density (1890.26, 25.01) • Poverty (14.97%, 51.33)	• Total Pop (1318.72, 6.29) • Pop Density (1915.27, 2.29) • Age 15-24 (4.92%, -3.26) • Racial/Ethnic Heterogeneity (0.16, 3.55) • Gini Index (0.07, -2.73) • Poverty (14.6%, 6.11)	• Vacancies (9.88%, 32.30) • Total Pop (1335.67, 70.63) • Pop Density (1946.72, 24.00) • Age 15-24 (4.77%, -29.66) • Racial/Ethnic Heterogeneity (0.16, 20.86)	• Total Pop (1348.73, 81.05) • Pop Density (1969.90, 27.45)
Part 2 Property	• Total Pop (1267.75, 26.85)	• Total Pop (1287.45, 24.17) • Racial/Ethnic Heterogeneity (0.18, -11.96)	• Total Pop (1304.34, 23.57)	• Total Pop (1285.01, 20.89) • Racial/Ethnic Heterogeneity (0.17, -8.51)	• Total Pop (1285.75, 15.37)	• Total Pop (1261.82, 12.28)	• Total Pop (1278.70, 13.68)	• Total Pop (1318.72, 14.34)	• Total Pop (1335.67, 12.73)	• Total Pop (1348.72, 13.29) • Racial/Ethnic Heterogeneity (0.15, -5.58)

Years	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Public Order	• Vacancies (7.16%, 122.31) • Total Pop (1267.75, 224.56)	• Total Pop (1287.45, 201.29)	• Vacancies (7.61%, 111.59) • Total Pop (1304.34, 218.36) • Racial/Ethnic Heterogeneity (0.17, 64.14)	• Vacancies (7.96%, 115.48) • Total Pop (1285.01, 208.19)	• Vacancies (8.29%, 130.26) • Total Pop (1285.75, 220.19)	• Vacancies (8.65%, 163.20) • Total Pop (1261.82, 192.19) • Racial/Ethnic Heterogeneity (0.16, 57.98)	• Vacancies (8.74%, 136.50) • Total Pop (1278.70, 180.38) • Racial/Ethnic Heterogeneity (0.16, 87.10)	• Vacancies (9.35%, 115.22) • Total Pop (1318.72, 183.31) • Age 15-24 (4.92, -73.95) • Racial/Ethnic Heterogeneity (0.16, 101.12) • Gini Index (0.07, -82.54)	• Total Pop (1335.67, 175.34) • Racial/Ethnic Heterogeneity (0.16, 59.04) • Unemployment (8.55%, 91.41)	• Total Pop (1348.73, 189.10)
Substance Offenses	• Total Pop (1267.75, 7.16)	• Total Pop (1287.45, 6.44)	• Total Pop (1304.34, 7.61)	• Total Pop (1285.75, 6.45)	• Geo. Mobility (8.32%, -3.65) • Total Pop (1285.75, 9.24 • Female HH (10.8%, -3.69) • Gini Index (0.07, -3.12)	• Total Pop (1261.82, 6.29) • Female HH (9.98%, -4.73) • Gini Index (0.07, -3.12)	• Geo. Mobility (8.99%, -3.84) • Total Pop (1278.70, 6.89) • Female HH (10.09%, -5.64)	• Total Pop (1318.72, 6.84) • Gini Index (0.07, -3.46)	• Total Pop (1335.67, 6.47)	• Total Pop (1348.73, 5.78)
Non-Crime Related Calls	• Vacancies (7.16%, 89.29) • Total Pop (1267.75, 194.44)	• Vacancies (7.8%, 64.81) • Total Pop (1287.45, 191.22)	• Total Pop (1304.34, 201.17)	• Vacancies (7.96%, 74.24) • Total Pop (1285.01, 208.69)	• Vacancies (8.29%, 101.91) • Total Pop (1285.75, 222.70)	• Vacancies (8.65%, 138.19) • Total Pop 1261.82, 205.95) • Female HH (9.98%, -110.26)	• Vacancies (8.74%. 96.26) • Total Pop (1278.70, 214.06) • Racial/Ethnic Heterogeneity (0.16, 58.26)	• Total Pop (1318.72, 200.93) • Racial/Ethnic Heterogeneity (0.16, 62.70)	• Total Pop 1335.67, 193.59)	• Total Pop (1348.72, 199.56)

Note: Blue font = positive relationship; Red font = inverse relationship; HH = head of household; Gini Index = measure of inequality

*To quantify the impact of each significant independent variable on the dependent variable refer to the values in the parentheses. There are two values noted in the parentheses and the numbers represent the following: the first number is the value of that independent variable's incremental effect on the calls for service category in that row; the second number is the additional number of calls for service category in that row that correspond to the first number's value.

Figure 24. Significant Carryover Effects Within Tracts: Residential Instability Measures and Calls for Service



Multivariate Results - Crimes

Regression – Between Tract Findings

Table 8, found on the next page, provides a summary of the specific significant variables from the regression analyses examining the relationship between the demographic and residential instability indicators on the categories of crime incidents. In addition, to quantify the impact of each significant independent variable on the dependent variable two values are placed in parentheses in Table 8. The two numbers represent the following: the first number is the value of that independent variable's incremental effect on crime incident category in that row; the second number is the additional number of crime incidents by category in that row that correspond to the first number's value. For example, to interpret these values, in 2010 a 7.16% incremental increase in the percentage of vacant addresses, resulted in an additional 3.79 Part 1 personal, 15.56 Part 2 personal, and 12.13 Part 2 property crimes. Complete standardized regression table results are reported in the Appendix for each year under study.

At the between level, tracts are compared to each other. The results indicate that over the 10-year study period, tracts with an increase in the percentage of vacant addresses experienced a rise in crime incidents. Across all tracts, tracts with a 9% incremental increase in the percentage of vacant addresses had an increase, on average, of 84 crime incidents. Specific to each crime type, these were the significant findings across all tracts:

- An incremental 9% increase in the percentage of vacant addresses was associated with an average increase of 4 Part 1 personal, 20 Part 1 Property, and 22 Part 2 personal, and 25 substance offense incidents.
- An incremental 8% increase in the percentage of vacancies was associated with an average increase of 12 Part 2 property crime and 34 public order incidents.

Table 8. Regression Summary Table: Significant Variables – Residential Instability and Crime

Years	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Crime Incident Categories										
Part 1 Personal	• Vacancies (7.16%, 3.80) • Total Pop (1267.75, 4.74) • Pop Density (1982.87, 25.53)	• Total Pop (1287.45, 2.80) • Female HH (10.27%, 3.55)	• Vacancies (7.61%, 5.30) • Total Pop (1304.34, 4.70) • Less than High School (9.85%, 3.97)	• Vacancies (7.96%, 4.18) • Total Pop (1285.01, 4.33)	• Vacancies (8.29%, 6.77) • Total Pop (1285.75, 4.76)	• Vacancies (8.65%, 4.49) • Total Pop (1261.82, 5.33) • Pop Density (1863.11, 1.74)	• Vacancies (8.74%, 5.16) • Total Pop (1278.70, 4.08) • Pop Density (1890.26, 1.72) • Poverty (14.97%, 4.92)	• Total Pop (1318.72, 2.60) • Poverty (14.60%, 5.06)	• Vacancies (9.88%, 2.53) • Total Pop (1335.67, 3.25) • Gini Index (0.08, -1.72)	• Vacancies (10.27%, 2.92) • Total Pop (1348.73, 2.90)
Part 1 Property	• Total Pop (1267.75, 84.65) • Median Income ($18375.50, -54.31) • Gini Index (0.07, -32.39)	• Total Pop (1287.45, 83.58) • Median Income ($17232.03, -49.61)	• Total Pop (1304.34, 79.74) • Median Income ($17110.38, -53.74)	• Total Pop (1285.01, 72.39)	• Vacancies (8.29%, 27.17) • Total Pop (1285.75, 58.01)	• Total Pop (1261.82, 55.80)	• Total Pop (1278.70, 48.84)	• Total Pop (1318.72, 52.34)	• Vacancies (9.88%, 14.61) • Total Pop (1335.67, 46,26)	• Vacancies (10.27%, 17.16) • Total Pop (1348.73, 48.16)
Part 2 Personal	• Vacancies (7.16%, 15.56) • Total Pop (1267.75, 42.66) • Pop Density (1982.87, 11.01) • Less than High School (10.31%, 17.74) • Median Income ($18375.50, -29.74)	• Total Pop (1287.45, 35.93) • Pop Density (6.09, 9.72)	• Vacancies (7.61%, 13.98) • Total Pop (1304.34, 38.61) • Pop Density (1927.78, 12.19)	• Vacancies (7.96%, 20.84) • Total Pop (1285.01, 35.85) • Pop Density (1859.25, 10.42)	• Vacancies (8.29%, 24.92) • Total Pop (1285.75, 39. 52) • Pop Density (1904.16, 11.14)	• Vacancies (8.65%, 28.72) • Total Pop (1261.82, 43.28) • Pop Density (1863.11, 10.75)	• Vacancies (8.74%, 27.83) • Total Pop (1278.70, 51.73) • Pop Density (1890.26, 17.27) • Racial/Ethnic Heterogeneity (0.16, 14.74) • Poverty (14.97%, 32.80)	• Total Pop (1318.72, 58.01) • Pop Density (1915.27, 16.64) • Racial/Ethnic Heterogeneity (0.16, 25.57) • Poverty (14.60%, 43.14) • Age 15-24 (4.92%, -18.59) • Gini Index (0.07, -18.04)	• Vacancies (9.88%, 22.03) • Total Pop (1335.67, 64.15)	• Vacancies (10.27%, 28.60) • Total Pop (1348.73, 66.50) • Pop Density (1969.90, 18.80)
Part 2 Property	• Rentals (21.50%, 12.32) • Vacancies (7.16%, 12.13) • Total Pop (1267.75, 26.08)	• Total Pop (1287.45, 23.30)	• Vacancies (7.61%, 9.61) • Total Pop (1304.34, 21.47)	• Vacancies (7.96%, 14.47) • Total Pop (1285.01, 23.88)	• Vacancies (8.29%, 15.27) • Total Pop (1285.75, 23.51)	• Vacancies (8.65%, 12.93) • Total Pop (1261.82, 23.52)	• Vacancies (8.74%, 10.71) • Total Pop (1278.70, 25.26)	• Vacancies (9.35%, 11.17) • Total Pop (1318.72, 25.68) • Age 15-24 (4.92%, -6.03)	• Vacancies (9.88%, 7.19) • Total Pop (1335.67, 24.88) • Median Income ($17634.23, -12.90)	• Total Pop (1348.73, 29.30)

Years	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Public Order	• Total Pop (1267.75, 39.48 • Pop Density (1982.87, 17.54 • Median Income ($18375.50, -25.37)	• Total Pop (1287.45, 29.85) • Pop Density (6.09, 13.78) • Median Income ($17232.03, -23.57)	• Total Pop (1304.34, 35.81)	• Vacancies (7.96%, 31.66) • Total Pop (1285.01, 38.09)	• Vacancies (8.29%, 39.80) • Total Pop (1285.75, 46.29)	• Vacancies (8.65%, 31.00) • Total Pop (1261.82, 40.04)	• Vacancies (8.74%, 31.85) • Total Pop (1278.70, 41.68)	• Total Pop (1318.72, 45.08) • Age 15-24 (4.92%, -18.59)	• Total Pop (1335.67, 41.81) • Age 15-24 (4.77%, -16.32)	• Total Pop (1348.73, 42.92) • Pop Density (1969.90, 17.18)
Substance Offenses			• Vacancies (7.61%, 12.05)	• Vacancies (7.96%, 22.47) • Total Pop (1285.01, 14.07)	• Geo. Mobility (8.32%, -15.04) • Vacancies (8.29%, 34.03) • Total Pop (1285.75, 19.76) • Median Income ($17135.08, 7.16) • Female HH (10.8%, -18.81)	• Vacancies (8.65%, 25.79) • Total Pop (1261.82, 17.85)	• Vacancies (8.74%, 25.71) • Total Pop (1278.70, 19.57)	• Vacancies (9.35%, 23.00)	• Vacancies (9.88%, 26.89) • Total Pop (1335.67, 16.53)	• Vacancies (10.27%, 28.74) • Total Pop (1348.73, 14.71)

Note: Blue font = positive relationship; Red font = inverse relationship; HH = head of household; Gini Index = measure of inequality

*To quantify the impact of each significant independent variable on the dependent variable refer to the values in the parentheses. There are two values noted in the parentheses and the numbers represent the following: the first number is the value of that independent variable's incremental effect on the crime incident category in that row; the second number is the additional number of crime incidents by category in that row that correspond to the first number's value.

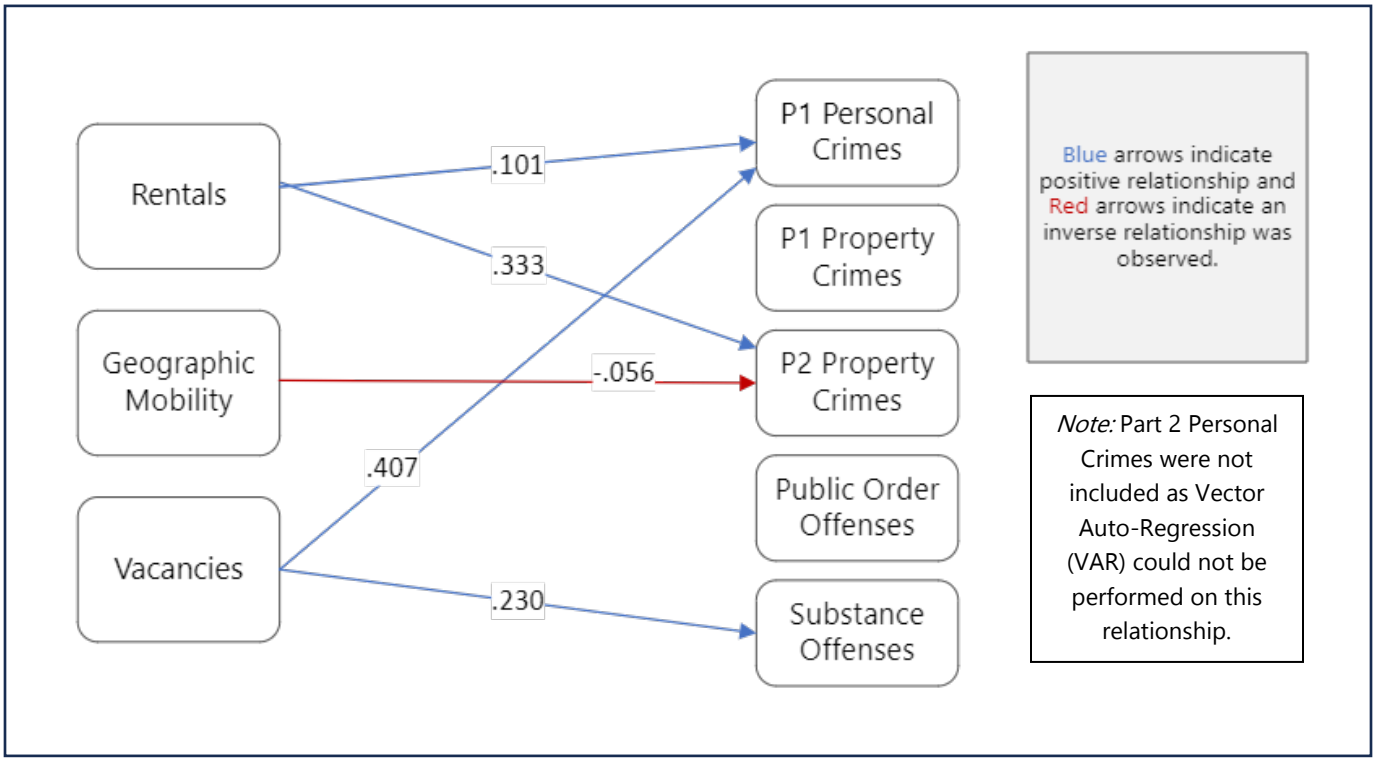
Regression – Within Tract Findings - Crime

As we did with calls for service, Autoregressive (VAR) Cross-Lagged Panel design was used to analyze the current time series data to study the relationship between residential instability and crime incidents. Recall that a VAR model is a multivariate time series model that estimates relationships between multiple variables measured at consecutive points in time and examines the carryover effect of each variable on itself over successive time points. Cross-lags are incorporated into the model to assess the relationship between past values of one variable and future values of another. For instance, it examines the effect of the percentage of renter occupied housing units in 2011 on changes in crime in 2012. This model allows for the examination of effects between each variable at the same time point (i.e., contemporaneous effects) and at the previous time point (i.e., lagged effects) to better understand the directional association between two or more variables from one year to the next. See Figure 25 below.

Within tract findings compare tracts to themselves over the 10-year period from 2010 to 2019. Within tracts over the ten years studied, the three measures of residential instability had a significant influence on certain types of crime. Tracts that had an incremental 12% increase in residential instability, compared to their average, had an increase of 9 crime incidents. Related to each significant association, we found:

- Tracts that had an incremental 8.59% increase in the percentage of vacant addresses, compared to their average, had an increase of 4 Part 1 personal crime incidents and nearly 12 substance offense crime incidents.
- Tracts that had an incremental 19% increase in the percentage of renter occupied housing units, compared to their average, had an increase of 1 Part 1 personal crime incidents and 12 Part 2 property crime incidents occurred.
- Tracts that had an incremental 9% increase in the percentage of population living in the same house as they did one year ago (i.e., geographic mobility), compared to their average, had a decrease of two Part 2 property crime incidents.

Figure 25. Significant Carryover Effects Within Tracts: Residential Instability Measures and Crime Incidents



Multivariate Results – Residential Instability and Calls Predicting Crimes

Regression – Between Tract Findings

Table 9 provides a summary of the specific significant variables from the regression analyses examining the relationship between the demographic characteristics, residential instability indicators, and types of calls for service and the categories of crime incidents. In addition, to quantify the impact of each significant independent variable on the dependent variable two values are placed in parentheses in Table 9. The two numbers represent the following: the first number is the value of that independent variable's incremental effect on the crime incident category in that row; the second number is the additional number of crime incidents by category in that row that correspond to the first number's value. For example, to interpret these values, in 2014, for every 8.29% increase in vacancies, there were 3.32 additional Part 1 personal crimes. Complete standardized regression table results are reported in the Appendix for each year under study.

Recall that at the between level, tracts are compared to each other. The residential instability indicators did not have as large an effect on types of crime incidents after calls for service categories were included in the models. There were some significant associations, however.

- As the percentage of vacant addresses increased, so did some categories of crime incidents (i.e., Part 1 and 2 personal, Part 1 and 2 property, and substance offenses) in some years, specifically 2013, 2014-2016, and 2018-2019, even when accounting for the number of calls for service categories.
- An incremental 9% increase in the percentage of vacant addresses was associated with an average increase of 15 crime incidents.
- The percentage of renter occupied housing units and geographic mobility measures were found to have a significant relationship with a few crime incidents and years of study.
    - An incremental 19% increase in the percentage of renter occupied housing units was associated with an average increase of 9 Part 2 property crimes in 2011 and 13 Part 2 personal crimes in 2018.
    - In 2019, an incremental 9% increase in the percentage of those residing in the same house as they did a year ago (i.e., geographic mobility) was associated with an average increase of almost 2 Part 1 personal crimes and 8 Part 1 property crimes.

- We found that calls for service and crime incidents falling under any category, for every average incremental increase of 143 calls of any type, there was an average increase of 26 crimes. Related to the distinct crime categories:
    - An average incremental increase of 177 calls for service was associated with an average increase of 3 additional Part 1 personal crimes, apart from the years 2011 and 2014.
    - An average incremental increase of 69 calls for service was associated with an average increase of 35 Part 1 property calls.
    - An average incremental increase of 132 calls for service was associated with an average increase of 42 Part 2 personal crimes.
    - An average incremental increase of 152 calls for service was associated with an average increase of 13 Part 2 property crimes.
    - Except for 2019, an average incremental increase of 205 calls was associated with an average increase of 30 public order crime incidents.
    - From 2010 through 2016, on average, an incremental increase of 202 calls for service was associated with an average increase of 22 substance offense incidents.

Table 9. Regression Summary Table: Significant Variables – Residential Instability and Calls for Service Predicting Crime

Years	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Crime Incident Categories										
Part 1 Personal	• Substance Offense Calls (16.1, 2.32) • Racial/Ethnic Heterogeneity (0.17, -2.02)	• Female HH (10.27%, 2.40)	• P2 Personal Calls (141.49, 7.62) • Public Order Calls (370.73, 9.77) • Non-Crime Related Calls (296.27, -4.93) • Unemployment (10.41%, -.337)	• P2 Personal Calls (125.25, 7.10) • Non-Crime Related Calls (286.66, -4.10)	• Vacancies (8.29%, 3.32) • Gini Index (0.07, 2.85)	• Public Order Calls (325.75, 6.41)	• P2 Personal Calls (119.66, 6.04) • Non-Crime Related Calls (316.5, -3.42) • Vacancies (8.74%, 2.55)	• P1 Personal Calls (2.00, 1.90) • P2 Personal Calls (126.8, 6.38)	• P2 Personal Calls (125.68, 4.10) • Supp. Gov. Assistance (23.96%, -2.60)	• P1 Property Calls (45.01, 3.95) • Geo. Mobility (9.39%, 1.56) • Total Pop (1348.73, -1.64)
Part 1 Property	• P1 Property Calls (96.97, 85.97) • P2 Personal Calls (153.33, -43.11) • P2 Property Calls (44.23, 60.81) • Median Income ($18,375.50, -18.06)	• P1 Property Calls (105.57, 85.78) • P2 Personal Calls (142.93, -36.95) • P2 Property Calls (41.97, 64.59) • Female HH (10.27%, 13.18)	• P1 Property Calls (93.38, 55.97) • P2 Property Calls (37.84, 64.40) • Median Income ($17,110.40, -18.62)	• P1 Property Calls (74.20, 36.82) • P2 Property Calls (36.2, 62.56) • Substance Offense Calls (11.39, 15.59)	• P1 Property Calls (67.17, 37.02) • P2 Property Calls (32.84, 52.50) • Vacancies (8.29%, 11.70) • Median Income ($17,135.10, -13.63) • Supp. Gov. Assistance (24.08%, -10.90)	• P1 Personal Calls (2.15, 11.33) • P1 Property Calls (51.32, 40.52) • P2 Property Calls (32.40, 58.84) • Total Pop (1261.82, 10.50)	• P1 Property Calls (48.98, 32.67) • P2 Property Calls (31.52, 51.63) • Total Pop (1278.70, 12.19) • Less than High School (9.247%, -11.79)	• P1 Property Calls (50.78, 54.23) • P2 Personal Calls (126.80, -28.81) • P2 Property Calls (25.84, 40.73) • Female HH (10.21, -9.95)	• P1 Property Calls (46.50, 27.42) • P2 Property Calls (23.70, 44.39)	• P1 Property Calls (45.01, 27.74) • P2 Personal Calls (130.10, -20.22) • P2 Property Calls (20.20, 37.25) • Non-Crime Related Calls (287.55, 18.43) • Geo. Mobility (4.39, 7.85)
Part 2 Personal	• P1 Personal Calls (2.05, 7.39) • P2 Personal Calls (153.33, 41.54) • Total Pop (1267.80, 12.07)	• P2 Personal Calls (142.93, 33.85) • Total Pop (1287.45, 10.10) • Female HH (10.27%, 9.13) • Median Income ($17232.03, -10.42)	• P2 Personal Calls (141.49, 47.34) • Female HH (10.93%, 6.22) • Unemployment (10.41%, -7.76)	• P2 Personal Calls (125.25, 59.53) • Unemployment (10.68%, -10.22)	• P2 Personal Calls (124.91, 53.78) • Public Order Calls (344.59, 20.51) • Non-Crime Related Calls (314.55, -11.88) • Female HH (10.80%, 8.08) • Median Income ($17135.08, -9.71)	• P1 Personal Calls (2.15, 9.66) • P2 Personal Calls (115.48, 53.22) • Vacancies (8.65%, 9.32) • Total Pop (1261.82, 16.20) • Female HH (9.98%, 8.23) • Less than High School (9.44%, -14.77)	• P2 Personal Calls (119.66, 73.63) • Female HH (10.09%, 12.21)	• P2 Personal Calls (126.80, 74.47) • Total Pop (1318.72, 19.06)	• P2 Personal Calls (125.68, 97.15) • Rentals (18.03%, 13.10) • Total Pop (1335.67, 16.69) • Median Income ($17634.23, -15.04)	• P2 Personal Calls (130.10, 93.19) • Substance Offense Calls (8.88, -21.12) • Median Income ($17,063.66, -17.38)

Years	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Part 2 Property	• P1 Property Calls (96.97, 18.72) • Substance Offense Calls (16.10, 8.07) • Total Pop (1267.80, 6.62)	• P1 Property Calls (105.57, 13.33) • Rentals (21.07%, 9.47) • Total Pop (1287.45, 6.92)	• P2 Property Calls (37.84, 7.32) • Public Order Calls (370.73, 22.22) • Unemployment (10.41%, -6.65)	• P2 Personal Calls (125.25, 11.70) • P2 Property Calls (36.20, 6.00) • Vacancies (7.96%, 5.67) • Total Pop (1285.01, 4.72)	• P2 Property Calls (32.84, 5.70) • Public Order Calls (344.59, 16.18)	• Public Order Calls (325.74, 14.06)	• Public Order Calls (325.74, 11.89) • Age 15-24 (5.21%, 4.36) • Racial/Ethnic Heterogeneity (0.16, -4.62) • Female HH (10.09%, 5.91) • Gini Index (0.07, 4.54)	• P1 Property Calls (50.78, 15.12) • Total Pop (1318.72, 7.08)	• P2 Personal Calls (125.68, 14.76) • Total Pop (1335.67, 7.54) • Median Income ($17634.23, -8.81)	• P2 Personal Calls (130.10, 18.17) • Total Pop (1348.73, 8.47)
Public Order	• P2 Personal Calls (153.33, 26.68) • Public Order Calls (378.68, 35.65) • Non-Crime Related Calls (293.71, 30.18) • Pop Density (1982.90, 9.14)	• Public Order Calls (379.08, 53.12) • Substance Offense Calls (12.81, 15.69)	• P1 Property Calls (93.38, -41.49) • P2 Personal Calls (141.49, 46.92) • Public Order Calls (370.73, 43.57)	• P2 Personal Calls (125.25, 37.77) • Public Order Calls (334.71, 36.24) • Total Pop (1285.01, -11.73)	• Public Order Calls (344.59, 49.32)	• P2 Personal Calls (115.48, 38.89) • Public Order Calls (325.74, 32.07) • Racial/Ethnic Heterogeneity (0.16, -8.96)	• P1 Property Calls (48.98, -24.13) • P2 Personal Calls (119.66, 54.19)	• P2 Personal Calls (126.80, 39.70)	• P2 Personal Calls (125.68, 41.57)	• Pop Density (1969.90, 9.90)
Substance Offenses	• Public Order Calls (378.68, 20.95) • Substance Offense Calls (16.10, 8.18) • Total Pop (1267.80, -9.41)	• Public Order Calls (379.08, 38.35) • Total Pop (1287.45, -11.33) • Racial/Ethnic Heterogeneity (0.18, -9.26)	• P1 Property Calls (93.38, -18.32) • Public Order Calls (370.73, 29.60) • Total Pop (1304.34, -13.11) • Racial/Ethnic Heterogeneity (0.17, -8.18)	• Public Order Calls (334.71, 35.05) • Total Pop (1285.01, -12.38) • Racial/Ethnic Heterogeneity (0.17, -10.09)	• Substance Offense Calls (12.99, 19.34) • Vacancies (8.29%, 21.37) • Racial/Ethnic Heterogeneity (0.17, -12.60)	• P2 Personal Calls (115.48, 38.43) • Total Pop (1261. 82, -14.96) • Racial/Ethnic Heterogeneity (0.16, -11.39)	• P2 Personal Calls (119.66, 30.09) • Racial/Ethnic Heterogeneity (0.16, -19.17)	• Total Population (1318.72, -16.58)	• Vacancies (9.88%, 15.73)	• Vacancies (10.27%, 18.82) • Total Pop (1348.73, -13.80)

Note: Blue font = positive relationship; Red font = inverse relationship; HH = head of household; Gini Index = measure of inequality

*To quantify the impact of each significant independent variable on the dependent variable refer to the values in the parentheses. There are two values noted in the parentheses and the numbers represent the following: the first number is the value of that independent variable's incremental influence on the crime incident category in that row; the second number is the additional number of crime incident category in that row that correspond to the first number's value.

Regression - Within Tract Findings

To better understand how residential instability and calls for service may have an influence on crime incidents within tracts, the VAR was conducted. As presented earlier in this report, a VAR model is a multivariate time series model that estimates relationships between multiple variables measured at consecutive points in time and examines how each variable influences itself over successive time points. Cross-lags are added to the model to explore the relationship between past values of one variable and future values of another. For example, it looks at the impact of the residential instability factors and the calls for crime categories' values in 2013 and how they might be associated with changes in crime in 2014. This model allows for examining the effects between variables at the same time point (i.e., contemporaneous effects) and from the previous time point (i.e., lagged effects) to better understand the directional relationship between two or more variables. The types of calls for service and residential instability variables were found to have significant associations with some crime categories over time (i.e., from one year to the next).

