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The Invisible Walls of The 606: An Examination of the Relationship Between an Urban Greenway and Community Change

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THE INVISIBLE WALLS OF THE 606: AN EXAMINATION OF THE RELATIONSHIP BETWEEN AN URBAN GREENWAY AND COMMUNITY CHANGE

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ABSTRACT

With much of the United State population now choosing to live, work, and recreate in urban locations, cities across the county have begun to look for ways to increase green space to meet the ever-growing demand of residents. One way this has been done is through the integration of urban greenways. Unlike other green spaces, these contemporary corridors are constructed in a manner that they directly traverse both densely populated residential communities and commercial spaces. By being built into the fabric of residential areas, these corridors connect residents who often vary in terms of race, socio-economic status, and culture. While these greenways have been shown to provide traversed communities with numerous benefits, the positive impacts resulting with greenway assimilation may not be equally distributed to communities of color and their residents. Research has shown that in urban settings communities of color and parks located within their boundaries are often avoided by White residents based on preconceived notions of neighborhood crime and disorder. This avoidance results in segregation and social isolation. Additionally, research has shown that the integration of a park or green space into a community of color may represent a threat to neighborhood culture and serve as a catalyst for neighborhood change. However, due to their contemporary nature, the effects of urban greenways on communities of color have been largely understudied and thus in need of additional research. The purpose of this study was to better understand how the integration of Chicago's 606, an urban greenway on the city's northwest side, into the Puerto Rican neighborhood of Humboldt Park was altering the social and structural environments in and around the community. In examining these

components, the study highlights and provides insight for city leaders and park officials looking to assimilate similar corridors into their cityscape. This mixed method study included quantitative and qualitative approaches to assess use patterns and the experiences of trail users and neighborhood residents. Findings indicate that urban greenways may present a paradox for the neighborhoods in which they are integrated. The 606 had utility in lowering crime, increasing access for minority residents, and providing a safe space for both active and passive recreation. However, it also demonstrated that stigma associated with minorities and the spaces they occupy, in this case Humboldt Park, had the ability to perpetuate exclusionary practices, resource disparities, and sustain inequities between communities. The study also found that The 606 represented a threat to the Humboldt Park community, providing an entry point for White newcomers and an instrument for developers to accelerate green gentrification. This study fills an existing research gap related to urban greenways and their relationship with urban communities. While the study demonstrated that urban greenways may benefit communities of color, it also showed that these benefits may be inequitable and terse. As the popularity for parks and greenways of this sort increases, more research is needed to better understand the positive and negative impacts on proximate environments.

DEDICATION

This dissertation is dedicated to my Mom, who has always believed in me and my dreams no matter how big or far-fetched. My work is also dedicated to all those individuals in Humboldt Park and Logan Square who embraced me during my study, vouched for my purpose in the community, and allowed me a glimpse into their lives.

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CHAPTER I: INTRODUCTION

Background

During the past decade, the United States has seen an unprecedented urban migration, with millions of people choosing to live, work, and play in cities across the country (Gehl, 2013). In fact, the urban flight movement witnessed in US cities across the country between 1960 and 1990 has reversed itself, infusing urban cores with population growth at unprecedented rates (Hyra, 2015). Given this rapid population change and the stress associated with urban lifestyles, cities are now focusing heavily on both residents' physical and mental well-being (Branas et al., 2011; Groenewegen, van den Berg, de Vries, & Verheij, 2006; Harnik, 2012; Larson, Jennings, & Cloutier, 2016; Peters, 2010). One way cities have done this is through the integration of parks, linear trails, and green space into urban landscapes (Gobster & Westphal, 2004; Swanwick, Dunnett, & Woolley, 2003). Prior research has shown that urban green spaces generate a variety of benefits that range from enhancing overall wellbeing (Godbey, 2009; Gomez-Feliciano et al., 2009; Larson et al., 2016; Maas, Verheij, Groenewegen, de Vries, & Spreeuwenberg, 2006; Sandy, Tchernis, Wilson, Liu, & Zhou, 2013) to increasing community unity (Browning & Cagney, 2002; Cohen, Inagami, & Finch, 2008; Groenewegen et al., 2006) to offsetting socioeconomic disparities (Larson et al., 2016), to assisting in urban renewal (Checker, 2011; Swanwick et al., 2003). In communities of color parks have been shown to help residents obtain a sense of belonging and a connection to a space (Low et al., 2009). Despite these decisively positive impacts of parks, most researchers have

examined these factors in relation to neighborhood and/or community parks. However, a contemporary addition to the urban landscape, the urban greenway has largely been overlooked by researchers, particularly in relation to social impacts these corridors may have on communities of color (Coutts & Miles, 2011). With the installation and success of New York's Highline and with other cities looking to integrate these linear parks into their cityscape (Sinah, 2014; Taylor, 2010), questions surrounding these corridors and their impacts now command the attention of researchers.

A greenway is a linear open space or park that connects places and is generally used by individuals for recreation or transportation (Lindsey, 2003). Studies have found that greenways can contribute to urban communities by providing residents with an increased opportunity to interact, recreate, and assimilate themselves into a restorative environment often absent in urban centers (Coutts & Miles, 2011; Lindsey, 2003; Moore & Ross, 1998; Shafer, Lee, & Turner, 2000). These benefits, along with the demand for increased park access, have led city planners and designers to integrate these structures into the very fabric of urban communities (Harnik, 2012). However, opposed to previous greenway designs, which were often located at ground level and away from highly dense city spaces, contemporary urban greenways are often elevated above street level and directly traverse highly trafficked residential and/or commercial districts (Mortice, 2015; Taylor, 2010). An innovation in urban park design, these corridors are the product of a novel approach taken by urban planners, that takes advantage of existing post-industrial infrastructure already in place within many large metropolitan areas (Harnik, 2012; Mortice, 2015). By making opportunistic use of abandon railways, vacated canals, and

long forgotten bridges, the intent behind the elevated urban greenway is to forge life and vibrancy into structures that previously served only as an eyesore in the city's landscape (Gomez-Feliciano et al., 2009; Sinah, 2014). More than a revitalization mechanism, however, these trails have also become vital conduits for transportation, as they provide both commuters and community residents accelerated access to previously isolated parts of the city. From a human ecological perspective, these structures are designed in a manner that help to both sustain and promote balance between the economic, environmental, and social characteristics in the area in which they are placed (Gobster, 1995; Shafer et al., 2000). For example, in their study of greenways in Houston, Texas, Shafer et al. (2000) discovered that urban greenways can increase overall quality of life through providing opportunities for increased recreation, better land use, and community pride. The study also found that those residents who used the trails for transportation purposes believed the greenways contributed to their quality of life by lowering transportation cost and providing better access to work (Shafer et al., 2000). Aligning with Beatley and Manning's (1997) list of characteristics needed to sustain a community, urban greenways have the ability to provide the opportunity for community interactions (face-to-face encounters), promote fairness and equity, provide a sense of place, create new businesses and act as a mass transit conduit. Additionally, as Chiesura (2004) noted, greenspace, like that afforded by greenways, allows for the creation and maintenance of a sustainable city, by naturally enhancing the social components of city life, such as individual satisfaction, human interactions, and community experiences.

While each of the aforementioned studies served to highlight the positive impact of parks and greenways in a large urban area, because the environmental, economic, and social climates of cities often vary dramatically not just from community to community, but from block to block, the integration of these corridors may also have consequences. For one, if placed in an enclave that is centered on a cultural centric identity, the insertion of these structures may unintentionally disrupt existing social ties or exhaust the resources needed to sustain social capital and collective cohesion (Checker, 2011). Here, because ethnic enclaves often rely on strong social networks and community ties for not just prosperity, but sustainability (Brown-Saracino, 2009; Pérez, 2004) the implementation of an urban greenway may create unwanted structural and social changes residents are ill equipped or desire to handle. This forced integration may then result in resentment toward greenways and a refusal to engage in recreation or leisure on it (Hyra, 2015). Additionally, because the integration of an urban greenway is likely to bring newcomers to the enclave, longtime residents may feel threatened and the culture they superimposed on the space endangered. This may lead residents to employ a form of human territoriality, where they retreat inward, engaging only in the spaces on the trail within the enclave and only with those they believe are part of the collective (Sack, 1986). As Low, Taplin, and Scheld (2009) explained, the human ecosystem within urban environments is a delicate balance of existing physical and social infrastructures that are interwoven and interdependent. Working in New York, the researchers found that the insertion, deletion, or change in an urban park can disrupt the social ecological equilibrium and destroy the harmony of the system (Low et al., 2009). For example,

while examining the impact of redesigns on neighborhood parks in communities of color in New York, Low et al. (2009), found that instead of making the spaces more appealing, redesigns often disrupted the existing social ecosystem. In one park located in a predominantly Latino/a community the result of a redesign was a loss of social capital and an increase in gang activity in the space (Low et al., 2009). Here, by upsetting the ecological balance in the neighborhood, it made the space more susceptible to crime and disorder---which are often correlated with park avoidance and fear (Cohen et al., 2010; Cohen et al., 2016; Crewe, 2001; Marzbali, Abdullah, Razak, & Tilaki, 2012; Sreetheran & van den Bosch, & Konijnendijk, 2014; Stodolska, Shinew, Acevedo, & Izenstark, 2011; Stodolska, Shinew, Acevedo, & Roman, 2013).

In addition to disrupting existing community ties, because the use of park space and recreational characteristics of minorities can and often do deviate from that of Whites (Floyd, 1998; Floyd & Shinew, 1999; Hutchison, 1987; Keith, Larson, Hallo, Shafer, & Fernandez, 2018; Stodolska & Shinew, 2010; Stodolska, Shinew, Floyd, & Walker, 2013), the integration of an urban greenway across diverse communities may also exacerbate existing inequalities between affluent and disadvantaged communities (Sister, Wolch, & Wilson, 2010; Wolch, Byrne, & Newell, 2014). As Coutts and Miles (2011) recognized, while urban greenways have the potential to foster access and inclusion, because they often traverse multiple neighborhoods comprised of diverse residents, they also hold the potential to be divisive environments characterized by discrimination. This is particularly true in cases where one race is not willing or uncomfortable using segments or interacting with residents in neighborhoods that are predominantly of

another race or ethnicity. As studies on race and ethnicity have shown, minorities often face discrimination within park and recreation settings, stereotyped on the basis of the skin color and excluded from engaging in forms of their desired forms of recreation (Byrne, 2012; Manning, 2010; Sharaievska, Stodolska, Shinew, & Kim, 2010; West, 1989). If this notion is applied to an urban greenway, while minority users may have access to the corridor, it may not be inclusive to their recreational needs and/or conflict with their cultural identity, therefore constraining their participation on and recreational benefits derived from the amenity (Gomez & Malega, 2007; Solecki & Welch, 1995; Stodolska, 2013).

While minorities may be excluded from engaging in certain recreational endeavors on urban greenways that traverse diverse communities, because Whites often stigmatize and subsequently avoid urban neighborhoods occupied by minorities urban greenways may also take on the characteristics of residential segregation that remains pervasive in many US cities (Charles, 2003; Massey & Denton, 1993; Sampson & Sharkey, 2008; Sampson, 2009, Sampson, 2012; Sharkey, 2013). As Low et al. (2009) postulated, poor communities of color are the most vulnerable to disruptions in their ecosystem because they do not possess the power or resources to struggle against social definitions and imputed labels. Research on urban segregation has shown communities of color are often stigmatized on the preconceived label of crime and disorder and avoided by Whites (Besbris, Faber, Rich, & Sharkey, 2015; Sampson & Raudenbush, 2004; Sampson & Raudenbush, 2005; Sampson, 2012). Here, anecdotal or skewed information is combined with little exposure to minority spaces to create an invisible barrier between

Whites and minorities. Known as neighborhood stigma (Sampson & Raudenbush, 2004; Sampson & Raudenbush, 2005) this phenomenon has been shown to heighten avoidance tendencies in economic transitions (Besbris et al., 2015), dictate migration patterns (Ellen, 2000), and hinder the ability of residents to successfully acquire work (Bauder, 2001; Bauder, 2002). Currently, however, little is known about the effects of neighborhood stigma on park and recreational behaviors. However, given that recreation is not a mutually exclusive social construct, rather intertwined with other institutions (i.e. economic, education) it is reasonable to assume that stigma imbued on an area would also influence recreational outcomes and behaviors (Mowatt, 2009). This is especially true of urban greenways, which because of their unique cross-cutting characteristics, create an environment where affluent communities and residents are frequently exposed to communities of color and residents who have historically been stigmatized and vice versa. It is not unreasonable to assume then that an urban greenway constructed to serve diverse residential neighborhood(s) may over time become a barrier to inclusion, reinforce racial inequalities, and become a mechanism for further neighborhood compartmentalization.

Although the contemporary nature of urban greenway has not yet allowed for a great deal of research to be conducted on the corridors, previous work on neighborhood parks located in communities of color provides a glimpse into possible user behaviors. Research in the parks and recreation field has shown that neighborhood parks located in communities of color are often avoided due to both observed and perceived notions of disorder (Shinew, Stodolska, Roman, & Yahner, 2013; Stodolska, Acevedo, & Shinew,

2009; Stodolska et al., 2011). Subsequently stigmatized, these spaces often become characterized by derelict infrastructure, graffiti, trash, and social deterioration (e.g. gang occupied) (Low, Taplin, & Scheld, 2009; Stodolska et al., 2009; Stodolska & Shinew, 2010; Stodolska et al., 2011). As aversion to the space increases the park become susceptible to further breakdown and the embedment criminal activity. This leads to a cyclic pattern of crime and avoidance and a barrier to the recreational activities for which the park was intended (Stodolska et al., 2009; Stodolska et al., 2011). When existing near a more affluent community, these neighborhood parks can become used as a boundary, further segregating Whites from minorities (Gobster, 1998; Solecki & Welch, 1995). Dubbed "green walls" by Solecki and Welch (1995), these parks may serve to reproduce social inequities between members of diverse social standings, acting as a mechanism for segregation and further stratification (Solecki & Welch, 1995; Suarez, 1999). Additionally, as Solecki and Welch (1995) explained, void of an identity boundary parks often remain in poor condition, neglected by the populations it divides until at least until the proximate neighborhoods begins to stabilize and change. Suarez (1999) provided a classic example of this in Chicago's Palmer Square. In his book*, The Old Neighborhood: What We Lost in the Great Suburban Migration,* Suarez detailed how differences in cultural expectations and perceptions led to conflicts in ownership over a park between members of the White and Latino/a communities. The resulting effect was that the boundary park was neglected by both parties until Whites, holding a higher economic and social standing, were able to remake the park to align with their recreation needs.

However, it remains to be seen if urban greenways are vulnerable to user segregation and in assuming similar "green wall" characteristics of urban boundary parks.

Returning to Suarez's (1999) work, the reason that the White community was able to remake the park space in their own image was because they begin to assimilate themselves into all the surrounding areas, effectively gentrifying the neighborhood and displacing Latino/as. In this same line, the final consequence of urban greenway integration may be community gentrification and displacement of minorities in the space (Gould & Lewis, 2016). Studies on park and greenspace revitalization have shown that the integration or redevelopment of urban parks and recreational amenities often precedes neighborhood gentrification (Gould & Lewis, 2016; Shmoll et al. 2016). Here, developers and real estate companies use a narrative of environmental sustainability and community betterment to attract more affluent residents to the area, thus fueling gentrification of the space (Gould & Lewis, 2016). Known as green gentrification (Gould & Lewis, 2016) or environmental gentrification (Checker, 2011; Eckerd, 2011; Wolch et al., 2014), the result can be a complete community overhaul that leaves minorities on the outside looking in. While this process has not been examined in direct relation to an urban greenway, it is possible that the insertion of an urban greenway that connects White and minority spaces, could fuel gentrification and lead to conflict over ownership of the space.

Despite the potential conflicts created by inserting urban greenways into minority enclaves, these corridors represent the next wave of urban park innovation and will

eventually be housed in numerous metropolitan locations throughout the country (Harnik, 2012). Thus, there currently exists a need to further investigate the relationship between urban greenways, the paradox they may create in the communities they serve, and social factors related to neighborhood stigma, that may serve to perpetuate inequalities and act as a constraint to recreation for trail users. Here research on urban greenways stands not only to benefit park and recreational scholars, but park professionals and city officials looking to integrate the structures into their city's landscape.

The following studies presented in this dissertation examine these constructs in relation to a recent urban greenway to be opened in a major urban area, The Bloomingdale Trail. Primarily known by its nickname, The 606, The Bloomingdale Trail opened on Chicago's Northwest Side in 2015, as Mayor Rahm Emanuel's signature project (The Story, n.d.). The 606, constructed on an abandon railway line is elevated almost 20 feet above the neighborhood streets below and extends 2.7 miles (Mortice, 2015). However, the reason the site was chosen for this study was that the trail traverses and connects the culturally-centric minority neighborhood of Humboldt Park, which has historically been stigmatized for crime and disorder (Mumm, 2016; Pérez, 2004; Rodríguez-Muñiz, 2016; Rúa, 2012; Wilson & Grammenos, 2005),with two affluent White communities (i.e. Wicker Park and Bucktown) and a rapidly gentrifying community (i.e. Logan Square). This location allowed the researcher to examine patterns of user behavior, the impacts of neighborhood stigma, and discourse between communities that has emerged since the trail's conception (e.g. green gentrification and its resistance). Additionally, because of the area's history with crime, the location also

allowed the researcher to examine the relationship between the trail and localized crime patterns.

Purpose of the Study

The primary purpose of this study was to understand the physical and social impacts of urban greenway assimilation on a community of color and its residents. To achieve this, the study had three secondary aims. The first was to examine if an urban greenway could have an influence on crime in trail-proximate communities. Here, because neighborhood crime and delinquency often serve to constrain urban park use and lead to space avoidance (see Stodolska et al.,2011; Stodolska et al., 2013), it was important to examine if the greenway's implementation had any correlation with crime increases or decreases in the adjacent neighborhoods. The second aim of the study was to understand if an urban greenway could take on the characteristics of intimate segregation by disrupting an ethnic enclave's sense of ownership over the space. Seeking to advance the Coutts and Miles (2011) study on urban greenways, the second study investigated if and how an urban greenway could threaten the environmental and social structures of a culturally centric minority enclave, leading residents to segregate themselves as a mode of resistance. The third aim of this study was to understand if and how neighborhood stigma, when attached to a community of color, influences the behavior of greenway users and perpetuates social exclusion. Using Sampson and Raudenbush's (2004, 2005) theory of neighborhood racial stigma, the third study investigated how neighborhood

stigma served as a constraint for greenway users and facilitated conflict between residents in the communities the greenway traversed.

Research Questions

Broad Question: What are the benefits and consequences of integrating an urban greenway across a diverse neighborhood environment?

Q1: Is there a relationship between an urban greenway and crime in a diverse and densely populated urban environment? If so, what effects does this built environmental space have on different types of crime in the surrounding area?

Q2: Does intimate segregation exist on Chicago's 606? If so, how does it manifest?

Q3: How does neighborhood stigma influence patterns of recreation on an urban greenway?

Definition of Terms

Boricua

A term frequently used by Puerto Ricans to refer to themselves, each other, and their collective community in Humboldt Park. This term was used to emphasize Puerto Rican identity, affection, and ownership within the context of time and space (Flores-Gonzalez, 2001; Pérez, 2004).

Broken Windows

Originating from a 1982 *Atlantic Monthly* article by James Wilson and George Kelling, broken windows is predicated on the idea that as physical structures are left to deteriorate, physical incivilities proliferate and residents in a local lose confidence in the neighborhood and the police's ability to control deviant activity (Wilson & Kelling, 1982). As these physical incivilities remain unrepaired, informal social controls weaken and potential offenders become emboldened.

Crime Prevention Through Environmental Design (CPTED)

Crime prevention through environmental design (CPTED) examines built structures within a given environment and assesses how the environmental structural components may serve to either enhance or reduce crime through design and modification (Marzbali et al., 2012; Sohn, 2016).

Deviance

A state of departing from accepted societal norms and/or standards. In the following studies it is used in reference to both unlawful actions (i.e. violent and property crime) and activities and behaviors that diverge from normal social constructs (e.g. using The 606 to race bicycles).

Discrimination

The studies here use Allport's (1979) definition of discrimination, defining it as the denial of "individuals or groups of people equality of treatment which they may wish" (p. 51). This may include actions and behaviors designed to main own-group characteristics and hierarchical position *at the expense* of the comparison group (Dovidio & Gaertner, 1986).

Environmental (Green) Gentrification

A multi-stage process where cities create or restore environmental amenities that subsequently attract wealthier groups who desire access and displace lower-income residents who can no longer afford to reside in the area (Gould and Lewis, 2016).

Incivilities

Similar to broken windows, idea that physical incivilities, such as abandoned lots, tagged buildings, or overgrown areas, encourage crime through the promotion of weak social ties (Sampson & Raudenbush, 1999). However, unlike broken windows, incivilities acknowledges the impact of social incivilities, or perceived symbols of

disorder, such as loitering youth, prostitutes and homeless individuals, drug dealing, and public drunkenness (Perkins, Wandersman, Rich, & Taylor, 1993).

Humboldt Park

A neighborhood located on Chicago's Near Northwest Side, Humboldt Park is one of Chicago's 77 defined communities. Since the 1960s the neighborhood has largely been defined by it large Puerto Rican population and identity (Pérez, 2004; Rúa, 2012). For this study we focused mainly on the northern side of the community or those areas located a half a mile from Bloomingdale Avenue or less.

Intimate Segregation

Process where residents of a statistically racially and ethnically diverse area use a variety of structural (fences/walls) and social (avoiding contact) techniques to avoid contact with those not considered part of the collective ingroup (Mumm, 2008)

Latino/a

A shortening of the Spanish word *latinoamericano,* the term is used to refer to an individual or communities of Latin American origin (Stodolska, 2013).

Neighborhood Stigma

Negative stereotyped imbued on a neighborhood or community occupied by a racial and/or ethnic minority group by more affluent, outside residents based on the assumption that a high level of deviant and disorderly actions occur within the minority

space (Sampson & Raudenbush, 2005). Unconsciously or not, outside residents use the neighborhood's racial composition as a gauge to measure the level and seriousness of disorder, instilling a statistical marker that heightens avoidance and stigmatizes the space (Sampson & Raudenbush, 2005).

Social Stigma

Crocker, Major, and Steele (1998) defined individual and social stigma as the prejudice, discrimination, and negative stereotyping of a group based upon a set of existing characteristics believed to be held truths by a larger, more powerful ingroup (Crocker & Major, 1989; Crocker, 1999; Major & O'Brien, 2005). As explained by Major and O'Brien, "stigmatizing marks may be visible or invisible, controllable or uncontrollable, and linked to appearance (physical deformity) behavior (e.g. child abuser), or group membership (e.g. African Americans)" (p. 395).

Stigma Consciousness

Pinel (1999) coined the term *stigma consciousness* to explain how stigmatized individuals navigate interactions with the stigmatizing group (Brown & Pinel, 2003; Pinel, 1999). Pinel (1999) recognized that individuals in negatively stereotyped groups are keenly aware that their group association plays a large role in how others behave toward them and what is perceived about them (Pinel, 1999). For some individuals this stigmatization may have very little influence, as they are able to ignore or dismiss the stigma without real consequence. Pinel (2002) referred to these individuals as having low

stigma consciousness. Conversely are those individuals with high stigma consciousness (Brown & Pinel, 2002; Pinel, 2002; Pinel, 1999).

Territoriality

The study uses Sack's (1986) definition of territoriality, explaining it as "the attempt (of humans) to affect, influence, or control actions and interactions (of people, things, and relationships) by asserting and attempting to enforce control over a geographic area" (p.55). The overriding assumption here is that territoriality is not built on simply occupying a general territory, but claiming it and exercising control over its boundaries by superimposing behaviors and activities that are centric to the identity of those that reside over it (Sack, 1986)

The 606 (The Bloomingdale Trail)

The 606 is the colloquial name given the Chicago's Bloomingdale Trail and associated pocket parks. The trail itself stretches 2.7 miles and is elevated 20 feet above the city streets below. Located on the city's northwest side, the corridor stretches across four Chicago communities: Humboldt Park, Logan Square, Wicker Park, and Bucktown (Mortice, 2015; SINHA, 2014).

White Newcomer

This term is used to describe a White individual who has no history or kin in Humboldt Park, but has recently entered to take advantage of residential development.

Delimitations

The focus of this study was to better understand the relationship between The 606 and the structural and social changes brought about by its insertion on Chicago's Westside. Given the study was based on The 606 and proximate, the study population was delimited to residents of the local communities and 606 users who agreed to participate in this study. The intention of this study was not to generate conclusions generalizable to all urban trail environments or populations, as it is recognized that The 606 represents a unique case. Rather, the goal was to develop a rich understanding about the environment and the potential conflicts surrounding its integration into the Latino/a community of Humboldt Park. The age of participants (average age: 34) and ability to participate on The 606 may also have served to delimit the study. While a broad spectrum of participants is represented (range: 18-68), those individuals younger than 18 and those who do not possess the necessary leisure time and/or desire/ability to use The 606 are absent. Despite these delimitations, the researcher intended The 606 to function as a foundational case for other urban locations interested in developing and integrating similar urban greenways into their landscapes. Lindsey et al. (2008) explained that in order to design and integrate greenways so that their utility is maximized and their benefits distributed equally, collaboration between fields must take place. Consequently, though the results of the study cannot necessarily be generalized, the researcher hopes that the finding lead to additional scholarship by urban park researchers on the effects of urban greenways and the helps to inform city officials and park employees looking to integrate greenways in the future. Like Coutts and Miles (2011) the researcher believes

that “urban greenways are ripe for research examining their potential to connect people to places and to one another” (p. 331).

Dissertation Format

The dissertation report is structured following the article format. The dissertation consists of three articles for publication as described below. Each article as composed with a particular journal in mind, however, because the author wanted to provide a more thorough account of literature and methodologies, as well as greater depth in qualitative findings, articles two (Chapter 3) and three (Chapter 4) consist of material, including literature, methodological explanation, and interview quotes, that will be removed in final article submission. It should also be noted that the first article (Chapter 2) of the dissertation was originally conducted as a pilot examination and has already been published in the journal of *Environment and Behavior*. The three articles presented here are as follows:

1. The first article titled, *Different Views from The 606: Examining the Impacts of an Urban Greenway on Crime in Chicago* focuses on the relationship between The 606 and crime in adjacent communities. This article focuses specifically on answering the questions, (1) is there a relationship between an urban greenway and crime in a diverse and densely populated urban environment and (2) if so, what effects does this built environmental space have on different types of crime in the surrounding area? To answer these questions crime trends were examined using both a match case-control comparison and a spatially oriented hierarchical

regression model. The article was written with the intent of being published in *Environment and Behavior.*

2. The second article titled, *Arms Together, Hearts Apart: An Exploration of Intimate Segregation on Chicago's 606* focuses on the Latino/a community of Humboldt Park and how disputes of trail ownership and exclusion have caused the trail to take on characteristics of intimate segregation. This article first specifically tests whether or not (1) intimate segregation exist on Chicago's 606. Building on these results, the second study seeks to add depth by considering (2) how intimate segregation may manifest in trail segments traversing Humboldt Park? To answer these questions a series of logistic regression models (binomial and nested binomial) were used in conjunction with intercept semi-structured interviews with Latino/a residents of Humboldt Park. The article was written with the intent of being published in either the *Urban Affairs Review* or *Environment and Behavior.*
3. The third article titled, *Neighborhood stigma impacts urban greenway use and greenway-proximate communities*, examines the impact of neighborhood stigma on the behavior of greenway users and proximate communities. Specifically, this study examines the consequences of the stigma imbued on the neighborhood of Humboldt Park, seeking to answer the question of (1) how does neighborhood stigma influence patterns of recreation when traversing a previously stigmatized enclave? To answer this question, informal observations were conducted on The 606 in concurrence with intercept interviews with 606 users and residents of each

neighborhood traversed by the trail. The article was written with the intent of being published in Environment and Behavior, *City and Community, or Leisure Sciences.*

The final chapter (Chapter 5) of this dissertation acts as a concluding chapter, bringing together the findings of all three articles, highlighting significant findings and contributions, discussing implications and future research that can be guided by the study.

References

Bauder, H. (2001). Work, young people and neighbourhood representations. *Social & Cultural Geography, 2*(4), 461-480. doi: 10.1080/14649360120092643

Bauder, H. (2002). Neighbourhood effects and cultural exclusion. *Urban Studies, 39*(1), 85-93. doi: 10.1080/00420980220099087

Beatley, T., & Manning, K. (1997). *The ecology of place: Planning for environment, economy, and community*. Washington, DC: Island Press.

Besbris, M., Faber, J. W., Rich, P., & Sharkey, P. (2015). Effect of neighborhood stigma on economic transactions. *Proceedings of the National Academy of Sciences of the United States of America, 112*(16), 4994-4998. doi:10.1073/pnas.1414139112

Branas, C. C., Cheney, R. A., MacDonald, J. M., Tam, V. W., Jackson, T. D., & Ten Have, T. R. (2011). A difference-in-differences analysis of health, safety, and greening vacant urban space. *American Journal of Epidemiology, 174*(11), 1296-1306. doi:10.1093/aje/kwr273

Brown, R. P., & Pinel, E. C. (2003). Stigma on my mind: Individual differences in the experience of stereotype threat. *Journal of Experimental Social Psychology, 39*(6), 626-633. doi: 10.1016/S0022-1031(03)00039-8

Browning, C. R., & Cagney, K. A. (2002). Neighborhood structural disadvantage, collective efficacy, and self-rated physical health in an urban setting. *Journal of Health and Social Behavior,43*(4), 383-399.

Brown-Saracino, J. (2009). *A neighborhood that never changes: Gentrification, social preservation, and the search for authenticity*. Chicago: University of Chicago Press.

Byrne, J. (2012). When green is white: The cultural politics of race, nature and social exclusion in a los angeles urban national park. *Geoforum, 43*(3), 595-611. doi: 10.1016/j.geoforum.2011.10.002

Charles, C. Z. (2003). The dynamics of racial residential segregation. *Annual Review of Sociology, 29*, 167-207. doi: 10.1146/annurev.soc.29.010202.100002

Checker, M. (2011). Wiped out by the "greenwave": Environmental gentrification and the paradoxical politics of urban sustainability. *City & Society, 23*(2), 210-229. doi: 10.1111/j.1548-744X.2011.01063.x

Chiesura, A. (2004). The role of urban parks for the sustainable city. *Landscape and Urban Planning*, *68*(1), 129-138. doi: 10.1016/j.landurbplan.2003.08.003

Cohen, D. A., Inagami, S., & Finch, B. (2008). The built environment and collective efficacy. *Health & Place, 14*(2), 198-208. doi:10.1016/j.healthplace.2007.06.001.

Cohen, D. A., Marsh, T., Williamson, S., Derose, K. P., Martinez, H., Setodji, C., & McKenzie, T. L. (2010). Parks and physical activity: Why are some parks used more than others? *Preventive Medicine, 50*, S9-S12. doi: 10.1016/j.ypmed.2009.08.020

Cohen, D. A., Han, B., Derose, K. P., Williamson, S., Marsh, T., Raaen, L., & McKenzie, T. L. (2016). The paradox of parks in low-income areas: Park use and perceived threats. *Environment and Behavior, 48*(1), 230-245. doi: 10.1177/0013916515614366.

Coutts, C., & Miles, R. (2011). Greenways as green magnets: The relationship between the race of greenway users and race in proximal neighborhoods. *Journal of Leisure Research, 43*(3), 317-333. doi: 925052823

Crewe, K. (2001). Linear parks and urban neighbourhoods: A study of the crime impact of the boston south-west corridor. *Journal of Urban Design, 6*(3), 245-264.

Crocker, J. (1999). Social stigma and self-esteem: Situational construction of self-worth. *Journal of Experimental Social Psychology, 35*(1), 89-107. doi: 10.1006/jesp.1998.1369

Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review, 96*(4), 608-630. doi: 10.1037/0033-295X.96.4.608

Dovidio, J. F., & Gaertner, S. L. (1986). Prejudice, discrimination, and racism: Historical trends and contemporary approaches. In J.F. Dovidio & S.L. Gaertner (Eds.). *Prejudice, discrimination, and racism* ,(pp.1-34). San Diego, CA: Academic Press.

Eckerd, A. (2011). Cleaning up without clearing out? A spatial assessment of environmental gentrification. *Urban Affairs Review, 47*(1), 31-59. doi: 10.1177/1078087410379720

Flores-Gonzalez, N. (2001). Paseo boricua: Claiming a Puerto Rican space in Chicago. *Centro Journal, 13*(2), 7-23. doi: 37711308002

Floyd, M. F. (1998). Getting beyond marginality and ethnicity: The challenge for race and ethnic studies in leisure research. *Journal of Leisure Research, 30*(1), 3-22.

Floyd, M. F., & Shinew, K. J. (1999). Convergence and divergence in leisure style among whites and african americans: Toward an interracial contact hypothesis. *Journal of Leisure Research, 31*(4), 359-384.

Gehl, J. (2013). *Cities for people.* Washington, DC*:* Island press.

Gobster, P. H. (1995). Perception and use of a metropolitan greenway system for recreation. *Landscape and Urban Planning, 33*(1), 401-413. doi: 10.1016/0169-2046(94)02031-A

Gobster, P. H. (1998). Urban parks as green walls or green magnets? Interracial relations in neighborhood boundary parks. *Landscape and Urban Planning, 41*(1), 43-55. doi: 10.1016/S0169-2046(98)00045-0.

Gobster, P. H., & Westphal, L. M. (2004). The human dimensions of urban greenways: Planning for recreation and related experiences. *Landscape and Urban Planning, 68*(2), 147-165. doi: 10.1016/S0169-2046(03)00162-2

Godbey, G. (2009). Outdoor recreation, health, and wellness: Understanding and enhancing the relationship. *RFF Discussion Paper*, 9-21. doi: 10.2139/ssrn.1408694

Gómez, E., & Malega, R. (2007). Residential attributes, park use, and perceived benefits: An exploration of individual and neighbourhood characteristics. *Leisure/Loisir*, *31*(1), 77-104. doi: 10.1080/14927713.2007.9651374

Gomez-Feliciano, L., McCreary, L. L., Sadowsky, R., Peterson, S., Hernandez, A., McElmurry, B. J., & Park, C. G. (2009). Active living logan square: Joining together to create opportunities for physical activity. *American Journal of Preventive Medicine, 37*(6), S361-S367. doi:10.1016/j.amepre.2009.09.003

Gould, K. A., & Lewis, T. L. (2016). *Green Gentrification: Urban sustainability and the struggle for environmental justice*. New York, NY: Routledge

Groenewegen, P. P., van den Berg, A. E., de Vries, S., & Verheij, R. A. (2006). Vitamin G: Effects of green space on health, well-being, and social safety. *BMC Public Health, 6* (149). doi:1471-2458-6-149

Harnik, P. (2012). *Urban green: Innovative parks for resurgent cities*. Washington, DC: Island Press.

Hutchison, R. (1987). Ethnicity and urban recreation: Whites, blacks, and hispanics in Chicago's public parks. *Journal of Leisure Research, 19*(3), 205-222

Keith, S. J., Larson, L. R., Hallo, J. C., Shafer, C. S., & Fernandez, M. (2018). Greenway use and preferences in diverse urban communities: Implications for trail design and management. *Landscape and Urban Planning*, 172, 47-59. doi: 10.1016/j.landurbplan.2017.12.007

Larson, L. R., Jennings, V., & Cloutier, S. A. (2016). Public parks and wellbeing in urban areas of the United States. *PloS One, 11*(4), e0153211. doi: 10.1371/journal.pone.0153211

Lindsey, G. (2003). Sustainability and urban greenways: Indicators in Indianapolis. *Journal of the American Planning Association, 69*(2), 165-180. doi: 10.1080/01944360308976304

Low, S., Taplin, D., & Scheld, S. (2009). *Rethinking urban parks: Public space and cultural diversity.* Austin, TX: University of Texas Press.

Maas, J., Verheij, R. A., Groenewegen, P. P., de Vries, S., & Spreeuwenberg, P. (2006). Green space, urbanity, and health: How strong is the relation? *Journal of Epidemiology and Community Health, 60*(7), 587-592. doi:60/7/587

Major, B., & O'Brien, L. T. (2005). The social psychology of stigma. *Annu.Rev.Psychol., 56*, 393-421. doi: 10.1146/annurev.psych.56.091103.070137

Manning, R. E. (2010). *Studies in outdoor recreation. Search and research for satisfaction.* Corvallis, OR: Oregon State University Press

Marzbali, M. H., Abdullah, A., Razak, N. A., & Tilaki, M. J. M. (2012). The influence of crime prevention through environmental design on victimisation and fear of crime. *Journal of Environmental Psychology, 32*(2), 79-88. doi: 10.1016/j.jenvp.2011.12.005

Massey, D. S., & Denton, N. A. (1993). *American apartheid: Segregation and the making of the underclass.* Cambridge, MA: Harvard University Press.

Moore, R. L., & Ross, D. T. (1998). Trails and recreational greenways: corridors of benefits. *Parks & Recreation (Ashburn)*, *33*(1), 68-79.

Mortice, Z. (2015). The express lane: Chicago's elevated rail park, the 606, was conceived and funded as transit infrastucture. *Landscape Architecture Magazine, 105*(4), 80.

Mowatt, R. A. (2009). Notes from a leisure son: Expanding an understanding of whiteness in leisure. *Journal of Leisure Research, 41*(4), 511-528.

Mumm, J. (2016). Gentrification in color and time: White and puerto rican racial histories at work in Humboldt Park. *Centro Journal, 28*(2), 88-125

Pérez, G. (2004). *The near northwest side story: Migration, displacement, and Puerto Rican families.* Berkeley, CA*:* University of California Press.

Perkins, D. D., Wandersman, A., Rich, R. C., & Taylor, R. B. (1993). The physical environment of street crime: Defensible space, territoriality and incivilities. *Journal of Environmental Psychology, 13*(1), 29-49. doi: 10.1016/S0272-4944(05)80213-0

Peters, K. (2010). Being together in urban parks: Connecting public space, leisure, and diversity. *Leisure Sciences, 32*(5), 418-433. doi: 10.1080/01490400.2010.510987

Pinel, E. C. (1999). Stigma consciousness: The psychological legacy of social stereotypes. *Journal of Personality and Social Psychology, 76*(1), 114-128. doi: 10.1037/0022-3514.76.1.114

Rodríguez-Muñiz, M. (2016). Riot and Remembrance: Puerto Rican Chicago and the Politics of Interruption. *Centro Journal*, *28*(2), 204-217.

Rúa, M. M. (2012). *A grounded identidad: Making new lives in Chicago's Puerto Rican neighborhoods.* New York, NY: Oxford University Press.

Sack, R. D. (1986). *Human territoriality: Its theory and history.* Cambridge, UK: Cambridge University Press.

Sampson, R. J. (2009). Racial stratification and the durable tangle of neighborhood inequality. *The Annals of the American Academy of Political and Social Science, 621*(1), 260-280. doi: 10.1177/0002716208324803

Sampson, R. J. (2012). *Great American City: Chicago and the enduring neighborhood effect.* Chicago, IL*:* University of Chicago Press.

