The Effect of Neighborhood Parks on Reported Crime Rates in the Greater San Antonio

Area, Texas

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by

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Authorization to Submit Thesis

This thesis of Kylene M. Collette, submitted for the degree of Master of Science with a Major in Integrated Architecture and Design and titled "The Effect of Neighborhood Parks on Reported Crime Rates in the Greater San Antonio Area, Texas," has been reviewed in final form. Permission, as indicated by the signatures and dates below, is now granted to submit final copies to the College of Graduate Studies for approval.

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Abstract

Biophilia is a buzzword that is commonly used in society. An increasing body of research points to the benefits of exposure to nature and natural elements. The focus of this study is on how the presence of outdoor parks in a dense urban environment, the greater San Antonio, Texas, area specifically, affects rates of reported crime between 2014 to 2018. Three components make up this investigation. Part one is a macro-level study of six areas, one lower income area with a park and one without, one middle income area with a park and one without, and one upper income area with a park and one without. In each demographic the crime rates in the neighborhood with the park is compared to the one without a park. Across all three income brackets, crime rates decrease in the neighborhood that has the park. The lower income neighborhood shows the greatest significance.

Part two is a more of a meso-level examination of the lower income demographic. Twenty neighborhoods with an annual average income of less than $35,000 are compared. Ten of these neighborhoods have parks and ten do not. The results of this study are less conclusive. Evidence indicates that overall, the presence of a park lowers the rate of reported crime, but not enough to achieve significance.

Part three is a micro-level examination of the results of part two that focuses just on the neighborhoods with a park. The two neighborhoods that have the highest rates of reported crime are analyzed, as are the two neighborhoods with the lowest crime rates. The observation is that, regardless of demographic factors, the parks in neighborhoods that have the lowest crime rates have the following in common: the park appeals to a multi-generational audience; it can be used at multiple times of the day and year; it is well maintained and has a variety of amenities; it has access for people of all abilities, including those in a wheelchair; there is a good balance of natural elements, such as a river and trees, and man-made amenities. The parks that have higher crime rates share these traits: parks are not well maintained, with portions of the park in total disrepair; the park has a narrow audience that would only be used for specific events; there are few amenities that allow the park to be used in all weather conditions; amenities do not encourage social interaction; and landscaping is limited.

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Dedication

Thank you to my family and friends for the love, support and encouragement. Thank you, Dave, Katie and Austin, for sacrificing family time in order for this work to be completed. I love you.

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Introduction

An increasing body of research indicates that when people are exposed to natural elements such as fresh air, sunlight, trees, waterscapes and natural landscapes, that there are positive physical and mental benefits. Prior studies have focused on how exposure to nature can improve health and wellness, but this researcher is more interested in finding out what positive social effects biophilia can have on society. The question in particular that prompted this line of enquiry is… *"Can the introduction of green spaces into dense urban environments reduce rates of crime?"*.

Multiple criminological theories seek to explain why crime occurs and these include biosocial theory, general strain theory, defensible space theory, collective efficacy and routine activity theory. This study does not attempt to replace those theories. There are cultural factors at play that are not related to green space at all. The proposed hypothesis is that green community spaces could reduce the crime rates, and further studies could then be conducted to understand why this could be so. Is it because there is reduced opportunity? Does the environment have a de-stressing effect on the aggressor, and does that change the rate of crime? Evidence suggests that well designed and carefully planned communities could lead to reduced crime rates. If the difference is substantial enough it may be reason to advocate for more of these spaces. Green space could be viewed, not as a luxury, but as vital part of a safe neighborhood.

Crime has many levels of negative consequences. If there is anything that can be done at a city planning level that could help to alleviate some of these issues, it is worth exploring. Rather than expending government resources to deal with crime after it occurs, effort should be directed at reducing the opportunity for crime in the first place. The greater San Antonio, Texas area provides the location in which the research is based.

CHAPTER 1: Literature Review

1.1 Biophilia

Biophilia collectively refers to human's innate affinity with elements that are of the natural world. This includes vegetation, water, natural light and green spaces. Biophilia was defined by the biologist Edward O. Wilson as the, "…innately emotional affiliation of human beings to other living organisms…" (Wilson, 1984). This phenomenon attempts to explain why people are drawn to the natural world. It is an innate, evolutionary instinct that people feel. Ever wondered why sitting in a sunlit corner feels so good? Or why it is so satisfying to watch the sunrise? Current research attempts to explain why this is so, and just how deep our connection to the world around us is.

The effect of exposure to biophilia is more than just an abstract feeling. There is evidence that suggests that the introduction of biophilia can have measurable positive mental and physical benefits (Beatley, 2016). An example is the use of nature to promote healing. In 1984, Roger Ulrich conducted studies that indicated that patients in hospital recovered faster if they had a view to nature. Additionally, stress levels of hospital staff decreased with access to gardens (Sternberg, 2010). The health care industry is making an active effort to maximize these benefits by incorporating green principles into facility and operational design.

Terrapin Bright Green, a consultant firm under the guidance of Bill Browning, conducted studies that focuses on harnessing the benefits of biophilia to increase profitability (Heerwagen, Loftness, & Painter, 2012). In their 2012 report, *The Economics of Biophilia,* the team reference studies by Norm Miller that link these health benefits to indirect methods of profitability measures, such as reduced rates of absenteeism and increased productivity (Miller, Pogue, Gough & Davis, 2009). Troy, Grove and O'Neil-Dunne studied vacant city lots in Baltimore and their finding is that the addition of trees to these lots resulted in an average of 11.8% reduction of crime rates (2012).

Richard Louv is an outspoken advocate for the benefits of exposure to nature. His book *Last Child in the Woods* (Louv, 2008) details the effects that lack of exposure to nature has on the present generation of young people. He argues that the generations of the last three decades have unprecedented lack of exposure to nature. This is in part due to over

exposure to electronics and the virtual world, too much time spent in structured indoor schooling and a greater sense of fear of the natural world. This generation of children is acutely aware of climate change, the hole in the ozone layer and pollution, compared to prior generations that just enjoyed the outdoors for the sake of it. His research indicates that some of the side effects of the lack of exposure to nature include increased levels of obesity, increased issues with Attention Deficit Disorder, greater feelings of isolation and depression and reduced use of primary senses. He maintains that when a child is able to have free play in nature, that it encourages a sense of wonder and belonging. That is to say that the child learns to understand that he/she is part of a much larger community of biodiverse creatures., thus reducing the sense of isolation. The effects felt by these children is then carried into adulthood.

1.2 The Link Between Antisocial Behavior and Criminal Acts

In an attempt to understand why crime is committed, and which type of people are liable to commit crimes, scientists focus on the traits that could lead to criminality in the first place. Antisocial behavior is one of these outcomes. Antisocial behavior is linked to an antisocial personality disorder which has been defined as a "…personality disorder characterized by persistent antisocial, irresponsible, or criminal behavior, often impulsive or aggressive, with disregard for any harm or distress caused to other people, and an inability to maintain long-term social and personal relationships…" (Soanes and Stevenson, 2008). This is relevant because in order to understand why green space could affect crime rates, one needs to have an understanding of what might cause the behavior in the first place.

Biosociology is a field that seeks to explain the cause of crime by taking an interdisciplinary approach that explains crime by considering biological as well as environmental factors. Neurology plays a vital role in substantiating biosociology. Scientists have mapped out the regions of the brain and how certain behaviors can be linked to these regions (Epstein & Kanwisher, 1998). If these regions are underdeveloped or damaged there is a direct effect on that individual's behavior. The brain is responsible for hormonal secretion, and there is a direct link between hormones and certain behaviors (Lilly, Cullen & Ball, 2015). If being in an environment can trigger a neurological response, it would be reasonable to assume that this could have a direct influence on the resulting behavior.

Robert S. Agnew's General Strain Theory (1992) argues that criminal behavior is triggered when one faces stress, i.e., strain. The individual feels a sense of hopelessness and is driven to criminal behavior as a means of pushing back on dire circumstances. Poverty-stricken people living in harsh inner-city environments could be particularly susceptible to the phenomenon (Lilly et al., 2015). Focusing less on the individual and more on the environment, one could consider three theories. Oscar Newman's Defensible Space (1972) focuses on crime prevention through environmental design, or CPTED. This is the notion that well-designed spaces allow for better surveillance and encourage residents to be more active agents in crime prevention. Cohen and Felson's Routine Activity Theory (1979) argues that in order for crime to occur there must be a motivated offender, suitable target and lack of guardianship. By increasing community interaction, there are more "guardians" present thus crime is less likely to occur (Lilly et al., 2015).

Collective Efficacy Theory is also relevant to this topic. When people in a neighborhood are able to form a connection of trust and support, there may be greater informal control of bad behavior amongst neighbors. This is not to say that neighbors need to form close friendships or spend too much time together, but rather that there would be a stronger sense of responsibility to look out for one another (Sampson, Raudenbush & Earls, 1997).

1.3 Green Space Associated with Lower Levels of Aggression

Frances E. Kuo looks for links between biophilia, urban spaces and crime. Her studies are conducted primarily in low income, public housing compounds, in dense, inner-city Chicago. One research project examines the crime rates of ninety-eight apartment complexes. Some of the buildings had nearby vegetation, whilst others had none (Kuo & Sullivan, 2001). Traditionally, vegetation in cities has been associated with higher levels of fear of crime (Jarowsky & Park, 2009), in that it could potentially offer hiding places for criminal activity. This notion would lead to an active attempt to remove any vegetation from cityscapes. Kuo's work argues that the opposite holds true: increased vegetation is associated with both lower levels of fear of crime (Kuo, Bacaicoa & Sullivan, 1998), as well as actual lower crime rates. Rates of property crime and violent crime both decreased with the caveat being that the type of vegetation used is what matters. Dense shrubbery may very

well conceal unsavory activities, whilst high canopy trees and grassy areas encourage community activities. By allowing residents the opportunity to have outdoor recreational and gathering spaces, there is increased potential for more "eyes on the street", offering increased surveillance and acting as a crime deterrent. In comparing buildings with low levels of vegetation versus high levels of vegetation, Kuo and Sullivan (2001) noted that there was 56% less violent crime for those spaces with high vegetation.

An additional study by Brunson, Kuo and Sullivan (2001) of outdoor spaces in public housing has similar findings: spaces that have nearby vegetation are less susceptible to vandalism, litter and generally disruptive behavior. This research team also set out to study how residents appropriated defensible space in public housing. There are three types of defensible spaces examined: physical, social, and territorial. The team interviewed ninety-one residents in low income public housing units. The results indicate a positive connection between levels of appropriation and levels of safety perception amongst residents.

Mooney and Nicell (1992) find that Alzheimer's patients exhibit substantially less aggressive behavior if access to green space is available. The team assessed five Alzheimer's facilities over a period of two years. Two of the five facilities provided patients access to on-site gardens, whilst the other three had none. Traditionally, it is expected that Alzheimer's patients become progressively more violent. This behavior was observed in the three gardenless facilities. However, the facilities that had gardens, experienced either stable or decreased violence levels.

1.4 Community Engagement to Reduce Crime

Cohen and Felson's Routine Activity Theory (1979) suggests that one factor which could help reduce criminal behavior is community engagement thereby increasing guardianship. When green public spaces are created, a community is more likely to spend time together in those spaces, as opposed to behind closed doors (Benedict & McMahon, 2006). As people get to know one another within communities, relationships could help to deter the crimes and at the very least create an environment of accountability for aggressors and support for victims.

But just how much does having green space actually encourage community interaction? Sullivan, Kuo & DePooter (2004) examined fifty-nine outdoor spaces in a

residential community in inner-city Chicago. Twenty-seven of the outdoor spaces had greenery and the remaining thirty-two had no vegetation. The team examines the usage rates of the different spaces, at all times of the day and separate findings by age category as well as sex. The team find that on average, 83% more of the people who congregate outside do so in the green areas than the non-green areas. Green spaces also have 82% more single male and 100% more single female occupancy. This strengthens the argument that green spaces are associated with feelings of safety. Conversely this could suggest that non-green spaces have higher feelings of fear associated with them.

Newman's Defensible Space Theory (1972) suggests that space that is appropriately designed, enables inhabitants a measure of security. Community interaction in outdoor spaces assists in installing a sense of ownership of shared outdoor spaces. Resident appropriation of defensible space is the result of this. A 2001 study of ninety-one public housing residents indicates that those who make frequent use of shared outdoor spaces feel a greater sense of safety. Thus, residents are more likely to use those outdoor spaces, thereby perpetuating the cycle of community engagement (Brunson, Kuo & Sullivan, 2001).

Why could it be that green spaces are associated with feelings of safety? Trees, shrubs and grasses all provide various levels of enclosure, termed "prospect and refuge" that the brain responds to. Wilson and Kelling (1993) argue that this is an evolutionary survival instinct in which people seek out environments in which they feel most secure. A primitive example would be an area that allowed one cover from danger, but with a clear view ahead to scan for prey or other potential danger.

In the field of neurophysiology, the region in the brain known as the parahippocampal gyrus, which is part of the limbic system and plays a vital part of memory retrieval, has been found to respond specifically to spatial enclosure (Epstein & Kanwisher, 1998). Participants were shown varied imagery, and an MRI measured the responses. Across the board, images that showed spatial enclosure are found to trigger the strongest reactions. This study offers support that there is reason to believe in the validity of biosocial criminological theories.

Several studies have been conducted that indicate the human preference for safety and enclosure, as well as how greenery can affect this perception. Shaffer and Anderson (1983) find that parking lots are perceived to be safer if there is an intentional landscape

design as part of the lot. Stamps (2005) attempts to gain even greater understanding into what these parameters look like by comparing the same scene with different levels of enclosure at varied distances. The result is consistent with earlier theories that people feel safer if the primitive need is met, that is, there is space for refuge, a clear view ahead and a way to escape if needed. This indicates a biological, innate preference for spaces that mimic this setting such as grassy areas and high canopy trees.

Buck (2017) examines the contribution of biomimicry in city design, specifically examining the Biospheric Foundation's urban farming project in the UK. This involves converting a derelict city center mall to an eco-friendly food production center and farm that encourages community volunteerism. Anecdotal evidence suggests that antisocial behavior and drug use in the area dropped substantially. This is not to say that the bad behavior didn't simply move elsewhere but does show promise.

1.5 Violence as a Result of Mental Fatigue and Stress

Agnew's General Strain Theory, suggests that mental fatigue, or stress, could lead to violence (Agnew, 1992). Conversely, other studies have shown that exposure to nature reduces stress (Hull & Michael, 1995). Thus, if one can reduce stress, or mental fatigue, one could lower levels of violence. One study which measures participants' salivary cortisol levels over the course of a day, indicates lower levels of stress when participants are in a green space (Ward Thompson, Roe, Aspinall, Mitchell, Clow & Miller, 2014). The participants also report feeling lower stress levels when in green space. A study of perceived stress in adolescents, when in close proximity to parks, has a similar finding (Feda, Seelbinder, Baek, Raja, Yin & Roemmich, 2015).

Another Kuo and Sullivan (2001) study suggests that impoverished inner city living leads to mental fatigue which leads to violent behavior but that this phenomenon can be mediated by exposure to nature. The study utilizes the Conflict Tactics Scale as a self-report measure to determine levels of interfamilial violence over one year. The team found that levels of violence are significantly lower for those who are in close proximity to green space versus those that are not. This finding applies to both mild and serious forms of violence.

The team deduces that if increased access to greenery reduces stress, and thus certain forms of violence, that a more proactive effort needs to be made by city officials to provide

green space for all of its residents. Whilst having a few, large parks has its benefits, it may be more worthwhile investing in a larger quantity of parks, even if on a much smaller scale (Kuo & Sullivan, 2001).

1.6 Biophilia Associated with Improved Mental Health

Roberts, Sadler & Chapman (2018) offer further evidence that green space is associated with feelings of positivity. The team analyzes the twitter data of users of sixty parks in Birmingham in the United Kingdom over a year. Over ten thousand tweets that originated in these parks are analyzed for overall mood and tone. Of these, 68.4% have a neutral tone, with no reference to a specific mood. Of the remaining tweets, 24.6% are found to be positive and only 7% found to be negative. In order to be truly relevant, the study would need to compare what those findings would look like in a control area, outside of the parks. However, it does show promise, that when people are in nature they tend to be more positive than negative.

Examining behavioral studies in biophilic spaces, research indicates that people are more likely to show generosity in the presence of nature (Weinstein, Przybylski, & Ryan, 2009). Ninety-eight individuals, of which about two thirds were women, were asked to fill out an aspirational questionnaire. The group was then randomly split into two, one that was exposed to natural scenes, and one that was exposed to man-made scenes. To make the experience more immersive, the participants were made to listen to sounds appropriate to their respective environment. To create a comparable comparison, the images shown were matched as closely as possible in composition, lighting and scale. After exposure to the environments, participants were then asked to redo the questionnaire. The group exposed to the natural scenes, exhibit greater feelings of generosity than the group exposed to man-made scenes.

Soderlund and Newman (2017) examined the possibility of better prison design by incorporating green principles. Based on studies of twenty-three thousand prisoners in twelve countries, the finding is that prisoners are at much higher risk for depression, suicide and psychotic illnesses than the general population (Fazel & Danesh, 2002). Whilst it could be argued that these mental issues led to imprisonment in the first place, it is worth

investigating how the negative psychological risks of the prison experience can be mitigated to reduce the rates of recidivism.

In Oregon, the Snake River Corrections Facility has been involved in the Sustainability in Prisons Project, which seeks to improve the experience of solitary confinement by adding imagery of nature to the walls (Nadkarni & Pacholke, 2013). After initially rejecting the idea in that it was too "coddling", the prison officials decided to try it. As a result, both disciplinary records and compliance of the prisoners has shown promising results (Soderlund & Newman, 2017). The pair cites Lopez I. Ferrer, a Senior Corrections analyst, as suggesting that biophilic interventions can help with rehabilitation and to reduce the stress of the prison environment. Additional promising programs within prison facilities include gardening programs by the Washington State Department of Corrections and the Evergreen State College that have shown to aid in rehabilitation. Like prisons, cities are often designed in such a way that disconnect people from each other and nature. If interventions are being suggested in prisons that focus on the restorative power of nature, and the resulting reduction of aggression, it could be argued that such applications be put into practice in an urban context.

The next study adds to the evidence that biophilia can reduce strain and its associated stress. Schools that have natural daylight are found to have three times less absenteeism than schools that do not (Nicklas & Bailey, 1996). Students who are absent are not able to perform in the same way students who are present can. Statistics have shown that lack of education leads to higher poverty levels. When comparing adults over the age of 25, it is found that those without a high school diploma have a 29% poverty rate compared to only a 5% rate for those with a bachelor's degree (*How Does Level of Education Relate to Poverty,* 2015). Additionally, there is a loss of wages for parents who have to miss work to watch children at home. These factors all increase strain and could be relieved with biophilic interventions.

Another Kuo (2001) study examines the link between access to green space and feelings of control of one's environment. Using similar methods as previously noted, Kuo surveyed one-hundred-forty-five residents in poor urban housing communities. The aim of this investigation is to determine if living nearby to greenery has any bearing on whether residents feel able to cope with the daily stresses they faced by living in an impoverished

environment. Those who have nearby access to greenery report fewer feelings of hopelessness, frustration and fatigue. This group also indicates less of an inclination to procrastinate and reports feeling better equipped to deal with major life issues.

1.7 Seasonal Affective Disorder: Light Directly Affects Bodily Function

A relevant component of biophilia is exposure to bright, natural light. Seasonal Affective Disorder, or SAD, is a psychological disorder that affects many people. Though sometimes brushed off as just "the winter blues", it has the potential to lead to severe depression. SAD symptoms include depression, fatigue, loss of interest in things once found pleasurable, irritability and weight fluctuations. In areas where the winter months are characterized by short days and low levels of light, SAD effects people by interfering with the body's natural level of dopamine, serotonin and melatonin, which affects circadian rhythms thus resulting in disturbed sleep patterns.

This is due to the following: the mammalian circadian rhythm follows a twenty-four-hour cycle. There are a series of bodily functions that happen in this period that include metabolism, blood pressure, heart rate, and cortisol secretions, to name just a few. Light acts as a cue to trigger these processes by which the retina signals the suprachiasmatic nucleus in the hypothalamus, via the retinohypothalamic tract. This cycle of light and dark triggers the production of melatonin from the pineal gland (Tonello, 2008). Melatonin is related to sleep patterns, thus if its production is interfered with, a chain reaction of sleeplessness and irritability follows.

This is an extreme example, but given the prevalence of SAD, it is one that many would be able to grasp. It provides clear evidence of the power that natural elements have over the body's chemistry and functioning. If there is evidence that mental fatigue can lead to aggression, this offers one more clue to as to how allowing people the opportunity to spend more time in natural surroundings can be beneficial.

1.8 Conclusion

The goal of this research is to determine whether utilizing principles of biophilia in urban design to provide restorative spaces can help to reduce rates of crime. The previously cited works provide evidence of the ways in which this is possible. Urbanization is a reality to the world's population, as is the violence and crime that tends to go hand in hand with it. These are complex issues than cannot be solved with a single solution. However, strategies that take advantage of a biophilic response may help to ease the problem in a way that may not need to be too costly. According to UN Habitat, 6 out of 10 people in the word will be living in urban environments by 2030. The exponential growth of urban environments, particularly in less wealthy areas has meant that infrastructure and urban planning have been lacking. As people move from an agrarian existence, to urban environments, there are a host of issues, both physically and psychologically that are becoming apparent (UN-Habitat at a glance 2017) Applying the principles of biophilic design to urban areas may be one way to ease some of these resulting issues.

Sufficient evidence exists to be able to link the positive effects of biophilia, specifically green spaces in urban environments, with reduced criminal behavior. Antisocial behavior is closely associated with criminal behavior so it is reasonable to assume a reduction in criminal behavior too. Biophilia ties in to biosocial criminology theory as it has been shown to reduce aggression and promote feelings of positivity. Such emotions are linked to hormonal secretions in the brain. Exposure to green space has also been shown to reduce mental fatigue and stress as well as enabling residents to feel greater levels of control within their own lives. The phenomenon of Seasonal Affective Disorder provides strong evidence of how dramatically the human body can be affected by nature. The fore-mentioned factors tie in to the causes of criminal activity that Agnew outlines in his General Strain Theory. Lastly, increased green space is associated with increased community activity and engagement. Per Newman's Defensible Space Theory and Cohen and Felson's Routine Activity Theory, this lowers criminal activity by promoting guardianship and allowing residents the opportunity for greater community surveillance.