Regarding calls for service and crime incidents, we found that within tracts, across all 10 years of data, tracts that had an incremental increase of 163 calls for service made for any type, compared to their average, had an increase of 8 crime incidents from one year to the next. Specific to each crime incident type over time,

- Tracts that had an incremental increase of 2 Part 1 personal crime calls for service, compared to their average, had an increase of nearly 2 Part 1 personal crime incidents.
- Tracts that had an incremental increase of 68 Part 1 property crime calls for service, compared to their average, had an increase, on average, of two crime incidents for Part 1 personal and 46 Part 1 property crime incidents; however, an incremental increase of 68 Part 1 property calls corresponded to a decrease, on average, in 23 Part 2 personal, 5 Part 2 property, 18 public order, and 11 substance offense incidents.
- Tracts that had an incremental increase of 131 Part 2 personal calls for service, compared to their average, had an increase of 3 Part 1 personal, 38 Part 2 personal, 11 Part 2 property, and 34 public order crime incidents. However, this same incremental increase in Part 2 personal calls was associated with decrease of 19 Part 1 property crimes within tracts over time.
- Tracts that had an incremental increase of 33 Part 2 property calls for service, compared to their average, had an increase of 33 Part 1 property and 4 Part 2 property crime incidents.
- Tracts that had an incremental increase of 340 public order calls for service, compared to their average, had an increase of 3 Part 1 personal crimes, 11 Part 1 property, 10 Part 2 property, 22 public order, and 17 substance offense crime incidents.
- Tracts that had an incremental increase of 297 non-crime related calls for service, compared to their average, had a decrease of 2 Part 1 personal crime and an increase in 6 Part 2 property crime incidents.

Significant effects were also observed with regards to the within-tract residential instability variables over time or one year to the next.

- Tracts that had an incremental 9% increase in the percentage of vacant addresses, compared to their average, had an increase of 4 Part 1 personal crimes and 11 substance offense incidents.
- Tracts that had an incremental 19% increase in the percentage of renter occupied housing, compared to their average, had 1 additional Part 1 personal crime and 12 Part 2 property crimes.
- Tracts that had an incremental 9% increase in the percentage of persons living in the same house as they did one year (i.e., geographic mobility), compared to their average, had a decrease of 2 Part 2 property crimes.

Figure 26. Significant Carryover Effects Within Tracts: Personal Calls for Service and Crime Incidents

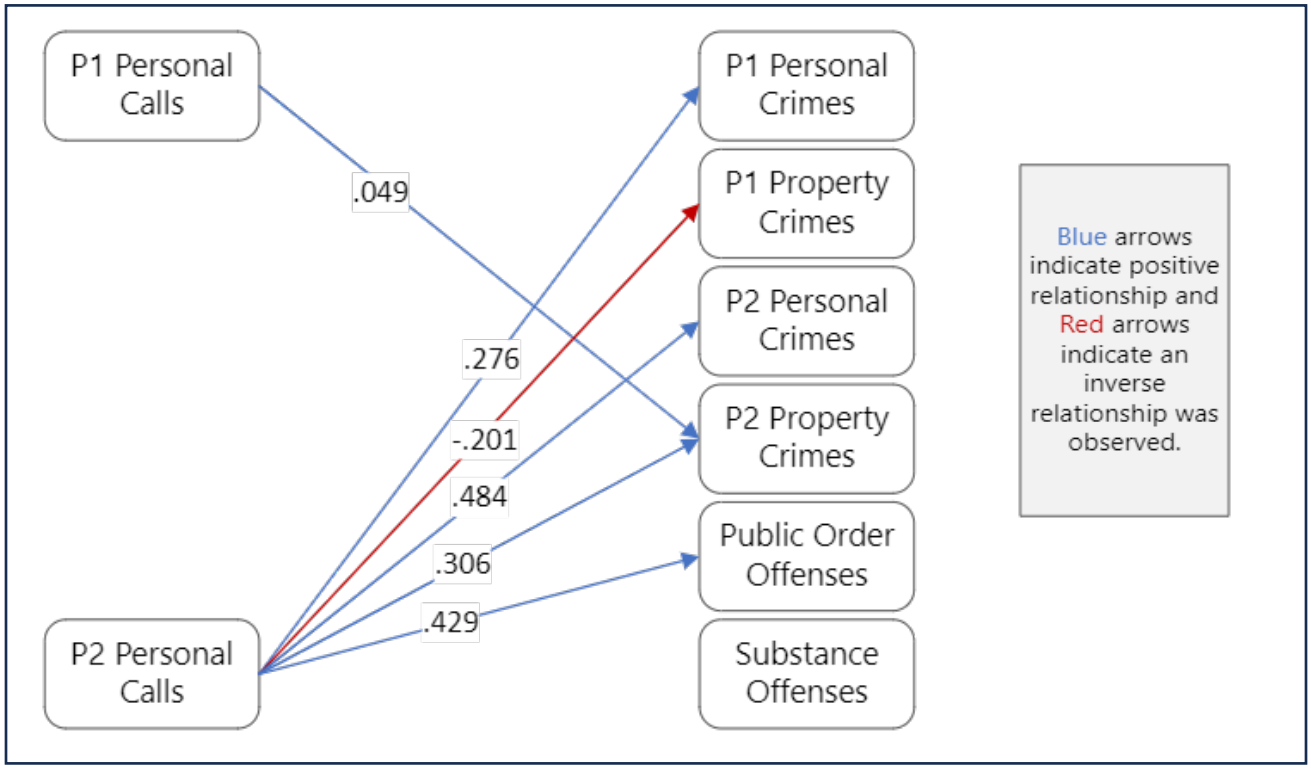


Figure 27. Significant Carryover Effects Within Tracts: Property Calls for Service on Crime Incidents

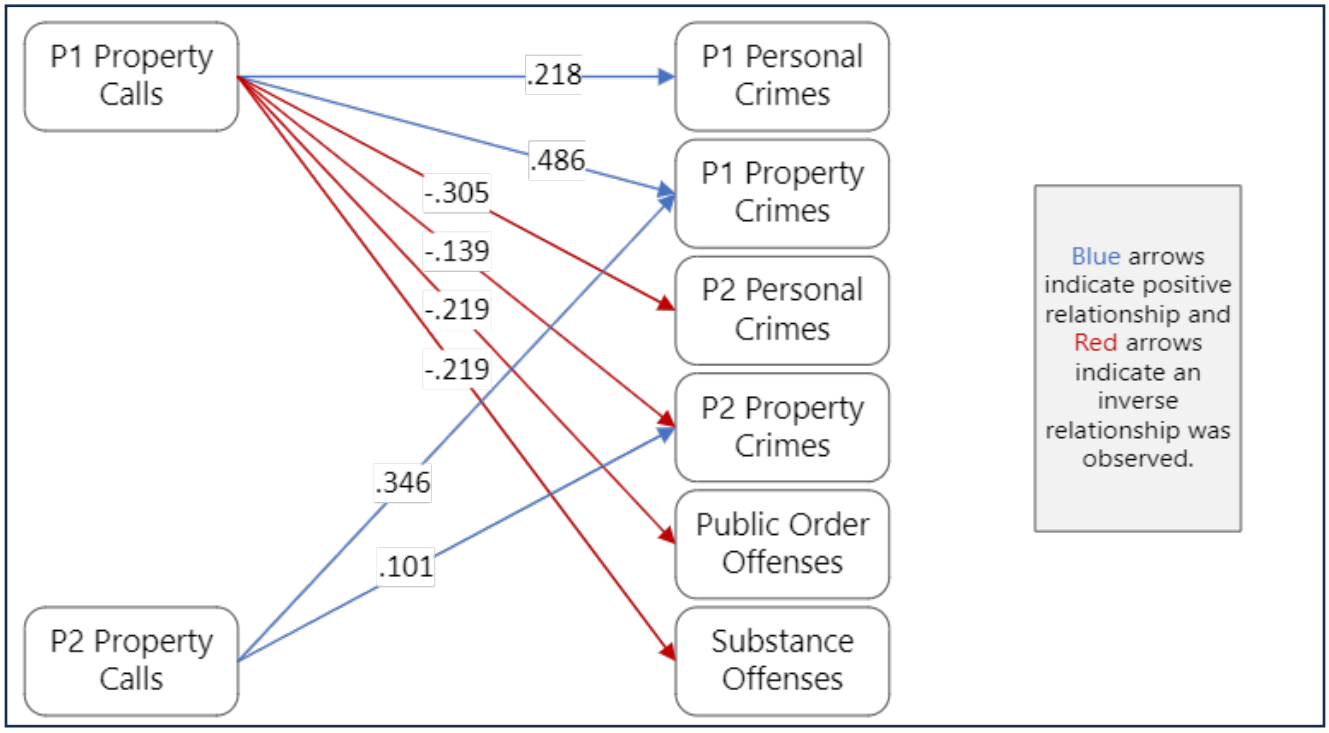
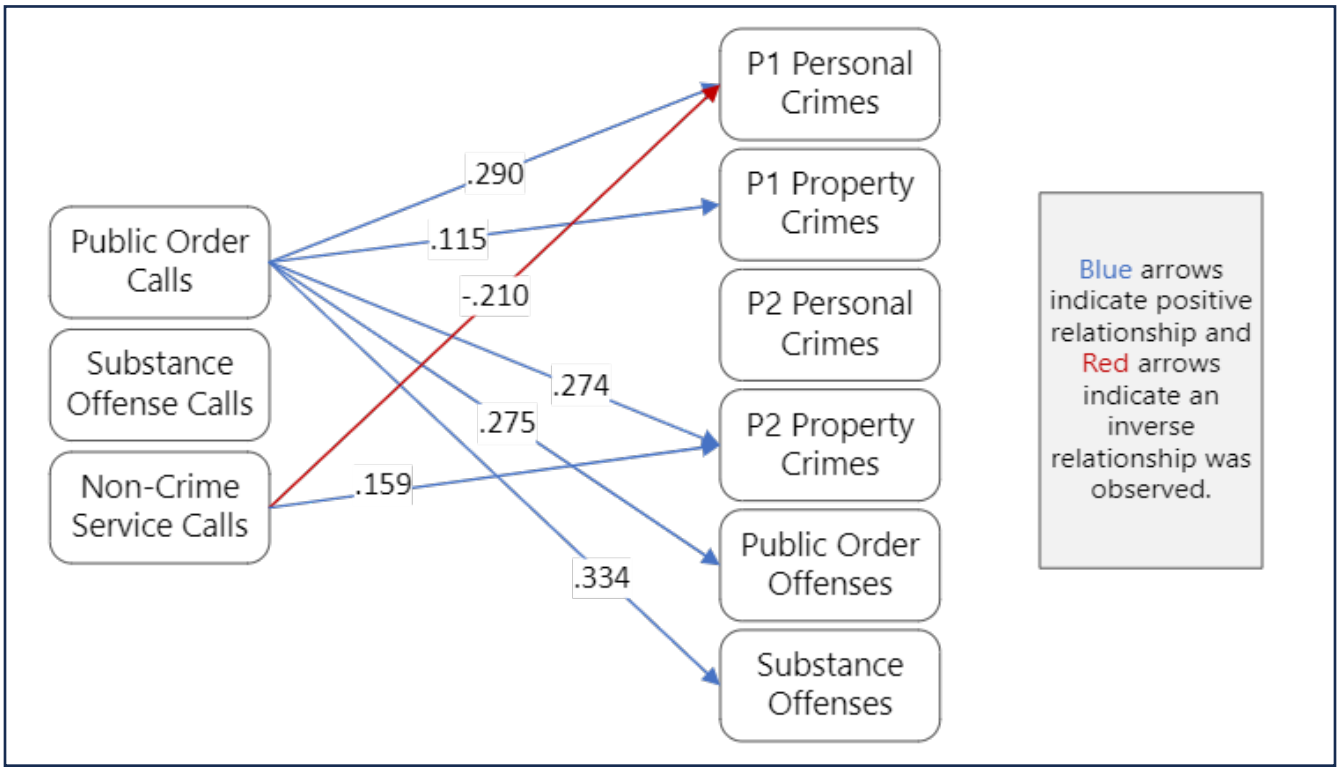


Figure 28. Significant Carryover Effect Within Tract: Public Disorder, Substance Offenses, and Non-Crime Calls and Crime



Summary of Study Results

Table 10 below provides the unrounded findings (reported as rounded figures in the Multivariate Results sections above) where the analyses resulted in a significant correlation between a residential instability variable between and within tracts. To best interpret these results, use the following statements as a template:

- In 2011, changes in the percent of vacancies were significantly associated with non-crime related service calls but no other call category when comparing tracts to one another (i.e., between tracts). To interpret the values noted in the table, in 2011 a 7.8% incremental increase in the percentage of vacant addresses was associated with an additional 64.81 calls of any type. Predicting further increases, if the percentage of vacancies were to double to 15.6% (which is 2 times 7.8%), we would expect the number of additional calls to also double to 129.62 (which is 2 times 64.81).

- Within tracts, where one tract is compared to itself from one year to the next, as opposed to the other tracts in the study, when averaging each tract's change in the percentage of vacancies over time, we found that for every 8.59% increase, we would predict a corresponding increase of 16.36 crimes. Thus, if the percentage of vacancies would double in a tract from one year to the next, we would expect an additional 32.72 crimes.

Table 10. Summary of Significant Residential Instability Variables and Changes in Calls and Crimes

Between Tracts												Within Tracts
Percent Vacancies												
Year	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**		**Over Time**
Vacancy Percent Change	7.16%	7.8%	7.61%	7.96%	8.29%	8.65%	8.74%	9.35%	9.88%	10.27%		8.59%
Calls	283.35	64.81	169.16	241.14	298.5	359.26	284.5	128.01	46.67	16.25		-12.01
Part 1 Personal	0.59	-	-	-	-	-	-	-	-	-		-
Part 1 Property	34.52	-	29.69	20.11	25.86	19.96	16.56	12.8	14.37	16.25		-
Part 2 Personal	36.64	-	27.87	31.31	40.47`	37.91	35.18	-	32.3	-		-
Part 2 Property	-	-	-	-	-	-	-	-	-	-		-
Public Order	122.31	-	111.59	115.48	130.26	163.20	136.50	115.22	-	-		-12.01
Substance	-	-	-	-	-	-	-	-	-	-		-
Service Calls	89.29	64.81	-	74.24	101.91	138.19	96.26	-	-	-		-
Crime	31.49	-	40.95	93.62	147.97	102.93	101.26	34.17	73.26	77.43		16.36
Part 1 Personal	3.8	-	5.3	4.18	6.77	4.49	5.16	-	2.53	2.92		4.49
Part 1 Property	-	-	-	-	27.17	-	-	-	14.61	17.16		-
Part 2 Personal	15.56	-	13.98	20.84	24.92	28.72	27.83	-	22.03	28.6		-
Part 2 Property	12.13	-	9.61	14.47	15.27	12.93	10.71	11.17	7.19	-		-
Public Order	-	-	-	31.66	39.8	31	31.85	-	-	-		-
Substance	-	-	12.05	22.47	34.03	25.79	25.71	23	26.89	28.74		11.88
Crime with Calls as Predictors	-	-	-	5.67	36.39	9.32	2.55	-	15.73	18.82		15.65
Part 1 Personal	-	-	-	-	3.32	-	2.55	-	-	-		4.32
Part 1 Property	-	-	-	-	11.70	-	-	-	-	-		-
Part 2 Personal	-	-	-	-	-	9.32	-	-	-	-		-
Part 2 Property	-	-	-	5.67	-	-	-	-	-	-		-
Public Order	-	-	-	-	-	-	-	-	-	-		-
Substance	-	-	-	-	21.37	-	-	-	15.73	18.82		11.33
Percent Renter Occupied Housing												
Renter Percent Change	21.5%	21.07%	20.16%	18.75%	18.10%	17.66%	17.66%	17.98%	18.03%	18.11%		18.99%
Calls	-	-	-	-	-	-	-	-	-	-		0.87
Part 1 Personal	-	-	-	-	-	-	-	-	-	-		
Part 1 Property	-	-	-	-	-	-	-	-	-	-		
Part 2 Personal	-	-	-	-	-	-	-	-	-	-		-
Part 2 Property	-	-	-	-	-	-	-	-	-	-		-
Public Order	-	-	-	-	-	-	-	-	-	-		-
Substance	-	-	-	-	-	-	-	-	-	-		-
Service Calls	-	-	-	-	-	-	-	-	-	-		-
Crime	12.32	-	-	-	-	-	-	-	-			13.01
Part 1 Personal	-	-	-	-	-	-	-	-	-	-		1.11
Part 1 Property	-	-	-	-	-	-	-	-	-	-		-
Part 2 Personal	-	-	-	-	-	-	-	-	-	-		-
Part 2 Property	12.32	-	-	-	-	-	-	-	-	-		11.90
Public Order	-	-	-	-	-	-	-	-	-	-		-
Substance	-	-	-	-	-	-	-	-	-	-		-

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019		Over Time
Crime with Calls as Predictors	-	9.47	-	-	-	-	-	-	13.10	-		13.02
Part 1 Personal	-	-	-	-	-	-	-	-	-	-		1.07
Part 1 Property	-	-	-	-	-	-	-	-	-	-		-
Part 2 Personal	-	-	-	-	-	-	-	-	13.10	-		-
Part 2 Property	-	9.47	-	-	-	-	-	-	-	-		-
Public Order	-	-	-	-	-	-	-	-	-	-		-
Substance	-	-	-	-	-	-	-	-	-	-		11.95
Geographic Mobility - Percentage of Persons in the Same House 1 Year Ago.												
Geographic Mobility	9.32%	8.96%	8.21%	8.24%	8.32%	9.03%	8.99%	9.10%	9.14%	9.39%		8.85%
Calls	-	-	-	-	-3.65	-	-3.84	-	-	-		-
Part 1 Personal	-	-	-	-	-	-	-	-	-	-		-
Part 1 Property	-	-	-	-	-	-	-	-	-	-		-
Part 2 Personal	-	-	-	-	-	-	-	-	-	-		-
Part 2 Property	-	-	-	-	-	-	-	-	-	-		-
Public Order	-	-	-	-	-	-	-	-	-	-		-
Substance	-	-	-	-	-3.65	-	-3.84	-	-	-		-
Service Calls	-	-	-	-	-	-	-	-	-	-		-
Crime	-	-	-	-	-15.04	-	-	-	-	-		-2.00
Part 1 Personal	-	-	-	-	-	-	-	-	-	-		-
Part 1 Property	-	-	-	-	-	-	-	-	-	-		-
Part 2 Personal	-	-	-	-	-	-	-	-	-	-		-
Part 2 Property	-	-	-	-	-	-	-	-	-	-		-2.00
Public Order	-	-	-	-	-	-	-	-	-	-		-
Substance	-	-	-	-	-15.04	-	-	-	-	-		-
Crime with Calls as Predictors	-	-	-	-	-	-	-	-	-	9.41		-2.00
Part 1 Personal	-	-	-	-	-	-	-	-	-	1.56		-
Part 1 Property	-	-	-	-	-	-	-	-	-	7.85		-
Part 2 Personal	-	-	-	-	-	-	-	-	-	-		-
Part 2 Property	-	-	-	-	-	-	-	-	-	-		-2.00
Public Order	-	-	-	-	-	-	-	-	-	-		-
Substance	-	-	-	-	-	-	-	-	-	-		-

Discussion and Conclusion

The purpose of our study was to determine whether changes in residential instability indicators could be associated with crime in neighborhoods. As reported, the results of our statistical analyses identified significant relationships between residential instability factors and both calls for service and crime incident categories over a 10-year period. At the between-tract level, we found that an increase in the percentage of vacant addresses was consistently linked to higher calls for service. Specifically, a 9% incremental rise in vacant addresses corresponded to an average increase of 193 calls for service, encompassing different types such as personal, non-crime related, and public order calls. Similarly, crime incidents rose with increased vacancies; a 9% increase led to an average rise of 84 crime incidents, including personal, property, and substance offense crimes. These findings illustrate the broader influence of residential instability across different neighborhoods and suggest that targeted interventions in areas with rising vacancies may be beneficial.

Within-tract analyses showed that changes in calls for service within the same tract were largely unaffected by changes in residential instability except for two: a 19% incremental increase in renter-occupied housing was linked to a slight rise in Part 1 personal crimes, and a 9% incremental increase in vacant addresses led to fewer public order calls. Also, within tracts, analyses revealed that incremental increases in residential instability measures significantly influenced certain crime types. For instance, a rise in vacant addresses or renter-occupied housing units led to increases in various crime incidents, while higher geographic stability (i.e., people living in the same house as the previous year) was associated with fewer property crimes. Localized interventions could consider some of these specific dynamics within each tract that could mitigate crime and calls for service.

Overall, we found that residential instability has an influence on the number of crime incidents when comparing census tracts to one another (i.e., between tracts) and within the census tracts themselves (i.e., within tracts) over the 10-year study period. This is particularly evident with the percentage of vacancies. Part 1 personal crimes and substance offenses increased as vacancies increased within census tracts from year to year. Census tracts with a higher percentage of renter-occupied housing experienced increases in Part 1 personal and Part 2 property crime incidents. The findings in this report can also be interpreted conversely as decreasing the percentages of vacant addresses and renter occupied housing, while increasing geographic mobility, we may be able reduce crime incidents. Investigating strategies to address significant relationships as noted could be a valuable approach to reducing crime incidents between and within neighborhoods.

One possible explanation for the significant associations observed could be that areas with higher residential stability have more long-term residents who are more likely to notice disorder and call the police for intervention. As such, would-be offenders may be discouraged from committing crimes in areas where more residents are familiar with one another and more easily identify visitors who may be there for unlawful reasons. Future studies should analyze the relationship between residential instability, other neighborhood characteristics, and crime in a larger section of neighborhoods/tracts to better understand how fluctuations in occupancies may affect crime.

Some limitations should be mentioned when considering the findings of this study. First, our study examined the relationship between residential instability and crime only in Toledo, Ohio. As a result, the generalizability of the findings should be considered as tract characteristics and determinants of crime may vary in other cities that are demographically different than Toledo.

Second, the final sample omitted six census tracts because these tracts were not fully situated within the city limits of Toledo. As a result, sections of Toledo were not analyzed in this study. Future studies should consider how these areas of the city can be included to fully assess the relationship between residential instability and

crime in Toledo. Specifically, given the consistent finding that vacancies led to more crime incidents across many crime categories both between and within census tracts, addressing changes in this residential factors may be an effective crime prevention strategy worth exploring.

The datasets used, while the best available, have their own limitations. The Toledo Police Department supplied calls for service and crime incident data in the format in which they record and store information. They indicated that the department conducted an initial cleaning of the data to remove duplicate incidents (i.e., when more than one call is made for a singular incident) and cancelled and self-initiated calls, and that they had switched data systems during our study timeframe which may have resulted in some missing data. After receiving the data, the CJR extensively cleaned the data. While we addressed data limitations to best of our ability, some calls for service and crime incidents were removed from the final sample for the following reasons: occurred in a tract not of our interest, there were spelling errors in the address that could not be accurately corrected, the Geocoder classified the incident as "no-match" or "tie," or if the type of crime incident was not of our interest (including incidents that were intended for other service providers such as EMS and fire or were not criminal in nature). Therefore, while both the CJR and TPD controlled for data limitations to the best of their ability, human error may exist in the data.

Given the nature of the calls for service and crime incidents data, human error may have also occurred during the data collection process by TPD. The calls for service data are based on "dispatch logs" (i.e., what dispatchers enter in their system based on the call they are receiving). As a result, differences between how calls are coded may differ from one dispatcher to another. While it is evident that Toledo dispatchers refer to law, fire, and medical codebooks, the information in these codebooks is limited, does not include all codes identified in the data, and may not consider additional factors presented to the dispatcher during the call. Dispatchers may use some level of discretion when deciding on a final call type code. Similar to the calls for service data, the crime incidents data are based on crime incident reports entered by Toledo law enforcement. These incidents do not consider cleared cases, action taken by TPD, or official charges filed. Therefore, law enforcement determines the nature of an incident based on their discretion, likely resulting in differences in how each law enforcement officer codes a crime incident. Like dispatchers, police are trained to code incidents in a similar manner, however, some differences are still likely.

Lastly, demographic data per tract were gathered from the American Community Survey (ACS) 5-year estimates available online via Social Explorer. The 5-year estimates, although considered the most reliable with the largest sample size, may be less current than 1-year estimates (U.S. Census Bureau, 2020). However, the latter are not available for examining census tracts, which was the unit of analysis for the present study. The 1-year estimates are also missing data for many variables we studied herein, and the margins of error were substantial.

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Appendix

Regression Tables 2010-2019

Each table in this appendix displays the standardized estimate when regressing the calls for service and/or crime outcome variable on the independent variables. Results show the effect of each independent variable on the outcome when controlling for each other variable.

Table A1.

Regression Results for 2010 Calls for Service

Variable	Part 1 Personal Calls				Part 1 Property Calls				Part 2 Personal Calls				Part 2 Property Calls			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility																
Geographic Mobility	-.240	.228	[-.653;.188]	.292	.046	.093	[-.135;.232]	.621	.031	.112	[-.190;.251]	.780	-.046	.103	[-.268;.150]	.655
Rentals	.099	.235	[-.392;.571]	.675	.125	.133	[-.129;.396]	.345	.142	.147	[-.152;.430]	.334	.226	.182	[-.166;.587]	.215
Vacancies	**.286**	**.125**	**[.051;.550]**	**.022**	**.356**	**.121**	**[.144;.622]**	**.003**	**.239**	**.112**	**[.059;.492]**	**.032**	.084	.129	[-.117;.386]	.514
Demographics																
Total Population	**.402**	**.122**	**[.157;.646]**	**.001**	**.671**	**.080**	**[.511;.821]**	**>.001**	**.562**	**.070**	**[.420;.696]**	**>.001**	**.607**	**.139**	**[.404;.934]**	**>.001**
Population Density	.075	.098	[-.106;.263]	.442	.097	.076	[-.052;236]	.205	**.217**	**.075**	**[.056;.355]**	**.004**	-.016	.083	[-.160;.176]	.850
Aged 15 to 24	-.111	.156	[-.379;.227]	.474	.043	.061	[-.087;.147]	.483	-.076	.090	[-.258;.100]	.400	.019	.079	[-.128;.199]	.808
Racial/Ethnic Heterogeneity	.031	.135	[-.269;.276]	.816	.138	.085	[-.017;.323]	.105	.077	.082	[-.087;.239]	.350	-.121	.113	[-.323;.134]	.285
Female Headed Household	.002	.157	[-.283;.352]	.988	.044	.106	[-.172;.238]	.677	-.019	.102	[-.222;.174]	.852	-.140	.121	[-.367;.124]	.249
Less than High School	.099	.200	[-.267;.552]	.623	.137	.132	[-.090;.424]	.301	**.328**	**.139**	**[.073;.636]**	**.018**	.060	.146	[-.186;.382]	.683
Unemployment	.098	.203	[-.381;.401]	.629	-.006	.144	[-.317;.258]	.967	-.042	.163	[-.379;.270]	.799	.001	.141	[-.301;.245]	.997
Median Income	.061	.196	[-.315;.490]	.756	-.264	.159	[-.594;.011]	.097	-.185	.141	[-.479;.076]	.192	-.326	.257	[-.804;.207]	.206
Gini Index	.008	.165	[-.318;.331]	.960	-.169	.108	[-.392;.033]	.116	-.027	.112	[-.263;.183]	.809	-.096	.152	[-.354;.215]	.529
Poverty	.174	.304	[-.420;.784]	.567	.170	.192	[-.192;.556]	.374	.136	.210	[-.267;.591]	.517	-.053	.185	[-.409;.304]	.777
Sup. Gov. Assistance	-.051	.212	[-.441;.373]	.811	-.071	.116	[-.311;.150]	.539	.036	.132	[-.243;.269]	.785	-.025	.145	[-.317;.276]	.865
R^2	.369				.731				.714				.325			

Variable	Public Order Calls				Substance Offense Calls				Non-Crime Service Calls			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	-.020	.152	[-.313;.261]	.895	-.045	.132	[-.311;.219]	.731	-.021	.190	[-.376;.330]	.913
Rentals	-.014	.152	[-.322;.273]	.928	.395	.209	[-.054;.772]	.059	.038	.197	[-.375;.384]	.847
Vacancies	**.323**	**.106**	**[.152;.570]**	**.002**	.007	.109	[-.185;.234]	.948	**.304**	**.091**	**[.158;.522]**	**.001**
Demographics												
Total Population	**.593**	**.083**	**[.439;.761]**	**>.001**	**.445**	**.124**	**[.217;.707]**	**>.001**	**.662**	**.097**	**[.468;.861]**	**>.001**
Population Density	.090	.089	[-.089;.251]	.311	.078	.104	[-.135;.263]	.455	.053	.089	[-.112;.227]	.549
Aged 15 to 24	.034	.072	[-.113;.172]	.638	.116	.086	[-.070;.274]	.178	.054	.100	[-.147;.249]	.586
Racial/Ethnic Heterogeneity	.130	.087	[-.033;.311]	.136	-.042	.132	[-.287;.248]	.749	.129	.115	[-.082;.359]	.261
Female Headed Household	.028	.105	[-.180;.233]	.794	.217	.164	[-.086;.554]	.186	-.148	.121	[-.384;.104]	.221
Less than High School	.088	.138	[-.159;.387]	.524	.109	.170	[-.204;.473]	.520	.029	.153	[-.231;.347]	.851
Unemployment	.007	.149	[-.322;.283]	.961	.415	.228	[-.132;.750]	.069	-.069	.152	[-.427;.162]	.651
Median Income	-.264	.143	[-.542;-.009]	.065	-.044	.210	[-.509;.323]	.834	-.240	.194	[.625;.118]	.217
Gini Index	-.101	.108	[-.323;.109]	.352	-.145	.141	[-.433;.124]	.304	-.124	.123	[-.369;.114]	.315
Poverty	.222	.200	[-.125;.632]	.267	-.286	.282	[-.792;.283]	.310	.232	.250	[-.228;.782]	.354
Sup. Gov. Assistance	.045	.137	[-.267;.290]	.744	-.142	.190	[-.515;.235]	.456	.058	.149	[-.243;.345]	.696
R^2	.694				.430				.557			

Note: Standardized estimates shown.