Sampson, R. J., & Raudenbush, S. W. (1999). Systematic social observation of public spaces: A new look at disorder in urban neighborhoods. *American Journal of Sociology, 105*(3), 603-651. doi:10.1086/210356

Sampson, R. J., & Raudenbush, S. W. (2004). Seeing disorder: Neighborhood stigma and the social construction of "broken windows". *Social Psychology Quarterly, 67*(4), 319-342. doi: 10.1177/019027250406700401.

Sampson, R. J., & Raudenbush, S. W. (2005). Neighborhood stigma and the perception of disorder. *Focus, 24*(1), 7-11.

Sampson, R. J., & Sharkey, P. (2008). Neighborhood selection and the social reproduction of concentrated racial inequality. *Demography, 45*(1), 1-29.

Sandy, R., Tchernis, R., Wilson, J., Liu, G., & Zhou, X. (2013). Effects of the built environment on childhood obesity: The case of urban recreational trails and crime. *Economics & Human Biology, 11*(1), 18-29. doi: 10.1016/j.ehb.2012.02.005

Shafer, C. S., Lee, B. K., & Turner, S. (2000). A tale of three greenway trails: User perceptions related to quality of life. *Landscape and Urban Planning, 49*(3), 163-178. doi: 10.1016/S0169-2046(00)00057-8

Sharaievska, I., Stodolska, M., Shinew, K. J., & Kim, J. (2010). Perceived discrimination in leisure settings in Latino urban communities. *Leisure/Loisir, 34*(3), 295-326. doi: 10.1080/14927713.2010.521319

Sharkey, P. (2013). *Stuck in place: Urban neighborhoods and the end of progress toward racial equality.* Chicago, IL: University of Chicago Press.

Shinew, K. J., Stodolska, M., Roman, C. G., & Yahner, J. (2013). Crime, physical activity and outdoor recreation among Latino adolescents in Chicago. *Preventive Medicine, 57*(5), 541-544. doi: 10.1016/j.ypmed.2013.07.008

Shmool, J. L., Yonas, M. A., Newman, O. D., Kubzansky, L. D., Joseph, E., Parks, A., ... & Clougherty, J. E. (2015). Identifying perceived neighborhood stressors across diverse communities in New York city. *American journal of community psychology*, *56*(1-2), 145-155. doi: 10.1007/s10464-015-9736-9

Sinah, A. (2014). *Slow landscapes of elevated linear parks: Bloomingdale trail in Chicago* doi:10.1080/14601176.2013.830428

Sister, C., Wolch, J., & Wilson, J. (2010). Got green? addressing environmental justice in park provision. *GeoJournal, 75*(3), 229-248.

Sohn, D. (2016). Residential crimes and neighbourhood built environment: Assessing the effectiveness of crime prevention through environmental design (CPTED). *Cities, 52*, 86-93. doi: 10.1016/j.cities.2015.11.023

Solecki, W. D., & Welch, J. M. (1995). Urban parks: Green spaces or green walls? *Landscape and Urban Planning, 32*(2), 93-106. doi: 10.1016/0169-2046(94)00193-7

Sreetheran, M., & van den Bosch, C.C.K. (2014). A socio-ecological exploration of fear of crime in urban green spaces–A systematic review. *Urban Forestry & Urban Greening, 13*(1), 1-18. doi: 10.1016/j.ufug.2013.11.006.

Stodolska, M., Acevedo, J. C., & Shinew, K. J. (2009). Gangs of Chicago: Perceptions of crime and its effect on the recreation behavior of latino residents in urban communities. *Leisure Sciences, 31*(5), 466-482. doi: 10.1080/01490400903199773

Stodolska, M., & Shinew, K. J. (2010). Environmental constraints on leisure time physical activity among latino urban residents. *Qualitative Research in Sport and Exercise, 2*(3), 313-335. doi: 10.1080/19398441.2010.517038

Stodolska, M., Shinew, K. J., Acevedo, J. C., & Izenstark, D. (2011). Perceptions of urban parks as havens and contested terrains by Mexican-Americans in Chicago neighborhoods. *Leisure Sciences, 33*(2), 103-126. doi: 10.1080/01490400.2011.550220

Stodolska, M., Shinew, K. J., Acevedo, J. C., & Roman, C. G. (2013). "I was born in the hood": Fear of crime, outdoor recreation and physical activity among Mexican-American urban adolescents. *Leisure Sciences, 35*(1), 1-15. doi: 10.1080/01490400.2013.739867

Stodolska, M., Shinew, K., Floyd, M., Walker, G. (2013). *Race, ethnicity, and leisure.* Champaign, IL: Human Kinetics.

Suarez, R. (1999). *The old neighborhood: What we lost in the great suburban migration, 1966-1999.* New York, NY: Simon and Schuster.

Swanwick, C., Dunnett, N., & Woolley, H. (2003). Nature, role and value of green space in towns and cities: An overview. *Built Environment, 29*(2), 94-106. doi: 10.2148/benv.29.2.94.54467

Taylor, K. (2010, July 14). After high Line's success, other cities look up. *New York Times.* Retrieved from http://www.nytimes.com/2010/07/15/arts/design/15highline.html

The Story. (n.d.). In The 606. Retrieved from http://www.the606.org/about/the-story/

West, P. C. (1989). Urban region parks and black minorities: Subculture, marginality, and interracial relations in park use in the detroit metropolitan area. *Leisure Sciences, 11*(1), 11-28. doi: 10.1080/01490408909512202

Wilson, D., & Grammenos, D. (2005). Gentrification, discourse, and the body: Chicago's Humboldt Park. *Environment and Planning D: Society and Space, 23*(2), 295-312. doi: 10.1068/d0203

Wolch, J. R., Byrne, J., & Newell, J. P. (2014). Urban green space, public health, and environmental justice: The challenge of making cities 'just green enough'.

Landscape and Urban Planning, 125, 234-244. doi: 10.1016/j.landurbplan.2014.01.017

CHAPTER II: DIFFERNET VIEWS FROM THE 606: EXAMINING THE IMPACTS OF AN URBAN GREENWAY ON CRIME IN CHICAGO

Introduction

During the past decade the United States has witnessed an unprecedented urban migration with millions of people choosing to live, work, and play in cities across the country (Gehl, 2013). Given the rapid population change and stress associated with urban lifestyles, cities are now focusing heavily on residents' health and well-being. One way cities have done this is through the integration of parks, linear trails, and green space into urban landscapes (Gobster & Westphal, 2004; Swanwick, Dunnett, & Woolley, 2003). Research suggests urban green spaces generate a variety of benefits that range from enhancing overall wellbeing (Godbey, 2009; Larson, Jennings, & Cloutier, 2016; Maas, Verheij, Groenewegen, de Vries, & Spreeuwenberg, 2006; Sandy, Tchernis, Wilson, Liu, & Zhou, 2013) to increasing community unity (Browning & Cagney, 2002; Cohen, Inagami, & Finch, 2008; Groenewegen, van den Berg, de Vries, & Verheij, 2006), to offsetting socioeconomic disparities (Jennings, Larson, & Yun, 2016). Additionally, urban green space has been shown to be related to another aspect of city life directly affecting the health and well-being of residents: crime.

Urban crime typically stems from residential instability, sustained economic depravity, and group dynamics that reinforce concentrated disadvantage within communities (Hughey et al., 2016; Sampson, 2012).These interacting forces precipitate a lack of social control and eventual social disorganization (Bursik, 1988). In urban environments, crime has been linked to high poverty and low income levels (Carvalho &

Lewis, 2003; Ludwig, Duncan, & Hirschfield, 2001), low-levels of education (Lochner, 2007; Lochner & Moretti, 2001), racial segregation (Blau & Blau, 1982; Lee, 2000), and overall lack of resources (Kuo & Sullivan, 2001a; Markowitz, Bellair, Liska, & Liu, 2001; Zembroski, 2011). While these factors highlight the inequities in socioeconomic status (SES) within urban hierarchies that are consistently linked to crime, other potential crime correlates have generated less conclusive results.

The relationship between the built environment and crime in urban settings has been studied for decades, revealing complex relationships (Schroeder & Anderson, 1984; Shaw & McKay, 1942). Specifically looking at parks and green space, studies have demonstrated that both can be effective in crime prevention and reduction (Bogar & Beyer, 2015; Branas et al., 2011; Donovan & Prestemon, 2012; Garvin, Cannuscio, & Branas, 2013; Kuo & Sullivan, 2001b). For instance, Kuo and Sullivan (2001a&b) showed that vegetation and "greener" surroundings were associated with a reduction in crime and incivilities in a historically disadvantaged Chicago housing complex. In a similar study in Austin, TX, Snelgrove, Michael, Waliczek, and Zajicek (2004) found that crime was reduced when vacant lots were "greened". The researchers posited that this decline was due to increased feelings of safety, resulting in enhanced socialization and community interactions. In Philadelphia, Garvin et al. (2013) also studied the impact of greening vacant lots, finding that assault with and without a gun, theft, and disorderly conduct were all reduced with increases in green space. The authors concluded that "vacant lot greening changes the physical environment from one that may promote crime and fear to one that may reduce crime and improve perceptions of safety" (p. 201).

Studies focusing on urban tree cover in Portland, OR (Donovan & Prestemon, 2012) and Baltimore, MD (Troy, Grove, & O'Neil-Dunne, 2012) have revealed similar inverse relationships between canopy coverage and violent, property, and disorderly crime rates (Donovan & Prestemon, 2012).

Despite the apparent benefits of urban green space from a crime prevention perspective, potential costs also exist. Parks may actually attract crime to certain areas of the city (Groff & McCord, 2012; Shafer, Lee, & Turner, 2000), thus fostering avoidance behavior (Shinew, Stodolska, Roman, & Yahner, 2013; Stodolska, Shinew, Acevedo, & Izenstark, 2011) and inadvertently propagating segregation (Solecki & Welch, 1995). For example, research has shown that when parks are allowed to decay or are designed in a manner that propagates segregation, they can create social and economic boundaries between existing communities (Solecki & Welch, 1995; Stodolska et al., 2011). Eventually these boundaries can lead to an increase in crime as cohesion among community residents decreases (Bernasco & Block, 2011; Jean, 2008). And while the relationship between crime and parks is multi-dimensional, dependent on a variety of geographical, cultural, and managerial factors, it is strongly influenced by the physical and social factors associated with the built environment.

The built environment can be defined as the physical elements existing within a neighborhood or community that affect the emotional, psychological, and physical well-being of neighborhood residents (Northridge, Sclar, & Biswas, 2003; Schweitzer et al., 1999). A majority of the literature on the built environment and crime has focused on

structural features that increase the likelihood of criminal activity such as poor lighting (Farrington & Welsh, 2002) or gang tagging (Lane & Meeker, 2003). These associations are founded in the theory of broken windows (Wilson & Kelling, 1982), which posits that deteriorating and unrepaired physical structures, which convey negative images of communities and their ability to control crime, are the catalyst for delinquency and disorder within a neighborhood (Ross, 2013). Minor forms of delinquency such as graffiti or vandalism lead to an escalation of offenses and an eventual breakdown of community (Jean, 2008; Wilson & Kelling, 1982). While this theory has been criticized for its limited scope (Taylor, 2001), it has succeeded in drawing attention to the importance of the built environment on crime and disorder.

Given the inadequacies of the theory of broken windows, the crime prevention through environmental design (CPTED) approach has been adopted by many urban environment scholars (Marzbali, Abdullah, Razak, & Tilaki, 2012; Newman, 1972; Sohn, 2016). CPTED seeks to reduce crime through neighborhood design and structure modification that focus on the permeable versus defensible space (Marzbali et al., 2012; Sohn, 2016). Permeable space is defined as space that has a high-density of individuals, allows for free-flowing human movement, and is easily accessible to strangers (Cozens & Love, 2009). In contrast, defensible space is characterized as residential space with low traffic density, restricted access to strangers, and the ability of residents to recognize potential threats in the community (i.e., self-policing) (Sohn, 2016).

One of the first people to recognize the connection between the built environment, social familiarity, and the community's ability to recognize criminal activity and "self-police" a defensible space was Jane Jacobs (1961). In her book, *The Death and Life of Great American Cities,* Jacobs (1961) developed and defended the "eyes on the street" theory, advocating for the use of mixed residential and commercial communities to deter deviant activities and foster mutually supportive relationships through social interactions, economic transactions, and continuous surveillance (Jacobs, 1961; Sampson et al., 1997). A space that is highly trafficked, while being permeable, may also be defensible as criminals become unwilling to risk the increased chance of being seen or caught (Jacobs, 1961). Jacob's idea aligns with the CPTED concept of activity support, which is built on the premise that spaces possessing elements that attract people who do not wish to commit a crime naturally deter people who do (Cozens, 2005). This concept, however, stands in contrast to other CPTED tenets such as access control, which persist that when a space becomes more permeable and residents lose the ability to control through movement they become more vulnerable to crime (Armitage, 2011). This contrast reflects the complex nature of occupied space in large cities where the relationship between crime and the built environment can vary from neighborhood to neighborhood (Bernasco & Block, 2011).

The complex relationship between the built environment and crime is particularly evident along urban greenways. Greenways are defined as linear parks that connect places and are used for recreation or travel (Lindsey, 2003). Greenways contribute to communities by providing residents with increased opportunities to socialize, commute,

engage in physical recreation, and enjoy the restorative benefits of a nature (Larson et al., 2016; Shafer et al. 2000). Given their unique attributes, some of which invite crime and others that diffuse it, the ambiguous relationship between urban greenways and crime remains a subject of heavy debate. While some have argued that urban greenways help to reduce crime by providing residents with a place to meet, interact, and unify (Shafer et al., 2000; Sinah, 2014), others contend that by increasing the connectivity of a neighborhood urban trails may unintentionally provide avenues for crime expansion and migration (Armitage, 2006, 2011). Recent literature on linear parks and crime has also shown that linear parks may incite fear among users (Crewe, 2001). Due to a lack of information or control over the environment, fear is increased as users *perceive* the threat of victimization to be higher (Bogar & Beyer, 2015; Sreetheran & van den Bosch, 2014). For example, in her study of Boston trails, Crewe (2001) found that areas along the trails that were narrow, well lit, close to shops, and offered refuge were perceived as safe throughout the day and early evening. At night, however, the trail was not perceived as safe regardless of physical characteristics, especially in areas where visibility was limited. Despite not actually observing crime or disorder in the park, user perceptions of the space led directly to fear and their subsequent avoidance of the trail (Crewe, 2001).

Collectively, theoretical approaches such as CPTED suggest ambiguous or uncertain connections between urban greenways and crime. To investigate this relationship and better understand the complex relationship between greenways and crime, our study sought to address the following questions (1) is there a relationship between an elevated linear trail and crime in a diverse and densely populated urban

environment (2) and if so, what effects does this built environmental space have on different types of crime in the surrounding area? Using two separate but related studies of Chicago's Bloomingdale Trail, an elevated linear trail affectionately known by local residents as The 606, we examined different aspects of the greenway-crime relationship that focused on trail presence/absence at course scales (Study 1) and trail proximity at finer spatial resolution (Study 2).

Study Site and Unit of Analysis

The 606 was selected as the study site for this investigation based on its urban location, the diversity of residents it serves, and the large number of crimes present in neighboring areas. Originally a railroad passage, the Bloomingdale Line was vacated in the early 2000's by Canadian Pacific Railway. The area was closed off for public use until its re-opening in 2015. In the decade prior to trail construction, the abandoned corridor became "an unregulated getaway for the homeless, drug users, urban curiosity seekers, joggers and teenagers—some carrying backpacks full of beer, spray-paint, and fireworks" (Dudek, 2015). While some individuals used the abandoned railroad for recreational purposes, others used the abandoned space for criminal activity such as drug distribution and gang activity (Dudek, 2015).

The 100 million dollar transformation of the railway to its current state began in 2013, when The Trust for Public Land, The City of Chicago, The Chicago Park District, and The Chicago Department of Transportation joined to break ground on Mayor Rahm Emanuel's signature project (The Story, n.d.). Devised as a traffic congestion relief mechanism (Mortice, 2015), the 2.7 mile long trail is one of Chicago's few east-west

pedestrian corridors. The 606 features 12 access points between the western trailhead located in West Humboldt Park and its easternmost point in Walsh Park (Figure 1) (Sinha, 2014). From its conception, The 606 has been marketed by the city as a sustainable amenity designed to relieve congestion and unify the vastly different neighborhoods it transverses (Figure 2-3). At the time our study was conducted (January 2016), The 606 had officially been open for 6 months (Trotter, 2015).

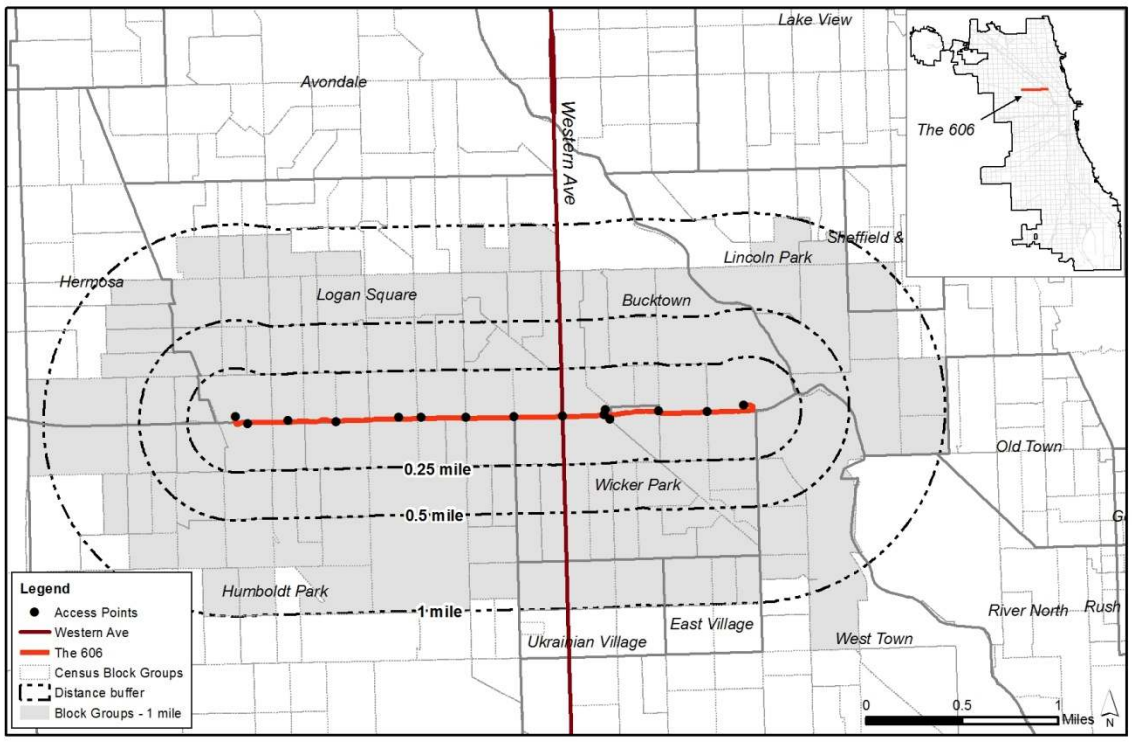


Figure 1: *Map of Chicago's Bloomingdale Trail (The 606) showing primary neighborhoods and trail access points.*

Although The 606 has become a recreation destination that attracts users from all over Chicago, the trail extends over several neighborhoods that are drastically different in terms of racial, ethnic, and socioeconomic composition: Humboldt Park, Logan Square, and West Town (Wicker Park and Bucktown) (Sinah, 2014). On the west end, Humboldt

Park is characterized by a large minority population (93.2%), high unemployment (17.3%), high poverty (33.9%), and a large number of residents without a high-school diploma (35.4%). In comparison, the neighborhoods of Wicker Park and Bucktown on the east end are more affluent, with a larger White demographic (59%), low unemployment (6.6%), poverty (14.7%), and few residents without a high-school diploma (12.9%) (Esri, 2015; US Census Bureau, 2015). The Logan Square neighborhood, located in the middle of the trail, remains largely Latino/a (50.7%) but is quickly gentrifying as developers seek to take advantage increased consumer interest (Gomez-Feliciano et al., 2009). For analytical purposes, we divided each of these larger neighborhoods into census block groups (CBGs), which represents the next to smallest spatial unit recognized by the U.S. Census Bureau (U. S. Census Bureau, 2015). Previous studies have shown that CBGs are a reliable unit of analysis for examining park proximity and other neighborhood correlates such as crime (Hughey et al., 2016; Nicholls, 2001).

Figure 2.*View looking east from the Lawndale Avenue access point located on the west end of the Bloomingdale Trail*

Figure 3.*View looking east from the Western Avenue access point on the Bloomingdale Trail.*

Dependent Variable: Crime

Crime was the dependent variable in our analysis. Specifically, we examined differences in violent, property, and disorderly crime rates for the years 2011 (pre-trail) and 2015 (post-trail) in CBGs throughout Chicago (Study 1) and surrounding The 606 (for Study 1 and Study 2). According to the FBI, violent crime is composed of murder and involuntary manslaughter, forcible rape, robbery, and aggravated assault (Federal Bureau of Investigation, 2016a). We also included simple and domestic battery under the violent crime categorization. Property crime includes incidents of burglary, larceny-theft, motor vehicle theft, and arson (Federal Bureau of Investigation, 2016b). Although no FBI definition exists for disorderly crime, we grouped all other crimes into this category, including: criminal damage, trespassing, narcotics, weapons, solicitation violations, interference with public officers, and other violations (stalking, harassment, parole violation, illegal possession). We obtained all crime data from the City of Chicago's crime data portal (City of Chicago, 2016). To maintain consistency across years, we only examined crime data from June-November, the warmer months where crime in the city typically peaks (City of Chicago, 2016).

Study 1: Matched Case-Control Analysis

Method

In the first phase of our study, we used a quasi-experimental matched case-control approach to compare per capita crime rates in 606-proximate neighborhoods (or CBGs) to those in socioeconomically similar neighborhoods in other parts Chicago. First, we

placed every CBG in the city into one of two categories using the Disadvantage Index, a reliable measure of concentrated socioeconomic disadvantage in urban environments (Hughey et al., 2016; Kirby & Kaneda, 2005; Turney & Harknett, 2009). The Disadvantage Index is composed of unemployment percentage, households below poverty, percentage of individuals with no high school education, and the percentage of renter occupied housing. It is calculated by first standardizing the four indicators and then summing each of their totals (Hughey et al., 2016). Higher scores on the index indicate greater disadvantage, or lower SES. Because crime in neighborhoods characterized by low SES occurs at higher rates than in neighborhoods that are more affluent (Friedson & Sharkey, 2015; Sampson, 2012; Sampson & Sharkey, 2008), analyses of urban crime patterns should account for social disadvantage at the neighborhood level.

Using socio-demographic data from US Census (2015) and Esri (2015), an index score was calculated for each CBG in the city. Low disadvantage neighborhoods reflected high SES, and high disadvantage neighborhoods reflected low SES. Next, we identified all CBGs within 0.5 miles of The 606 and determined their 2011 Disadvantage Index scores. This approach revealed a clear west (high disadvantage, Humboldt Park, etc., 43 CBGs) to east (low disadvantage, Wicker Park, Bucktown, 19 CBGs) divide along the trail, bisected by Western Avenue. We used the mean 2011 Disadvantage Index scores for 606-proximate west and east neighborhood clusters to identify comparable neighborhoods in Chicago that were not near the trail (i.e., matched case-controls): low disadvantage Lincoln Square (22 CBGs on Chicago's North Side, about 5 miles from the trail) and high disadvantage Pilsen (44 CBGs on the Lower West Side, about 6 miles

from the trail) (Chapter Appendix 1-Figure 4). Contiguous CBGs were selected within these neighborhoods until a distribution was reached that closely resembled that of the neighborhoods near The 606.

To confirm that 606 neighborhoods and matched controls were similar, we compared 2011 statistics and found no major differences with respect to other urban demographic indicators such as total population, median home values, or diversity index, which examines the probability that two randomly selected individuals will be from the same race category (Simpson, 1949). Initial differences were observed in per capita crime rates (crimes per 100 residents) within each CBG (higher 2011 crime rates near the current 606 location), so we attempted to normalize comparisons by examining the mean changes in absolute crime rates (property, disorderly, and violent) from 2011 and 2015. Because construction of The 606 began in 2013 and the trail was completed in 2015, we presumed that – when compared to other comparable Chicago neighborhoods experiencing similar citywide change - observed changes in crime rates for 606-proximate neighborhoods over that time period would be primarily due to the trail itself. In total, we compared 87 high disadvantage (low SES) CBGs and 41 low disadvantage (high SES) CBGs.

Data in Study 1 were analyzed using IBM SPSS (IBM SPSS Statistics Version 23, 2015). First, to understand the general distribution of crime and examine the linearity of the data, descriptive statistics were run for each crime category and covariate. We used standardized z-scores, Cook's D, and Mahalanobis distance to detect outliers. In total,

three CBGs with greater than 80 occurrences of property crime in 2011 were removed from the analysis, as each was found to exceed the critical value for Mahalanobis distance. For disorderly and violent crime, there were no outliers. We then conducted two series of independent sample t-tests to compare the differences in per capita crime rates in 2011 and 2015 for neighborhoods adjacent to and farther from the trail, based on social disadvantage. The Bonferroni correction to familywise error rate (adjusted $\alpha = 0.05/3$) was applied prior to interpretation of the multiple comparison tests. To further assess the interactions among 606 proximity, neighborhood status, and crime rates, we pooled all CBG data and conducted ANOVA to test for differential impacts on crime based on 606 proximity, neighborhood status (i.e., Disadvantage Index), and potential interactions between these two variables. Effects sizes were estimated using Cohen's d for t-tests and partial eta-squared for ANOVA.

Results

Results suggested that the presence of The 606 had a significant and large positive effect on violent crime in both high disadvantage (low SES) and low disadvantage (high SES) neighborhoods (Table 1). In other words, violent crime rates near The 606 decreased more substantially between 2011 and 2015 (post-606 construction) than they did in comparable neighborhoods away from the trail. Similar patterns were observed for property and disorderly crimes, though these differences were only statistically significant with moderate effects sizes in low SES neighborhoods (Table 1). Diversity index scores also increased at a significantly higher rate in low SES neighborhoods near the trail than in other comparable Chicago neighborhoods. Disadvantage and diversity

index scores for high SES neighborhoods did not appear to be significantly impacted by 606 construction.

Table 1: *Comparison of Mean Changes from 2011 to 2015 in Crime Rates Per 100 Residents, Social Disadvantage and Diversity for High and Low Disadvantage Chicago Neighborhoods (Census Block Groups) Close to and Away from the 606 Trail*

	High Disadvantage (Low SES)			**Low Disadvantage (High SES)**		
Variable (change from 2011 to 2015)	**Near 606** (n = 43)	**No 606** (n = 44)	**Diff. Test**	**Near 606** (n = 19)	**No 606** (n = 22)	**Diff. Test**
Violent Crimes per 100 Residents	-0.863	-0.311	$t(85)=3.91$, $p<.001$, Cohen's d = .83	-0.310	-0.017	$t(39)=2.93$, $p=.006$, Cohen's d = .91
Property Crimes per 100 Residents	-0.922	-0.570	$t(85)=2.17$, $p=.033$, Cohen's d = .46	-0.938	-0.865	$t(39)=.27$, $p=.792$, Cohen's d = .08
Disorderly Crimes per 100 Residents	-1.019	-0.577	$t(85)=2.31$, $p=.024$, Cohen's d = .49	-0.433	-0.194	$t(39)=1.21$, $p=.232$, Cohen's d = .37
Disadvantage Index	-1.084	-0.814	$t(85)=1.20$, $p=.232$, Cohen's d = .26	-0.413	-0.271	$t(39)=0.73$, $p=.470$, Cohen's d = .23
Diversity Index	0.102	0.027	$t(85)=-3.92$, $p<.001$, Cohen's d = .84	0.026	0.046	$t(39)=0.54$, $p=.591$, Cohen's d = .18

We observed similar patterns in the ANOVA evaluating relationships among 606 proximity, neighborhood status, and changing per capita crime rates for the pooled set of

CBGs. In the violent crime model, both The 606 proximity, $F(1,124)=15.06$, $p<.001$, partial $\eta 2=.11$, and Disadvantage Index variables, $F(1,124)=15.12$, $p<.001$, partial $\eta 2=0.11$, were significant. Examining violent crimes for 2011 and 2015 showed that it decreased faster in low- SES CBGs and those closer to the trail. Results were similar for disorderly crimes, with significant effects for both The 606 proximity, $F(1,124)=4.79$, $p=.030$, partial $\eta 2=.04$, and Disadvantage Index variables, $F(1,124)=9.71$, $p=.002$, partial $\eta 2=.07$. Property crime trends reflected the same general pattern, although neither variable had a statistically significant influence in that particular model. The 606proximity*DisadvantageIndex interaction term was not significant for any of the ANOVA crime models.

Discussion

In the past decade, crime rates in major metropolitan areas have declined at an nearly unprecedented rate (Friedson & Sharkey, 2015; Sampson, 2012). With the exception of 2016, which has seen a spike in violent crime (City of Chicago, 2016), Chicago has followed this general pattern (Friedson & Sharkey, 2015). Our study highlighted substantial differences in crime between 2011 and 2015 for almost all of the CBGs in the analysis. However, per capita crime rates appear to be falling more rapidly in some parts of the city than others. Our results suggest that construction of The 606 has led to significant decreases in per capita crime rates – particularly in low SES neighborhoods along the trail. This was particularly true among violent crime rates, which decreased more rapidly in both low and high SES 606-proximate neighborhoods than in similar Chicago neighborhoods farther from the trail. Several potential

explanations for this result exist. First, when compared to high SES neighborhoods, the 2011 baseline for violent crime rates was much higher in low SES neighborhoods along the trail's western end, leading to greater room for improvement. But other factors likely contributed to this change as well.

Returning to Jacobs' (1961) "eyes on the street theory", criminals may choose to avoid The 606 area because increased overall traffic and density leads to an enhanced risk of being caught. Looking at the relationship between violent crime and traffic density, Christens and Speer (2005) found similar results. They postulated that as population in an area rises, violent crime falls because of the increase presence of individuals to intervene. Because The 606 traverses neighborhoods that are high in both commercial and residential densities, traffic in the area is naturally increased as commuters, exercise enthusiasts, and tourists frequent the trail (Vivanco, 2016b). The increase in traffic due to The 606 may be particularly beneficial to the low SES neighborhoods on the west end, which have historically been more prone to violent crime than those neighborhoods located farther east (Rúa, 2012). The increase in traffic as a mechanism for violent crime reduction is supported in the CPTED factor of activity support (Sohn 2016), whereby heavy use leads to heightened overall natural surveillance of the area and decreases in deviant behavior. In other urban spaces, greenways have generally shown to promote positive outdoor recreation participation for a diverse array of urban residents (Branas et al., 2011; Groenewegen et al., 2006; Larson et al. 2016; Wolfe & Mennis, 2012), including those living in low SES neighborhoods. The encouragement of positive

recreational activities along The 606 may deter crime by providing increased opportunity for positive recreational engagement (Cohen et al., 2016; Garvin et al., 2013).

Another potential explanation for the more rapid decline in violent crime in 606-proximate neighborhoods may stem from enhanced social interactions made possible by the trail. Such interactions can lead to an increase in social capital, defined as the "cooperative social relationships that facilitate the realization of collective goals" (Rosenfeld, Baumer, & Messner, 2001, p. 284). Multiple studies have shown that social capital directly contributes to reduction in violent crime (Sampson 2012; Rosenfeld et al., 2001; Sampson et al., 1997). For example, in a study on neighborhood social ties and the reproduction of social capital, Kaźmierczak (2013) found that neighborhood parks, when properly maintained and perceived as safe, serve to facilitate interactions and as a result, increase the overall social capital in a community. Additional research on the relationship between green space and social capital in low SES neighborhoods has produced similar results, with increases in green space showing a positive relationship with social capital and an inverse relationship with violence (Garvin et al., 2013; Kuo & Sullivan, 2001). However, as Collier (2002) explained, for social capital to be effective in crime reduction both the "social" and "capital" component must be present. Integration of The 606 has potentially provided this positive structural component that the low SES areas located on Chicago's West Side were previously lacking (and components that continue to be absent in the comparable neighborhoods we studied). By revitalizing and removing a space that visually signified decay and disorder, The 606 is now a common space for neighborhood residents to engage with one another without fear. Social capital may therefore be a

product of the interactions both between and within the neighborhoods now possible as a result of the trail's construction (Cozens, Hiller, & Prescott, 2001; Cozens, Saville, & Hiller, 2005; Jacobs, 1961).

In addition to significant impacts on violent crime, The 606 also seemed to have a significant and positive impact on property and disorderly crime in neighborhoods immediately surrounding the trail. In both of these latter cases, the strength and trajectory of the relationship between the trail and crime appeared to be moderated – at least to some degree - by a neighborhood's SES. For individuals living in high disadvantage (low SES) neighborhoods close to The 606, disorderly and property crimes are decreasing faster than in comparable neighborhoods farther from the trail. This finding supports previous literature on the positive impact parks have in urban communities plagued by low SES (Garvin et al., 2013; Kuo & Sullivan, 2001a; Wolfe & Mennis, 2012). On the other hand, despite associations with lower levels of violent crime, the presence of The 606 appears to have fewer effects on property or disorderly crimes in low disadvantage (high SES) neighborhoods. While this finding may simply be indicative of the drastic changes occurring in the more western neighborhoods and the stability of the eastern communities, results also highlight greenways' potential to act as either a crime attractor or generator (Groff & McCord, 2012). Given that the east end of the trail is more commercialized, it may provide criminals with both the ability to remain anonymous and target an increased number of potential victims (Brantingham & Brantingham, 1995; Groff & McCord, 2012).

Study 2: Hierarchical Linear Modeling

Method

In the second phase of our study, we employed hierarchical linear modeling (HLM) to conduct a more spatially-refined analysis of 606-proximate CBGs to examine the impact of trail proximity on violent, property, and disorderly crime. Again, we focused on CBGs within a 0.5 mile radius of The 606 (n = 62). Recent research from The Trust for Public Land supports the use of the half a mile standard, finding that residents in urban centers are willing to travel distances of up to half a mile to reach a park destination (The Trust for Public Land, 2016). Given The 606's use as both a recreational amenity and transportation conduit, it is reasonable to assume that the trail's impact extends at least half a mile from its borders.

We wanted to assess the influence of time on crime, primarily because it served as the proxy to the trail's construction. We again focused on crime data at two points in time: 2011 (representing the "pre-trail" condition two years prior to the trails groundbreaking) and 2015 (representing the "post-trail" condition two years after groundbreaking and after the trail opened). The second important independent variable in this study was spatial proximity to The 606 (measured in feet). If the trail were influencing crime, we assumed the effect would be more pronounced in CBGs closer to the trail. To calculate proximity, each of the 12 access points along The 606 were mapped using ArcGIS. Proximity was estimated as the distance from the center of each CBG to the nearest 606 access point. The neighborhood Disadvantage Index (calculated for both

2011 and 2015) was included as a control in our HLM analysis to isolate the effects of the trail (time) and trail spatial proximity while accounting neighborhood SES disparities.

Data in Study 2 were also analyzed using IBM SPSS Statistics software (IBM SPSS Statistics Version 23, 2015). After screening all data and removing three CBG outliers based on property crime data using the process described in Study 1, we developed a mixed model to examine the variance existing both within (Level 1) (e.g., time – in this case, pre- and post-trail and disadvantage) and between (Level 2) (e.g., CBG and corresponding variables such as trail proximity) each of the CBGs in our study (Hofmann, 1997). In other words, years (2011, or pre-trail, and 2015, or post-trail) were nested (Level 1) within CBGs (Level 2).

Given the hierarchical nature of the study, it was important to first determine a baseline (or null) model for each of the three dependent variables (i.e., types of crime). These analyses reveal how much variance resides within and between groups and also serve as a baseline for further analyses (Raudenbush & Bryk, 2002). Intraclass correlation coefficients (ICC) derived from the null modes revealed a significant amount of nesting between groups (property crime =.401; violent crime =.458; disorderly crime =.373). These results provided support and justification for the use of our mixed model approach.

After determining the null model (Model 1), potential predictors were entered into the model hierarchically to determine the incremental predictive power of each variable. The time variable was entered first as a fixed effect to determine the linear trend of crime across 2011 and 2015 (pre and post trail). Time was also entered as a random effect to

determine the random error term. After recording results for Year, the Disadvantage Index was added to the model as both a fixed and random effect. Following Raudenbush and Bryk's (2002) strategy of mixed model construction, which professes to keep models as simple as possible, we chose to use only the Disadvantage Index as a control variable to minimize the risk of multicollinearity while still accounting for a key SES-based crime correlate (Raudenbush & Bryk, 2002). Once we had recorded the impact of disadvantage, our Level 2 predictor, Proximity, was added to the model as a fixed effect. Both Year and Proximity were grand mean centered to remove between group variance and provides a "pure" estimate of the within group slope (Tabachnik & Fidell, 2007). Following Raudenbush and Bryk's (2002) model explanation, the Level 1 equation was:

Y_{ij} (Δ Violent, Property, Disorderly) = $\beta_{0j} + \beta_{1j} X_{1j}$(Year) + $\beta_{2j} X_{2j}$ (Disadvantage Index) + ε

- Y_{ij} is the change in violent, disorderly, and property crime
- β_0 refers to intercept of crime at Level 2 Proximity
- β_{1j} regression coefficient for the explanatory Level 1 variable Year
- β_{2j} regression coefficient for the explanatory Level 1 variable Disadvantage Index
- X_{1j} = Level 1 predictor variable Year
- $X_{2j=}$ Level 1 predictor variable Disadvantage Index
- ε refers to the random errors at Level 1

The Level 2 model used the Proximity variable to predict the Level 1 intercept, and the Level 1 slopes were not allowed to vary. The Level 2 equation was:

$\beta_{0j} = y_{00} + y_{01} Z_j$ (Proximity) + u_{0j} (A)

$\beta_{1j} = y_{05}$ (Year) + u_{1j} (B)

$\beta_{2j} = y_{10}$ (Disadvantage Index) + u_{2j} (C)

Equation A predicts the average property crime (the intercept β_{0j}) using proximity (Z) at the CBG level (Level 2). In equation A, y_{00} is the overall intercept, while y_{01} is the coefficient between property crime and proximity. Both equations B and C predict the Level 1 coefficients, or slope, between property crime and the Level 1 predictors (Year and Disadvantage Index). The u-terms in the equations represent (random) residual errors at Level 2.

In addition to testing each of the variables individually, we also tested the cross-level interaction between the Year (Level 1) and Proximity of the CBGs to the trail (Level 2). The inclusion of the interaction allowed us to test the effect of year (i.e., trail construction) on each type of crime, moderated by proximity (Aguinis, Gottfredson, & Culpepper, 2013). If moderation were occurring, we would expect to find differences in the slope across time (pre-and post-trail), or a non-parallel relationship between those areas with high, average, and low crime. This interaction was tested when controlling for the Disadvantage Index.