The primary limitation of this review is the limited number of specific studies that have been conducted on this topic. There are several that address the connection between green space and antisocial behavior and crime but are by the same group of researchers. There is need for more research to solidify what looks to be promising findings.

Additionally, though the focus of this study is on areas where biophilia has been introduced as the primary means of improvement, it is not realistic to assume that any change in crime statistics is solely the result of biophilia. There may be other socio-economic factors specific to that area that would cause a change in crime rates. Criminal and antisocial behavior is a complex issue, and can neither be explained, nor solved with a one-dimensional solution. The topic discussed simply offers one potential angle that may alleviate some of the problem.

CHAPTER 2: Research Design

San Antonio, Texas is the area of focus for this study for several reasons. The United States Census Bureau (2018) estimates that as of 2017, the city has a population of 1,511,946 people. The city is large, almost 408 square miles (San Antonio: Geography and Climate, 2018) and this makes it an area that is large enough to obtain several appropriate samples. The Uniform Crime Report (2017) estimates that between 1985-2014 there was an annual average of 6980 reported violent crimes. This large number means that the city will have enough reports of crime to make it a feasible study area. As the independent variable in this study is the urban park and its effect on crime rates, it is important to control for other means of outdoor recreation that could skew the results. Thus, large cities that are near an ocean, large lake or mountainous region must be eliminated. Aside from rivers, San Antonio has few large natural recreational areas. Availability of information is excellent for San Antonio with good access to information on demographics, population, and income. Additionally, information from a crime mapping website that goes back several years is available. The independent variable in this study is the neighborhood or community park and the dependent variable is the rate of violent crime that occurs in neighborhoods, either with a park, or without one. The unit of analysis is neighborhood in which the study is conducted. The research method controls for income, race and general city demographics.

2.1 Neighborhood and Community Parks

Information on park classification is obtained from the City of San Antonio (2006). The document is the *San Antonio Parks and Recreation System Strategic Plan: 2006-2016*. The two types of parks that will be included in the study are neighborhood parks and community parks. A Neighborhood park is defined as the basic unit of the park system. It is between 3-10 acres and services the social and recreational needs of a surrounding neighborhood. It needs good pedestrian access and will likely have playground equipment and some basic sports facilities. It need not have any restroom facilities. It should also have informal open space and greenery. Community parks are larger, between 10-50 acres. They will serve multiple communities, and may serve not only as recreational sites, but as a means to preserve unique geographical features and native flora and fauna. They will accommodate

group activities and should be accessible by both pedestrian and vehicular traffic and off-street parking should be provided accordingly. Both neighborhood and community parks should allow for active and passive activity, provide green spaces within a city and be suitable for users of various age groups.

Aside from obtaining this information from the city's Park and Recreation Department, several other sources of information are used. For information on the size of the parks, Google Maps is used to verify the surface area of each space. Additionally, observation is used to determine what the primary use of the space is, what facilities it has, what state the facilities are in and who the park which users would most likely use the park. Google Earth will be used to obtain a visual of each of the parks, as well as the neighborhood in which they are situated. In order to ensure an accurate comparison between like areas, each neighborhood, and park where appropriate, should have a similar look and feel. Information on the demographics of each neighborhood is obtained from City-data.com.

The operationalization of the independent variable is reliable as this is a measure of objective facts, not subjective matter. The size and features are what they are. The information gleaned from the Census Bureau will have some degree on non-sampling error, but as the study is so large, this is negligible. This measure is valid, as it provides the answers to exactly what is being studied, namely size of land and population and geographical features.

2.2 Crime Rates

Crime rates, as defined in this study, will not be measured by the general population of the city. It will be a count of reported crimes that occur in a specific geographically defined area over a certain period of time. The crimes to be measured will be: homicide, attempted homicide, sexual assault, attempted sexual assault, assault, aggravated assault, robbery and arson. The information on these crimes will be obtained via the crime mapping website, LexisNexis, which is connected to the San Antonio Police Department. The measure will be somewhat reliable, as a large number of these crimes will go unreported, especially crimes of a personal nature, like domestic assault and sexual assault. This is why the topic focuses on reported crime. However, as there will be a comparison of crime rates

for locations, each will have the same deficiency. This should nullify the effect for comparison purposes. In order to increase reliability though, the test-retest method will be used, whereby the same analysis will be conducted at the same location, over a different period of time. Smaller sample sizes skew the results, and the ratio between crimes that are often reported versus those that are under reported, will also not reflect accurate ratios of crime. This is discussed a bit more in depth in a later chapter. The measure will be valid, as reports of crime are an exact measure of reported crime.

2.3 Methodology

In order to strengthen the validity of findings, triangulation is employed by obtaining data in several different ways, using both quantitative and qualitative methods. Firstly, there is a comparison of the crime rates of areas that have a park, versus areas that do not. In order to control for demographics, specifically race and median family income, there are three different comparison groups. One has a median income of under $35,000 (and similar race demographics, which are primarily Hispanic), the second has a median income of $90,000-$120,000 and the third has a median income of over $170,000. LexisNexis is used, which maps crimes geographically, to observe where crimes have been reported. For each comparison group, the total crimes in each area are recorded for a full year, January through December, for a period of five years to obtain an average rate of crime, from 2014-2018. The raw values are converted to a rate of crime per 1000 residents, for the purpose of making a direct comparison between study areas.

Secondly, upon completion of the initial investigation, the income group with the most noticeable difference in crime rates is studied in more depth. This is achieved by collecting data on ten neighborhoods in that income group that have a park, and ten that do not. Following this is a comparison of the findings to determine if there are similar results as found in the first set of observations. As demographics are already controlled for, this provides the opportunity to see if certain park amenities and qualities attract or repel crime, and what types of crimes, if any, are noticeably affected by the presence of a park.

Thirdly, the ten neighborhoods with parks from the second part of this study are examined in more depth. The two neighborhoods with the lowest crime rates, and the two with the highest crime rates are compared. The physical attributes of these parks are studied,

to see if there is a difference in the kind of park that either encourages or deters criminal activity. This includes the condition of the park, the landscaping and the physical structures inside the park as well as the intended use of the park. There is no data included on the actual users of these parks, so this has the potential to skew results.

2.4 Initial Areas of Study
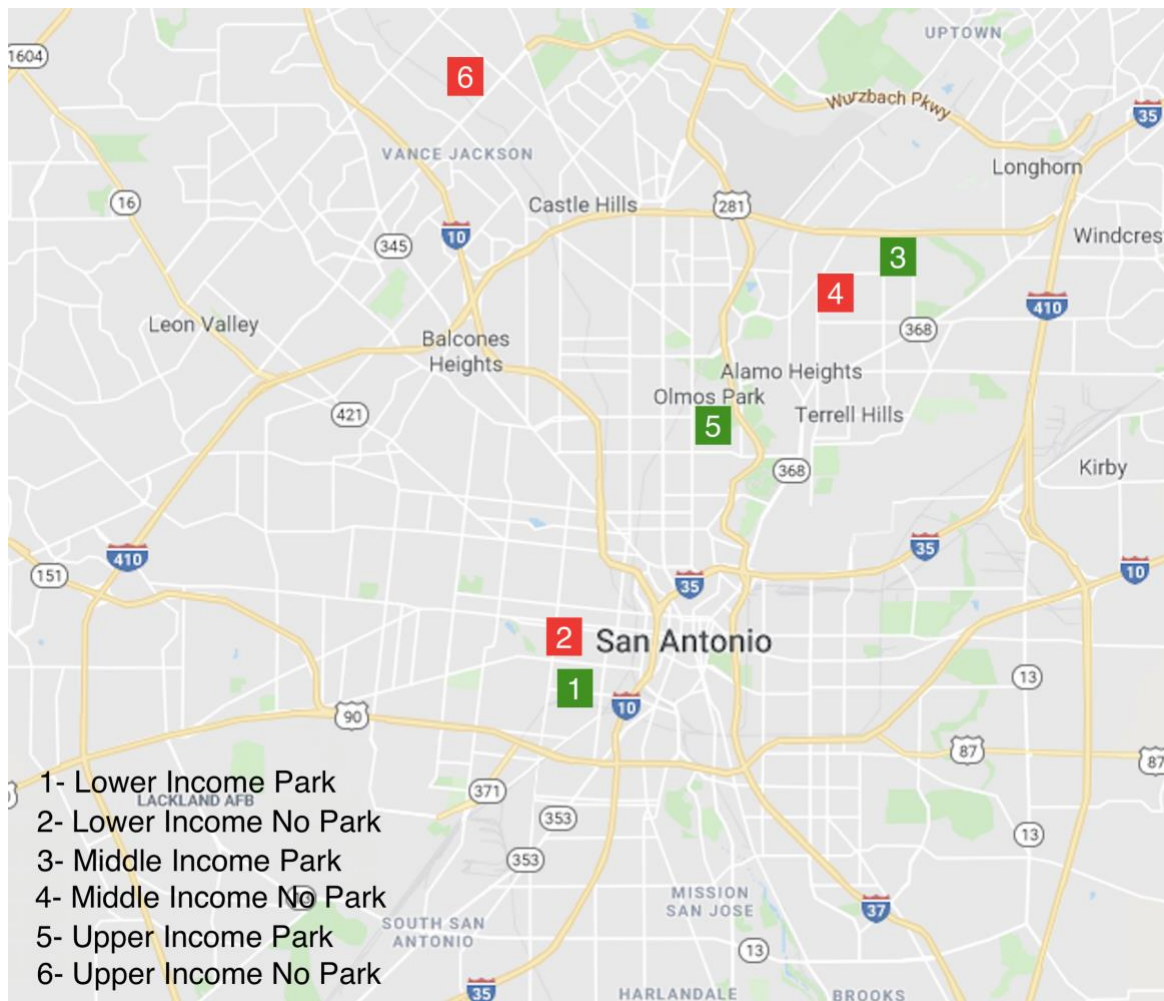
Figure 2.1: Location of Study Areas (Google, n.d.)

The lower income comparison group is as follows: the neighborhood without a park is bordered by Guadalupe Street on the south, San Luis Street on the north, S. Sabinas Street on the east and S. Zarzamora Street on the west. It has a median annual income of $20,042 and has a population of 1166 residents, with 316 households. The demographic breakdown

is 97% Hispanic and 3% White. The population density is 12496 residents per square mile.; The neighborhood with the park is bordered by Saltillo Street on the south, Chihauhau Street on the north, S. Trinity Street to the east and S. Navidada Street to the west. It has a median income of $25,000, has a population of 706 with 149 households. The demographic is 99.4% Hispanic and 0.6% White. The park in this neighborhood is Amistad Park. The population density is 6829 residents per square mile.
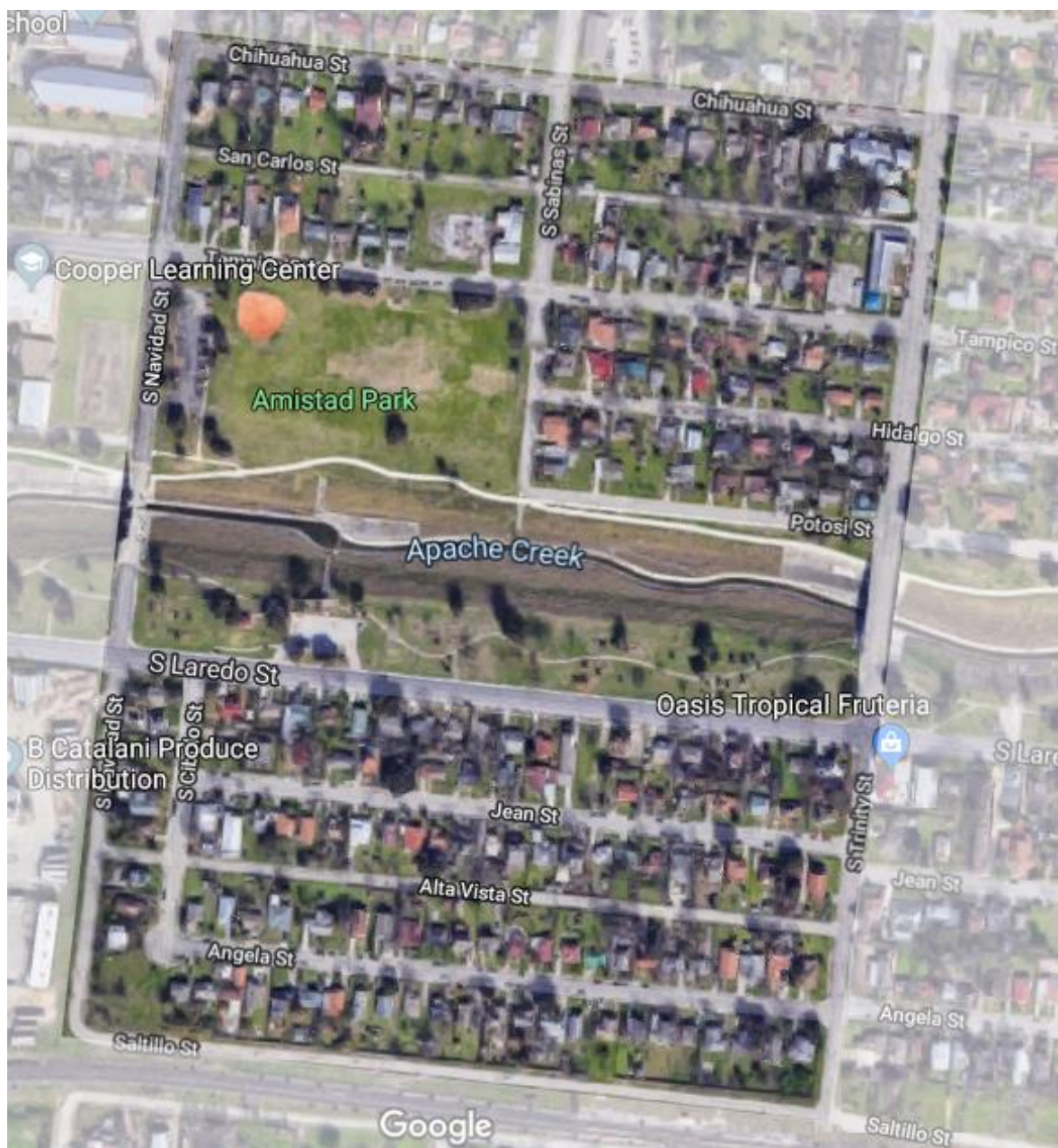
Figure 2.2: Aerial View of Lower Income Area with Park (Google, n.d.)
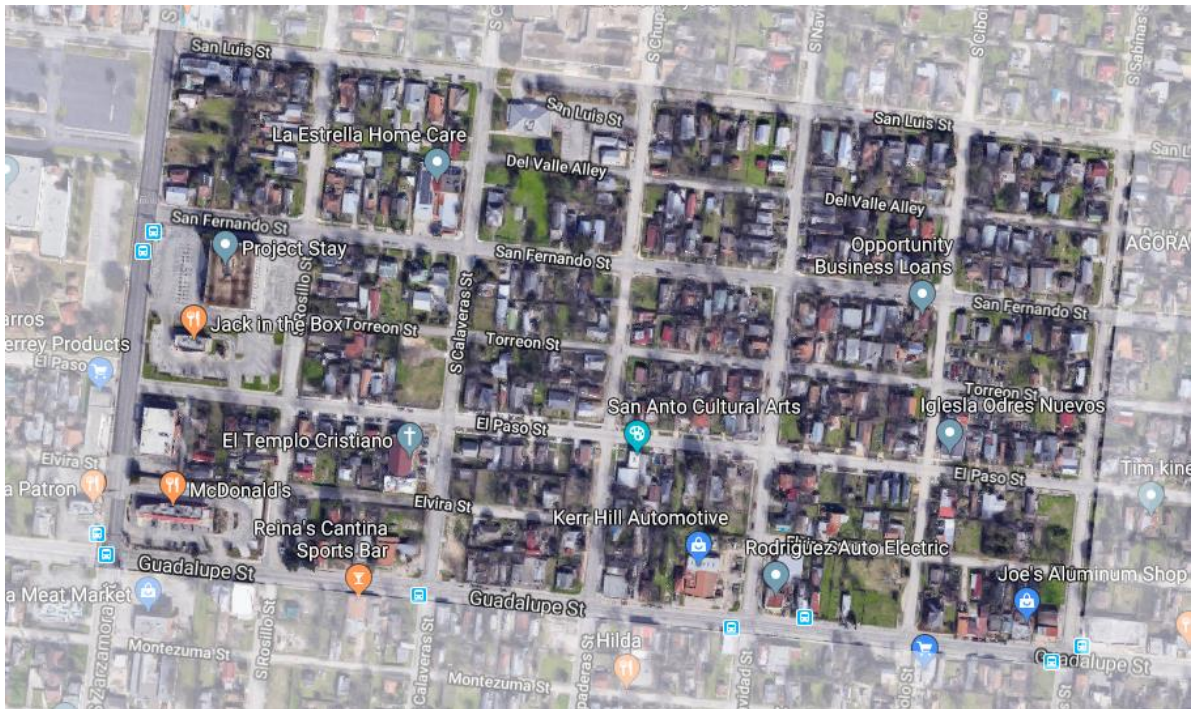
Figure 2.3: Aerial View of Lower Income Area without Park (Google, n.d.)

The middle income comparison group is as follows: the neighborhood without the park is bordered by Northridge Drive on the south, Kenilworth Boulevard on the east, Rockhill drive on the north and North New Braunfels on the west. It has a median income of $117,333, has a population of 885 with 329 households. The demographic is 84.8% White, 12.6% Hispanic, and 2.6% other races. The population density is 4068 residents per square mile.; The neighborhood with a park is bordered by Urban Crest Drive to the south, N.E. Loop 410 to the north, Robin Rest Drive to the east and N. Vandiver Road to the west. It has a median income of $90,417 and has a population of 994 residents with 333 households. The demographic breakdown is 77.6% white and 22.4% Hispanic. The park in this neighborhood is Northwood Park. The population density is 3504 residents per square mile.
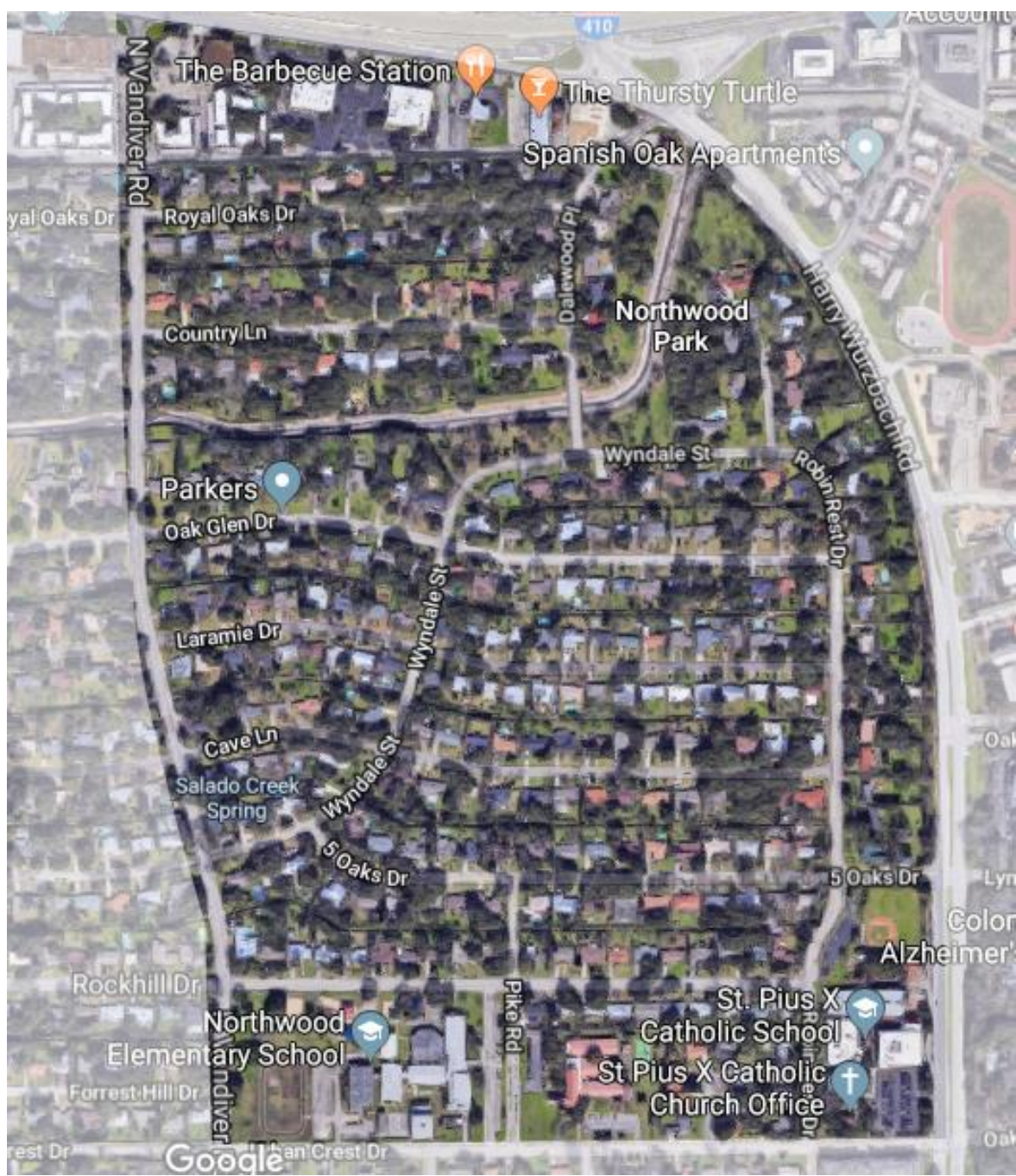
Figure 2.4: Aerial View of Middle Income Area with Park (Google, n.d.)
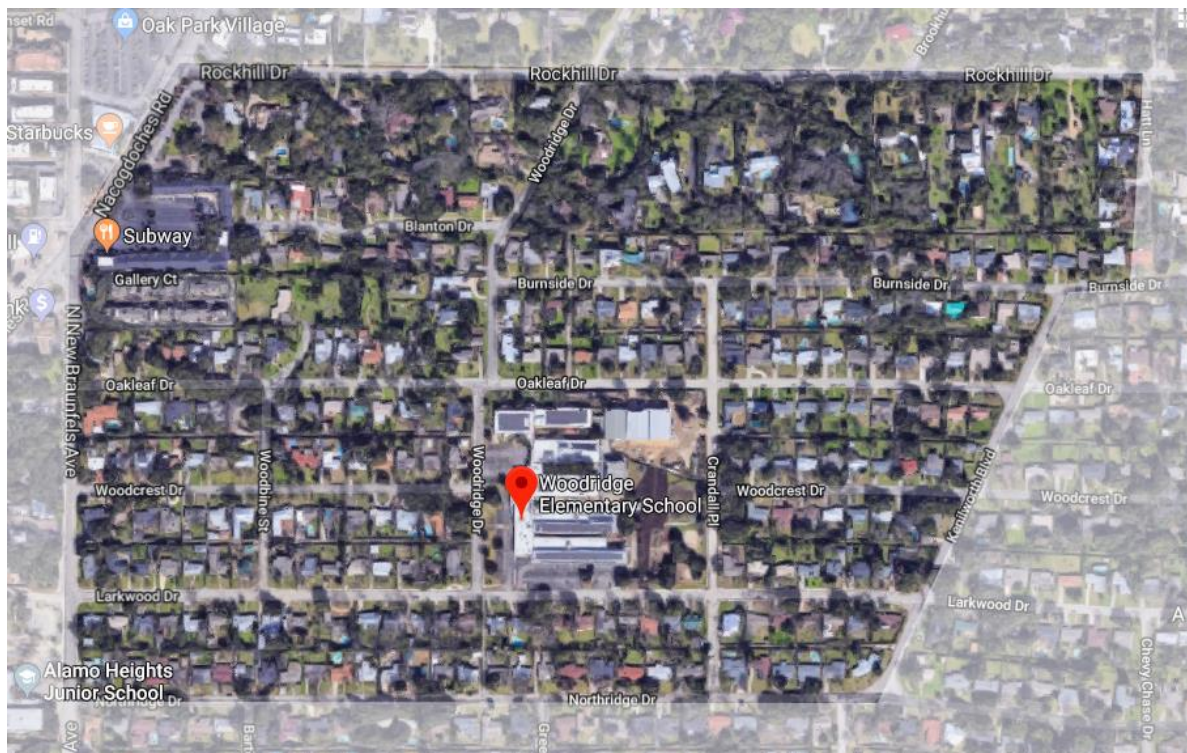
Figure 2.5: Aerial View of Middle Income Area without Park (Google, n.d.)