Bold = Significant

SE = Standard Error

95% CI = upper/lower limits for the bootstrapped confidence interval

$p \geq .05$

Table A2.

Regression Results for 2011 Calls for Service

Variable	Part 1 Personal Calls				Part 1 Property Calls				Part 2 Personal Calls				Part 2 Property Calls			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility																
Geographic Mobility	.106	.184	[-.282;.416]	.567	.006	.117	[-.262;.195]	.958	.007	.131	[-.292;.220]	.960	-.131	.124	[-.377;.105]	.292
Rentals	.087	.284	[-.498;.581]	.760	-.038	.171	[-.378;.286]	.825	.111	.186	[-.263;.454]	.552	.324	.226	[-.143;.755]	.151
Vacancies	.039	.170	[-.217;.447]	.820	.223	.124	[.027;.513]	.074	.135	.107	[-.034;.380]	.209	-.041	.096	[-.192;.188]	.669
Demographics																
Total Population	.228	.117	[.015;.476]	.051	**.585**	**.082**	**[.426;.751]**	**>.001**	**.504**	**.078**	**[.354;.667]**	**>.001**	**.576**	**.116**	**[.423;.865]**	**>.001**
Population Density	.123	.103	[-.080;.315]	.235	**.174**	**.081**	**[.000;.317]**	**.030**	**.188**	**.076**	**[.041;.326]**	**.013**	-.023	.081	[-.172;.144]	.776
Aged 15 to 24	-.033	.149	[-.309;.264]	.822	.037	.081	[-.129;.195]	.649	-.096	.104	[-.297;.108]	.358	.064	.107	[-.125;.298]	.549
Racial/Ethnic Heterogeneity	.215	.145	[-.082;.478]	.139	.157	.097	[-.047;.345]	.107	.140	.093	[-.050;.319]	.132	**-.285**	**.131**	**[-.539;-.028]**	**.029**
Female Headed Household	.073	.196	[-.347;.415]	.710	.056	.117	[-.186;.261]	.629	.138	.119	[-.110;.345]	.247	-.029	.135	[-.344;.213]	.829
Less than High School	.070	.237	[-.443;.480]	.768	.285	.150	[.002;.572]	.058	**.357**	**.147**	**[.036;.603]**	**.015**	.243	.157	[-.036;.583]	.121
Unemployment	.075	.201	[-.324;.460]	.710	.029	.154	[-.266;.332]	.849	-.113	.156	[-.428;.169]	.470	.082	.168	[-.255;.401]	.625
Median Income	-.035	.181	[-.410;.335]	.848	-.182	.147	[-.482;.092]	.216	-.128	.137	[-.428;.115]	.347	-.297	.199	[-.691;.110]	.136
Gini Index	.033	.177	[-.351;.341]	.854	-.060	.118	[-.304;.144]	.608	-.024	.108	[-.283;.146]	.827	.040	.115	[-.164;.294]	.725
Poverty	.187	.275	[-.277;.812]	.495	.086	.175	[-.200;.467]	.621	.048	.208	[-.283;.541]	.818	-.214	.209	[-.587;.255]	.306
Sup. Gov. Assistance	-.085	.230	[-.524;.397]	.710	.023	.146	[-.284;.309]	.877	.148	.147	[-.136;.459]	.314	-.287	.242	[-.700;.220]	.235
R^2			.279				.682				.687				.321	

Variable	Public Order Calls				Substance Offense Calls				Non-Crime Service Calls			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	-.041	.146	[-.377;.187]	.780	-.154	.153	[-.476;.131]	.314	-.025	.162	[-.414;.227]	.877
Rentals	-.012	.179	[-.392;.301]	.948	.398	.219	[-.059;.802]	.069	.063	.215	[-.400;.422]	.770
Vacancies	.226	.125	[.040;.529]	.071	-.116	.151	[-.361;.231]	.443	**.222**	**.095**	**[.073;.457]**	**.019**
Demographics												
Total Population	**.531**	**.086**	**[.379;.707]**	**>.001**	**.503**	**.114**	**[.285;.732]**	**>.001**	**.655**	**.097**	**[.472;.852]**	**>.001**
Population Density	.125	.086	[-.044;.280]	.146	.098	.123	[-.136;.330]	.424	.058	.091	[-.119;.230]	.520
Aged 15 to 24	-.034	.104	[-.237;.165]	.744	.027	.135	[-.224;.317]	.839	-.001	.109	[-.218;.211]	.993
Racial/Ethnic Heterogeneity	.192	.102	[-.019;.392]	.060	-.115	.135	[-.378;.146]	.394	.154	.123	[-.089;.397]	.209
Female Headed Household	.087	.132	[-.195;.314]	.507	.039	.173	[-.283;.378]	.820	-.027	.148	[-.346;.240]	.853
Less than High School	.158	.154	[-.150;.423]	.303	.101	.198	[-.318;.472]	.611	.028	.167	[-.307;.346]	.869
Unemployment	.053	.172	[-.300;.360]	.759	.211	.209	[-.214;.589]	.314	.019	.173	[-.351;.341]	.914
Median Income	-.192	.149	[-.503;.082]	.198	-.226	.185	[-.597;.098]	.223	-.190	.204	[-.575;.186]	.352
Gini Index	-.037	.123	[-.314;.168]	.763	-.022	.152	[-.325;.257]	.887	-.048	.134	[-.343;.168]	.717
Poverty	.038	.214	[-.311;.525]	.859	-.379	.276	[-.865;.193]	.170	-.015	.241	[-.389;.548]	.950
Sup. Gov. Assistance	.116	.152	[-.183;.425]	.445	.106	.213	[-.302;.518]	.618	.117	.186	[-.239;.482]	.530
R^2			.648				.435				.522	

Note: Standardized estimates shown.

Bold = Significant

SE = Standard Error

95% CI = upper/lower limits for the bootstrapped confidence interval

$p \geq .05$

Table A3.

Regression Results for 2012 Calls for Service

Variable	Part 1 Personal Calls				Part 1 Property Calls				Part 2 Personal Calls				Part 2 Property Calls			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility																
Geographic Mobility	-.166	.165	[-.511;.141]	.314	-.027	.103	[-.242;.155]	.791	-.088	.110	[-.321;.097]	.421	-.211	.129	[-.475;.036]	.102
Rentals	-.169	.214	[-.616;.229]	.430	-.033	.159	[-.334;.281]	.837	.060	.150	[-.219;.372]	.688	.205	.196	[-.163;.606]	.294
Vacancies	.051	.145	[-.245;.288]	.726	**.318**	**.098**	**[.129;.517]**	**.001**	**.197**	**.099**	**[.007;.396]**	**.048**	.001	.118	[-.206;.265]	.996
Demographics																
Total Population	**.357**	**.135**	**[.097;.608]**	**.008**	**.658**	**.080**	**[.508;.832]**	**>.001**	**.557**	**.076**	**[.407;.709]**	**>.001**	**.623**	**.101**	**[.461;.861]**	**>.001**
Population Density	**.208**	**.091**	**[.034;.386]**	**.023**	.123	.074	[-.027;.266]	.096	**.198**	**.075**	**[.047;.336]**	**.008**	-.023	.096	[-.200;.188]	.807
Aged 15 to 24	**-.299**	**.118**	**[-.534;-.049]**	**.011**	.044	.093	[-.142;.233]	.638	-.090	.097	[-.282;.098]	.353	.055	.114	[-.128;.327]	.627
Racial/Ethnic Heterogeneity	.160	.117	[-.090;.368]	.172	.158	.085	[-.029;.315]	.064	.076	.075	[-.065;.223]	.308	-.236	.125	[-.472;.019]	.058
Female Headed Household	-.120	.145	[-.374;.201]	.408	-.038	.106	[-.264;.150]	.718	.066	.112	[-.156;.266]	.553	-.070	.137	[-.362;.180]	.609
Less than High School	-.005	.154	[-.303;.324]	.975	**.232**	**.112**	**[.023;.444]**	**.038**	**.296**	**.120**	**[.063;.524]**	**.013**	.219	.144	[-.031;.548]	.128
Unemployment	-.109	.191	[-.500;.254]	.569	.124	.121	[-.130;.344]	.303	.138	.145	[-.136;.427]	.340	.150	.136	[-.106;.423]	.269
Median Income	-.311	.195	[-.709;.062]	.110	-.296	.164	[-.620;-.003]	.070	-.214	.146	[-.508;.068]	.144	-.299	.234	[-.748;.180]	.200
Gini Index	-.095	.193	[-.509;.257]	.621	-.153	.119	[-.424;.048]	.199	-.034	.117	[-.310;.159]	.770	-.012	.139	[-.267;.278]	.929
Poverty	.507	.306	[-.073;1.143]	.097	-.045	.178	[-.380;.316]	.800	.012	.192	[-.323;.439]	.951	-.307	.207	[-.749;.119]	.140
Sup. Gov. Assistance	.109	.199	[-.327;.483]	.585	.046	.125	[-.225;.283]	.713	.031	.123	[-.220;.276]	.801	-.135	.242	[-.581;.345]	.579
R^2			.405				.697				.713				.327	

Variable	Public Order Calls				Substance Offense Calls				Non-Crime Service Calls			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	-.094	.120	[-.337;.124]	.435	-.211	.150	[-.512;.052]	.160	-.077	.156	[-.407;.190]	.624
Rentals	-.066	.167	[-.386;.258]	.694	.121	.225	[-.322;.537]	.593	-.066	.197	[-.441;.329]	.738
Vacancies	**.301**	**.111**	**[.100;.529]**	**.007**	.072	.118	[-.139;.334]	.544	.188	.097	[.016;.391]	.052
Demographics												
Total Population	**.589**	**.084**	**[.432;.755]**	**>.001**	**.613**	**.108**	**[.401;.818]**	**>.001**	**.679**	**.100**	**[.483;.876]**	**>.001**
Population Density	.096	.081	[-.056;.254]	.235	.116	.095	[-.076;.300]	.225	.029	.087	[-.132;.211]	.736
Aged 15 to 24	.007	.102	[-.184;.220]	.944	-.089	.109	[-.298;.141]	.413	.009	.118	[-.213;.254]	.936
Racial/Ethnic Heterogeneity	**.173**	**.087**	**[.003;.358]**	**.048**	-.003	.129	[-.244;.271]	.978	.174	.112	[-.054;.401]	.120
Female Headed Household	-.042	.111	[-.264;.160]	.706	-.041	.138	[-.307;.236]	.765	-.131	.131	[-.418;.091]	.318
Less than High School	.088	.113	[-.150;.304]	.434	.125	.137	[-.158;.382]	.362	.026	.127	[-.235;.279]	.839
Unemployment	.174	.158	[-.146;.452]	.272	.009	.168	[-.359;.301]	.956	.099	.145	[-.212;.372]	.495
Median Income	-.292	.159	[-.616;.028]	.066	-.273	.211	[-.732;.117]	.195	-.240	.206	[-.663;.152]	.243
Gini Index	-.077	.134	[-.389;.148]	.567	-.119	.161	[-.429;.214]	.460	-.096	.145	[-.409;.168]	.511
Poverty	.074	.212	[-.319;.527]	.727	.034	.259	[-.464;.570]	.897	.128	.255	[-.344;.672]	.616
Sup. Gov. Assistance	.058	.133	[-.200;.328]	.666	.006	.187	[-.382;.382]	.973	.073	.170	[-.262;.412]	.666
R^2			.673				.427				.529	

Note: Standardized estimates shown.

Bold = Significant

SE = Standard Error

95% CI = upper/lower limits for the bootstrapped confidence interval

$p \geq .05$

Table A4.

Regression Results for 2013 Calls for Service

Variable	Part 1 Personal Calls				Part 1 Property Calls				Part 2 Personal Calls				Part 2 Property Calls			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility																
Geographic Mobility	-.030	.198	[-.379;.404]	.878	-.061	.118	[-.298;.179]	.603	-.119	.114	[-.338;.107]	.295	-.194	.114	[-.433;.033]	.089
Rentals	.280	.259	[-.202;.823]	.280	.010	.176	[-.318;.376]	.957	-.031	.188	[-.378;.341]	.869	.180	.181	[-.168;.558]	.320
Vacancies	.113	.168	[-.222;.439]	.502	**.271**	**.111**	**[.057;.501]**	**.014**	**.250**	**.110**	**[.049;.473]**	**.023**	.106	.115	[-.064;.381]	.356
Demographics																
Total Population	**.317**	**.127**	**[.025;.525]**	**.013**	**.693**	**.086**	**[.518;.851]**	**>.001**	**.515**	**.080**	**[.357;.673]**	**>.001**	**.577**	**.147**	**[.375;.913]**	**>.001**
Population Density	-.098	.101	[-.293;.094]	.333	.150	.079	[.002;.305]	.059	**.179**	**.073**	**[.031;.308]**	**.015**	-.060	.078	[-.208;.090]	.442
Aged 15 to 24	-.090	.142	[-.354;.200]	.526	.041	.101	[-.158;.238]	.681	-.074	.108	[-.292;.131]	.490	-.039	.140	[-.257;.285]	.780
Racial/Ethnic Heterogeneity	.161	.141	[-.128;.417]	.253	.098	.096	[-.098;.298]	.310	.120	.086	[-.056;.283]	.159	**-.235**	**.113**	**[-.426;.022]**	**.037**
Female Headed Household	-.127	.152	[-.423;.170]	.403	-.074	.115	[-.289;.161]	.521	-.100	.121	[-.333;.147]	.410	-.127	.101	[-.343;.051]	.209
Less than High School	.222	.178	[-.124;.585]	.210	**.272**	**.132**	**[-.006;.528]**	**.040**	**.340**	**.141**	**[.030;.585]**	**.016**	.101	.183	[-.217;.507]	.580
Unemployment	-.137	.164	[-.447;.205]	.403	-.002	.128	[-.256;.251]	.991	.117	.153	[-.157;.414]	.444	.046	.129	[-.216;.321]	.721
Median Income	-.057	.212	[-.504;.328]	.787	-.281	.186	[-.669;.053]	.132	-.252	.170	[-.599;.057]	.138	-.302	.286	[-.831;.290]	.291
Gini Index	-.174	.187	[-.587;.147]	.353	-.190	.109	[-.436;.005]	.081	.001	.107	[-.231;.187]	.996	-.032	.140	[-.299;.286]	.820
Poverty	.276	.410	[-.507;1.095]	.501	.077	.230	[-.353;.539]	.738	-.029	.250	[-.482;.492]	.907	-.155	.241	[-.620;.348]	.520
Sup. Gov. Assistance	.043	.168	[-.270;.377]	.798	.055	.122	[-.217;.272]	.654	.093	.127	[-.165;.331]	.463	-.101	.155	[-.381;.229]	.516
R^2			.373				.647				.673				.283	

Variable	Public Order Calls				Substance Offense Calls				Non-Crime Service Calls			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	-.115	.132	[-.367;.163]	.385	-.266	.168	[-.538;.128]	.178	-.151	.164	[-.438;.191]	.355
Rentals	-.082	.171	[-.420;.251]	.631	.183	.227	[-.231;.657]	.419	-.049	.224	[-.479;.392]	.827
Vacancies	**.345**	**.116**	**[.129;.580]**	**.003**	.127	.126	[-.103;.395]	.311	**.259**	**.115**	**[.050;.499]**	**.025**
Demographics												
Total Population	**.622**	**.086**	**[.454;.789]**	**>.001**	**.566**	**.120**	**[.310;.789]**	**>.001**	**.728**	**.100**	**[.524;.919]**	**>.001**
Population Density	.070	.078	[-.079;.214]	.372	.038	.097	[-.152;.229]	.692	.011	.083	[-.150;.175]	.896
Aged 15 to 24	.030	.104	[-.163;.236]	.776	-.116	.138	[-.382;.155]	.401	-.030	.123	[-.276;.221]	.809
Racial/Ethnic Heterogeneity	.154	.086	[-.014;.322]	.073	.014	.114	[-.223;.228]	.902	.117	.102	[-.084;.315]	.249
Female Headed Household	-.076	.112	[-.294;.158]	.498	-.275	.152	[-.554;.060]	.070	-.198	.129	[-.467;.054]	.125
Less than High School	.175	.118	[-.067;.388]	.136	.126	.150	[-.184;.412]	.401	.033	.144	[-.265;.298]	.821
Unemployment	.132	.154	[-.153;.436]	.394	.129	.219	[-.302;.535]	.556	-.012	.136	[-.289;.257]	.928
Median Income	-.240	.162	[-.577;.074]	.138	-.218	.241	[-.706;.227]	.367	-.268	.222	[-.742;.135]	.228
Gini Index	-.039	.104	[-.265;.154]	.707	-.180	.163	[-.516;.121]	.268	-.068	.131	[-.352;.154]	.603
Poverty	.066	.236	[-.367;.516]	.779	.188	.299	[-.320;.834]	.529	.179	.289	[-.338;.791]	.536
Sup. Gov. Assistance	.060	.129	[-.208;.311]	.643	-.059	.186	[-.446;.305]	.751	.054	.174	[-.303;.374]	.754
R^2			.678				.430				.543	

Note: Standardized estimates shown.

Bold = Significant

SE = Standard Error

95% CI = upper/lower limits for the bootstrapped confidence interval

$p \geq .05$

Table A5.

Regression Results for 2014 Calls for Service

Variable	Part 1 Personal Calls				Part 1 Property Calls				Part 2 Personal Calls				Part 2 Property Calls			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility																
Geographic Mobility	-.308	.190	[-.670;.084]	.105	-.101	.094	[-.307;.067]	.284	-.143	.094	[-.328;.030]	.131	-.102	.133	[-.347;.186]	.442
Rentals	-.079	.260	[-.596;.422]	.761	.022	.155	[-.274;.335]	.886	-.011	.159	[-.324;.296]	.943	.216	.215	[-.193;.649]	.315
Vacancies	-.061	.201	[-.466;.328]	.762	**.385**	**.116**	**[.178;.630]**	**.001**	**.324**	**.119**	**[.097;.554]**	**.007**	.070	.143	[-.166;.398]	.625
Demographics																
Total Population	.225	.147	[-.046;.525]	.125	**.656**	**.085**	**[.493;.830]**	**>.001**	**.562**	**.077**	**[.419;.721]**	**>.001**	**.468**	**.141**	**[.245;.798]**	**.001**
Population Density	.084	.091	[-.112;.239]	.357	**.138**	**.067**	**[.007;.268]**	**.038**	**.157**	**.069**	**[.009;.286]**	**.023**	-.088	.091	[-.260;.092]	.333
Aged 15 to 24	**-.295**	**.147**	**[-.593;-.007]**	**.045**	-.028	.100	[-.245;.152]	.777	-.125	.097	[-.326;.055]	.199	-.070	.179	[-.363;.328]	.697
Racial/Ethnic Heterogeneity	**.263**	**.114**	**[.019;.485]**	**.021**	.161	.088	[-.020;.334]	.069	.096	.085	[-.082;.258]	.259	-.185	.123	[-.392;.091]	.132
Female Headed Household	-.175	.175	[-.440;.253]	.317	-.130	.116	[-.357;.091]	.260	-.141	.134	[-.392;.134]	.293	-.182	.110	[-.413;.029]	.097
Less than High School	.255	.205	[-.213;.609]	.213	**.376**	**.153**	**[.054;.659]**	**.014**	.289	.154	[-.066;.544]	.060	.127	.216	[-.256;.606]	.559
Unemployment	-.020	.186	[-.394;.348]	.916	-.187	.146	[-.516;.066]	.201	.013	.161	[-.323;.309]	.935	-.023	.179	[-.453;.278]	.899
Median Income	.110	.196	[-.306;.469]	.573	-.157	.188	[-.572;.170]	.403	-.119	.171	[-.501;.174]	.488	-.339	.273	[-.877;.234]	.215
Gini Index	-.019	.180	[-.368;.349]	.915	-.163	.099	[-.372;.020]	.100	-.076	.098	[-.286;.098]	.437	-.018	.133	[-.242;.280]	.893
Poverty	.417	.353	[-.210;1.156]	.238	.142	.228	[-.285;.610]	.535	.302	.215	[-.109;.743]	.160	-.083	.280	[-.618;.488]	.768
Sup. Gov. Assistance	.115	.201	[-.310;.491]	.567	.127	.127	[-.139;.365]	.317	.109	.128	[-.126;.396]	.394	-.103	.195	[-.424;.327]	.596
R^2			.392				.689				.693				.235	

Variable	Public Order Calls				Substance Offense Calls				Non-Crime Service Calls			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	-.123	.122	[-.382;.118]	.311	**-.281**	**.127**	**[-.537;-.036]**	**.026**	-.185	.154	[-.488;.108]	.228
Rentals	-.011	.198	[-.402;.371]	.955	.147	.214	[-.209;.600]	.492	.047	.203	[-.354;.454]	.816
Vacancies	**.378**	**.128**	**[.139;.625]**	**.003**	.170	.132	[-.077;.436]	.200	**.324**	**.140**	**[.077;.620]**	**.020**
Demographics												
Total Population	**.639**	**.093**	**[.466;.832]**	**>.001**	**.711**	**.107**	**[.502;.915]**	**>.001**	**.708**	**.114**	**[.494;.928]**	**>.001**
Population Density	.085	.078	[-.069;.230]	.280	.038	.089	[-.133;.217]	.669	-.022	.083	[-.176;.140]	.787
Aged 15 to 24	.011	.101	[-.196;.195]	.914	-.139	.123	[-.387;.092]	.256	-.072	.124	[-.337;.174]	.560
Racial/Ethnic Heterogeneity	.138	.087	[-.043;.299]	.112	-.033	.092	[-.220;.135]	.723	.130	.093	[-.055;.315]	.161
Female Headed Household	-.168	.132	[-.419;.103]	.204	**-.284**	**.143**	**[-.574;-.011]**	**.047**	-.235	.134	[-.510;.007]	.079
Less than High School	.163	.161	[-.182;.447]	.311	.035	.181	[-.356;.369]	.845	.005	.170	[-.365;.283]	.976
Unemployment	.047	.166	[-.305;.344]	.778	-.045	.152	[-.385;.219]	.765	-.056	.152	[-.377;.206]	.711
Median Income	-.064	.160	[-.384;.236]	.692	-.181	.192	[-.569;.198]	.347	-.205	.214	[-.660;.193]	.338
Gini Index	-.033	.106	[-.248;.165]	.754	**-.248**	**.111**	**[-.475;-.039]**	**.025**	-.040	.138	[-.298;.231]	.773
Poverty	.138	.247	[-.321;.660]	.578	.316	.245	[-.149;.805]	.196	.122	.253	[-.352;.657]	.629
Sup. Gov. Assistance	.213	.141	[-.067;.479]	.132	.096	.166	[-.216;.438]	.563	.084	.185	[-.289;.441]	.652
R^2			.660				.521				.538	

Note: Standardized estimates shown.

Bold = Significant

SE = Standard Error

95% CI = upper/lower limits for the bootstrapped confidence interval

$p \geq .05$

Table A6.

Regression Results for 2015 Calls for Service

Variable	Part 1 Personal Calls				Part 1 Property Calls				Part 2 Personal Calls				Part 2 Property Calls			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility																
Geographic Mobility	-.047	.158	[-.330;.288]	.764	-.110	.080	[-.277;.038]	.170	-.087	.086	[-.274;.080]	.313	-.050	.114	[-.260;.186]	.661
Rentals	-.195	.224	[-.554;.291]	.384	.143	.159	[-.173;.440]	.369	.017	.166	[-.307;.354]	.919	.113	.182	[-.292;.456]	.535
Vacancies	-.003	.145	[-.318;.266]	.983	**.389**	**.136**	**[.120;.665]**	**.004**	**.328**	**.118**	**[.089;.563]**	**.006**	-.044	.106	[-.256;.163]	.679
Demographics																
Total Population	-.024	.132	[-.271;.262]	.856	**.621**	**.092**	**[.434;.797]**	**>.001**	**.510**	**.081**	**[.360;.668]**	**>.001**	**.379**	**.143**	**[.160;.722]**	**.008**
Population Density	.037	.084	[-.133;.198]	.665	.109	.068	[-.035;.239]	.107	**.182**	**.071**	**[.039;.319]**	**.011**	-.091	.085	[-.247;.087]	.282
Aged 15 to 24	.005	.136	[-.262;.285]	.973	-.085	.092	[-.283;.081]	.355	-.133	.098	[-.327;.056]	.174	-.092	.196	[-.411;.408]	.639
Racial/Ethnic Heterogeneity	**.508**	**.124**	**[.230;.729]**	**>.001**	.173	.094	[.003;.378]	.066	.160	.087	[-.017;.329]	.068	-.122	.121	[-.348;.135]	.312
Female Headed Household	**-.445**	**.148**	**[-.690;-.106]**	**.003**	-.126	.121	[-.352;.125]	.298	-.153	.126	[-.385;.124]	.223	-.072	.111	[-.277;.168]	.514
Less than High School	-.053	.183	[-.459;.283]	.772	.246	.172	[-.133;.554]	.152	.294	.151	[-.028;.544]	.052	.019	.186	[-.354;.422]	.920
Unemployment	.298	.187	[-.050;.677]	.111	-.011	.149	[-.340;.247]	.943	.013	.150	[-.283;.301]	.932	-.103	.157	[-.446;.184]	.514
Median Income	**-.522**	**.185**	**[-.956;-.244]**	**.005**	-.162	.229	[-.688;.188]	.480	-.104	.195	[-.529;.199]	.596	-.519	.267	[-1.141;-.095]	.053
Gini Index	-.098	.138	[-.383;.163]	.478	**-.235**	**.106**	**[-.458;-.052]**	**.027**	-.166	.120	[-.416;.045]	.165	-.096	.111	[-.332;.110]	.385
Poverty	-.025	.305	[-.635;.554]	.934	.194	.226	[-.268;.641]	.391	.317	.217	[-.115;.742]	.143	-.069	.363	[-.712;.702]	.850
Sup. Gov. Assistance	.003	.221	[-.476;.369]	.991	.008	.126	[-.248;.242]	.948	.146	.140	[-.155;.424]	.295	-.078	.170	[-.381;.288]	.646
R^2			.470				.650				.699				.210	

Variable	Public Order Calls				Substance Offense Calls				Non-Crime Service Calls			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	-.098	.107	[-.324;.112]	.360	-.175	.146	[-.462;.102]	.230	-.155	.160	[-.462;.150]	.331
Rentals	.052	.184	[-.332;.407]	.778	.045	.197	[-.319;.470]	.819	.133	.226	[-.264;.625]	.558
Vacancies	**.501**	**.140**	**[.227;.773]**	**>.001**	.205	.152	[-.098;.483]	.179	**.465**	**.141**	**[.199;.743]**	**.001**
Demographics												
Total Population	**.590**	**.098**	**[.418;.799]**	**>.001**	**.524**	**.114**	**[.311;.756]**	**>.001**	**.693**	**.118**	**[.484;.933]**	**>.001**
Population Density	.066	.085	[-.100;.228]	.441	.091	.083	[-.064;.258]	.275	-.022	.076	[-.168;.124]	.768
Aged 15 to 24	-.073	.106	[-.300;.119]	.488	-.027	.137	[-.302;.230]	.846	-.233	.126	[-.496;.014]	.064
Racial/Ethnic Heterogeneity	**.178**	**.088**	**[-.007;.330]**	**.045**	-.005	.095	[-.180;.188]	.960	.142	.092	[-.035;.324]	.121
Female Headed Household	-.198	.131	[-.447;.085]	.129	**-.394**	**.188**	**[-.739;.008]**	**.037**	**-.371**	**.145**	**[-.667;-.078]**	**.010**
Less than High School	.067	.168	[-.315;.349]	.690	.208	.219	[-.256;.608]	.341	-.235	.169	[-.619;.041]	.163
Unemployment	.014	.153	[-.318;.300]	.928	-.092	.226	[-.556;.346]	.684	-.073	.153	[-.406;.197]	.633
Median Income	-.135	.185	[-.578;.157]	.465	-.139	.228	[-.636;.279]	.543	-.115	.211	[-.607;.225]	.585
Gini Index	-.150	.127	[-.400;.096]	.237	**-.260**	**.125**	**[-.519;-.031]**	**.037**	-.120	.121	[-.386;.104]	.319
Poverty	.226	.249	[-.243;.753]	.363	.395	.259	[-.106;.891]	.128	.413	.247	[-.040;.946]	.095
Sup. Gov. Assistance	.164	.146	[-.146;.432]	.262	.155	.190	[-.226;.532]	.416	.171	.204	[-.266;.541]	.404
R^2			.644				.429				.577	

Note: Standardized estimates shown.