Results

The HLM analysis revealed multiple significant predictors of property crime (Table 2). When the Level 1 variable Year was added (Model 2), property crime declined significantly across years, reducing the residual variance by 50.9% from the null model (Model 1). This finding is consistent with prior research in Chicago (Friedson & Sharkey, 2015), which has shown that citywide crime has dropped substantially during the past decade. Disadvantage also proved to be a significant predictor (Model 3), accounting for

1.7% of the overall variance with results showing γ = -1.43, *SE*=.478, p<.05. This model reaffirms what was found in Study 1: The 606 seems to have a stronger positive influence on property crime rates in low SES neighborhoods (relative to comparable low SES neighborhoods in other parts of Chicago), than it does on property crime rates in more affluent areas. In Model 4, the Level 2 variable Proximity was entered as a fixed effect. Results show that proximity to The 606 is a significant predictor of property crime γ =.003, SE=.0014, p<.05, reducing the overall intercept variance by 4.5%. For every additional foot one moves out from the trail, property crime increases by .002. Or, simply stated, as proximity to The 606 increases, property crime rates decrease. Finally, in Model 5, we examined the cross-level interaction between Proximity and Year while controlling for Disadvantage. The cross-level interaction tested the change in the slope of distance moving from the 2011 to 2015 or the change in the slope of Year as distance increases 1 unit (Aguinis, Gottfredson, & Culpepper, 2013). Results showed that all predictor variables, including the interaction, were significant, with a 2.7% change in the R^2 and an overall reduction in slope variance of 23.6%. For every 1 unit increase in the moderator (Proximity), the slope for property crime decreases by .03. The cross-level interaction indicated that while overall property crime is decreasing over the four year period, the rate of the decline is lower at greater distances from the trail (i.e., the effect is moderated by trail proximity).

Table 2: *Multi-level HLM Regression Models Examining Factors Associated with Property Crime Rates in Neighborhoods Near Chicago's 606 Trail*

	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**

Effect	(Null) Estimate (SE)	Estimate (SE)	Estimate (SE)	Estimate (SE)	Estimate (SE)
Intercept	24.464 (1.42)	24.74 (1.52)	24.75 (1.49)	24.67 (1.37)	24.68 (1.41)
Level 1 Year	--	-11.23* (1.32)	-11.21* (1.33)	-11.14* (1.36)	-11.15* (1.33)
Level 1 Disadvantage Index	--	--	-1.43* (.478)	-1.590* (.467)	-1.515* (.473)
Level 2 Proximity	-	-	-	.003* (.0014)	.0027* (.0014)
Interaction L1 Year and Level 2 Proximity	--	-	-	-	-.0031* (.0013)
Change in Model R^{2a}	-	.5089	.017	.045	.027

*$p < .05$
[a] R^2 is the HLM version of the percent reduction in variance.
Note: n=62; *SE*=Standard Error

Using the same multi-level modeling, we also examined the effect of The 606 on violent and disorderly crime. Consistent with violent crime trends outlined in previous literature (Friedson & Sharkey, 2015), violent crime decreased at a significant rate in 606-proximate neighborhoods from 2011 to 2015, γ = -6.81, *SE*=.828, p<.05, reducing the residual variance 44.4%. In addition to time (Year) being a significant predictor of violent crime, the Disadvantage Index was also found to be significant, γ =1.632,

SE=.247, $p<.05$, reducing the overall variance by 4.2%. This finding is also in line with previous research, which has shown violent crime is significantly higher in those areas with lower-SES and higher amounts of concentrated disadvantage (Sampson, 2012). However, for CBGs within 0.5 miles of The 606, significant effects of trail proximity and cross-level interactions involving trail proximity were not evident with respect to violent crime.

Disorderly crime also decreased significantly across years before and after 606 construction, γ = -9.17, *SE* 1.18, $p<.05$, reducing the residual variance 41.3% from the null model. The Disadvantage Index was also significant predictor of disorderly crime, γ =1.136, *SE*=.363, $p<.05$, reducing the overall variance in the model by 3.1%. However, similar to violent crime, significant effects of trail proximity and cross-level interactions involving trail proximity were not evident with respect to disorderly crime. While the presence of The 606 (i.e., Year) is associated with reductions in violent and disorderly crime when compared to similar neighborhoods in Chicago, particularly in low SES neighborhoods, specific trail proximity at a more localized scale does not seem to be significant.

Discussion

While our first study showed that the presence of The 606 was positively correlated with decreases in all types of crime when compared to similarly stratified neighborhoods without the trail's presence (particularly in low SES neighborhoods near the trail), our second analysis sought to examine more specific effects of trail proximity

on crime in CBGs near the trail. Results revealed the most significant relationship with property crime, which was lowest at close proximity to The 606 and gradually rose as proximity increased (Chapter Appendix 2-Figure 5) Although our analysis did not reveal mechanisms driving the observed crime distribution patterns, several potential explanations exist. One possible cause for this phenomenon is that areas immediately surrounding The 606 have commanded the attention of formal surveillance systems, especially in the high disadvantage, 606-proximate neighborhoods that were once plagued by crime (Velez, 2001). Because The 606 is being marketed by Chicago as a safe and friendly environment, increased emphasis has likely been placed on monitoring and removing delinquent activity from areas immediately surrounding the trail (Hinkle & Weisburd, 2008).

In addition to formal surveillance, the decrease in property crime may also be a result of the CPTED concept of territoriality (Sohn, 2016). Territoriality is centered on the premise that individuals within a community will protect their own space and be mindful of outsiders who travel through the area (Anderson, MacDonald, Bluthenthal, & Ashwood, 2012; Minnery & Lim, 2005). Levels of theft and other crimes in communities are reduced when local residents feel a sense of ownership and guardianship (Wortley & McFarlane, 2011). It is possible that reduction of property crime along The 606 is a reflection of individuals in the neighborhoods taking ownership of both the areas around the trail and the trail itself. For example, the volunteer organization Friends of the Bloomingdale Trail recently created a map that aggregates news stories occurring with a two block radius of the trail (Hauser, 2015). Through actions such as this, community

residents are empowered with the ability to rapidly share communication about deviant activity along the trail and assist one another in informal surveillance. Vigilance may decrease at distances farther from the trail.

Natural surveillance, another hallmark of CPTED, may also play an important role in the prevention of property crime in areas adjacent to the trail (Sohn, 2016). Research has shown that natural surveillance and subsequent crime reduction is enhanced through increased lighting (Farrington & Welsh, 2002; Painter, 1996; Pease, 1999), street designs that are difficult to navigate (Cozens & Love, 2009), and designs with numerous escape points (Fisher & Nasar, 1992; Luymes & Tamminga, 1995). All of these built environment factors inhibit criminal movement and refuge (Marzbali et al., 2012; Sohn, 2016). Because each of these design components is present on The 606, criminals may be discouraged to engage in deviant actions along the trail and within its immediate surroundings. However, one area where this does not seem to hold true is Damen Avenue on the east end of the trail. Here property crime spikes and extends outward to a distance of a half mile (see dark red coloring on Figure 3). The reason for the deviation in crime patterns at this location may stem from high levels of commercialization at the Damen-Milwaukee Ave. intersection in Wicker Park. As discussed in Study 1, highly commercialized areas can often serve as crime generators due to the vast number of targets available for potential criminals (Brantingham & Brantingham, 1995).

Although trail proximity appeared to impact property crime rates, effects on violent and disorderly crime were less pronounced. Both types of crime declined

significantly in 606-proximate CBGs after trail construction, but neither was influenced by distance from the trail. Other correlates remained important, however. For example, social disadvantage proved to be a significant predictor for all three types of crime, a result found in prior literature on crime in urban environments (Carvalho & Lewis, 2003; Ludwig, Duncan, & Hirschfield, 2001; Morenoff, Sampson, & Raudenbush, 2001). In Chicago, Sampson (2012) found that concentrated disadvantage is a perpetuating cycle that weakens infrastructure by undermining positive social processes needed to build strong community. The systematic breakdown in social process eventually leads to community disorganization and an increase in crime and disorder (Sampson, 2012). Although crime has shown significant decreases in almost all neighborhoods along The 606 over time, overall violent and disorderly crime rates remain higher in the more western neighborhoods characterized by higher disadvantage (City of Chicago, 2016).

Limitations and Future Research

Before considering broader implications of our results, it is prudent to take a closer look at the limitations of our studies. First, The 606's relationship with crime may have been moderated positively or negatively by exceptionally high traffic patterns during the six months we studied in 2015 (June-November), the opening months of the trail. To address this issue, future longitudinal studies could examine normalized trail patterns after the post-construction hype has passed and the trail has become more a fixture in trail-proximate neighborhoods. A longitudinal approach could also help researchers fully understand the trail's impact on the culture of surrounding neighborhoods, especially related to gentrification. Before the opening of the trail, the

neighborhoods on Chicago's West Side were fairly homogeneous and operated in isolation of one another. However, the infusion of The 606 has brought an inevitable blending of the neighborhoods, particularly in Humboldt Park where White individuals are choosing to purchase homes in what once was a primarily Latino/a community (Gomez-Feliciano et al., 2009; Vivanco, 2016a). Future studies should explore how the blending of the communities resulting from The 606 is impacting the social and cultural identity of residents and how these residential fluctuations may influence social capital.

Future research on urban greenways should seek to extend on the CPTED aspect of connectivity and increased access (an attribute that distinguishes linear trails from parks and other types of green space). Given that our analyses were limited to CBGs within a half mile radius of the trail, future studies should look to extend the measurements to neighborhoods existing outside of this boundary. Specifically future studies should focus on the concept of neighborhood spatial interdependence (Sampson, 2012), where significant changes in one neighborhood create a "ripple effect" that extends outward to other neighboring communities (Sampson, 2012). Our results provide evidence that The 606 may be inadvertently creating such a "ripple effect", lowering crime in those areas immediately adjacent to it, but simultaneously making other communities more permeable and thus potentially more vulnerable to property crime (Marzbali et al., 2012; Sohn, 2016). Geographic criminology research supports this notion, having previously shown robbers to be attracted to areas that are both easily accessible and highly dense, granting them the ability to prospect and target without detection (Bernasco & Block, 2009). By facilitating pedestrian movement and access to a

number of neighborhoods The 606 may allow offenders to remain "hidden" as they choose new targets and permeate areas that were previously isolated. Finally, given the vast disparities in disadvantage and neighborhood composition along The 606, additional investigations could explore the effect of neighborhood stigma and perceptions of disorder on trail use and social interactions in surrounding areas.

Conclusion & Management Implications

Using multiple analytical approaches, our study showed that creation of Chicago's 606, was associated with decreases in violent, property, and disorderly crimes between 2011 and 2015. It appears the crime deterrent effects of 606 construction have been particularly effective in low-SES neighborhoods along the western half of the trail. Our findings also give rise to questions regarding spatial interdependence and mechanisms influencing deviant behavior when moving away from the trail, highlighting a significant inverse relationship between property crime and trail proximity. Although we have integrated theoretical frameworks such as CPTED to generate several explanations for associations between The 606 and crime, future studies are needed to understand mechanisms driving these observed patterns and determining the influence of The 606 on the rapidly changing communities that surround it.

Although our results raise many future questions about mechanisms driving the relationship between The 606 and crime, they also highlight several management implications for areas considering adding a linear park. First, because The 606 is heralded as an innovation in the park and recreational field that provides a template for future

elevated linear parks, officials planning similar projects should carefully consider the costs and benefits with respect to crime and disorder in both trail-proximate communities and those located several blocks from the amenity itself. This is particularity vital in low SES communities that often rely on community cohesion and social capital to combat crime. Next, in order to unify neighborhoods, facilitate resident interactions, and reduce crime, cities should continue to activate trails through programming and events. Thus far, the City of Chicago and Chicago Park District have offered a variety of diverse programs, appealing to individuals of various ages and interest (Trail Mix Event Series, n.d.). Prior research has shown that structured park programs have the ability to increase park use and lower crime (Cohen et al., 2016). Maintaining and adding programming, such as The 606 Moves, a dance workshop facilitated by Chicago Park District in The 606's pocket parks, is therefore an essential part in helping to increase neighborhood interactions and combating potential deviance (Trail Mix Event Series, n.d.).

Finally, while general decline in crime in neighborhoods along The 606 is encouraging, it may be driven in part by gentrification and neighborhood trajectory (Hwang & Sampson, 2014). Gentrification has been shown to significantly reduce violent crime (Papachristos, Smith, Scherer, & Fugiero, 2011). The reason for this reduction is that new resources, such as businesses and new residential buildings, often take the place of previously decaying or abandoned infrastructure that perpetuate disorganization and disorder (Kreager et al. 2011). Beginning with the gentrification of Wicker Park in the 1980's and 1990's (Lloyd, 2002) and the more recent migration of White renters and homeowners into Logan Square (Gomez-Feliciano et al., 2009), the socio-demographic

composition of neighborhoods around The 606 continues to change. As the increasing diversity and decreasing disadvantage scores in our study suggest, the trail seems to be attracting more affluent residents to the area, especially Logan Square and Humboldt Park (Biasco, 2015; Rúa, 2012). Regardless of future trajectory, however, Chicago must work to ensure that The 606 continues to be an inclusive, safe, and welcoming space for all 80,000 residents living within walking distance (Vivanco, 2016b). Finally, as urban trails continue to gain popularity and are integrated into the landscape of cities around the country, both researchers and professionals working in the field must continue to study and monitor these trails in order to gain a better understanding of their long-term impacts on crime and community.

References

Anderson, J. M., MacDonald, J. M., Bluthenthal, R., & Ashwood, J. S. (2012). Reducing crime by shaping the built environment with zoning: An empirical study of Los Angeles. *U.Pa.L.Rev., 161*, 699-755.

Aguinis, H., Gottfredson, R. K., & Culpepper, S. A. (2013). Best-practice recommendations for estimating cross-level interaction effects using multilevel modeling. *Journal of Management, 39,* 1490-1528. doi: 10.1177/0149206313478188

Armitage, R. (2006). Predicting and preventing: Developing a risk assessment mechanism for residential housing. *Crime Prevention and Community Safety: An International Journal, 8*(3), 137-149. doi: 10.1057/palgrave.cpcs.8150024

Armitage, R (2011) The Impact of Connectivity and Through-Movement within Residential Developments on Levels of Crime and Anti-Social Behaviour. Other. University of Huddersfield, Huddersfield. (Unpublished)

Bernasco, W., & Block, R. (2009). Where offenders choose to attack: A discrete choice model of robberies in Chicago. *Criminology, 47*(1), 93-130. doi: 10.1111/j.1745-9125.2009.00140.x

Bernasco, W., & Block, R. (2011). Robberies in Chicago: A block-level analysis of the influence of crime generators, crime attractors, and offender anchor points. *Journal of Research in Crime and Delinquency, 48*(1), 33-57. doi:10.1177/0022427810384135

Biasco, P. (2015). Neighbors Hope $750,000 Logan Square Townhomes Push Gang Problem Away. *DNA Info: Logan Square and Humboldt Park*. Retrieved from https://www.dnainfo.com/chicago/20150929/logan-square/50-townhomes-slated-replace-factory-near-blue-lines-western-stop

Brantingham, P., & Brantingham, P. (1995). Criminality of place. *European Journal on Criminal Policy and Research, 3*(3), 5-26. doi: 10.1007/BF02242925

Blau, J. R., & Blau, P. M. (1982). The cost of inequality: Metropolitan structure and violent crime. *American Sociological Review, 47*(1) , 114-129.

Bogar, S., & Beyer, K. M. (2015). Green space, violence, and crime: A systematic review. *Trauma, Violence & Abuse, 17*(2), 160-171. doi:10.1177/1524838015576412

Branas, C. C., Cheney, R. A., MacDonald, J. M., Tam, V. W., Jackson, T. D., & Ten Have, T. R. (2011). A difference-in-differences analysis of health, safety, and greening vacant urban space. *American Journal of Epidemiology, 174*(11), 1296-1306. doi: 10.1093/aje/kwr273

Brantingham, P., & Brantingham, P. (1995). Criminality of place. *European Journal on Criminal Policy and Research, 3*(3), 5-26. doi: 10.1007/BF02242925

Brantingham, P. J., & Brantingham, P. L. (1993). Environment, routine and situation: Toward a pattern theory of crime. In R. Clark and M. Felson (Eds.), *Routine Activity and Rational Choice. Advances in Criminological Theory,* (259-294). New Brunswick, NJ: Transaction Publishers

Browning, C. R., & Cagney, K. A. (2002). Neighborhood structural disadvantage, collective efficacy, and self-rated physical health in an urban setting. *Journal of Health and Social Behavior,43*(4), 383-399.

Brunson, L., Kuo, F. E., & Sullivan, W. C. (2001). Resident appropriation of defensible space in public housing implications for safety and community. *Environment and Behavior, 33*(5), 626-652. doi: 10.1177/00139160121973160

Bursik, R. J. (1988). Social disorganization and theories of crime and delinquency: Problems and prospects. *Criminology, 26*(4), 519-552. doi: 10.1111/j.1745-9125.1988.tb00854.x.

Caldwell, L., & Smith, E. (2007). Leisure as a context for youth development and delinquency prevention. *Pathways and Crime Prevention,* (271-296). New York, NY: Routledge Publishing

Carvalho, I., & Lewis, D. A. (2003). Beyond community: Reactions to crime and disorder among inner-city residents. *Criminology, 41*(3), 779-812. doi: 10.1111/j.1745-9125.2003.tb01004.x.

Christens, B., & Speer, P. W. (2005). Predicting violent crime using urban and suburban densities. *Behavior and Social Issues*, 14(2), 113-127.

City of Chicago (2016). *Crimes-2001 to present*. Chicago, IL: US Retrieved from https://data.cityofchicago.org/Public-Safety/Crimes-2001-to-present/ijzp-q8t2

Cohen, D. A., Han, B., Derose, K. P., Williamson, S., Marsh, T., Raaen, L., & McKenzie, T. L. (2016). The paradox of parks in low-income areas: Park use and perceived

threats. *Environment and Behavior, 48*(1), 230-245. doi: 10.1177/0013916515614366.

Cohen, D. A., Inagami, S., & Finch, B. (2008). The built environment and collective efficacy. *Health & Place, 14*(2), 198-208. doi:10.1016/j.healthplace.2007.06.001.

Collier, P. (2002). Social capital and poverty: a microeconomic perspective. In C. Grootaert and. T. Bastelaer (Edss), *The role of social capital in development: An empirical assessment*, (19-41). Cambridge, UK: Cambridge University Press

Cozens, P., Hillier, D., & Prescott, G. (2001). Crime and the design of residential property-exploring the theoretical background-Part 1. *Property management*, *19*(2), 136-164. doi: 10.1108/02637470110388235.

Cozens, P., & Love, T. (2009). Manipulating permeability as a process for controlling crime: Balancing security and sustainability in local contexts. *Built Environment,35*(3) , 346-365. doi: 10.2148/benv.35.3.346.

Cozens, P. M., Saville, G., & Hillier, D. (2005). Crime prevention through environmental design (CPTED): a review and modern bibliography. *Property management*, *23*(5), 328-356. doi: 10.1108/02637470510631483

Donovan, G. H., & Prestemon, J. P. (2012). The effect of trees on crime in Portland, Oregon. *Environment and Behavior, 44*(1), 3-30. doi: 10.1177/0013916510383238.

Drawve, G., Thomas, S. A., & Walker, J. T. (2016). Bringing the physical environment back into neighborhood research: The utility of RTM for developing an aggregate neighborhood risk of crime measure. *Journal of Criminal Justice, 44*, 21-29. doi: 10.1016/j.jcrimjus.2015.12.002.

Dudek, M. (2015). The paved-over, unofficial history of The 606 trail. *The Chicago Sun-Times*. Retrieved from http://chicago.suntimes.com/news/the-paved-over-unofficial-history-of-the-606-trail/

Esri. (2015). *Methodology Statement: 2015/2020 Esri US Demographic Updates*. (White Paper). Esri, Redlands, CA.

Farrington, D. P., & Welsh, B. C. (2002). *Effects of improved street lighting on crime: A systematic review*. London, England: Home Office

Federal Bureau of Investigation (2016a). *Property Crime*. Retrieved from https://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/property-crime

Federal Bureau of Investigation (2016b). *Violent Crime*. Retrieved from https://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/violent-crime

Fisher, B. S., & Nasar, J. L. (1992). Fear of crime in relation to three exterior site features prospect, refuge, and escape. *Environment and Behavior, 24*(1), 35-65. doi: 10.1177/0013916592241002.

Friedson, M., & Sharkey, P. (2015). Violence and neighborhood disadvantage after the crime decline. *The Annals of the American Academy of Political and Social Science, 660*(1), 341-358. doi: 10.1177/0002716215579825.

Garvin, E. C., Cannuscio, C. C., & Branas, C. C. (2013). Greening vacant lots to reduce violent crime: A randomised controlled trial. *Injury Prevention : Journal of the International Society for Child and Adolescent Injury Prevention, 19*(3), 198-203. doi:10.1136/injuryprev-2012-040439.

Gehl, J. (2013). *Cities for people.* Washington, D.C.: Island Press.

Gobster, P. H. (1998). Urban parks as green walls or green magnets? Interracial relations in neighborhood boundary parks. *Landscape and Urban Planning, 41*(1), 43-55. doi: 10.1016/S0169-2046(98)00045-0.

Gobster, P. H., & Westphal, L. M. (2004). The human dimensions of urban greenways: Planning for recreation and related experiences. *Landscape and Urban Planning, 68*(2), 147-165. doi: 10.1016/S0169-2046(03)00162-2.

Godbey, G. (2009). Outdoor recreation, health, and wellness: Understanding and enhancing the relationship. Social Science Research Network. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1408694

Gomez-Feliciano, L., McCreary, L. L., Sadowsky, R., Peterson, S., Hernandez, A., McElmurry, B. J., & Park, C. G. (2009). Active living Logan Square: Joining together to create opportunities for physical activity. *American Journal of Preventive Medicine, 37*(6), 361-367. doi:10.1016/j.amepre.2009.09.003.

Groenewegen, P. P., Berg, A. E., Vries, S., & Verheij, R. A. (2006). Vitamin G: Effects of green space on health, well-being, and social safety. *BMC Public Health, 6(1)*, 1-9. doi:1471-2458-6-149 doi: 10.1186/1471-2458-6-149.

Groff, E., & McCord, E. S. (2012). The role of neighborhood parks as crime generators. *Security Journal, 25*(1), 1-24. doi: 10.1057/sj.2011.1.

Hauser, A. (2015). The Bloomingdale Trail Is Open-Now What? Security, Other Upgrades Planned. In *DNA Info: The 606*. Retrieved from https://www.dnainfo.com/chicago/20150609/bucktown/bloomingdale-trail-is-open---now-what-security-trash-upgrades-planned

Haynie, D. L., & Osgood, D. W. (2005). Reconsidering peers and delinquency: How do peers matter?. *Social Forces*, *84*(2), 1109-1130. doi: 10.1353/sof.2006.0018

Hillier, B., & Sahbaz, O. (2009). An evidence based approach to crime and urban design, or, can we have vitality, sustainability and security all at once. In R.Cooper, G.Evans, C.Boyko, C.(Eds.)*, Designing Sustainable Cities: Decision-Making Tools and Resources for Design, Wiley Blackwell,(*163-186). Oxford, England: John Wiley & Sons.

Hinkle, J. C., & Weisburd, D. (2008). The irony of broken windows policing: A micro-place study of the relationship between disorder, focused police crackdowns and fear of crime. *Journal of Criminal Justice*, *36*(6), 503-512. doi: 10.1016/j.jcrimjus.2008.09.010

Hofmann, D. A. (1997). An overview of the logic and rationale of hierarchical linear models. *Journal of management*, *23*(6), 723-744. doi: 10.1016/S0149-2063(97)90026-X.

Hox, J. J. (2010). Analyzing longitudinal data. In *Multilevel Analysis: Techniques and applications* (2nd Ed., pp. 79-111). New York, NY: Routledge.

Hughey, S. M., Walsemann, K. M., Child, S., Powers, A., Reed, J. A., & Kaczynski, A. T. (2016). Using an environmental justice approach to examine the relationships between park availability and quality indicators, neighborhood disadvantage, and racial/ethnic composition. *Landscape and Urban Planning, 148*, 159-169. doi: 10.1016/j.landurbplan.2015.12.016.

Hwang, J., & Sampson, R. J. (2014). Divergent pathways of gentrification racial inequality and the social order of renewal in Chicago neighborhoods.*American Sociological Review*, *79*(4), 726-751.doi: 10.1177/0003122414535774.

Jacobs, J. (1961). *The death and life of great American cities*. New York, NY: Vintage.

Jean, P. K. S. (2008). *Pockets of crime: Broken windows, collective efficacy, and the criminal point of view.* Chicago, IL: University of Chicago Press.

Jennings, V., Larson, L., & Yun, J. (2016). Advancing sustainability through urban green space: cultural ecosystem services, equity, and social determinants of health. *International Journal of Environmental Research and Public Health*, *13*(2), 196. doi: 10.3390/ijerph13020196.

Kaźmierczak, A. (2013). The contribution of local parks to neighbourhood social ties. *Landscape and Urban Planning*, *109*(1), 31-44. doi:10.1016/j.landurbplan.2012.05.007

Kirby, J. B., & Kaneda, T. (2005). Neighborhood socioeconomic disadvantage and access to health care. *Journal of Health and Social Behavior, 46*(1), 15-31. doi: 10.1177/002214650504600103.

Kreager, D. A., Lyons, C. J., & Hays, Z. R. (2011). Urban revitalization and Seattle crime, 1982–2000. *Social problems*, *58*(4), 615-639. doi:10.1525/sp.2011.58.4.615

Kuo, F. E., & Sullivan, W. C. (2001a). Aggression and violence in the inner city effects of environment via mental fatigue. *Environment and Behavior, 33*(4), 543-571. doi: 10.1177/00139160121973124.

Kuo, F. E., & Sullivan, W. C. (2001b). Environment and crime in the inner city does vegetation reduce crime? *Environment and Behavior, 33*(3), 343-367. doi: 10.1177/0013916501333002.

Lane, J., & Meeker, J. W. (2003). Women's and men's fear of gang crimes: Sexual and nonsexual assault as perceptually contemporaneous offenses. *Justice Quarterly, 20*(2), 337-371. doi: 10.1080/07418820300095551.

Larson, L. R., Keith, S. J., Fernandez, M., Hallo, J. C., Shafer, S. C., & Jennings, V. (2016). Ecosystem services and urban greenways: What's the public's perspective? *Ecosystem Services, 22*: 111-116. doi: /10.1016/j.ecoser.2016.10.004

Larson, L. R., Jennings, V., & Cloutier, S. A. (2016). Public parks and wellbeing in urban areas of the United States. *PloS One, 11*(4), 1-19. doi: 10.1371/journal.pone.0153211.

Lee, M. R. (2000). Concentrated poverty, race, and homicide. *The Sociological Quarterly, 41*(2), 189-206. doi: 10.1111/j.1533-8525.2000.tb00091.x.

Lindsey, G. (2003). Sustainability and urban greenways: Indicators in Indianapolis. *Journal of the American Planning Association, 69*(2), 165-180. doi: 10.1080/01944360308976304

Lloyd, R. (2002). Neo–Bohemia: art and neighborhood redevelopment in Chicago. *Journal of Urban Affairs*, *24*(5), 517-532. doi: 10.1111/1467-9906.00141

Lochner, L. (2007). Education and crime. *International Encyclopedia of Education,* 3, 1-14.

Lochner, L., & Moretti, E. (2001). *The effect of education on crime: Evidence from prison inmates, arrests, and self-reports* (No. w8605). National Bureau of Economic Research. Retrieved from http://files.eric.ed.gov/fulltext/ED463346.pdf

Ludwig, J., Duncan, G. J., & Hirschfield, P. (2001). Urban poverty and juvenile crime: Evidence from a randomized housing-mobility experiment. *Quarterly Journal of Economics, 116*(2), 655-680.

Luymes, D. T., & Tamminga, K. (1995). Integrating public safety and use into planning urban greenways. *Landscape and Urban Planning, 33*(1), 391-400. doi: 10.1016/0169-2046(94)02030-J.

Maas, J., Verheij, R. A., Groenewegen, P. P., de Vries, S., & Spreeuwenberg, P. (2006). Green space, urbanity, and health: How strong is the relation? *Journal of Epidemiology and Community Health, 60*(7), 587-592. doi: 60/7/587.

Maimon, D., & Browning, C. R. (2010). Unstructured socializing, collective efficacy, and violent behavior among urban youth. *Criminology*, *48*(2), 443-474.doi: 10.1111/j.1745-9125.2010.00192.x

Markowitz, F. E., Bellair, P. E., Liska, A. E., & Liu, J. (2001). Extending social disorganization theory: Modeling the relationships between cohesion, disorder, and fear. *Criminology, 39(2)*, 293. doi: 10.1111/j.1745-9125.2001.tb00924.x.

Marzbali, M. H., Abdullah, A., Razak, N. A., & Tilaki, M. J. M. (2012). The influence of crime prevention through environmental design on victimisation and fear of crime. *Journal of Environmental Psychology, 32*(2), 79-88. doi: 10.1016/j.jenvp.2011.12.005.

Minnery, J. R., & Lim, B. (2005). Measuring crime prevention through environmental design. *Journal of Architectural and Planning Research,22*(4), 330-341.

Morenoff, J. D., Sampson, R. J., & Raudenbush, S. W. (2001). Neighborhood inequality, collective efficacy, and the spatial dynamics of urban violence. *Criminology*, *39*(3), 517-558. doi:10.1111/j.1745-9125.2001.tb00932.x.

Mortice, Z. (2015). The express lane: Chicago's elevated rail park, The 606, was conceived and funded as transit infrastucture. *Landscape Architecture Magazine, 105*(4), 80-82.

Newman, O. (1972). *Defensible space.* New York, NY: Macmillan Publishing.

Nicholls, S. (2001). Measuring the accessibility and equity of public parks: A case study using GIS. *Managing Leisure, 6*(4), 201-219. doi: 10.1080/13606710110084651.

Northridge, M. E., Sclar, E. D., & Biswas, M. P. (2003). Sorting out the connections between the built environment and health: A conceptual framework for navigating pathways and planning healthy cities. *Journal of Urban Health, 80*(4), 556-568. doi: 10.1093/jurban/jtg064.

Osgood, D. W., & Anderson, A. L. (2004). Unstructured socializing and rates of delinquency. *Criminology*, *42*(3), 519-550. doi: 10.1111/j.1745-9125.2004.tb00528.x

Painter, K. (1996). The influence of street lighting improvements on crime, fear and pedestrian street use, after dark. *Landscape and Urban Planning, 35*(2), 193-201. doi:10.1016/0169-2046(96)00311-8.

Papachristos, A. V., Smith, C. M., Scherer, M. L., & Fugiero, M. A. (2011). More coffee, less crime? The relationship between gentrification and neighborhood crime rates in Chicago, 1991 to 2005. *City & Community*,*10*(3), 215-240. doi: 10.1111/j.1540-6040.2011.01371.x

Pease, K. (1999). A review of street lighting evaluations: Crime reduction effects. In: K. Painter and N. Tiller (Eds.), *Surveillance of Public Space: CCTV, Street Lighting and Crime Prevention, Crime Prevention Studies*, 10, (47-76). Monsey, NY: Criminal Justice Press/Willow Tree Press

Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods.* Thousand Oaks, CA: Sage Publishing.

Rosenfeld, R., Baumer, E. P., & Messner, S. F. (2001). Social capital and homicide. *Social Forces*, *80*(1), 283-310. doi: 10.1353/sof.2001.0086

Ross, J. I. (2013). *Encyclopedia of street crime in America*. Thousand Oaks, CA: Sage Publications

Rúa, M. M. (2012). *A grounded identidad: making new lives in Chicago's Puerto Rican neighborhoods*. New York, NY:Oxford University Press.

Sampson, R. J. (2012). *Great American City: Chicago and the enduring neighborhood effect.* Chicago, IL*:* University of Chicago Press.

Sampson, R. J., & Raudenbush, S. W. (1999). Systematic social observation of public spaces: A new look at disorder in urban neighborhoods 1. *American Journal of Sociology, 105*(3), 603-651. doi: 10.1086/210356.

Sampson, R. J., & Raudenbush, S. W. (2004). Seeing disorder: Neighborhood stigma and the social construction of "broken windows". *Social Psychology Quarterly, 67*(4), 319-342. doi: 10.1177/019027250406700401.

Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science, 277*(5328), 918-924. doi: 0.1126/science.277.5328.918

Sampson, R. J., & Sharkey, P. (2008). Neighborhood selection and the social reproduction of concentrated racial inequality. *Demography, 45*(1), 1-29. doi: 10.1353/dem.2008.0012.

Sandy, R., Tchernis, R., Wilson, J., Liu, G., & Zhou, X. (2013). Effects of the built environment on childhood obesity: The case of urban recreational trails and crime. *Economics & Human Biology, 11*(1), 18-29. doi: 10.1016/j.ehb.2012.02.005.

Schroeder, H. W., & Anderson, L. (1984). Perception of personal safety in urban recreation sites. *Journal of Leisure Research, 16*(2), 178-194.

Schweitzer, J. H., Kim, J. W., & Mackin, J. R. (1999). The impact of the built environment on crime and fear of crime in urban neighborhoods. *Journal of Urban Technology, 6*(3), 59-73. doi: 10.1080/10630739983588.

Shafer, C. S., Lee, B. K., & Turner, S. (2000). A tale of three greenway trails: User perceptions related to quality of life. *Landscape and Urban Planning, 49*(3), 163-178. doi: 1016/S0169-2046(00)00057-8.

Shaw, C. R., & McKay, H. D. (1942). Juvenile delinquency and urban areas. Chicago, Illinois.

Shinew, K. J., Stodolska, M., Roman, C. G., & Yahner, J. (2013). Crime, physical activity and outdoor recreation among Latino adolescents in Chicago. *Preventive Medicine, 57*(5), 541-544. doi: 10.1016/j.ypmed.2013.07.008.

Simpson, E. H. (1949). Measurement of diversity. *Nature,163,*688

Sinah, A. (2014). Slow landscapes of elevated linear parks: Bloomingdale Trail in Chicago. *Studies in the History of Gardens & Designed Landscapes*, *34*(2), 113-122. doi: 10.1080/14601176.2013.830428.

Snelgrove, A. G., Michael, J. H., Waliczek, T. M., & Zajicek, J. M. (2004). Urban greening and criminal behavior: A geographic information system perspective. *HortTechnology*, *14*(1), 48-51.

Sohn, D. (2016). Residential crimes and neighbourhood built environment: Assessing the effectiveness of crime prevention through environmental design (CPTED). *Cities, 52*, 86-93. doi: 10.1016/j.cities.2015.11.023.

Solecki, W. D., & Welch, J. M. (1995). Urban parks: Green spaces or green walls? *Landscape and Urban Planning, 32*(2), 93-106. doi: 10.1016/0169-2046(94)00193-7.

Sreetheran, M., & van den Bosch, C.C.K. (2014). A socio-ecological exploration of fear of crime in urban green spaces–A systematic review. *Urban Forestry & Urban Greening, 13*(1), 1-18. doi: 10.1016/j.ufug.2013.11.006.

Stodolska, M., Shinew, K. J., Acevedo, J. C., & Izenstark, D. (2011). Perceptions of urban parks as havens and contested terrains by Mexican-Americans in Chicago neighborhoods. *Leisure Sciences, 33*(2), 103-126. doi:10.1080/01490400.2011.550220.

Swanwick, C., Dunnett, N., & Woolley, H. (2003). Nature, role and value of green space in towns and cities: An overview. *Built Environment, 29*(2), 94-106. doi: 10.2148/benv.29.2.94.54467

Tabachnik, B. G., & Fidell, L. S. (2007). Multilevel Linear Modeling. In *Using Multivariate Statistics* (5th Ed., pp. 781-857). Boston, MA: Pearson/Allyn & Bacon.

Taylor, R. B. (2001). *Breaking away from broken windows: Baltimore neighborhoods and the nationwide fight against crime, grime, fear, and declin*e. Boulder, CO: Westview Press.

The Story. (n.d.). In The 606. Retrieved from http://www.the606.org/about/the-story/

Trail Mix Event Series, (n.d.) In The 606. Retrieved from http://www.the606.org/explore/trailmix/

Troy, A., Grove, J. M., & O'Neil-Dunne, J. (2012). The relationship between tree canopy and crime rates across an urban–rural gradient in the greater Baltimore region. *Landscape and Urban Planning*, *106*(3), 262-270. doi: 10.1016/j.landurbplan.2012.03.010.

Trust For Public Land (2016). Why a ten-minute walk? Retrieved from https://www.tpl.org/why-ten-minute-walk

Turney, K., & Harknett, K. (2009). Neighborhood disadvantage, residential stability, and perceptions of instrumental support among new mothers. *Journal of Family Issues*,*31*(4), 499-524. doi: 10.1177/0192513X09347992.

U.S. Census Bureau (2010). 2010 Census Interactive Population Map. Washington, DC: US. Retrieved from http://www.census.gov/2010census/popmap/

U.S. Census Bureau (2015). 2010 American Community Survey. American Fact Finder. Washington, DC: U.S. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml#

Velez, M. B. (2001). The role of public social control in urban neighborhoods: A multilevel analysis of victimization risk. *Criminology*, *39*(4), 837-864. doi: 10.1111/j.1745-9125.2001.tb00942.x.

Vivanco, L. (2016a). Marchers take to The 606 trail to protest gentrification. *The Chicago Tribune*. Retrieved from http://www.chicagotribune.com/news/local/breaking/ct-606-trail-march-gentrification-met-0517-story.html

Vivanco, L. (2016b). The 606 trail, a study in contrast, celebrates its first birthday. *The Chicago Tribune.* Retrieved from http://www.chicagotribune.com/news/ct-606-trail-anniversary-met-0531-20160602-story.html

Warner, B. D. (2014). Neighborhood factors related to the likelihood of successful informal social control efforts. *Journal of Criminal Justice*, *42*(5), 421-430. doi:10.1016/j.jcrimjus.2014.07.001.

Wilson, J. Q., & Kelling, G. L. (1982). Broken windows. *Atlantic Monthly*, *249*(3), 29-38.

Wolfe, M. K., & Mennis, J. (2012). Does vegetation encourage or suppress urban crime? evidence from Philadelphia, PA. *Landscape and Urban Planning*, *108*(2), 112-122. doi: 10.1016/j.landurbplan.2012.08.006.

Wortley, R., & McFarlane, M. (2011). The role of territoriality in crime prevention: A field experiment. *Security Journa*l, *24*(2), 149-156. doi: 10.1057/sj.2009.22

Zembroski, D. (2011). Sociological theories of crime and delinquency. *Journal of Human Behavior in the Social Environment*, *21*(3), 240-254. doi: 10.1111/j.1745-9125.1988.tb00854.x.