The upper income comparison group is as follows: the neighborhood without a park is bordered by Elm Creek on the southwest, Wurzbach Road on the southeast, Elm Creek Road on the northeast and Orsinger Lane on the northwest. It has a median annual income of $171,469 and has a population of 642 residents, with 223 households. The demographic breakdown is 72.4% White, 21.3% Hispanic, 4.1% Asian and 2.2% Black. The population density is 1461 residents per square mile; The neighborhood with the park is bordered by Belvediere Drive on the south, E. Mandelay Drive on the north, E. Contour Drive to the east and McCullough Drive Avenue to the west. It has a median income of $183,750, has a population of 1133 with 463 households. The demographic is 73.2% White, 17.5% Hispanic, 8.8% Black and 0.5% other races. The park in this neighborhood is Olmos Basin, a trailhead in natural vegetation with a central sports field. This is more of a community park than a neighborhood park. The population density is 1886 residents per square mile.

Figure 2.6: Aerial View of Upper Income Area with Park (Google, n.d.)

Figure 2.7: Aerial View of Upper Income Area without Park (Google, n.d.)

2.5 Types of Crimes

      Nine different categories of crime are analyzed. These are as follows: homicide and attempted homicide, sexual assault and sexual offences, robbery, aggravated assault and assault, burglary, theft, motor vehicle theft, arson and lastly drugs and alcohol violations. There is additional information available on other petty crimes, such as vandalism and parole violation, but is not included in this study, as they are less relevant.

2.6 Discussion and Limitations

As the purpose of this study is to examine if parks affect crime in urban neighborhoods a direct comparison between areas that have and those that do not have parks is appropriate. The results will afford the opportunity to see if the ratio of crime is different across different income brackets. Do parks have more or less effect as median income changes? This could have policy implications particularly if crime is decreased in a poor, high crime area. Additionally, the study offers the opportunity to see which types of crime, specifically, is affected by the addition of park space. This could provide the impetus for further study for the effect of that particular crime and its relationship to park space. To further strengthen the findings, the study could be repeated in the same manner across different cities in the United States.

One confounding factor is that most of the wealthier areas in San Antonio have a primarily white demographic and in poorer areas a primarily Hispanic demographic. In San Antonio, it is difficult to find areas that have either an a mostly Hispanic or mostly white that spans all three income groups. Therefore, the focus is more on ensuring that within each income range, the comparison groups are as close as possible in income and racial demographics. Any measure of crime will have limitations in that much of it will go unreported. Additionally, when using LexisNexis to map the geographical location of a crime, there is some measure of error. In order to protect victim privacy, location pins are slightly offset. To control for this, the search area is expanded from just park spaces to the surrounding areas as well. As this is an issue that will affect all of the research areas, the effect should be nullified. An additional limitation is the date range of research conducted.

In searching for like areas to compare across the three income brackets, it becomes apparent how difficult this is. The neighborhoods and properties are inherently different. It becomes clear how disparate parks in each neighborhood are. Poorer neighborhoods tend to have small neighborhood parks, whereas wealthy areas have few neighborhood parks, with access to well-maintained community and urban parks. According to the City of San Antonio (2006), the city has been divided into park sub-areas, each with an equivalent amount of park acreage, roughly 2000 acres per sub-area. Between 2001-2005, expenditures for the wealthier North sub-area was $24,879,686 whereas in the poorer South sub-area it was almost half that, at $13,276,900.

The results will be merely indicative and would certainly warrant further investigation. But this initial investigation may be a starting point that could direct future research.

CHAPTER 3: Findings- Part One

After converting the raw data into the rate of crime per 1000 residents per year, there are some noticeable trends. Not surprisingly, across the three income groups, there is an inverse relationship between income and crime rates. The higher income neighborhoods have an average of 15.62 crimes per year between them, the middle income neighborhoods have an average of 49.02 crimes per year between them and the lower income groups have an average of 90.29 crimes per year between them. In all three groups, there is evidence that the neighborhood with the park, has the lower crime rate. When comparing the difference in crime rates between neighborhoods that have parks, versus those that do not, the following is found: the lower income area without a park has 301.91% more crime than the neighborhood that has a park, the middle-income area without a park has 30.95% more crime than the neighborhood that has a park and the upper income area without a park has 76.48% more crime than the neighborhood with a park.

It is important to note, that with such a small sample size, the effect of non-reporting of crimes is going to skew results quite drastically. For example, a serious crime, such as homicide would likely not go unreported, whereas many assaults may go unreported. In essence, these results may indicate that for every 19 assaults, there is 1 homicide. This is likely not the case and the ratio a lot more different.

Table 3.1: Comparison of Annual Rates per 1000 Residents (Collette 2019)

COMPARISON OF ANNUAL RATE PER 1000 RESIDENTS											
	POP. DENSITY	HOMICIDE	SEX OFFENCE	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	ALCOHOL/ DRUGS	TOTAL	AVERAGE
LOW INCOME- no park	12496	1.03	50.52	3.10	19.48	6.55	19.66	5.34	0.69	38.45	144.83	
LOW INCOME- park	6829	1.13	1.13	0.57	5.38	3.68	8.22	3.97	0.00	11.90	35.98	90.23
% difference		9.54	4358.15	447.76	261.97	77.90	139.25	34.77	*	223.15	302.55	
MIDDLE INCOME- no park	4068	1.36	1.13	1.36	4.52	8.59	19.89	14.24	0.00	4.52	55.59	
MIDDLE INCOME- park	3504	1.61	1.41	0.60	5.03	8.65	11.87	10.87	0.20	2.21	42.45	49.02
% difference		18.71	24.65	124.63	11.29	0.75	67.52	31.04	*	104.21	30.95	
UPPER INCOME- no park	1461	1.56	0.62	0.31	2.49	0.93	8.10	4.36	0.00	1.56	19.94	
UPPER INCOME- park	1886	0.71	0.18	0.00	3.00	1.24	3.00	1.06	0.00	2.12	11.30	15.62
% difference		120.60	252.96	*	20.41	32.22	169.91	311.79	*	35.99	76.48	

3.1 Lower Income Neighborhoods

The crime rates per 1000 residents annually for the neighborhood without a park, has the following findings: 1.03 cases of homicide and attempted homicide, 50.52 cases of sexual assault and sexual offences, 3.10 cases of robbery, 19.48 cases of aggravated assault and assault, 6.55 cases of burglary, 19.66 cases of theft, 5.34 cases of motor vehicle theft, 0.69 cases of arson and lastly 38.45 cases of drug and alcohol violations. This gives an average of 144.83 crimes per 1000 residents annually. It is worth noting that the rate of sexual offences is abnormally high and could be the result of a coding error in Lexis Nexis.

The crime rates per 1000 residents annually for the neighborhood with a park, has the following findings: 1.13 cases of homicide and attempted homicide; 1.13 cases of sexual assault and sexual offences; 0.57 cases of robbery; 5.38 cases of aggravated assault and assault; 3.68 cases of burglary; 8.22 cases of theft; 3.97 cases of motor vehicle theft; 0 cases of arson; and lastly 11.90 cases of drug and alcohol violations. This gives an average of 35.98 crimes per 1000 residents annually.

Table 3.2: Comparison of Annual Rates Lower Income (Collette 2019)

COMPARISON OF ANNUAL RATE PER 1000 RESIDENTS												
		HOMICIDE	SEX OFFENCE	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	ALCOHOL/ DRUGS	TOTAL	AVERAGE
LOW INCOME- no park	12496	1.03	50.52	3.10	19.48	6.55	19.66	5.34	0.69	38.45	**144.83**	
LOW INCOME- park	6829	1.13	1.13	0.57	5.38	3.68	8.22	3.97	0.00	11.90	**35.98**	90.23
% difference		9.54	4358.15	447.76	261.97	77.90	139.25	34.77	*	223.15	**302.55**	

All but one category, homicide and attempted homicide, indicate increased levels of crime in areas that do not contain a park. The difference in rates of crime for these two areas is drastic, so much so, that there may be an anomaly. Specifically, in the rates of sexual assault, which at a total average of 50.77 cases per 1000 residents annually, sees an increase of 4358.15% in the area without a park. This could be an indication of something specific to this neighborhood that causes such a high rate. The next biggest difference is seen in the category of robbery, with a 447.76% increase in the rate of crime. This is misleading though, as the rates are relatively low, at 3.10 and 0.57 per 1000 residents annually. In the category of assault, the area without a park has an average of 19.55 crimes per 1000 residents annually, making it 261.97% higher than the area with a park. Alcohol and drug related

offences have a rate that is 223.15% higher, theft is 139.25% higher, burglary is 77.9% higher and motor vehicle theft is 34.77% higher in the area without a park.

3.2 Middle Income Neighborhoods

The crime rates per 1000 residents annually for the neighborhood without a park, has the following findings: 1.36 cases of homicide and attempted homicide, 1.13 cases of sexual assault and sexual offences, 1.36 cases of robbery, 4.52 cases of aggravated assault and assault, 8.59 cases of burglary, 19.89 cases of theft, 14.24 cases of motor vehicle theft, 0 cases of arson and lastly 4.52 cases of drug and alcohol violations. This gives an average of 55.59 crimes per 1000 residents annually. The crime rates per 1000 residents annually for the neighborhood with a park, has the following findings: 1.61 cases of homicide and attempted homicide, 1.41 cases of sexual assault and sexual offences, 0.60 cases of robbery, 5.03 cases of aggravated assault and assault, 8.65 cases of burglary, 11.87 cases of theft, 10.87 cases of motor vehicle theft, 0.20 cases of arson and lastly 2.21 cases of drug and alcohol violations. This gives an average of 42.45 crimes per 1000 residents annually.

Table 3.3: Comparison of Annual Rates Middle Income (Collette 2019)

COMPARISON OF ANNUAL RATE PER 1000 RESIDENTS											
		HOMICIDE	SEX OFFENCE	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	ALCOHOL/ DRUGS	TOTAL	AVERAGE
MIDDLE INCOME- no park	4068	1.36	1.13	1.36	4.52	8.59	19.89	14.24	0.00	4.52	55.59	
MIDDLE INCOME- park	3504	1.61	1.41	0.60	5.03	8.65	11.87	10.87	0.20	2.21	42.45	49.02
% difference		18.71	24.65	124.63	11.29	0.75	67.52	31.04	*	104.21	30.95	

Despite the finding that the overall levels of crime are 30.95% higher in areas without a park, there is more of an even distribution across the types of crime. In the areas without a park, these are the categories of crime that have a higher proportion compared to the areas with a park: robbery rates, at 124% higher; theft rates, at 67.52% higher; motor vehicle theft at 31.04% higher; and alcohol and drug violations, at 104.21%. In the areas with a park, these are the categories of crime that have a higher proportion of crime: homicide and attempted homicide, at 18.71% higher; sexual assault, at 24.66 higher; assault, at 11.29 higher; and burglary at 0.75% higher. It is worth noting that in the instances where crime is higher in the neighborhood with a park, that the differences are not that great,

ranging from 0.75% to 24.66%. However, in the opposite instance, the differences are more dramatic, ranging from 31.04% to 124%.

3.3 Upper Income Neighborhoods

The crime rates per 1000 residents annually for the neighborhood without a park, has the following findings: 1.56 cases of homicide and attempted homicide, 0.62 cases of sexual assault and sexual offences, 0.31 cases of robbery, 2.49 cases of aggravated assault and assault, 0.93 cases of burglary, 8.10 cases of theft, 4.36 cases of motor vehicle theft, 0 cases of arson and lastly 1.56 cases of drug and alcohol violations. This gives an average of 19.94 crimes per 1000 residents annually. The crime rates per 1000 residents annually for the neighborhood with a park, has the following findings: 0.71 cases of homicide and attempted homicide, 0.18 cases of sexual assault and sexual offences, 0 cases of robbery, 3.00 cases of aggravated assault and assault, 1.24 cases of burglary, 3.00 cases of theft, 1.06 cases of motor vehicle theft, 0 cases of arson and 2.12 cases of drug and alcohol violations. This gives an average of 11.30 crimes per 1000 residents annually.

Table 3.4: Comparison of Annual Rates Upper Income (Collette 2019)

COMPARISON OF ANNUAL RATE PER 1000 RESIDENTS												
		HOMICIDE	SEX OFFENCE	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	ALCOHOL/ DRUGS	TOTAL	AVERAGE
UPPER INCOME- no park	1461	1.56	0.62	0.31	2.49	0.93	8.10	4.36	0.00	1.56	19.94	
UPPER INCOME- park	1886	0.71	0.18	0.00	3.00	1.24	3.00	1.06	0.00	2.12	11.30	15.62
% difference		120.60	252.96	*	20.41	32.22	169.91	311.79	*	35.99	76.48	

The difference between the neighborhood with a park and that without, is more prominent in this demographic than in the middle income, but less so than the lower income. The area without a park has 76.48% more crime than the area that has a park. However, it is important to note that the rates all round are quite low. So, whilst the rate of sexual assault in the area with no park is 253.03% higher than the area with the park, both of the actual numbers are so low, 0.62 and 0.18, that this is not that meaningful.

3.4 Significance Testing

As the sample size is only two, running significance tests are not statistically useful. However, several ANOVA tests are performed just to observe which areas indicate higher levels of significance. The null hypothesis states that the presence of a park would not affect the rates of the various crime categories. The alpha level selected to test the null hypothesis is 0.05. The table below outlines the results of those tests. Each category is tested separately, and then the combined values for all of the categories is added and a new test run to test overall (total) significance, as seen in the last line of the table.

Table 3.5: ANOVA Results Lower Income (Collette 2019)

ANOVA RESULTS- LOWER INCOME				
	F-RATIO	P-VALUE	ALPHA LEVEL	SIGNIFICANT
HOMICIDE	0.02	0.89	0.05	NO
SEX ASSAULT	156.27	< .00001	0.05	YES
ROBBERY	8.94	0.00	0.05	YES
ASSAULT	39.29	< .00001	0.05	YES
BURGLARY	3.40	0.07	0.05	NO
THEFT	22.74	< .00001	0.05	YES
CAR THEFT	0.94	0.33	0.05	NO
ARSON	4.21	0.04	0.05	YES
ALCOHOL/ DRUGS	47.23	< .00001	0.05	YES
TOTAL	**196.58**	**< .00001**	**0.05**	**YES**

Upon examination of the lower income areas, it becomes clear that the null hypothesis can be rejected in all but three instances, namely homicide, burglary and car theft. In the categories of sexual assault, robbery, assault, theft, arson and drug/alcohol, as well as with overall rates, significance is achieved at the alpha level of 0.05. Areas that show great significance are sexual assault, assault, theft, alcohol/drug use and overall crime rates with a P value that is less than 0.00001.

Table 3.6: ANOVA Results Middle Income (Collette 2019)

ANOVA RESULTS- MIDDLE INCOME				
	F-RATIO	P-VALUE	ALPHA LEVEL	SIGNIFICANT
HOMICIDE	0.09	0.77	0.05	NO
SEX ASSAULT	0.13	0.72	0.05	NO
ROBBERY	1.42	0.24	0.05	NO
ASSAULT	0.12	0.73	0.05	NO
BURGLARY	0.00	0.97	0.05	NO
THEFT	9.97	0.00	0.05	YES
CAR THEFT	2.07	0.15	0.05	NO
ARSON	1.00	0.32	0.05	NO
ALCOHOL/ DRUGS	4.56	0.03	0.05	YES
TOTAL	6.81	0.01	0.05	YES

The results of the middle income ANOVA tests are less one-sided than in the set of low-income neighborhoods. In the middle-income neighborhoods the null hypothesis can be rejected in only three instances, namely theft, alcohol/drug use and the overall rates at an alpha level of 0.05. In each of these three areas, the P-value is not as low as in the low-income neighborhoods either, with the lowest value being theft at 0.002.

Table 3.7: ANOVA Results Upper Income (Collette 2019)

ANOVA RESULTS- UPPER INCOME				
	F-RATIO	P-VALUE	ALPHA LEVEL	SIGNIFICANT
HOMICIDE	1.27	0.26	0.05	NO
SEX ASSAULT	0.90	0.35	0.05	NO
ROBBERY	1.00	0.32	0.05	NO
ASSAULT	0.22	0.64	0.05	NO
BURGLARY	0.19	0.66	0.05	NO
THEFT	9.46	0.00	0.05	YES
CAR THEFT	7.64	0.01	0.05	YES
ARSON	NA	NA	NA	NA
ALCOHOL/ DRUGS	0.24	0.63	0.05	NO
TOTAL	8.82	0.00	0.05	YES

The results of the upper income ANOVA tests are very similar to those in the middle income group. In the upper income neighborhoods, the null hypothesis can be rejected in only three instances, namely theft, car theft and the overall rates at an alpha level of 0.05. Again, the P-value is not as low as in the low-income neighborhoods, but similar to the middle income group, with the lowest value being theft at 0.0026.

3.5 Overall Observations

The first clear trend observed is that the lower the income, the greater the volume of crime committed. This is not that surprising a finding. The second, and more relevant finding for this study, is that in all three income categories, the neighborhood with a park had lower rates of crime than the neighborhood without a park. This effect dissipated with an increase in income. That is to say, that even though the lower income areas had higher rates of crime, the difference between park/non-park neighborhoods is greatest at this income level.