Bold = Significant

SE = Standard Error

95% CI = upper/lower limits for the bootstrapped confidence interval

$p \geq .05$

Table A7.

Regression Results for 2016 Calls for Service

Variable	Part 1 Personal Calls				Part 1 Property Calls				Part 2 Personal Calls				Part 2 Property Calls			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility																
Geographic Mobility	-.167	.197	[-.505;.279]	.397	-.003	.098	[-.202;.182]	.974	-.025	.109	[-.259;.178]	.819	-.022	.119	[-.263;.205]	.852
Rentals	.245	.219	[-.166;.713]	.264	.256	.140	[-.021;.521]	.067	.065	.155	[-.247;.346]	.673	.160	.193	[-.136;.621]	.406
Vacancies	.190	.179	[-.171;.533]	.287	**.338**	**.130**	**[.083;.599]**	**.009**	**.294**	**.142**	**[.008;.567]**	**.038**	.020	.135	[-.217;.315]	.881
Demographics																
Total Population	.054	.116	[-.194;.286]	.639	**.583**	**.094**	**[.396;.755]**	**>.001**	**.507**	**.083**	**[.341;.665]**	**>.001**	**.434**	**.181**	**[.182;.836]**	**.016**
Population Density	.196	.100	[-.005;.378]	.051	.119	.080	[-.042;.273]	.134	**.209**	**.075**	**[.053;.354]**	**.005**	-.078	.096	[-.297;.072]	.416
Aged 15 to 24	-.119	.137	[-.376;.167]	.386	-.085	.098	[-.280;.111]	.386	-.203	.127	[-.450;.060]	.108	-.115	.126	[-.350;.168]	.361
Racial/Ethnic Heterogeneity	**.308**	**.114**	**[.073;.530]**	**.007**	**.214**	**.082**	**[.056;.380]**	**.009**	**.232**	**.074**	**[.081;.373]**	**.002**	-.191	.108	[-.373;.048]	.077
Female Headed Household	-.172	.173	[-.451;.217]	.320	-.052	.125	[-.309;.184]	.680	-.077	.129	[-.328;.188]	.552	-.116	.131	[-.375;.174]	.374
Less than High School	.222	.241	[-.348;.633]	.358	.258	.180	[-.136;.555]	.152	.094	.186	[-.305;.410]	.612	.096	.194	[-.229;.548]	.622
Unemployment	.002	.199	[-.393;.397]	.991	-.016	.166	[-.330;.320]	.925	.075	.165	[-.221;.427]	.648	-.150	.168	[-.453;.180]	.374
Median Income	-.161	.270	[-.765;.308]	.550	.073	.171	[-.267;.387]	.668	-.080	.178	[-.465;.227]	.655	-.146	.303	[-.695;.511]	.629
Gini Index	-.140	.145	[-.425;.148]	.334	-.127	.097	[-.313;.060]	.189	-.146	.108	[-.361;.074]	.176	-.048	.141	[-.372;.176]	.734
Poverty	-.124	.308	[-.747;.511]	.687	.191	.215	[-.262;.596]	.375	**.429**	**.184**	**[.030;.777]**	**.020**	.165	.314	[-.368;.893]	.600
Sup. Gov. Assistance	-.043	.198	[-.439;.357]	.830	.104	.152	[-.187;.419]	.494	.114	.166	[-.223;.438]	.491	.092	.182	[-.319;.428]	.613
R^2			.413				.676				.685				.194	

Variable	Public Order Calls				Substance Offense Calls				Non-Crime Service Calls			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	-.089	.144	[-.384;.185]	.536	**-.314**	**.156**	**[-.635;-.021]**	**.044**	-.188	.208	[-.573;.189]	.368
Rentals	.227	.176	[-.116;.578]	.198	.084	.175	[-.260;.440]	.631	.224	.215	[-.170;.685]	.299
Vacancies	**.420**	**.161**	**[.093;.722]**	**.009**	.291	.159	[-.025;.596]	.068	**.304**	**.152**	**[.004;.604]**	**.046**
Demographics												
Total Population	**.555**	**.101**	**[.368;.759]**	**>.001**	**.563**	**.120**	**[.319;.778]**	**>.001**	**.676**	**.105**	**[.465;.877]**	**>.001**
Population Density	.056	.099	[-.137;.243]	.571	.035	.093	[-.152;.206]	.707	-.011	.091	[-.188;.164]	.906
Aged 15 to 24	-.152	.109	[-.395;.054]	.164	.012	.141	[-.264;.293]	.934	-.218	.145	[-.505;.083]	.133
Racial/Ethnic Heterogeneity	**.268**	**.091**	**[.094;.442]**	**.003**	.096	.103	[-.078;.309]	.351	**.184**	**.082**	**[.027;.350]**	**.025**
Female Headed Household	-.138	.140	[-.418;.158]	.325	**-.461**	**.151**	**[-.767;-.148]**	**.002**	-.250	.153	[-.552;.045]	.103
Less than High School	-.036	.177	[-.427;.281]	.840	.234	.227	[-.187;.681]	.303	-.139	.174	[-.512;.162]	.423
Unemployment	.189	.168	[-.120;.543]	.260	.180	.189	[-.180;.558]	.342	.026	.193	[-.345;.419]	.892
Median Income	-.012	.163	[-.362;.264]	.942	-.292	.230	[-.795;.092]	.205	.025	.200	[-.396;.393]	.900
Gini Index	-.167	.109	[-.368;.047]	.124	-.179	.128	[-.445;.059]	.164	-.153	.120	[-.403;.078]	.202
Poverty	.177	.213	[-.284;.572]	.405	-.138	.288	[-.789;.375]	.633	.363	.264	[-.161;.881]	.169
Sup. Gov. Assistance	.138	.144	[-.157;.420]	.337	-.073	.179	[-.476;.258]	.682	.162	.163	[-.178;.479]	.321
R^2			.643				.483				.576	

Note: Standardized estimates shown.

Bold = Significant

SE = Standard Error

95% CI = upper/lower limits for the bootstrapped confidence interval

$p \geq .05$

Table A8.

Regression Results for 2017 Calls for Service

Variable	Part 1 Personal Calls				Part 1 Property Calls				Part 2 Personal Calls				Part 2 Property Calls			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility																
Geographic Mobility	.060	.158	[-.225;.417]	.702	.105	.122	[-.121;.363]	.392	.045	.113	[-.185;.267]	.690	-.058	.115	[-.303;.167]	.616
Rentals	.313	.208	[-.104;.730]	.132	.233	.178	[-.095;.623]	.191	.164	.163	[-.147;.514]	.314	.174	.178	[-.165;.535]	.327
Vacancies	.026	.198	[-.424;.378]	.896	**.252**	**.123**	**[.002;.471]**	**.040**	.212	.130	[-.042;.466]	.103	-.012	.138	[-.270;.260]	.931
Demographics																
Total Population	.185	.130	[-.089;.413]	.155	**.617**	**.091**	**[.428;.780]**	**>.001**	**.491**	**.083**	**[.324;.652]**	**>.001**	**.555**	**.149**	**[.262;.856]**	**>.001**
Population Density	.191	.106	[-.040;.388]	.072	.105	.095	[-.089;.281]	.270	**.179**	**.080**	**[.010;.333]**	**.026**	-.132	.109	[-.342;.080]	.228
Aged 15 to 24	**-.280**	**.119**	**[-.475;-.015]**	**.018**	-.144	.085	[-.319;.017]	.091	**-.255**	**.099**	**[-.433;-.042]**	**.010**	-.160	.135	[-.409;.130]	.234
Racial/Ethnic Heterogeneity	.238	.145	[-.057;.507]	.101	**.247**	**.084**	**[.069;.412]**	**.003**	**.277**	**.084**	**[.109;.427]**	**.001**	-.183	.115	[-.401;.050]	.110
Female Headed Household	.013	.153	[-.274;.324]	.932	-.075	.120	[-.300;.161]	.530	-.091	.126	[-.319;.174]	.471	.097	.134	[-.146;.380]	.469
Less than High School	-.024	.235	[-.486;.449]	.920	.137	.133	[-.132;.390]	.302	.185	.143	[-.076;.472]	.195	.106	.168	[-.253;.425]	.527
Unemployment	.026	.183	[-.370;.343]	.885	-.090	.143	[-.380;.183]	.530	.007	.146	[-.293;.293]	.960	-.200	.160	[-.535;.116]	.209
Median Income	-.006	.226	[-.433;.478]	.980	-.165	.208	[-.669;.121]	.430	-.005	.156	[-.352;.270]	.973	-.196	.279	[-.844;.281]	.483
Gini Index	.133	.130	[-.142;.365]	.306	**-.212**	**.101**	**[-.388;.015]**	**.035**	**-.213**	**.100**	**[-.396;.012]**	**.034**	-.155	.147	[-.448;.125]	.291
Poverty	.127	.261	[-.365;.688]	.625	.323	.208	[-.130;.683]	.121	**.477**	**.198**	**[.035;.839]**	**.016**	.381	.320	[-.246;1.024]	.233
Sup. Gov. Assistance	.056	.201	[-.323;.470]	.780	.073	.128	[-.212;.305]	.567	.118	.124	[-.147;.338]	.340	-.113	.161	[-.440;.193]	.483
R^2			.405				.681				.707				.259	

Variable	Public Order Calls				Substance Offense Calls				Non-Crime Service Calls			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	-.030	.137	[-.289;.266]	.825	-.128	.149	[-.427;.160]	.391	-.213	.206	[-.585;.183]	.302
Rentals	.221	.197	[-.183;.616]	.262	.314	.214	[-.129;.740]	.143	.150	.244	[-.310;.658]	.540
Vacancies	**.335**	**.166**	**[.019;.675]**	**.043**	.120	.166	[-.226;.425]	.471	.227	.158	[-.069;.546]	.151
Demographics												
Total Population	**.533**	**.107**	**[.334;.761]**	**>.001**	**.564**	**.119**	**[.295;.779]**	**>.001**	**.673**	**.113**	**[.432;.872]**	**>.001**
Population Density	.021	.107	[-.183;.226]	.843	.045	.108	[-.171;.258]	.678	-.016	.102	[-.217;.177]	.879
Aged 15 to 24	**-.215**	**.098**	**[-.400;-.017]**	**.029**	-.157	.131	[-.403;.102]	.231	-.175	.116	[-.387;.065]	.134
Racial/Ethnic Heterogeneity	**.294**	**.106**	**[.084;.490]**	**.006**	.104	.110	[-.121;.310]	.345	**.210**	**.104**	**[-.009;.408]**	**.044**
Female Headed Household	-.060	.128	[-.300;.223]	.639	-.217	.165	[-.517;.119]	.190	-.234	.150	[-.537;.070]	.118
Less than High School	-.064	.165	[-.384;.229]	.695	.016	.218	[-.420;.423]	.942	-.080	.170	[-.450;.237]	.638
Unemployment	.119	.158	[-.232;.416]	.452	.100	.203	[-.328;.486]	.621	.172	.169	[-.162;.482]	.309
Median Income	-.023	.192	[-.503;.300]	.904	-.118	.223	[-.590;.318]	.598	-.123	.234	[-.686;.281]	.600
Gini Index	**-.240**	**.108**	**[-.436;-.010]**	**.026**	**-.285**	**.116**	**[-.502;-.052]**	**.014**	-.203	.127	[-.445;.055]	.108
Poverty	.306	.217	[-.129;.718]	.158	.254	.302	[-.360;.849]	.400	.154	.244	[-.363;.610]	.531
Sup. Gov. Assistance	.111	.127	[-.151;.342]	.383	-.032	.169	[-.382;.287]	.848	.094	.156	[-.231;.369]	.548
R^2			.601				.452				.554	

Note: Standardized estimates shown.

Bold = Significant

SE = Standard Error

95% CI = upper/lower limits for the bootstrapped confidence interval

$p \geq .05$

Table A9.

Regression Results for 2018 Calls for Service

Variable	Part 1 Personal Calls				Part 1 Property Calls				Part 2 Personal Calls				Part 2 Property Calls			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility																
Geographic Mobility	-.177	.152	[-.457;.146]	.246	-.007	.101	[-.205;.202]	.947	-.051	.119	[-.297;.176]	.669	-.141	.126	[-.383;.103]	.265
Rentals	-.096	.222	[-.543;.336]	.665	.257	.135	[-.015;.520]	.057	.091	.148	[-.190;.390]	.539	.223	.154	[-.074;.538]	.149
Vacancies	.120	.169	[-.181;.482]	.477	**.309**	**.129**	**[.062;.539]**	**.017**	**.257**	**.123**	**[.038;.516]**	**.037**	.034	.124	[-.198;.281]	.784
Demographics																
Total Population	**.297**	**.133**	**[.040;.559]**	**.025**	**.699**	**.090**	**[.499;.847]**	**>.001**	**.562**	**.073**	**[.411;.702]**	**>.001**	**.537**	**.136**	**[.301;.831]**	**>.001**
Population Density	.009	.120	[-.209;.254]	.942	.063	.086	[-.102;.226]	.464	**.191**	**.077**	**[.028;.329]**	**.013**	-.136	.093	[-.334;.025]	.144
Aged 15 to 24	**-.250**	**.106**	**[-.433;-.033]**	**.018**	**-.172**	**.073**	**[-.315;-.028]**	**.019**	**-.236**	**.110**	**[-.435;-.003]**	**.032**	-.159	.105	[-.352;.075]	.131
Racial/Ethnic Heterogeneity	.246	.145	[-.040;.510]	.088	.097	.084	[-.058;.269]	.248	**.166**	**.079**	**[.012;.316]**	**.035**	-.183	.094	[-.361;.014]	.053
Female Headed Household	.145	.159	[-.178;.425]	.361	-.094	.125	[-.323;.178]	.451	-.031	.121	[-.262;.222]	.799	.113	.156	[-.167;.435]	.468
Less than High School	-.289	.161	[-.622;.030]	.072	.025	.114	[-.211;.237]	.827	.016	.110	[-.228;.207]	.883	-.135	.136	[-.412;.126]	.320
Unemployment	.071	.192	[-.315;.437]	.710	.187	.134	[-.085;.458]	.162	.142	.154	[-.141;.456]	.358	.052	.148	[-.205;.387]	.726
Median Income	.024	.200	[-.374;.395]	.906	-.114	.172	[-.520;.161]	.508	-.161	.188	[-.553;.201]	.390	-.213	.204	[-.655;.144]	.298
Gini Index	-.030	.154	[-.277;.309]	.844	-.133	.101	[-.324;.086]	.191	-.125	.104	[-.321;.081]	.229	-.168	.152	[-.502;.094]	.268
Poverty	.291	.258	[-.258;.774]	.259	.113	.186	[-.274;.456]	.545	.264	.226	[-.184;.673]	.243	.132	.216	[-.291;.600]	.542
Sup. Gov. Assistance	**.345**	**.158**	**[.026;.637]**	**.029**	.191	.113	[-.060;.391]	.089	.196	.108	[-.030;.390]	.071	.035	.134	[-.251;.293]	.793
R^2			.420				.677				.694				.301	

Variable	Public Order Calls				Substance Offense Calls				Non-Crime Service Calls			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	-.118	.133	[-.392;.128]	.376	-.183	.125	[-.447;.070]	.144	-.308	.165	[-.615;.018]	.062
Rentals	.109	.177	[-.251;.461]	.537	.214	.162	[-.082;.547]	.186	.088	.198	[-.320;.464]	.657
Vacancies	.262	.140	[.009;.560]	.060	.016	.155	[-.287;.326]	.917	.151	.121	[-.063;.410]	.214
Demographics												
Total Population	**.585**	**.092**	**[.392;.751]**	**>.001**	**.621**	**.110**	**[.381;.824]**	**>.001**	**.682**	**.105**	**[.452;.864]**	**>.001**
Population Density	.008	.096	[-.188;.186]	.937	.043	.113	[-.170;.269]	.701	-.058	.091	[-.237;.109]	.522
Aged 15 to 24	-.146	.101	[-.340;.056]	.150	-.022	.103	[-.223;.180]	.833	-.125	.108	[-.325;.104]	.249
Racial/Ethnic Heterogeneity	**.197**	**.097**	**[.005;.393]**	**.042**	-.059	.115	[-.300;.153]	.607	.101	.100	[-.094;.301]	.313
Female Headed Household	-.002	.135	[-.254;.281]	.988	-.077	.155	[-.362;.235]	.617	-.134	.152	[-.426;.170]	.376
Less than High School	-.066	.128	[-.349;.157]	.604	.020	.151	[-.307;.302]	.895	-.057	.124	[-.327;.174]	.643
Unemployment	**.305**	**.153**	**[.012;.601]**	**.046**	.009	.174	[-.331;.345]	.957	.141	.154	[-.156;.442]	.359
Median Income	-.196	.188	[-.592;.161]	.298	-.377	.224	[-.877;.013]	.093	-.143	.203	[-.586;.218]	.482
Gini Index	-.131	.108	[-.329;.094]	.226	-.211	.131	[-.451;.080]	.107	-.165	.120	[-.406;.074]	.167
Poverty	.059	.225	[-.405;.454]	.794	-.045	.259	[-.616;.405]	.863	.090	.208	[-.319;.498]	.666
Sup. Gov. Assistance	.062	.128	[-.217;.294]	.630	.055	.148	[-.237;.339]	.708	.184	.158	[-.145;.467]	.243
R^2			.622				.486				.582	

Note: Standardized estimates shown.

Bold = Significant

SE = Standard Error

95% CI = upper/lower limits for the bootstrapped confidence interval

$p \geq .05$

Table A10.

Regression Results for 2019 Calls for Service

Variable	Part 1 Personal Calls				Part 1 Property Calls				Part 2 Personal Calls				Part 2 Property Calls			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility																
Geographic Mobility	-.128	.185	[-.463;.248]	.489	-.177	.133	[-.456;.069]	.181	-.084	.144	[-.406;.175]	.559	-.250	.137	[-.518;.026]	.068
Rentals	.027	.196	[-.372;.393]	.892	.215	.143	[-.047;.536]	.134	.106	.152	[-.174;.426]	.487	.172	.156	[-.125;.513]	.269
Vacancies	.217	.171	[-.144;.537]	.205	**.361**	**.130**	**[.105;.611]**	**.005**	.238	.145	[-.019;.554]	.102	.136	.148	[-.179;.400]	.358
Demographics																
Total Population	**.377**	**.139**	**[.103;.652]**	**.007**	**.737**	**.098**	**[.510;.909]**	**>.001**	**.623**	**.088**	**[.442;.788]**	**>.001**	**.658**	**.122**	**[.413;.883]**	**>.001**
Population Density	-.025	.106	[-.234;.182]	.812	.105	.100	[-.104;.287]	.291	**.211**	**.084**	**[.027;.348]**	**.012**	-.075	.115	[-.307;.174]	.513
Aged 15 to 24	.034	.130	[-.213;.290]	.793	-.085	.093	[-.248;.116]	.359	-.160	.101	[-.346;.058]	.114	-.040	.098	[-.207;.168]	.684
Racial/Ethnic Heterogeneity	.084	.155	[-.225;.387]	.589	-.047	.099	[-.252;.141]	.633	.006	.096	[-.197;.185]	.949	**-.276**	**.104**	**[-.482;-.075]**	**.008**
Female Headed Household	-.179	.132	[-.446;.089]	.175	.078	.113	[-.161;.300]	.489	.149	.117	[-.101;.383]	.206	.197	.140	[-.061;.478]	.159
Less than High School	.207	.189	[-.204;.562]	.273	.147	.126	[-.091;.382]	.242	.138	.131	[-.140;.363]	.294	.159	.158	[-.174;.461]	.313
Unemployment	.054	.158	[-.275;.360]	.733	.032	.118	[-.193;.273]	.786	.003	.129	[-.235;.250]	.979	-.133	.133	[-.382;.138]	.317
Median Income	-.329	.273	[-.922;.141]	.228	-.038	.188	[-.454;.292]	.841	-.150	.172	[-.507;.167]	.382	-.201	.271	[-.852;.272]	.458
Gini Index	.319	.199	[-.093;.703]	.109	-.040	.183	[-.376;.309]	.826	-.061	.176	[-.380;.286]	.731	.122	.193	[-.297;.482]	.526
Poverty	**-.499**	**.253**	**[-.973;.013]**	**.049**	.113	.252	[-.463;.543]	.652	.269	.244	[-.308;.682]	.270	-.020	.252	[-.520;.491]	.937
Sup. Gov. Assistance	-.011	.212	[-.409;.401]	.959	-.016	.149	[-.340;.244]	.916	.042	.139	[-.256;.287]	.760	-.171	.154	[-.479;.132]	.266
R^2			.310				.622				.658				.610	

Variable	Public Order Calls				Substance Offense Calls				Non-Crime Service Calls			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	-.177	.162	[-.516;.138]	.276	-.122	.176	[-.477;.219]	.488	-.311	.170	[-.631;.034]	.068
Rentals	.128	.164	[-.180;.470]	.435	.247	.194	[-.127;.625]	.203	.109	.181	[-.224;.483]	.549
Vacancies	.281	.149	[-.009;.578]	.061	.001	.156	[-.278;.302]	.996	.171	.121	[-.055;.401]	.156
Demographics												
Total Population	**.646**	**.094**	**[.443;.823]**	**>.001**	**.651**	**.127**	**[.365;.858]**	**>.001**	**.694**	**.109**	**[.452;.888]**	**>.001**
Population Density	.022	.094	[-.171;.195]	.814	-.036	.106	[-.234;.182]	.736	-.033	.088	[-.197;.132]	.708
Aged 15 to 24	-.069	.095	[-.248;.122]	.469	-.065	.121	[-.298;.171]	.592	-.066	.098	[-.247;.140]	.504
Racial/Ethnic Heterogeneity	.051	.102	[-.158;.244]	.616	-.084	.141	[-.357;.206]	.549	.045	.110	[-.174;.272]	.681
Female Headed Household	.138	.124	[-.099;.388]	.263	.106	.169	[-.199;.447]	.530	-.014	.148	[-.297;.285]	.923
Less than High School	-.019	.138	[-.317;.229]	.891	.065	.150	[-.261;.335]	.667	-.028	.128	[-.281;.210]	.828
Unemployment	.065	.127	[-.172;.331]	.609	-.171	.142	[-.442;.102]	.227	-.049	.120	[-.288;.183]	.679
Median Income	-.154	.181	[-.569;.178]	.396	-.089	.223	[-.579;.325]	.690	-.132	.201	[-.606;.201]	.510
Gini Index	-.102	.169	[-.441;.204]	.545	-.292	.213	[-.735;.098]	.171	-.134	.178	[-.521;.199]	.450
Poverty	.219	.239	[-.338;.628]	.361	.419	.270	[-.124;.935]	.121	.144	.232	[-.330;.572]	.536
Sup. Gov. Assistance	-.023	.138	[-.328;.225]	.869	.063	.163	[-.277;.360]	.701	.124	.153	[-.213;.407]	.418
R^2			.596				.439				.556	

Note: Standardized estimates shown.

Bold = Significant

SE = Standard Error

95% CI = upper/lower limits for the bootstrapped confidence interval

$p \geq .05$

Table A11.
Regression Results for 2010 Crimes

Variable	Part 1 Personal Crimes				Part 1 Property Crimes				Part 2 Personal Crimes			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	-.083	.108	[-.312;.120]	.443	.028	.078	[-.119;.182]	.721	.050	.118	[-.198;.263]	.669
Rentals	.181	.153	[-.129;.504]	.239	.257	.140	[-.028;.555]	.067	.198	.152	[-.099;.493]	.193
Vacancies	**.335**	**.120**	**[.127;.613]**	**.005**	.198	.114	[.003;.447]	.084	**.236**	**.091**	**[.070;.420]**	**.010**
Demographics												
Total Population	**.419**	**.088**	**[.256;.598]**	**>.001**	**.703**	**.093**	**[.515;.890]**	**>.001**	**.647**	**.081**	**[.499;.806]**	**>.001**
Population Density	**.212**	**.095**	**[.017;.396]**	**.025**	-.036	.067	[-.161;.100]	.591	**.167**	**.067**	**[.031;.293]**	**.013**
Aged 15 to 24	-.035	.080	[-.197;.117]	.664	.112	.071	[-.025;.251]	.118	-.025	.090	[-.211;.134]	.776
Racial/Ethnic Heterogeneity	-.118	.110	[-.335;.099]	.284	.029	.104	[-.169;.236]	.778	.041	.084	[-.131;.203]	.623
Female Headed Household	.003	.114	[-.211;.226]	.980	-.019	.106	[-.213;.195]	.857	.124	.099	[-.062;.316]	.211
Less than High School	.106	.181	[-.232;.487]	.558	-.017	.125	[-.226;.254]	.894	**.269**	**.129**	**[.025;.532]**	**.038**
Unemployment	.059	.154	[-.278;.338]	.701	-.034	.122	[-.333;.151]	.784	-.069	.139	[-.357;.192]	.620
Median Income	-.127	.163	[-.479;.174]	.436	**-.451**	**.191**	**[-.873;-.107]**	**.018**	**-.288**	**.147**	**[-.588;-.015]**	**.050**
Gini Index	-.033	.106	[-.234;.185]	.758	**-.269**	**.109**	**[-.504;-.072]**	**.014**	-.008	.102	[-.228;.192]	.934
Poverty	.121	.203	[-.277;.556]	.551	-.025	.167	[-.359;.316]	.879	-.024	.207	[-.393;.421]	.908
Sup. Gov. Assistance	.129	.128	[-.129;.383]	.314	-.027	.124	[-.284;.221]	.828	-.018	.131	[-.301;.226]	.891
R^2	.628				.578				.734			

Variable	Part 2 Property Crimes				Public Order Offenses				Substance Offenses			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	-.012	.106	[-.229;.179]	.910	-.055	.180	[-.414;.258]	.758	-.181	.237	[-.603;.256]	.446
Rentals	**.331**	**.153**	**[.027;.643]**	**.031**	.031	.198	[-.359;.408]	.876	.131	.234	[-.356;.538]	.577
Vacancies	**.326**	**.083**	**[.179;.506]**	**>.001**	.172	.107	[-.007;.401]	.107	.110	.149	[-.131;.456]	.461
Demographics												
Total Population	**.701**	**.080**	**[.544;.855]**	**>.001**	**.484**	**.100**	**[.296;.693]**	**>.001**	.173	.143	[-.062;.485]	.227
Population Density	.078	.075	[-.066;.224]	.299	**.215**	**.084**	**[.046;.375]**	**.010**	.154	.094	[-.028;.350]	.099
Aged 15 to 24	.040	.061	[-.093;.142]	.513	.042	.095	[-.149;.235]	.660	.106	.101	[-.093;.312]	.294
Racial/Ethnic Heterogeneity	.031	.089	[-.131;.210]	.728	-.024	.106	[-.231;.179]	.820	-.126	.114	[-.341;.110]	.271
Female Headed Household	.060	.101	[-.130;.261]	.550	.042	.126	[-.196;.283]	.738	-.026	.146	[-.282;.279]	.859
Less than High School	.005	.138	[-.237;.317]	.971	.204	.158	[-110;.528]	.196	.087	.182	[-.244;.478]	.631
Unemployment	.077	.145	[-.253;.312]	.597	.010	.161	[-.348;.298]	.953	.134	.212	[-.332;.474]	.529
Median Income	-.316	.191	[-.704;.035]	.098	**-.311**	**.148**	**[-.622;-.024]**	**.036**	-.152	.154	[-.478;.124]	.325
Gini Index	-.119	.101	[-.323;.070]	.239	.051	.113	[-171;.284]	.654	-.226	.121	[-.463;.047]	.061
Poverty	-.050	.191	[-.422;.338]	.795	-.017	.242	[-.476;.495]	.945	.140	.288	[-.404;.720]	.628
Sup. Gov. Assistance	-.060	.123	[-.304;.185]	.624	.062	.152	[-.259;.358]	.684	.180	.212	[-.238;.595]	.396
R^2	.722				.588				.481			

Note: Standardized estimates shown; Bold = Significant; *SE* = Standard Error; 95% CI = upper/lower limits for bootstrapped confidence interval; $p \geq .05$.