Chapter II: Appendix A- (Matched Controlled Sample Map)

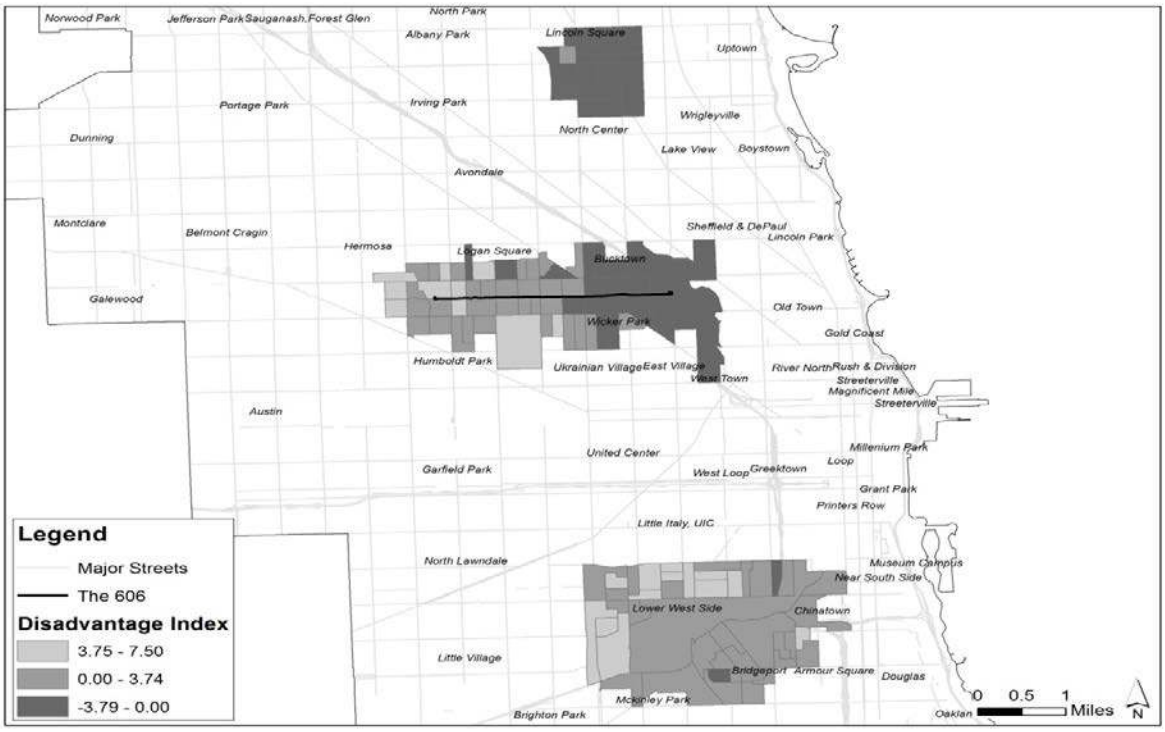


Figure 4: *High and low disadvantage neighborhoods used in matched control study examining effect of the 606 on crime rates in Chicago*

Chapter II: Appendix B- (Property Crime Map)

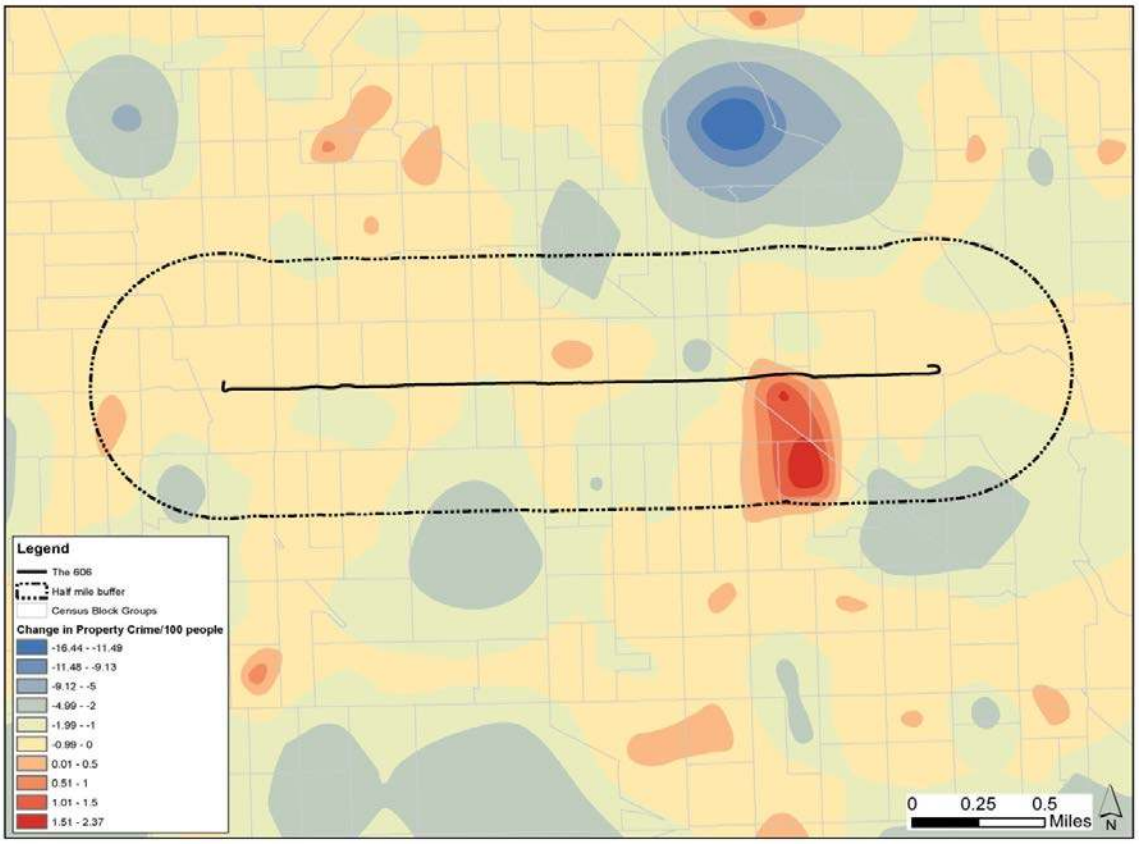


Figure 5*: Interpolated change in property crime from 2011 to 2015 in a half mile radius of The 606*

CHAPTER III: ARMS TOGETHER, HEARTS APART: AN EXPLORATION OF INTIMATE SEGREGATION ON CHICAGO'S 606

Introduction

In the book, *The City*, famed sociologist Robert Park and his colleagues branded Chicago as a "mosaic of little worlds which touch but do not interpenetrate" (p. 40). Park, McKenzie, and Burgess (1967) recognized that while Chicago was (and remains) a diverse metropolis, it was highly segregated, fragmented into homogenous neighborhoods that shared spatial proximity, but lacked similarities in either the social or economic realms. While a prosperous urban lifestyle may be a reality for those of affluence and power, those living in minority neighborhoods have been subjected to a different reality. For these residents, the urban lifestyle is much more bleak, as they are often forced to survive in communities with fewer economic resources, substandard educational institutions, higher crime, and decaying infrastructure (Besbris, Faber, Rich, & Sharkey, 2015; Warren, Stewart, Tomaskovic-Devey, & Gertz, 2012). Here, because White residents sit atop the power hierarchy in the city of Chicago, they assume systematic control of neighborhood viability and resource distribution (Sampson, 2009; Sharkey 2013). This systematic control extends to the park and recreation arena (Mowatt, 2009), where communities of color and residents are afforded little say in the integration of green infrastructure, despite the potential community disruption these structures may possess.

With large amounts of urban space consumed with residential developments, urban planners and designers have begun to convert abandon railways and/or old

riverbeds into contemporary urban greenways, injecting new green into once grey landscapes (Harnik, 2012). Shafer, Lee, and Turner (2000) broadly defined urban greenways as "multiple objective, open space corridors that perform natural functions while offering desirable aesthetic qualities to humans as they recreate or commute along trails" (p. 164). Research on urban greenways has shown that these amenities can benefit communities by providing valuable ecosystem services (Larson et al., 2016), increasing overall physical well-being (Cohen et al., 2007), social interactions (Coutts & Miles, 2011), commercial and residential activity (Littke, Locke, & Haas, 2015), and decreasing crime (Harris, Larson, & Ogletree, 2017). However, for communities of color, which usually have little say in the greenway's design or development (González, 2017), the effects appear to be paradoxical in nature with conflicts arising over equitable opportunities in the space and community ownership (Wolch, Byrne, & Newell, 2014). Urban greenway integration may be particularly pernicious in Latino/a communities, where culture and park space are frequently intertwined and relied on for identity and sustainability (Low, Taplin, & Scheld 2009).

In their study of ethnic factors that influence recreational endeavors in parks, Floyd, Gramann, & Saenz (1993) noted that leisure constructs and activities are often ethnically enclosed. For Latino/a communities divergences in values, norms, and socialization practices, as well as the stratification of resources has led to differences in recreation and leisure patterns (Floyd & Gramann, 1993; Floyd & Shinew, 1999). Not aligning with leisure constructs as defined by Whites, these differences can lead to intergroup conflicts in parks or green spaces (Low et al., 2009; Stodolska, Shinew, Floyd,

& Walker, 2013). In fact, research has demonstrated that parks and greenways may serve as exclusionary locations, housing racial discrimination and negative stereotypes, leading to further marginalization (Floyd & Gramann, 1995; Floyd & Shinew, 1999; Sharaievska, Stodolska, Shinew, & Kim, 2010; Shinew, Floyd, & Parry, 2004) and the formation of a "green wall" (Gobster, 1998; Solecki & Welch, 1995). The combination of these factors may also lead both White and Latino/a residents to avoid one another, only associating with those in their own social network. Mumm (2008) described this phenomenon as *intimate segregation*. Mumm (2008) explained that although an area may be diverse statistically, comprised of different races and ethnicities living side-by-side, residents of neighborhoods undergoing changes in composition will oftentimes avoid contact with those not considered part of the collective ingroup. Applying this notion to greenways, if integrated into diverse communities it seems plausible that differences in preferences, as well as discrimination, fear, and exclusionary practices, could result to user segregation. This occurrence would then lead the greenway to reflect the mosaic of stratified communities it traverses.

In addition to the divisive environment created by user preference and discrimination within in the space, the insertion of an urban greenway into a Latino/a enclave may further facilitate intimate segregation by altering the space itself. Here, the placement of an urban greenway into a Latino/a enclave may eventually cause a shift community ownership, as the greenway is used as a mechanism to remake the space to appeal a higher, more affluent White newcomer (Checker, 2011; Dooling, 2009; Mumm, 2016). Recent research on gentrification has shown, when new parks and green space are

integrated into communities of color they can strip the community of the culture that has historically defined it (González, 2017; Low et al., 2009) and displace residents through an escalation in housing costs and property taxes (Checker, 2011; Eckerd, 2011; Gould & Lewis, 2016; Wolch et al., 2014). Known as green gentrification (Checker, 2011; Gould & Lewis, 2016) or ecological gentrification (Dooling, 2009), this process leads to the entrance and alteration of residential structures through developers looking to capitalize economically, shifts in the commercial infrastructure, and the disintegration of social networks residents of color depend on for long-term sustainability (Gould & Lewis, 2016; Wolch et al., 2014). Although environmental justice issues in relation to environmental gentrification have been well documented in recent years (Checker, 2011; Gould and Lewis, 2016; Low, 2013; Pearsall & Anguelovksi, 2016), because of their relative newness to the urban landscape the relationship between environmental gentrification and urban greenways has yet to be fully explored (Rigolon & Németh, 2018). .

The research explored here examines the relationship between the newly constructed Bloomingdale Trail (commonly referred to as The 606), an urban greenway located on Chicago's northwest side, and Humboldt Park, a culturally centric Puerto Rican enclave in which the trail traverses (Harris et al., 2017). Specifically, the study investigates how physical and social changes resulting from the trail's integration in Humboldt Park may be resulting in intimate segregation on the trail as Latino/a residents look to maintain "ownership" over trail segments located in their community.

Review of Literature

> Conflict situations in cities lead people to feel threatened. This will particularly apply to recent in-migrates, who may vary culturally from the 'host' population....The perceived threat may materialize in the form of physical violence or remain as a psychological threat. At the same time, and indeed sometimes because of the threat, the ethnic group may have a strong urge to internal cohesion, so that the cultural 'heritage' of the group may be retained (Boal, 1976, p. 45)

Territoriality and Communities of Color

Territoriality is centered on the premise that individuals within a community will seek to control and protect the space in which they occupy and be mindful of outsiders who travel through the area (Anderson, MacDonald, Bluthenthal, & Ashwood, 2012; Minnery & Lim, 2005). In an urban environment where space is a finite resource, territoriality can be used by collective groups to claim space and construct enclaves that act in sovereignty (Chisholm & Smith, 2016; Sack, 1986). Despite outside social and economic hierarchies, historical oppression, or imposed stereotypes and discrimination, territoriality allows a unified collective to establish differential access and boundaries to the community, its residents, and their activities (Sack, 1983; Sack, 1986). Here, not only then does territoriality grant the ability to control and defend space, but also the interactions occurring within the space (Sack, 1986). Through this simultaneous control, the space occupied by the collective in power serves to insulate those who occupy it from outside threats, be it to the physical body or to the collective identity (Keith & Pile, 2013; Moore, 1997).

In minority enclaves the space occupied by residents serves as a critical component to sustainability by equalizing discrepancies that occur in the larger

environment (Betancur & Smith, 2016; González, 2017; Sack, 1986). The sovereign control over the space allows the dominant culture to circulate uninhibited over both the physical and social ecosystem (Betancur & Smith, 2016; Sack, 1986). As Williams and Kofman (1989) pointed out, within its boundaries, territoriality allows a group of people, regardless of status in the larger system to "divide and rule its territory so as to hinder or prevent attempts by subordinate cultures from developing a solid base from which to reproduce their own culture" (p. 5). This is particularly important for Latino/a communities who are often excluded from the host society on the basis of ingrained stereotypes, racialized spaces, sovereign whiteness, and culture (Bauder, 2001; 2002; Betancur & Smith, 2016; Chisholm & Smith, 2016; Ellen, 2000; Gupta & Ferguson, 1997).

Urban stratification has shown to have damning consequences for urban minority residents, including Latino/as (Bauder, 2001, 2002; Massey & Denton, 1993; Sampson, 2012). Research has shown, however, in the absence of economic capital, Latino/as often use territoriality to form centralized enclaves based on collective culture (González, 2017; Pérez, 2004; Rinaldo, 2002; Rúa, 2012). While still subjected to fiscal marginalization, these enclaves act an insulator to the outside environment, allowing the collective to form the social ties necessary for sustainability (Betancur & Smith, 2016; González, 2017; Gupta & Ferguson, 1997). Here, territoriality is used to establish Latino/a based institutions built on traditional values and history (González, 2017). Within the neighborhood, family, kin, and ritualized friendships not only take precedence over the macro-environment, but are depended on for survival (González, 2017). For

Latino/a communities, the connection between the space and those who occupy it becomes extremely close as residents come to think of themselves and the space as organically connected (Sack, 1986). Anchored in culture, the enclave's formation allows the identity of the group to be superimposed on the space forming conceptual boundaries that separate it from other locations in the city and providing residents with a haven from otherwise omnipresent racialized spaces (Betancur & Smith, 2016; Gupta & Ferguson, 1997; Hidalgo & Hernandez, 2001; Taylor, Gottfredson, & Brower, 1985).

Parks, Territoriality, and the Latino/a Enclave

Concentrated in ethnic enclaves, Latino/a residents often use park spaces to remove themselves from the dominant narrative and showcase their cultural identity. As Levinson (1994) postulated, park-related activities can represent a mechanism through which "people identify themselves and are identified by others as members of a specific ethnic group" (p. 73). For example, in their study of parks in Mexican-American neighborhoods in Chicago, Stodolska and Shinew (2010) found that parks provided both social and cultural benefits to local residents. On the social side, parks were viewed as important spaces for both community socialization and those in the community who could not afford access to more expensive recreational activities. Culturally, parks were considered as a vital part of sustaining and reproducing Hispanic culture. Results showed that for the Mexican community, parks served as a substitute for Mexican plazas, which were seen as the primary location for social life in the neighborhood. A prior study by Hutchison (1987) reached a similar conclusion, leading Hutchison to posit that parks located in a Hispanic neighborhood represented an "integral part of Hispanic leisure

activity" (p. 219) and to be imbued with cultural meaning. Similarly, studying Latino/a neighborhoods in Chicago, Suarez (1999) found that parks and green space often exist outside the reach of local imperialism, serving as the primary location for residents living in the enclave to come together, socialize, and participate in leisure activities celebrating their culture. Other studies and essays, such as the ones by Rinaldo (2002), Flores-Gonzalez (2001), and Rodríguez-Muñiz (2016) in Humboldt Park, indicated that parks are not just spaces for recreation, but for remembrance, cultural sovereignty, and collective resistance. As Low et al. (2009) explained, because parks in minority neighborhoods are a combination of social constructions and complex histories rather that neutral spaces, they encourage the symbolic expressions necessary for cultural groups to maintain cohesion under oppressed conditions. Here, "parks help sustain the cultural dynamics of urban societies [by] providing numerous resources that cultural groups use for the continuity of their community" (p. 147).

Looking specifically at greenways, trail segments located in spaces occupied by residents of color, like parks, may come to reflect the culture of the community's residents and an important space for within community interactions (Coutts & Miles, 2011). However, unlike parks, because greenways are designed to connect neighborhoods and resident, they often transcend demarcations and naturally invite White newcomers to spaces occupied by residents of color. This can eventually lead to a contentious environment where the ownership of residents becomes challenged (Rigolon & Németh, 2018). As research on the park use and proximity has shown individuals are more likely to use and claim ownership over park spaces located in closest proximity to their

residence (Coutts & Miles, 2011; Gobster, 1995; Wolch et al., 2010). However, because neighborhood revitalization and shifts in neighborhood composition often follow linear park construction (Harnik, 2012; Wolch et al., 2014), the territoriality of minority residents may exist in direct discord with that of neighboring communities and newcomers, thus leading to disputes over ownership as the space becomes more integrated. Although research has shown that diverse racial and social groups are able to coexist in parks and on greenways (Gobster, 2002; Loukaitou-Sideris, 1995; Peters, 2010), to date only one study has specifically examined how urban greenways that traverse communities with diverse ethnic and racial composition influence social cohesion and tension (Coutts & Miles, 2011). Findings from this study found that when equitable proximity is considered, patterns of greenway use in White and minority neighborhoods did not significantly differ. In other words, behavioral patterns were not constrained by neighborhood racial composition. However, because the study was conducted in two small cities (<150,000) (Coutts & Miles, 2011) and not in an area where the greenway under study traversed a culturally centric enclave and threatened green gentrification, its findings may not be applicable when these conditions are present.

Humboldt Park, The 606, and Intimate Segregation

The history of Puerto Ricans in Chicago has been continually shaped by displacement, segregation, and resistance, as they sought to their own way of life in the binary Black/White terrain that has come to define the city's landscape (Pérez, 2004; Rinaldo, 2002; Rúa, 2012). In no place is this more evident than in the northwest neighborhood of Humboldt Park. A testament to their collective struggle, Humboldt Park

is considered the foremost Puerto Rican enclave in Chicago (Wilson & Grammenos, 2005). After being displaced in the 1950's and 1960's from a rapidly gentrifying Lincoln Park, Chicago's Puerto Ricans entered Humboldt Park seeking a place that could be shaped in their own image, a place where they could celebrate their culture, and a place they could make into a home (Pérez, 2004; Rúa, 2012). While the enclave has gone through numerous iterations, it has remained an embodiment of Puerto Rican Chicago. However, the integration of Chicago's newest recreational amenity, The 606 now threatens to change both the physical and social environments of Humboldt Park.

Extending 2.7 miles, the elevated urban greenway connects the Puerto Rican enclave to the eastern neighborhoods of Logan Square, Wicker Park, and Bucktown. Constructed on the foundation of an abandoned railway, The 606 opened in 2015 as one of Mayor Rahm Emanuel's signature projects (The Story, n.d.). Devised as a relief mechanism for heavy traffic on the city's growing west side (Mortice, 2015), the greenway is one of Chicago's few east-west pedestrian corridors and features 12 access points, located between West Humboldt Park on the west and Walsh Park in Bucktown on the east (see Figure 1) (Sinah, 2014). While The 606 itself is fairly uniform in terms of aesthetics, maintenance, and amenities (i.e. benches, vegetation, surveillance cameras, and signage), the neighborhoods in which the trail extends over vary dramatically moving from an the affluent White neighborhood of West Town in the east, to the Puerto Rican enclave of Humboldt Park in the west (Esri, 2016; US Census Bureau, 2015). The trail also traverses the neighborhood of Logan Square, a once predominantly Latino community (Gomez-Feliciano et al., 2009) that has over the past decade become a

destination for White artist and creatives and now features full venues catering to upscale and eclectic consumption (Vivanco, 2016b)..

Park et al. (1967) described discord between diverse communities in terms of intimate boundaries. Here, Whites entering minority spaces internalize social constructions and narratives of the neighborhood in order to maximize their own privilege. Conversely, communities of color respond to perceived threats by deploying a mixture of overt cultural signifiers and latent inhabitance of certain spaces that reflect social constructions on their terms (Park et al., 1984). These conflicts can eventually lead both parties to avoid interactions through a racialized process of self-segregation that Mumm (2008) termed intimate segregation. As studies by Solecki and Welch (1995) and Gobster (1998) have shown, parks located within these divisive environments can serve as boundaries between communities, or "green walls" (Solecki & Welch, 1995). However, unlike the parks in these studies, conditions present on contemporary urban greenways, such as fluidity and connectivity, make intimate segregation and division of recreational interest more difficult. Looking specifically at The 606, where Humboldt Park residents are forced to share the greenway with more affluent communities, it is plausible that they will perceive the space as exclusive to their culture and constructions of leisure, particularly in those segments traversing White neighborhoods. As Low et al. (2009) attest, parks often create an "artificial environment" where minorities feel excluded and refuse to enter due to a lack of representation (p. 156). Responding to feelings of exclusion, Latino/a residents may protect those segments traversing Humboldt Park by engaging in leisure and recreation behavior reflecting the enclave's identity.

Perceptions of privilege and exclusion may combine to form an invisible barrier between residents on the greenway itself.

The potential for intimate segregation on The 606 may also be heightened by the pervasive threat of gentrification accelerated by The 606's integration in Humboldt Park. While marketed by city officials as a unification and revitalization tool, The 606 has served to increase property values and rents, pricing many Latino/a families out of the area (Vivanco, 2016a, 2016b). According to one real estate agent working in Humboldt Park, "Bucktown was already a desirable neighborhood, so The 606 has had a minimal positive effect on it...[however] as you get west of Western Avenue (i.e. Humboldt Park), the positive effect on property values and neighborhood desirability goes up because of The 606." (Yerak, 2016). The occurrence of intimate segregation on the greenway then may be a product of defiance, as remaining residents seek to showcase their ownership over the enclave, including The 606 segments located within the enclave's bounds.

Using an explanatory, mixed-method design, the following investigation examines the relationship between territoriality, intimate segregation, and the distribution of greenway users on Chicago's 606 Trail in relation to the enclave of Humboldt Park. Using the quantitative System for Observing Play and Recreation in Communities (SOPARC) methodology (McKenzie, Cohen, Sehgal, Williamson & Golinelli, 2006), we first examined whether or not intimate segregation exists on The 606. Building on these findings, the second part of the study attempts to add depth to Study 1, seeking to

understand how intimate segregation may manifest in trail segments located in Humboldt Park?

Figure 1: *Map of The Bloomingdale Trail (The 606) with access points and proximate neighborhoods*

STUDY 1: SOPARC

Method

Instrumentation

To address the question of whether or not intimate segregation was present on The 606, visitor use data were collected through the use of the System for Observing Play and Recreation in Communities (SOPARC) methodology (McKenzie et al., 2006). Before beginning data collection on The 606, we received approval from the Internal Review Board (IRB) at the associate institution. Prior to immersion, we also worked with experienced SOPARC researchers who provided training on conducting SOPARC

research. The SOPARC protocol and procedures as outlined by McKenzie et al. (2006) were also reviewed.

Since its conception, the reliability and validity of SOPARC has been confirmed through numerous studies on recreational behaviors in park and recreation settings (Baran et al., 2014; Cohen et al., 2011; Reed et al., 2008; Whiting, Lawson, & Green, 2012). This tool has been shown to be particularly effective in observing recreational and leisure type behaviors, as well as user characteristics (gender, age range, race), on linear parks and trails (Librett, Yore, & Schmid, 2006; Reed, McKenzie, Hagen, & Harring, 2007; Reed, Morrison, & Arant, 2009).

In order to gain a better understand of greenway use patterns in each of the neighborhoods along The 606, the greenway was divided into 12 segments based on access points (See Figure 2). Access points were delineated by formal points on the greenway where users could choose to either enter or exit the elevated structure. Because The 606 is elevated 17-20 feet above street and is directly adjacent to the residential and commercial structure, these twelve points represent the only means of greenway access. Given the cross-cutting nature of the greenway and the variable nature of definitive neighborhood markers, this type of segmentation procedure was deemed an improvement over arbitrarily dividing the greenway at various points. Similar segmentation approaches have been shown to be an effective technique for observing distributions along a linear trail system (Coutts & Miles, 2011). Once on site, the trail and each of its access points were reviewed prior to observation. This procedure aligns with previous studies that have

used the SOPARC methodology to assess green space (Reed et al., 2007; Reed et al., 2009).

Procedures

Using an adapted version of SOPARC (see Figure 5 in Appendix A) observations were conducted over a 4-week period in July, 2016. Observations were performed during three time intervals each day (morning, 7 a.m. to 11:59 a.m.; afternoon, 12:00 p.m. to 5:59 p.m.; and evening 6:00 p.m. to 11:00 p.m.). Because The 606 features 12 access points we used these areas as the observational locations for the study. To indicate location we added an access point variable to the SOPARC template, where each access point was assigned a number, 1-12, starting at the most western access point. To ensure adequate coverage of each of these 12 access points, we devised a stratified, staggered schedule where observations at Access points 1-6 (see Figure 2) and 7-12 were conducted every other day with these days alternating on a weekly basis. For example, for the first week data was collected at Access points 1-6 on Monday, Wednesday, and Friday during each of the three time intervals. The following week data was collected at these access points on Tuesday, Wednesday, and Saturday. Sunday was used to make up for any days missed during the week due to weather or a holiday (data was not collected on July 4th).To ensure time representation data collection began at a different access point during each observational period. For example, data collection started at Access Point 1 on Monday at 7 a.m., then on Wednesday observations would begin at 7 a.m. at Access Point 2. In each case, data was collected for 20 minutes at each location before proceeding to the next point, where the strategy was then repeated. Given the linear

nature of The 606, its density, and the risk of double-counting, users were only counted at each observation area from one direction.

During each observational period, the researcher recorded greenway user physical activity (sedentary, walking, running, or biking), gender (male or female), age (child (infancy to 12), teen (13–20), adult (21–59), senior (60+).), and race (White, Black, Latino/a, Other). While previous studies have shown that each of these variables can be obtained reliably through visual observations (Cohen et al., 2009; Whiting et al., 2012), in order to ensure accuracy and reliability of each variable, the researcher engaged 474 greenway users, identifying himself, the context of the research, and requested the gender, age, and race variables. Overall, a vast majority of users' gender (99.57%), age (94.51%) and race (96.84%) were correctly identified.

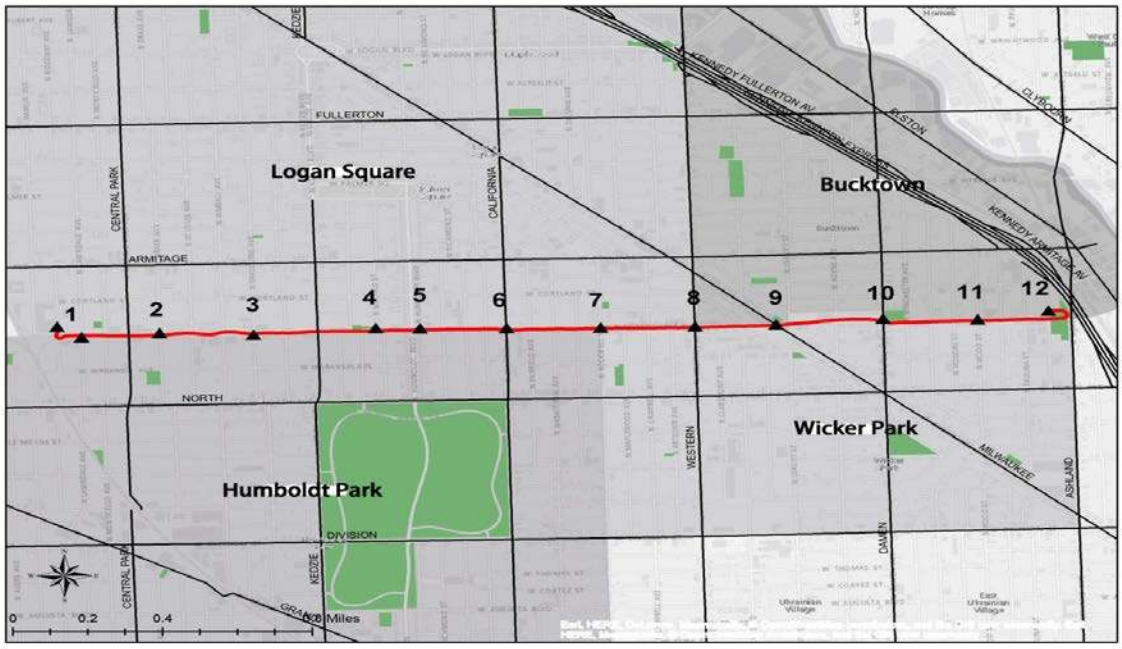


Figure 2: *Map of The Bloomingdale Trail (The 606) with numbered access points used in SOPARC data collection and analysis*

Quantitative Analysis: SOPARC

To analyze the data collected using SOPARC, first descriptive statistics were run to attain the overall racial composition of 606-users (Table 1). However, because the study sought to examine patterns of intimate segregation between White and Latino/a users, which combined made up 93.9% of total greenway users, further analysis only included these populations. Following the descriptive analysis, an observed frequency ratio between White and Latino/a users was calculated using cross tabulations for each access point. This was performed to gain a better understanding of the racial composition of users at each access point. Considering the greenway as a linear continuum moving from the predominantly Latino/a neighborhoods at its western end to predominantly White neighborhoods on its eastern end or vice-versa, the researchers decided to use dichotomous nested logistic regressions, taking into account the variation in composition across the continuum (Cohen, Cohen, West, & Aiken, 2013) (Table 3 in Appendix C). Instead of using a static baseline comparing each access point to the greenway as a whole, the nested model uses partitions to examine the racial composition of greenway users at each access point *relative to the expected outcome remaining* on the greenway when moving from Access Point 1 to Access Point 12 (see Figure 2). This method provides a baseline that better reflects the changing racial composition along The 606. As a result we were able to attain greater insight into the occurrence of shifts in racial composition on the greenway and where segregation may be present.

Table 1: *Observed 606 Users by Race*

User Race	Frequency	Percent to Total

White	2621	53.9%
Latino/a	1947	40.0%
Black	142	2.9%
Asian	124	2.6%
Other	28	.6%
Totals	4862	100.0%

To run the nested models, we first constructed a series of nested partitions of the dependent variable, Access Point, was constructed using orthogonal contrast codes (Cohen et al., 2013). Numerous scholars have recommended the use of partitions and contrast coding to sharpen the interpretation results and statistical power when examining a dependent variable that contains multiple categories (Abelson, 2012; Fox, 1997). For this study, the use of partitions was used to create 11 new dichotomous dependent variables in the model—one for each access point with the exception of Access Point 12. This aligns with Fox's (1997) framework of continuation dichotomies, where by setting up partitions, each category in the dependent variable becomes treated as a separate regression model with an unrelated baseline. By using partitions for the continuous design, each logistic model in the series has a different ratio-model or expected versus observed outcome. Again, because we set up the access points along a continuum, each analysis in the series of nested logistic regressions assessed the observed racial differences at a target access point *relative to the expected* differences of remaining points.

For the nested model, race was used as the primary independent variable. While all races were observed on the greenway because the focus of the study is centered on the

territoriality and intimate segregation between Latino/as and White users, only these two races were included in each series. Additionally, for each model, the researcher controlled for activity type and gender. In total, a series of 11 nested logistic models (one for each access point, with the exclusion of Access Point 12) were run.

The probabilities for each model in the series were attained by either adding or subtracting (depending on sign) the independent predictor (Race) from the intercept coefficient and then taking the exponential to calculate the associated odds ratio. Once the odds ratio was obtained, the probabilities for each access point were realized by dividing the exponential form of the logit by itself plus one. Additionally, the effect size ($\mathbf{R^2_L}$) for each regression in the series was also calculated using the following equation:

$$R^2_L = \text{Model } \chi^2 / \text{ Model } \chi^2 + \varepsilon$$

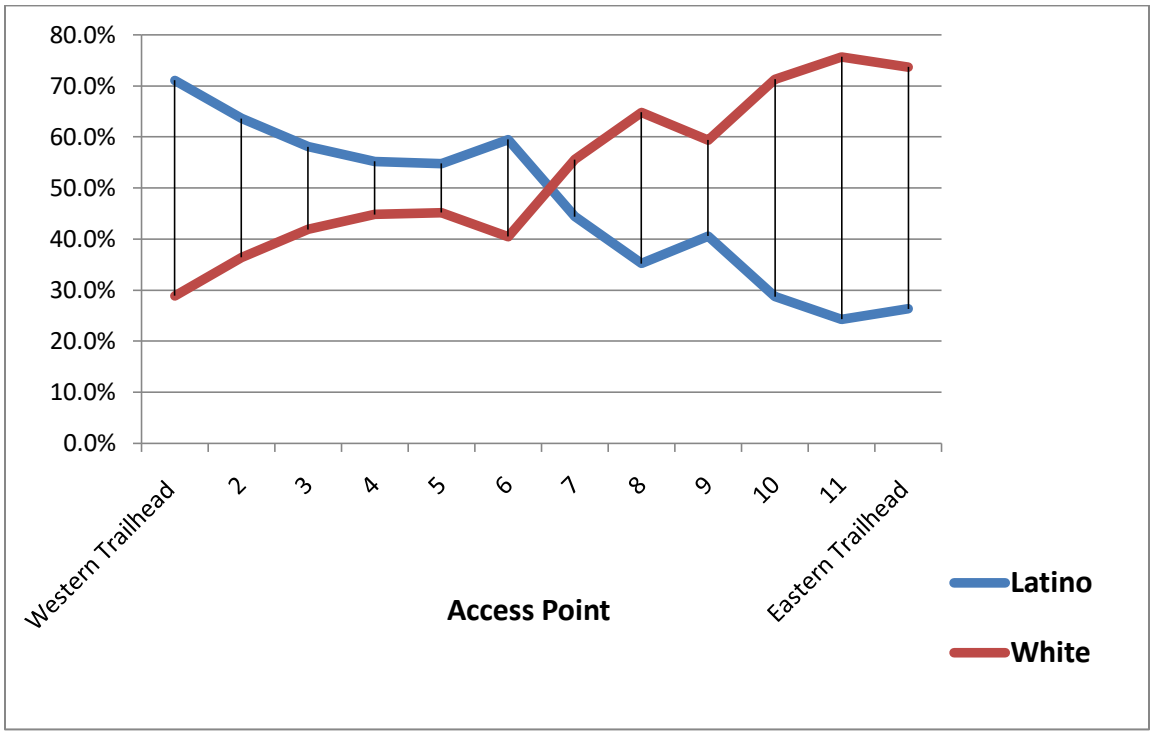
In each of the regression model, the kernel model was used to calculate the log likelihood function and the effect size (Heck, Thomas, &Tabata, 2012). The use of the kernel log likelihood is preferred as it facilitates simplified forms of the model parameters, allowing for tests of model fit be constructed based on the chi-square (Heck et al., 2012).

Results

Excluding other racial/ethnic groups (8% of the sample), we observed 4,556 White and Latino/a users. Results from the frequency distribution analysis (see Table 2) and series of regressions provide evidence of distinct variations of the racial composition of greenway users at different parts of the greenway. Looking specifically at the

regression analysis, results showed that the prevalence of Latino/a users to be significantly higher on western side of the greenway between Access Points 1 and 6, which each model showing significant results (see Appendix 2-Table 3).

Figure 3 *Observed Ratio of White and Latino/a Trail Users at each 606 Access Points*



N=4556

The analysis also showed Race to be insignificant for many of the access points located east of Access Point 8 (i.e., Western Avenue). Here, Access Points 8 was found to be insignificant relative to Access Points 9 through 12 (*β =.146 SE = .097, Exp (β)=1.16, p=.131)*. A similar result was found for Access Point 10 relative to Access Points 11 and 12 (*β = .176, SE = .135, Exp (β)=1.19, p =.193)* and Access Point 11 relative to Access Point 12 *(β = -.107, SE = .191, Exp (β)=.898, p=.575)*. For these

access points, the insignificant results signify that there was no significant difference between what was observed at each of the access locations and what was expected in terms of racial composition for those areas remaining along the greenway. It is helpful to once again point out that because the baseline of each logistic model adjusts with each partition, the chi-square also adjusts. So, while Whites made up a majority of users in the observed model at Access Points 8-12, it does not deviate from what was expected from the null model, thus resulting in a statistical nonsignificance. To explain this further, let's postulate that the expected number of White users at Access Point 11 is 90, while the expected number of Latino/a users at the same point is 10. If 90 White users and 10 Latino/a users are then observed at this point there will be no difference between expected and observed and race will be a found to be nonsignificant, despite the differences in terms of frequency. It should be noted that an exception to the nonsignificant findings between Access Points 8-12 was found at Access Point 9, where race was found to be a significant predictor ($\beta = .621$, $SE = .104$, $Exp(\beta) = 1.86$, $p < .001$). This may be attributed to the large number of proximate amenities resulted in an increased number of Latino/as observed at this point relative to the remaining number expected on the greenway.

The series of logistic regressions showed polarization in terms of racial composition between the eastern and western sides of the greenway. What's more, the nested partitions in the analysis revealed the western side to potentially be more vulnerable to intimate segregation with Latino/as making up a greater than expected percentage of user population. This finding stands in contradiction to the results found in

the study by Coutts and Miles (2011), where race was found to be a nonsignificant predictor of urban greenway use across diverse communities. On The 606, binary racial worlds were evident.

Study 2: Intercept Interviews

Method

Qualitative Procedures

While the results from SOPARC in Study 1 supported the occurrence of intimate segregation on The 606, to gain a broader understanding of how it manifested in segments traversing Humboldt Park, a series of qualitative interviews with 606-users and Humboldt Park residents was conducted. Sample size was determined by using the guidelines set forth by Creswell (2013), who postulated that 20 to 30 interviews should be conducted in order to reach theoretical saturation.

In each of the interviews, a semi-structured open-ended question format was employed, using the techniques and rules outlined by Fontana and Frey (2000). For example, to understand use patterns and segments that may be avoided, participants were asked if they used the entire greenway from end-to-end, why or why not, and to describe the differences, if any, between the greenway segments located in the eastern and western neighborhoods. In total each interview consisted of sixteen main questions. Follow-up question were also asked based on participants' responses. For example, if a participant indicated that they used The 606, but avoided certain segments due to feelings of exclusion, the researcher would ask the participant to describe how they were excluded

and why they believed this was occurring. To protect against sampling bias the researcher began the study using a systematic random sampling of individuals on both the east and west ends of The 606 (Babbie, 2013; Mack, Woodsong, MacQueen, Guest, & Namey, 2005). In each case, the researcher would approach the participant, identify himself, inform the participant about the project, relay the interview script as approved by the University's Internal Review Board (IRB), and provide examples of interview questions. If the individual agreed to participant the researcher would begin the interview. Using this technique a total of 41 interviews were conducted on The 606, exceeding the theoretical saturation number set by Creswell (2013).