CHAPTER 4: Findings- Part Two

4.1 Focused Observations for Only One Income Level

Though all three income groups showed less crime in the neighborhood with a park, the lower income group showed the most drastic difference in crime rates. Because the initial study only used one of each area, these findings are not too reliable. In order to see if there is any validity to the argument that parks help to reduce crime rates, a larger sample size is needed. The following is a study of 20 low income areas, 10 with a park and 10 without. The total rate is the combination of each of the subcategories of crime.
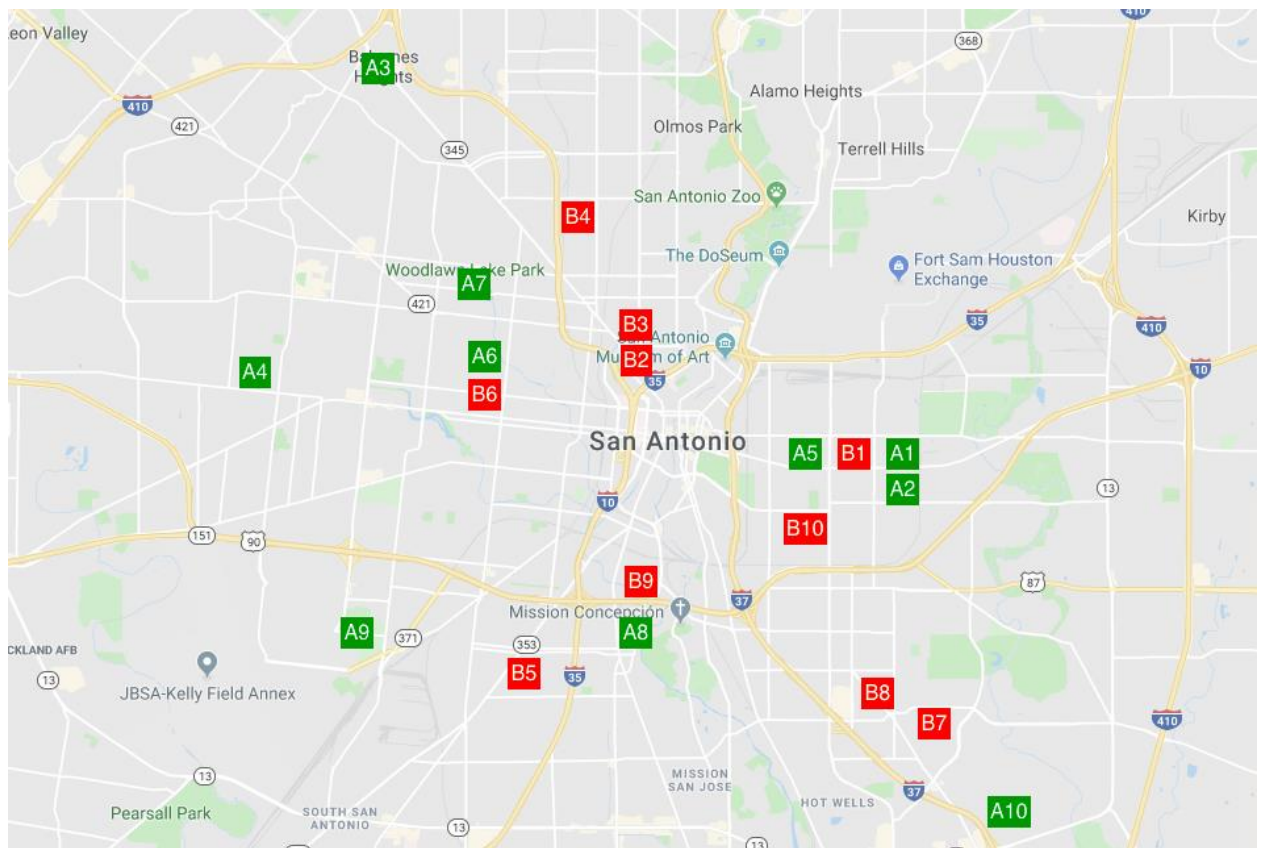

Figure 4.1: Location of Study Areas (Google, n.d.)

Table 4.1: Crime Rate per 1000 Residents with Park (Collette 2019)

ANNUAL AVERAGE RATE PER 1000 RESIDENTS- PARK										
	HOMICIDE	SEX ASSAULT	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	ALCOHOL/ DRUGS	TOTAL
A1	2.93	4.53	1.87	38.13	18.40	22.93	9.07	0.53	15.47	113.87
A2	0.59	1.76	0.00	19.71	7.94	12.35	10.88	0.59	2.35	56.18
A3	1.07	0.53	1.07	8.27	4.53	13.87	6.67	0.00	2.13	38.13
A4	0.73	0.73	1.09	17.05	6.65	17.41	7.74	0.00	10.76	62.15
A5	2.17	21.66	3.97	32.49	12.27	46.57	10.11	0.00	36.82	166.06
A6	2.17	4.08	1.36	16.03	13.04	22.55	5.71	0.27	18.21	83.42
A7	1.30	0.97	0.32	6.66	5.52	11.85	6.98	0.00	7.47	41.07
A8	0.87	1.22	0.70	9.90	2.61	16.68	2.78	0.00	5.91	40.66
A9	1.31	0.82	1.31	16.22	11.14	9.83	9.66	0.33	4.26	54.87
A10	0.32	4.94	0.32	5.83	2.11	22.51	11.09	0.00	4.37	51.50
TOTAL	13.46	41.24	12.01	170.29	84.21	196.56	80.69	1.72	107.75	707.92
AVE	1.35	4.12	1.20	17.03	8.42	19.66	8.07	0.17	10.78	70.79

Table 4.2: Crime Rate per 1000 Residents without Park (Collette 2019)

ANNUAL AVERAGE RATE PER 1000 RESIDENTS- NO PARK										
	HOMICIDE	SEX ASSAULT	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	ALCOHOL/ DRUGS	TOTAL
B1	2.29	13.75	4.01	24.64	17.77	46.13	9.17	0.29	24.93	142.98
B2	1.05	1.92	1.40	11.00	5.24	18.86	7.16	0.17	14.15	60.96
B3	0.39	1.76	0.29	3.52	1.86	6.45	2.64	0.00	7.23	24.12
B4	1.23	0.46	0.77	6.44	9.35	17.93	7.51	0.15	8.58	52.41
B5	1.67	3.09	1.67	16.34	10.04	26.64	7.85	0.13	14.29	81.72
B6	2.65	2.32	1.32	19.70	16.39	21.19	10.26	0.33	14.40	88.58
B7	2.00	1.17	1.67	10.99	7.16	17.99	6.00	0.00	6.99	53.96
B8	2.88	1.92	2.24	27.56	15.71	46.79	11.86	0.00	9.62	118.59
B9	1.20	4.01	2.81	15.45	8.63	36.11	8.63	0.00	7.82	84.65
B10	1.75	2.98	0.88	19.44	7.01	8.06	3.15	0.18	15.94	59.37
TOTAL	17.12	33.38	17.06	155.09	99.14	246.15	74.22	1.25	123.95	767.34
AVE	1.71	3.34	1.71	15.51	9.91	24.62	7.42	0.12	12.39	76.73

Table 4.3: Comparison of Crime Rate (Collette 2019)

ANNUAL AVERAGE RATE PER 1000 RESIDENTS- COMPARISON										
	HOMICIDE	SEX ASSAULT	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	ALCOHOL/ DRUGS	TOTAL
PARK	1.35	4.12	1.20	17.03	8.42	19.66	8.07	0.17	10.78	70.79
NO PARK	1.71	3.34	1.71	15.51	9.91	24.62	7.42	0.12	12.39	76.73

Once raw data is converted to an annual rate per 1000 residents, the observation is that the neighborhoods that have parks tend to have lower overall crime rates. This is not by a significant number though, with the neighborhoods with parks averaging 70.79 crimes per 1000 residents annually, and the neighborhoods with parks averaging 76.74 crimes per 1000 residents annually. Based on these findings, the types of crimes that see a reduction in rate with the addition of a park to a neighborhood are: homicide, robbery, burglary, theft and

drugs and alcohol related crimes. The crimes that have higher rates in neighborhoods with parks are: sexual assault, assault and arson. If domestic assault and most sexual assault tend to take place behind closed doors, this result is unsurprising. The presence of an engaged community may not affect what happens in private homes, though could help to deter opportunistic crimes such as robbery, burglary and theft.

Table 4.4: ANOVA Results- In-depth Lower Income Comparison (Collette 2019)

ANOVA RESULTS- PART 2- LOWER INCOME NEIGHBORHOODS ONLY				
	F-RATIO	P-VALUE	ALPHA LEVEL	SIGNIFICANT
HOMICIDE	1.52	0.22	0.05	NO
SEX ASSAULT	0.36	0.55	0.05	NO
ROBBERY	1.93	0.17	0.05	NO
ASSAULT	0.55	0.46	0.05	NO
BURGLARY	1.14	0.29	0.05	NO
THEFT	2.85	0.09	0.05	NO
CAR THEFT	0.66	0.42	0.05	NO
ARSON	0.37	0.54	0.05	NO
ALCOHOL/ DRUGS	0.37	0.41	0.05	NO
TOTAL	0.52	0.47	0.05	NO

Multiple ANOVA tests are run to test for significance in just the lower income areas. The null hypothesis states that the presence of parks does not affect the crime rates in low income areas at an alpha level of 0.05. The results of these tests are indicated in the table above. The types of crime that come close to showing significance are robbery, with a p-value of 0.17 and theft at 0.09. However, there is no area that indicates significance, thus we cannot reject the null hypothesis. Even though the rates indicate that there is a difference in crime for areas with a park versus those that do not, significance cannot be achieved in any of the categories. This means that though one observes a difference, it is not substantial enough to claim that the difference is due to the presence of a park in the neighborhood.

CHAPTER 5: Findings- Part Three

       Once the crime rates of multiple neighborhood with parks are combined, the results are less conclusive than in the first part of this study. Therein lies a missed opportunity to understand why the initial set of tests indicated lower crime rates in areas with a park. The second set of tests controlled for demographics and income, but the actual park spaces within those lower income neighborhoods are quite different. As only quantitative methods have been used thus far, it is worth using a qualitative approach to examine the actual park spaces in those areas to see which kinds of parks are present in the highest and well as lowest crime rate groups. In addition, there are observations about some of the characteristics of those specific neighborhoods. It is worth noting that these observations are based solely on images of the parks and the respective neighborhoods, not on any observation of actual users. There is likely an effect that the type of users in the parks has on the findings, that is then not accounted for in this investigation.

       Based on the findings in the neighborhoods with parks, Fairchild Park is the park in the neighborhood that has the highest crime rate. The next highest crime rate is in the neighborhood in which Lincoln Park is found. The neighborhood that has the lowest crime rate has Rogiers Park in it, and the next lowest has Concepcion Park in it. The following is an examination of each of these parks in an attempt to understand what characteristics help to determine these rates.

5.1 Fairchild Park- Highest Rate of Crime

       One of the most notable features of the neighborhood in which Fairchild Park is, is that it is bordered on the south and east side by a large cemetery and borders some commercial and retail space on the north. Of all the study areas with parks, this had the lowest population, which was only 554, thus the rate of crime is higher than the actual number of crimes. It also had the lowest income of the group, with an average of $14,792 annually. It has a population density of 3412 people per square mile. The proximity to the retail areas are likely to drive up crime rates. LexisNexis offsets crime locations on the map slightly to protect privacy, so some of the crimes shown to be in this neighborhood may have in fact occurred just outside of it, in the commercial and retail spaces.

Figure 5.1: Commercial Zone Adjacent to Neighborhood (Google, n.d.)

Figure 5.2: Non-Residential Zone Adjacent to Neighborhood (Google, n.d.)

The residential portion of this neighborhood consists mostly of small single-family homes. A couple of the houses are in disrepair, but for the most part, the homes and yards look to be relatively well maintained. Lots are small and narrow and there appears to be minimal landscaping.

Figure 5.3: Typical Home in Fairchild Park Neighborhood (Google, n.d.)

Figure 5.4: Additional Home in Fairchild Park Neighborhood (Google, n.d.)

The actual park itself has a mix of amenities. There are 14 tennis courts, 9 pickle ball courts, a swimming pool and a playground. The courts all seem to still be operational, but do not appear to be in very good shape. The swimming pool looks as though it is no longer in use. Google images from March 2019 show an empty pool and fairly run down looking swimming facilities. The page for Fairchild Park, on the San Antonio parks website has photographs of the swimming pool in use. But when one goes to the list of active swimming pools in San Antonio, this one is not listed. The last pictures of the swimming pool in use posted by the public to google are dated August 2016. The north and west sides of the park border a residential neighborhood, and there is good visibility into the park from these sides. However, the south and east sides are bordered by a cemetery, thus these areas have lower visibility.
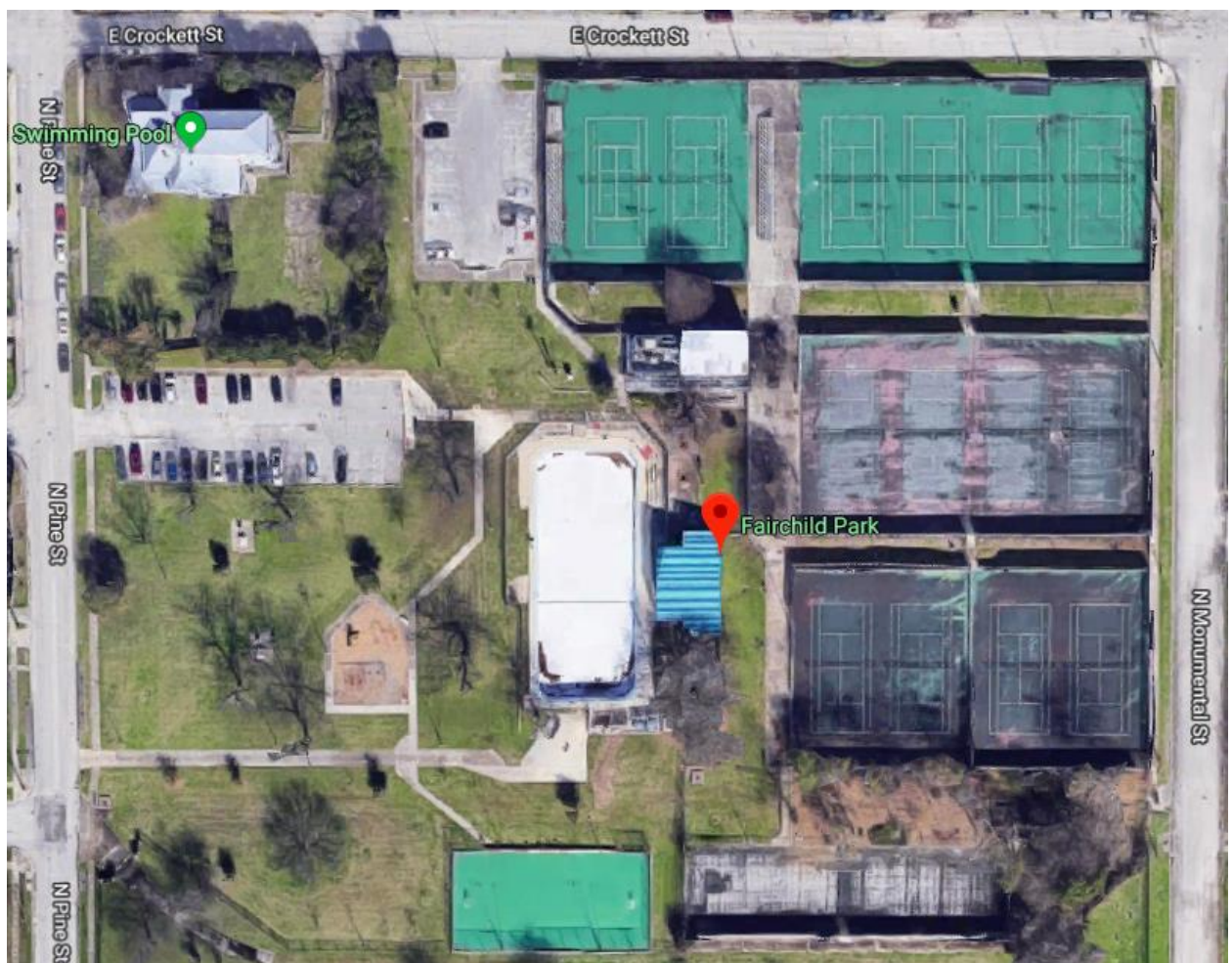
Figure 5.5: Aerial View of Fairchild Park (Google, n.d.)

The playground is quite small. There are two swing sets and one small jungle gym with a slide. The equipment itself is in decent shape, and the target age group is definitely younger children. This limits the number of potential users of this play ground. In addition, small children would attend this park with a guardian, but there is very little place for the guardians to sit. There is a bench and only two picnic tables. This would make socializing amongst the guardian's difficult unless they just stood beside the playground. There is minimal formal landscaping, with mostly grassy areas and some large trees, but what is there does appear to be well maintained.

Figure 5.6: Playground at Fairchild Park (Google, n.d.)

Overall, this seems like the kind of park that would experience heavy use by groups at specific times of the day and year, specifically for the sports facilities. But there is little that would attract people to this park, just for the sake of play or relaxation. It would certainly be a seasonally used facility too. The vacant swimming pool complex could also attract vandalism, making the entire park feel unsafe.

5.2 Lincoln Park- Second Highest Rate of Crime

The neighborhood in which Lincoln Park is has a median income of $22,292 and has a population of 750 people. In general, this looks to be an older neighborhood, with smaller homes and lot sizes. Many of the yards are fenced in and are not well maintained. There is a mix of trees and shrubbery, but not much formal landscaping with few decorative gardens. Sidewalks do not appear to be well maintained either. This neighborhood is adjacent to the one with Fairchild Park, and shares the road with the commercial buildings on it. It has a population density of 3655 people per square mile.

Figure 5.7: Typical Home in Lincoln Park Neighborhood (Google, n.d.)

Figure 5.8: Additional Home in Lincoln Park Neighborhood (Google, n.d.)

Lincoln Park itself is quite sizable but has similar characteristics to Fairchild Park. There are three softball fields, a swimming pool and a community center. There is also open green space. Like Fairchild Park, the swimming pool appears to be in a derelict state and is not usable. There is no playground equipment or picnic seating, and unless one was attending a softball game, there would be very little to do in the actual park. The areas of open green space, have mown grass, but it does not appear to be very well maintained. There is very little landscaping, and just a few small trees. There is not much that would block visibility to the park from the outside, but there is really only one section of parkland that has neighbors bordering it. It is on the west side, which is the side with the fewest amenities, thus fewer users. Thus, any deterrent effect that having good visibility would provide could be made void.

The community center would certainly have the opportunity to draw people to the area, but with few outdoor amenities, activity would be limited to the indoors. The demographic who play softball is limited, so unless a scheduled game or practice was in progress, there would be little appeal in spending any time in this park. Again, as in Fairchild Park, having a derelict swimming pool center could invite vandalism and mischief.
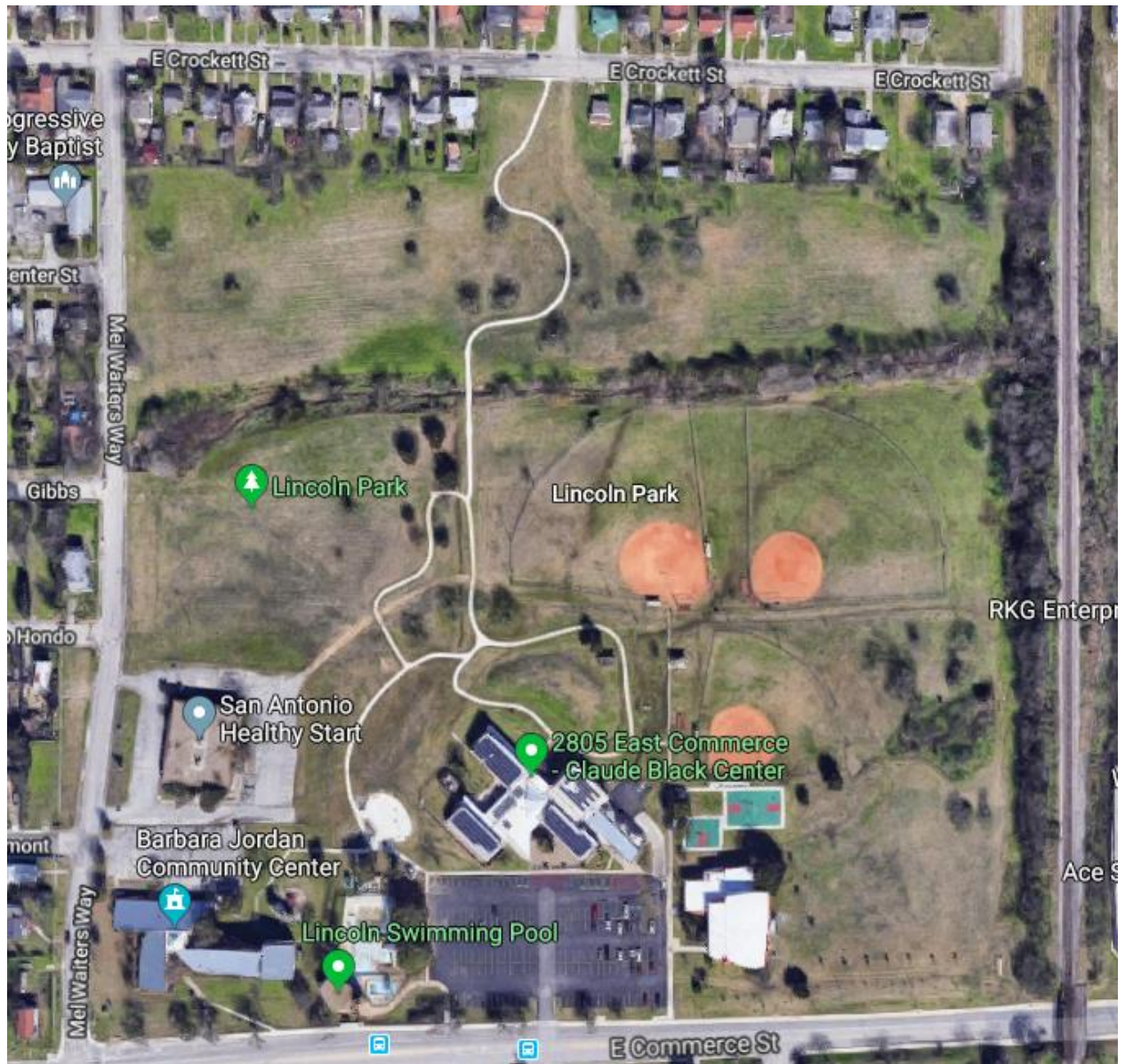
Figure 5.9: Aerial View of Lincoln Park (Google, n.d.)

Figure 5.10: Street View of Lincoln Park (Google, n.d.)

Figure 5.11: Aerial View of Sports Fields at Lincoln Park (Google, n.d.)

Figure 5.12: Aerial View of Swimming Pool at Lincoln park (Google, n.d.)

5.3 Rogiers Park- Lowest Rate of Crime

Rogiers Park has the lowest crime rate of all of the areas in this portion of the study. It also has the highest average annual income, at $33,036 and a population of 750 people. The neighborhood is bordered on most sides by other residential areas, except the northeast side, which has multiple commercial businesses. But these are mostly retail (such as Hobby Lobby) and restaurants. The type of businesses in this neighborhood versus those in the Fairchild Park neighborhood, may partly account for the lower crime rate, and certainly having a higher annual income affects the rate too. It has a population density of 4854 people per square mile.

Figure 5.13: Commercial Area Bordering Rogiers Park Neighborhood (Google, n.d.)

The neighborhood is attractive. The houses are less modest than in the other two neighborhoods discussed, but this could be explained by the slightly higher income bracket. The houses are on larger lots, are set back quite far from the street and are well maintained. There are plenty of mature trees and there is variation in the kinds of vegetation in private gardens, with a mix of trees and shrubbery.