Table A12.
Regression Results for 2011 Crimes

Variable	Part 1 Personal Crimes				Part 1 Property Crimes				Part 2 Personal Crimes			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	0.011	.129	[-.257;.248]	.931	-.040	.108	[-.260;.149]	.711	-.040	.134	[-.332;.171]	.763
Rentals	.043	.189	[-.341;.380]	.821	.226	.211	[-.198;.630]	.284	.105	.193	[-.283;.460]	.587
Vacancies	.196	.113	[.016;.438]	.083	.102	.114	[-.069;.374]	.371	.168	.099	[.008;.404]	.091
Demographics												
Total Population	**.263**	**.090**	**[.086;.439]**	**.003**	**.647**	**.081**	**[.503;.816]**	**>.001**	**.552**	**.088**	**[.393;.741]**	**>.001**
Population Density	.107	.090	[-.074;.276]	.237	.028	.076	[-.112;.177]	.715	**.150**	**.067**	**[.030;.288]**	**.024**
Aged 15 to 24	.000	.087	[-.171;.171]	.998	.102	.086	[-.084;.268]	.237	-.055	.099	[-.246;.138]	.557
Racial/Ethnic Heterogeneity	.149	.102	[-.072;.339]	.145	.000	.146	[-295;.281]	.999	.115	.085	[-.055;.270]	.176
Female Headed Household	**.333**	**.124**	**[.062;.532]**	**.007**	.081	.113	[-.156;.287]	.477	.232	.121	[-.020;.445]	.056
Less than High School	.298	.190	[-.102;.651]	.117	.154	.155	[-.133;.481]	.321	.198	.138	[-.091;.461]	.151
Unemployment	-.116	.137	[-.391;.155]	.397	-.008	.149	[-.321;.279]	.960	-.147	.151	[-.459;.131]	.331
Median Income	-.123	.166	[-.478;.162]	.459	**-.384**	**.191**	**[-.811;-.049]**	**.045**	-.258	.159	[-595;.026]	.104
Gini Index	-.066	.118	[-.329;.141]	.572	-.099	.108	[-.314;.123]	.359	-.105	.123	[-.379;.094]	.393
Poverty	-.014	.233	[-.416;.490]	.951	-.143	.193	[-.487;.266]	.459	.083	.202	[-.263;.528]	.682
Sup. Gov. Assistance	.135	.130	[-.100;.413]	.297	-.155	.213	[-.606;.234]	.468	.066	.156	[-.250;.371]	.674
R^2			.669				.509				.663	

Variable	Part 2 Property Crimes				Public Order Offenses				Substance Offenses			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	-.007	.108	[-.251;.176]	.948	-.065	.166	[-.420;.201]	.696	-.109	.187	[-.496;.235]	.562
Rentals	.270	.169	[-.050;.616]	.111	.045	.206	[-.371;.435]	.826	.110	.235	[-.399;.521]	.641
Vacancies	.125	.122	[-.079;.397]	.305	.197	.144	[-.023;.530]	.170	.117	.168	[-.142;.509]	.485
Demographics												
Total Population	**.647**	**.083**	**[.483;.811]**	**>.001**	**.390**	**.106**	**[.194;.605]**	**>.001**	.090	.128	[-.126;.384]	.481
Population Density	.102	.084	[-.056;.268]	.224	**.180**	**.086**	**[.014;.349]**	**.037**	.147	.102	[-.036;.366]	.147
Aged 15 to 24	.027	.087	[-.155;.186]	.755	.003	.104	[-.208;.213]	.979	.042	.122	[-.198;.283]	.729
Racial/Ethnic Heterogeneity	.048	.099	[-.153;.234]	.631	.100	.102	[-.115;.292]	.329	-.136	.118	[-.379;.098]	.250
Female Headed Household	.131	.117	[-.120;.360]	.262	.166	.161	[-.153;.468]	.304	.084	.192	[-.298;.459]	.664
Less than High School	.255	.148	[-.013;.579]	.085	.240	.170	[-.115;.547]	.157	.127	.203	[-.311;.512]	.533
Unemployment	-.106	.136	[-.388;.166]	.436	-.065	.162	[-.386;.245]	.688	-.011	.194	[-.416;.330]	.954
Median Income	-.330	.171	[-.685;-.022]	.054	**-.308**	**.152**	**[-.646;-.029]**	**.043**	-.227	.155	[-.559;.067]	.145
Gini Index	-.004	.117	[-.221;.236]	.970	.050	.131	[-.239;.287]	.703	-.085	.151	[-.406;.177]	.576
Poverty	-.169	.199	[-.545;.249]	.396	-.106	.260	[-.540;.459]	.684	-.036	.304	[-.533;.623]	.907
Sup. Gov. Assistance	-.002	.152	[-.322;.258]	.989	.020	.185	[-.358;.362]	.915	.255	.218	[-.173;.674]	.243
R^2			.659				.594				.469	

Note: Standardized estimates shown; Bold = Significant; *SE* = Standard Error; 95% CI = upper/lower limits for bootstrapped confidence interval; $p \geq .05$.

Table A13.
Regression Results for 2012 Crimes

Variable	Part 1 Personal Crimes				Part 1 Property Crimes				Part 2 Personal Crimes			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	.028	.122	[-.251;.272]	.816	-.112	.107	[-.319;.100]	.295	-.079	.107	[-.293;.100]	.460
Rentals	.131	.164	[-.167;.463]	.424	.153	.184	[-.205;.508]	.407	-.103	.152	[-.182;.407]	.498
Vacancies	**.394**	**.128**	**[.151;.661]**	**.002**	.183	.116	[-.019;.447]	.114	**.218**	**.092**	**[.057;.414]**	**.018**
Demographics												
Total Population	**.349**	**.092**	**[.156;.519]**	**>.001**	**.681**	**.081**	**[.534;.861]**	**>.001**	**.602**	**.091**	**[.424;.777]**	**>.001**
Population Density	.102	.096	[-.088;.281]	.288	-.014	.067	[-.133;.120]	.840	**.190**	**.076**	**[.033;.335]**	**.013**
Aged 15 to 24	.014	.092	[-.182;.174]	.880	.091	.090	[-.068;.289]	.311	-.080	.090	[-.246;.103]	.373
Racial/Ethnic Heterogeneity	-.021	.095	[-.231;.160]	.823	.002	.118	[-242;.224]	.985	.099	.080	[-.063;.244]	.217
Female Headed Household	.004	.129	[-.254;.256]	.976	-.023	.098	[-.204;.175]	.815	.141	.099	[-.062;.323]	.153
Less than High School	**.295**	**.139**	**[-.004;.549]**	**.034**	.090	.104	[-105;.305]	.385	.146	.116	[-.106;.347]	.211
Unemployment	-.089	.187	[-.428;.317]	.635	.107	.114	[-.144;.299]	.350	.012	.143	[-.256;.300]	.934
Median Income	-.207	.153	[-.532;.069]	.175	**-.459**	**.193**	**[-.887;-.137]**	**.017**	-.322	.166	[-.662;-.013]	.053
Gini Index	-.004	.148	[-.315;.278]	.978	-.180	.109	[-.390;.019]	.097	-.104	.124	[-.388;.124]	.402
Poverty	.050	.234	[-.373;.543]	.831	-.247	.181	[-.608;.114]	.174	.044	.197	[-.335;.439]	.822
Sup. Gov. Assistance	.066	.125	[-.187;.297]	.595	-.058	.199	[-.481;.303]	.769	.027	.120	[-.223;.260]	.825
R^2	.621				.519				.707			

Variable	Part 2 Property Crimes				Public Order Offenses				Substance Offenses			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	-.072	.123	[-.324;.148]	.556	-.134	.170	[-.479;.177]	.429	-.177	.173	[-.519;.168]	.307
Rentals	.131	.170	[-.167;.481]	.439	.086	.218	[-.372;.521]	.693	.072	.188	[-.297;.452]	.704
Vacancies	**.269**	**.122**	**[.049;.517]**	**.027**	.202	.125	[-.039;.454]	.106	**.296**	**.134**	**[.041;.567]**	**.027**
Demographics												
Total Population	**.601**	**.087**	**[.435;.767]**	**>.001**	**.448**	**.112**	**[.220;.664]**	**>.001**	.201	.111	[-.021;.424]	.071
Population Density	.124	.091	[-.063;.291]	.171	.145	.091	[-.036;.324]	.113	.134	.096	[-.043;.332]	.165
Aged 15 to 24	.017	.100	[-.178;.221]	.869	.033	.112	[-.177;.257]	.766	.012	.105	[-.192;.226]	.909
Racial/Ethnic Heterogeneity	.056	.095	[-.147;.223]	.556	-.005	.101	[-.200;.209]	.957	-.103	.094	[-.277;.086]	.274
Female Headed Household	.053	.126	[-.192;.287]	.674	.033	.153	[-.258;.330]	.828	-.022	.150	[-.295;.291]	.883
Less than High School	.136	.149	[-.186;.416]	.362	.195	.138	[-.078;.466]	.158	.034	.169	[-.309;.361]	.842
Unemployment	.015	.160	[-.278;.332]	.925	.082	.179	[-.265;.442]	.649	.231	.189	[-.138;.590]	.221
Median Income	-.302	.168	[-.649;.022]	.072	-.286	.165	[-.612;.025]	.083	-.180	.158	[-.520;.128]	.255
Gini Index	.013	.140	[-.294;.260]	.926	.016	.150	[-.304;.263]	.914	-.080	.156	[-.403;.207]	.606
Poverty	-.025	.223	[-.449;.420]	.911	-.038	.284	[-.571;.556]	.894	.047	.280	[-.495;.614]	.867
Sup. Gov. Assistance	-.026	.134	[-.278;.241]	.846	-.011	.186	[-.374;.350]	.953	.096	.169	[-.233;.440]	.572
R^2	.610				.538				.511			

Note: Standardized estimates shown; Bold = Significant; *SE* = Standard Error; 95% CI = upper/lower limits for bootstrapped confidence interval; $p \geq .05$.

Table A14.
Regression Results for 2013 Crimes

Variable	Part 1 Personal Crimes				Part 1 Property Crimes				Part 2 Personal Crimes			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	.000	.112	[-.234;.208]	.999	-.106	.104	[-.309;.108]	.309	-.058	.106	[-.249;.172]	.585
Rentals	.016	.188	[-.342;.393]	.930	.129	.182	[-.194;.520]	.478	.069	.205	[-.323;.477]	.736
Vacancies	**.358**	**.138**	**[.096;.633]**	**.009**	.203	.114	[.006;.461]	.075	**.308**	**.109**	**[.109;.533]**	**.005**
Demographics												
Total Population	**.371**	**.092**	**[.184;.542]**	**>.001**	**.692**	**.094**	**[.526;.886]**	**>.001**	**.530**	**.082**	**[.366;.688]**	**>.001**
Population Density	.089	.085	[-.086;.249]	.298	-.040	.073	[-.177;.111]	.582	**.154**	**.072**	**[.000;.290]**	**.033**
Aged 15 to 24	-.071	.105	[-.285;.139]	.502	.071	.125	[-.154;.329]	.569	-.007	.099	[-.205;.183]	.946
Racial/Ethnic Heterogeneity	.087	.095	[-.113;.270]	.359	-.067	.116	[-.285;.166]	.565	.092	.083	[-.085;.241]	.267
Female Headed Household	-.002	.129	[-.256;.260]	.991	-.045	.095	[-207;.174]	.636	.026	.116	[-.175;.275]	.825
Less than High School	.258	.160	[-.071;.565]	.106	.023	.141	[-.258;.313]	.869	.263	.148	[-.056;.528]	.076
Unemployment	.009	.157	[-.288;.324]	.954	-.044	.118	[-.293;.168]	.705	-.011	.143	[-.271;.275]	.938
Median Income	-.130	.175	[-.484;.202]	.458	-.409	.226	[-.918;.014]	.070	-.298	.168	[-.632;.030]	.076
Gini Index	.015	.107	[-.186;.226]	.890	-.181	.111	[-.415;.044]	.104	-.028	.103	[-.239;.161]	.783
Poverty	.167	.221	[-.249;.616]	.450	.038	.225	[-.390;.505]	.867	-.043	.225	[-.460;.398]	.847
Sup. Gov. Assistance	.093	.113	[-.131;.303]	.412	-.063	.141	[-.374;.199]	.656	.068	.124	[-.189;.300]	.586
R^2	.645				.458				.678			

Variable	Part 2 Property Crimes				Public Order Offenses				Substance Offenses			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	-.173	.115	[-.402;.072]	.133	-.080	.136	[-.328;.199]	.555	-.225	.158	[-.510;.116]	.155
Rentals	.053	.176	[-.294;.416]	.764	-.048	.194	[-.415;.369]	.806	.050	.195	[-.311;.446]	.798
Vacancies	**.429**	**.114**	**[.209;.656]**	**>.001**	**.394**	**.117**	**[.168;.633]**	**.001**	**.452**	**.127**	**[.195;.695]**	**>.001**
Demographics												
Total Population	**.708**	**.085**	**[.532;.857]**	**>.001**	**.474**	**.087**	**[.288;.635]**	**>.001**	**.283**	**.092**	**[.093;.460]**	**.002**
Population Density	.038	.084	[-.136;.196]	.656	.103	.081	[-.054;.256]	.204	.100	.087	[-.063;.281]	.251
Aged 15 to 24	.005	.103	[-.195;.203]	.959	-.010	.124	[-.247;.240]	.938	-.120	.128	[-.355;.137]	.350
Racial/Ethnic Heterogeneity	.017	.081	[-.151;.169]	.830	.027	.092	[-.166;.200]	.768	-.097	.095	[-.278;.094]	.304
Female Headed Household	-.109	.105	[-.305;.116]	.298	-.039	.128	[-.266;.226]	.760	-.117	.144	[-.374;.217]	.418
Less than High School	.075	.150	[-.229;.365]	.617	.195	.132	[-.058;.451]	.140	.203	.153	[-.066;.524]	.184
Unemployment	.036	.135	[-.220;.297]	.789	-.047	.155	[-.340;.253]	.762	.174	.188	[-.191;.521]	.335
Median Income	-.194	.187	[-.591;.132]	.300	-.290	.177	[-.654;.051]	.101	-.023	.154	[-.324;.276]	.884
Gini Index	-.058	.104	[-.270;.145]	.577	.037	.118	[-.204;.268]	.754	.031	.130	[-.211;.283]	.814
Poverty	.192	.244	[-.284;.646]	.431	.065	.252	[-.403;.556]	.797	.104	.263	[-.461;.-565]	.692
Sup. Gov. Assistance	.034	.113	[-.220;.252]	.762	.101	.144	[-.216;.351]	.482	.055	.144	[-.252;.316]	.701
R^2	.655				.592				.569			

Note: Standardized estimates shown; Bold = Significant; *SE* = Standard Error; 95% CI = upper/lower limits for bootstrapped confidence interval; $p \geq .05$.

Table A15.
Regression Results for 2014 Crimes

Variable	Part 1 Personal Crimes				Part 1 Property Crimes				Part 2 Personal Crimes			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	-.162	.104	[-.393;.024]	.120	-.117	.121	[-.371;.125]	.335	-.116	.094	[-.309;.067]	.216
Rentals	-.193	.168	[-.532;.141]	.249	.193	.188	[-.160;.576]	.304	-.015	.185	[-.364;.356]	.933
Vacancies	**.585**	**.123**	**[.311;.789]**	**>.001**	**.309**	**.136**	**[.070;.596]**	**.023**	**.367**	**.125**	**[.123;.600]**	**.003**
Demographics												
Total Population	**.411**	**.095**	**[.216;.601]**	**>.001**	**.665**	**.110**	**[.459;.897]**	**>.001**	**.582**	**.081**	**[.419;.746]**	**>.001**
Population Density	.048	.074	[-.098;.189]	.520	-.019	.072	[-.157;.130]	.792	**.164**	**.076**	**[-.003;.305]**	**.030**
Aged 15 to 24	-.102	.110	[-.310;.116]	.352	-.008	.150	[-.277;.288]	.956	-.041	.091	[-.243;.124]	.653
Racial/Ethnic Heterogeneity	.080	.088	[-.107;.236]	.363	-.029	.108	[-.228;.205]	.785	.105	.082	[-.057;.252]	.198
Female Headed Household	-.074	.115	[-.277;.174]	.521	-.119	.103	[-.318;.087]	.247	-.019	.131	[-.251;.256]	.886
Less than High School	.148	.163	[-.189;.450]	.364	.173	.176	[-.205;.514]	.325	.137	.161	[-.222;.414]	.395
Unemployment	-.022	.148	[-.327;.243]	.881	-.149	.148	[-.466;.111]	.311	-.017	.157	[-.342;.273]	.913
Median Income	-.162	.177	[-.563;.135]	.358	-.423	.229	[-.923;.018]	.064	-.216	.163	[-.555;.071]	.185
Gini Index	.193	.128	[-.092;.402]	.131	-.107	.098	[-.298;.093]	.276	-.093	.094	[-.299;.090]	.325
Poverty	.187	.249	[-.272;.688]	.453	-.034	.248	[-.541;.452]	.892	.284	.215	[-.113;.744]	.186
Sup. Gov. Assistance	.008	.132	[-.261;.271]	.950	-.134	.164	[-.432;.199]	.414	.050	.133	[-.214;.317]	.705
R^2	.683				.461				.684			

Variable	Part 2 Property Crimes				Public Order Offenses				Substance Offenses			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	-.092	.120	[-.351;.129]	.444	-.132	.120	[-.383;.092]	.273	**-.252**	**.127**	**[-.489;.010]**	**.048**
Rentals	.200	.174	[-.162;.536]	.251	-.028	.200	[-.419;.374]	.889	.041	.180	[-.269;.436]	.821
Vacancies	**.421**	**.140**	**[.144;.695]**	**.003**	**.460**	**.134**	**[.217;.725]**	**.001**	**.570**	**.139**	**[.292;.826]**	**>.001**
Demographics												
Total Population	**.648**	**.095**	**[.447;.828]**	**>.001**	**.535**	**.094**	**[.357;.712]**	**>.001**	**.331**	**.091**	**[.149;.505]**	**>.001**
Population Density	.028	.084	[-.137;.178]	.742	.146	.081	[-.018;.301]	.072	.149	.084	[-.014;.319]	.077
Aged 15 to 24	.002	.107	[-.228;.197]	.987	-.047	.118	[-.295;.160]	.689	-.117	.096	[-.297;.074]	.223
Racial/Ethnic Heterogeneity	.022	.086	[-.163;.181]	.803	.006	.092	[-.184;.181]	.944	-.149	.085	[-.320;.013]	.081
Female Headed Household	-.079	.128	[-.303;.190]	.538	-.199	.136	[-.416;.122]	.144	**-.315**	**.141**	**[-.557;.017]**	**.025**
Less than High School	.223	.172	[-.155;.537]	.194	.180	.174	[-.197;.485]	.302	.149	.173	[-.191;.506]	.391
Unemployment	-.061	.158	[-.373;.242]	.701	.007	.187	[-.397;.332]	.970	.085	.175	[-.298;.399]	.627
Median Income	-.020	.179	[-.377;.317]	.909	-.080	.184	[-.447;.260]	.664	**.120**	**.141**	**[-.159;.381]**	**.025**
Gini Index	.039	.120	[-.176;.297]	.746	.018	.111	[-.200;.247]	.868	.103	.121	[-.135;.347]	.397
Poverty	.089	.241	[-.377;.587]	.712	.265	.243	[-.165;.767]	.275	.382	.211	[-.055;.788]	.070
Sup. Gov. Assistance	.087	.151	[-.218;.380]	.563	.136	.155	[-.169;.439]	.380	.068	.139	[-.202;.354]	.625
R^2	.628				.602				.617			

Note: Standardized estimates shown; Bold = Significant; *SE* = Standard Error; 95% CI = upper/lower limits for bootstrapped confidence interval; $p \geq .05$.

Table A16.
Regression Results for 2015 Crimes

Variable	Part 1 Personal Crimes				Part 1 Property Crimes				Part 2 Personal Crimes			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	.002	.083	[-.167;.154]	.985	-.124	.104	[-.337;.077]	.232	-.025	.090	[-.207;.142]	.779
Rentals	-.045	.156	[-.344;.266]	.771	.173	.166	[-.144;.535]	.298	.045	.175	[-.291;.402]	.796
Vacancies	**.377**	**.124**	**[.104;.604]**	**.002**	.208	.134	[-.058;.465]	.121	**.422**	**.124**	**[.171;.659]**	**.001**
Demographics												
Total Population	**.448**	**.087**	**[.270;.618]**	**>.001**	**.606**	**.126**	**[.362;.870]**	**>.001**	**.636**	**.088**	**[.471;.811]**	**>.001**
Population Density	**.146**	**.073**	**[.002;.285]**	**.044**	-.030	.072	[-.174;.115]	.676	**.158**	**.072**	**[.012;.292]**	**.028**
Aged 15 to 24	-.100	.092	[-.286;.083]	.279	-.096	.148	[-.377;.199]	.518	-.156	.105	[-.361;.064]	.136
Racial/Ethnic Heterogeneity	.155	.087	[-.023;.318]	.074	.045	.111	[-.149;.277]	.683	.185	.095	[-.005;.353]	.052
Female Headed Household	.006	.118	[-.182;.266]	.961	-.072	.114	[-.285;.177]	.530	-.061	.124	[-.273;.228]	.620
Less than High School	.252	.160	[-.121;.526]	.116	.024	.159	[-.319;.316]	.878	.011	.163	[-.332;.302]	.949
Unemployment	-.060	.165	[-.391;.269]	.715	-.088	.152	[-.413;.188]	.563	-.025	.143	[-.316;.266]	.862
Median Income	-.057	.162	[-.452;.196]	.724	-.374	.277	[-.984;.093]	.177	-.246	.190	[-.681;.052]	.196
Gini Index	-.088	.106	[-.276;.142]	.410	-.163	.107	[-.408;.035]	.128	-.179	.108	[-.397;.023]	.098
Poverty	.463	.254	[-.065;.947]	.068	.095	.326	[-.524;.767]	.770	.414	.234	[-.070;.870]	.077
Sup. Gov. Assistance	.059	.136	[-.216;.302]	.668	-.107	.151	[-.425;.173]	.480	.030	.148	[-.302;.299]	.841
R^2	.702				.390				.683			

Variable	Part 2 Property Crimes				Public Order Offenses				Substance Offenses			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	-.073	.118	[-.319;.150]	.536	-.079	.125	[-.356;.140]	.527	-.120	.104	[-.361;.069]	.250
Rentals	.097	.193	[-.273;.488]	.615	.062	.210	[-.341;.504]	.769	.203	.203	[-.167;.633]	.315
Vacancies	**.369**	**.131**	**[.104;.616]**	**.005**	**.405**	**.141**	**[.124;.668]**	**.004**	**.455**	**.139**	**[.151;.707]**	**.001**
Demographics												
Total Population	**.671**	**.093**	**[.486;.849]**	**>.001**	**.523**	**.095**	**[.341;.712]**	**>.001**	**.315**	**.103**	**[.104;.509]**	**.002**
Population Density	.113	.082	[-.056;.267]	.169	.139	.077	[-.016;.284]	.069	.161	.096	[-.021;.357]	.092
Aged 15 to 24	-.039	.113	[-.262;.173]	.730	-.133	.120	[-.357;.109]	.268	-.117	.108	[-.335;.093]	.277
Racial/Ethnic Heterogeneity	.044	.080	[-.119;.196]	.585	.071	.090	[-.124;.225]	.430	-.073	.092	[-.260;.100]	.429
Female Headed Household	-.179	.145	[-.447;.145]	.217	-.166	.154	[-.446;.192]	.282	-.135	.137	[-.353;.188]	.322
Less than High School	.031	.160	[-.338;.307]	.847	.108	.173	[-.285;.396]	.530	.200	.194	[-.212;.537]	.303
Unemployment	-.121	.157	[-.428;.192]	.441	-.085	.167	[-.422;.235]	.610	-.015	.179	[-.363;.325]	.935
Median Income	-.260	.215	[-.757;.109]	.227	-.170	.213	[-.635;.185]	.424	.164	.196	[-.252;.520]	.403
Gini Index	-.141	.116	[-.373;.078]	.226	-.069	.151	[-.369;.219]	.648	-.177	.154	[-.484;.122]	.251
Poverty	.392	.242	[-.079;.859]	.104	.381	.254	[-.119;.897]	.133	.407	.254	[-.095;.903]	.109
Sup. Gov. Assistance	.076	.166	[-.266;.389]	.645	.093	.171	[-.266;.395]	.588	.158	.167	[-.162;.476]	.344
R^2	.589				.566				.530			

Note: Standardized estimates shown; Bold = Significant; *SE* = Standard Error; 95% CI = upper/lower limits for bootstrapped confidence interval; $p \geq .05$.

Table A17.
Regression Results for 2016 Crimes

Variable	Part 1 Personal Crimes				Part 1 Property Crimes				Part 2 Personal Crimes			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	.129	.112	[-.091;.343]	.250	-.018	.097	[-.222;.166]	.853	.062	.101	[-.141;.253]	.535
Rentals	.236	.166	[-.094;.546]	.155	.223	.159	[-.077;.566]	.162	.107	.156	[-.168;.436]	.494
Vacancies	**.475**	**.168**	**[.104;.777]**	**.005**	.246	.151	[-.045;.558]	.104	**.319**	**.145**	**[.040;.618]**	**.028**
Demographics												
Total Population	**.375**	**.105**	**[.171;.593]**	**>.001**	**.613**	**.138**	**[.373;.898]**	**>.001**	**.593**	**.096**	**[.404;.775]**	**>.001**
Population Density	**.158**	**.080**	**[-.007;.308]**	**.048**	-.018	.077	[-.174;.124]	.811	**.198**	**.086**	**[.015;.360]**	**.021**
Aged 15 to 24	-.091	.102	[-.276;.122]	.372	-.034	.118	[-.239;.213]	.774	-.121	.108	[-.349;.108]	.264
Racial/Ethnic Heterogeneity	.051	.085	[-.126;.203]	.546	.010	.127	[-.211;.271]	.934	**.169**	**.084**	**[-.002;.337]**	**.045**
Female Headed Household	-.083	.145	[-.335;.241]	.565	-.096	.126	[-.338;.172]	.446	.066	.138	[-.202;.341]	.632
Less than High School	.144	.167	[-.215;.445]	.391	.011	.151	[-.315;.283]	.939	.005	.183	[-.366;.339]	.978
Unemployment	.078	.181	[-.271;.432]	.665	-.162	.151	[-.439;.133]	.283	-.029	.159	[-.308;.318]	.857
Median Income	.102	.180	[-.232;.506]	.570	-.153	.249	[-.681;.317]	540	-.184	.177	[-543;.145]	.299
Gini Index	-.068	.107	[-.263;.141]	.522	-.019	.112	[-.239;.197]	.863	-.151	.102	[-.346;.047]	.139
Poverty	**.453**	**.221**	**[.018;.878]**	**.041**	.159	.246	[-.331;.663]	.518	**.376**	**.184**	**[-.017;.695]**	**.041**
Sup. Gov. Assistance	.033	.147	[-.263;.306]	.820	.091	.149	[-.210;.390]	.541	.076	.162	[-.256;.388]	.641
R^2	.663				.410				.671			

Variable	Part 2 Property Crimes				Public Order Offenses				Substance Offenses			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	.011	.120	[-.224;.245]	.925	-.068	.160	[-.411;.226]	.670	-.164	.144	[-.448;.120]	.524
Rentals	.194	.173	[-.136;.536]	.263	.126	.193	[-.213;.512]	.514	.261	.193	[-.120;.615]	.175
Vacancies	**.290**	**.148**	**[-.001;.589]**	**.049**	**.392**	**.176**	**[.031;.706]**	**.026**	**.452**	**.170**	**[.112;.783]**	**.008**
Demographics												
Total Population	**.684**	**.093**	**[.495;.855]**	**>.001**	**.513**	**.104**	**[.289;.704]**	**>.001**	**.344**	**.113**	**[.120;.561]**	**.002**
Population Density	.067	.091	[-.118;.233]	.462	.175	.093	[-.027;.341]	.060	.120	.102	[-.086;.312]	.240
Aged 15 to 24	-.029	.106	[-.264;.157]	.787	-.167	.129	[-.453;.091]	.198	-.104	.123	[-.374;.133]	.400
Racial/Ethnic Heterogeneity	.062	.076	[-.088;.205]	.415	.122	.092	[-.067;.292]	.184	-.106	.077	[-.271;.039]	.168
Female Headed Household	.060	.132	[-.215;.322]	.649	-.159	.172	[-.496;.196]	.353	-.173	.139	[-.430;.133]	.212
Less than High School	.083	.183	[-.330;.389]	.652	.045	.199	[-.380;.410]	822	.267	.236	[-.288;.662]	.259
Unemployment	-.097	.171	[-.420;.252]	.571	.041	.196	[-.313;.470]	.835	.100	.187	[-.249;.475]	.591
Median Income	-.161	.174	[-.496;.162]	.355	-.174	.204	[-.619;.177]	.394	.177	.189	[-149;.593]	.350
Gini Index	-.015	.110	[-.209;.214]	.888	-.073	.130	[-.315;.179]	.577	-.073	.136	[-.325;.204]	.593
Poverty	.252	.202	[-.137;.645]	.211	.239	.241	[-.292;.666]	.322	.257	.270	[-.239;.790]	.341
Sup. Gov. Assistance	.027	.154	[-.303;.307]	.862	.098	.190	[-.283;.492]	.604	.071	.186	[-.281;.425]	.702
R^2	.637				.564				.544			

Note: Standardized estimates shown; Bold = Significant; *SE* = Standard Error; 95% CI = upper/lower limits for bootstrapped confidence interval; $p \geq .05$.