In addition to the interviews on the trail, an additional 13 interviews were conducted with Humboldt Park residents in their homes and/or place of employment. These interviews were set up with the help of a community gatekeeper (Babbie, 2013), who had agreed to assist the researcher in establishing relationships with community members before data collection began. Given the conflict surrounding The 606, the gatekeeper was used to help establish trust and gain access to local community members. Creswell (2013) noted that the use of a gatekeeper when conducting research in communities in which the researcher is not a member is an effective tool to gain access and establish rapport and trust. In order to obtain richer data and make participants feel more comfortable during interviews, the researcher did not use a recording device to record any of the conversations. Dewalt and Dewalt (2011) noted when status differences are present, researchers should employ data collection techniques that allow conversation to flow freely and minimize to risk of feeling of discomfort.

Upon completion of each interview, the researcher performed member-checking with each participant (Erlandson, 1993; Lincoln & Guba, 1985). Here, participants were asked to review direct quotes taken during the course of the interview and correct any errors or change their interpretation of certain events. Member-checking for user content was also done in later interviews as participants were asked to verify interpretations and data from prior interviews. These member-checking techniques have been shown to be effective in establishing credibility and trustworthiness by Erlandson (1993).

Qualitative Analysis: Interviews

To analyze interviews the researcher used a thematic analysis consisting of open and axial coding (Miles, Huberman, & Saldana, 2013). Thematic analysis has been broadly defined by Braun and Clark (2006) as "a method for identifying, analyzing, and reporting patterns (themes) within data". Thematic analysis was chosen because of its flexibility in explaining both latent constructs and observed realities (Boyatzis, 1998; Braun & Clarke, 2006). To begin the analysis, an open coding technique outlined by Strauss and Corbin (1998) was used. Here, data from each interview was categorized based on broad concepts that emerged over the course of data collection and given a label (Strauss & Corbin, 1998). Once categorized, the researcher created content-driven codes based upon the established labels. As a measure of check-and-balances, during the open coding phase a cumulative audit trail was created through memoing (Strauss & Corbin, 1998). Here, as interviews were analyzed, the thoughts, interpretations, and questions of the researcher were penned in concomitance with each analysis. The use of memoing provided the researcher with an additional layer of richness in the data analysis and a

mechanism for reflexivity within the context of the study (Miles et al., 2013; O'Brien, Harris, Beckman, Reed, & Cook, 2014).

Upon completion of the open coding phase, the data were reassessed through the process of axial coding (Strauss & Corbin, 1998). Axial coding can be defined as the process where the broader categories or themes are reduced "linking categories at the level of properties and dimensions" (Strauss & Corbin, 1998, p. 123). During this phase the researcher reexamined each of the broad categories of data based on the code book created during the open coding phase. Categories that were found to have similar content were combined and the data broken down into more acute subcategories. For example, the researcher found that many residents of Humboldt Park had experienced some type of conflict in the trail related to differences in recreational endeavors. Others residents experienced conflicts related to stereotypes. While these incidents differ, they both can be contextualized as subcategories of greenway conflict.

Results

Study Participants

For the qualitative interviews, a total of fifty-four participants were interviewed in Humboldt Park or the neighboring enclave of Logan Square. Of these participants 27 were female, 27 were male an all ranged in age from 18 to 68 (mean age: 34.1). The racial composition of participants was as follows: 36 (67%) were Latino/a/Hispanic, 14 (26%) were non-Hispanic White, 3 were Black (5%), and 1(2%) was Asian. As previously noted, 41 (76%) interviews took place on The 606, while the other 13 (24%)

took place either in the home of the participants or their place of employment. For each participant in the study a pseudonym was assigned to ensure confidentiality (see Table 4 in Appendix D). Finally, it should be noted that in the results and discussion section the researcher uses the term "Latino/a" to refer to the residents of Humboldt Park. While it is recognized that Puerto Rican is not interchangeable with Latino/a, due to the parameters of this study and the macro-implications, "Latino/a" is often used to describe residents as a whole. However, when a direct quote is used, ethnicity is specified

From the qualitative analysis five major themes emerged that helped provide a more in-depth understanding of how The 606's integration was impacting perceptions of territoriality in Humboldt Park. Although the first major theme, *community benefits*, helps to showcase the positive outcomes resulting from The 606's construction and opening, the other themes, *conflicts over differences in trail use; social exclusion and stereotype tax; environmental gentrification; and Puerto Rican resistance* helped bring attention to discord surrounding the space and provide understanding as to why intimate segregation, found in the first study, is present on The 606.

Theme 1-Community Benefits

A theme that emerged from the data outside of the territoriality framework was that of the community benefits provided by The 606 to the residents of Humboldt Park. Although The 606 remains a fairly new amenity in the neighborhood, community residents consistently reported that the greenway was an asset both to their individual lives and the community as a whole. Humboldt Park residents interviewed spoke to the

physical recreational and transportation opportunities provided by The 606. Additionally, many Latino residents spoke exclusively to the socialization aspects the greenway provided the neighborhood

> "People here [Humboldt Park] finally have something to do. We've always had the park, but it isn't safe after dark. Now you see people on the trail with their kids at night and that wouldn't have happened before. It is so nice to see people out of their houses, talking, walking around. This thing [The 606] is a blessing for this community". [Lonnie, 20's, Latino of Puerto Rican Decent]

One of the reasons Humboldt Park residents attributed to the increase in physical activity and socialization in the community, was the reduction in perceived gang activity in the space now occupied by The 606. Intercepted while playing with his daughter at Julia De Burgos Park, a small pocket park located off one of The 606 access ramps, Edwin indicated that The 606 was successfully helping to remove deviant activity that had long been embedded in the neighborhood:

> "Before this [The 606] I would have never brought my kids to this park [Julia De Burgos]. When I left for the military 5 years ago you couldn't come here without having to worry about the gangbangers, but now it is really nice". [Edwin, 30's, Latino of Puerto Rican Decent]

Puerto Rican teens residing in proximal neighborhoods expressed similar sediments. Many teens told the researcher that the greenway represented a "safe space" where they could meet and socialize without the threat of or pressure to become affiliated with local gangs.

> "It's a safe place to come and chill with my friends. I don't have to worry about bangers or getting shot. When I'm on my bike, I don't have to worry about lights slowing me up or getting clipped [opening of a car door into bike rider] either". [Alan, 19, Latino of Puerto Rican Decent]

Another benefit of The 606 that was acknowledged by neighborhood residents was its proficiency for increasing commercial activity and improving the overall

reputation of the Humboldt Park neighborhood. Residents explained that before The 606's construction, many of the spaces located adjacent to the greenway in Humboldt Park were either occupied by dilapidated infrastructures or abandoned lots. According to participants, these spaces, now occupied by new condos and townhomes, were attracting new residents into the enclave and thus helping dispel some of the negative stereotypes that once caused neighborhood aversion. While the neighboring community of Logan Square had been experiencing an influx of new commercial and residential activity before The 606, many residents spoke to the greenway's role in further expanding the revitalization efforts to the Humboldt neighborhood.

> "Before the neighborhood was just us [Puerto Ricans], which was cool. It's still our neighborhood, but I like that other people are coming to see what we're about. I'm Puerto Rican so I never saw a lot of diversity [in the neighborhood] before now. People were afraid to come here, but now you see all kinds of people moving in and walking around. There are just so many more people out. I think the trail has done that, got people moving. It's this space for everyone. I think it's a good thing". [Isabella, 20's, Latina of Puerto Rican Decent]

Theme 2-Trail Conflicts

While The 606 was regarded by some as a positive addition to Humboldt Park, residents' comments also revealed its paradoxical nature, indicating that the trail's integration led to disputes between their community and the more affluent eastern neighborhoods. One disagreement that emerged was related to the differences in recreation and leisure styles between Latino/a and White users. For many Puerto Ricans living in Humboldt Park, the greenway was believed to be a space for community interactions, socializing, and fun. To these users, The 606 was a place for families and friends to gather, play music, and relax. As Grace, a Humboldt Park resident explained,

"On the west end there are a lot more people just casually walking around or sitting in the grass. People down there [Humboldt Park] just seem to be in less hurried and more relaxed". Additionally, for many Puerto Rican parents, The 606 was thought to be a space where they could allow their children to participate in leisure time activities (e.g., riding a bike or playing on the grass) away from dangers existing at street level, such as traffic or crime. Conversely, the east end of the greenway (i.e., Bucktown and Wicker Park) was perceived by Humboldt Park residents to be a place where leisure and recreation was constructed around physical pursuits, such as running or biking, and generally taken in more of a "serious" fashion. In this line, White bike riders were frequently mentioned as major source of conflict. Here many Latino/a residents disliked the behavior of bike riders with many feeling as though they had little respect for the more relaxed atmosphere on the greenway's western side.

> "I hate the entitlement of these bikers, man. Martin explained many bikers on the trail "go too fast and are rude to walkers". As he continued, "the trail isn't that long or that wide, so there's no reason to be riding like you're in a race. There is no reason for you to act like a [crazy person]". [Martin, 30's, Latino/a of Puerto Rican Decent]

Still other residents felt as though the behavior of the bikers posed a direct threat to the safety of others on The 606, especially children. Cynthia acknowledged this in her comments:

> "We use The 606 all the time, but you can't take a family on the east side. The bikers are so aggressive. They yell at my kids, and I want to fight them. Like seriously. You want to yell at my kids. [Heck] no"! [Cynthia, 20's, Latina of Mexican Decent]

To avoid bikers, who were thought to be more heavily concentrated on the eastern side of the greenway, many families chose to remain in the areas of the greenway located in

Humboldt Park or Logan Square. As will be discussed further later, these differences in recreational patterns may be partially responsible for intimate segregation on the trail.

> I feel like a stranger down there [east side of The 606]. There are families down here, people I know. You just don't see that down there. And there are too many bikers. They're crazy...act like they are the only people on here. I am afraid to take my granddaughters there". [Mila, 60's, Latina of Puerto Rican Decent]

Another dispute that emerged from the study corresponded with the activities of Puerto Rican youth in segments of The 606 passing through Wicker Park and Bucktown. Interviews with Puerto Rican youth revealed that they were often believed to be gang affiliated by White greenway users. This was particularly true when youth were congregated in large groups to socialize. As Chris, a youth resident of Humboldt Park, explained, "as soon as they [White users] see us they might be calling the police." When asked why he thought that was the participant replied, "they think we're in a gang or that we're here, trying to cause [trouble]". Additionally, youth noted that their participation in bicycle racing frequently led to conflicts with other greenway users. While this alternate form of recreation was not seen as deviant or unlawful by the youth, they reported that the result of their engagement in the activity was displacement and exclusion from the eastern side of the greenway by local authorities.

> "People are real quick to call the cops down there [east end]. Like we're not allowed to race, like it's a crime. I feel like a lot of people think we're criminals because of how we look or like, because of the music we play. They don't know anything about me, but still hate". [Kyle, 18, Latino of Puerto Rican Decent]

In speaking with Alice, who was the community director responsible for engaging Latino/a and Hispanic youth in Humboldt Park and Logan Square, it was reiterated that

the frequent encounters with Puerto Rican youth facilitated by the greenway was new for people located in the Bucktown neighborhood.

> "The east end is a lot more young people building their lives so if they have kids they are usually really young and not using the trail. On this end [in Humboldt Park] there are a lot more families. That is why you see so many Latin teens on here. They grew up here". [Alice, 20's, Latina of Puerto Rican Decent]

The participant further disseminated that she believed local media was partially responsible for discord on the greenway. She explained that while crime is ubiquitous in Chicago, minority spaces are often the focal point of local stories about crime and disorder, generating fear and avoidance by those located outside of the community.

> "There is crime all over Chicago. This area [Humboldt Park] is no different. My bike got stolen the other week by what I think was gang members. There is crime and gangs all over the city, some neighborhoods are just better at disguising it or keeping it hidden". [Alice, 20's, Latina of Puerto Rican Decent]

Theme 3: Social Exclusion and Stereotype Tax

The third theme that emerged from the interview was Humboldt Park residents' reluctance to use the eastern side of the greenway due to feeling of social exclusion and stereotypes. Some of these feelings were directly connected to the aforementioned differences in leisure and recreational engagements between the east and west sides of the greenway.

> "I don't feel welcome. Those people really aren't like us. They are so serious about running or biking and they don't like when my kids are in their way. You have to be careful, because the bikes will run you over. They fly on and off the ramps and don't even look. I worry my kids are going to get hit, so we just say down here. It's much better...you know"? [Bella, 40's, Latina of Puerto Rican Decent]

However in many cases, feelings of exclusion transcended these differences and were extended to perceived feeling of prejudice. In these instances, residents noted that their presence on the eastern side was often met with either "rudeness" or complete neglect.

> "I am not trying to give this end of the trail [Bucktown area] a bad name, but people here are just rude. They act like you are an intruder in their neighborhood and won't even acknowledge you. You say "hi" and they just keep walking. My side of the trail [in Humboldt Park] isn't really like that. People are friendlier. Everyone says "hi" to you and seems to be having a good time". [Ally, 30's, Latina of Puerto Rican Decent]

While many of the study's participants indicated that they had not experienced any form of overt discrimination aside from general abrasiveness and unwillingness to interact, the perpetual feeling that they were not welcome on the greenway's eastern side or were "outsiders" served to constrain may residents to use only the western side of the greenway. Some of the participants explained that they believed that their exclusion were a product of cultural differences and the more family-centric and "fun" leisure style of Puerto Ricans. For others, however, the exclusion was believed to be directly correlated with racism and the notion that Puerto Ricans from Humboldt Park were deviant in nature.

> "You see these people [White trail users] and they think that you [Puerto Rican] are just poor... living off the government....from a bad neighborhood. It's like, [screw] you! I served our country, what have you done? I'm out here working, trying to raise my daughter to be good to everybody, but people judge me on how I look. There are good people in this neighborhood [Humboldt Park], people who have been here a long time, dealt with a lot, you know. Most of us aren't bangers". [Edwin, 30's, Latino of Puerto Rican Decent]

Although some Puerto Rican greenway users were able to ignore the stereotype imbued on them and continued to use the entire greenway for recreation, others avoided the eastern end almost entirely. For these individuals the western end became a haven where

they could socialize and recreate in an unencumbered fashion, outside of the reach of stereotypes.

Conversely, for White residents, Humboldt Park was often viewed as an urban dystopia, a blemish on the face of an otherwise idyllic park space. Here, stereotypes established from Humboldt Park's past deviances (i.e. high crime, derelict infrastructure) acted to constrain recreational endeavors and induce fear. Even when living in Humboldt Park or neighboring Logan Square, White trail users frequently elected to recreate in eastern segments, subjecting themselves to *stereotype tax*--the price an individual was willing to pay for buying into a preconceived notion (Caruso, Rahnev, & Banaji, 2009). As Jacob, who recently moved to the Humboldt Park area explained.

> "People are out, but the people who live at the other end of the trail [east end] come down, turn around, and go back. I live here [Humboldt Park] and still run east. I work sometimes till like 8 or 9, so it's dark when I get up here [on The 606]. If I go west [further into Humboldt Park], I feel like there is a better chance of something happening. I'm sure I'd fine, I'm 230, but Humboldt Park is still Humboldt Park. You know, like why take that chance? Why not run east? The neighborhood is getting better, but there are still all gangs around us. This trail is open at night, so to think nothing goes on up here is crazy". [Jacob, 30's, White]

Theme 4: Environmental Gentrification

A main concern for many Puerto Rican residents in Humboldt Park was that The 606 had spurred or accelerated environmental or green gentrification (Gould and Lewis, 2016). Residents believed that The 606 was being used to romanticize the idea of living in the neighborhood of Humboldt Park. Here, by positioning The 606 at the forefront of advertising strategies that appealed to White residents looking to move to the Northwest side, developers were able to sale the connective properties of The 606. Research revealed that in some cases, developers were assigning a new title to spaces in Humboldt

Park, referring to it only as West Bucktown. Adam, a local developer in Logan Square, spoke to this strategy:

> "A lot of developers have stopped calling it [the neighborhood] Humboldt [Park] all together and now refer to it only as West Bucktown or even South Logan. They just completely remove Humboldt [Park] from their vocabulary all together.... People in this business [residential development] sell the dream of buying a place now and waiting for the neighborhood to turn into the next Wicker [Park] or Lincoln Park or Lakeview. The trail has just given them more ammo". [Adam, 40's, Asian]

From the perspective of many Latino/a residents, The 606's construction was less about utilitarianism and equity and more about economic prosperity. According to these residents, the The 606 was not about the present composition of Humboldt Park, but those who may occupy it in the future.

> "This neighborhood [Humboldt Park] has been on the city's radar for years. When Logan started to turn, it was only a matter of time. I know some people blame the trail [for the threat of gentrification to Humboldt Park], but most people understand that it was happening already. All the trail has done is speed the process up. I am sure you have seen the condos at Monticello. Developers are smart. They are using the trail to sell their properties. Landlords too. If you own a building you are using the trail to rent to people". [Brook, 40's, White]

> "The neighborhood is changing. I just don't think we [Puerto Ricans] are part of the change...part of the plan. You seem to be a smart young man, so you know what the condos going up means...who those are meant for. This trail is great, but it wasn't put here for us, it's for the people coming in". [Mila 60's, Latina of Puerto Rican].

Escalating residential cost in the area associated with The 606's construction added to residents fear that they would be removed from the spaces around The 606. Since the greenway's opening in 2015 many residents had experienced a dramatic increase in property taxes and rent. As was disseminated to the researcher, for some Latino/a families the increased cost of living was forcing them to consider relocating to a residence in Humboldt Park further away from the greenway, thus relinquishing desired

access. For other residents, the consequences were even more dire as they pondered abandoning the enclave entirely. Grace, who helped manage a nonprofit organization working to preserve Latino/a presence in the area, explained:

> "People are being squeezed out slowly. Property taxes have gone up $1,000, $2,000 and some families are simply not going to be able to afford to live here if it keeps going up. There is no way that I can. It's not fair to a lot of longtime residents. Sure, the neighborhood is getting better, but there is no reason that has to mean it changes to being all White. There is nothing that says that the rich, Bucktown people can't live close to the working families down the street. It seems like a lot of people want to say they live in Chicago, but make it resemble the 'burbs. Diversity is a scary word for some people". [Grace, 30's, White].

Finally, Latino/a residents' trepidation over White newcomers entering the enclave and their own displacement was fueled by cultural amputation and space ownership. Susan acknowledged this during her interview:

> "I believe that The 606 is a wonderful addition to Chicago, but there is a question of who it belongs to. Right now it is a battle for ownership. This has always been a Puerto Rican neighborhood [Humboldt Park], so I think people like it [The 606] but they want to protect their neighborhood...there is just a divide right now about who owns the trail and I am not sure when that is going to change". [Susan, 30's, Latina of Puerto Rican Decent]

As Susan continued, she explained that there was a perception among many residents in Humboldt Park that The 606 was meant as a mechanism to the change space entirely, removing the Puerto Rican culture than had defined the enclave for decades. Standing at the center of these ownership debates were a series of murals inscribed with Puerto Rican artwork on the underside of The 606 in Humboldt Park (See Figures 3 & 4). For example, Lily noted that there was talk that the murals would be whitewashed (i.e., painted over) to make the greenway homogeneous and ease the fear of White newcomers, who believed

the symbols inscribed on the murals represented gang tags (i.e., gang symbols indicating gang controlled territory).

> "They [White residents] want to paint over all of those [the murals]. A lot of the White people [living in residences along The 606] started a petition to just paint the walls white or black. Like seriously, come on. That is part of our neighborhood, part of our culture. They [murals] show what it means to be Boricua! I hope they paint them, so we can paint them back! In 5 years, the only people who are going to be using this [The 606] are White people. This place is going to be like Lincoln Park". [Lily, 20's, Latina of Puerto Rican Decent]

However, as Lily's comments show, for many Puerto Rican residents the murals were a representation of culture, helping them to showcase ownership over the space and evoke memories of place (Pérez, 2004). For these residents, the desired removal of the murals was seen as a tactic to seize ownership from Puerto Rican residents, remove the culture from the space, and redistribute power to White newcomers. As Brown-Saracino (2009) noted, the stripping of culturally-centric iconography by White urban pioneers under a veil of beautification is primarily founded in their own economic self-interest and potential benefit from redefining the space. As Alice explained:

> "The trail wall is the largest one [Puerto Ricans] have in Humboldt and most of the murals were done by teens and kids in the neighborhood. You can't just take that away from them. Gentrification happens everywhere, but I really hope they leave the murals below the trail. Art gives these kids an outlet, a chance to express themselves. It's not gang tagging decorating the walls. Its meaningful pieces of art that represent these guys' culture and identity as a Puerto Rican. How can you take that away from them"? [Alice, 20's, Latina of Puerto Rican Decent]

Figure 4: *Image shows Humboldt Park mural located directly below the surface of The 606 near Central Park Avenue*

Figure 5: *Image shows murals documenting Puerto Rican culture in the Humboldt Park neighborhood*

Theme 5: Puerto Rican Resistance

Finally, results showed that conflicts over gentrification and exclusion had become a catalyst for resistance by many Puerto Rican residents. While some residents indicated they would simply relocate to a different location within the current boundaries of neighborhood or move to a neighboring community that would allow them to remain connected to the Humboldt Park, others planned to be much more defiant in their actions. Residents indicated that they would remain in the enclave, regardless of cost or new development, indicating Humboldt Park was more than just a space in the city. Zoe, acknowledged this:

> "I grew up here [Humboldt Park], my family and friends are still here, so it [Humboldt Park] means a lot. I don't plan on leaving. I have seen a lot of things change, including this place, but I never wanted to live anywhere else. It's part of me. Yo soy Boricua! I'm happy here. When ask about the threat of gentrification, she continued "We [Puerto Ricans] have been fighting for a long time, that will never stop". [Zoe, 60's, Latina of Puerto Rican Decent]

Other residents offered similar sediments, noting a refusal to abandon or relinquish control over the space to neighborhood newcomers.

> "For a long time people have tried to get rid of us [Puerto Ricans] and we're still here. This neighborhood [Humboldt Park] and its people are Puerto Rican Chicago. It's worth protecting. This is a community of families". [Dante, 40's, Latino of Puerto Rican Decent]

While some residents showed their resistance to gentrification through their refusal relocate or succumb to the discourse surrounding the community, others used The 606, believing the greenway to offer a visible platform for demonstrations directly resisting neighborhood change. For example, marches were held on The 606 helping to showcase collective unity and Puerto Rican resistance. As Ana explained to the researcher, "I'll do whatever it takes to protect my community".

Discussion

This study served to highlight the occurrence of intimate segregation on The 606 and provide evidence as to why it is manifesting in greenway segments located in Humboldt Park. Results from the nested logistic regression models revealed the presence intimate segregation on the trail's western side. Although the frequency distribution analysis was able to show the binary environment created on The 606 by the changing racial composition (see Figure 3), the regression models, revealed Race (i.e. being Latino/a) to be a significant predictor of concentration in western access points—or an increased vulnerability to intimate segregation. Before proceeding to the explanations for this occurrence, it should not go without mention that being Latino/a was also a found to be significant predictor at Access Point 9 (Damon Avenue), a deviation from other access point located east of Access Point 8 (Western Avenue). Interviews found that this occurrence could be attributed in part to the area around Damon Avenue being commercially dense, offering a myriad of shopping and dining options attracting Latino/a users from the more western neighborhoods and the release of Pokémon GO. The later is an interactive game for mobile devices that augments reality by placing digital creatures into the real world on the mobile device's screen (Althoff, White, & Horvitz, 2016; Perez, 2016). Interviews conducted with youth and young adults found that they would frequently travel to Damon Avenue because the location presented the opportunity to catch and train Pokémon. This finding aligns with previous literature on Pokémon GO, which has shown the game to favor affluent urban communities (Colley et al., 2017).

While the quantitative results showed the occurrence of intimate segregation on The 606, results from participant interviews in Study 2 provided a more in-depth understanding as to why this was occurring and the influence of territoriality on this issue. First, the existing polarization between the residents located in the eastern and western neighborhoods on The 606 appears to be driven, in part, by divergences in leisure and recreation patterns. For Puerto Rican residents of Humboldt Park, The 606 is viewed as an extension of their neighborhood and a space to be used to gather and socialize. As a result, the western side of the greenway is characterized by a more family-centric atmosphere with large groups of Puerto Ricans congregating in and around the greenway. This finding aligns with Gobster's (2002) study of urban parks in Chicago, which found that Latino/as were more likely than Whites to frequent park spaces in large groups and participant in more passive forms of recreation, such as talking and socializing. Other studies, including a recent study by Keith, Larson, Hallo, Shafer, & Fernandez (2018), have also shown strong support for this finding, concluding that Latino/as are more likely to view park space as a social construct and engage in it in a manner that is built around collective socialization and family (Byrne & Wolch, 2009; Floyd & Shinew, 1999; Stodolska, et al.,2013; Stodolska, Shinew, Li, 2010). The participation and engagement in leisure activities has also been shown as a territoriality construct employed by a group as a control mechanism over a given space (Low et al., 2009; Sack, 1986). Therefore, by engaging in frequent socialization on The 606 within the boundaries of Humboldt Park, residents are able to maintain the space as a section of the enclave.

Standing in contrast to this, the eastern side of the greenway was perceived by study participants to be centered more on serious recreational pursuits. This finding aligns with prior studies on trails and greenways, which have shown White, greenway users to be the demographic most involved in activities related to intense physical exertion, such as biking, running, and walking (Price, Reed, & Muthukrishnan, 2012; Stodolska et al., 2013). Additionally, because the eastern end is more commercialized and densely populated, many Puerto Rican residents believed the space to overcrowded, strenuous, and less conducive to a pleasurable recreation experience.

Although the differences in the leisure characteristics contributed to intimate segregation, results from the interviews communicated that the social exclusion of Puerto Ricans in eastern trail segments also played a role. These exclusionary practices may be linked to several explanations. To begin, Latino/a exclusion is potentially a product of latent prejudice that can linked to racial stereotypes held by members of the more affluent communities (Sampson, 2012; Sampson, 2009). As Shinew, Floyd, and Parry (2004) explained in their study of leisure constraints, stereotypes are not a static characteristic, isolated to a select number of minority engagements. Rather, stereotypes are ingrained in every part of the minorities' daily lives, including the places they live and the recreation activities in which they choose to engage (Shinew, Floyd, & Parry, 2004). In urban environments race becomes intertwined with preconceived notions of disorder and used as a pillar to signal criminality (Eberhardt, Groff, Purdie, & Davies, 2004; McIntyre, 2000; Sampson, 2012). On The 606, although Whites in the eastern neighborhoods may not openly discriminate against Puerto Ricans, because of a variety cognitive,

motivational, and sociocultural processes that have become ingrained over time and reinforced through in-group projections and societal structures, they are likely to still hold latent bias (Gaertner & Dovidio, 1986), linking Puerto Ricans and other Latino/as residing in Humboldt Park to deviant behavior (Mumm, 2016; Rinaldo 2002). These latent biases may be manifesting as uneasiness and fear of Puerto Rican bodies, leading to the micro-aggressions (i.e. calling the police on youth) and avoidance. Results showed that White users were often willing to constrain their use on the trail in order to avoid trail segments located in Humboldt Park. Returning to the notion of stereotype tax, for these White users the price for subscribing to preconceived stereotypes surrounding Humboldt Park is full use of the amenity.

For Puerto Rican greenway users, by avoiding the eastern side of the greenway and localizing themselves to western segments superimposed with their culture and controlled by like individuals, feeling of exclusion and discrimination may be reduced (Gupta & Ferguson, 1997; Sack, 1983; Sack, 1986). As testimonies revealed, in these segments, socialization, recreation, and relaxation are able to occur outside of the constraints that result from discriminatory actions of Whites. As Floyd et al. (1993) explained when minority groups are less acculturated or resistant to mainstream society, leisure choices may reflect awareness of discrimination and intergroup distance, leading to a decrease in the likelihood a minority and majority group will interact and/or share a common area.

Another possibility for Latino/a exclusion on The 606 may stem from unequal power dynamics and desire by Whites to mold the greenway, particularly those eastern segments, to reflect leisure ideals salient only to White users and residents in proximal neighborhoods. For example, the autocratic attitude and unwillingness to respect the passive leisure engagements of Latino/a families displayed by many White bicyclists transcends simple differences in leisure characteristics, instead reflecting larger societal constructs of hierarchical maintenance through hegemonic displays of power and control (Mowatt, 2009). As Byrne (2012) noted in his study of park constraints among Latino/as in California, exclusion is not isomorphic construct linked solely to ethnic and racial proclivities or socio-spatial barriers, but rather a larger set of structural and cultural processes that mutually reinforce White's power to exclude minorities and control park space. Other studies also have shown that leisure and recreation is continually shrouded in a white veil, where acceptable activities are constructed in a manner that fits the White standard and perpetuated by an unequal power structure that denigrates divergences from the standard (Arai & Kivel, 2009; Baran et al., 2014; Floyd, 2014; Mowatt, 2009). Using this idea, it seems plausible that segments of the greenway traversing prestigious White neighborhoods and used more by White users are being molded to reflect an idyllic image of recreation inclusive only to those users. Power and dominance over the space is then established through resistance of divergent activities and exclusion. As Mowatt (2009) postulated, Whites will seek to reaffirm their own identity at the expense of others, not "to keep people in their proper place but more to affirm its own place" (p. 518). By keeping the eastern side of The 606 predominantly homogeneous in regard to recreation

and leisure endeavors, White residents' and users position atop the social hierarchy and power over the space is confirmed. In these segments questions of "whose space" and "whose recreation" become answered simply as "Whites".

Conversely, for Latino/a residents of Humboldt Park, the tendency to remain in the enclave while engaging in recreation and leisure activities represents a way to establish and define their own set of social norms. Research on territoriality has shown that minority groups may be able to displace direct attention from existing power dynamics by placing attention on a space itself or as Sack (1986) asserts, defining the "laws of the land" (p. 33). In other words, the group with control over a defined space may set up and enforce what it deems to be proper behavior within the space's boundaries. Applying this notion to the space around The 606, by setting up what is considered proper usage within the space, residents of Humboldt Park are able to control and communicate what is socially permitted, (i.e., large gathering and bicycle racing), regardless of its fit within eastern communities constructions of ideal recreational behavior.

Lastly, intimate segregation on The 606 appears to emanate from the greenway's role in accelerating green gentrification in Humboldt Park (Vivanco, 2016a, 2016b). As Hyra (2015) found in his study of new urban renewal in Washington D.C., longtime residents may resent new neighborhood amenities, believing them to signify a shift in neighborhood values and norms of newcomers, rather than community improvement. As prior research has shown the integration of green amenities in communities of color can

have severe consequences, such as forced displacement and cultural evaporation (Checker, 2011; Curran & Hamilton, 2012; Dooling, 2009; Wolch et al., 2014). In urban areas, gentrification is usually spurred by the residential mobility of Whites and desire for economic prosperity of developers (Mumm, 2016; Sampson, 2012), however, parks can also play a role in this process by "[wiping] away the historical traces of their [minorities] fashioning" (Moore, Pandian, & Kosek 2003, p.3). Recent examples of parks role in spurring gentrification can be seen in Eckard's (2011) study in Portland, Dooling's (2009) study in Seattle, and Gould and Lewis' (2016) study of Brooklyn. In his study, Eckard (2011) found that when environmental refinements are used in disadvantaged neighborhoods as revitalization tools, such as in Humboldt Park, they often become the catalyst for gentrification and the displacement of community residents as the area becomes more desirable (Eckard, 2011). Similarly, the study by Gould and Lewis (2016) concluded that because the economic prosperity of urban elites, not social equity or environmental sustainability, is often placed at the forefront of green initiatives, communities of color and their residents are rendered invisible. As Gould and Lewis (2016) articulated "green is pursued only to the extent that it enhances [economic] growth" (p. 130).

While The 606 presents a unique case in relation to environmental gentrification, accounts by residents and observations by the researcher clearly delineate that the trial is being used by developers to attract more affluent residents into the enclave. For example, the rebranding of Humboldt Park as "West Bucktown" represents a blatant attempt to separate the space located along the greenway from the rest of Humboldt Park and

remake its image that is more appealing to a White clientele (Mumm, 2008; Pérez, 2002). Additionally, the removal of the murals in Humboldt Park projects imperialistic images of a hostile takeover rather than a mutual beneficial renaissance. As Mumm (2015) explained, White newcomers often view a community and place with "moral minimalism" (p. 104). This culture, according to Mumm (2015), is built on apathy, lack of attachment to place, and an aversion to learning or recognizing the differences that exist between themselves and established community members. To these individuals, ambivalence and privilege breed a disinterested comportment towards others and the consequences for their own actions. From this perspective, the removal of the culturally-centric murals is viewed only through a narcissistic romanticism where the enclave can be remade in an image that is befitting of White newcomers and their existence in the space. However, for Puerto Rican residents located in Humboldt Park, the murals serve to communicate their culture and history in the enclave and demarcate the bounds of the space in which they claim ownership. Like a "keep out" sign, these territory markers reinforce territory identity and serve as an emblem of affiliation for past and present members of the enclave. If these murals are whitewashed, the cultural rhetoric surrounding the space becomes diffused, making it easier to remake the space as existing outside the reach of the *barrio* (Betancur, 2002). As Arefi (2004) noted, when an area becomes standardized through cookie-cutter buildings and homogeneous infrastructure, it ceases to have a recognizable identity and its history can be lost.

While the city is working to insert provisions in the area to slow gentrification---such as increasing demolition fees for developers and charging a deconversion fee for

tearing down multi-unit building and replacing with single-family dwellings, (Bloom, 2017; Shropshire, 2017)-- there remains an underlying fear that those Latino/a residents living along the trail in Humboldt Park will succumb to the same fate as the neighboring community of Logan Square (Yerak, 2016). This fear, along with anger, has led many residents to protest against unwanted development and further unify through collective resistance (Vivanco, 2016a, 2016b). It is plausible that intimate segregation on The 606 is a product of this resistance, as residents choose to remain close and occupy to the space they wish to protect and claim ownership (Hooper et al., 2015).

Limitations and Future Research

For the current study it is prudent to closely examine its limitations. To begin, the primary researcher in the study was a White male with a residence outside of the Humboldt Park enclave. Although the researcher took steps to prevent power inequities and establish trust in the community, his position as a powerful outsider may have led to social desirability bias or occurrence of the Hawthorne effect (Babbie, 2013; Fontana & Frey, 2000). To account for inequities in power, future studies in Humboldt Park should use methodologies that redistribute power back to those localized residents. The use of community-based participatory research (CBPR), would not only help in neutralizing power dichotomies and gaining insight into the lived experience of community members, but answer the recent call by Floyd (2014).

Another limitation of the study was that it occurred at a time when there was a considerable amount of controversy surrounding both The 606 and the gentrification occurring in Humboldt Park. The unrest brought to the neighborhood by The 606 may

have caused participants to behave in an irregular manner on the greenway and respond to the questions posed by the researcher abnormally. Given the area remains in turmoil (Bloom, 2017; Shropshire 2017), a longitudinal approach could be beneficial in helping researchers develop a more holistic understanding of how conflicts related to The 606, particularly gentrification, are altering residents perceptions of both the physical and social environment in the area. Future longitudinal studies also examine the recreational behavior of Latino/a residents who remain in the enclave. While a majority of research on green gentrification has centered on those residents who have or will be displaced, little research exist on the residents who are able to remain (Hyra, 2015).

A third limitation of this study was the lack of separation in regard to the classification of race and ethnicity during observations, specifically Latino/a and Puerto Rican. While we acknowledged that there is a stark difference these classifications, during the observation portion of our study were not able to ask each individual for these characteristics, thus limiting our ability to account for any unique effects related to the relationship between race and ethnicity and recreational behaviors and constraints. Future research in the area should consider the use of quantitative surveys, with questions allowing individuals to specify both race and ethnicity.

Conclusions and Management Implications

Our results incite many future questions regarding urban greenways and their influence on communities of color. Given The 606 is considered an innovation in park design and a template for other large urban cities seeking to integrate similar green

infrastructure (Harnik, 2012; Mortice, 2015), the polarization and lack of social interactions between The 606's communities is troublesome. While, studies have shown that leisure and recreation spaces may help different races to integrate successfully (Coutts and Miles, 2011; Shinew, Glover, & Parry, 2004), as the comments of Humboldt Park residents help showcase, when power dynamics are unequal and minority resident are excluded, green spaces have the potential to add to community divisiveness.

Aware that communities like Humboldt Park are imbued with culture and place salient to community identity and relied on for sustainability (Brown-Saracino, 2009; Ellen, 2000; Pérez, 2004; Riger & Lavrakas, 1981; Shaw and Hageman, 2015; Curren, 2018), city officials must take into account the potential paradoxical impacts of placing greenways into communities of color. While neoliberal urban politics have placed cultural commodification and fiscal gains atop the urban green hierarchy (Curren, 2018), refocused agendas of policymakers must seek to treat greenway integration as a democratic process that places social and economic equity at the forefront of greenway planning and operations. Here, a failure to proactively take steps to ensure that the integrity and composition of communities of color persists represents a direct violation of access rights and lead to unforeseen consequences on and off the greenway (i.e., intimate segregation).

The threat of green gentrification expedited by the integration of green amenities, like The 606, may only exacerbate community segregation and conflict. Knowing this, it becomes critical that provisions are put in place protecting minority spaces and residents

from gentrification before greenway construction begins. In Humboldt Park, while polices reacting to the occurring gentrification have been proposed by Chicago officials to try and slow residential displacement (Spielman, 2017), for many Latino/a families these policies are too little, too late (Trotter & Byrne, 2015). However, hope remains. As Curren and Hamilton (2012) pointed out in their case study on the Greenpoint community in Brooklyn, when local stakeholders are given the ability to collaborate with planners and policymakers on a strategic vision built around community concerns, needs and desires in the early phases of development, the resulting effect can be a green space that is inclusive, socially sustainable, and protective of lower-income residents and their enclave. Additionally, as Curren (2018) found in her recent study in Chicago, communities may also be able to address gentrification concerns at the ballot box. Working in Pilsen, a Mexican-American community on Chicago's Lower West side , Curren (2018) found that a ballot referendum can be successful tactic employed by a community to heighten transparency in development processes and challenge the way a space is changing. If this is applied to green gentrification, referendum's specifically targeting the planning and develop processes may allow community members to proactive address gentrification, thus stopping it before it begins.

This study extends the work of Coutts and Miles (2011) by helping to address the current gap in literature pertaining to the relationship between urban greenways and their impact on communities of color in large cities. Given the inclusion of urban greenways in urban settings throughout the country, it is vital to understand potential conflicts that may arise in and because of these structures. Although this study uses a different foundation

(i.e., intimate segregation) and setting (i.e., urban greenways), it also renews the "green walls" conversation first posed by Solecki and Welch (1995). Finally, the study adds to the growing body of work on social and environmental justice issues in parks and recreation, taking a critical look at how Latino/a communities may be further excluded as a result of urban greenway integration.