Figure 5.14: Typical Home in Rogiers Park Neighborhood (Google, n.d.)

Figure 5.15: Additional Home in Rogiers Park Neighborhood (Google, n.d.)

Rogiers Park is one of the smaller parks in the group. The landscaping is exceptionally well maintained, looking both groomed and fertilized. There are plenty of mature shade trees and a variety of amenities. There are three playgrounds, a skateboard park, a basketball court, a covered pavilion and multiple picnic areas. This park would appeal to users of all ages, from young children and their parents on the playground, teenagers on the basketball court and skate park, and older people could enjoy the shaded picnic areas. There are also paved walkways that meander through the park making it wheelchair accessible. Because of the wide variety of people who could use the park, it could be well used at all times when it is open. The park is fully fenced, helping to enforce park hours. The park is centrally located within the neighborhood and is bordered by residential properties, making it highly accessible to residents. The park is bounded on all four sides by residential homes, and though fenced and closed at night, visibility into the park is excellent. Two of the side of the park have residences right up its perimeter, without a road to separate them, so it would be very easy for residents to keep an eye on what is happening in the neighborhood.
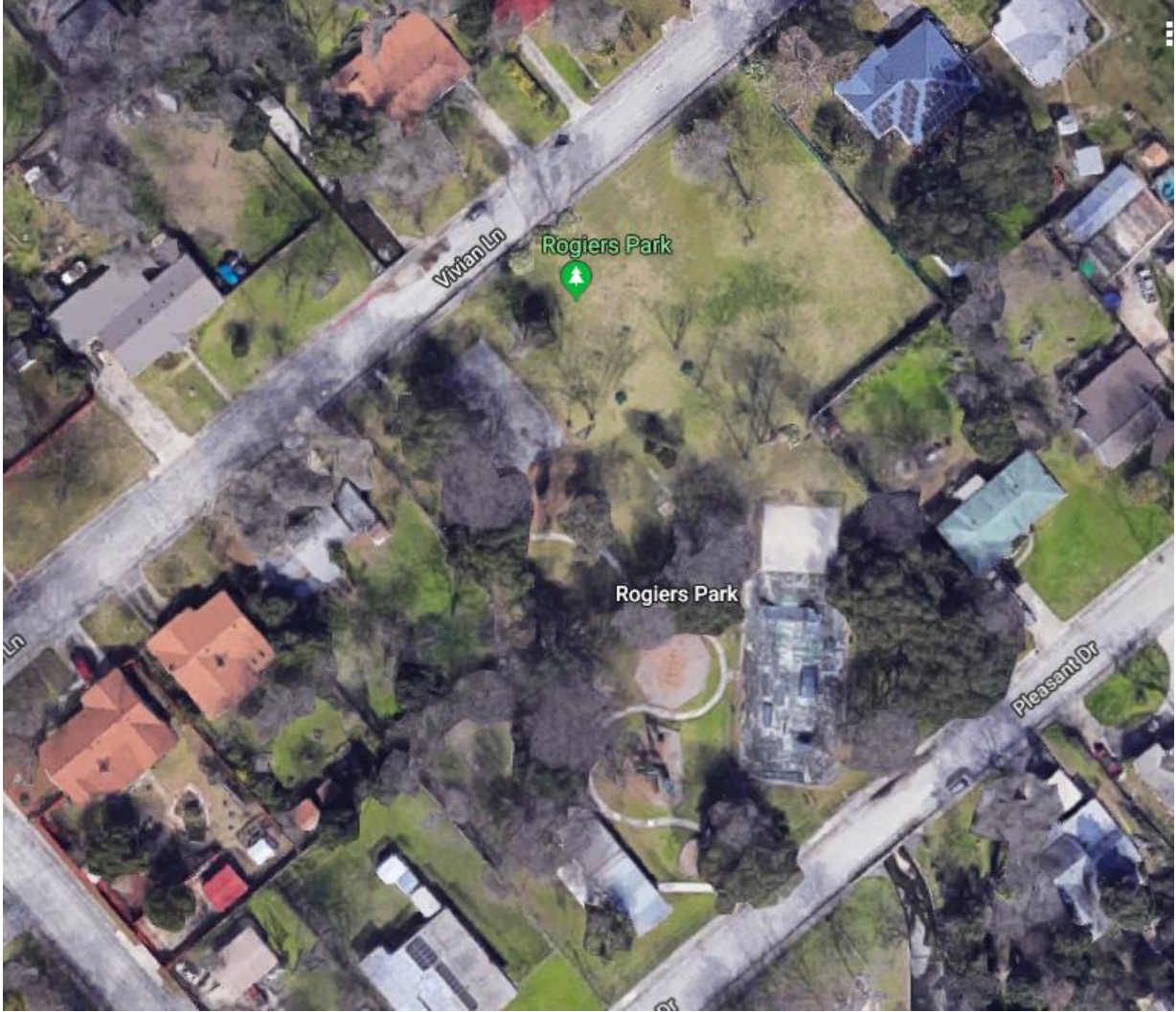
Figure 5.16: Aerial View of Rogiers Park (Google, n.d.)

Figure 5.17: Rogiers Park Amenities (Google, n.d.)
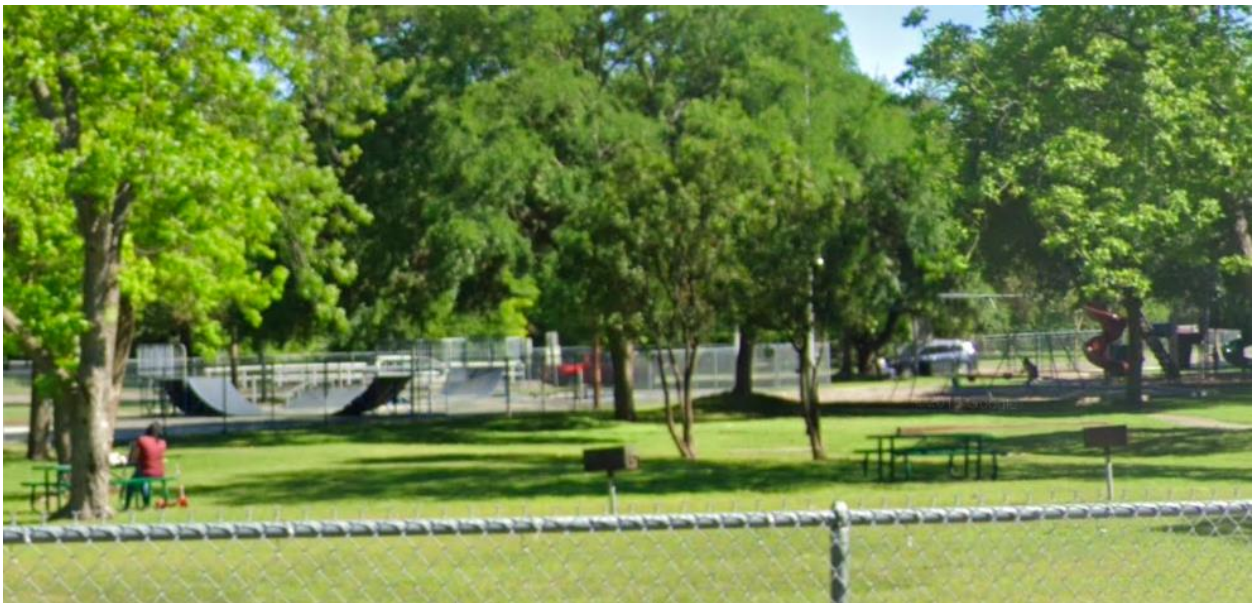
Figure 5.18: Additional View of Rogiers Park (Google, n.d.)

5.4 Concepcion Park- Second Lowest Rate of Crime

Though the highest and lowest crime rates have coincided with income level (thus perhaps nullifying the effect that the park has on the crime rate), Concepcion Park is the best example of the true effect a park can have on the crime rates of an area. The neighborhood with Concepcion Park has the third lowest average annual income, at $20,000, and one of

the highest populations, at 1151 people. Properties are similar in size and layout as the two high crime neighborhoods, but homes appear to be well maintained. It has a population density of 6199 people per square mile.

Figure 5.19: Typical Home in Concepcion Park Neighborhood (Google, n.d.)
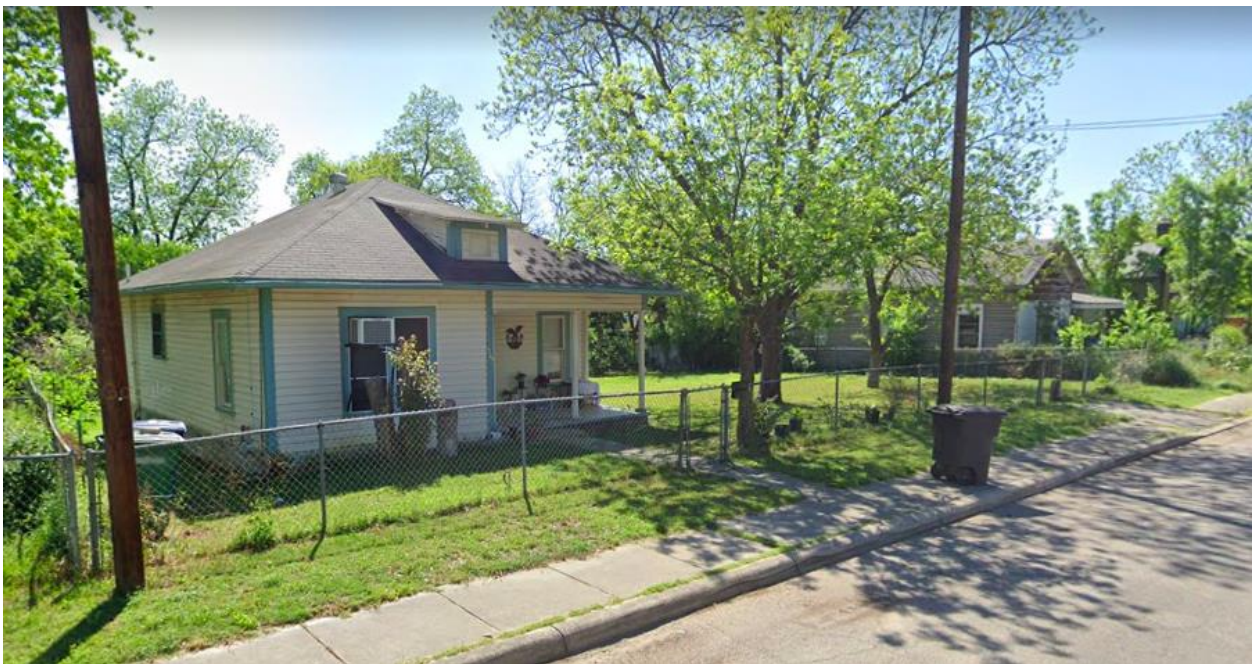
Figure 5.20: Additional Home in Concepcion Park Neighborhood (Google, n.d.)

The park itself has been recently upgraded and is in excellent condition. This indicates that the condition of the park matters. There are a mix of amenities offered at Concepcion Park. There is a swimming pool that appears to be functional, new playground equipment that would appeal to a wide age group of children, a workout course (separated from the play area by the swimming pool) that would appeal to teenagers and adults, two softball fields, a covered pavilion, multiple seating and picnic areas and paved accessible walkways making it wheelchair friendly. It borders the San Antonio River and has a river walkway that connects adjacent neighborhoods. There are a variety of trees in the park, as well as the natural landscaping along the opposite side of the river. Much of the landscaping on the park side of the river has been cleared to allow for good sightlines. Concepcion Park is different to the other parks discussed as it is connected to some other community amenities such as a historical church, and a children's home. This increases collective efficacy.The east side of the park is bounded by the San Antonio River, and there is green space to the south. There is a small section of residential homes that borders the north section of the park, and these have excellent views into the park.
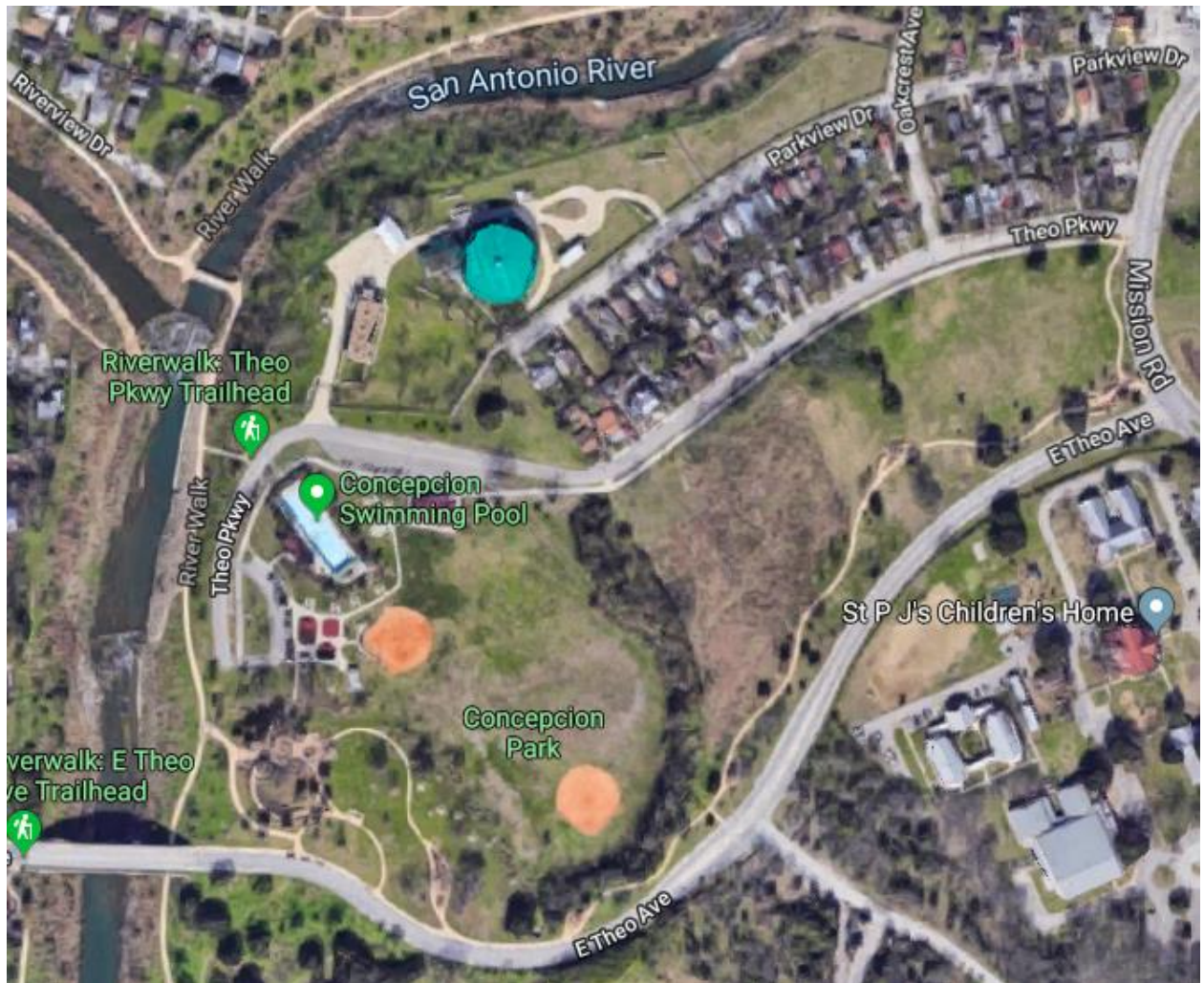
Figure 5.21: Aerial View of Concepcion Park (Google, n.d.)

Figure 5.22: Playground at Concepcion Park (Google, n.d.)

Figure 5.23: Workout Area at Concepcion Park (Google, n.d.)

Figure 5.24: Aerial View of Swimming Pool at Concepcion Park (Google, n.d.)

5.5 Overall Observations

      Aside from the external factors that could cause a difference in crime rates, such as income and adjacent neighborhoods, there are some qualities that are shared by the low crime parks and the higher crime parks.

      In the parks where there are higher rates of crime, the parks share these traits: the parks are not aimed at multiple user groups, with limited activities that do not have broad appeal. These activities would also be limited to certain times of the day and year; both parks have amenities that are derelict, in both cases a swimming pool complex; both parks have limited seating opportunities and lack some sort of permanently shaded pavilion which could facilitate social activities in all seasons and weather conditions.

      The parks with lower crimes rates have these traits in common: each has a variety of attractions that will allow the park to appeal to users of multiple generations. This in turn allows the parks to be in use at various times of the day; each park is maintained in excellent condition and has access to natural elements such as the river or mature trees; both parks have multiple seating opportunities and permanently shaded pavilions that allow social interactions and group activities throughout the year; neither park has any amenity that is derelict or in non-working order.

CHAPTER 6: Conclusion

6.1 Opportunities for Future Research

This study represents just a small sample in one metropolitan area in the United States. Further research is warranted to see if any of these results would be replicated in other cities or countries. A longitudinal study, with more areas represented, across multiple cities or countries could give a better understanding as to the role that parks play in local rates of crime. Of particular interest is the effect that parks could have on low income areas. Instead of good parks being seen as a luxury afforded only to the privileged, an argument could be made that thoughtful and strategic park design, as well as good maintenance could help to alleviate some of the social issues felt by this demographic, and that parks are more a necessity than a luxury. Additional focus on these lower income areas is warranted. Future research could also capture more of a qualitative narrative, with interviews and surveys targeting this demographic specifically. This would enable researchers to dig a little deeper into how and why the parks are used and how, if at all, the parks influence perception and fear of crime.

In addition, a more in-depth study on the kinds of crime that are most affected by the presence, or lack of, parks is warranted. Similarly, it would be interesting to determine specifically which park attractions had the greatest effect on rates of crime.

6.2 Closing Remarks

The results of this study are not conclusive and further research is warranted. The first part of the study illustrates that there is a difference in the rates of crime between neighborhoods that have parks, versus those that do not. This effect is observed most strongly in areas with a lower income demographic. There is also evidence of an inverse relationship between income level and crime rates. Overall, the crime rates most affected by the presence of a park are theft and alcohol and drug use. An explanation for this could be that if residents have something nearby that will allow them to entertain themselves and socialize, that they could be less inclined to entertainment themselves in the form of drugs and alcohol. Additionally, having well used parks enables there to be more eyes on the neighborhood, which could be an opportunistic theft deterrent. Per Cohen and Felson's

Routine Activity Theory (1979) which argues that in order for crime to occur, there must be a motivated offender and a suitable target and lack of guardianship, the assumption is that the offender is always motivated. This becomes the constant in the formula. By modifying the amount and access to green space, one could potentially disrupt this pattern.

The second part of the study which focuses on twenty low income areas, ten with a park and ten without, has less conclusive results. There are some areas of crime that have a reduction in rate with the addition of a park, as well as an overall decrease, but the difference is not substantial enough to achieve significance.

The third part of the study illustrates that the type of park in a neighborhood and the condition of it, is what makes the difference in crime rates. The way in which a park is maintained has implications for social disorganization and collective efficacy theories. Parks that appeal to multiple generations and abilities, have the opportunity to be used throughout the day and year and which are well maintained tend to have reduced crime rates. Such parks also tend to encourage more well maintained private homes, regardless of how low the annual average income is.