Table A18.
Regression Results for 2017 Crimes

Variable	Part 1 Personal Crimes				Part 1 Property Crimes				Part 2 Personal Crimes			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	.153	.133	[-.101;.405]	.248	-.032	.110	[-.247;.207]	.773	.141	.106	[-.071;.352]	.184
Rentals	.157	.209	[-.270;.564]	.454	.245	.166	[-.076;.591]	.141	.078	.150	[-.200;.400]	.605
Vacancies	.181	.170	[-.163;.530]	.287	.210	.147	[-.094;.489]	.153	.210	.113	[-.019;.423]	.064
Demographics												
Total Population	**.305**	**.117**	**[.068;.531]**	**.009**	**.694**	**.119**	**[.451;.925]**	**>.001**	**.624**	**.091**	**[.446;.796]**	**>.001**
Population Density	.181	.106	[-.032;.378]	.087	-.056	.088	[-.223;.108]	.523	**.179**	**.087**	**[-.016;.335]**	**.041**
Aged 15 to 24	-.172	.101	[-.377;.026]	.087	-.176	.104	[-.396;.020]	.092	**-.200**	**.090**	**[-.373;.006]**	**.025**
Racial/Ethnic Heterogeneity	.165	.118	[-.062;.400]	.162	.033	.125	[-.217;.279]	.792	**.275**	**.091**	**[.090;.435]**	**.002**
Female Headed Household	.130	.161	[-.177;.477]	.422	-.097	.116	[-.316;.138]	.401	.031	.116	[-.176;.277]	.788
Less than High School	.143	.202	[-.293;.480]	.480	.010	.138	[-.290;.268]	.942	.142	.143	[-.131;.438]	.321
Unemployment	-.121	.176	[-.501;.205]	.494	-.143	.137	[-.393;.138]	.297	-.111	.130	[-.375;.156]	.394
Median Income	.052	.212	[-.328;.488]	.806	-.279	.253	[-.930;.069]	.270	-.136	.157	[-.511;.143]	.386
Gini Index	-.138	.110	[-.332;.103]	.209	-.149	.131	[-.387;.132]	.254	**-.194**	**.088**	**[-.351;.011]**	**.027**
Poverty	**.594**	**.205**	**[.192;.982]**	**.004**	.278	.236	[-.243;.695]	.238	**.464**	**.181**	**[.059;.774]**	**.010**
Sup. Gov. Assistance	.004	.160	[-.320;.310]	.981	-.055	.130	[-.323;.172]	.674	.111	.128	[-.157;.340]	.387
R^2	.527				.463				.724			

Variable	Part 2 Property Crimes				Public Order Offenses				Substance Offenses			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	.068	.111	[-.145;.284]	.540	-.149	.163	[-.492;.152]	.360	-.123	.160	[-.431;.189]	.442
Rentals	.267	.169	[-.076;.561]	.114	.129	.198	[-.258;.534]	.515	.282	.213	[-.131;.706]	.185
Vacancies	**.311**	**.124**	**[.052;.541]**	**.012**	.239	.158	[-.091;.541]	.130	**.430**	**.169**	**[.085;.770]**	**.011**
Demographics												
Total Population	**.715**	**.100**	**[.532;.915]**	**>.001**	**.570**	**.101**	**[.364;.755]**	**>.001**	.182	.104	[-.027;.374]	.079
Population Density	.042	.092	[-.132;.225]	.647	.128	.104	[-.082;.335]	.219	.129	.100	[-.068;.318]	.199
Aged 15 to 24	**-.168**	**.085**	**[-.324;.007]**	**.048**	**-.235**	**.117**	**[-.452;.015]**	**.044**	-.116	.107	[-.329;.078]	.278
Racial/Ethnic Heterogeneity	.090	.089	[-.094;.251]	.313	.119	.115	[-.116;.326]	.302	.028	.094	[-.160;.215]	.762
Female Headed Household	.011	.118	[-.209;.254]	.928	.051	.163	[-.252;.400]	.755	-.232	.174	[-.538;.150]	.181
Less than High School	-.044	.133	[-.349;.177]	.743	.018	.178	[-.337;.370]	.918	.213	.184	[-.209;.498]	.249
Unemployment	-.020	.130	[-.285;.217]	.880	.027	.171	[-.314;.342]	.874	.082	.217	[-.371;.498]	.707
Median Income	-.252	.194	[-.735;.033]	.194	-.200	.223	[-.743;.166]	.369	.089	.189	[-.267;.499]	.638
Gini Index	-.115	.113	[-.322;.129]	.309	-.205	.121	[-.424;.055]	.091	-.121	.123	[-.360;.137]	.327
Poverty	.346	.205	[-.098;.741]	.092	.260	.226	[-.273;.672]	.249	.156	.272	[-.338;.751]	.566
Sup. Gov. Assistance	-.027	.136	[-.312;.215]	.844	-.011	.170	[-.379;.299]	.947	.091	.134	[-.190;.321]	.497
R^2	.657				.521				.508			

Note: Standardized estimates shown; Bold = Significant; *SE* = Standard Error; 95% CI = upper/lower limits for bootstrapped confidence interval; $p \geq .05$.

Table A19.
Regression results for 2018 Crimes

Variable	Part 1 Personal Crimes				Part 1 Property Crimes				Part 2 Personal Crimes			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	-.007	.119	[-.252;.213]	.951	-.077	.109	[-.309;.133]	.480	0.07	.119	[-.186;.286]	.556
Rentals	.019	.135	[-.227;.325]	.889	.256	.135	[.025;.556]	.050	.220	.151	[-.081;.515]	.147
Vacancies	**.319**	**.137**	**[.061;.590]**	**.020**	**.211**	**.103**	**[.010;.424]**	**.040**	**.227**	**.116**	**[.054;.508]**	**.017**
Demographics												
Total Population	**.409**	**.108**	**[.179;.620]**	**>.001**	**.668**	**.121**	**[.441;.906]**	**>.001**	**.661**	**.080**	**[.503;.820]**	**>.001**
Population Density	.103	.096	[-.088;.295]	.283	-.017	.081	[-.177;.138]	.836	.161	.087	[-.027;.321]	.064
Aged 15 to 24	-.110	.092	[-.279;.088]	.235	-.168	.097	[-.349;.029]	.081	-.183	.100	[-.371;.037]	.066
Racial/Ethnic Heterogeneity	.211	.127	[-.064;.437]	.098	-.046	.100	[-.228;.164]	.647	.142	.089	[-.057;.305]	.112
Female Headed Household	.191	.156	[-.098;.502]	.221	-.075	.121	[-.296;.177]	.534	-.045	.124	[-.269;.216]	.718
Less than High School	.148	.122	[-.111;.386]	.223	-.099	.123	[-.333;.127]	.420	-.009	.113	[-.254;.181]	.937
Unemployment	.061	.148	[-.219;.378]	.681	.097	.129	[-.132;.370]	.455	.099	.146	[-.197;.390]	.500
Median Income	-.202	.166	[-.559;.087]	.223	-.279	.198	[-.744;.044]	.159	-.299	.192	[-.686;.052]	.119
Gini Index	**-.217**	**.104**	**[-.405;.004]**	**.036**	-.070	.123	[-.332;.161]	.570	-.114	.111	[-.314;.124]	.303
Poverty	.291	.198	[-.159;.614]	.143	.025	.169	[-.329;.345]	.884	.124	.232	[-.376;.535]	.592
Sup. Gov. Assistance	-.183	.113	[-.425;.022]	.105	.033	.119	[-.235;.237]	.780	.083	.109	[-.153;.273]	.444
R^2	.624				.442				.679			

Variable	Part 2 Property Crimes				Public Order Offenses				Substance Offenses			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	-.091	.125	[-.346;.161]	.470	-.168	.135	[-.452;.088]	.214	-.086	.129	[-.345;.139]	.502
Rentals	.146	.150	[-.132;.451]	.333	.158	.168	[-.176;.477]	.345	.245	.164	[-.104;.552]	.135
Vacancies	**.209**	**.105**	**[.002;.405]**	**.047**	.258	.147	[-.024;.559]	.080	**.441**	**.156**	**.134;.757]**	**.005**
Demographics												
Total Population	**.723**	**.080**	**[.565;.875]**	**>.001**	**.543**	**.089**	**[.358;.712]**	**>.001**	**.271**	**.097**	**[.063;.451]**	**.005**
Population Density	.082	.089	[-.105;.251]	.353	.076	.091	[-.124;.249]	.406	.135	.092	[-.055;.318]	.142
Aged 15 to 24	-.163	.087	[-.318;.025]	.061	**-.212**	**.107**	**[-.415;.013]**	**.048**	-.118	.112	[-.345;.096]	.292
Racial/Ethnic Heterogeneity	.033	.076	[-.118;.171]	.663	.049	.100	[-.154;.233]	.628	-.066	.103	[-.266;.125]	.523
Female Headed Household	.086	.109	[-.112;.309]	.433	.091	.140	[-.169;.397]	.515	-.166	.146	[-.443;.119]	.254
Less than High School	-.013	.099	[-.228;.162]	.896	-.060	.136	[-.354;.176]	.660	.029	.149	[-.263;.312]	.846
Unemployment	.052	.125	[-.199;.300]	.677	.131	.164	[-.162;.449]	.425	.162	.228	[-.285;.613]	.476
Median Income	**-.375**	**.180**	**[-.772;.-.075]**	**.037**	-.236	.217	[-.672;.183]	.278	-.034	.200	[-.427;.363]	.864
Gini Index	-.124	.093	[-.298;.073]	.185	-.203	.118	[-.430;.039]	.086	-.096	.128	[-.358;.170]	.455
Poverty	.179	.182	[-.220;.492]	.325	.195	.230	[-.262;.611]	.395	.155	.314	[-.467;.760]	.621
Sup. Gov. Assistance	.055	.106	[-.144;.259]	.601	-.001	.126	[-.276;.228]	.996	.173	.116	[-.072;.403]	.137
R^2	.724				.549				.516			

Note: Standardized estimates shown; Bold = Significant; *SE* = Standard Error; 95% CI = upper/lower limits for bootstrapped confidence interval; $p \geq .05$.

Table A20.
Regression Results for 2019 Crimes

Variable	Part 1 Personal Crimes				Part 1 Property Crimes				Part 2 Personal Crimes			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	.015	.135	[-.273;.264]	.913	-.153	.115	[-.379;.066]	.183	.028	.121	[-.239;.264]	.820
Rentals	.144	.134	[-.111;.439]	.282	.240	.147	[-.023;.558]	.103	.172	.164	[-.131;.504]	.292
Vacancies	**.348**	**.152**	**[.059;.652]**	**.022**	**.258**	**.128**	**[-.020;.494]**	**.045**	**.283**	**.113**	**[.071;.528]**	**.012**
Demographics												
Total Population	**.346**	**.098**	**[.124;.509]**	**>.001**	**.724**	**.110**	**[.502;.930]**	**>.001**	**.658**	**.091**	**[.471;.826]**	**>.001**
Population Density	.155	.095	[-.048;.310]	.102	-.036	.078	[-.199;.113]	.639	**.186**	**.080**	**[.013;.330]**	**.020**
Aged 15 to 24	-.153	.107	[-.340;.092]	.152	-.057	.084	[-.214;.116]	.494	-.076	.098	[-.257;.128]	.437
Racial/Ethnic Heterogeneity	.133	.117	[-.093;.362]	.256	-.093	.097	[-.290;.099]	.338	.030	.094	[-.162;.205]	.748
Female Headed Household	.120	.129	[-.148;.381]	.351	.052	.117	[-.162;.300]	.659	.194	.125	[-.062;.441]	.123
Less than High School	.255	.141	[.017;.541]	.072	.078	.114	[-.132;.308]	.497	.073	.118	[-.179;.298]	.534
Unemployment	.046	.131	[-.197;.323]	.726	-.112	.125	[-.349;.130]	.371	-.053	.121	[-.275;.181]	.660
Median Income	.080	.162	[-.242;.433]	.623	-.257	.260	[-.893;.187]	.322	-.306	.186	[-.728;.028]	.100
Gini Index	-.027	.213	[-.426;.380]	.900	-.065	.168	[-.433;.244]	.697	-.119	.157	[-.432;.190]	.448
Poverty	.240	.262	[-.336;.683]	.360	.066	.205	[-.379;.423]	.746	.078	.219	[-.436;.457]	.723
Sup. Gov. Assistance	-.005	.151	[-.327;.241]	.976	-.116	.125	[-.383;.131]	.354	.032	.135	[-.244;.272]	.812
R^2	.612				.498				.669			

Variable	Part 2 Property Crimes				Public Order Offenses				Substance Offenses			
	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Residential Mobility												
Geographic Mobility	-.082	.130	[-.345;.165]	.528	-.106	.151	[-.422;.179]	.481	-.220	.176	[-.572;.136]	.210
Rentals	.180	.131	[-.055;.464]	.171	.054	.163	[-.253;.383]	.742	.274	.206	[-.119;.687]	.183
Vacancies	.222	.123	[-.027;.445]	.072	.275	.161	[-.018;.607]	.088	**.594**	**.143**	**[.326;.875]**	**>.001**
Demographics												
Total Population	**.782**	**.086**	**[.610;.944]**	**>.001**	**.507**	**.091**	**[.307;.674]**	**>.001**	**.304**	**.106**	**[.083;.489]**	**.004**
Population Density	.082	.095	[-.124;.245]	.386	**.203**	**.082**	**[.014;.334]**	**.013**	.136	.086	[-.037;.288]	.116
Aged 15 to 24	-.127	.092	[-.283;.074]	.169	-.159	.105	[-.347;.061]	.130	-.093	.123	[-.325;.142]	.448
Racial/Ethnic Heterogeneity	-.106	.089	[-.285;.056]	.231	.105	.098	[-.097;.304]	.285	-.114	.115	[-.324;.142]	.321
Female Headed Household	.159	.106	[-.054;.373]	.134	.228	.128	[-.031;.484]	.076	-.029	.131	[-.270;.229]	.823
Less than High School	.062	.133	[-.236;.305]	.641	-.022	.153	[-.316;.266]	.884	.103	.151	[-.225;.378]	.493
Unemployment	-.038	.104	[-.231;.174]	.717	-.033	.137	[-.308;.234]	.810	.016	.134	[-.238;.281]	.903
Median Income	-.213	.163	[-.552;.080]	.191	-.182	.183	[-.587;.167]	.320	.007	.203	[-.375;.426]	.972
Gini Index	.009	.182	[-.344;.364]	.962	-.171	.193	[-.581;.187]	.376	.079	.175	[-.300;.375]	.651
Poverty	.251	.231	[-.243;.678]	.277	.311	.257	[-.225;.778]	.226	.057	.248	[-.450;.486]	.819
Sup. Gov. Assistance	.006	.133	[-.278;.232]	.962	.041	.155	[-.306;.319]	.792	-.071	.144	[-.359;.203]	.620
R^2	.684				.572				.544			

Note: Standardized estimates shown; Bold = Significant; *SE* = Standard Error; 95% CI = upper/lower limits for bootstrapped confidence interval; $p \geq .05$.

Table A21. *Regression Results for 2010 Calls for Service and Crime*

	Variable	Part 1 Personal Crimes				Part 1 Property Crimes				Part 2 Personal Crimes			
		Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Calls for Service	Part 1 Personal	.036	.102	[-.145;.251]	.726	-.038	.055	[-.138;.070]	.493	**.112**	**.055**	**[.006;.216]**	**.042**
	Part 1 Property	-.030	.200	[-.491;.321]	.881	**.714**	**.177**	**[.415;1.081]**	**>.001**	.045	.135	[-.235;.301]	.738
	Part 2 Personal	.363	.208	[-.034;.785]	.081	**-.358**	**.117**	**[-.562;-.113]**	**.002**	**.463**	**.147**	**[.201;.759]**	**.002**
	Part 2 Property	-.036	.121	[-.159;.317]	.765	**.505**	**.167**	**[.166;.708]**	**.003**	-.052	.064	[-.182;.101]	.422
	Public Order	.458	.259	[-.124;.902]	.076	-.051	.150	[-.337;.232]	.731	.197	.136	[-.063;.470]	.148
	Substance Offense	**.205**	**.099**	**[.028;.428]**	**.038**	.057	.049	[-.046;.143]	.238	-.057	.077	[-.198;.103]	.461
	Non-Crime Service	-.152	.183	[-.522;.183]	.405	.093	.095	[-.069;.292]	.325	.102	.128	[-.166;.321]	.425
Res Mob	Geographic Mobility	-.070	.089	[-.252;.083]	.427	.024	.041	[-.062;.102]	.557	.062	.062	[-.072;.171]	.315
	Rentals	.069	.117	[-.171;.297]	.556	.082	.056	[-.014;.208]	.148	.148	.108	[-.054;.358]	.172
	Vacancies	.149	.096	[-.030;.339]	.121	-.015	.050	[-.129;.292]	.772	-.013	.061	[-.162;.089]	.833
Demographics	Total Population	-.020	.094	[-.225;.145]	.835	.077	.054	[-.017;.192]	.151	**.183**	**.080**	**[.040;.358]**	**.022**
	Population Density	.084	.074	[-.071;.220]	.255	-.021	.030	[-.087;.036]	.483	.034	.039	[-.041;.112]	.384
	Aged 15 to 24	-.032	.069	[-.161;.104]	.641	.030	.038	[-.028;.117]	.431	.016	.042	[-.076;.096]	.713
	Racial/Ethnic Heterogeneity	**-.178**	**.090**	**[-.348;-.002]**	**.048**	.018	.041	[-.079;.085]	.665	-.051	.060	[-.188;.051]	.395
	Female Headed Household	-.074	.092	[-.232;.117]	.421	.016	.052	[-.083;.125]	.756	.145	.074	[-.010;.287]	.051
	Less than High School	-.068	.142	[-.360;.193]	.629	-.028	.056	[-.155;.066]	.620	.089	.082	[-.074;.251]	.278
	Unemployment	-.029	.094	[-.244;.126]	.761	-.058	.061	[-.173;.059]	.343	-.031	.083	[-.217;.118]	.711
	Median Income	.011	.100	[-.209;.185]	.908	**-.150**	**.058**	**[-.253;-.028]**	**.010**	-.141	.103	[-.325;.094]	.171
	Gini Index	.025	.092	[-.174;.187]	.783	-.094	.050	[-.195;.005]	.060	.030	.063	[-.093;.165]	.633
	Poverty	.061	.159	[-.230;.384]	.703	-.059	.075	[-.224;.072]	.431	-.201	.126	[-.390;.106]	.112
	Sup. Gov. Assistance	.132	.106	[-.086;.331]	.212	.052	.062	[-.064;.179]	.398	-.050	.078	[-.207;.109]	.522
R^2				.826				.957				.920	

	Variable	Part 2 Property Crimes				Public Order Offenses				Substance Offenses			
		Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Calls for Service	Part 1 Personal	.017	.060	[-.098;.141]	.784	.025	.074	[-.133;.163]	.732	.124	.099	[-.113;.291]	.210
	Part 1 Property	**.503**	**.153**	**[.173;.800]**	**.001**	-.197	.171	[-.514;.159]	.290	-.394	.233	[-.825;.077]	.090
	Part 2 Personal	-.125	.156	[-.432;.191]	.425	**.327**	**.160**	**[.057;.681]**	**.040**	.045	.231	[-.375;.541]	.846
	Part 2 Property	.011	.082	[-.072;.253]	.889	.097	.114	[-.204;.250]	.398	.103	.099	[-.039;.340]	.298
	Public Order	.198	.187	[-.147;.585]	.288	**.437**	**.193**	**[.038;.788]**	**.023**	**.668**	**.275**	**[.076;1.137]**	**.015**
	Substance Offense	**.217**	**.071**	**[.054;.345]**	**.002**	-.106	.101	[-.276;.124]	.291	**.261**	**.131**	**[-.036;.490]**	**.046**
	Non-Crime Service	.041	.138	[-.250;.284]	.768	**.370**	**.149**	**[.064;.656]**	**.012**	.132	.198	[-.277;.523]	.504
Res Mob	Geographic Mobility	-.012	.058	[-.139;.101]	.836	-.040	.076	[-.202;.098]	.650	-.101	.118	[-.296;.141]	.391
	Rentals	.197	.108	[-.008;.406]	.069	.019	.119	[-.206;.262]	.875	.039	.157	[-.288;.350]	.803
	Vacancies	.093	.071	[-.085;.199]	.195	-.105	.092	[-.288;.082]	.250	-.062	.131	[-.288;.234]	.635
Demographics	Total Population	**.178**	**.074**	**[.012;.306]**	**.017**	-.096	.101	[-.266;.135]	.343	**-.300**	**.131**	**[-.528;-.015]**	**.022**
	Population Density	.018	.044	[-.060;.112]	.679	**.112**	**.056**	**[-.001;.224]**	**.046**	.088	.075	[-.049;.243]	.242
	Aged 15 to 24	-.024	.045	[-.119;.059]	.599	.053	.066	[-.080;.182]	.420	.078	.079	[-.064;.245]	.323
	Racial/Ethnic Heterogeneity	-.050	.069	[-.194;.077]	.469	-.121	.069	[-.271;.001]	.080	-.159	.098	[-.357;.035]	.103
	Female Headed Household	-.009	.072	[-.148;.145]	.896	.137	.088	[-.049;.295]	.122	-.049	.119	[-.271;.204]	.681
	Less than High School	-.068	.084	[-.226;.116]	.422	.078	.118	[-.175;.292]	.511	.017	.147	[-.269;.301]	.908
	Unemployment	-.016	.082	[-.186;.134]	.846	.086	.102	[-.131;.265]	.399	.017	.142	[-.290;.260]	.907
	Median Income	-.131	.119	[-.368;.085]	.269	-.072	.115	[-.278;.191]	.529	-.002	.132	[-.276;.266]	.988
	Gini Index	.020	.071	[-.122;.165]	.774	.110	.094	[-.054;.315]	.240	-.161	.102	[-.349;.063]	.113
	Poverty	-.112	.125	[-.347;.141]	.369	-.241	.150	[-.513;.062]	.108	.080	.194	[-.291;.450]	.679
	Sup. Gov. Assistance	.001	.081	[-.150;.165]	.994	-.016	.099	[-.194;.202]	.868	.158	.170	[-.152;.496]	.352
R^2				.911				.865				.772	

Note: Standardized estimates shown; Bold = Significant; *SE* = Standard Error; 95% CI = upper/lower limits for bootstrapped confidence interval; $p \geq .05$.

Table A22. *Regression Results for 2011 Calls for Service and Crime*

	Variable	Part 1 Personal Crimes				Part 1 Property Crimes				Part 2 Personal Crimes			
		Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Calls for Service	Part 1 Personal	.074	.095	[-.111;.268]	.439	-.030	.050	[-.137;.060]	.541	.096	.059	[-.028;.212]	.105
	Part 1 Property	-.047	.215	[-.535;.315]	.825	**.664**	**.154**	**[.398;.983]**	**>.001**	-.178	.163	[-.487;.145]	.274
	Part 2 Personal	.351	.264	[-.215;.845]	.184	**-.286**	**.140**	**[-.555;-.004]**	**.041**	**.523**	**.153**	**[.199;.815]**	**.001**
	Part 2 Property	.086	.066	[-.015;.254]	.192	**.500**	**.156**	**[.186;.673]**	**.001**	-.054	.059	[-.154;.091]	.362
	Public Order	.573	.328	[-.003;1.268]	.081	.019	.169	[-.262;.394]	.911	.343	.197	[-.005;.742]	.082
	Substance Offense	.045	.096	[-.197;.187]	.641	-.016	.055	[-.153;.068]	.779	-.122	.068	[-.242;.023]	.074
	Non-Crime Service	-.286	.178	[-.657;.043]	.107	.152	.089	[-.008;.354]	.090	.191	.117	[-.064;.398]	.102
Res Mob	Geographic Mobility	.035	.091	[-.138;.228]	.697	.029	.051	[-.077;.123]	.570	-.060	.063	[-.188;.059]	.343
	Rentals	-.025	.147	[-.331;.249]	.866	.119	.075	[-.009;.300]	.113	.09	.099	[-.101;.296]	.365
	Vacancies	.099	.092	[-.105;.260]	.281	-.026	.052	[-.138;.072]	.624	-.002	.057	[-.104;.117]	.965
Demographics	Total Population	-.092	.084	[-.269;.071]	.273	.019	.053	[-.074;.143]	.717	**.156**	**.068**	**[.035;.299]**	**.021**
	Population Density	-.018	.062	[-.121;.116]	.779	-.029	.033	[-.103;.029]	.381	.028	.047	[-.061;.119]	.558
	Aged 15 to 24	.051	.070	[-.088;.181]	.473	.018	.035	[-.040;.100]	.605	.023	.039	[-.058;.094]	.551
	Racial/Ethnic Heterogeneity	.056	.093	[-.141;.239]	.547	.056	.043	[-.050;.123]	.193	-.075	.057	[-.196;.028]	.186
	Female Headed Household	**.225**	**.098**	**[.027;.421]**	**.022**	**.102**	**.049**	**[.015;.209]**	**.035**	**.141**	**.055**	**[.043;.254]**	**.010**
	Less than High School	.073	.161	[-.209;.416]	.647	-.059	.069	[-.197;.077]	.393	.021	.092	[-.149;.205]	.815
	Unemployment	-.122	.118	[-.352;.100]	.300	-.099	.059	[-.205;.021]	.094	-.082	.074	[-.243;.043]	.268
	Median Income	.007	.120	[-.261;.216]	.952	-.123	.065	[-.277;-.019]	.060	**-.161**	**.081**	**[-.360;-.027]**	**.047**
	Gini Index	-.059	.099	[-.253;.141]	.555	-.077	.042	[-.156;.014]	.066	-.085	.064	[-.207;.047]	.186
	Poverty	-.032	.164	[-.356;.315]	.846	-.078	.087	[-.263;.080]	.367	-.012	.102	[-.228;.177]	.903
	Sup. Gov. Assistance	.077	.104	[-.134;.281]	.457	-.005	.067	[-.167;.098]	.946	-.064	.072	[-.202;.082]	.371
R^2				.857				.951				.926	

	Variable	Part 2 Property Crimes				Public Order Offenses				Substance Offenses			
		Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Calls for Service	Part 1 Personal	.063	.085	[-.093;.240]	.457	.030	.070	[-.102;.183]	.663	.121	.115	[-.074;.380]	.290
	Part 1 Property	**.370**	**.187**	**[-.015;.719]**	**.048**	-.005	.184	[-.339;.392]	.978	-.319	.274	[-.828;.256]	.244
	Part 2 Personal	-.121	.216	[-.581;.278]	.576	.195	.192	[-.196;.563]	.311	-.087	.312	[-.789;.465]	.780
	Part 2 Property	.048	.104	[-.060;.355]	.641	.068	.087	[-.141;.185]	.433	.031	.090	[-.136;.221]	.729
	Public Order	.354	.224	[-.090;.817]	.114	**.694**	**.236**	**[.227;1.181]**	**.003**	**1.110**	**.422**	**[.280;1.928]**	**.008**
	Substance Offense	.030	.095	[-.162;.217]	.753	**.205**	**.078**	**[.059;.375]**	**.009**	.166	.116	[-.054;.407]	.154
	Non-Crime Service	.082	.155	[-.255;.372]	.596	-.144	.134	[-.458;.083]	.283	-.107	.224	[-.568;.315]	.633
Res Mob	Geographic Mobility	.012	.072	[-.125;.159]	.864	-.004	.075	[-.156;.141]	.954	-.047	.101	[-.244;.158]	.644
	Rentals	**.263**	**.124**	**[.038;.527]**	**.034**	-.066	.095	[-.248;.149]	.493	.040	.167	[-.300;.354]	.810
	Vacancies	-.036	.082	[-.197;.129]	.660	.073	.082	[-.088;.240]	.370	-.011	.123	[-.238;.235]	.927
Demographics	Total Population	**.192**	**.089**	**[-.014;.338]**	**.032**	-.128	.072	[-.251;.038]	.073	**-.328**	**.107**	**[-.533;-.094]**	**.002**
	Population Density	.001	.054	[-.093;.118]	.983	.044	.044	[-.052;.128]	.323	.056	.076	[-.082;.225]	.458
	Aged 15 to 24	.012	.066	[-.132;.120]	.855	.036	.056	[-.060;.160]	.517	.081	.070	[-.053;.216]	.245
	Racial/Ethnic Heterogeneity	-.071	.083	[-.220;.105]	.394	-.001	.055	[-.114;.103]	.990	**-.268**	**.106**	**[-.466;-.031]**	**.011**
	Female Headed Household	.094	.084	[-.043;.280]	.262	.067	.076	[-.079;.223]	.381	-.001	.130	[-.211;.284]	.995
	Less than High School	.115	.108	[-.095;.330]	.286	.027	.085	[-.151;.200]	.751	.043	.143	[-.221;.348]	.761
	Unemployment	-.166	.114	[-.435;.034]	.146	-.128	.076	[-.270;.025]	.091	-.115	.119	[-.374;.116]	.334
	Median Income	-.171	.109	[-.423;.024]	.116	-.110	.078	[-.262;.047]	.157	-.052	.106	[-.262;.153]	.625
	Gini Index	.029	.078	[-.099;.203]	.713	.073	.074	[-.066;.231]	.319	-.072	.105	[-.282;.120]	.493
	Poverty	-.198	.142	[-.509;.025]	.165	-.057	.112	[-.307;.142]	.612	-.001	.180	[-.358;.371]	.997
	Sup. Gov. Assistance	-.027	.106	[-.263;.159]	.798	-.072	.098	[-.266;.120]	.460	.160	.164	[-.169;.471]	.327
R^2				.873				.913				.793	

Note: Standardized estimates shown; Bold = Significant; *SE* = Standard Error; 95% CI = upper/lower limits for bootstrapped confidence interval; $p \geq .05$.