References

Abelson, R. P. (2012). *Statistics as principled argument.* New York, NY*:* Psychology Press.

Althoff, T., White, R. W., & Horvitz, E. (2016). Influence of pokemon go on physical activity: Study and implications. *Journal of Medical Internet Research, 18*(12), e315. doi:v18i12e315

Anderson, J. M., MacDonald, J. M., Bluthenthal, R., & Ashwood, J. S. (2012). Reducing crime by shaping the built environment with zoning: An empirical study of Los Angeles. *U.Pa.L.Rev., 161 (3)*, 699-756. doi: 23527820

Arai, S., & Kivel, B. D. (2009). Critical race theory and social justice perspectives on whiteness, difference (s) and (anti) racism: A fourth wave of race research in leisure studies. *Journal of Leisure Research, 41*(4), 459-472.

Arefi, M. (2004). The pedagogy of the American city: revisiting the concepts of place, non-place, and placelessness. *Urban Design International*, *9*(3), 103-117. doi: 10.1057/palgrave.udi.9000121

Babbie, E. R. (2013). *The basics of social research.* Belmont, CA: Cengage Learning.

Baran, P. K., Smith, W. R., Moore, R. C., Floyd, M. F., Bocarro, J. N., Cosco, N. G., & Danninger, T. M. (2014). Park use among youth and adults: Examination of individual, social, and urban form factors. *Environment & Behavior, 46*(6), 768-800. doi:10.1177/0013916512470134

Bauder, H. (2001). Work, young people and neighbourhood representations. *Social & Cultural Geography, 2*(4), 461-480. doi: 10.1080/14649360120092643

Bauder, H. (2002). Neighbourhood effects and cultural exclusion. *Urban Studies, 39*(1), 85-93. doi: 10.1080/00420980220099087

Besbris, M., Faber, J. W., Rich, P., & Sharkey, P. (2015). Effect of neighborhood stigma on economic transactions. *Proceedings of the National Academy of Sciences of the United States of America, 112*(16), 4994-4998. doi:10.1073/pnas.1414139112

Betancur, J. J. (2002). The politics of gentrification: The case of west town in Chicago. *Urban Affairs Review, 37*(6), 780-814. doi: 10.1177/107874037006002

Betancur, J., & Smith, J. (2016). *Claiming Neighborhood: New Ways of Understanding Urban Change*. Urbana, IL University of Illinois Press.

Bloom, M. (2017). Gentrification Along The 606 Could Be Curbed Under New Law, Aldermen Say. *DNAInfo*. Retrieved from

https://www.dnainfo.com/chicago/20170314/logan-square/gentrification-the-606-home-prices-demolition-fees-deconversion-fees

Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development.* Thousand Oaks, CA: Sage.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. doi: 10.1191/1478088706qp063oa

Brown-Saracino, J. (2009). *A neighborhood that never changes: Gentrification, social preservation, and the search for authenticity*. Chicago: University of Chicago Press.

Byrne, J. (2012). When green is white: The cultural politics of race, nature and social exclusion in a los angeles urban national park. *Geoforum, 43*(3), 595-611. doi: 10.1016/j.geoforum.2011.10.002

Byrne, J., & Wolch, J. (2009). Nature, race, and parks: past research and future directions for geographic research. *Progress in Human Geography*, *33*(6), 743-765. doi: 10.1177/0309132509103156

Caruso, E. M., Rahnev, D. A., & Banaji, M. R. (2009). Using conjoint analysis to detect discrimination: revealing covert preferences from overt choices. *Social Cognition*, *27*(1), 128-137. doi: 10.1521/soco.2009.27.1.128

Checker, M. (2011). Wiped out by the "greenwave": Environmental gentrification and the paradoxical politics of urban sustainability. *City & Society, 23*(2), 210-229. doi: 10.1111/j.1548-744X.2011.01063.x

Chisholm, M., & Smith, D. M. (Eds.). (2016). *Shared space: divided space: essays on conflict and territorial organization*. New York, NY: Routledge.

Cohen, D. A., Golinelli, D., Williamson, S., Sehgal, A., Marsh, T., & McKenzie, T. L. (2009). Effects of park improvements on park use and physical activity: Policy and programming implications. *American Journal of Preventive Medicine, 37*(6), 475-480. doi: 10.1016/j.amepre.2009.07.017

Cohen, D. A., McKenzie, T. L., Sehgal, A., Williamson, S., Golinelli, D., & Lurie, N. (2007). Contribution of public parks to physical activity. *American Journal of Public Health, 97*(3), 509-514. doi: 10.2105/AJPH.2005.072447

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences* New York: NY: Routledge.

Cohen, D. A., Setodji, C., Evenson, K. R., Ward, P., Lapham, S., Hillier, A., & McKenzie, T. L. (2011). How much observation is enough? refining the administration of SOPARC. *Journal of Physical Activity & Health, 8*(8), 1117-1123. doi: 10.1123/jpah.8.8.1117

Colley, A., Thebault-Spieker, J., Lin, A. Y., Degraen, D., Fischman, B., Häkkilä, J., . . . Wenig, N. (2017). The geography of pokémon GO: Beneficial and problematic effects on places and movement. Paper presented at the *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems,* 1179-1192.

Coutts, C., & Miles, R. (2011). Greenways as green magnets: The relationship between the race of greenway users and race in proximal neighborhoods. *Journal of Leisure Research, 43*(3), 317-333. doi: 925052823

Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches.* Thousand Oaks, CA: Sage.

Curran, W. (2018). 'Mexicans love red'and other gentrification myths: Displacements and contestations in the gentrification of Pilsen, Chicago, USA. *Urban Studies*, 1-18. doi 10.1177/0042098017736503

Curran, W., & Hamilton, T. (2012). Just green enough: Contesting environmental gentrification in Greenpoint, Brooklyn. *Local Environment, 17*(9), 1027-1042. doi: 10.1080/13549839.2012.729569

Dooling, S. (2009). Ecological gentrification: A research agenda exploring justice in the city. *International Journal of Urban and Regional Research, 33*(3), 621-639. doi: 10.1111/j.1468-2427.2009.00860.x

Eberhardt, J. L., Goff, P. A., Purdie, V. J., & Davies, P. G. (2004). Seeing black: Race, crime, and visual processing. *Journal of Personality and Social Psychology, 87*(6), 876-893. doi: 10.1037/0022-3514.87.6.876

Eckerd, A. (2011). Cleaning up without clearing out? A spatial assessment of environmental gentrification. *Urban Affairs Review, 47*(1), 31-59. doi: 10.1177/1078087410379720

Ellen, I. G. (2000). *Sharing america's neighborhoods*. Cambridge, MA: Harvard University Press.

Erlandson, D. A. (1993). *Doing naturalistic inquiry: A guide to methods.* Thousand Oaks, CA: Sage

Esri. (2015). *Methodology Statement: 2015/2020 Esri US Demographic Updates*. (White Paper). Esri, Redlands, CA

Flores-Gonzalez, N. (2001). Paseo boricua: Claiming a Puerto Rican space in Chicago. *Centro Journal, 13*(2), 7-23. doi: 37711308002

Floyd, M. F. (2014). Social justice as an integrating force for leisure research. *Leisure Sciences, 36*(4), 379-387. doi: 10.1080/01490400.2014.917002

Floyd, M. F., & Gramann, J. H. (1993). Effects of acculturation and structural assimilation in resource-based recreation: The case of Mexican Americans. *Journal of Leisure Research, 25*(1), 6-21.

Floyd, M. F., & Gramann, J. H. (1995). Perceptions of discrimination in a recreation context. *Journal of Leisure Research*, *27*(2), 192-199.

Floyd, M. F., Gramann, J. H., & Saenz, R. (1993). Ethnic factors and the use of public outdoor recreation areas: The case of Mexican Americans. *Leisure Sciences*, *15*(2), 83-98. doi: 10.1080/01490409309513190

Floyd, M. F., & Shinew, K. J. (1999). Convergence and divergence in leisure style among whites and african americans: Toward an interracial contact hypothesis. *Journal of Leisure Research, 31*(4), 359-384.

Fontana, A., & Frey, J. H. (2000). The interview: From structured questions to negotiated text. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of Qualitative Research, (*2nd ed. pp. 645-672). Thousand Oaks, CA: Sage.

Fox, J. (1997). *Applied regression analysis, linear models, and related methods.* Thousand Oaks, CA: Sage

Gaertner, S. L., & Dovidio, J. F. (1986). The aversive form of racism. In J.F. Dovidio & S.L. Gaertner (Eds.). *Prejudice, discrimination, and racism*, (pp.61-89). San Diego, CA.: Academic Press.

Gobster, P. H. (2002). Managing urban parks for a racially and ethnically diverse clientele. *Leisure Sciences, 24*(2), 143-159. doi: 10.1080/01490400252900121

Gobster, P. H. (1995). Perception and use of a metropolitan greenway system for recreation. *Landscape and Urban Planning, 33*(1), 401-413. doi: 10.1016/0169-2046(94)02031-A

Gobster, P. H. (1998). Urban parks as green walls or green magnets? Interracial relations in neighborhood boundary parks. *Landscape and Urban Planning, 41*(1), 43-55. doi: 10.1016/S0169-2046(98)00045-0.

Gomez-Feliciano, L., McCreary, L. L., Sadowsky, R., Peterson, S., Hernandez, A., McElmurry, B. J., & Park, C. G. (2009). Active living Logan Square: Joining together to create opportunities for physical activity. *American Journal of Preventive Medicine, 37*(6), 361-367. doi:10.1016/j.amepre.2009.09.003.

González, E. R. (2017). *Latino City: urban planning, politics, and the grassroots*. New York, NY: Taylor & Francis.

Gould, K. A., & Lewis, T. L. (2016). *Green Gentrification: Urban sustainability and the struggle for environmental justice*. New York, NY: Routledge.

Gupta, A., & Ferguson, J. (1997). *Culture, power, place: Explorations in critical anthropology.* Durham, NC*:* Duke University press.

Harnik, P. (2012). *Urban green: Innovative parks for resurgent cities*. Washington, DC: Island Press.

Harris, B., Larson, L., & Ogletree, S. (2017). Different views from the 606: Examining the impacts of an urban greenway on crime in Chicago. *Environment and Behavior,* , 0013916517690197.

Heck, R. H., Thomas, S., & Tabata, L. (2013). *Multilevel modeling of categorical outcomes using IBM SPSS*. New York, NY: Routledge.

Hidalgo, M. C., & Hernandez, B. (2001). Place attachment: Conceptual and empirical questions. *Journal of Environmental Psychology, 21*(3), 273-281. doi: 10.1006/jevp.2001.0221

Hooper, P. L., Smith, E. A., Kohler, T. A., & Kaplan, H. (2015). Ecological and social dynamics of territoriality and hierarchy formation. *Principles of Complexity: An Introduction to Complex Adaptive Systems and Human Society,* 1-12*.*

Hutchison, R. (1987). Ethnicity and urban recreation: Whites, Blacks, and Hispanics in Chicago's public parks. *Journal of Leisure Research*, *19*(3), 205-222.

Hyra, D. (2015). The back-to-the-city movement: Neighbourhood redevelopment and processes of political and cultural displacement. *Urban Studies*, *52*(10), 1753-1773.doi: 10.1177/0042098014539403

Keith, S. J., Larson, L. R., Hallo, J. C., Shafer, C. S., & Fernandez, M. (2018). Greenway use and preferences in diverse urban communities: Implications for trail design and management. *Landscape and Urban Planning*, 172, 47-59. doi: 10.1016/j.landurbplan.2017.12.007

Keith, M., & Pile, S. (2013). *Geographies of resistance.* New York, NY: Routledge.

Larson, L. R., Keith, S. J., Fernandez, M., Hallo, J. C., Shafer, S. C., & Jennings, V. (2016). Ecosystem services and urban greenways: What's the public's perspective? *Ecosystem Services, 22*: 111-116. doi: 10.1016/j.ecoser.2016.10.004

Levinson, D. (1994). *Ethnic relations: a cross-cultural encyclopedia*. Santa Barbara, CA: Abc-Clio Incorporated.

Librett, J. J., Yore, M. M., & Schmid, T. L. (2006). Characteristics of physical activity levels among trail users in a US national sample. *American Journal of Preventive Medicine, 31*(5), 399-405. doi: 10.1016/j.amepre.2006.07.009

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry.* Thousand Oaks, CA: Sage.

Littke, H., Locke R., Haas, T., (2015). Taking the High Line: elevated parks, transforming neighbourhoods, and the ever-changing relationship between the urban and nature. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability, 9(4),*353-371. doi: 10.1080/17549175.2015.1063532

Loukaitou-Sideris, A. (1995). Urban form and social context: Cultural differentiation in the uses of urban parks. *Journal of Planning Education and Research, 14*(2), 89-102. doi: 10.1177/0739456X9501400202

Low, S. (2013). Public space and diversity: Distributive, procedural and interactional justice for parks. In G. Young, & D. Stevenson (Eds.). *The Ashgate research companion to planning and culture* (pp. 295–310). Surrey, England: Ashgate Publishing.

Low, S., Taplin, D., & Scheld, S. (2009). *Rethinking urban parks: Public space and cultural diversity.* Austin, TX: University of Texas Press.

Mack, N., Woodsong, C., MacQueen, K. M., Guest, G., & Namey, E. (2005). *Qualitative research methods: A data collectors field guide*. Research Triangle Park, NC: Family Health International

Massey, D. S., & Denton, N. A. (1993). *American apartheid: Segregation and the making of the underclass*. Cambridge, MA: Harvard University Press.

McIntyre, A. (2000). Constructing meaning about violence, school, and community: Participatory action research with urban youth. *The Urban Review, 32*(2), 123-154. doi: 10.1023/A:1005181731698

McKenzie, T. L., Cohen, D. A., Sehgal, A., Williamson, S., & Golinelli, D. (2006). System for Observing Play and Recreation in Communities (SOPARC): reliability

and feasibility measures. *Journal of Physical Activity and Health*, *3*(s1), S208-S222. doi: doi.org/10.1123/jpah.3.s1.s208

Miles, M. B., Huberman, A. M., & Saldana, J. (2013). *Qualitative data analysis: A methods sourcebook*. Thousand Oaks, CA: Sage.

Minnery, J. R., & Lim, B. (2005). Measuring crime prevention through environmental design. *Journal of Architectural and Planning Research, 22*(4), 330-341. doi: 43030751

Moore, D. S. (1997). Remapping resistance:"Ground for struggle" and the politics of place. In S. Pile & M. Keith (Eds.), *Geographies of Resistance,* (pp. 87-106). New York, NY: Routledge

Moore, D. S., Pandian, A., & Kosek, J. (2003). The cultural politics of race and nature: Terrains of power and practice. In D. Moore, J. Kosek, & A. Pandian (Eds.), *Race, nature and the politics of difference*, (pp. 1-70). Durham, NC: Duke University Press.

Mortice, Z. (2015). The express lane: Chicago's elevated rail park, The 606, was conceived and funded as transit infrastucture. *Landscape Architecture Magazine, 105*(4), 80-82.

Mowatt, R. A. (2009). Notes from a leisure son: Expanding an understanding of whiteness in leisure. *Journal of Leisure Research, 41*(4), 511-528.

Mumm, J. (2008). Report from the field: Redoing chicago: Gentrification, race, and intimate segregation. *North American Dialogue, 11*(1), 16-19. doi: 10.1111/j.1556-4819.2008.00007.x

Mumm, J. (2016). Gentrification in color and time: White and puerto rican racial histories at work in Humboldt Park. *Centro Journal, 28*(2), 88-125.

O'Brien, B. C., Harris, I. B., Beckman, T. J., Reed, D. A., & Cook, D. A. (2014). Standards for reporting qualitative research: A synthesis of recommendations. *Academic Medicine : Journal of the Association of American Medical Colleges, 89*(9), 1245-1251. doi:10.1097/ACM.0000000000000388

Park, R. E., Burgess, E. W., & McKenzie, R. D. (1984). *The city.* Chicago, IL: University of Chicago Press.

Patton, M. Q. (2002). *Qualitative evaluation and research methods.* Thousand Oaks, CA: Sage.

Pearsall, H., & Anguelovski, I. (2016). Contesting and resisting environmental gentrification: Responses to new paradoxes and challenges for urban environmental justice. *Sociological Research Online*, 21(3), 1–7. doi: 10.5153/sro.3979.

Pérez, G. (2004). *The near northwest side story: Migration, displacement, and Puerto Rican families. Berkeley, CA:* University of California Press.

Pérez, G. M. (2002). The other" real world": Gentrification and the social construction of place in Chicago. *Urban Anthropology and Studies of Cultural Systems and World Economic Development, 31(1)* , 37-68. doi: 40553556

Perez, S. (2016). Pokémon go passed 100 million installs over the weekend. Retrieved from *https://techcrunch.com/2016/08/01/pokemon-go-passed-100-million-installs-over-the-weekend/.*

Peters, K. (2010). Being together in urban parks: Connecting public space, leisure, and diversity. *Leisure Sciences, 32*(5), 418-433. doi: 10.1080/01490400.2010.510987

Price, A. E., Reed, J. A., & Muthukrishnan, S. (2012). Trail user demographics, physical activity behaviors, and perceptions of a newly constructed greenway trail. *Journal of Community Health, 37*(5), 949-956. doi: 10.1007/s10900-011-9530-z

Reed, J. A., Arant, C., Wells, P., Stevens, K., Hagen, S., & Harring, H. (2008). A descriptive examination of the most frequently used activity settings in 25 community parks using direct observation. *Journal of Physical Activity & Health, 5(1)*, S183-S195. doi: 10.1123/jpah.5.s1.s183

Reed, J. A., McKenzie, T. L., Hagen, S., & Harring, H. (2007). Using direct observation methodology to measure trail-use. *The ICHPER-SD Journal of Research in Health, Physical Education, Recreation, Sport & Dance, 2*(2), 33-39.

Reed, J. A., Morrison, A., & Arant, C. (2009). Profile differences of users of paved versus natural-surface trails. *Journal of Physical Activity & Health, 6*(1), 112-118. doi: 10.1123/jpah.6.1.112

Riger, S., & Lavrakas, P. J. (1981). Community ties: Patterns of attachment and social interaction in urban neighborhoods. *American Journal of Community Psychology, 9*(1), 55-66. doi: 10.1007/BF00896360

Rigolon, A., & Németh, J. (2018). "We're not in the business of housing:" Environmental gentrification and the nonprofitization of green infrastructure projects. *Cities*. doi: 10.1016/j.cities.2018.03.016

Rinaldo, R. (2002). Space of resistance: The Puerto Rican cultural center and Humboldt Park. *Cultural Critique, 50*(1), 135-174. doi: 10.1353/cul.2002.0010

Rodríguez-Muñiz, M. (2016). Riot and Remembrance: Puerto Rican Chicago and the Politics of Interruption. *Centro Journal*, *28*(2), 204-217.

Rúa, M. M. (2012). *A grounded identidad: making new lives in Chicago's Puerto Rican neighborhoods*. New York, NY: Oxford University Press.

Sack, R. D. (1983). Human territoriality: A theory. *Annals of the Association of American Geographers, 73*(1), 55-74. doi: 10.1111/j.1467-8306.1983.tb01396.x

Sack, R. D. (1986). *Human territoriality: Its theory and history.* Cambridge, UK: Cambridge University Press.

Sampson, R. J. (2009). Racial stratification and the durable tangle of neighborhood inequality. *The Annals of the American Academy of Political and Social Science, 621*(1), 260-280. doi: 10.1177/0002716208324803

Sampson, R. J. (2012). *Great American City: Chicago and the enduring neighborhood effect.* Chicago, IL*:* University of Chicago Press.

Shafer, C. S., Lee, B. K., & Turner, S. (2000). A tale of three greenway trails: User perceptions related to quality of life. *Landscape and Urban Planning, 49*(3), 163-178.

Sharaievska, I., Stodolska, M., Shinew, K. J., & Kim, J. (2010). Perceived discrimination in leisure settings in latino urban communities. *Leisure/Loisir, 34*(3), 295-326. doi: 10.1080/14927713.2010.521319

Sharkey, P. (2013). *Stuck in place: Urban neighborhoods and the end of progress toward racial equality*. Chicago, IL: University of Chicago Press.

Shaw, K., & Hagemans, I. (2015). 'Gentrification without displacement' and the consequent loss of place: The effects of class transition on low-income residents of secure housing in gentrifying areas. *International Journal of Urban and Regional Research,* 39(2), 323–341. doi: 10.1111/1468-2427.12164

Shinew, K. J., Floyd, M. F., & Parry, D. (2004). Understanding the relationship between race and leisure activities and constraints: Exploring an alternative framework. *Leisure Sciences, 26*(2), 181-199. doi: 10.1080/01490400490432109

Shinew, K. J., Glover, T. D., & Parry, D. C. (2004). Leisure spaces as potential sites for interracial interaction: Community gardens in urban areas. *Journal of Leisure Research, 36*(3), 336-355.

Shropshire, C. (2017). Aldermen want to 'put a brake' on gentrification along The 606. *Chicago Tribune.* Retrieved from http://www.chicagotribune.com/business/ct-606-housing-fees-proposal-0310-biz-20170309-story.html

Sinah, A. (2014). Slow landscapes of elevated linear parks: Bloomingdale Trail in Chicago. *Studies in the History of Gardens & Designed Landscapes*, *34*(2), 113-122. doi: 10.1080/14601176.2013.830428.

Solecki, W. D., & Welch, J. M. (1995). Urban parks: Green spaces or green walls? *Landscape and Urban Planning, 32*(2), 93-106. doi: 10.1016/0169-2046(94)00193-7

Spielman, F. (2017). Aldermen propose hefty fees to stop 606 gentrification. *Chicago Sun Times.* Retrieved from http://chicago.suntimes.com/news/aldermen-propose-hefty-fees-to-stop-606-gentrification/

Stodolska, M., & Shinew, K. J. (2010). Environmental constraints on leisure time physical activity among latino urban residents. *Qualitative Research in Sport and Exercise, 2*(3), 313-335. doi: 10.1080/19398441.2010.517038

Stodolska, M., Shinew, K. J., & Li, M. Z. (2010). Recreation participation patterns and physical activity among Latino visitors to three urban outdoor recreation environments. *Journal of Park and Recreation Administration*, *28*(2). 35-56.

Stodolska, M., Shinew, K.., Floyd, M., Walker, G. (2013). *Race, ethnicity, and leisure.* Champaign, IL: Human Kinetics.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory.* Thousand Oaks, CA*:* Sage

Suarez, R. (1999). *The old neighborhood: What we lost in the great suburban migration, 1966-1999.* New York, NY: Simon and Schuster.

Taylor, R. B., Gottfredson, S. D., & Brower, S. (1985). Attachment to place: Discriminant validity, and impacts of disorder and diversity. *American Journal of Community Psychology, 13*(5), 525-542. doi: 10.1007/BF00923265

The Story. (n.d.). In The 606. Retrieved from http://www.the606.org/about/the-story/

Trotter, G., & Byrne, J. (2015). Chicago's new 606 park stirs gentrification fears. *Chicago Tribune* Retrieved from http://www.chicagotribune.com/news/local/breaking/ct-606-bloomingdale-trail-gentrification-met-20150605-story.html

U.S. Census Bureau (2015). 2010 American Community Survey. American Fact Finder. Washington, DC: U.S. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml#

Vivanco, L. (2016a). Marchers take to The 606 trail to protest gentrification. *The Chicago Tribune*. Retrieved from http://www.chicagotribune.com/news/local/breaking/ct-606-trail-march-gentrification-met-0517-story.html

Vivanco, L. (2016b). The 606 trail, a study in contrast, celebrates its first birthday. *The Chicago Tribune.* Retrieved from http://www.chicagotribune.com/news/ct-606-trail-anniversary-met-0531-20160602-story.html

Warren, P. Y., Stewart, E. A., Tomaskovic-Devey, D., & Gertz, M. (2012). White's residential preferences: Reassessing the relevance of criminal and economic stereotypes. *Race and Justice*, *2*(4), 231-249. doi: 10.1177/2153368712452908

Whiting, J. W., Lawson, L. R., & Green, G. T. (2012). Monitoring visitation in Georgia state parks using the system for observing play and recreation in communities (SOPARC). *Journal of Park and Recreation Administration, 30*(4), 21-37.

Williams, C. H., & Kofman, E. (Eds.). (1989). *Community conflict, partition and nationalism*. London, UK: Routledge

Wilson, D., & Grammenos, D. (2005). Gentrification, discourse, and the body: Chicago's Humboldt Park. *Environment and Planning D: Society and Space, 23*(2), 295-312. doi: 10.1068/d0203

Wolch, J. R., Byrne, J., & Newell, J. P. (2014). Urban green space, public health, and environmental justice: The challenge of making cities 'just green enough'. *Landscape and Urban Planning, 125*, 234-244. doi: 10.1016/j.landurbplan.2014.01.017

Wolch, J. R., Tatalovich, Z., Spruijt-Metz, D., Byrne, J., Jerrett, M., Chou, C., . . . Reynolds, K. (2010). Proximity and perceived safety as determinants of urban trail use: Findings from a three-city study. *Environment and Planning A, 42*(1), 57-79. doi: 10.1068/a41302

Yerak, B. (2016). Hot neighborhoods: Humboldt Park, West Pullman among areas showing gains. *The Chicago Tribune.* Retrieved from http://www.chicagotribune.com/business/ct-hot-chicago-housing-markets-0207-biz-20160205-story.html

Chapter III: Appendix A (SOPARC Template)

DATE______TRAIL________AREA____________WEATHER___________TIME_______OBS ______

ACCESS POINT______________ Area/Access Point Condition____________

ACTIVITY				GENDER		AGE GROUP				RACE				
W	R	B	S	F	M	Child	Teen	Adult	Sen	W	L	B	A	O

Figure 6: *SOPARC template used to record observations on The 606*

Chapter III: Appendix B (Logistic Regression Table)

Access Point_ Comparison	***1_2-12 (n=4556)***			***2_3-12 (n=4280)***			***3_4-12 (n=3972)***			***4_5-12 (n=3693)***			***5_6-12 (n=3200)***			***6_7-12 (n=2886)***		
Effect	**β (*SE*)**	***Exp(β)***	***Sign***	**β (*SE*)**	***Exp(β)***	***Sign***	**β (*SE*)**	***Exp(β)***	***Sign***	**β (*SE*)**	***Exp(β)***	***Sign***	**β (*SE*)**	***Exp(β)***	***Sign***	**β (*SE*)**	***Exp(β)***	***Sign***
Intercept (=0)	-3.42 (.114)	.033	.000	-3.03 (.097)	.048	.000	-2.94 (.095)	.053	.000	-2.19 (.071)	.111	.000	-2.564 (.087)	.077	.000	-2.81 (.101)	.060	.000
Race (=1)	1.18 (.136)	3.24	.000	.904 (.123)	2.47	.000	.722 (.126)	2.06	.000	.701 (.098)	2.01	.000	.764 (.120)	2.15	.000	1.06 (.133)	2.88	.000
R^2_L	.044			.026			.017			.019			.02			.037		
Probability (Race)	.764			.711			.673			.668			.682			.742		

Access Point_ Comparison	***7_8-12 (n=2627)***			***8_9-12 (n=2420)***			***9_10-12 (n=1773)***			***10_11-12 (n=1113)***			***11_12 (n=583)***			
Effect	**β (*SE*)**	***Exp(β)***	***Sign***	**β (*SE*)**	***Exp(β)***	***Sign***	**β (*SE*)**	***Exp(β)***	***Sign***	**β (*SE*)**	***Exp(β)***	***Sign***	**β (*SE*)**	***Exp(β)***	***Sign***	
Intercept (=0)	-2.65 (097)	.071	.000	-1.06 (.057)	.347	.000	-.731 (.062)	.482	.000	-.143 (.07)	.867	.042	.203 (.097)	1.224	.035	
Race (=1)	.492 (.146)	1.64	.001	.146 (.097)	1.16	.131	.621 (.104)	1.86	.000	.176 (.135)	1.19	.193	-.107 (.191)	.898	.575	
R^2_L	.01			NS			.02			NS			NS			
Probability (Race)	.621			.537			.650			.543			.473			

Table 2: *Nested Logistic Regression with Access Point Partitions*

Code: 0=White; 1 =Latino; R2L=Effect Size; β= Beta; SE=Standard Error; Exponential (β)=Odds Ratio; Degrees of Freedom=1;NS=Not Significant

Chapter III: Appendix C (Interview Participant Information)

Table 3: *Pseudonyms and Demographic Information for Humboldt Park/Logan Square Interview Participants*

Pseudonym	Race	Gender	Age
Ally	Latino/a/Hispanic	Female	32
Adam	Asian	Male	41
Adrian	Latino/a/Hispanic	Male	28
Alan	Latino/a/Hispanic	Male	19
Alice	Latino/a/Hispanic	Female	28
Ana	Latino/a/Hispanic	Female	35
Avery	White	Female	54
Bella	Latino/a/Hispanic	Female	45
Brook	White	Female	46
Carla	Latino/a/Hispanic	Female	54
Chris	Latino/a/Hispanic	Male	18
Cynthia	Latino/a/Hispanic	Female	26
Danielle	Latino/a/Hispanic	Female	35
Dante	Latino/a/Hispanic	Male	40
Diego	Latino/a/Hispanic	Male	36
Edwin	Latino/a/Hispanic	Male	33
Emma	Latino/a/Hispanic	Female	26
Franco	Latino/a/Hispanic	Male	19
Garrett	Black	Male	29
Grace	White	Female	31
Hannah	Latino/a/Hispanic	Female	18
Hugo	Latino/a/Hispanic	Male	18
Isabella	Latino/a/Hispanic	Female	24
Jackson	White	Male	28
Jacob	White	Male	38
James	Black	Male	42
Jennifer	White	Female	28
Jessica	White	Female	21
Jordan	Latino/a/Hispanic	Male	18
Julian	Latino/a/Hispanic	Male	53
Kyle	Latino/a/Hispanic	Male	18
Lily	Latino/a/Hispanic	Female	31
Lonnie	Latino/a/Hispanic	Male	27
Lorenzo	Latino/a/Hispanic	Male	50
Lucas	Latino/a/Hispanic	Male	24

Luis	Latino/a/Hispanic	Male	19
Maria	Latino/a/Hispanic	Female	43
Martin	Latino/a/Hispanic	Male	36
Mateo	Latino/a/Hispanic	Male	29
Max	White	Male	41
Maya	Latino/a/Hispanic	Female	48
Mila	Latino/a/Hispanic	Female	68
Nathan	White	Male	33
Patty	White	Female	28
Robert	Black	Male	18
Ryan	White	Male	32
Sofia	Latino/a/Hispanic	Female	35
Susan	Latino/a/Hispanic	Female	39
Teresa	White	Female	56
Tori	White	Female	32
Victoria	Latino/a/Hispanic	Female	24
Wyatt	Latino/a/Hispanic	Male	19
Zelda	White	Female	63
Zoe	Latino/a/Hispanic	Female	66

CHAPTER IV: CHAPTER FOUR: EXAMINING NEIGHBORHOOD STIGMA IMPACTS ON URBAN GREENWAY USE AND GREENWAY-PROXIMATE COMMUNITIES

Introduction

In urban park and recreation settings, ethnic and racial minorities have often been the subject of persistent marginalization and discrimination (Byrne, 2012; Floyd, 2014, Sharaievska et al., 2010; West, 1989). With the recent migration back to the urban center, these chronic factors are at risk enduring as Whites begin to take up residence in spaces either close to or in communities of color (Betancur, 2002; Gehl, 2013; Hwang, 2015). The influx of White urbanites into the central city is of particular concern for Latino/as, whose communities are often located in close proximity to centralized business districts and/or economic hubs, making them desirable locations for the newcomers (Diaz & Torres, 2012). Here, negative stereotypes surrounding Latino/a bodies may lead Whites to avoid interactions and exclude Latino/as within shared park and recreational spaces (Rodriguez, 2012; Sharaievska et al., 2010). Additionally, because negative stereotypes can manifest not only as discrimination on the individual body but as a stigma surrounding an entire area (Sampson & Raudenbush, 2004; Sampson & Raudenbush, 2005; Sampson, 2012), Whites entering a Latino/a enclave may attempt to use the stigma as a catalyst for neighborhood alterations and eventual transformation.

Katz and Kirby (1991) posited that parks and green spaces may serve as figurative representations of social hierarchies and power structures that can be created and manipulated to reproduce inequities in the social order. Although parks and green spaces are often regarded by Whites as rather innocuous havens in the urban landscape

(Taylor, 1999), several studies have revealed that these spaces are often created and conformed to White elitist ideals (Byrne & Wolch, 2009; Byrne, 2012; Gandy, 2003; Wolch, Byrne, & Newell, 2014). In these cases, parks and green spaces may be used as a measure of social control (Taylor, 1999; Byrne, 2012), inclusive only to those who meet or assimilate themselves into to the existing social construct (Byrne & Wolch, 2009; Floyd & Johnson, 2002; Gandy, 2003; Shinew, Floyd, & Parry, 2004; Stodolska & Shinew, 2010). Social inequities regarding race, class, and ability (to name a few) then play out in the provision and availability of urban green spaces. Research has indicated that the inequalities of green space access experienced by people of minority populations can be attributed to socio-cultural factors (e.g., cultural conceptions of leisure, poverty), socio-spatial determinants (e.g., park features, proximity), and discrimination (Byrne & Wolch, 2009; Byrne, 2012; Floyd, 1998; Floyd, 2007; Sharaievska et al., 2010; Shinew, Stodolska, Floyd, Hibbler, Allison, Johnson, & Santos, 2006).

The primary focus of this study centers on that of discrimination (West, 1989) and more precisely the concept of *neighborhood stigma* (Sampson & Raudenbush, 2004; Sampson & Raudenbush, 2005). Founded on the idea that Whites will seek to avoid minorities and their spaces due to perceptions of social disorganization and disorder (Sampson & Raudenbush, 2004), this concept has been used to explore urban migration patterns and residential segregation (Ellen, 2000), crime and disorder (Sampson & Raudenbush, 2004; Sampson & Raudenbush, 2005), and purchasing decisions (Besbris, Faber, Rich, & Sharkey, 2015). To date, however, the concept of neighborhood stigma has yet to be studied in relation to park and recreational behaviors. Given the influx of

new residents entering what once stood as segregated spaces and the connective properties that some of these contemporary urban parks hold, neighborhoods stigma's application to behavior in park spaces could provide potentially valuable insight for both park and recreation professionals and city officials. For the following study, we focus on a contemporary park in Chicago known as The 606 (Mortice, 2015; Sinah, 2014). An urban greenway, The 606, connects the Puerto Rican enclave of Humboldt Park, which has historically avoided and stigmatized by Whites (Pérez, 2004; Rúa, 2012), with communities characterized by a predominantly White (Wicker Park and Bucktown) or rapidly gentrifying (Logan Square) demographic (US Census Bureau, 2015). This study seeks then to understand how the neighborhood stigma surrounding Humboldt Park is negotiated by greenway users and local residents at both ends of greenway.

Review of Literature

Latino/a Park Use Constraints

Several studies have shown that Latino/as often differ from Whites and other races in their construction of leisure and leisure preference (Baas, Ewert, & Chavez, 1993; Floyd & Shinew, 1999; Floyd, 2001; Hutchison, 1987; Manning, 2010; Stodolska & Walker, 2007; Whiting, Larson, Green, & Kralowec, 2017). For Latino/as, including those of Puerto Rican descent, recreation and leisure engagement frequently takes place in large groups, where emphasis is placed on socialization, family, and culture (Gobster, 2002; Gomez & Malega, 2007; Hutchison, 1987; Stodolska, Shinew, Floyd, & Walker, 2013). Urban greenways are also different in respect to the leisure and recreation engagement between Whites and Latino/as (Cronan, Shinew, & Stodolska, 2008; Keith,

Larson, Hallo, Shafer, & Fernandez, 2018). For example, examining the Lincoln Park Trail System in Chicago, Cronan, et al. (2008) found that Latino/as often used the trail system as a way of resting, relaxing, and socializing. The study also found that Latino/as used adjacent areas surrounding the trails to celebrate their culture by creating plazas reflecting those in their homeland. Conversely, research has shown that Whites are more likely to use urban trails for vigorous forms of recreation such as biking, running, or rollerblading (Lindsey, Han, Wilson, & Yang, 2006; Price, Reed, & Muthukrishnan, 2012). Although these discrepancies are often a product of culture (Stodolska et al., 2013), the benefits (perceived and realized) associated with greenways do not appear to be equally distributed across communities (Lindsey et al., 2006; Wolch et al., 2010). Multiple studies have revealed a vast majority of greenway users are White, wealthy, and educated (Coutts & Miles, 2011; Lindsey et al., 2006; Price & Reed, 2014), suggesting greenways are underutilized by racial/ethnic minorities and residents with lower levels of income and education. Some researchers have suggested that these differences may lead to a devaluation of minority group's interests and culture, potentially leading to conflicts and/or the displacement of the minority group (Byrne, 2012; Low, Taplin, & Scheld, 2009; Wolch et al., 2014).

In addition to the socio-cultural constraints, Latino/as frequently face structural constraints related to socio-spatial factors, such as lack of access, income disparities, and inadequate transportation (Dahmann, Wolch, Joassart-Marcelli, Reynolds, & Jerrett, 2010; Moore, Roux, Evenson, McGinn, & Brines, 2008; West, 1989; Wolch & Zhang, 2004). Urban park inequalities become a function of historical patterns of

disenfranchisement that render minorities unable to gain access to park spaces and/or resources (Byrne, 2012; Floyd & Gramann, & Saenz, 1993; Wolch, Wilson, & Fehrenbach, 2005). Here, social stratification manifests itself spatially, whereby holding a disadvantaged status compared to Whites, Latino/as are subjected to structural constraints hindering both their ability to frequent parks or engage the spaces due to lesser or absent resources (e.g. picnic facilities, properly maintained equipment, adequate restrooms) (Bruton & Floyd, 2014; Dahmann et al., 2010; Moore et al., 2008; Stodolska & Shinew, 2010).

Literature has also shown that structural inequalities, such as a lack of park maintenance or services, in Latino/a communities can have direct consequences to the community's social fabric (Shinew, Stodolska, Roman, & Yahner, 2013; Stodolska, Acevedo, & Shinew, 2009; Stodolska, Shinew, Acevedo, & Izenstark, 2011; Stodolska, Shinew, Acevedo, & Roman, 2013). When park spaces are left to decay they can become a breeding ground for crime and disorder, further perpetuating racial stigma, prejudice, and discrimination (Groff & McCord, 2012; Stodolska & Shinew, 2010; Stodolska et al., 2011; Stodolska et al., 2013).