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Appendix

Raw Data

				RAW DATA- LOWER INCOME- NO PARK					
	HOMICIDE	SEX OFFENCE	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	ALCOHOL / DRUGS
January 2014	0	0	0	0	0	1	1	0	5
February 2014	0	5	1	1	0	4	1	0	5
March 2014	0	4	0	2	0	0	1	0	5
April 2014	0	2	0	1	0	4	0	0	7
May 2014	0	5	1	2	2	2	1	1	6
June 2014	0	6	1	2	1	1	0	0	4
July 2014	0	6	1	2	3	5	2	0	5
August 2014	0	7	0	0	0	5	0	0	4
September 2014	0	2	0	0	0	3	1	0	8
October 2014	0	3	0	5	0	2	0	0	2
November 2014	0	4	0	3	0	2	3	0	1
December 2014	0	3	0	1	0	3	0	0	1
January 2015	0	4	0	2	1	3	0	0	0
February 2015	0	5	1	0	0	2	1	0	5
March 2015	0	3	0	1	0	5	0	0	2
April 2015	0	4	2	1	0	1	0	0	3
May 2015	0	15	0	0	1	4	1	0	5
June 2015	0	6	2	1	1	1	0	0	5
July 2015	0	4	1	6	0	1	1	0	8
August 2015	1	12	1	2	2	1	0	0	4
September 2015	0	4	0	3	1	3	0	0	4
October 2015	1	3	0	2	0	2	1	0	4
November 2015	0	1	0	1	3	2	1	0	6
December 2015	0	0	0	1	0	1	0	0	3
January 2016	0	3	2	1	0	1	2	0	3
February 2016	0	2	0	4	0	2	0	0	1
March 2016	0	5	0	1	0	1	0	0	3
April 2016	0	5	0	1	1	2	0	0	2
May 2016	0	5	0	3	2	2	0	0	0
June 2016	0	1	0	0	1	1	0	0	0
July 2016	1	6	1	3	2	1	0	0	1
August 2016	0	4	1	0	0	1	0	0	1
September 2016	0	6	0	4	1	0	0	0	2
October 2016	1	3	0	4	0	5	1	0	4
November 2016	0	6	0	1	1	0	1	1	2
December 2016	0	5	1	1	0	3	0	0	6
January 2017	1	5	0	2	0	2	1	0	5
February 2017	0	3	0	3	0	2	0	0	3
March 2017	0	8	0	1	0	1	2	0	5
April 2017	0	7	0	4	0	2	1	1	2
May 2017	0	3	1	2	2	0	0	0	6
June 2017	0	6	0	2	1	3	0	0	0
July 2017	0	8	0	4	1	2	0	0	6
August 2017	0	12	0	5	0	1	0	0	4
September 2017	0	5	0	3	1	2	1	0	3
October 2017	0	9	0	2	1	2	1	0	6
November 2017	0	8	0	2	0	2	1	0	9
December 2017	0	5	0	0	0	0	0	0	6
January 2018	0	7	0	1	0	1	0	0	4
February 2018	0	4	0	3	0	0	0	0	2
March 2018	0	4	0	1	0	4	1	0	2
April 2018	0	4	0	2	1	2	0	1	11
May 2018	0	3	0	3	1	1	0	0	2
June 2018	0	5	0	2	2	1	0	0	6
July 2018	0	4	0	1	0	2	1	0	2
August 2018	0	2	0	2	2	1	0	0	5
September 2018	0	5	0	3	0	1	1	0	3
October 2018	0	13	0	1	1	2	0	0	2
November 2018	1	2	1	2	2	2	1	0	1
December 2018	0	2	0	0	0	1	1	0	1
	6	296	18	113	38	114	31	4	223

	HOMICIDE	SEX OFFENCE	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	ALCOHOL/ DRUGS
				RAW DATA LOWER INCOME- PARK					
January 2014	0	0	0	0	0	0	0	0	1
February 2014	0	0	0	2	0	1	0	0	1
March 2014	0	0	0	0	0	0	0	0	1
April 2014	0	0	0	2	0	1	0	0	0
May 2014	0	0	0	0	0	0	0	0	0
June 2014	0	0	0	1	0	0	1	0	0
July 2014	0	0	0	0	0	0	0	0	0
August 2014	0	0	0	1	0	2	0	0	2
September 2014	0	0	0	0	0	0	0	0	1
October 2014	0	0	0	0	0	1	0	0	0
November 2014	0	0	0	1	0	0	0	0	0
December 2014	0	1	0	1	1	0	0	0	0
January 2015	0	0	0	0	0	1	0	0	2
February 2015	0	0	0	0	0	0	0	0	0
March 2015	0	0	0	0	0	0	1	0	0
April 2015	0	0	0	0	0	1	0	0	0
May 2015	0	0	0	0	0	0	0	0	0
June 2015	0	0	0	0	0	0	0	0	1
July 2015	0	0	0	1	0	1	0	0	0
August 2015	0	0	0	0	0	0	0	0	0
September 2015	0	0	0	0	0	0	0	0	0
October 2015	0	0	0	0	1	0	0	0	1
November 2015	0	0	0	0	0	1	1	0	0
December 2015	0	0	0	0	0	0	0	0	0
January 2016	0	0	0	0	0	1	1	0	0
February 2016	0	0	0	0	0	0	0	0	1
March 2016	0	0	0	0	0	0	1	0	0
April 2016	0	0	0	0	1	0	0	0	0
May 2016	0	0	0	2	0	0	0	0	4
June 2016	0	0	0	0	0	0	0	0	0
July 2016	0	0	0	1	0	0	0	0	0
August 2016	0	0	0	1	0	1	0	0	0
September 2016	0	0	0	1	0	1	1	0	0
October 2016	0	0	0	0	1	1	2	0	1
November 2016	1	1	0	1	1	1	1	0	1
December 2016	0	0	0	0	0	0	0	0	1
January 2017	0	0	0	0	2	0	0	0	0
February 2017	0	0	0	0	0	0	0	0	0
March 2017	0	0	0	0	0	0	0	0	0
April 2017	0	0	0	1	2	0	1	0	1
May 2017	1	0	0	1	0	0	0	0	1
June 2017	0	0	0	0	0	0	0	0	1
July 2017	0	1	0	0	1	0	0	0	0
August 2017	0	0	0	0	0	0	0	0	1
September 2017	0	0	0	0	1	0	0	0	1
October 2017	0	0	0	1	0	0	2	0	1
November 2017	0	0	0	0	0	0	1	0	0
December 2017	0	1	0	0	0	1	0	0	0
January 2018	0	0	0	0	0	1	0	0	1
February 2018	0	0	0	0	0	1	0	0	3
March 2018	0	0	0	0	0	1	0	0	3
April 2018	0	0	0	0	0	3	0	0	1
May 2018	0	0	0	0	1	3	0	0	0
June 2018	1	0	1	1	1	2	0	0	3
July 2018	0	0	0	0	0	2	0	0	4
August 2018	1	0	0	0	0	0	0	0	0
September 2018	0	0	1	0	0	0	0	0	0
October 2018	0	0	0	0	0	0	0	0	1
November 2018	0	0	0	0	0	1	0	0	2
December 2018	0	0	0	0	0	0	1	0	0
	4	4	2	19	13	29	14	0	42

	HOMICIDE	SEX OFFENCE	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	ALCOHOL/ DRUGS
RAW DATA MIDDLE INCOME- NO PARK									
January 2014	0	0	0	1	1	1	0	0	1
February 2014	0	1	0	0	0	0	1	0	1
March 2014	0	0	1	1	0	3	0	0	0
April 2014	0	0	0	0	0	1	0	0	1
May 2014	0	0	0	0	0	1	0	0	1
June 2014	0	0	0	0	0	1	0	0	1
July 2014	0	0	0	0	1	2	0	0	0
August 2014	0	0	0	0	1	0	1	0	1
September 2014	0	0	0	1	0	0	2	0	1
October 2014	0	0	0	0	0	3	1	0	1
November 2014	0	0	0	0	1	1	0	0	0
December 2014	0	0	0	0	1	1	1	0	0
January 2015	0	0	0	0	2	1	2	0	1
February 2015	0	0	0	0	1	0	1	0	0
March 2015	1	0	0	1	1	0	0	0	0
April 2015	0	0	0	2	0	0	1	0	0
May 2015	0	0	0	0	0	0	1	0	0
June 2015	0	0	0	0	0	2	2	0	0
July 2015	0	0	0	0	0	3	0	0	1
August 2015	0	0	1	0	1	3	1	0	0
September 2015	0	0	0	1	0	1	0	0	0
October 2015	0	0	0	0	1	2	2	0	0
November 2015	0	0	0	0	1	3	3	0	0
December 2015	0	0	0	0	2	0	0	0	0
January 2016	0	0	0	0	2	1	1	0	0
February 2016	0	0	0	0	1	4	1	0	1
March 2016	0	0	1	0	2	1	3	0	0
April 2016	0	0	0	0	1	3	2	0	0
May 2016	0	0	1	1	1	4	1	0	0
June 2016	0	0	0	0	0	1	0	0	0
July 2016	1	0	0	0	2	3	1	0	0
August 2016	0	0	0	0	3	0	1	0	0
September 2016	0	0	0	1	0	2	0	0	1
October 2016	1	1	0	1	0	2	0	0	0
November 2016	0	0	1	0	0	4	2	0	0
December 2016	0	0	0	0	1	3	1	0	0
January 2017	0	0	0	1	2	2	1	0	2
February 2017	0	0	0	0	0	1	3	0	0
March 2017	0	0	0	0	0	1	2	0	0
April 2017	0	0	0	0	1	2	3	0	0
May 2017	1	0	0	0	0	2	2	0	0
June 2017	0	0	0	0	1	3	0	0	0
July 2017	0	0	1	0	1	2	1	0	0
August 2017	0	0	0	2	1	1	3	0	0
September 2017	0	0	0	0	0	2	1	0	1
October 2017	0	0	0	1	1	1	3	0	0
November 2017	0	0	0	0	0	0	0	0	0
December 2017	0	1	0	0	0	1	1	0	0
January 2018	0	0	0	0	0	0	0	0	0
February 2018	0	0	0	0	1	1	1	0	0
March 2018	0	0	0	1	0	1	1	0	1
April 2018	0	0	0	0	0	3	3	0	1
May 2018	0	0	0	1	1	1	0	0	0
June 2018	1	0	0	0	0	2	0	0	0
July 2018	0	0	0	2	0	2	0	0	0
August 2018	1	0	0	1	0	0	0	0	1
September 2018	0	2	0	1	0	0	0	0	0
October 2018	0	0	0	0	0	1	3	0	0
November 2018	0	0	0	0	2	1	3	0	1
December 2018	0	0	0	0	0	1	0	0	1
	6	5	6	20	38	88	63	0	20

	HOMICIDE	SEX OFFENCE	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	ALCOHOL / DRUGS
				RAW DATA MIDDLE INCOME- PARK					
January 2014	0	0	0	0	0	0	1	0	0
February 2014	0	0	0	0	0	0	0	0	0
March 2014	0	0	0	0	0	0	1	0	0
April 2014	0	0	0	0	0	1	1	0	0
May 2014	0	0	0	0	0	0	2	0	0
June 2014	0	0	0	0	1	0	1	0	0
July 2014	0	0	0	0	1	1	0	0	0
August 2014	0	0	0	0	1	1	2	0	0
September 2014	0	0	0	0	0	0	0	0	0
October 2014	0	0	0	0	0	0	0	0	0
November 2014	0	0	0	0	0	1	2	0	0
December 2014	0	0	0	0	0	0	1	0	1
January 2015	0	0	0	2	1	2	2	0	1
February 2015	1	0	0	1	0	1	1	0	0
March 2015	0	0	0	0	0	1	0	0	0
April 2015	0	0	0	0	0	1	0	0	0
May 2015	0	0	0	0	0	0	0	0	0
June 2015	0	0	0	0	1	0	0	0	0
July 2015	0	0	0	0	1	0	0	0	0
August 2015	0	0	0	0	0	0	0	0	1
September 2015	0	0	0	0	0	0	2	0	0
October 2015	0	0	0	0	0	1	1	0	0
November 2015	0	0	0	0	0	1	2	0	0
December 2015	0	0	0	0	0	2	1	0	0
January 2016	0	0	0	0	0	0	0	0	0
February 2016	0	0	1	1	1	1	0	0	1
March 2016	0	0	0	0	1	1	1	1	0
April 2016	0	0	0	0	0	1	0	0	0
May 2016	0	0	0	0	1	2	2	0	0
June 2016	0	0	0	1	1	3	0	0	0
July 2016	0	0	1	1	1	3	2	0	1
August 2016	0	0	0	0	0	1	4	0	0
September 2016	0	0	0	0	2	4	1	0	0
October 2016	0	0	0	1	1	2	1	0	1
November 2016	0	0	0	1	0	2	3	0	0
December 2016	0	0	0	1	2	1	2	0	0
January 2017	0	1	0	0	3	1	0	0	0
February 2017	0	0	0	1	3	0	0	0	0
March 2017	0	0	0	0	0	1	1	0	0
April 2017	0	0	0	1	0	2	2	0	0
May 2017	0	0	0	0	1	0	1	0	0
June 2017	0	0	0	3	1	2	1	0	1
July 2017	0	0	0	0	2	0	2	0	0
August 2017	0	1	1	1	1	1	0	0	0
September 2017	0	1	0	0	1	1	2	0	1
October 2017	1	0	0	0	1	2	0	0	0
November 2017	0	1	0	1	3	1	0	0	0
December 2017	0	1	0	0	4	3	0	0	0
January 2018	0	0	0	0	2	0	1	0	0
February 2018	1	0	0	1	1	0	0	0	0
March 2018	2	0	0	2	1	2	1	0	0
April 2018	0	0	0	1	0	0	1	0	1
May 2018	1	0	0	0	0	0	2	0	1
June 2018	0	0	0	1	1	1	1	0	1
July 2018	0	0	0	2	0	3	0	0	0
August 2018	0	0	0	0	0	1	0	0	0
September 2018	0	0	0	0	1	2	0	0	0
October 2018	0	1	0	1	0	0	1	0	0
November 2018	0	0	0	0	0	1	1	0	0
December 2018	2	1	0	1	1	1	1	0	0
	8	7	3	25	43	59	54	1	11

	HOMICIDE	SEX OFFENCE	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	ALCOHOL/ DRUGS
RAW DATA UPPER INCOME- NO PARK									
January 2014	1	0	0	0	0	1	0	0	0
February 2014	0	0	0	0	0	0	0	0	0
March 2014	0	0	0	0	1	0	0	0	0
April 2014	0	0	0	0	0	0	0	0	0
May 2014	0	0	0	0	0	1	1	0	1
June 2014	0	0	0	0	0	0	0	0	0
July 2014	0	0	0	0	0	0	0	0	0
August 2014	0	0	0	1	0	0	0	0	0
September 2014	0	0	0	0	0	0	0	0	0
October 2014	0	0	0	0	0	1	0	0	0
November 2014	0	0	0	0	0	0	0	0	0
December 2014	0	0	0	0	0	1	0	0	0
January 2015	0	0	0	0	0	0	0	0	0
February 2015	0	0	0	0	0	0	0	0	0
March 2015	0	0	0	0	0	0	1	0	0
April 2015	0	0	0	0	0	0	0	0	0
May 2015	0	0	0	0	0	0	0	0	0
June 2015	0	0	0	0	0	0	1	0	0
July 2015	0	0	0	0	0	0	0	0	0
August 2015	0	0	0	0	0	1	1	0	0
September 2015	0	0	0	0	0	0	0	0	0
October 2015	0	0	0	0	0	1	0	0	0
November 2015	0	0	0	0	0	1	1	0	0
December 2015	0	0	0	0	0	1	0	0	1
January 2016	0	0	0	0	0	1	0	0	0
February 2016	0	0	0	1	0	0	0	0	0
March 2016	0	0	0	0	0	0	0	0	0
April 2016	0	0	0	0	0	0	0	0	0
May 2016	0	1	0	0	0	0	0	0	0
June 2016	0	0	0	0	0	2	0	0	0
July 2016	0	0	0	1	0	0	0	0	0
August 2016	0	0	0	1	0	0	0	0	0
September 2016	0	0	0	0	0	1	0	0	0
October 2016	0	0	0	0	0	1	0	0	0
November 2016	0	0	0	0	1	0	0	0	0
December 2016	0	0	0	0	0	1	0	0	0
January 2017	0	0	0	0	0	0	0	0	0
February 2017	0	0	0	0	0	0	2	0	2
March 2017	0	0	0	1	0	1	1	0	0
April 2017	0	0	0	0	0	0	1	0	0
May 2017	0	0	0	0	0	0	0	0	0
June 2017	0	0	0	0	0	1	1	0	0
July 2017	0	0	0	0	0	0	0	0	0
August 2017	1	0	0	0	0	1	1	0	0
September 2017	0	0	0	0	0	1	0	0	0
October 2017	0	0	0	0	0	0	0	0	0
November 2017	0	0	0	0	1	1	0	0	0
December 2017	0	0	0	1	0	0	0	0	0
January 2018	1	0	0	0	0	0	0	0	0
February 2018	1	0	0	0	0	0	0	0	0
March 2018	1	0	0	0	0	0	0	0	0
April 2018	0	1	0	0	0	0	1	0	0
May 2018	0	0	0	0	0	1	0	0	0
June 2018	0	0	0	0	0	1	0	0	0
July 2018	0	0	1	0	0	0	1	0	0
August 2018	0	0	0	0	0	2	1	0	0
September 2018	0	0	0	0	0	1	0	0	0
October 2018	0	0	0	1	0	0	0	0	0
November 2018	0	0	0	1	0	0	0	0	1
December 2018	0	0	0	0	0	2	0	0	0
	5	**2**	**1**	**8**	**3**	**26**	**14**	**0**	**5**

	HOMICIDE	SEX OFFENCE	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	ALCOHOL/ DRUGS
				RAW DATA UPPER INCOME- PARK					
January 2014	1	0	0	0	0	0	0	0	0
February 2014	0	0	0	0	0	1	0	0	0
March 2014	0	0	0	0	1	2	0	0	0
April 2014	0	0	0	0	1	0	1	0	0
May 2014	0	0	0	1	1	2	0	0	1
June 2014	0	0	0	1	0	1	0	0	1
July 2014	0	0	0	0	1	1	0	0	0
August 2014	0	0	0	1	0	0	0	0	1
September 2014	0	0	0	0	0	0	1	0	0
October 2014	0	0	0	0	0	0	0	0	0
November 2014	0	0	0	1	1	0	1	0	0
December 2014	1	0	0	1	1	0	0	0	0
January 2015	0	0	0	0	0	0	0	0	0
February 2015	0	0	0	0	0	0	0	0	0
March 2015	0	0	0	0	0	0	0	0	0
April 2015	0	0	0	2	1	1	0	0	1
May 2015	0	0	0	0	0	0	0	0	0
June 2015	0	0	0	0	0	1	0	0	0
July 2015	0	0	0	1	0	0	0	0	0
August 2015	0	0	0	0	0	2	0	0	0
September 2015	0	0	0	0	0	0	0	0	0
October 2015	0	0	0	1	0	1	0	0	0
November 2015	1	0	0	1	0	0	0	0	0
December 2015	0	0	0	0	0	0	0	0	0
January 2016	0	0	0	0	0	0	0	0	0
February 2016	0	0	0	0	0	0	0	0	0
March 2016	0	0	0	0	0	0	0	0	0
April 2016	0	1	0	1	0	0	0	0	0
May 2016	0	0	0	0	0	0	0	0	0
June 2016	0	0	0	0	0	1	0	0	0
July 2016	0	0	0	1	0	0	0	0	0
August 2016	0	0	0	1	0	0	0	0	1
September 2016	0	0	0	1	0	0	0	0	1
October 2016	0	0	0	0	0	0	0	0	0
November 2016	0	0	0	0	0	0	0	0	0
December 2016	0	0	0	0	0	0	0	0	0
January 2017	0	0	0	2	0	0	0	0	1
February 2017	0	0	0	0	0	0	0	0	4
March 2017	0	0	0	0	0	0	0	0	1
April 2017	0	0	0	0	0	0	0	0	0
May 2017	0	0	0	0	0	0	0	0	0
June 2017	0	0	0	0	0	0	1	0	0
July 2017	0	0	0	0	0	0	0	0	0
August 2017	0	0	0	0	0	2	0	0	0
September 2017	0	0	0	0	0	0	0	0	0
October 2017	0	0	0	0	0	0	0	0	0
November 2017	0	0	0	0	0	0	0	0	0
December 2017	0	0	0	1	0	0	0	0	DRUGS
January 2018	0	0	0	0	0	0	0	0	0
February 2018	0	0	0	0	0	0	0	0	0
March 2018	0	0	0	0	0	0	0	0	0
April 2018	0	0	0	0	0	0	0	0	0
May 2018	0	0	0	0	0	0	0	0	0
June 2018	0	0	0	0	0	0	1	0	0
July 2018	0	0	0	0	0	2	0	0	0
August 2018	0	0	0	0	0	0	1	0	0
September 2018	0	0	0	0	0	0	0	0	0
October 2018	0	0	0	0	0	0	0	0	0
November 2018	1	0	0	0	0	0	0	0	0
December 2018	0	0	0	0	0	0	0	0	0
	4	1	0	17	7	17	6	0	12