Table A23. *Regression Results for 2012 Calls for Service and Crime*

	Variable	Part 1 Personal Crimes				Part 1 Property Crimes				Part 2 Personal Crimes			
		Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Calls for Service	Part 1 Personal	.011	.081	[-.141;.181]	.890	.086	.058	[-.032;.195]	.142	-.055	.049	[-.158;.032]	.260
	Part 1 Property	-.027	.206	[-.421;.421]	.896	**.478**	**.176**	**[.198;.885]**	**.007**	.019	.118	[-.166;.282]	.874
	Part 2 Personal	**.566**	**.287**	**[-.074;1.057]**	**.048**	-.281	.200	[-.696;.085]	.159	**.738**	**.129**	**[.444;.969]**	**>.001**
	Part 2 Property	-.016	.093	[-.238;.122]	.866	**.550**	**.155**	**[.133;.723]**	**>.001**	-.097	.050	[-.212;-.014]	.053
	Public Order	**.726**	**.269**	**[.251;1.322]**	**.007**	.044	.188	[-.317;.420]	.817	.169	.163	[-.135;.507]	.298
	Substance Offense	-.076	.094	[-.273;.095]	.418	-.015	.068	[-.181;.089]	.826	.023	.053	[-.096;.114]	.668
	Non-Crime Service	**-.366**	**.180**	**[-.675;.009]**	**.042**	.075	.112	[-.112;.326]	.501	.077	.087	[-.096;.257]	.377
Res Mob	Geographic Mobility	.100	.098	[-.124;.270]	.307	.014	.056	[-.098;.129]	.810	-.017	.041	[-.093;.066]	.686
	Rentals	.134	.126	[-.065;.424]	.288	.097	.092	[-.066;.293]	.293	.083	.065	[-.037;.220]	.205
	Vacancies	.147	.098	[-.054;.346]	.133	.055	.070	[-.100;.174]	.428	003	.049	[-.094;.111]	.954
Demographics	Total Population	-.075	.084	[-.256;.074]	.368	.082	.065	[-.051;.209]	.206	.093	.058	[-.010;.218]	.110
	Population Density	-.060	.060	[-.182;.049]	.315	-.026	.041	[-.108;.053]	.521	.029	.036	[-.039;.103]	.416
	Aged 15 to 24	.062	.100	[-.140;.235]	.535	.038	.047	[-.057;.137]	.421	-.025	.040	[-.107;.045]	.521
	Racial/Ethnic Heterogeneity	-.128	.100	[-.339;.048]	.202	.044	.050	[-.052;.149]	.388	-.017	.041	[-.107;.055]	.672
	Female Headed Household	-.055	.089	[-.221;.135]	.539	.074	.059	[-.025;.205]	.209	**.097**	**.046**	**[.016;.194]**	**.035**
	Less than High School	.092	.114	[-.150;.314]	.421	-.061	.070	[-.205;.081]	.386	-.076	.066	[-.228;.041]	.252
	Unemployment	**-.250**	**.112**	**[-.455;-.003]**	**.026**	-.002	.075	[-.170;.126]	.980	**-.121**	**.053**	**[-.232;-.026]**	**.023**
	Median Income	.008	.100	[-.219;.202]	.938	**-.159**	**.068**	**[-.295;-.028]**	**.019**	-.131	.068	[-.275;-.003]	.055
	Gini Index	.024	.101	[-.155;.262]	.815	-.093	.068	[-.219;.050]	.175	-.060	.051	[-.152;.057]	.243
	Poverty	.027	.173	[-.353;.332]	.875	-.109	.091	[-.301;.053]	.229	.012	.089	[-.183;.167]	.897
	Sup. Gov. Assistance	.032	.096	[-.172;.192]	.737	-.015	.061	[-.129;.104]	.808	-.020	.052	[-.129;.079]	.702
R^2				.842				.905				.953	

	Variable	Part 2 Property Crimes				Public Order Offenses				Substance Offenses			
		Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Calls for Service	Part 1 Personal	-.128	.072	[-.276;.010]	.075	.010	.065	[-.129;.129]	.873	.029	.087	[-.160;.181]	.741
	Part 1 Property	.028	.192	[-.387;.375]	.883	**-.519**	**.176**	**[-.823;-.141]**	**.003**	**-.450**	**.218**	**[-.875;.006]**	**.039**
	Part 2 Personal	.333	.210	[-.121;.693]	.113	**.587**	**.201**	**[.236;1.010]**	**.004**	.483	.249	[.024;.953]	.052
	Part 2 Property	**.205**	**.069**	**[.097;.371]**	**.003**	.105	.121	[-.156;.287]	.387	.049	.073	[-.089;.197]	.503
	Public Order	**.622**	**.209**	**[.281;1.119]**	**.003**	**.545**	**.204**	**[.146;.918]**	**.008**	**.727**	**.259**	**[.273;1.254]**	**.005**
	Substance Offense	-.139	.084	[-.297;.026]	.097	.034	.082	[-.123;.200]	.678	.049	.103	[-.151;.262]	.637
	Non-Crime Service	.001	.138	[-.258;.278]	.994	.273	.161	[-.022;.605]	.090	.074	.179	[-.310;.409]	.680
Res Mob	Geographic Mobility	.009	.061	[-.121;.127]	.885	.006	.078	[-.148;.161]	.936	-.047	.102	[-.233;.164]	.645
	Rentals	.106	.107	[-.070;.351]	.321	.063	.101	[-.149;.255]	.530	.069	.131	[-.189;.325]	.598
	Vacancies	.023	.088	[-.126;.218]	.791	.033	.076	[-.129;.176]	.662	.106	.101	[-.115;.293]	.292
Demographics	Total Population	.032	.086	[-.124;.217]	.707	-.134	.080	[-.268;.043]	.095	**-.322**	**.094**	**[-.526;-.148]**	**.001**
	Population Density	.042	.050	[-.049;.144]	.395	.028	.054	[-.073;.143]	.598	.011	.073	[-.116;.174]	.883
	Aged 15 to 24	-.021	.059	[-.153;.082]	.717	.103	.066	[-.017;.234]	.117	.080	.073	[-.069;.219]	.272
	Racial/Ethnic Heterogeneity	-.013	.065	[-.151;.108]	.838	-.087	.059	[-.202;.033]	.142	**-.201**	**.084**	**[-.357;-.030]**	**.017**
	Female Headed Household	.051	.067	[-.069;.189]	.444	.043	.086	[-.116;.223]	.617	-.022	.105	[-.203;.206]	.833
	Less than High School	-.052	.095	[-.237;.136]	.586	.059	.095	[-.146;.232]	.529	-.088	.144	[-.366;.210]	.543
	Unemployment	**-.186**	**.093**	**[-.368;-.002]**	**.045**	-.072	.083	[-.246;.079]	.387	.082	.120	[-.169;.319]	.495
	Median Income	-.057	.090	[-.228;.125]	.525	-.046	.098	[-.230;.162]	.640	.057	.120	[-.180;.313]	.636
	Gini Index	.050	.092	[-.110;.250]	.586	.031	.076	[-.108;.188]	.683	-.061	.111	[-.240;.179]	.584
	Poverty	.059	.153	[-.243;.330]	.700	-.118	.125	[-.376;.120]	.347	-.043	.167	[-.405;.146]	.795
	Sup. Gov. Assistance	-.031	.079	[-.196;.117]	.694	-.044	.085	[-.201;.119]	.604	.057	.106	[-.158;.259]	.590
R^2				.893				.902				.819	

Note: Standardized estimates shown; Bold = Significant; *SE* = Standard Error; 95% CI = upper/lower limits for bootstrapped confidence interval; $p \geq .05$.

Table A24. *Regression Results for 2013 Calls for Service and Crime*

	Variable	Part 1 Personal Crimes				Part 1 Property Crimes				Part 2 Personal Crimes			
		Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Calls for Service	Part 1 Personal	-.002	.064	[-.114;.140]	.971	-.027	.049	[-.118;.079]	.589	-.061	.050	[-.149;.043]	.227
	Part 1 Property	.267	.165	[-.115;.548]	.105	**.352**	**.179**	**[.024;.715]**	**.049**	-.062	.106	[-.258;.168]	.560
	Part 2 Personal	**.608**	**.213**	**[.169;1.008]**	**.004**	-.253	.130	[-.560;-.055]	.051	**.880**	**.126**	**[.640;1.134]**	**>.001**
	Part 2 Property	-.104	.064	[-.258;.003]	.106	**.598**	**.150**	**[.175;.747]**	**>.001**	-.016	.049	[-.116;.088]	.739
	Public Order	.410	.232	[-.025;.908]	.078	.103	.154	[-.188;.438]	.505	.230	.136	[-.039;.515]	.090
	Substance Offense	.014	.088	[-.141;.219]	.873	**.149**	**.064**	**[.019;.283]**	**.021**	-.017	.057	[-.141;.087]	.758
	Non-Crime Service	**-.351**	**.161**	**[-.728;-.067]**	**.029**	.060	.118	[-.139;.323]	.610	-.062	.092	[-.255;.116]	.504
Res Mob	Geographic Mobility	.066	.076	[-.094;.205]	.384	.056	.056	[-.058;.168]	.318	.052	.048	[-.034;161]	.285
	Rentals	.066	.121	[-.183;.297]	.587	.002	.078	[-.149;.162]	.981	.136	.094	[-.031;.343]	.147
	Vacancies	.093	.093	[-.090;.283]	.321	.041	.055	[-.064;.151]	.457	.053	.052	[-.073;.142]	.310
Demographics	Total Population	-.074	.079	[-.234;.082]	.350	.049	.064	[-.080;.171]	.439	.059	.055	[-.054;.156]	.281
	Population Density	-.092	.057	[-.208;.010]	.107	-.028	.036	[-.103;.047]	.448	-.015	.037	[-.096;.054]	.681
	Aged 15 to 24	-.062	.058	[-.190;.049]	.289	.075	.052	[-.027;.180]	.149	.044	.047	[-.048;.132]	.340
	Racial/Ethnic Heterogeneity	-.059	.066	[-.210;.054]	.368	.049	.056	[-.076;.141]	.384	-.030	.039	[-.116;.037]	.435
	Female Headed Household	.031	.071	[-.112;.173]	.665	.089	.052	[-.002;.201]	.085	.100	.057	[.009;.238]	.082
	Less than High School	-.072	.096	[-.266;.114]	.453	-.080	.066	[-.217;.043]	.228	-.040	.069	[-.179;.099]	.568
	Unemployment	-.117	.103	[-.304;.102]	.256	-.077	.074	[-.229;.080]	.297	**-.151**	**.065**	**[-.284;-.035]**	**.021**
	Median Income	.075	.092	[-.105;.276]	.418	-.122	.079	[-.273;.052]	.122	-.067	.067	[-.192;.077]	.315
	Gini Index	.056	.077	[-.095;.210]	.466	-.065	.076	[-.203;.096]	.395	-.050	.057	[-.152;.072]	.376
	Poverty	.182	.143	[-.097;.457]	.204	.058	.088	[-.122;.229]	.511	.000	.103	[-.221;.193]	.998
	Sup. Gov. Assistance	.007	.073	[-.136;.148]	.927	.002	.058	[-.125;.107]	.971	-.021	.061	[-.152;.082]	.728
R^2				.892				.933				.950	

	Variable	Part 2 Property Crimes				Public Order Offenses				Substance Offenses			
		Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Calls for Service	Part 1 Personal	.005	.059	[-.106;.125]	.934	-.057	.063	[-.185;.062]	.362	-.013	.083	[-.177;.138]	.874
	Part 1 Property	.118	.132	[-.149;.381]	.370	.058	.141	[-.189;.363]	.683	-.122	.212	[-.526;.316]	.564
	Part 2 Personal	**.347**	**.176**	**[-.046;.663]**	**.049**	**.470**	**.158**	**[.164;.791]**	**.003**	.139	.259	[-.306;.693]	.592
	Part 2 Property	**.178**	**.076**	**[.090;.392]**	**.019**	.072	.092	[-.143;.215]	.431	.049	.086	[-.081;.260]	.570
	Public Order	.341	.202	[-.006;.768]	.091	**.451**	**.174**	**[.072;.767]**	**.009**	**.705**	**.281**	**[.078;1.194]**	**.012**
	Substance Offense	-.124	.079	[-.265;.047]	.120	.045	.081	[-.122;.190]	.580	.100	.108	[-.137;.295]	.355
	Non-Crime Service	.083	.146	[-.260;.330]	.569	.011	.138	[-.217;.318]	.936	.036	.204	[-.272;.538]	.860
Res Mob	Geographic Mobility	-.066	.057	[-.172;.052]	.244	.055	.071	[-.075;.195]	.434	-.098	.105	[-.293;.127]	.350
	Rentals	.084	.104	[-.108;.301]	.418	-.001	.102	[-.187;.210]	.991	.092	.150	[-.192;.391]	.541
	Vacancies	**.168**	**.070**	**[-.028;.300]**	**.016**	.095	.067	[-.033;.232]	.154	.182	.107	[-.025;.403]	.089
Demographics	Total Population	**.140**	**.072**	**[-.024;.259]**	**.050**	**-.146**	**.072**	**[-.290;-.009]**	**.042**	**-.249**	**.099**	**[-.467;-.080]**	**.012**
	Population Density	-.051	.047	[-.146;.037]	.280	-.024	.054	[-.130;.081]	.662	.041	.082	[-.115;.210]	.613
	Aged 15 to 24	.012	.061	[-.123;.122]	.849	.013	.062	[-.106;.136]	.839	-.112	.088	[-.280;.062]	.202
	Racial/Ethnic Heterogeneity	-.056	.050	[-.148;.047]	.264	-.080	.054	[-.196;.027]	.140	**-.203**	**.088**	**[-.357;-.010]**	**.020**
	Female Headed Household	-.034	.064	[-.148;.112]	.598	.063	.071	[-.057;.219]	.379	-.019	.109	[-.193;.229]	.858
	Less than High School	-.141	.085	[-.322;.014]	.097	-.060	.080	[-.223;.109]	.452	.050	.144	[-.222;.348]	.730
	Unemployment	-.040	.081	[-.197;.130]	.623	-.178	.094	[-.365;.004]	.057	.048	.143	[-.236;.323]	.737
	Median Income	.058	.093	[-.132;.229]	.535	-.015	.078	[-.153;.158]	.844	.193	.112	[-.016;.414]	.085
	Gini Index	-.032	.071	[-.159;.117]	.649	.066	.076	[-.070;.228]	.381	.055	.112	[-.158;.293]	.627
	Poverty	.205	.137	[-.129;.438]	.135	.061	.127	[-.208;.288]	.632	.057	.216	[-.430;.397]	.791
	Sup. Gov. Assistance	-.019	.076	[-.173;.125]	.800	.039	.067	[-.107;.167]	.563	.016	.090	[-.185;.169]	.854
R^2				.911				.916				.818	

Note: Standardized estimates shown; Bold = Significant; *SE* = Standard Error; 95% CI = upper/lower limits for bootstrapped confidence interval; $p \geq .05$.

Table A25. *Regression Results for 2014 Calls for Service and Crime*

	Variable	Part 1 Personal Crimes				Part 1 Property Crimes				Part 2 Personal Crimes			
		Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Calls for Service	Part 1 Personal	-.067	.091	[-.234;.118]	.461	.046	.059	[-.063;.167]	.442	.010	.048	[-.082;.111]	.840
	Part 1 Property	.128	.219	[-.298;.572]	.558	**.421**	**.147**	**[.209;.780]**	**.004**	-.077	.101	[-.278;.106]	.443
	Part 2 Personal	.301	.287	[-.254;.923]	.295	-.161	.139	[-.452;.123]	.246	**.792**	**.102**	**[.585;.995]**	**>.001**
	Part 2 Property	-.106	.079	[-.271;.026]	.178	**.597**	**.196**	**[.116;.780]**	**.002**	-.034	.052	[-.151;.042]	.514
	Public Order	.350	.265	[-.224;.803]	.186	-.004	.125	[-.258;.255]	.972	**.302**	**.123**	**[.082;.567]**	**.014**
	Substance Offense	-.007	.161	[-.320;.308]	.964	.071	.067	[-.059;.222]	.288	.112	.081	[-.026;.292]	.167
	Non-Crime Service	.070	.181	[-.323;.411]	.699	.054	.105	[-.142;.280]	.609	**-.175**	**.078**	**[-.328;-.026]**	**.025**
Res Mob	Geographic Mobility	-.084	.087	[-.262;.088]	.337	.007	.055	[-.084;.127]	.899	.025	.046	[-.062;.120]	.589
	Rentals	-.173	.143	[-.452;.110]	.226	.044	.075	[-.115;.191]	.559	-.001	.069	[-.135;.135]	.983
	Vacancies	**.287**	**.128**	**[.002;.506]**	**.025**	**.133**	**.062**	**[.010;.248]**	**.031**	.067	.056	[-.048;.176]	.228
Demographics	Total Population	-.045	.118	[-.294;.174]	.703	.103	.062	[-.006;.236]	.094	.053	.049	[-.041;.156]	.283
	Population Density	-.049	.063	[-.181;.070]	.434	-.004	.037	[-.088;.056]	.910	.012	.030	[-.053;.063]	.679
	Aged 15 to 24	-.088	.085	[-.256;.083]	.301	.052	.064	[-.046;.201]	.417	.056	.049	[-.039;.163]	.254
	Racial/Ethnic Heterogeneity	-.029	.084	[-.196;.121]	.729	.013	.053	[-.123;.089]	.811	.018	.037	[-.063;.076]	.627
	Female Headed Household	.027	.095	[-.134;.237]	.772	.062	.050	[-.025;.178]	.214	**.119**	**.047**	**[.036;.230]**	**.011**
	Less than High School	-.014	.127	[-.288;.217]	.911	-.028	.083	[-.166;.155]	.738	-.114	.073	[-.247;.033]	.120
	Unemployment	-.018	.122	[-.224;.244]	.879	-.048	.066	[-.193;.070]	.471	-.061	.061	[-.193;.058]	.317
	Median Income	-.100	.127	[-.384;.120]	.431	**-.155**	**.078**	**[-.308;.001]**	**.046**	**-.143**	**.056**	**[-.252;-.025]**	**.012**
	Gini Index	**.246**	**.111**	**[.016;.470]**	**.027**	-.019	.058	[-.128;.104]	.739	-.015	.049	[-.102;.094]	.756
	Poverty	.043	.208	[-.367;.440]	.837	-.043	.095	[-.249;.143]	.653	-.007	.095	[-.202;.171]	.945
	Sup. Gov. Assistance	-.124	.098	[-.334;.071]	.207	**-.124**	**.055**	**[-.236;-.020]**	**.025**	-.092	.052	[-.201;.006]	.080
R^2				.836				.943				.960	

	Variable	Part 2 Property Crimes				Public Order Offenses				Substance Offenses			
		Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Calls for Service	Part 1 Personal	.043	.071	[-.096;.179]	.547	.032	.060	[-.083;.142]	.588	.077	.095	[-.109;.269]	.416
	Part 1 Property	.106	.142	[-.168;.383]	.459	.103	.158	[-.176;.437]	.513	-.060	.206	[-.492;.306]	.772
	Part 2 Personal	.087	.181	[-.261;.479]	.633	.205	.175	[-.161;.539]	.241	.323	.263	[-.152;.880]	.220
	Part 2 Property	**.157**	**.079**	**[-.009;.302]**	**.047**	.095	.122	[-.162;.278]	.436	-.015	.076	[-.170;.135]	.848
	Public Order	**.446**	**.199**	**[.050;.795]**	**.025**	**.570**	**.148**	**[.241;.809]**	**>.001**	.251	.240	[-.212;.719]	.294
	Substance Offense	.050	.115	[-.155;.295]	.666	.119	.081	[-.019;.304]	.143	**.324**	**.134**	**[.053;.581]**	**.015**
	Non-Crime Service	.047	.168	[-.275;.386]	.779	-.067	.120	[-.257;.208]	.574	-.045	.142	[-.324;.262]	.752
Res Mob	Geographic Mobility	.038	.076	[-.105;.179]	.615	.019	.061	[-.090;.150]	.753	-.075	.095	[-.253;.141]	.431
	Rentals	.164	.113	[-.086;.361]	.147	-.054	.087	[-.205;.141]	.536	.012	.144	[-.234;.321]	.932
	Vacancies	.151	.101	[-.065;.341]	.135	.135	.079	[-.020;.297]	.088	**.358**	**.113**	**[.131;.579]**	**.002**
Demographics	Total Population	.093	.083	[-.083;.266]	.261	-.102	.063	[-.241;.018]	.110	-.182	.104	[-.417;.008]	.080
	Population Density	-.029	.050	[-.132;.057]	.566	.051	.044	[-.042;.135]	.245	.064	.060	[-.056;.183]	.292
	Aged 15 to 24	.045	.075	[-.117;.181]	.552	.003	.064	[-.115;.136]	.960	-.017	.076	[-.170;.143]	.826
	Racial/Ethnic Heterogeneity	-.052	.066	[-.169;.089]	.429	-.087	.061	[-.210;.029]	.153	**-.211**	**.079**	**[-.365;-.049]**	**.008**
	Female Headed Household	.083	.075	[-.053;.251]	.267	-.020	.077	[-.129;.175]	.798	-.143	.114	[-.316;.130]	.209
	Less than High School	.053	.120	[-.190;.292]	.662	-.036	.091	[-.221;.135]	.692	.007	.127	[-.235;.264]	.954
	Unemployment	-.054	.101	[-.242;.150]	.593	.001	.082	[-.166;.166]	.988	.071	.109	[-.149;.292]	.515
	Median Income	.102	.097	[-.075;.319]	.296	.033	.098	[-.106;.275]	.734	.201	.110	[.029;.449]	.068
	Gini Index	.095	.104	[-.068;.325]	.361	.099	.069	[-.023;.249]	.151	.206	.109	[-.004;.426]	.059
	Poverty	-.040	.163	[-.372;.293]	.806	.075	.130	[-.181;.343]	.566	.127	.178	[-.239;.448]	.475
	Sup. Gov. Assistance	-.028	.091	[-.204;.162]	.761	-.021	.061	[-.136;.100]	.734	-.051	.090	[-.263;.105]	.570
R^2				.884				.923				.849	

Note: Standardized estimates shown; Bold = Significant; *SE* = Standard Error; 95% CI = upper/lower limits for bootstrapped confidence interval; $p \geq .05$.

Table A26. *Regression Results for 2015 Calls for Service and Crime*

	Variable	Part 1 Personal Crimes				Part 1 Property Crimes				Part 2 Personal Crimes			
		Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Calls for Service	Part 1 Personal	.001	.095	[-.200;.170]	.993	**.123**	**.055**	**[.013;.226]**	**.025**	**.142**	**.057**	**[.027;.254]**	**.013**
	Part 1 Property	-.052	.150	[-.392;.219]	.731	**.440**	**.134**	**[.231;.746]**	**.001**	-.089	.116	[-.318;.159]	.445
	Part 2 Personal	.396	.217	[.030;.896]	.068	-.216	.125	[-.447;.053]	.083	**.782**	**.140**	**[.498;1.045]**	**>.001**
	Part 2 Property	.015	.073	[-.171;.119]	.834	**.639**	**.197**	**[.104;.806]**	**.001**	-.012	.061	[-.190;.069]	.841
	Public Order	**.539**	**.222**	**[.009;.857]**	**.015**	.091	.096	[-.116;.287]	.345	.186	.131	[-.065;.471]	.155
	Substance Offense	-.016	.091	[-.196;.164]	.861	-.041	.049	[-.146;.052]	.402	-.003	.054	[-.118;.094]	.949
	Non-Crime Service	-.181	.188	[-.443;.280]	.336	.084	.116	[-.090;.362]	.469	-.065	.109	[-.253;.177]	.551
Res Mob	Geographic Mobility	.053	.074	[-.090;.193]	.471	-.042	.036	[-.108;.029]	.238	.047	.046	[-.050;.131]	.309
	Rentals	-.050	.108	[-.289;.129]	.646	.051	.067	[-.074;.188]	.441	.073	.070	[-.085;.208]	.301
	Vacancies	.085	.110	[-.200;.254]	.441	.060	.067	[-.098;.168]	.368	**.137**	**.068**	**[-.028;.244]**	**.044**
Demographics	Total Population	.088	.103	[-.134;.272]	.392	**.114**	**.054**	**[.018;.219]**	**.035**	**.238**	**.067**	**[.108;.363]**	**>.001**
	Population Density	.043	.057	[-.060;.160]	.446	.015	.034	[-.056;.075]	.662	.006	.036	[-.058;.082]	.870
	Aged 15 to 24	-.053	.088	[-.200;.146]	.547	-.004	.064	[-.087;.174]	.951	-.063	.057	[-.156;.067]	.272
	Racial/Ethnic Heterogeneity	.032	.077	[-.135;.166]	.678	-.009	.049	[-.123;.074]	.852	-.021	.059	[-.153;.078]	.716
	Female Headed Household	.095	.100	[-.056;.336]	.341	.085	.066	[-.025;.237]	.198	**.121**	**.056**	**[.025;.243]**	**.030**
	Less than High School	.073	.150	[-.204;.394]	.628	-.003	.079	[-.144;.171]	.968	**-.217**	**.082**	**[-.357;-.044]**	**.008**
	Unemployment	-.087	.117	[-.331;.123]	.460	-.051	.053	[-.169;.040]	.335	-.087	.067	[-.228;.045]	.194
	Median Income	.034	.120	[-.232;.246]	.779	.087	.075	[-.118;.183]	.251	-.094	.082	[-.272;.059]	.247
	Gini Index	.022	.080	[-.117;.189]	.779	-.009	.043	[-.102;.064]	.828	-.038	.051	[-.136;.065]	.458
	Poverty	.307	.182	[-.067;.657]	.091	.087	.094	[-.124;.256]	.356	.172	.106	[-.070;.342]	.107
	Sup. Gov. Assistance	-.053	.110	[-.263;.174]	.632	-.052	.062	[-.204;.041]	.404	-.104	.065	[-.225;.028]	.107
R^2				.868				.955				.938	

	Variable	Part 2 Property Crimes				Public Order Offenses				Substance Offenses			
		Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Calls for Service	Part 1 Personal	.062	.081	[-.116;.209]	.445	.106	.076	[-.071;.237]	.165	-.053	.110	[-.288;.153]	.633
	Part 1 Property	.059	.147	[-.162;.434]	.686	-.088	.141	[-.392;.192]	.533	.104	.202	[-.231;.580]	.605
	Part 2 Personal	.258	.182	[-.127;.559]	.155	**.508**	**.177**	**[.187;.884]**	**.004**	**.678**	**.221**	**[.211;1.066]**	**.002**
	Part 2 Property	.212	.129	[-.041;.436]	.102	.108	.137	[-.166;.307]	.433	-.043	.096	[-.257;.125]	.652
	Public Order	**.401**	**.142**	**[.123;.690]**	**.005**	**.419**	**.150**	**[.118;.718]**	**.005**	.118	.187	[-.287;.487]	.526
	Substance Offense	.052	.070	[-.087;.190]	.459	.045	.069	[-.092;.172]	.511	.184	.096	[.016;.401]	.055
	Non-Crime Service	.040	.161	[-.331;.309]	.804	.047	.158	[-.205;.412]	.766	.026	.153	[-.225;.368]	.866
Res Mob	Geographic Mobility	.024	.062	[-.092;.153]	.702	.022	.054	[-.087;.126]	.677	-.006	.076	[-.150;.151]	.932
	Rentals	.044	.101	[-.121;.280]	.663	.044	.085	[-.128;.219]	.603	.154	.132	[-.119;.409]	.243
	Vacancies	.041	.092	[-.154;.214]	.657	.037	.093	[-.169;.199]	.688	.081	.125	[-.201;.304]	.518
Demographics	Total Population	.133	.082	[-.036;.292]	.107	-.024	.077	[-.180;.120]	.760	**-.264**	**.109**	**[-.517;-.082]**	**.015**
	Population Density	.046	.049	[-.057;.132]	.343	.032	.041	[-.045;.112]	.437	.000	.070	[-.130;.145]	.995
	Aged 15 to 24	.060	.061	[-.065;.173]	.324	-.021	.074	[-.138;.156]	.781	-.002	.084	[-.151;.187]	.981
	Racial/Ethnic Heterogeneity	-.090	.060	[-.199;.030]	.130	**-.117**	**.059**	**[-.228;.007]**	**.048**	**-.201**	**.089**	**[-.366;-.023]**	**.024**
	Female Headed Household	.025	.074	[-.117;.174]	.734	.074	.086	[-.065;.281]	.388	.060	.105	[-.111;.302]	.565
	Less than High School	-.089	.109	[-.325;.119]	.416	-.042	.16	[-.248;.171]	.691	-.068	.161	[-.340;.322]	.675
	Unemployment	-.118	.087	[-.279;.069]	.175	-.111	.082	[-.266;.048]	.174	.006	.121	[-.220;.253]	.961
	Median Income	-.016	.107	[-.202;.231]	.885	.048	.124	[-.184;.298]	.700	.246	.143	[-.010;.592]	.085
	Gini Index	.021	.070	[-.123;.154]	.767	.096	.072	[-.055;.239]	.181	.019	.086	[-.131;.212]	.824
	Poverty	.187	.131	[-.067;.446]	.153	.115	.146	[-.198;.381]	.432	.058	.188	[-.299;.459]	.760
	Sup. Gov. Assistance	-.026	.090	[-.201;.155]	.772	-.057	.073	[-.207;.074]	.440	.002	.094	[-.168;.192]	.979
R^2				.897				.910				.840	

Note: Standardized estimates shown; Bold = Significant; *SE* = Standard Error; 95% CI = upper/lower limits for bootstrapped confidence interval; $p \geq .05$.