Stereotyping and Discrimination

Feagin and Eckberg (1980) defined racial/ethnic discrimination as "the practices and actions of dominant race-ethnic groups that have a differential and negative impact on subordinate race-ethnic groups" (p. 9). Given the fact that recreation and leisure activities are frequently intertwined with social constructs (Solecki & Welch, 1995), racial stereotypes in these settings can extend existing hierarchies and discriminatory

practices (Floyd, 2007). As Floyd (2007) suggested, for marginalized communities such as African Americans and Latino/as, leisure may assist in "the creation and reinforcement of racist practices" (p. 249). Although, several definitions of stereotyping have been proposed (see Dovidio, Brigham, Johnson, & Gaertner 1996), Brigham's (1971) explanation of the concept captured the pejorative sense of the term, forming the foundation that is used in everyday discourse. Brigham (1971) believed negative stereotypes should be seen as generalizations about a collective or its members that is unjustified by observers (Dovidio et al., 1996). Under this definition, a stereotype reflects "faulty thought processes or overgeneralization, factual incorrectness, inordinate rigidity, an inappropriate pattern of attribution, or a rationalization for a prejudiced attitude or discriminatory behavior" (Dovidio et al., 1996, p. 280). For Latino/as living in urban setting, stereotypic conceptions imbued by Whites often associate them with crime, deviance, and disorder (Wilson & Taub, 2006). In doing so, Whites often avoid interactions and denounce the spaces that Latino/as occupy (Besbris et al., 2015; Sampson & Raudenbush, 2005; Wilson & Taub, 2006).

Neighborhood Stigma

Stigma can be defined as the prejudice, discrimination, and negative stereotyping of a group based upon a set of existing characteristics believed truths by a larger, more powerful ingroup (Crocker, 1999; Major & O'Brien, 2005). Although not labeled as stigma, Allport (1954) first addressed stigma and its consequences in *The Nature of Prejudice,* viewing it as a categorization tool, used by individuals to address initial dissonance. In his view, individuals use stereotypes to provide initial information about

others with whom they are not familiar, thus simplifying social perceptions. Erving Goffman (1963) continued to build on Allport's framework, and in 1963 resurrected the term "stigma" in his book, *Stigma: Notes on a Spoiled Identity*. According to Goffman (1963), when an individual becomes stigmatized the stigma becomes an attribute that serves to effectively discredit the individual and reducing him or her "from a whole and usual person to a tainted, discounted one" (p. 3). Under his notion, once stigma was attached to an individual or group, they became devalued by others and seen as foundational flawed and ill fitted for interaction (Crocker, 1999).

While stigma may be inculcated due to a variety of factors (see Neuberg, Smith, & Asher 2000), in urban environments where minorities are frequently segregated into homogeneous communities, stigma is primarily based on race and perceived disorder within communities of color (Sampson, 2012). As Loury and Loury (2009) explained, dark skin is an easily observed trait that has become indoctrinated with meaning about crime and disorder, possessing the ability to stigmatize not only a classification of people, but the places in which they reside. This sentiment was echoed by Ellen (2000) who conceptualized the race-based neighborhood stereotyping hypothesis. In her hypothesis, Ellen (2000) viewed neighborhood stigma as a deeply seeded social construction built by Whites around future neighborhood expectations. From her perspective minority neighborhoods are viewed as observable examples of deterioration in school quality, public safety, and a downward future trajectory of a neighborhood. Expanding on these studies, Sampson and Raudenbush (2004) coined the term *neighborhood racial stigma* to describe how pervasive stereotypes formed from perceived deviance serve as the basis for

discrimination against minority residents and their communities. According to the authors, because Whites typically hold persistent beliefs about disadvantaged communities of color they have a tendency, unconsciously or not, to link minority residents to crime, violence, disorder, and neighborhood decay (Sampson & Raudenbush, 2005). In urban locations, like Chicago, these notions become reinforced by involuntary stratification and concentrated poverty. Over time these associations cause institutional divestment, neighborhood avoidance by Whites, and a stamp of disorder assigned to the community. Sampson and Raudenbush (2005) articulated "race in American society is a statistical marker that stigmatizes not only individuals but the places in which they are concentrated" (p. 7).

Using Latino/a and Black neighborhoods in Chicago as the backdrop, Sampson and Raudenbush (2004) contended that perceptions of neighborhood deviance are suffused with social meanings exclusive from objective physical conditions. Findings from their study showed that neighborhoods composed of a high number of ethnic minorities were perceived to be significantly more deviant than White neighborhoods, regardless of more objective measures of crime such as the number of crime-related incidents reported in the area (Sampson & Raudenbush, 2004). A follow up study by Sampson and Raudenbush (2005) revealed similar results, once again finding that neighborhoods comprised of a higher proportion of Blacks and/or Latino/as were positively and significantly correlated to perceived deviance. A more recent study by Besbris et al. (2015) also provided additional support for this notion. Using an audit design to measure the influence of neighborhood stigma on economic transactions across

12 metro locations, Besbris et al. (2015) found that individuals from disadvantaged neighborhoods carry a stigma that, hiders their ability to engage in economic exchanges with individuals located outside of the immediate enclave. The authors also found that neighborhood stigma becomes magnified when concentrated poverty and perceived crime are prevalent. Other studies by Bauder (2001, 2002) showed that neighborhood stigma can also hinder the ability of neighborhood residents to obtain employment, incite behaviors that perpetuate the inculcated stereotype, and reinforce cultural exclusion. One such neighborhood where this has occurred is Chicago's Humboldt Park (Rinaldo, 2002; Rúa, 2012; Wilson & Grammenos, 2005).

Humboldt Park

Park, McKenzie, and Burgess (1967) recognized in their work *The City* that Chicago's landscape resembled a collage, a fragmented world consisting of homogenous neighborhoods that shared spatial proximity, but drastic distinctiveness in terms of social status, physical infrastructure, and cultural identity (Betancur & Smith, 2016). For Puerto Rican residents, in no place has their heritage and identity become more prominent or celebrated than in the neighborhood of Humboldt Park (Pérez, 2004; Rúa, 2012). Anchored by the famed Paseo Boricua and characterized by Puerto Rican focused businesses, services, flags, and monuments, the enclave reproduces feelings of national pride, liberation, and unbroken determination (Bentancur & Smith, 2016; Flores-Gonzalez, 2001; Pérez, 2004; Rúa, 2012). However, while collective identity and cultural expression succeeded in establishing the space as distinctively Puerto Rican (Flores-Gonzalez, 2001; Rinaldo, 2002; Toro-Morn, 2016), since 1966 when riots

engulfed the enclave, the perception by many outsiders has been that the neighborhood is derelict, occupied by gangs and plagued with disorder (Humboldt Park was referred to as "hell's living room" in 1997 by a *Chicago Tribune* writer) (Mumm, 2016; Pérez, 2004). These perceptions, along with divestment, combined to place a stigma on the enclave and decades of avoidance by outsiders (Wilson & Grammenos, 2005).

Neighborhood Stigma and Parks

Prior research has shown that parks and trails can serve as dividing lines between White and Latino/a areas in urban locations (Gobster, 1998; Solecki & Welch, 1995; Suarez, 1999). For example, studying Boston-area parks Solecki and Welch (1995) found that when parks are placed between heterogeneous populations they may act as a barrier or "green wall", leading to exclusion and further propagating segregation. Working in Chicago, Gobster (1998) also found a lack of interactions between Whites and residents of color, including Latino/as, in neighborhood parks and greenways. Although these studies provided a glimpse into how community residents may navigate a park separating diverse communities, neither study yielded information pertaining to user behavior when connectivity and social interactions are built into the very nature of the park.

With their unique nature and design, contemporary urban greenways, such as New York's Highline and Chicago's Bloomingdale Trail, are changing this dynamic of urban communities by connecting neighborhoods that have significant variations in terms of socioeconomic status, culture, and values (Gomez-Feliciano et al., 2009; Harnik, 2012; Low et al., 2009; Mortice, 2015). Additionally, because these greenways are being constructed in places once stigmatized for disorder and avoided (e.g. Humboldt Park)

(Brisman, 2012; Harnik, 2012; Mumm, 2016), questions persist on how individuals will not only interact, but navigate stigmatized areas along the greenways' route. To date, few studies have specifically examined urban greenways that traverse communities with diverse ethnic and racial composition (Coutts & Miles, 2011; Harris, Larson, & Ogletree, 2017). A study conducted by Coutts and Miles (2011) on urban greenways in Michigan, found that when effectively programmed, maintained, and supervised greenways may encourage interactions between diverse communities, thus supporting previous findings by Gobster's (1998) and his "green magnets" theory. However, as the authors acknowledged, the study was limited by the size of the cities in which it was conducted (<150,000 persons) and by the methodology that did not account for user perceptions (Coutts & Miles, 2011). A later study by Harris et al. (2017) conducted on The 606 in Chicago, found the greenway to have a negative correlation with violent and property crime in proximate communities, including Humboldt Park. This finding led the authors to conclude that The 606 was a positive mechanism in helping to reduce observed crime in the area. While the findings by Harris et al. (2017) provides foundational information for this study, because it focused on observed rather than perceived crime it did not capture any of the social psychological mechanisms in play or whether behavior could be influenced by existing stigma surrounding the Humboldt Park enclave. Additionally, with another study by Harris, Schmalz, Fernandez, Larson, and Griffin (unpublished) showing an existing divide between White and Latino/a users on The 606, there is a need to further understand how latent mechanisms, such as stigma, may be driving this dissonance and disunity. This study seeks to fill that gap. Using a case study approach,

this study attempts to add to the previous works on urban greenways in diverse communities by answering the following question: How does neighborhood stigma influence patterns of recreation on an urban greenway when traversing a previously stigmatized enclave?

Methods

Study Site Characteristics

Elevated 16 feet above the street below, The Bloomingdale Trail or The 606, as it is commonly known (Our Story, n.d.) was selected as the study site for this investigation based on its location, community diversity, and its passage through the Latino/a enclave of Humboldt Park. Constructed on the framework of the vacated Bloomingdale Railway line (Sinha, 2014), the transformation of the corridor began in 2013, when Mayor Rahm Emanuel, in partnership with the City of Chicago, The Trust for Public Land, The Chicago Park District, and the Chicago Department of Transportation, broke ground on the signature project (The Story, n.d.). Completed in the summer of 2015, the greenway was originally devised as a way to relieve traffic on Chicago's northwest side (Mortice, 2015). The 100 million dollar, 2.7 mile long greenway is one of the city's few east-west pedestrian corridors and is adorned with native vegetation, art installations, and numerous sitting areas. The 30-foot-wide trail features a two-lane bike path (with one lane in each direction) flanked by rubber track jogging paths on each side (Mortice, 2015). A series of 12 access points, exist between the western trailhead located in West Humboldt Park and its easternmost point in Walsh Park in Bucktown (see Figure 1).

Although The 606 is a recreation destination that attracts users from all over Chicago, the trail extends over several neighborhoods that are drastically different in terms of racial, ethnic, and socioeconomic composition (Sinah, 2014). On the eastern side of the trail the neighborhoods of Wicker Park and Bucktown are mainly comprised of an affluent, White demographic (59%), low unemployment (6.6%), low poverty (14.7%), and few residents without a high-school diploma (12.9%) (US Census Bureau, 2015). The Logan Square neighborhood, located to the north of the trail, is defined by a larger Latino/a (50.7%) population, but also low-unemployment (8.2%), low poverty (16.8%) and few residents without a high-school diploma (14.8%). These numbers, however, are potentially deceiving, as the community has been rapidly gentrifying as developers take advantage of the neighborhood's proximity to Wicker Park and Bucktown (Gomez-Feliciano et al., 2009). Lastly, the western side of The 606 is occupied by the neighborhood of Humboldt Park. A Puerto Rican enclave for over six decades, the neighborhood is characterized by a large minority population (93.2%), high unemployment (17.3%), high poverty (33.9%), and a large number of residents without a high-school diploma (35.4%).

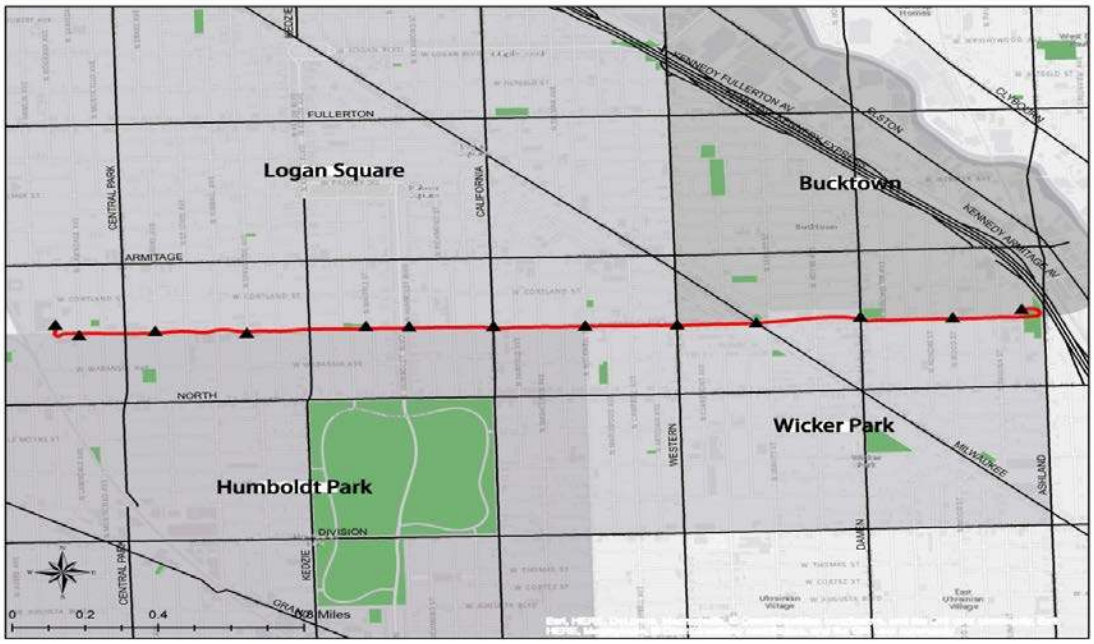


Figure 1*: Map of The Bloomingdale Trail (The 606) with access points and proximate neighborhoods*

Approach: Case Study

The following study used informal observations and intercept interviews to understand the relationship between neighborhood stigma assigned to Humboldt Park and greenway behavior. Here, a case study approach as outlined by Yin (2014) was adopted. The case study approach was deemed appropriate for this study as it allowed us to use a variety of data collection techniques to capture the various dimensions of neighborhood stigma, producing a better-rounded, complete understanding of phenomenon. Defined by Yin (2014) as an empirical inquiry that "investigates a contemporary phenomenon (the "case") in depth and within its real-world context" (p. 16), the case approach has proven to be effective in situations where the primary objective of a study is learning and discovery and findings used to expand and generalize theories (Stark, 2005; Yin, 2014). Denizen and Lincoln (2005) explained that a case study approach within qualitative

research grants researchers the ability to capture rich descriptions of real world social processes from "the individual's point of view" (p. 12).

Informal Observations

Before beginning observations or interviews on The 606 trail, approval was received from the Internal Review Board (IRB) from the lead investigator's home institution. To study neighborhood stigma and its impact of recreational behaviors of 606 users, we employed both informal observations, where the lead researcher immersed himself in the area and passively observed the behavior of users on The 606, and a series of interviews with 606-users and residents living in the adjacent neighborhoods. These methodologies were conducted over a 4 month period in the summer (May-August) of 2016, a year after the opening of the trail. In order to gain a proper understanding of 606 user behaviors, during the four month period the researcher made 117 visits to The 606. These visits took place on both weekdays and weekends, between the hours of 7 am and 11pm.

A journal was used to record informal observations of the area surrounding The 606, the recreational and leisure styles of 606 users, trail behaviors and patterns, infrastructure and maintenance, and safety and security features (i.e. security cameras, switch backs at trail access points, law enforcement officers on the trail). Other studies in the park and recreation field have used similar observational techniques to observe park activity in urban environments (Cronan et al., 2008; Gobster, 1998; Hutchison, 1987). Mirroring these studies, a pencil-and-paper technique was used to record observations. Because only one researcher was involved in data collection, the journal was a primary

source in assuring trustworthiness, providing the researcher a mode in which to document outliers, follow up on specific cases, and check for research bias (Miles, Huberman, & Saldana, 2013).

Following the framework of DeWalt and DeWalt (2011) the researcher collected three different kinds of observation notes—scratch, expanded, methodological. First, *scratch* notes pertaining to daily events and behaviors observed on The 606 or in the adjacent neighborhoods were recorded. These notes included words, phrases, and drawings pertaining to information about the researcher's location, the day's weather patterns, interactions witnessed by the researcher, and the presence any abnormalities (i.e. graffiti, missing bike stations, etc.). For example, on several occasions the researcher witnessed White trail users leave the trail before entering Humboldt Park, circle back to an adjacent point, and recoil back east. Observing this behavior, the researcher would record the destination the user exited the trail, the time of day, whether the user was traveling alone or with another user, and any other indicators the researcher believed may have influenced this behavior. Because the researcher was immersed in the environment for a prolonged period, new knowledge and information naturally emerged. To account for this, the researcher kept a series of *expanded notes.* Recorded at the conclusion of each observation period, these notes provided organization and detail to the daily scratch notes and were used to identify unique cases, follow-up on questions, and address any research gaps. Returning again to the reluctance of White users to enter trail segments in Humboldt Park, the use of expanded notes not only helped the researcher identify this pattern, but reshape certain interview questions to obtain more information as to why this

behavior was occurring and how it related to stigma surrounding Humboldt Park. Finally, *methodological* notes were kept regarding any deviations made by the researcher to the study's methods. For example, while the original design of the study called for informal observations to be performed exclusively on The 606's surface, because graffiti located off the trail's surface was used to validate perceived disorder and extend stigma, the researcher adjusted the observation area. Prior researchers have postulated the importance of journaling, noting its effectiveness in finding key patterns, inconsistencies, and ensuring trustworthiness (Bernard, 2011; Guba & Lincoln, 1989; Lincoln & Guba, 1985; Miles, Huberman, & Saldana, 2013).

Qualitative Interviews

In addition to the informal observations, the researcher conducted intercept interviews with 606 users and off-site interviews with local community members. In each of the interviews, the researcher used a semi-structured open ended format outlined by Fontana and Frey (2000). Each interview consisted of sixteen main questions addressing topics ranging from how often the participant used The 606 to recreate to perceived constraints they faced while using The 606. To get a better understanding of neighborhood stigma, participants were asked to describe their impressions of each neighborhoods along the trail and if they perceived any of these areas to be unsafe. Depending on the participant's responses, follow-up questions were asked during the interview to attain further information or clarify a response. This type of probing aligns with the emergent design process, which allows the researcher's question to vary depending on information that emerges throughout the course of the interview (Guba &

Lincoln, 1989). Sample size was determined using the guidelines set forth by Creswell (2013) who postulated that twenty to thirty interviews should be conducted in order to reach saturation. Saturation is described by Glaser and Strauss (2009) as the point where "no additional data are being found whereby the (researcher) can develop properties of the category" (p. 65).

Before beginning each interview the researcher would identify himself, inform the participant about the project, relay the interview script and confidentiality agreement approved by the University's Internal Review Board (IRB), and provide examples of interview questions. After attaining individual consent the researcher would begin the interview. To begin the research, a systematic random sampling technique was employed. However, in Humboldt Park, because the researcher was not a member of the local Latino/a community, interviews on the greenway were often difficult. As a way of overcoming this and establishing trust in the community, a gatekeeper was often used by the researcher. The gatekeeper, which the researcher established rapport with before beginning data collection, assisted the researcher in making contact with local community members and endorsing the research study. This purposive sampling technique helped the researcher attain a representative sample size and establish rapport in the community. Prior research has been shown the use of a gatekeeper to be an effective tool when working with populations where the researcher is an outsider and access to specific community members is problematic (Creswell, 2013).

To establish further trust with participants and gain richer data, the researcher did not use a recording device during participant interviews. Instead, detailed descriptions and direct quotes from the conversations were transcribed via pencil-and-paper on-site. As Dewalt and Dewalt (2011) explained, “because the goal is to understand the way participants view a phenomenon, it is important to allow the flow of conversation to reflect those aspects that are salient to the informants" (p. 123). Again, due to the social climate currently surrounding The 606 and the volatility of the topic matters discussed during interviews, an audio recording device would have hindered conversations or the willingness of participants to address certain topics. Other studies in Humboldt Park, such as Rinaldo’s (2002), have shown the use of pencil-and-paper to be an effective way to collect interview data from Humboldt Park residents. Finally, upon completion of each interview, the researcher also performed on-site member-checking with each of the participants (Erlandson, 1993; Lincoln & Guba, 1985). Here, participants were presented with interview data taken by the researcher and allowed to correct any errors or change their interpretation or quote regarding described events/behaviors. Additionally, the researcher asked participants to verify interpretations, events, and data collected from prior interviews. These techniques were shown to be effective by Erlandson et al. (1993).

Data Analysis

To analyze the observations and interviews, the researcher used a thematic analysis that consisted of open and axial coding (Boyatzis, 1998; Braun & Clarke, 2006; Miles, Huberman, & Saldana, 2013). According to Braun and Clark (2006) thematic analysis is considered “a method for identifying, analyzing, and reporting patterns

(themes) within data" (p.79). The use of this technique allowed the researcher flexibility in organizing and describing the qualitative data, producing rich results (Boyatzis, 1998; Braun & Clarke, 2006), without having to subscribe to a pre-existing framework.

To begin the analysis the researcher categorized the content of the interviews based on broad concepts that emerged over the course of data collection (Strauss & Corbin, 1998). After the initial categorization, a code book was created related to each theme. The initial code book consisted of 91 codes across 14 different themes. Of these codes, more that 74% (68) were identified in the first 25 interviews. While some of the initial codes were later combined during axial coding, the open coding process and code book created from the process served as the foundation of the analysis, as it allowed for further classification and constant comparison of interviews and observations (Strauss & Corbin, 1998).

Following the open coding phase, the broad categories were reduced through axial coding (Strauss, 1987; Strauss & Corbin, 1998). Strauss and Corbin (1998) described axial coding as a process where the broader categories are reduced through either separation or the use of subcategories. During this phase, the researcher reexamined each of the broad themes created during open coding and the codes assigned to each line data. Themes that had similar properties were combined or broken down into separate subcategories.

Results

Study Participants

In total, 86 participants were interviewed and assigned a pseudonym (see Table 1 in Appendix A). Of these individuals 46 were male, 40 were female. The age of participants ranged from 18 to 68 with an average of 34. The racial composition of the participants was 43% (n=37) Latino/a/Hispanic, 49% (n=42) non-Hispanic White, 6% (n= 5) Black, 1% (n=1) Asian, and 1% (n=1) Middle-Easterner. Of the total interviews 69 (80%) took place on The 606, while 17 (20%) took place in the resident's home or place of employment. Thirteen participants (15%) did not live in any of the neighborhoods traversed by The 606, however, because the stigma surrounding Humboldt Park has been integrated into the discourse in Chicago (Wilson & Grammenos, 2005), these interviews were retained during analysis. It should be noted that for both the results and discussion sections the term "Latino/a" is used frequently to refer to Humboldt Park residents. This term is used due to the parameters of the study and its ability to be generalized to all "Latin/Hispanic" enclaves. However, when a direct quote of a participant is used, the ethnicity of the participants is specified.

Results from the analysis confirmed the existence of neighborhood stigma, identifying five themes related to it and its detrimental effect on 606 user's behavior and proximate communities. Taken together, these themes help provide a better understanding of the issues that can arise as a result of stigma by highlighting the current situation facing 606 users and residents living adjacent to the greenway. The five themes identified were as follows: Humboldt Park's reputation in influencing recreational behavior on The 606; inequalities in trail aesthetics; imbued stigma placed on Latino/a

youth bodies; exclusion through displacement; and Latino/as response to stigma and neighborhood gentrification.

Theme 1: The Reputation of Humboldt Park

On numerous occasions during informal observations the researcher witnessed White individuals running or walking west on The 606 toward Humboldt Park stop short of entering enclave. Although no uniform point signifying entrance into the neighborhood exists on the trail, many White users either turned around at North Humboldt Boulevard or North Kedize Avenue. Other chose to exit the trail entirely, looping around before running back east toward Bucktown and Wicker Park. When participants were asked why they did not continue into Humboldt Park, many White trail users indicated that the area was "sketchy" or "ghetto". Interviews revealed that fear of the area increased at night when trail density decreased. Trail users reported that despite the trail being open until 11 p.m. the reputation of Humboldt Park, combined with feelings of isolation, rendered them unable to enjoy their recreation or leisure pursuit in western trail segments. Interviews showed that the primary concern of White 606 users in Humboldt Park was the presence of gangs and potential victimization. Caroline acknowledged the constraint imposed by Humboldt Park's reputation, noting:

> "The more west I go on the trail the more unsafe I feel. I avoid Humboldt Park completely, unless I am running during the day. The reputation of the neighborhood is just unsettling and I am not going to be in a location where I don't feel completely safe". [Caroline, 30's, White]

Will, who lived in the Irving Park community, located north of the area traversed by the trail, also believed of the threat of victimization increased in Humboldt Park. While the participant acknowledged the neighborhood showed signs of change since the trail's

introduction, he remained reluctant to enter. When asked if he used the trail from end-to-end when exercising, Will replied:

> "This trail goes through Humboldt Park and I try to steer clear of that place. That is one neighborhood where [White individuals] aren't loved.....Humboldt is like a different country. I know it's changing, but I am just not comfortable there. I don't know, there is no reason for me to go over there unless I am trying to get robbed. People just don't care, you know how Chicago is. It's dangerous. They will hit you over the head for no reason. This has always been a city where people stay in their own neighborhoods...They leave me alone, I leave them alone". [Will, 50's, White]

In addition to the reputation of Humboldt Park influencing the recreational patterns of individuals located outside the community, results showed that it also had an impact on some White newcomers living within the neighborhood's boundaries. While many White newcomers living in Humboldt Park praised the neighborhood and its diverse composition, they openly admitted that their recreational patterns on The 606 were constrained by existing stereotypes stemming from historic patterns of disorder. As both Patty and Jennifer acknowledged, the reputation of Humboldt Park has been part of the area's narrative so long that it remains engrained in their mind, despite living in the community:

> "The funny thing was when I first moved here [Humboldt Park] and even sometimes now, I find myself naturally gravitating to the [eastern area of The 606] when I skate. It's like it is some unconscious thing. I live in Humboldt, I shouldn't be nervous in my own neighborhood, but the stories my dad told me and what I heard about it still influence me. It's like it's burned in my brain". [Patty, 30's, White]

> "I am not afraid of being in the neighborhood [Humboldt Park], but it's hard not to buy into the stereotype. The people, my neighbors, are wonderful, but you never know who is on other parts of the trail. I know [the eastern neighborhoods] are safe, so that's where I run". [Jennifer, 20's, White]

Speaking about the role the reputation of Humboldt Park serves in fostering avoidance tendencies on The 606, Mason, a long-standing member of the Humboldt Park neighborhood, explained that newcomers to the city have been taught to fear the unknown and to avoid minority spaces by the media and outsiders using anecdotal information. As he postulated "[White newcomers] move here from the suburbs and their parents tell them these horror stories about certain neighborhoods so they take it as fact. They're afraid but they really don't know that they're afraid of". Mason continued, explaining that because White residents had segregated themselves into homogeneous communities they feared prolonged contact with Latino/as. Adrian, another member of the Humboldt Park community, expressed similar thoughts, noting that avoidance of the neighborhood is largely due to Humboldt Park's past and association with a notorious Latin street gang. As Adrian explained, "a lot of people see a poor neighborhood still run by the [Latin gang]". He continued, "People outside only know [Humboldt Park] for the violence, for the [Latin gang]. If you're not from here all you know is it's a Puerto Rican neighborhood, that carries a reputation with it...like this is the ghetto".

Theme 2: Inequalities in Trail Aesthetics

Results from both informal observations and interviews revealed that differences in trail aesthetics between trail segments located in Humboldt Park and those based in the eastern communities contributed to neighborhood avoidance and fear in the space. When asked to describe any place on the trail in which they felt unsafe and why, several White users spoke to the aesthetics on the trail's western end. As Caroline explained, "The east end of the trail is more manicured and has more like, floral areas. Whereas the west side

seems to be a little overlooked. There is overgrowth and the few times I have been down there it doesn't seem to be well-kept". Observations of the area aligned with this discourse. The researcher found that certain segments of The 606 in Humboldt Park were not well maintained or featured spaces directly off the trail's surface where construction appeared stalled or abandoned (see Figure 2). Additionally, graffiti in Humboldt Park was observed on access point signs and trail railing on several occasions (see Figure 3). However, unlike observed graffiti in eastern segments, which was rare and quickly removed, graffiti in Humboldt Park was allowed to remain for several days.

Figure 2: *Image of an unfinished lot located directly off the paved surface of The 606 at Kimball Avenue.*

Figure 3: *Image of graffiti on in Humboldt Park on The 606.* ***Left****: A gang tag is spray painted onto the surface of The 606 near Ridgeway Avenue (Western trailhead).* ***Right:*** *graffiti covers a sign located just below the trail in Humboldt*

Another area of concern related to trail aesthetics was the overgrowth in vegetation in certain trail segments in Humboldt Park. Sam, a resident of Logan Square, acknowledged the overgrowth of vegetation impaired user sightlines and offered potential places for individuals to hide.

> "I was on the trail the other night running with a group of friends and these dudes were hiding in the trees [in Humboldt Park]. It was probably midnight and these dudes were jumping out at people, trying to scare them. They could have easily been jacking people...you couldn't see them". Continuing with his explanation the participant noted "It's really dark down there [Humboldt Park] and there aren't a lot of people at night. You don't want to be isolated, you're just asking for it. The neighborhood has a reputation for a reason". [Sam, Male, 20's, White]

A consequence of the vegetation overgrown was that overhead lighting, which is homogenous throughout the greenway, was obstructed. This obstruction made many participants weary using the segments for fear of victimization. The lack of lighting was

of particular concern for female users. As Jessica, a resident of Wicker Park, described her reluctance to use segments in Humboldt Park, "It's so dark down there. There are places where the trees block out the street lights. It's nice during the day, but at night it's so scary. I've heard all about [Humboldt Park] on the news so when I was alone that was all I could think about".

Theme 3: Youth Stigmatization

Results from the study revealed that the stigma surrounding Humboldt Park also served to constrain the recreational endeavors of Latino/a youth. Interviews revealed that Latino/a youth were often perceived by White greenway users as an embodiment of neighborhood disorder. Youth were frequently referred to as "thugs" and "gangbangers" by White uses. As Teresa, a White resident of Bucktown, noted when speaking to The 606's ability to eventually displace Latino youth, "once the teenage gangs are gone, there won't be anything to worry about around here [are occupied by The 606]". This perception often led to the discrimination of youth in eastern greenway segments. However, it was common to witness a group of 8-10 youth sitting at the Humboldt Park Overpass or socializing on one of the grassy medians located on the greenway's western side. According to youth participants, The 606 represented a "safe space" to "chill" and "hang out" without having to worry about traffic or the threat of violence. In addition to passive recreation pursuits, Latino/a youth were also observed riding bikes on the trail, walking to and from various locations, and playing Pokémon GO, a popular virtual reality mobile game (Althoff, White, & Horvitz, 2016). Although Latino/a youth were seen on all parts greenway, a majority of large gatherings and passive recreation

endeavors took place away from eastern greenway segments. When questions addressing the youth's avoidance arose, participants continually mentioned that they felt unwelcome when recreating or socializing in eastern segments. Here, participants believed they were constantly criminalized by White residents and mistreated by local law enforcement. Speaking to their criminalization, Chris, a Latino teen, who used the trail to meet and socialize with his peers postulated, "as soon as they see us they call the police". When asked why he thought that was Chris replied, "they think we're in a gang or that we're here trying to cause [trouble]". He continued explaining that he thought a lot of people in the neighborhoods located east of Humboldt Park weren't use to interacting with *"*kids from the hood*"*. Chris expanded on this, pointing out that before the The 606's construction the traversed communities had operated in relative isolation, limiting the contact and exposure of White residents to minority youth, particularly during leisure and recreation time. As he declared "they never had to see us before". We stayed in the park or on the streets. Now they see us on here every day and they don't know how to handle it".

Although many youth simply elected to avoid the eastern end of the trail entirely, others reveled that they simply ignored stereotypes and often gathered at the Damen Avenue access point, which is located in eastern-based neighborhood of Wicker Park. This location represented one of the few spaces on the greenway's eastern end where large groups of Latino/a youth routinely socialized. In interviews, youth explained the reason for the location's popularity was due to its close proximity to restaurants and shops, its stadium seating, which could accommodate sizable groups, and number of

Pokémon that could be "captured" at the location. However, despite "posting-up" [i.e., sitting at for a long period of time] at the location, interviews with Latino/a youth found that their presence was rejected by White trail users and residents of the eastern neighborhoods. Wyatt addressed youth exclusion during his interview, describing several situations where law enforcement had been notified of their behavior on the trail:

> "Sometimes people call the police when there's a lot of us, but we just ride away. We're not doing anything, just chillin, but the cops still come and make us leave. [The 606] is a good spot to get up, but the cops are always trying to [get rid of] us". [Wyatt, 19, Latino of Puerto Rican Decent]

A similar story was told by Luis. While Luis said that he used the eastern trail segments when traveling to and from Wicker Park or while running, he often felt discriminated against due to his appearance.

> "I'm not saying this about all White people, but some of you don't like to hang around a bunch of Puerto Ricans. Even if we aren't doing anything, they [White residents] just call the police. I don't know, it's like [Whites] think they own the trail". [Luis, 20, Latino of Puerto Rican Decent]

While Latino/a youth were found to be the group most often stereotyped as deviant and therefore constrained in their usage of the greenway, other Latino/as also felt unwelcome on the eastern side of The 606. However, unlike youth, most adult users attributed to divide between communities not to overt forms of discrimination, but a difference in recreational activity preference. Data from interviews and observations consistently showed that opposed to the passive recreational activities that were normalized on the western end of The 606, the eastern was characterized by more active activities, such as biking or running.

Theme 4: Exclusion through Displacement

Informal observations combined with the interviews with residents also allowed the researcher to obtain an understanding of the greenway's role in the gentrification and the exclusion of Latino/as through displacement from the Humboldt Park enclave. For many Latino/a residents, The 606 was seen as a paradox. On the positive side, The 606 was perceived as a benefit to the community in terms of fostering interactions, providing a space to participant in recreational activities, and even decreasing crime. One resident summed up these feelings noting "The 606 provides a safe spot for the kids, for everyone in the community. You can go out there and workout if you want....or just sit and reflect...and not have to worry about a thing". Adrian, also expressed optimism in changes in the neighborhood, believing The 606 was helping to remove gang housing and areas where crime was previously embedded. Adrian explained that White newcomers had renovated a house on his street that was previously occupied by a drug dealer: "People want to keep [Humboldt Park] the same, but I'm tired of having to worry about bangers or getting shot. This is [Puerto Rican] neighborhood, but that doesn't mean other people can't live here".

Despite these positive reactions, many Latino/as believed that these benefits and their place in the enclave to be on borrowed time, as rising property taxes and new development threatened widespread displacement. Residents indicated that they were "afraid" and "uncertain" of their future, as new residential housing replaced historic greystones and vacated lots. The rapid rate of development led many Latino/a residents to question whether or not The 606 was built to increase opportunities for the community or to change it to reflect the neighborhoods located on the greenway's eastern side.

> "Look at the condos going up, those are not for us! That was the cities plan, build this shiny new toy and then use it to justify building new condos. You aren't going to see us [Latino/a residents] buying those places....it makes me mad. It's like as we get something for our community and it's gone. The same people always end up benefitting". [Ana, 30's, Latina of Puerto Rican Decent]

> "People are getting rich off of this trail. Developers! Building Owners! The City! They make a fortune. They don't care about the people who live here. No, the just dismiss us! To them it's just about money. I don't think it [The 606] is bad, but I don't like how they are using it...to get us out. There are a lot of good people moving in. They are buying old houses and making them fancy. That's nice, but just because new people are moving in, doesn't mean we should have to move out". [Carla, 50's, Latina of Puerto Rican Decent]

While the resulting gentrification effects of The 606's construction caused many Latino/a residents to worry about their future in the neighborhood, for White residents the changes in Humboldt Park brought about by The 606 were often viewed through a pragmatic lens of inevitability. Here the positive changes in Humboldt Park, such as decreased crime and new commercial enterprises seemed to justify the gentrification process. Although some Whites expressed empathy for Latino/a residents, few recognized the importance of culture in Humboldt Park or disapproved of the trajectory of the area close to the greenway.

> It's all becoming Bucktown. [Humboldt Park] is just going to be an extension of Bucktown. It's like, you don't like gentrification? Well, too bad! People are going to live where they want to live. If you can't afford it here then you'll find a new place to live--money talks. I'm not going to sugarcoat anything. Gentrification has happened before and it's going to happen again. Right now it's just happening in Humboldt Park. If people think about it, it's going to make this side of town better anyway....I get it, I feel bad for those families, but like I said, money talks. People with money and power do what they want. It has always been that way and it's not changing". [Preston, 20's, White]

> "It cost more to live in a nice neighborhood. You can't have it both ways. You can't expect your rent or taxes to stay the same if your spot becomes improved. That's just reality. New businesses aren't coming to the ghetto. This trail wouldn't have been built if they thought the area around it didn't have potential. They weren't building [The 606] in the slums". [Brad, 20's, White]

In addition to the pragmatic perspective voiced by many White residents and trail consumers, research showed that local developers were using The 606 as a mechanism to rebrand the area and drive gentrification. Using Humboldt Park's increased connectivity to the eastern neighborhoods as a promotional platform developers were attempting to shift the narrative surrounding Humboldt Park by branding the area to newcomers as "*West Bucktown*". For developers, the change in discourse was meant to remove the stereotype surrounding the enclave, enabling them to repackage and market the area along the greenway to White, affluent customers. As Adam, a developer in the area, indicated:

> "I know people are pissed that the area is changing, but that's what happens when neighborhoods improve. As someone who owns numerous properties, I can tell you that the rent is only going to go up now that the trail runs through the area. Logan Square is already seeing big increases and Humboldt Park is next... A lot of developers have stopped calling [the neighborhood] Humboldt [Park] all together and now refer to it only as West Bucktown or even West Logan. They just completely remove Humboldt [Park] from their vocabulary all together". [Adam, 40's, Asian]

Theme 5: Latino/a Response to the Stigma

Study results showed that White 606 users responded to the stereotypic notions of Humboldt Park by avoiding the area, denigrating Latino/a youth, and in the case of developers, changing the space through gentrification. The response by Latino/a residents to the threats imposed on them and the Humboldt Park enclave were self-segregation, disregard, and/or resistance. Observations and interviews revealed that the greenway's western end was largely defined by a greater number of Latino/a users, many of whom were engaged in passive recreation (i.e. socializing) or family activities (i.e. parents teaching children to ride a bicycle). As previously noted, Latino/a youth often lined the

benches along the greenway's path and grassy areas, socializing, listening to music, and smoking cigarettes. From speaking with many Latino/a residents, it became clear that the western segments were preferred by the population due to its family-centric atmosphere, feelings of belongingness, user density, and the absence of stigma ascribed to them. For example, when asked about the differences between the eastern and western sides of The 606, Cynthia, who resides in Humboldt Park with her family, postulated that she believed Latino/as often avoid eastern greenway segments because of the coarse attitude of White users and the profiling that frequently occurred.