	HOMICIDE	SEX OFFENCE	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	ALCOHOL/ DRUGS	MONTHLY TOTAL
				RATE PER 1000 RESIDENTS LOWER INCOME- PARK						
January 2014	0.0000	0.0000	0.0000	0.0000	0.0000	0.8621	0.8621	0.0000	4.3103	**6.0345**
February 2014	0.0000	4.3103	0.8621	0.8621	0.0000	3.4483	0.8621	0.0000	4.3103	**14.6552**
March 2014	0.0000	3.4483	0.0000	1.7241	0.0000	0.0000	0.8621	0.0000	4.3103	**10.3448**
April 2014	0.0000	1.7241	0.0000	0.8621	0.0000	3.4483	0.0000	0.0000	6.0345	**12.0690**
May 2014	0.0000	4.3103	0.8621	1.7241	1.7241	1.7241	0.8621	0.8621	5.1724	**17.2414**
June 2014	0.0000	5.1724	0.8621	1.7241	0.8621	0.8621	0.0000	0.0000	3.4483	**12.9310**
July 2014	0.0000	5.1724	0.8621	1.7241	2.5862	4.3103	1.7241	0.0000	4.3103	**20.6897**
August 2014	0.0000	6.0345	0.0000	0.0000	0.0000	4.3103	0.0000	0.0000	3.4483	**13.7931**
September 2014	0.0000	1.7241	0.0000	0.0000	0.0000	2.5862	0.8621	0.0000	6.8966	**12.0690**
October 2014	0.0000	2.5862	0.0000	4.3103	0.0000	1.7241	0.0000	0.0000	1.7241	**10.3448**
November 2014	0.0000	3.4483	0.0000	2.5862	0.0000	1.7241	2.5862	0.0000	0.8621	**11.2069**
December 2014	0.0000	2.5862	0.0000	0.8621	0.0000	2.5862	0.0000	0.0000	0.8621	**6.8966**
January 2015	0.0000	3.4483	0.0000	1.7241	0.8621	2.5862	0.0000	0.0000	0.0000	**8.6207**
February 2015	0.0000	4.3103	0.8621	0.0000	0.0000	1.7241	0.8621	0.0000	4.3103	**12.0690**
March 2015	0.0000	2.5862	0.0000	0.8621	0.0000	4.3103	0.0000	0.0000	1.7241	**9.4828**
April 2015	0.0000	3.4483	1.7241	0.8621	0.0000	0.8621	0.0000	0.0000	2.5862	**9.4828**
May 2015	0.0000	12.9310	0.0000	0.0000	0.8621	3.4483	0.8621	0.0000	4.3103	**22.4138**
June 2015	0.0000	5.1724	1.7241	0.8621	0.8621	0.8621	0.0000	0.0000	4.3103	**13.7931**
July 2015	0.0000	3.4483	0.8621	5.1724	0.0000	0.8621	0.8621	0.0000	6.8966	**18.1034**
August 2015	0.8621	10.3448	0.8621	1.7241	1.7241	0.8621	0.0000	0.0000	3.4483	**19.8276**
September 2015	0.0000	3.4483	0.0000	2.5862	0.8621	2.5862	0.0000	0.0000	3.4483	**12.9310**
October 2015	0.8621	2.5862	0.0000	1.7241	0.0000	1.7241	0.8621	0.0000	3.4483	**11.2069**
November 2015	0.0000	0.8621	0.0000	0.8621	2.5862	1.7241	0.8621	0.0000	5.1724	**12.0690**
December 2015	0.0000	0.0000	0.0000	0.8621	0.0000	0.8621	0.0000	0.0000	2.5862	**4.3103**
January 2016	0.0000	2.5862	1.7241	0.8621	0.0000	0.8621	1.7241	0.0000	2.5862	**10.3448**
February 2016	0.0000	1.7241	0.0000	3.4483	0.0000	1.7241	0.0000	0.0000	0.8621	**7.7586**
March 2016	0.0000	4.3103	0.0000	0.8621	0.0000	0.8621	0.0000	0.0000	2.5862	**8.6207**
April 2016	0.0000	4.3103	0.0000	0.8621	0.8621	1.7241	0.0000	0.0000	1.7241	**9.4828**
May 2016	0.0000	4.3103	0.0000	2.5862	1.7241	1.7241	0.0000	0.0000	0.0000	**10.3448**
June 2016	0.0000	0.8621	0.0000	0.0000	0.8621	0.8621	0.0000	0.0000	0.0000	**2.5862**
July 2016	0.8621	5.1724	0.8621	2.5862	1.7241	0.8621	0.0000	0.0000	0.8621	**12.9310**
August 2016	0.0000	3.4483	0.8621	0.0000	0.0000	0.8621	0.0000	0.0000	0.8621	**6.0345**
September 2016	0.0000	5.1724	0.0000	3.4483	0.8621	0.0000	0.0000	0.0000	1.7241	**11.2069**
October 2016	0.8621	2.5862	0.0000	3.4483	0.0000	4.3103	0.8621	0.0000	3.4483	**15.5172**
November 2016	0.0000	5.1724	0.0000	0.8621	0.8621	0.0000	0.8621	0.8621	1.7241	**10.3448**
December 2016	0.0000	4.3103	0.8621	0.8621	0.0000	2.5862	0.0000	0.0000	5.1724	**13.7931**
January 2017	0.8621	4.3103	0.0000	1.7241	0.0000	1.7241	0.8621	0.0000	4.3103	**13.7931**
February 2017	0.0000	2.5862	0.0000	2.5862	0.0000	1.7241	0.0000	0.0000	2.5862	**9.4828**
March 2017	0.0000	6.8966	0.0000	0.8621	0.0000	0.8621	1.7241	0.0000	4.3103	**14.6552**
April 2017	0.0000	6.0345	0.0000	3.4483	0.0000	1.7241	0.8621	0.8621	1.7241	**14.6552**
May 2017	0.0000	2.5862	0.8621	1.7241	1.7241	0.0000	0.0000	0.0000	5.1724	**12.0690**
June 2017	0.0000	5.1724	0.0000	1.7241	0.8621	2.5862	0.0000	0.0000	0.0000	**10.3448**
July 2017	0.0000	6.8966	0.0000	3.4483	0.8621	1.7241	0.0000	0.0000	5.1724	**18.1034**
August 2017	0.0000	10.3448	0.0000	4.3103	0.0000	0.8621	0.0000	0.0000	3.4483	**18.9655**
September 2017	0.0000	4.3103	0.0000	2.5862	0.8621	1.7241	0.8621	0.0000	2.5862	**12.9310**
October 2017	0.0000	7.7586	0.0000	1.7241	0.8621	1.7241	0.8621	0.0000	5.1724	**18.1034**
November 2017	0.0000	6.8966	0.0000	1.7241	0.0000	1.7241	0.8621	0.0000	7.7586	**18.9655**
December 2017	0.0000	4.3103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.1724	**9.4828**
January 2018	0.0000	6.0345	0.0000	0.8621	0.0000	0.8621	0.0000	0.0000	3.4483	**11.2069**
February 2018	0.0000	3.4483	0.0000	2.5862	0.0000	0.0000	0.0000	0.0000	1.7241	**7.7586**
March 2018	0.0000	3.4483	0.0000	0.8621	0.0000	3.4483	0.8621	0.0000	1.7241	**10.3448**
April 2018	0.0000	3.4483	0.0000	1.7241	0.8621	1.7241	0.0000	0.8621	9.4828	**18.1034**
May 2018	0.0000	2.5862	0.0000	2.5862	0.8621	0.8621	0.0000	0.0000	1.7241	**8.6207**
June 2018	0.0000	4.3103	0.0000	1.7241	1.7241	0.8621	0.0000	0.0000	5.1724	**13.7931**
July 2018	0.0000	3.4483	0.0000	0.8621	0.0000	1.7241	0.8621	0.0000	1.7241	**8.6207**
August 2018	0.0000	1.7241	0.0000	1.7241	1.7241	0.8621	0.0000	0.0000	4.3103	**10.3448**
September 2018	0.0000	4.3103	0.0000	2.5862	0.0000	0.8621	0.8621	0.0000	2.5862	**11.2069**
October 2018	0.0000	11.2069	0.0000	0.8621	0.8621	1.7241	0.0000	0.0000	1.7241	**16.3793**
November 2018	0.8621	1.7241	0.8621	1.7241	1.7241	1.7241	0.8621	0.0000	0.8621	**10.3448**
December 2018	0.0000	1.7241	0.0000	0.0000	0.0000	0.8621	0.8621	0.0000	0.8621	**4.3103**
TOTAL	5.1724	252.5862	15.5172	97.4138	32.7586	98.2759	26.7241	3.4483	192.2414	**724.1379**
ANNUAL AVERAG	**1.0345**	**50.5172**	**3.1034**	**19.4828**	**6.5517**	**19.6552**	**5.3448**	**0.6897**	**38.4483**	**144.8276**

									ALCOHOL/	MONTHLY
	HOMICIDE	SEX OFFENCE	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	DRUGS	TOTAL

RATE PER 1000 RESIDENTS LOWER INCOME- PARK

	HOMICIDE	SEX OFFENCE	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	ALCOHOL/ DRUGS	MONTHLY TOTAL
January 2014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.416	**1.416**
February 2014	0.000	0.000	0.000	2.833	0.000	1.416	0.000	0.000	1.416	**5.666**
March 2014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.416	**1.416**
April 2014	0.000	0.000	0.000	2.833	0.000	1.416	0.000	0.000	0.000	**4.249**
May 2014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
June 2014	0.000	0.000	0.000	1.416	0.000	0.000	1.416	0.000	0.000	**2.833**
July 2014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
August 2014	0.000	0.000	0.000	1.416	0.000	2.833	0.000	0.000	2.833	**7.082**
September 2014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.416	**1.416**
October 2014	0.000	0.000	0.000	0.000	0.000	1.416	0.000	0.000	0.000	**1.416**
November 2014	0.000	0.000	0.000	1.416	0.000	0.000	0.000	0.000	0.000	**1.416**
December 2014	0.000	1.416	0.000	1.416	1.416	0.000	0.000	0.000	0.000	**4.249**
January 2015	0.000	0.000	0.000	0.000	0.000	1.416	0.000	0.000	2.833	**4.249**
February 2015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
March 2015	0.000	0.000	0.000	0.000	0.000	0.000	1.416	0.000	0.000	**1.416**
April 2015	0.000	0.000	0.000	0.000	0.000	1.416	0.000	0.000	0.000	**1.416**
May 2015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
June 2015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.416	**1.416**
July 2015	0.000	0.000	0.000	1.416	0.000	1.416	0.000	0.000	0.000	**2.833**
August 2015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
September 2015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
October 2015	0.000	0.000	0.000	0.000	1.416	0.000	0.000	0.000	1.416	**2.833**
November 2015	0.000	0.000	0.000	0.000	0.000	1.416	1.416	0.000	0.000	**2.833**
December 2015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
January 2016	0.000	0.000	0.000	0.000	0.000	1.416	1.416	0.000	0.000	**2.833**
February 2016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.416	**1.416**
March 2016	0.000	0.000	0.000	0.000	0.000	0.000	1.416	0.000	0.000	**1.416**
April 2016	0.000	0.000	0.000	0.000	1.416	0.000	0.000	0.000	0.000	**1.416**
May 2016	0.000	0.000	0.000	2.833	0.000	0.000	0.000	0.000	5.666	**8.499**
June 2016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
July 2016	0.000	0.000	0.000	1.416	0.000	0.000	0.000	0.000	0.000	**1.416**
August 2016	0.000	0.000	0.000	1.416	0.000	1.416	0.000	0.000	0.000	**2.833**
September 2016	0.000	0.000	0.000	1.416	0.000	1.416	1.416	0.000	0.000	**4.249**
October 2016	0.000	0.000	0.000	0.000	1.416	1.416	2.833	0.000	1.416	**7.082**
November 2016	1.416	1.416	0.000	1.416	1.416	1.416	1.416	0.000	1.416	**9.915**
December 2016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.416	**1.416**
January 2017	0.000	0.000	0.000	0.000	2.833	0.000	0.000	0.000	0.000	**2.833**
February 2017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
March 2017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
April 2017	0.000	0.000	0.000	1.416	2.833	0.000	1.416	0.000	1.416	**7.082**
May 2017	1.416	0.000	0.000	1.416	0.000	0.000	0.000	0.000	1.416	**4.249**
June 2017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.416	**1.416**
July 2017	0.000	1.416	0.000	0.000	1.416	0.000	0.000	0.000	0.000	**2.833**
August 2017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.416	**1.416**
September 2017	0.000	0.000	0.000	0.000	1.416	0.000	0.000	0.000	1.416	**2.833**
October 2017	0.000	0.000	0.000	1.416	0.000	0.000	2.833	0.000	1.416	**5.666**
November 2017	0.000	0.000	0.000	0.000	0.000	0.000	1.416	0.000	0.000	**1.416**
December 2017	0.000	1.416	0.000	0.000	0.000	1.416	0.000	0.000	0.000	**2.833**
January 2018	0.000	0.000	0.000	0.000	0.000	1.416	0.000	0.000	1.416	**2.833**
February 2018	0.000	0.000	0.000	0.000	0.000	1.416	0.000	0.000	4.249	**5.666**
March 2018	0.000	0.000	0.000	0.000	0.000	1.416	0.000	0.000	4.249	**5.666**
April 2018	0.000	0.000	0.000	0.000	0.000	4.249	0.000	0.000	1.416	**5.666**
May 2018	0.000	0.000	0.000	0.000	1.416	4.249	0.000	0.000	0.000	**5.666**
June 2018	1.416	0.000	1.416	1.416	1.416	2.833	0.000	0.000	4.249	**12.748**
July 2018	0.000	0.000	0.000	0.000	0.000	2.833	0.000	0.000	5.666	**8.499**
August 2018	1.416	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**1.416**
September 2018	0.000	0.000	1.416	0.000	0.000	0.000	0.000	0.000	0.000	**1.416**
October 2018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.416	**1.416**
November 2018	0.000	0.000	0.000	0.000	0.000	1.416	0.000	0.000	2.833	**4.249**
December 2018	0.000	0.000	0.000	0.000	0.000	0.000	1.416	0.000	0.000	**1.416**
TOTAL	5.666	5.666	2.833	26.912	18.414	41.076	19.830	0.000	59.490	**179.887**
ANNUAL AVERAGE	**1.133**	**1.133**	**0.567**	**5.382**	**3.683**	**8.215**	**3.966**	**0.000**	**11.898**	**35.977**

AVERAGE PER 1000 RESIDENTS MIDDLE INCOME- NO PARK									
	HOMICIDE	SEX OFFENCE	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	ALCOHOL/ DRUGS	MONTHLY TOTAL
January 2014	0.0000	0.0000	0.0000	1.1299	1.1299	1.1299	0.0000	0.0000	1.1299	**4.5198**
February 2014	0.0000	1.1299	0.0000	0.0000	0.0000	0.0000	1.1299	0.0000	1.1299	**3.3898**
March 2014	0.0000	0.0000	1.1299	1.1299	0.0000	3.3898	0.0000	0.0000	0.0000	**5.6497**
April 2014	0.0000	0.0000	0.0000	0.0000	0.0000	1.1299	0.0000	0.0000	1.1299	**2.2599**
May 2014	0.0000	0.0000	0.0000	0.0000	0.0000	1.1299	0.0000	0.0000	1.1299	**2.2599**
June 2014	0.0000	0.0000	0.0000	0.0000	0.0000	1.1299	0.0000	0.0000	1.1299	**2.2599**
July 2014	0.0000	0.0000	0.0000	0.0000	1.1299	2.2599	0.0000	0.0000	0.0000	**3.3898**
August 2014	0.0000	0.0000	0.0000	0.0000	1.1299	0.0000	1.1299	0.0000	1.1299	**3.3898**
September 2014	0.0000	0.0000	0.0000	1.1299	0.0000	0.0000	2.2599	0.0000	1.1299	**4.5198**
October 2014	0.0000	0.0000	0.0000	0.0000	0.0000	3.3898	1.1299	0.0000	1.1299	**5.6497**
November 2014	0.0000	0.0000	0.0000	0.0000	1.1299	1.1299	0.0000	0.0000	0.0000	**2.2599**
December 2014	0.0000	0.0000	0.0000	0.0000	1.1299	1.1299	1.1299	0.0000	0.0000	**3.3898**
January 2015	0.0000	0.0000	0.0000	0.0000	2.2599	1.1299	2.2599	0.0000	1.1299	**6.7797**
February 2015	0.0000	0.0000	0.0000	0.0000	1.1299	0.0000	1.1299	0.0000	0.0000	**2.2599**
March 2015	1.1299	0.0000	0.0000	1.1299	1.1299	0.0000	0.0000	0.0000	0.0000	**3.3898**
April 2015	0.0000	0.0000	0.0000	2.2599	0.0000	0.0000	1.1299	0.0000	0.0000	**3.3898**
May 2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.1299	0.0000	0.0000	**1.1299**
June 2015	0.0000	0.0000	0.0000	0.0000	0.0000	2.2599	2.2599	0.0000	0.0000	**4.5198**
July 2015	0.0000	0.0000	0.0000	0.0000	0.0000	3.3898	0.0000	0.0000	1.1299	**4.5198**
August 2015	0.0000	0.0000	1.1299	0.0000	1.1299	3.3898	1.1299	0.0000	0.0000	**6.7797**
September 2015	0.0000	0.0000	0.0000	1.1299	0.0000	1.1299	0.0000	0.0000	0.0000	**2.2599**
October 2015	0.0000	0.0000	0.0000	0.0000	1.1299	2.2599	2.2599	0.0000	0.0000	**5.6497**
November 2015	0.0000	0.0000	0.0000	0.0000	1.1299	3.3898	3.3898	0.0000	0.0000	**7.9096**
December 2015	0.0000	0.0000	0.0000	0.0000	2.2599	0.0000	0.0000	0.0000	0.0000	**2.2599**
January 2016	0.0000	0.0000	0.0000	0.0000	2.2599	1.1299	1.1299	0.0000	0.0000	**4.5198**
February 2016	0.0000	0.0000	0.0000	0.0000	1.1299	4.5198	1.1299	0.0000	1.1299	**7.9096**
March 2016	0.0000	0.0000	1.1299	0.0000	2.2599	1.1299	3.3898	0.0000	0.0000	**7.9096**
April 2016	0.0000	0.0000	0.0000	0.0000	1.1299	3.3898	2.2599	0.0000	0.0000	**6.7797**
May 2016	0.0000	0.0000	1.1299	1.1299	1.1299	4.5198	1.1299	0.0000	0.0000	**9.0395**
June 2016	0.0000	0.0000	0.0000	0.0000	0.0000	1.1299	0.0000	0.0000	0.0000	**1.1299**
July 2016	1.1299	0.0000	0.0000	0.0000	2.2599	3.3898	1.1299	0.0000	0.0000	**7.9096**
August 2016	0.0000	0.0000	0.0000	0.0000	3.3898	0.0000	1.1299	0.0000	0.0000	**4.5198**
September 2016	0.0000	0.0000	0.0000	1.1299	0.0000	2.2599	0.0000	0.0000	1.1299	**4.5198**
October 2016	1.1299	1.1299	0.0000	1.1299	0.0000	2.2599	0.0000	0.0000	0.0000	**5.6497**
November 2016	0.0000	0.0000	1.1299	0.0000	0.0000	4.5198	2.2599	0.0000	0.0000	**7.9096**
December 2016	0.0000	0.0000	0.0000	0.0000	1.1299	3.3898	1.1299	0.0000	0.0000	**5.6497**
January 2017	0.0000	0.0000	0.0000	1.1299	2.2599	2.2599	1.1299	0.0000	2.2599	**9.0395**
February 2017	0.0000	0.0000	0.0000	0.0000	0.0000	1.1299	3.3898	0.0000	0.0000	**4.5198**
March 2017	0.0000	0.0000	0.0000	0.0000	0.0000	1.1299	2.2599	0.0000	0.0000	**3.3898**
April 2017	0.0000	0.0000	0.0000	0.0000	1.1299	2.2599	3.3898	0.0000	0.0000	**6.7797**
May 2017	1.1299	0.0000	0.0000	0.0000	0.0000	2.2599	2.2599	0.0000	0.0000	**5.6497**
June 2017	0.0000	0.0000	0.0000	0.0000	1.1299	3.3898	0.0000	0.0000	0.0000	**4.5198**
July 2017	0.0000	0.0000	1.1299	0.0000	1.1299	2.2599	1.1299	0.0000	0.0000	**5.6497**
August 2017	0.0000	0.0000	0.0000	2.2599	1.1299	1.1299	3.3898	0.0000	0.0000	**7.9096**
September 2017	0.0000	0.0000	0.0000	0.0000	0.0000	2.2599	1.1299	0.0000	1.1299	**4.5198**
October 2017	0.0000	0.0000	0.0000	1.1299	1.1299	1.1299	3.3898	0.0000	0.0000	**6.7797**
November 2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
December 2017	0.0000	1.1299	0.0000	0.0000	0.0000	1.1299	1.1299	0.0000	0.0000	**3.3898**
January 2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
February 2018	0.0000	0.0000	0.0000	0.0000	1.1299	1.1299	1.1299	0.0000	0.0000	**3.3898**
March 2018	0.0000	0.0000	0.0000	1.1299	0.0000	1.1299	1.1299	0.0000	1.1299	**4.5198**
April 2018	0.0000	0.0000	0.0000	0.0000	0.0000	3.3898	3.3898	0.0000	1.1299	**7.9096**
May 2018	0.0000	0.0000	0.0000	1.1299	1.1299	1.1299	0.0000	0.0000	0.0000	**3.3898**
June 2018	1.1299	0.0000	0.0000	0.0000	0.0000	2.2599	0.0000	0.0000	0.0000	**3.3898**
July 2018	0.0000	0.0000	0.0000	2.2599	0.0000	2.2599	0.0000	0.0000	0.0000	**4.5198**
August 2018	1.1299	0.0000	0.0000	1.1299	0.0000	0.0000	0.0000	0.0000	1.1299	**3.3898**
September 2018	0.0000	2.2599	0.0000	1.1299	0.0000	0.0000	0.0000	0.0000	0.0000	**3.3898**
October 2018	0.0000	0.0000	0.0000	0.0000	0.0000	1.1299	3.3898	0.0000	0.0000	**4.5198**
November 2018	0.0000	0.0000	0.0000	0.0000	2.2599	1.1299	3.3898	0.0000	1.1299	**7.9096**
December 2018	0.0000	0.0000	0.0000	0.0000	0.0000	1.1299	0.0000	0.0000	1.1299	**2.2599**
TOTAL	6.7797	5.6497	6.7797	22.5989	42.9379	99.4350	71.1864	0.0000	22.5989	277.9661
ANNUAL AVERAGE	**1.3559**	**1.1299**	**1.3559**	**4.5198**	**8.5876**	**19.8870**	**14.2373**	**0.0000**	**4.5198**	**55.5932**