Table A27. *Regression Results for 2016 Calls for Service and Crime*

	Variable	Part 1 Personal Crimes				Part 1 Property Crimes				Part 2 Personal Crimes			
		Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Calls for Service	Part 1 Personal	.125	.082	[-.038;.295]	.125	.069	.051	[-.037;.163]	.178	-.031	.063	[-.160;.095]	.626
	Part 1 Property	-.119	.175	[-.512;.199]	.497	**.410**	**.199**	**[.190;.899]**	**.039**	-.006	.126	[-.232;.271]	.963
	Part 2 Personal	**.556**	**.237**	**[.002;.914]**	**.019**	-.215	.124	[-.452;.023]	.083	**.844**	**.135**	**[.559;1.100]**	**>.001**
	Part 2 Property	.031	.070	[-.120;.175]	.654	**.648**	**.276**	**[.044;.833]**	**.019**	.006	.073	[-.196;.085	.931
	Public Order	.390	.259	[.072;1.022]	.132	.136	.123	[-.178;.358]	.270	.113	.113	[-.107;.357]	.315
	Substance Offense	.082	.099	[-.103;.299]	.409	-.013	.065	[-.138;.121]	.846	.025	.070	[-.092;.170]	.724
	Non-Crime Service	**-.315**	**.152**	**[-.612;.007]**	**.038**	-.035	.123	[-.205;.279]	.778	-.050	.108	[-.227;.190]	.642
Res Mob	Geographic Mobility	.165	.092	[-.016;.352]	.072	.005	.048	[-.089;.102]	.912	.087	.055	[-.026;.195]	.111
	Rentals	.170	.117	[-.061;.395]	.147	-.010	.067	[-.128;.139]	.878	.043	.077	[-.108;.204]	.574
	Vacancies	**.235**	**.115**	**[.002;.469]**	**.040**	.101	.057	[-.038;.194]	.075	.040	.072	[-.107;.175]	.581
Demographics	Total Population	.092	.112	[-.108;.314]	.410	**.153**	**.071**	**[.032;.321]**	**.030**	.125	.074	[-.020;.273]	.088
	Population Density	.006	.061	[-.129;.118]	.922	.007	.043	[-.101;.063]	.868	.020	.049	[-.081;.115]	.680
	Aged 15 to 24	.020	.071	[-.102;.177]	.779	.053	.050	[-.013;.177]	.289	.053	.048	[-.038;.148]	.268
	Racial/Ethnic Heterogeneity	-.140	.077	[-.294;.003]	.070	.046	.057	[-.103;.115]	.415	-.038	.061	[-.165;.076]	.537
	Female Headed Household	-.009	.115	[-.220;.248]	.937	.000	.060	[-.097;.138]	.994	**.140**	**.070**	**[.016;.278]**	**.045**
	Less than High School	.042	.136	[-.191;.334]	.759	**-.148**	**.073**	**[-.281;.016]**	**.043**	-.075	.096	[-.256;.139]	.433
	Unemployment	-.041	.136	[-.323;.208]	.762	-.065	.074	[-.244;.052]	.379	-.116	.079	[-.251;.051]	.141
	Median Income	.217	.151	[-.034;.580]	.153	-.095	.083	[-.259;.068]	.250	-.110	.106	[-.295;.133]	.298
	Gini Index	.049	.087	[-.139;.217]	.578	.057	.045	[-.033;.144]	.206	-.017	.059	[-.145;.080]	.767
	Poverty	.304	.189	[-.080;.671]	.108	.062	.086	[-.099;.239]	.475	.012	.121	[-.260;.238]	.922
	Sup. Gov. Assistance	-.012	.113	[-.246;.198]	.915	.002	.078	[-.183;.114]	.975	-.028	.071	[-.177;.100]	.697
R^2				.855				.943				.928	

	Variable	Part 2 Property Crimes				Public Order Offenses				Substance Offenses			
		Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Calls for Service	Part 1 Personal	-.030	.071	[-.178;.100]	.671	-.014	.076	[-.151;.148]	.851	.063	.096	[-.117;.258]	.516
	Part 1 Property	.259	.142	[-.017;.543]	.068	**-.297**	**.140**	**[-.566;-.018]**	**.034**	.099	.239	[-.411;.517]	.678
	Part 2 Personal	.308	.167	[-.023;.593]	.064	**.667**	**.209**	**[.193;.994]**	**.001**	**.529**	**.252**	**[.053;1.082]**	**.036**
	Part 2 Property	.113	.077	[-.060;.236]	.145	.172	.090	[-.044;.317]	.055	-.014	.096	[-.171;.237]	.884
	Public Order	**.322**	**.152**	**[.085;.684]**	**.034**	.383	.206	[.097;.873]	.064	.207	.235	[-.343;.624]	.378
	Substance Offense	.015	.080	[-.133;.187]	.854	.077	.094	[-.100;.261]	.414	.090	.127	[-.116;.386]	.479
	Non-Crime Service	.017	.112	[-.216;.232]	.877	.074	.118	[-.158;.318]	.529	.005	.203	[-.397;.418]	.980
Res Mob	Geographic Mobility	.054	.070	[-.064;.213]	.443	.021	.074	[-.124;.165]	.776	-.092	.114	[-.297;.142]	.416
	Rentals	.018	.094	[-.154;.217]	.844	.025	.091	[-.140;.225]	.786	.133	.132	[-.105;.403]	.313
	Vacancies	-.029	.072	[-.161;.135]	.688	.091	.101	[-.110;.288]	.368	.137	.119	[-.067;.398]	.249
Demographics	Total Population	.131	.070	[-.009;.271]	.061	-.032	.080	[-.191;.131]	.687	-.148	.101	[-.345;.047]	.140
	Population Density	-.032	.049	[-.141;.063]	.506	.064	.050	[-.050;.141]	.195	-.031	.079	[-.193;.116]	.698
	Aged 15 to 24	**.118**	**.059**	**[.008;.241]**	**.046**	.035	.061	[-.100;.144]	.571	.049	.084	[-.115;.226]	.559
	Racial/Ethnic Heterogeneity	**-.125**	**.058**	**[-.232;-.004]**	**.032**	-.055	.068	[-.188;.087]	.414	**-.337**	**.075**	**[-.483;-.185]**	**>.001**
	Female Headed Household	**.160**	**.068**	**[.033;.294]**	**.019**	.011	.090	[-.174;.173]	.994	-.047	.112	[-.247;.205]	.672
	Less than High School	-.007	.108	[-.230;.196]	.950	.051	.101	[-.133;.261]	.615	.166	.197	[-.203;.563]	.401
	Unemployment	-.163	.084	[-.312;.024]	.053	-.076	.089	[-.247;.134]	.391	.004	.125	[-.246;.249]	.972
	Median Income	-.136	.105	[-.329;.108]	.198	-.051	.104	[-.273;.140]	.625	.248	.182	[-.022;.695]	.172
	Gini Index	**.123**	**.056**	**[.001;.236]**	**.029**	.082	.062	[-.046;.200]	.182	.077	.085	[-.075;.258]	.363
	Poverty	-.013	.139	[-.274;.276]	.925	-.104	.131	[-.387;.138]	.427	-.005	.228	[-.426;.478]	.983
	Sup. Gov. Assistance	-.093	.077	[-.275;.036]	.229	-.022	.097	[-.205;.174]	.819	-.018	.139	[-.288;.260]	.895
R^2				.921				.902				.814	

Note: Standardized estimates shown; Bold = Significant; *SE* = Standard Error; 95% CI = upper/lower limits for bootstrapped confidence interval; $p \geq .05$.

Table A28. *Regression Results for 2017 Calls for Service and Crime*

	Variable	Part 1 Personal Crimes				Part 1 Property Crimes				Part 2 Personal Crimes			
		Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Calls for Service	Part 1 Personal	**.223**	**.085**	**[.064;.394]**	**.009**	-.029	.049	[-.097;.093]	.550	.008	.051	[-.093;.108]	.879
	Part 1 Property	-.210	.290	[-.858;.265]	.468	**.719**	**.163**	**[.415;1.048]**	**>.001**	.103	.156	[-.245;.378]	.509
	Part 2 Personal	**.749**	**.337**	**[.071;1.345]**	**.026**	**-.382**	**.142**	**[-.676;-.139]**	**.007**	**.801**	**.145**	**[.507;1.087]**	**>.001**
	Part 2 Property	.103	.123	[-.133;.364]	.401	**.540**	**.179**	**[.124;.729]**	**.003**	-.021	.094	[-.225;.136]	.822
	Public Order	-.036	.339	[-.382;.933]	.915	.150	.119	[-.058;.464]	.206	-.012	.155	[-.209;.404]	.937
	Substance Offense	.011	.125	[-.223;.269]	.928	-.028	.057	[-.133;.093]	.621	.036	.063	[-.099;.159]	.572
	Non-Crime Service	.019	.226	[-.460;.440]	.933	-.020	.110	[-.223;.217]	.857	-.062	.113	[-.254;.194]	.583
Res Mob	Geographic Mobility	.139	.126	[-.113;.395]	.271	-.060	.056	[-.197;.020]	.279	.084	.057	[-.031;.198]	.140
	Rentals	-.004	.200	[-.403;.387]	.985	.034	.078	[-.114;.196]	.669	-.076	.086	[-.245;.100]	.378
	Vacancies	.078	.161	[-.234;.380]	.628	.075	.056	[-.039;.187]	.183	.028	.061	[-.097;.143]	.650
Demographics	Total Population	-.031	.118	[-.261;.209]	.790	.093	.078	[-.036;.276]	.234	**.205**	**.079**	**[.058;.368]**	**.009**
	Population Density	.041	.082	[-.142;.194]	.620	.011	.051	[-.106;.083]	.824	.018	.047	[-.085;.102]	.704
	Aged 15 to 24	.065	.086	[-.104;.248]	.451	-.068	.048	[-.157;.040]	.160	.010	.045	[-.062;.116]	.824
	Racial/Ethnic Heterogeneity	-.019	.115	[-.246;.192]	.870	.030	.054	[-.092;.119]	.582	.035	.061	[-.086;.143]	.561
	Female Headed Household	.174	.143	[-.085;.487]	.225	**-.132**	**.061**	**[-.234;.009]**	**.031**	.106	.064	[-.006;.247]	.099
	Less than High School	.026	.187	[-.362;.370]	.888	-.068	.071	[-.198;.088]	.338	-.024	.077	[-.167;.139]	.760
	Unemployment	-.130	.149	[-.436;.166]	.380	.022	.059	[-.093;.135]	.712	-.103	.067	[-.253;.024]	.125
	Median Income	.046	.208	[-.323;.494]	.826	-.060	.078	[-.217;.105]	.446	-.123	.097	[-.319;.065]	.205
	Gini Index	-.038	.111	[-.256;.191]	.732	.033	.054	[-.087;.122]	.535	-.011	.046	[-.106;.069]	.817
	Poverty	.242	.207	[-.181;.638]	.241	-.009	.108	[-.198;.222]	.932	.060	.100	[-.150;.257]	.547
	Sup. Gov. Assistance	-.068	.118	[-.317;.148]	.565	-.015	.072	[-.176;.103]	.834	.014	.069	[-.112;.152]	.837
R^2		.702				.942				.934			

	Variable	Part 2 Property Crimes				Public Order Offenses				Substance Offenses			
		Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Calls for Service	Part 1 Personal	.019	.060	[-.096;.137]	.753	.022	.065	[-.085;.164]	.738	.015	.088	[-.154;.187]	.865
	Part 1 Property	**.421**	**.190**	**[.018;.807]**	**.027**	-.063	.233	[-.507;.384]	.786	-.231	.221	[-.622;.248]	.296
	Part 2 Personal	.017	.213	[-.450;.411]	.936	**.502**	**.256**	**[-.091;.927]**	**.050**	.563	.302	[-.135;1.049]	.062
	Part 2 Property	.177	.129	[-.085;.399]	.171	.202	.179	[-.146;.493]	.260	.027	.092	[-.190;.190]	.767
	Public Order	.346	.207	[.129;.891]	.094	.115	.306	[-.114;.907]	.708	.126	.300	[-.178;.936]	.674
	Substance Offense	.009	.086	[-.142;.181]	.916	.172	.092	[-.001;.354]	.063	.244	.141	[-.030;.527]	.083
	Non-Crime Service	-.061	.146	[-.333;.242]	.674	.168	.180	[-.276;.427]	.352	.201	.180	[-.249;.467]	.265
Res Mob	Geographic Mobility	.031	.076	[-.129;.160]	.688	-.093	.077	[-.270;.034]	.227	-.045	.103	[-.254;.180]	.659
	Rentals	.059	.108	[-.182;.243]	.585	-.085	.092	[-.258;.098]	.353	.099	.135	[-.153;.372]	.460
	Vacancies	.099	.087	[-.086;.264]	.255	.053	.096	[-.154;.245]	.578	.252	.134	[.001;.539]	.060
Demographics	Total Population	**.197**	**.090**	**[.023;.373]**	**.029**	-.024	.092	[-.217;.155]	.793	**-.310**	**.089**	**[-.499;-.150]**	**>.001**
	Population Density	.006	.053	[-.107;.106]	.910	.060	.066	[-.081;.180]	.366	.042	.086	[-.134;.196]	.621
	Aged 15 to 24	-.004	.056	[-.112;.115]	.938	.003	.069	[-.120;.147]	.966	.104	.074	[-.056;.232]	.162
	Racial/Ethnic Heterogeneity	-.081	.069	[-.227;.050]	.241	.059	.086	[-.235;.103]	.493	-.173	.098	[-.340;.033]	.077
	Female Headed Household	.035	.077	[-.120;.194]	.650	.155	.116	[-.070;.401]	.182	-.094	.137	[-.358;.192]	.494
	Less than High School	-.106	.107	[-.319;.108]	.322	-.068	.108	[-.265;.168]	.525	.158	.216	[-.308;.516]	.464
	Unemployment	.022	.090	[-.177;.184]	.808	-.002	.107	[-.217;.222]	.984	-.012	.160	[-.321;.300]	.939
	Median Income	-.146	.102	[-.351;.069]	.151	-.125	.126	[-.364;.132]	.323	.116	.151	[-.115;.481]	.445
	Gini Index	.076	.064	[-.053;.200]	.230	.028	.061	[-.107;.140]	.653	.093	.075	[-.059;.237]	.219
	Poverty	.034	.130	[-.214;.292]	.796	-.143	.147	[-.430;.137]	.330	-.181	.214	[-.556;.290]	.396
	Sup. Gov. Assistance	-.073	.085	[-.248;.096]	.389	-.067	.108	[-.290;.120]	.532	.018	.103	[-.214;.198]	.858
R^2		.907				.876				.796			

Note: Standardized estimates shown; Bold = Significant; *SE* = Standard Error; 95% CI = upper/lower limits for bootstrapped confidence interval; $p \geq .05$.

Table A29. *Regression Results for 2018 Calls for Service and Crime*

	Variable	Part 1 Personal Crimes				Part 1 Property Crimes				Part 2 Personal Crimes			
		Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Calls for Service	Part 1 Personal	.111	.103	[-.082;.317]	.283	-.021	.049	[-.117;.089]	.663	-.054	.048	[-.161;.033]	.260
	Part 1 Property	.012	.167	[-.377;.276]	.943	**.396**	**.186**	**[.136;.798]**	**.033**	.002	.106	[-.234;.182]	.984
	Part 2 Personal	**.516**	**.248**	**[.058;1.024]**	**.038**	-.291	.164	[-.586;.055]	.076	**1.001**	**.123**	**[.750;1.245]**	**>.001**
	Part 2 Property	.059	.092	[-.128;.231]	.520	**.641**	**.268**	**[.062;.823]**	**.017**	-.004	.075	[-.218;.092]	.963
	Public Order	.028	.264	[-.447;.598]	.916	.154	.145	[-.092;.488]	.290	.076	.127	[-.118;.392]	.548
	Substance Offense	.103	.145	[-.185;.390]	.479	.004	.079	[-.132;.189]	.954	-.047	.077	[-.203;.099]	.546
	Non-Crime Service	-.030	.195	[-.431;.339]	.880	.085	.129	[-.171;.324]	.512	-.107	.116	[-.328;.128]	.356
Res Mob	Geographic Mobility	.060	.115	[-.181;.273]	.604	.042	.065	[-.129;.139]	.517	.078	.052	[-.042;.174]	.134
	Rentals	-.056	.137	[-.304;.228]	.682	.019	.077	[-.106;.191]	.803	**.135**	**.066**	**[-.006;.253]**	**.042**
	Vacancies	.163	.137	[-.112;.419]	.234	.091	.063	[-.037;.201]	.144	.022	.059	[-.100;.133]	.709
Demographics	Total Population	-.014	.125	[-.247;.236]	.912	.066	.071	[-.059;.205]	.350	**.172**	**.068**	**[.036;.304]**	**.011**
	Population Density	.004	.080	[-.150;.168]	.958	.105	.064	[-.061;.171]	.101	-.035	.046	[-.146;.045]	.447
	Aged 15 to 24	.054	.098	[-.121;.268]	.586	-.040	.051	[-.120;.087]	.437	.036	.039	[-.036;.116]	.356
	Racial/Ethnic Heterogeneity	.111	.112	[-.128;.307]	.322	.048	.060	[-.084;.140]	.428	-.019	.054	[-.132;.082]	.732
	Female Headed Household	.190	.141	[-.102;.464]	.179	-.104	.085	[-.206;.111]	.219	-.023	.068	[-.134;.135]	.735
	Less than High School	.177	.108	[-.029;.399]	.101	-.009	.068	[-.154;.117]	.893	-.041	.056	[-.162;.068]	.461
	Unemployment	-.031	.144	[-.290;.269]	.832	-.027	.068	[-.145;.134]	.690	-.047	.063	[-.176;.076]	.457
	Median Income	-.068	.150	[-.369;.235]	.651	-.100	.087	[-.249;.092]	.250	**-.155**	**.072**	**[-.305;-.021]**	**.032**
	Gini Index	-.117	.089	[-.270;.083]	.189	.088	.060	[-.050;.178]	.138	-.009	.044	[-.091;.083]	.841
	Poverty	.119	.219	[-.385;.470]	.586	-.038	.093	[-.214;.149]	.678	-.121	.084	[-.310;.038]	.148
	Sup. Gov. Assistance	**-.328**	**.123**	**[-.570;-.075]**	**.007**	-.026	.071	[-.183;.084]	.714	-.076	.058	[-.199;.041]	.194
R^2				.778				.922				.945	

	Variable	Part 2 Property Crimes				Public Order Offenses				Substance Offenses			
		Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Calls for Service	Part 1 Personal	-.016	.062	[-.134;.116]	.789	.020	.078	[-.144;.156]	.803	.026	.083	[-.137;.197]	.751
	Part 1 Property	.222	.135	[-.049;.495]	.099	-.136	.172	[-.467;.195]	.429	-.066	.252	[-.478;.472]	.793
	Part 2 Personal	**.429**	**.165**	**[.033;.709]**	**.009**	**.540**	**.245**	**[.026;.946]**	**.027**	.447	.289	[-.265;.878]	.123
	Part 2 Property	.122	.076	[-.045;.265]	.107	.202	.235	[-.304;.469]	.389	.084	.112	[-.141;.291]	.456
	Public Order	.166	.170	[-.080;.594]	.330	.353	.319	[-.108;1.033]	.268	.420	.225	[.006;.907]	.062
	Substance Offense	-.096	.087	[-.247;.088]	.268	-.119	.117	[-.335;.130]	.306	.233	.158	[-.077;.538]	.140
	Non-Crime Service	.014	.144	[-.321;.252]	.924	.148	.219	[-.259;.601]	.500	-.206	.188	[-.628;.137]	.273
Res Mob	Geographic Mobility	-.047	.087	[-.222;.114]	.591	-.045	.083	[-.238;.092]	.590	-.019	.114	[-.258;.193]	.869
	Rentals	.022	.098	[-.159;.242]	.824	.075	.097	[-.129;.245]	.440	.128	.139	[-.173;.378]	.358
	Vacancies	-.017	.080	[-.193;.124]	.836	.039	.105	[-.169;.241]	.710	**.258**	**.128**	**[.016;.527]**	**.044**
Demographics	Total Population	**.219**	**.073**	**[.071;.360]**	**.003**	-.013	.110	[-.242;.194]	.908	-.237	.124	[-.468;.020]	.056
	Population Density	.007	.056	[-.111;.103]	.907	.020	.077	[-.155;.130]	.798	.040	.082	[-.120;.198]	.630
	Aged 15 to 24	.016	.047	[-.076;.112]	.740	-.003	.078	[-.139;.166]	.966	.037	.076	[-.118;.189]	.627
	Racial/Ethnic Heterogeneity	-.073	.064	[-.199;.048]	.253	-.087	.086	[-.257;.085]	.314	-.173	.110	[-.373;.056]	.118
	Female Headed Household	.103	.080	[-.054;.276]	.197	.080	.108	[-.088;.345]	.456	-.180	.109	[-.408;.028]	.099
	Less than High School	.000	.064	[-.127;.131]	1.000	.002	.091	[-.185;.179]	.982	.054	.140	[-.197;.359]	.701
	Unemployment	-.107	.086	[-.275;.061]	.215	-.059	.094	[-.224;.137]	.526	.004	.187	[-.363;.396]	.982
	Median Income	**-.256**	**.107**	**[-.458;-.037]**	**.016**	-.077	.133	[-.323;.217]	.565	.188	.146	[-.084;.500]	.196
	Gini Index	-.017	.052	[-.120;.082]	.747	-.074	.078	[-.238;.064]	.341	.036	.094	[-.152;.214]	.698
	Poverty	.014	.116	[-.262;.212]	.906	-.004	.130	[-.260;.242]	.978	.030	.205	[-.361;.452]	.883
	Sup. Gov. Assistance	-.077	.075	[-.222;.078]	.305	-.136	.094	[-.318;.040]	.145	.085	.102	[-.113;.290]	.404
R^2				.913				.840				.762	

Note: Standardized estimates shown; Bold = Significant; *SE* = Standard Error; 95% CI = upper/lower limits for bootstrapped confidence interval; $p \geq .05$.

Table A30. *Regression Results for 2019 Calls for Service and Crime*

	Variable	Part 1 Personal Crimes				Part 1 Property Crimes				Part 2 Personal Crimes			
		Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Calls for Service	Part 1 Personal	.128	.071	[-.006;.262]	.070	-.046	.038	[-.118;.029]	.225	.010	.044	[-.077;.096]	.822
	Part 1 Property	**.471**	**.207**	**[.017;.872]**	**.023**	**.417**	**.179**	**[.134;.807]**	**.020**	.042	.124	[-.224;.280]	.735
	Part 2 Personal	.235	.218	[-.177;.689]	.282	**-.304**	**.147**	**[-.577;-.007]**	**.038**	**.922**	**.132**	**[.680;1.220]**	**>.001**
	Part 2 Property	-.021	.106	[-.251;.186]	.843	**.560**	**.240**	**[.069;.786]**	**.019**	-.025	.076	[-.216;.101]	.745
	Public Order	-.191	.228	[-.721;.187]	.403	.081	.135	[-.255;.313]	.549	-.002	.142	[-.307;.277]	.987
	Substance Offense	-.173	.134	[-.415;.101]	.196	-.101	.074	[-.261;.034]	.174	**-.209**	**.091**	**[-.368;-.021]**	**.021**
	Non-Crime Service	.359	.233	[-.064;.872]	.123	**.277**	**.136**	**[-.007;.537]**	**.042**	.112	.116	[-.134;.324]	.335
Res Mob	Geographic Mobility	**.186**	**.085**	**[.023;.350]**	**.029**	**.118**	**.059**	**[-.006.220]**	**.047**	.117	.061	[-.018;.232]	.056
	Rentals	.046	.110	[-.159;.278]	.674	.072	.075	[-.060;.228]	.336	.109	.075	[-.048;.257]	.148
	Vacancies	.089	.130	[-.137;.375]	.496	.043	.068	[-.104;.170]	.527	.032	.064	[-.110;.148]	.622
Demographics	Total Population	**-.195**	**.087**	**[-.376;-.035]**	**.026**	.076	.067	[-.036;.224]	.253	.125	.064	[.018;.267]	.051
	Population Density	.067	.068	[-.086;.188]	.327	.028	.060	[-.109;.112]	.633	-.018	.038	[-.099;.047]	.633
	Aged 15 to 24	-.081	.076	[-.223;.073]	.284	-.029	.049	[-.107;.080]	.550	.067	.035	[.000;.143]	.056
	Racial/Ethnic Heterogeneity	.116	.097	[-.070;.315]	.229	.062	.060	[-.073;.155]	.302	-.004	.043	[-.092;.066]	.932
	Female Headed Household	.126	.119	[-.101;.380]	.290	-.051	.071	[-.148;.117]	.475	.084	.076	[-.042;.249]	.266
	Less than High School	.148	.130	[-.083;.426]	.257	-.006	.066	[-.134;.125]	.932	-.042	.060	[-.155;.083]	.484
	Unemployment	.021	.108	[-.178;.257]	.847	-.056	.056	[-.182;.036]	.316	-.091	.060	[-.216;.023]	.130
	Median Income	.173	.155	[-.073;.535]	.264	-.150	.094	[-.338;.024]	.109	**-.172**	**.086**	**[-.363;-.002]**	**.047**
	Gini Index	-.054	.155	[-.345;.258]	.729	-.105	.082	[-.277;.048]	.201	-.108	.069	[-.247;.024]	.115
	Poverty	.249	.200	[-.138;.638]	.212	.074	.115	[-.155;.311]	.521	-.099	.093	[-.293;.075]	.288
	Sup. Gov. Assistance	-.047	.110	[-.283;.152]	.666	-.028	.079	[-.199;.106]	.726	-.011	.059	[-.116;.108]	.850
R^2				.822				.925				.941	

	Variable	Part 2 Property Crimes				Public Order Offenses				Substance Offenses			
		Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*	Estimate	*SE*	95% CI	*p*
Calls for Service	Part 1 Personal	-.010	.060	[-.128;.099]	.867	.046	.073	[-.096;.200]	.532	.047	.074	[-.113;.184]	.526
	Part 1 Property	.212	.158	[-.140;.485]	.180	.117	.170	[-.158;.481]	.493	-.028	.202	[-.412;.372]	.888
	Part 2 Personal	**.485**	**.169**	**[.117;.796]**	**.004**	.340	.177	[.004;.710]	.055	.316	.289	[-.320;.836]	.274
	Part 2 Property	.142	.106	[-.007;.410]	.183	.043	.147	[-.293;.236]	.769	-.001	.084	[-.144;.196]	.991
	Public Order	.104	.193	[-.268;.526]	.592	.353	.203	[-.046;.756]	.082	.280	.264	[-.149;.912]	.289
	Substance Offense	-.101	.090	[-.255;.083]	.262	-.165	.091	[-.361;-.002]	.069	.010	.125	[-.229;.253]	.934
	Non-Crime Service	.010	.148	[-.309;.286]	.946	.221	.163	[-.092;.533]	.177	.300	.202	[-.117;.656]	.139
Res Mob	Geographic Mobility	.039	.067	[-.073;.180]	.556	.071	.079	[-.113;.202]	.373	-.049	.097	[-.244;.136]	.612
	Rentals	.069	.075	[-.087;.213]	.353	-.045	.089	[-.206;.146]	.614	.174	.123	[-.071;.396]	.155
	Vacancies	-.018	.088	[-.198;.140]	.840	-.001	.095	[-.163;.217]	.995	**.389**	**.121**	**[.171;.639]**	**.001**
Demographics	Total Population	**.226**	**.087**	**[.070;.410]**	**.010**	-.110	.085	[-.267;.061]	.194	**-.285**	**.112**	**[-.499;-.069]**	**.011**
	Population Density	-.037	.048	[-.132;.066]	.439	**.117**	**.055**	**[-.017;.195]**	**.033**	.077	.073	[-.074;.222]	.290
	Aged 15 to 24	-.024	.046	[-.120;.061]	.603	-.066	.057	[-.168;.055]	.243	-.007	.073	[-.161;.130]	.922
	Racial/Ethnic Heterogeneity	-.073	.064	[-.198;.061]	.255	.075	.080	[-.076;.233]	.351	-.149	.115	[-.334;.091]	.197
	Female Headed Household	.037	.067	[-.097;.170]	.577	.139	.099	[-.039.355]	.160	-.101	.105	[-.302;.116]	.337
	Less than High School	-.048	.071	[-.181;.096]	.501	-.079	.114	[-.294;.153]	.487	.067	.108	[-.152;.272]	.534
	Unemployment	-.050	.075	[-.186;.109]	.504	-.075	.093	[-.261;.095]	.421	.012	.097	[-.158;.215]	.903
	Median Income	-.099	.087	[-.277;.074]	.259	-.034	.129	[-.244;.281]	.793	.153	.160	[-.133;.486]	.341
	Gini Index	.015	.091	[-.162;.204]	.869	-.147	.112	[-.373;.066]	.188	.154	.142	[-.157;.408]	.278
	Poverty	.112	.121	[-.136;.343]	.354	.190	.159	[-.123;.513]	.232	-.110	.160	[-.434;.199]	.490
	Sup. Gov. Assistance	.021	.079	[-.134;.180]	.794	.027	.104	[-.182;.229]	.792	-.116	.103	[-.299;.105]	.261
R^2				.915				.874				.829	

Note: Standardized estimates shown; Bold = Significant; *SE* = Standard Error; 95% CI = upper/lower limits for bootstrapped confidence interval; $p \geq .05$.