	HOMICIDE	SEX OFFENCE	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	ALCOHOL/ DRUGS	MONTHLY TOTAL
January 2014	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0060	0.0000	0.0000	1.0060
February 2014	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
March 2014	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0060	0.0000	0.0000	1.0060
April 2014	0.0000	0.0000	0.0000	0.0000	0.0000	1.0060	1.0060	0.0000	0.0000	2.0121
May 2014	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.0121	0.0000	0.0000	2.0121
June 2014	0.0000	0.0000	0.0000	0.0000	1.0060	0.0000	1.0060	0.0000	0.0000	2.0121
July 2014	0.0000	0.0000	0.0000	0.0000	1.0060	1.0060	0.0000	0.0000	0.0000	2.0121
August 2014	0.0000	0.0000	0.0000	0.0000	1.0060	1.0060	2.0121	0.0000	0.0000	4.0241
September 2014	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
October 2014	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
November 2014	0.0000	0.0000	0.0000	0.0000	0.0000	1.0060	2.0121	0.0000	0.0000	3.0181
December 2014	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0060	0.0000	1.0060	2.0121
January 2015	0.0000	0.0000	0.0000	2.0121	1.0060	2.0121	2.0121	0.0000	1.0060	8.0483
February 2015	1.0060	0.0000	0.0000	1.0060	0.0000	1.0060	1.0060	0.0000	0.0000	4.0241
March 2015	0.0000	0.0000	0.0000	0.0000	0.0000	1.0060	0.0000	0.0000	0.0000	1.0060
April 2015	0.0000	0.0000	0.0000	0.0000	0.0000	1.0060	0.0000	0.0000	0.0000	1.0060
May 2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
June 2015	0.0000	0.0000	0.0000	0.0000	1.0060	0.0000	0.0000	0.0000	0.0000	1.0060
July 2015	0.0000	0.0000	0.0000	0.0000	1.0060	0.0000	0.0000	0.0000	0.0000	1.0060
August 2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0060	1.0060
September 2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.0121	0.0000	0.0000	2.0121
October 2015	0.0000	0.0000	0.0000	0.0000	0.0000	1.0060	1.0060	0.0000	0.0000	2.0121
November 2015	0.0000	0.0000	0.0000	0.0000	0.0000	1.0060	2.0121	0.0000	0.0000	3.0181
December 2015	0.0000	0.0000	0.0000	0.0000	0.0000	2.0121	1.0060	0.0000	0.0000	3.0181
January 2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
February 2016	0.0000	0.0000	1.0060	1.0060	1.0060	1.0060	0.0000	0.0000	1.0060	5.0302
March 2016	0.0000	0.0000	0.0000	0.0000	1.0060	1.0060	1.0060	1.0060	0.0000	4.0241
April 2016	0.0000	0.0000	0.0000	0.0000	0.0000	1.0060	0.0000	0.0000	0.0000	1.0060
May 2016	0.0000	0.0000	0.0000	0.0000	1.0060	2.0121	2.0121	0.0000	0.0000	5.0302
June 2016	0.0000	0.0000	0.0000	1.0060	1.0060	3.0181	0.0000	0.0000	0.0000	5.0302
July 2016	0.0000	0.0000	1.0060	1.0060	1.0060	3.0181	2.0121	0.0000	1.0060	9.0543
August 2016	0.0000	0.0000	0.0000	0.0000	0.0000	1.0060	4.0241	0.0000	0.0000	5.0302
September 2016	0.0000	0.0000	0.0000	0.0000	2.0121	4.0241	1.0060	0.0000	0.0000	7.0423
October 2016	0.0000	0.0000	0.0000	1.0060	1.0060	2.0121	1.0060	0.0000	1.0060	6.0362
November 2016	0.0000	0.0000	0.0000	1.0060	0.0000	2.0121	3.0181	0.0000	0.0000	6.0362
December 2016	0.0000	0.0000	0.0000	1.0060	2.0121	1.0060	2.0121	0.0000	0.0000	6.0362
January 2017	0.0000	1.0060	0.0000	0.0000	3.0181	1.0060	0.0000	0.0000	0.0000	5.0302
February 2017	0.0000	0.0000	0.0000	1.0060	3.0181	0.0000	0.0000	0.0000	0.0000	4.0241
March 2017	0.0000	0.0000	0.0000	0.0000	0.0000	1.0060	1.0060	0.0000	0.0000	2.0121
April 2017	0.0000	0.0000	0.0000	1.0060	0.0000	2.0121	2.0121	0.0000	0.0000	5.0302
May 2017	0.0000	0.0000	0.0000	0.0000	1.0060	0.0000	1.0060	0.0000	0.0000	2.0121
June 2017	0.0000	0.0000	0.0000	3.0181	1.0060	2.0121	1.0060	0.0000	1.0060	8.0483
July 2017	0.0000	0.0000	0.0000	0.0000	2.0121	0.0000	2.0121	0.0000	0.0000	4.0241
August 2017	0.0000	1.0060	1.0060	1.0060	1.0060	1.0060	0.0000	0.0000	0.0000	5.0302
September 2017	0.0000	1.0060	0.0000	0.0000	1.0060	1.0060	2.0121	0.0000	1.0060	6.0362
October 2017	1.0060	0.0000	0.0000	0.0000	1.0060	2.0121	0.0000	0.0000	0.0000	4.0241
November 2017	0.0000	1.0060	0.0000	1.0060	3.0181	1.0060	0.0000	0.0000	0.0000	6.0362
December 2017	0.0000	1.0060	0.0000	0.0000	4.0241	3.0181	0.0000	0.0000	0.0000	8.0483
January 2018	0.0000	0.0000	0.0000	0.0000	2.0121	0.0000	1.0060	0.0000	0.0000	3.0181
February 2018	1.0060	0.0000	0.0000	1.0060	1.0060	0.0000	0.0000	0.0000	0.0000	3.0181
March 2018	2.0121	0.0000	0.0000	2.0121	1.0060	2.0121	1.0060	0.0000	0.0000	8.0483
April 2018	0.0000	0.0000	0.0000	1.0060	0.0000	0.0000	1.0060	0.0000	1.0060	3.0181
May 2018	1.0060	0.0000	0.0000	0.0000	0.0000	0.0000	2.0121	0.0000	1.0060	4.0241
June 2018	0.0000	0.0000	0.0000	1.0060	1.0060	1.0060	1.0060	0.0000	1.0060	5.0302
July 2018	0.0000	0.0000	0.0000	2.0121	0.0000	3.0181	0.0000	0.0000	0.0000	5.0302
August 2018	0.0000	0.0000	0.0000	0.0000	0.0000	1.0060	0.0000	0.0000	0.0000	1.0060
September 2018	0.0000	0.0000	0.0000	0.0000	1.0060	2.0121	0.0000	0.0000	0.0000	3.0181
October 2018	0.0000	1.0060	0.0000	1.0060	0.0000	0.0000	1.0060	0.0000	0.0000	3.0181
November 2018	0.0000	0.0000	0.0000	0.0000	0.0000	1.0060	1.0060	0.0000	0.0000	2.0121
December 2018	2.0121	1.0060	0.0000	1.0060	1.0060	1.0060	1.0060	0.0000	0.0000	7.0423
TOTAL	8.0483	7.0423	3.0181	25.1509	43.2596	59.3561	54.3260	1.0060	11.0664	212.2736
ANNUAL AVERA	1.6097	1.4085	0.6036	5.0302	8.6519	11.8712	10.8652	0.2012	2.2133	42.4547

	HOMICIDE	SEX OFFENCE	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	ALCOHOL/ DRUGS	MONTHLY TOTAL
January 2014	1.5576	0.0000	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	**3.1153**
February 2014	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
March 2014	0.0000	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	0.0000	**1.5576**
April 2014	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
May 2014	0.0000	0.0000	0.0000	0.0000	0.0000	1.5576	1.5576	0.0000	1.5576	**4.6729**
June 2014	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
July 2014	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
August 2014	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	0.0000	0.0000	**1.5576**
September 2014	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
October 2014	0.0000	0.0000	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	**1.5576**
November 2014	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
December 2014	0.0000	0.0000	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	**1.5576**
January 2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
February 2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
March 2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	**1.5576**
April 2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
May 2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
June 2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	**1.5576**
July 2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
August 2015	0.0000	0.0000	0.0000	0.0000	0.0000	1.5576	1.5576	0.0000	0.0000	**3.1153**
September 2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
October 2015	0.0000	0.0000	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	**1.5576**
November 2015	0.0000	0.0000	0.0000	0.0000	0.0000	1.5576	1.5576	0.0000	0.0000	**3.1153**
December 2015	0.0000	0.0000	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	1.5576	**3.1153**
January 2016	0.0000	0.0000	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	**1.5576**
February 2016	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	0.0000	0.0000	**1.5576**
March 2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
April 2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
May 2016	0.0000	1.5576	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**1.5576**
June 2016	0.0000	0.0000	0.0000	0.0000	0.0000	3.1153	0.0000	0.0000	0.0000	**3.1153**
July 2016	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	0.0000	0.0000	**1.5576**
August 2016	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	0.0000	0.0000	**1.5576**
September 2016	0.0000	0.0000	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	**1.5576**
October 2016	0.0000	0.0000	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	**1.5576**
November 2016	0.0000	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	0.0000	**1.5576**
December 2016	0.0000	0.0000	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	**1.5576**
January 2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
February 2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.1153	0.0000	3.1153	**6.2305**
March 2017	0.0000	0.0000	0.0000	1.5576	0.0000	1.5576	1.5576	0.0000	0.0000	**4.6729**
April 2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	**1.5576**
May 2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
June 2017	0.0000	0.0000	0.0000	0.0000	0.0000	1.5576	1.5576	0.0000	0.0000	**3.1153**
July 2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
August 2017	1.5576	0.0000	0.0000	0.0000	0.0000	1.5576	1.5576	0.0000	0.0000	**4.6729**
September 2017	0.0000	0.0000	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	**1.5576**
October 2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
November 2017	0.0000	0.0000	0.0000	0.0000	1.5576	1.5576	0.0000	0.0000	0.0000	**3.1153**
December 2017	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	0.0000	0.0000	**1.5576**
January 2018	1.5576	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**1.5576**
February 2018	1.5576	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**1.5576**
March 2018	1.5576	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**1.5576**
April 2018	0.0000	1.5576	0.0000	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	**3.1153**
May 2018	0.0000	0.0000	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	**1.5576**
June 2018	0.0000	0.0000	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	**1.5576**
July 2018	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	**3.1153**
August 2018	0.0000	0.0000	0.0000	0.0000	0.0000	3.1153	1.5576	0.0000	0.0000	**4.6729**
September 2018	0.0000	0.0000	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	**1.5576**
October 2018	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	0.0000	0.0000	**1.5576**
November 2018	0.0000	0.0000	0.0000	1.5576	0.0000	0.0000	0.0000	0.0000	1.5576	**3.1153**
December 2018	0.0000	0.0000	0.0000	0.0000	0.0000	3.1153	0.0000	0.0000	0.0000	**3.1153**
TOTAL	7.7882	3.1153	1.5576	12.4611	4.6729	40.4984	21.8069	0.0000	7.7882	**99.6885**
ANNUAL AVERA	**1.5576**	**0.6231**	**0.3115**	**2.4922**	**0.9346**	**8.0997**	**4.3614**	**0.0000**	**1.5576**	**19.9377**

AVERAGE PER 1000 RESIDENTS UPPER INCOME- PARK									
	HOMICIDE	SEX OFFENCE	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	ALCOHOL/ DRUGS	MONTHLY TOTAL
January 2014	0.8826	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.8826**
February 2014	0.0000	0.0000	0.0000	0.0000	0.0000	0.8826	0.0000	0.0000	0.0000	**0.8826**
March 2014	0.0000	0.0000	0.0000	0.0000	0.8826	1.7652	0.0000	0.0000	0.0000	**2.6478**
April 2014	0.0000	0.0000	0.0000	0.0000	0.8826	0.0000	0.8826	0.0000	0.0000	**1.7652**
May 2014	0.0000	0.0000	0.0000	0.8826	0.8826	1.7652	0.0000	0.0000	0.8826	**4.4131**
June 2014	0.0000	0.0000	0.0000	0.8826	0.0000	0.8826	0.0000	0.0000	0.8826	**2.6478**
July 2014	0.0000	0.0000	0.0000	0.0000	0.8826	0.8826	0.0000	0.0000	0.0000	**1.7652**
August 2014	0.0000	0.0000	0.0000	0.8826	0.0000	0.0000	0.0000	0.0000	0.8826	**1.7652**
September 2014	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.8826	0.0000	0.0000	**0.8826**
October 2014	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
November 2014	0.0000	0.0000	0.0000	0.8826	0.8826	0.0000	0.8826	0.0000	0.0000	**2.6478**
December 2014	0.8826	0.0000	0.0000	0.8826	0.8826	0.0000	0.0000	0.0000	0.0000	**2.6478**
January 2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
February 2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
March 2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
April 2015	0.0000	0.0000	0.0000	1.7652	0.8826	0.8826	0.0000	0.0000	0.8826	**4.4131**
May 2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
June 2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.8826	0.0000	0.0000	0.0000	**0.8826**
July 2015	0.0000	0.0000	0.0000	0.8826	0.0000	0.0000	0.0000	0.0000	0.0000	**0.8826**
August 2015	0.0000	0.0000	0.0000	0.0000	0.0000	1.7652	0.0000	0.0000	0.0000	**1.7652**
September 2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
October 2015	0.0000	0.0000	0.0000	0.8826	0.0000	0.8826	0.0000	0.0000	0.0000	**1.7652**
November 2015	0.8826	0.0000	0.0000	0.8826	0.0000	0.0000	0.0000	0.0000	0.0000	**1.7652**
December 2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
January 2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
February 2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
March 2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
April 2016	0.0000	0.8826	0.0000	0.8826	0.0000	0.0000	0.0000	0.0000	0.0000	**1.7652**
May 2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
June 2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.8826	0.0000	0.0000	0.0000	**0.8826**
July 2016	0.0000	0.0000	0.0000	0.8826	0.0000	0.0000	0.0000	0.0000	0.0000	**0.8826**
August 2016	0.0000	0.0000	0.0000	0.8826	0.0000	0.0000	0.0000	0.0000	0.8826	**1.7652**
September 2016	0.0000	0.0000	0.0000	0.8826	0.0000	0.0000	0.0000	0.0000	0.8826	**1.7652**
October 2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
November 2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
December 2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
January 2017	0.0000	0.0000	0.0000	1.7652	0.0000	0.0000	0.0000	0.0000	0.8826	**2.6478**
February 2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.5305	**3.5305**
March 2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.8826	**0.8826**
April 2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
May 2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
June 2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.8826	0.0000	0.0000	**0.8826**
July 2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
August 2017	0.0000	0.0000	0.0000	0.0000	0.0000	1.7652	0.0000	0.0000	0.0000	**1.7652**
September 2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
October 2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
November 2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
December 2017	0.0000	0.0000	0.0000	0.8826	0.0000	0.0000	0.0000	0.0000	0.0000	**0.8826**
January 2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
February 2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
March 2018	0.0000	0.0000	ROBBERY	ASSAULT	BURGLARY	0.0000	0.0000	0.0000	ALCOHOL/	**0.0000**
April 2018	0.0000	OFFENCE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	DRUGS	**0.0000**
May 2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
June 2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.8826	0.0000	0.0000	**0.8826**
July 2018	0.0000	0.0000	0.0000	0.0000	0.0000	1.7652	0.0000	0.0000	0.0000	**1.7652**
August 2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.8826	0.0000	0.0000	**0.8826**
September 2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
October 2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
November 2018	0.8826	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.8826**
December 2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**0.0000**
TOTAL	3.5305	0.8826	0.0000	15.0044	6.1783	15.0044	5.2957	0.0000	10.5914	**56.4872**
ANNUAL AVERA	**0.7061**	**0.1765**	**0.0000**	**3.0009**	**1.2357**	**3.0009**	**1.0591**	**0.0000**	**2.1183**	**11.2974**

				RAW DATA- LOWER INCOME PARK									
AREA	INCOME	POPULATION	YEAR	HOMICIDE	SEX ASSAULT	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	LCOHOL/DRUG	TOTAL
A1	$22,292.00	750	2014	1	3	0	29	22	20	9	1	11	
		750	2015	0	1	2	27	6	13	9	1	18	
		750	2016	4	5	3	26	27	14	5	0	7	
		750	2017	4	7	0	31	10	17	7	0	8	
		750	2018	2	1	2	30	4	22	4	0	14	
				11	**17**	**7**	**143**	**69**	**86**	**34**	**2**	**58**	**427**
A2	$23,349.00	680	2014	1	2	0	14	13	6	11	1	0	
		680	2015	0	0	0	21	4	4	10	1	0	
		680	2016	1	0	0	10	8	10	2	0	2	
		680	2017	0	3	0	12	1	8	5	0	2	
		680	2018	0	1	0	10	1	14	9	0	4	
				2	**6**	**0**	**67**	**27**	**42**	**37**	**2**	**8**	**191**
A3	$33,036.00	750	2014	2	1	0	14	4	15	5	0	3	
		750	2015	1	1	1	9	12	18	6	0	2	
		750	2016	0	0	0	2	1	10	7	0	1	
		750	2017	1	0	2	2	0	3	3	0	1	
		750	2018	0	0	1	4	0	6	4	0	1	
				4	**2**	**4**	**31**	**17**	**52**	**25**	**0**	**8**	**143**
A4	$21,949.00	1654	2014	1	2	2	22	9	26	10	0	21	
		1654	2015	0	4	2	27	14	34	22	0	18	
		1654	2016	0	0	2	39	13	26	10	0	16	
		1654	2017	3	0	2	27	13	35	9	0	14	
		1654	2018	2	0	1	26	6	23	13	0	20	
				6	**6**	**9**	**141**	**55**	**144**	**64**	**0**	**89**	**514**
A5	$14,792.00	554	2014	2	0	1	6	8	8	3	0	14	
		554	2015	1	8	2	14	5	9	4	0	8	
		554	2016	1	17	2	23	5	38	7	0	24	
		554	2017	1	14	6	21	7	31	8	0	29	
		554	2018	1	21	0	26	9	43	6	0	27	
				6	**60**	**11**	**90**	**34**	**129**	**28**	**0**	**102**	**460**
A6	$26,250.00	736	2014	4	1	0	11	10	11	6	0	6	
		736	2015	1	3	1	5	3	11	4	0	8	
		736	2016	0	5	2	13	14	24	6	0	10	
		736	2017	1	5	2	13	12	19	0	0	21	
		736	2018	2	1	0	17	9	18	5	1	22	
				8	**15**	**5**	**59**	**48**	**83**	**21**	**1**	**67**	**307**
A7	$26,017.00	1232	2014	0	0	0	8	5	10	12	0	6	
		1232	2015	1	0	0	10	11	16	6	0	14	
		1232	2016	2	1	0	2	7	14	11	0	4	
		1232	2017	1	1	2	11	5	14	5	0	9	
		1232	2018	4	4	0	10	6	19	9	0	13	
				8	**6**	**2**	**41**	**34**	**73**	**43**	**0**	**46**	**253**
A8	$20,000.00	1151	2014	1	0	3	10	0	14	1	0	4	
		1151	2015	0	2	0	9	6	14	1	0	9	
		1151	2016	1	3	0	13	3	24	5	0	5	
		1151	2017	3	0	0	8	1	24	5	0	4	
		1151	2018	0	2	1	17	5	20	4	0	12	
				5	**7**	**4**	**57**	**15**	**96**	**16**	**0**	**34**	**234**
A9	$18,875.00	1221	2014	1	2	1	20	17	10	17	0	6	
		1221	2015	3	1	2	21	12	11	3	0	6	
		1221	2016	1	0	2	19	18	12	16	0	3	
		1221	2017	2	1	1	18	12	14	14	1	4	
		1221	2018	1	1	2	21	9	13	9	1	7	
				8	**5**	**8**	**99**	**68**	**60**	**59**	**2**	**26**	**335**
A10	$29,764.00	2470	2014	0	6	1	5	2	49	31	0	18	
		2470	2015	1	9	2	14	1	79	28	0	9	
		2470	2016	0	19	1	13	9	53	30	0	6	
		2470	2017	0	18	0	17	8	45	23	0	14	
		2470	2018	3	9	0	23	6	52	25	0	7	
				4	**61**	**4**	**72**	**26**	**278**	**137**	**0**	**54**	**636**

								RAW DATA LOWER INCOME NO PARK					
AREA	INCOME	POPULATION	YEAR	HOMICIDE	SEX ASSAULT	ROBBERY	ASSAULT	BURGLARY	THEFT	CAR THEFT	ARSON	.LCOHOL/DRUG	TOTAL
B1	$17,500.00	698	2014	0	1	4	13	15	33	11	0	12	
		698	2015	3	3	1	15	26	33	10	0	16	
		698	2016	4	7	3	20	9	44	2	0	20	
		698	2017	1	16	6	23	3	30	7	1	22	
		698	2018	0	21	0	15	9	21	2	0	17	
				8	**48**	**14**	**86**	**62**	**161**	**32**	**1**	**87**	**499**
B2	$11,434.00	1145	2014	0	1	3	9	7	11	4	0	6	
		1145	2015	3	1	0	9	4	17	6	0	9	
		1145	2016	0	3	2	12	5	28	6	0	24	
		1145	2017	3	3	2	13	11	23	13	0	13	
		1145	2018	0	3	1	20	3	29	12	1	29	
				6	**11**	**8**	**63**	**30**	**108**	**41**	**1**	**81**	**349**
B3	$13,323.00	2048	2014	1	0	1	7	5	9	4	0	10	
		2048	2015	0	0	1	6	5	15	5	0	5	
		2048	2016	0	8	0	8	0	10	8	0	20	
		2048	2017	0	5	1	7	4	12	5	0	20	
		2048	2018	3	5	0	8	5	20	5	0	19	
				4	**18**	**3**	**36**	**19**	**66**	**27**	**0**	**74**	**247**
B4	$16,429.00	1305	2014	2	0	2	7	15	9	10	0	14	
		1305	2015	0	2	0	11	12	12	11	0	15	
		1305	2016	1	0	0	6	13	22	13	0	6	
		1305	2017	3	1	0	7	11	44	9	1	10	
		1305	2018	2	0	3	11	10	30	6	0	11	
				8	**3**	**5**	**42**	**61**	**117**	**49**	**1**	**56**	**342**
B5	$24,222.00	1554	2014	2	9	5	32	19	38	15	0	28	
		1554	2015	1	3	0	24	28	46	15	0	24	
		1554	2016	3	4	6	27	11	37	15	1	16	
		1554	2017	3	6	1	19	14	47	9	0	28	
		1554	2018	4	2	1	25	6	39	7	0	15	
				13	**24**	**13**	**127**	**78**	**207**	**61**	**1**	**111**	**635**
B6	$25,854.00	1208	2014	4	3	1	32	18	24	15	0	14	
		1208	2015	1	1	2	18	16	23	10	0	7	
		1208	2016	5	3	0	19	23	26	10	0	16	
		1208	2017	3	3	5	23	20	23	15	1	22	
		1208	2018	3	4	0	27	22	32	12	1	28	
				16	**14**	**8**	**119**	**99**	**128**	**62**	**2**	**87**	**535**
B7	$19,291.00	1201	2014	2	2	1	6	12	21	4	0	6	
		1201	2015	5	2	3	13	5	22	13	0	4	
		1201	2016	4	1	1	21	10	24	5	0	9	
		1201	2017	0	2	5	14	8	18	9	0	12	
		1201	2018	1	0	0	12	8	23	5	0	11	
				12	**7**	**10**	**66**	**43**	**108**	**36**	**0**	**42**	**324**
B8	$25,484.00	624	2014	0	2	1	19	12	31	5	0	1	
		624	2015	1	0	2	14	10	21	7	0	1	
		624	2016	3	0	2	11	12	33	8	0	12	
		624	2017	3	2	2	16	9	34	6	0	9	
		624	2018	2	2	0	26	6	27	11	0	7	
				9	**6**	**7**	**86**	**49**	**146**	**37**	**0**	**30**	**370**
B9	$29,625.00	997	2014	3	6	2	12	6	19	7	0	8	
		997	2015	0	4	5	12	7	22	4	0	5	
		997	2016	0	1	4	19	13	50	10	0	10	
		997	2017	1	4	1	15	12	44	9	0	9	
		997	2018	2	5	2	19	5	45	13	0	7	
				6	**20**	**14**	**77**	**43**	**180**	**43**	**0**	**39**	**422**
B10 41	$18,705.00	1142	2014	1	3	0	19	8	10	2	0	25	
		1142	2015	3	7	2	23	9	4	3	0	10	
		1142	2016	2	3	2	22	8	10	4	0	14	
		1142	2017	4	0	1	22	8	10	5	1	17	
		1142	2018	0	4	0	25	7	12	4	0	25	
				10	**17**	**5**	**111**	**40**	**46**	**18**	**1**	**91**	**339**