> "I feel like they all profile. It's bad. It's like 'they must be a gang member, why are they down here'?! Seriously! Have you not seen the news? When you call the cops, you are playing with someone's life. The cops in [Humboldt Park] are profiling now too. It's worse [in the eastern neighborhoods] though. There [police] will go up to a group of kids and be like, scatter...scatter. And for what? Just because they aren't White? Because they're Mexican or Puerto Rican? I'm not going to be somewhere like that". [Cynthia, 20's, Latina of Mexican Decent]

Another Logan Square resident, who was also an employee of the Chicago Park District, confirmed the narrative, telling the researcher a story of a recent incident involving a Latino/a youth on The 606 while walking through a trail segment in an eastern neighborhood.

> "Just the other day, a vocal member of the Friends of the Bloomingdale Trail[1] community called the police because she saw a dark skin teenager wearing a hoodie and according to her "looking suspicious". I don't know what happened, probably nothing, but that is the type of thing that keeps these communities apart! You have a bunch of older rich people who think anyone that comes from Humboldt Park is a criminal". [Susan, 30's, Latina of Puerto Rican Decent]

[1] Friends of the Bloomingdale Trail is a group of community stewards who provide "an independent voice while working closely with all stakeholders of The 606, to ensure that the trail is a vibrant, inclusive park of the Bloomingdale corridor" (Who We Are, n.d.)

While many Latino/a users chose to avoid areas where they felt unwelcome, others chose to disregard the stereotypes placed on them and their community, choosing instead to view the trail as an opportunity to see new neighborhoods and engage in recreation and leisure endeavors. As Lucas explained "I love it man! I'm on here every day. It lets me and him [speaking about his dog] get some exercise". When asked if he used the entire trail, Lucas replied, "Yeah! Of course! I come in the morning because of all the traffic down here [eastern segments], but I run down and then back". The researcher then asked if he ever felt unwelcomed on the eastern end, to which the participant replied "I've never thought about it. I don't bother people, so who cares what they think of me". As previously mentioned, Pokémon GO had also lured more Latino/a residents to the eastern side of the trail, particularly youth. For example, when asked by the researcher if he used the entire trail when engaging in recreational pursuit, Luis replied that he did. He explained that while he used to primarily remain on the western end for fear of criminalization, since the release of Pokémon GO, he visited Damen Avenue 3-4 times a day to "catch Pokémon". He continued, "I just chill there and wait for [Pokémon]. There's some rare ones around and there's a gym[2] to train them at Western [Avenue]".

Results showed that in response to the threat of gentrification and narrative it could be used to "clean up" Humboldt Park, many Latino/a residents chose to use The 606 as a place to unify against and resist the changes. For example, during observations the researcher observed a march on The 606 protesting gentrification. Anti-gentrification

[2] In the augmented reality game, Pokémon GO, Pokémon can increase their capabilities by "training" at designated areas in the digital world, known as Pokémon gyms (Pokémon GO, n.d.)

signs were also observed on The 606 on numerous occasions (see Figure 4). Speaking with a resident of Humboldt Park after the protest, the researcher was informed that while marches were not common, they were important because they sent a message to developers that Humboldt Park "belongs to" Latino/as and they will not be displaced without a fight. Bella, a Puerto Rican resident of Humboldt Park postulated:

> "I have lived here my whole life. I grew up here, so the neighborhood means a lot. That's why I am never leaving. All my family is here, my friends. This is our neighborhood. We watch over each other and the kids. They can't just push me out." [Bella, 40's, Latino of Puerto Rican Decent]

Other residents had similar reactions to the redevelopment efforts taking place in the Humboldt Park community. As Dante explained:

> "This is a community of families. The developers say that they are just trying to get rid of the crime and bring opportunities here. That's [crap]! They are trying to get rid of the neighborhood. We're not going to let that happen. We're going to fight". [Dante, 40's, Latino of Puerto Rican Decent]

Figure 4: *An anti-gentrification is posted next to the 606 at Ridgeway Avenue in Humboldt Park.*

Discussion

Using the case study approach this study allowed the complexities, contradictions, and dynamics of urban trail integration reveal themselves, providing both support for the neighborhood stigma hypothesis as first detailed by Sampson and Raudenbush (2004) and showcasing the multiplicity of perspectives taking place within the space. The study found that the neighborhood of Humboldt Park is stigmatized by White trail users and outside residents based on perceptions of crime and disorder. Our finding show then that these perceptions of the neighborhood serve to influence user behaviors and recreational patterns on the trail. These results are similar to those of Besbris et al. (2012), who found that White's avoidance of communities of color is often based on pervasive racial stigma

tied surrounding urban communities of color (Farley, Steeh, Krysan, Jackson, & Reeves, 1994; Massey & Denton, 1993; Pérez, 2004). While Besbris et al. (2012) study examined neighborhood stigma in regard to economic transactions, the prevalence in which Whites are willing to forgo interactions in communities of color due to latent bias links the studies.

For many White trail users, Humboldt Park is viewed only through a prism of race (Krysan & Bader, 2007), known for little more than its high concentration of Puerto Rican residents and its reputation for crime and disorder. Interviews revealed that stigma attached to the neighborhood provides a foundation of fear for Whites that are then supplemented by anecdotal information from family, friends, and neighbors. Further perpetuating this fear is local media, which frequently propagandize public notion by publishing catchy headlines about crime occurring on and around the greenway (see Hauser, 2017). Lane and Meeker (2005) postulated when people of different racial, ethnic, or cultural backgrounds live in close proximity to one another, there is a tendency to develop feelings of fear, particularly among Whites living close to communities of color. Here, because Whites lack an understanding about community of color's culture and way of life (Krysan & Bader, 2009), any behavior that exist outside of White credo is considered alarming or deviant (Lane & Meeker, 2005). Unlike the study by Coutts and Miles (2011), which found greenway movement was not constrained by racial disparity (p.329), the results from this study reveal the opposite. Results show that despite the connective properties of The 606 and potential recreation and leisure benefits that could be derived from using the full greenway (i.e. visiting new park spaces, more space to

run/bike due to less traffic), the existing stigma on Humboldt Park acts as a barrier or constraint for many White users. As Besbris et al. (2012) pointed out, in spatially differentiated cities, like Chicago, neighborhoods often become characterized and recognized based on "their institutions, the level of crime and disorder, their appearance, and their population" (p. 3).

Contributing to the fear of Humboldt Park and subsequent avoidance by White trail users are inequalities in trail maintenance and aesthetics. This finding aligns with the work of Neckerman et al. (2009) and Shmool et al. (2015) which found that the quality of a recreation area, rather than access, can serve to reinforce social stratification and limit park participation. Additional research on cultural stereotypes and implicit bias have shown that inferior structural inequalities, such as those in 606 segments in Humboldt Park, can foster perceptions of disorder and perpetuate negative stereotypes by reinforcing historic conceptions of race and disorder (Kang & Lane, 2010; Sampson & Raudenbush, 2004; Sampson, 2012). Dovidio, Kawakami, & Gaertner (2002) defined implicit bias as "evaluations that are automatically activated by the mere presence (actual or symbolic) of the attitude object and commonly function without a person's full awareness or control" (p. 62). Meaning visual signs of disorder that exist within a stigmatized community of color can become exaggerated and used to activate or perpetuate existing stereotypes outside an individual's conscious awareness. As Sampson and Raudenbush's (2005) postulated, because outside residents are not trained as natural observers, visual signs of disorder are perceived as holistic representations of an area (Banks, Eberhardt, & Ross, 2006; Dovidio et al., 2002; Nosek et al., 2007). Although the

City of Chicago is working to repair and beautify the greenway segments in Humboldt Park (Hauser, 2017), until existing projects are completed and the area consistently maintained (i.e. quick removal of graffiti, proper vegetation care, replacing stolen bicycle stations) the lack of care in the area may continue to trigger implicit notions of disorder founded in the neighborhood's reputation as "sketchy" and foster avoidance.

Neighborhood stigma also acts as a mechanism to exclude and discriminate against Latino/a youth. Interviews with youth found that they are often perceived to embody the neighborhood's reputation as disorderly---a finding shown in previous works in the community (Pérez, 2002; Rúa, 2012; Wilson & Grammenos, 2005). Speaking to the concept of "cultural criminology" Sanders (2004) explained that the cultural attributions of minority youth are frequently considered in relation to their level of deviance. Here, mediated images of deviance provide portrayals of Black and Latino/a youth that become internalized by a vast audience, leading to stereotyped conceptions of who should be considered criminal, what they look like, what activities in which they engage, and what culture they potentially belong (Sanders, 2004). Given the history of gang activity and violence in Humboldt Park (Pérez, 2004; Rodríguez-Muñiz, 2016; Rúa, 2012) and the current state of Chicago, where gang related gun violence has become an epidemic among youth of color (Garbarino, 2017), for many White 606 users, the answer to these questions has simply become Latino/a youth.

Responding to the stigma imposed on them, youth often avoid eastern segments of The 606, instead choosing to remain in western greenway areas where Latino/a

recreational practices are salient and where they believe they will not be subjected to profiling or criticism. Pinel's (1999) theory of stigma consciousness potentially provides an explanation for this behavior. Pinel (1999, 2001) explained that individuals who have been stereotyped are often keenly aware of the stereotype placed on them and will choose to avoid the stigmatizing party to protect themselves against the cognitive and behavioral consequences that result from contact (Pinel, 2001). Studies on stigma defense strategies have found that individuals who are stigmatized may also choose to disengage psychologically from the stigmatizing party (Crocker, Voelkl, Testa, & Major, 1991; Major, Spencer, Schmader, Wolfe, & Crocker, 1998). In deploying this tactic, the individual or group is able protect themselves against the threat of the imposed stigma, despite contact. Given that complete avoidance of Whites on The 606 is unrealistic, youth may disengage psychologically when avoidance is not possible. To date, however, Latino/a youth represent perhaps the most vulnerable population on the greenway; their presence and behaviors unfairly criticized by those who lack knowledge or understanding of leisure and recreation conceptions that deviate from those constructed by Whites.

Adding to the exclusion of Latino/as is The 606's role in accelerating gentrification. Gould and Lewis (2016) wrote that "the combination of market-forces in urban real estate, institutional and cultural racism and urban environmental policy can be a powerful tool of urban renewal and urban removal, with the 'greening' of urban areas becoming code for the 'Whitening' of urban areas" (p. 58). What Gould and Lewis (2016) discovered in their assessment of green space in Brooklyn, New York, was that minority residents are progressively relocated following the construction or renewal of an

environmental amenity. Over time this serves to both reduce their access and dissolve their community. The process, termed environmental or green gentrification, begins when cities create or restore environmental amenities with the purpose of attracting wealthier groups (Checker, 2011; Dooling, 2009; Eckerd, 2011; Gould & Lewis, 2016). Simply put, green space is used as a commodity, allowing the city to sell the neighborhood (Betancur & Smith, 2016). If the green gentrification process is allowed to persist, residents of color become gradually displaced from the amenity, eventually resulting in a space that is bound by White standards and recreational patterns that are conformed to White ideals (Betancur & Smith, 2016; Gould & Lewis, 2016).

Results from the interviews showed that The 606 is perceived by many Latino/a residents as the primary source fueling residential displacement and neighborhood gentrification. Similar to green gentrification in places like Brooklyn and Harlem (Gould & Lewis, 2016), The 606 is being used by developers and real estate companies to access the neighborhood and develop residential structures more attractive to affluent White residents. Although The 606 was built under a seemingly universal rubric of neighborhood improvement, opportunity and sustainability (Our Story, n.d.), in reality it has brought about unequal development and the appropriation of economic value by members of a higher-economic class. As Checker (2009) described in her study of environmental gentrification in Harlem, New York, the insertion of environmental amenities into a minority neighborhood can appear to be both ecologically and socially sensitive, but many times is subordinate a profit driven agenda. As a recent study by the Institute for Housing Studies at DePaul University (2016) showed since The 606's

opening in 2013, single-family home prices have increased in the Humboldt Park and Logan Square by 48.2 percent (Marotti, 2016). More telling of the developers' agenda, however, is that of the single-family homes sold in the area in 2016: 31 percent were to investors and developers, a 10 percent increase from the prior year (Rodkin, 2017). So, while the narrative surrounding The 606's role in gentrification may be inflated due to the hyper-awareness and anger of Humboldt Park residents, housing studies in area show their concerns to be warranted.

Woven into the discourse of neighborhood gentrification is the stigma of crime and disorder surrounding Humboldt Park. While The 606 has been the site of occasional robberies and assaults (Bauer 2016, Hauser, 2016), most incidents have occurred either after The 606's closure (11 p.m.) or outside of the Humboldt Park enclave (Hauser, 2017). A recent study on the greenway found that while crime rates had decreased in all the neighborhoods surrounding the trail since its integration, the western neighborhoods of Humboldt Park and Logan Square had experienced the most significant declines (Harris et al., 2017). Despite this, comments from White trail users and residents still indicated that the trail would never be perceived as ideal for recreation or safe until the segments passing through Humboldt Park were "*cleaned-up*" and molded into spaces reflecting those eastern neighborhoods (i.e. Wicker Park and Bucktown). Other studies have also shown perceptions of safety to significantly influence urban park use (see McCormack, Rock, Toohey, & Hignell, 2010). Although many White users spoke to the ubiquitously positive impacts of The 606 the criminalization of Latino/a youth and the characterization of Humboldt Park as the "*ghetto*" or "*slums*" clearly show these

egalitarian narratives are laced with latent bias. Mumm (2016) pointed out in his work in Humboldt Park that despite changes in the landscape, in the eyes of White residents located outside the enclave the space remains synonymous with "poverty, pathology, gangs, drugs, danger, and Puerto Ricans" (p. 94). Gentrification was not only perceived as a relative nonissue for Whites, but a pragmatic solution in removing deviance in the area. Papachristos et al. (2011) postulated that gentrification is a racialized process, viewed by Whites as a feasible strategy to decrease crime and increase neighborhood quality.

Beyond the removal of crime, the pragmatism expressed by Whites in regard to gentrification may also be linked to modern racism (McConahay, 1986). As first postulated by McConahay (1986) modern racism is founded on the notion that Whites generally reject traditional racism and racist sentiments (i.e., minorities are not as smart as Whites), but perceive minorities as intruding of White resources and making unfair demands that are not warranted and which they do not deserve. Interviews with White residents revealed that many do not see gentrification as a discriminatory process, but a naturally occurring urban phenomenon that will inevitably serve the greater good. The desire of lower-income Latino/as then to remain in the areas of Humboldt Park around The 606 and halt the redevelopment process along the greenway is perceived to be trivial at the least and at the most, excessively demanding. Regardless, of the source green gentrification in the area not only evokes the distinct racial histories in Chicago for Puerto Rican residents, who are once again being displaced from an enclave they created

(Pérez, 2004), but showcases moral minimalism, racial ascriptions, and privilege of White newcomers.

With the threat of gentrification and stigma surrounding Humboldt Park and the deviant and disorderly labels attached to Latino/a bodies, The 606 has become a site where the struggles over position and privilege are highly visible. While results showed that many Humboldt Park residents are willing to accept White newcomers into the enclave, they remain steadfast in their position to keep the area centric to Puerto Rican culture and maintain ownership over the space. The desire to remain in control on the enclave results in recreational patterns and behavior on The 606 steeped in positioning, power, and resistance.

While the fight over ownership in the area continues (Vivanco, 2016a; 2016b), the ability of residents to completely thwart green gentrification is now absent (Rigolon & Németh, 2018), Although new policies discouraging demolition and new development in the area have been enacted (Rodkin, 2017; Spielman, 2017), the social and cultural dynamics of the area surrounding The 606 are forever changed. For Humboldt Park and its Latino/a residents The 606 itself is a paradox, successful in its ability to provide a recreation and transportation opportunities, but flawed in its dexterity to provide long-term sustainability. In this line, The 606 has inadvertently propagated recreation segregation and led to a future direction where recreational behavior on The 606 may reflect only that of those who can afford to live in the area. As Latino/a residents' attested during interviews, while they are currently help shape use patterns on The 606, they do not seem to be part of its future trajectory..

Limitations and Future Research

Although our study helped to extend the research related to the discrimination of Latino/as in recreation settings and highlight the impact of neighborhood stigma both as a recreational constraint and mechanism used to accelerate green gentrification, it had several limitations. First, the design characteristics of The 606 and the diversity of neighborhoods it traverses are unique, thus making it difficult to generalize results to other urban cities and greenways. While other cities have plans to construct similar elevated trails (Harnik, 2012), to date only the Highline in New York shares similar characteristics in terms of design (i.e. elevated, diverse neighborhoods intersected) (Taylor, 2010). As more elevated greenways are constructed, future studies should look to include multiple cases either within a single city or across multiple cities in order to make a controlled comparison. By examining multiple cases, researchers should be better the able to isolate the consequences associated with neighborhood stigma on urban greenways, particularly as it relates to green gentrification. Likewise, future studies should also take a closer look at the relationship between green gentrification and modern racism (McConahay, 1986). While interviews with White greenway users in this study showed indications of the tenets of modern racism, future studies should look to employ the Modern Racism Scale (McConahay, 1986). The Modern Racism Scale has shown to remain a valid indicator of modern racism (Henry, 2009) and its application could help in further identifying the perceptions of Whites in relation to both green gentrification and its resistance.

A third limitation to our study was that the primary researcher was a White male, automatically positioning him atop existing social constructs related to power. Although the researcher took steps to prevent power inequities and establish trust in Humboldt Park, his position as an outsider may have led to social desirability bias or occurrence of the Hawthorne effect by participants (Babbie, 2013; Fontana & Frey, 2000). To account for inequities in power dynamic, future studies in Humboldt Park should use methodologies that redistribute power back to those localized residents. Innovate methods, such as photovoice (Wang & Burris, 1997), have proven to be effective in neutralizing power dichotomies and gaining insight into the lived experience of disadvantaged communities (Strack, Magill, & McDonagh, 2004; Wang, Cash, & Powers, 2000; Wang, Morrel-Samuels, Hutchison, Bell, & Pestronk, 2004).

Another limitation of this study, as with any qualitative study, is that results do not reflect the perceptions and opinions of all community members. While a large sample size was attained using the combination of interviews and informal observations, a majority of participants captured in our study were under the age of 40 (73.2 %). Prior research has shown that generational differences can influence perceptions of neighborhood quality, with young White creative types having a greater predilection for racial integration (Brown-Saracino, 2009; Hwang & Sampson, 2014; Lloyd, 2002). While results show that even among this generation the stigma surrounding Humboldt Park induced fear and led to avoidance, a more thorough investigation specifically targeting an older demographic could be applied. To our knowledge no study has specifically

explored how generational differences in urban park users influence perceptions of crime, deviance, or stigma.

Lastly, while our study provided a glimpse into the exclusion of young Latino/as, future studies are also needed specifically addressing the stigma attached to this population on urban greenways. For instance, future studies should look to distinguish the differences on how large groups of White and Latino/a youth are perceived on urban greenways when engaged in collective socialization. With White youth not currently frequenting The 606 at high rates, alternative study sites should be considered. Questions that need further exploration include: Are there a differences between loitering and socialization?; Are there markers used by Whites, other than race, to make a distinction?; and How do law enforcement perceive these differences, if at all?

Conclusions and Management Implications

While the results from this study raise future questions regarding the influence of neighborhood stigma on recreation behavior and the integration of urban greenways into minority spaces, they also have several implications for both park professionals and city officials. First, to address neighborhood avoidance caused by preconceived notions of disorder, park and city officials must find ways to activate the space through park-based programming (Cohen et al., 2016). Cohen et al.'s (2016) research on park space in high-poverty communities concluded that when properly organized and supervised, park programs are the strongest predictor of park engagement. Furthermore, the researchers' postulated that focusing on program related resources may be more effective than

attempting to address perceived threats related to disorder. In communities like Humboldt Park that have been historically avoided by Whites, park programming may provide a way to expose users to the space, mitigating fear, and combating stereotypes. Park programs may also help facilitate interactions between minority youth and Whites. While the latent racial stereotypes placed on minority youth are unlikely to be removed due to embedded social constructs and hierarchies (Banks et al., 2006; Dovidio & Gaertner, 2000; Gaertner & Dovidio, 1986), park programming may provide an outlet to start the conversations necessary to foster an environment of inclusion and acceptance. It is only through the observance of diversity and a deliberate agenda toward inclusion, where each population group served is given a voice, can the space truly become an unprejudiced cosmopolitan arena for recreation and the impacts of stigma lessened.

Although the Chicago Park District has done a good job putting on programs and events along The 606 (Trail Mix Event Series, n.d.), interviews revealed that many users were unaware of the existence of the programs, unsure when programs were offered, or in the case of minority youth, not interested in the programs offered. Given the diverse population, a multilevel approach that includes expanding marketing on social media platforms, partnering with local businesses and community influencers to distribute information, and working with neighborhood schools, may help to increase program attendance. To increase youth participation, park programmers should include youth in the discussion and planning of programs. For example, during interviews several youth indicated that bike racing was a frequent activity performed on the trail. However, because of the density of trail traffic and high-risk nature of the activity, bike racing was

often condemned. As a result, bike racing was frequently performed at night after the trail's closure, increasing the perception of youth deviance. Instead of ignoring or vilifying the activity, park officials should be proactive and work with youth to devise a plan to offer an organized bike racing program. This would grant youth the ability to race at a set time where they are not endangering other park users or themselves. This would also help decrease tensions between Latino/a youth and White residents. As research has concluded, when youth are provided with programs that align with their interests they are more likely to participant and less likely to engage in delinquent activities (Hartmann, 2001; Perkins et al., 2007).

In addition to the implications this study holds for park and recreation officials, results also provide insight for city officials considering integrating urban greenways. Specifically, results from the study bring attention to the gentrifying effects of urban greenways when provisions are not put in place protecting low-income residents prior to construction. Results also provide insight into how developers may use green infrastructure to accelerate gentrification and remake a space for fiscal gains. As was postulated by Gould and Lewis (2016), in the neoliberal climate that currently exist in metropolitan cities, private developers and real-estate companies hold a great deal of power and will seek to manipulate the residential landscape in a way to maximize profits. With the back-to-the-city movement (Hyra, 2014) showing no signs decelerating, developers are using a narrative of sustainability and green access to advocate for projects in low-income communities of color, knowing that their assimilation can be used as a mechanism to escalate property values and increase profits (Gould & Lewis, 2016).

Recognizing this, city officials must be proactive in implementing policies protecting low-income residents (González, 2017; Gould & Lewis, 2016). This should include implementing high-tear down fees for developers (Bloom, 2017), a mandate to work with local residents and organizations (Rigolon & Németh, 2018), and forgivable loan programs for local residents allowing them to repair and restore current infrastructure (Biasco, 2016). Not only would each of these steps assist in addressing environmental justice issues (Low, 2013; Rigolon & Németh, 2018), but remove variables (i.e. derelict infrastructure) that encourage discrimination and allow the perceptions of disorder associated with neighborhood stigma to persist (Sampson, 2012) Once constructed, property tax rebates should also be provided for residents living in close proximity to the greenway, helping to ensure they are able to meet the financial burden associated with the inevitable escalation in property tax. As Hum (2014) explained, "the right to stay in a neighborhood is central to community empowerment and control" (p. 209). All of these provisions would help to ensure social equity is placed at the forefront of green project and that diverse residents are able to enjoy the benefits of greenways and other forms of park-based recreation without constraint.

References

Allport, G. W. (1954). *The nature of prejudice.* New York, NY: Basic books.

Althoff, T., White, R. W., & Horvitz, E. (2016). Influence of pokemon go on physical activity: Study and implications. *Journal of Medical Internet Research, 18*(12), e315. doi: 10.2196/jmir.6759

Baas, J. M., Ewert, A., & Chavez, D. J. (1993). Influence of ethnicity on recreation and natural environment use patterns: Managing recreation sites for ethnic and racial diversity. *Environmental Management, 17*(4), 523-529. doi: 10.1007/BF02394667

Babbie, E. R. (2013). *The basics of social research.* Belmont, CA: Cengage Learning.

Banks, R. R., Eberhardt, J. L., & Ross, L. (2006). Discrimination and implicit bias in a racially unequal society. *California Law Review, 94*(4), 1169-1190. doi: 10.2307/20439061

Bauder, H. (2001). Work, young people and neighbourhood representations. *Social & Cultural Geography, 2*(4), 461-480. doi: 10.1080/14649360120092643

Bauder, H. (2002). Neighbourhood effects and cultural exclusion. *Urban Studies, 39*(1), 85-93. doi: 10.1080/00420980220099087

Bauer, K. (2016, October 20). The 606 Trail Hit By 5 Armed Robberies In A Month, Police Say. *DNA Info.* Retrieved from https://www.dnainfo.com/chicago/20161020/logan-square/chicago-crime-the-606

Bernard, H. R. (2011). *Research methods in anthropology: Qualitative and quantitative approaches.* Plymouth, UK: Rowman Altamira.

Besbris, M., Faber, J. W., Rich, P., & Sharkey, P. (2015). Effect of neighborhood stigma on economic transactions. *Proceedings of the National Academy of Sciences of the United States of America, 112*(16), 4994-4998. doi:10.1073/pnas.1414139112

Betancur, J. J. (2002). The politics of gentrification: The case of west town in Chicago. *Urban Affairs Review, 37*(6), 780-814. doi: 10.1177/107874037006002

Betancur, J., & Smith, J. (2016). *Claiming Neighborhood: New Ways of Understanding Urban Change*. Urbana, IL University of Illinois Press.

Biasco, P. (2016, February 22). As Area Near 606 Gentrifies, Loans Give Longtime Humboldt Residents Hope. *DNAInfo.* Retrieved from https://www.dnainfo.com/chicago/20160222/west-humboldt-park/606-loan-program-aims-stop-gentrification-humboldt-park

Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development.* Thousand Oaks, CA: Sage Publishing.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. doi: 10.1191/1478088706qp063oa

Brigham, J. C. (1971). Ethnic stereotypes. *Psychological bulletin*, *76*(1), 15-38. doi: 10.1037/h0031446

Brisman, A. (2012). An elevated challenge to 'broken windows': The high line (new york). *Crime, Media, Culture, 8*(3), 381-381. doi: 10.1177/1741659012443235

Brown-Saracino, J. (2009). *A neighborhood that never changes : Gentrification, social preservation, and the search for authenticity*. Chicago, IL: University of Chicago Press.

Bruton, C. M., & Floyd, M. F. (2014). Disparities in built and natural features of urban parks: Comparisons by neighborhood level race/ethnicity and income. *Journal of Urban Health, 91*(5), 894-907. doi: 10.1007/s11524-014-9893-4

Byrne, J. (2012). When green is white: The cultural politics of race, nature and social exclusion in a los angeles urban national park. *Geoforum, 43*(3), 595-611. doi: 10.1016/j.geoforum.2011.10.002

Byrne, J., & Wolch, J. (2009). Nature, race, and parks: past research and future directions for geographic research. *Progress in Human Geography*, *33*(6), 743-765. doi: 10.1177/0309132509103156

Checker, M. (2011). Wiped out by the "greenwave": Environmental gentrification and the paradoxical politics of urban sustainability. *City & Society, 23*(2), 210-229. doi: 10.1111/j.1548-744X.2011.01063.x

Cohen, D. A., Han, B., Derose, K. P., Williamson, S., Marsh, T., Raaen, L., & McKenzie, T. L. (2016). The paradox of parks in low-income areas: Park use and perceived threats. *Environment and Behavior, 48*(1), 230-245. doi: 10.1177/0013916515614366.

Coutts, C., & Miles, R. (2011). Greenways as green magnets: The relationship between the race of greenway users and race in proximal neighborhoods. *Journal of Leisure Research, 43*(3), 317-333. doi: 925052823

Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches.* Thousand Oaks, CA: Sage.

Crocker, J. (1999). Social stigma and self-esteem: Situational construction of self-worth. *Journal of Experimental Social Psychology, 35*(1), 89-107. doi: 10.1006/jesp.1998.1369

Crocker, J., Voelkl, K., Testa, M., & Major, B. (1991). Social stigma: The affective consequences of attributional ambiguity. *Journal of Personality and Social Psychology*, *60*(2), 218-228. doi: 10.1037//0022-3514.60.2.218

Cronan, M. K., Shinew, K. J., & Stodolska, M. (2008). Trail use among Latinos: Recognizing diverse uses among A specific population. *Journal of Park & Recreation Administration, 26*(1), 62-86.

Dahmann, N., Wolch, J., Joassart-Marcelli, P., Reynolds, K., & Jerrett, M. (2010). The active city? disparities in provision of urban public recreation resources. *Health & Place, 16*(3), 431-445. doi: 10.1016/j.healthplace.2009.11.005

Denizen, N.K. & Lincoln, Y.S. (2005). *The Sage Handbook of Qualitative Research* (3rd Ed). Thousand Oaks, CA: Sage.

DeWalt, K. M., & DeWalt, B. R. (2011). *Participant observation: A guide for fieldworkers*. Plymouth, UK: Rowman Altamira.

Diaz, D. R., & Torres, R. D. (2012). *Latino urbanism: The politics of planning, policy, and redevelopment.* New York, NY*:* NYU Press.

Dooling, S. (2009). Ecological gentrification: A research agenda exploring justice in the city. *International Journal of Urban and Regional Research, 33*(3), 621-639. doi: 10.1111/j.1468-2427.2009.00860.x

Dovidio, J. F., Brigham, J. C., Johnson, B. T., & Gaertner, S. L. (1996). Stereotyping, prejudice, and discrimination: Another look. In C. Macrae, C. Stangor, & M. Hewstone (Eds.) *Stereotypes and Stereotyping,* (pp. 276-319). New York, NY: Guilford Press

Dovidio, J. F., Kawakami, K., & Gaertner, S. L. (2002). Implicit and explicit prejudice and interracial interaction. *Journal of Personality and Social Psychology, 82*(1), 62-68. doi: 10.1037/0022-3514.82.1.62

Dovidio, J. F., & Gaertner, S. L. (2000). Aversive racism and selection decisions: 1989 and 1999. *Psychological Science, 11*(4), 315-319. doi:10.1111/1467-9280.00262

Eckerd, A. (2011). Cleaning up without clearing out? A spatial assessment of environmental gentrification. *Urban Affairs Review, 47*(1), 31-59. doi: 10.1177/1078087410379720

Ellen, I. G. (2000). *Sharing america's neighborhoods.* Cambridge, MA: Harvard University Press.

Erlandson, D. A. (1993). *Doing naturalistic inquiry: A guide to methods.* Thousand Oaks, CA: Sage.

Farley, R., Steeh, C., Krysan, M., Jackson, T., & Reeves, K. (1994). Stereotypes and segregation: Neighborhoods in the Detroit area. *American Journal of Sociology, 100*(3), 750-780. doi: 10.1086/230580

Feagin, J. R., & Eckberg, D. L. (1980). Discrimination: Motivation, action, effects, and context. *Annual Review of Sociology*, *6*(1), 1-20. doi: 10.1146/annurev.so.06.080180.000245

Flores-Gonzalez, N. (2001). Paseo boricua: Claiming a Puerto Rican space in Chicago. *Centro Journal, 13*(2), 7-23.

Floyd, M. F. (1998). Getting beyond marginality and ethnicity: The challenge for race and ethnic studies in leisure research. *Journal of Leisure Research, 30*(1), 3-22.

Floyd, M. (2001). Managing National Parks in a Multicultural Society: Searching for Common Ground. *The George Wright Forum,18*(3), 41-51. Retrieved from http://www.jstor.org/stable/43597755

Floyd, M. F. (2007). Research on race and ethnicity in leisure: Anticipating the fourth wave. *Leisure/loisir, 31*(1), 245-254. doi: 10.1080/14927713.2007.9651380

Floyd, M. F. (2014). Social justice as an integrating force for leisure research. *Leisure Sciences, 36*(4), 379-387. doi: 10.1080/01490400.2014.917002

Floyd, M. F., Gramann, J. H., & Saenz, R. (1993). Ethnic factors and the use of public outdoor recreation areas: The case of Mexican Americans. *Leisure Sciences, 15*(2), 83-98. doi: 10.1080/01490409309513190

Floyd, M. F., & Johnson, C. Y. (2002). Coming to terms with environmental justice in outdoor recreation: A conceptual discussion with research implications. *Leisure Sciences, 24*(1), 59-77. doi: 10.1080/01490400252772836

Floyd, M. F., & Shinew, K. J. (1999). Convergence and divergence in leisure style among whites and african americans: Toward an interracial contact hypothesis. *Journal of Leisure Research, 31*(4), 359-384.

Fontana, A., & Frey, J. H. (2000). The interview: From structured questions to negotiated text. In N. Denzin & Y. Lincoln (Eds.) *Handbook of Qualitative Research,* (pp. 645-672). Thousand Oaks, CA: Sage

Gaertner, S. L., & Dovidio, J. F. (1986). The aversive form of racism. In J. Dovidio & S. Gaertner (Eds.,), *Prejudice, discrimination, and racism (*pp. 61-89). San Diego, CA: Academic Press.

Gandy, M. (2003). *Concrete and clay: Reworking nature in New York City.* Cambridge, MA*:* MIT Press.

Garbarino, J. (2017). Gun violence in Chicago. *Violence and Gender, 4*(2), 45-47. doi: 10.1089/vio.2017.0013

Gehl, J. (2013). *Cities for people.* Washington, DC: Island press.

Gobster, P. H. (1998). Urban parks as green walls or green magnets? interracial relations in neighborhood boundary parks. *Landscape and Urban Planning, 41*(1), 43-55. doi: 10.1016/S0169-2046(98)00045-0

Gobster, P. H. (2002). Managing urban parks for a racially and ethnically diverse clientele. *Leisure Sciences, 24*(2), 143-159. doi: 10.1080/01490400252900121

Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity.* New York, NY: Simon and Schuster.

Gómez, E., & Malega, R. (2007). Residential attributes, park use, and perceived benefits: An exploration of individual and neighbourhood characteristics. *Leisure/Loisir*, *31*(1), 77-104. doi: 10.1080/14927713.2007.9651374

Gomez-Feliciano, L., McCreary, L. L., Sadowsky, R., Peterson, S., Hernandez, A., McElmurry, B. J., & Park, C. G. (2009). Active living logan square: Joining together to create opportunities for physical activity. *American Journal of Preventive Medicine, 37*(6), S361-S367. doi:10.1016/j.amepre.2009.09.003

González, E. R. (2017). *Latino City: urban planning, politics, and the grassroots*. New York, NY: Taylor & Francis.

Gould, K. A., & Lewis, T. L. (2016). *Green Gentrification: Urban sustainability and the struggle for environmental justice*. New York, NY: Routledge

Groff, E., & McCord, E. S. (2012). The role of neighborhood parks as crime generators. *Security Journal, 25*(1), 1-24.

Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation.* Thousand Oaks, CA: Sage.

Harnik, P. (2012). *Urban green: Innovative parks for resurgent cities.* Washington, DC: Island Press.

Harris, B., Larson, L., & Ogletree, S. (2017). Different views from the 606: Examining the impacts of an urban greenway on crime in chicago. *Environment and Behavior,* , 0013916517690197.

Hartmann, D. (2001). Notes on midnight basketball and the cultural politics of recreation, race, and at-risk urban youth. *Journal of Sport & Social Issues, 25*(4), 339-371. doi: 10.1177/0193723501254002

Hauser, A. (2017, July 23). Thieves on The 606 Knocking People Off Bikes And Beating, Robbing Them.*DNA Info.* Retrieved from https://www.dnainfo.com/chicago/20170723/logan-square/thieves-on-606-knocking-people-off-bikes-then-beating-robbing-them

Hauser, A. (2016, August 10). '606' Trail Walker Punched; Suspect Threatened to Steal Her Dog, Police Say. *DNA Info.* Retrieved from https://www.dnainfo.com/chicago/20160810/humboldt-park/606-walker-punched-suspect-threatened-steal-her-dog-police-say

Henry, P. J. (2009). Modern racism. In J. M. Levine & M. A. Hogg (Eds.), *Encyclopedia of group processes and intergroup relations*, (pp. 575–577). Thousand Oaks, CA: Sage

Hum, T. (2014). *Making a global immigrant neighborhood: Brooklyn's Sunset Park* (Vol. 171). Philadelphia, PA: Temple University Press.

Hutchison, R. (1987). Ethnicity and urban recreation: Whites, blacks, and hispanics in Chicago's public parks. *Journal of Leisure Research, 19*(3), 205-222

Hwang, J. (2015). Gentrification in changing cities immigration, new diversity, and racial inequality in neighborhood renewal. *The Annals of the American Academy of Political and Social Science, 660*(1), 319-340. doi: 10.1177/0002716215579823

Hwang, J., & Sampson, R. J. (2014). Divergent pathways of gentrification racial inequality and the social order of renewal in chicago neighborhoods. *American Sociological Review, 79*(4), 726-751. doi: 10.1177/0003122414535774

Hyra, D. (2015). The back-to-the-city movement: Neighbourhood redevelopment and processes of political and cultural displacement. *Urban Studies*, *52*(10), 1753-1773.doi: 10.1177/0042098014539403

Kang, J., & Lane, K. (2010). Seeing through colorblindness: Implicit bias and the law. *UCLA Law Review*, *58*, 465-520.

Katz, C., & Kirby, A. (1991). In the nature of things: the environment and everyday life. *Transactions of the Institute of British Geographers, 16*(3), *259-271.*

Keith, S. J., Larson, L. R., Hallo, J. C., Shafer, C. S., & Fernandez, M. (2018). Greenway use and preferences in diverse urban communities: Implications for trail design and management. *Landscape and Urban Planning*, 172, 47-59. doi: 10.1016/j.landurbplan.2017.12.007

Krysan, M., & Bader, M. (2007). Perceiving the metropolis: Seeing the city through a prism of race. *Social Forces, 86*(2), 699-733. doi: 10.1093/sf/86.2.699

Krysan, M., & Bader, M. D. (2009). Racial blind spots: Black-white-latino differences in community knowledge. *Social Problems, 56*(4), 677-701.

Lane, J., & Meeker, J. W. (2005). Theories and fear of gang crime among whites and latinos: A replication and extension of prior research. *Journal of Criminal Justice, 33*(6), 627-641. doi: 10.1016/j.jcrimjus.2005.08.009

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry.* Thousand Oaks, CA: Sage.

Lindsey, G., Han, Y., Wilson, J., & Yang, J. (2006). Neighborhood correlates of urban trail use. *Journal of Physical Activity and Health, 3*(s1), S139-S157. doi: 10.1123/jpah.3.s1.s139

Lloyd, R. (2002). Neo–Bohemia: Art and neighborhood redevelopment in Chicago. *Journal of Urban Affairs, 24*(5), 517-532. doi: 10.1111/1467-9906.00141

Loury, G. C., & Loury, G. C. (2009). *The anatomy of racial inequality*. Cambridge, MA: Harvard University Press

Low, S. (2013). Public space and diversity: Distributive, procedural and interactional justice for parks. In G. Young, & D. Stevenson (Eds.). *The Ashgate research companion to planning and culture* (pp. 295–310). Surrey, England: Ashgate Publishing

Low, S., Taplin, D., & Scheld, S. (2009). *Rethinking urban parks: Public space and cultural diversity.* Austin, TX: University of Texas Press.

Major, B., & O'Brien, L. T. (2005). The social psychology of stigma. *Annu.Rev.Psychol., 56*, 393-421. doi: 10.1146/annurev.psych.56.091103.070137

Major, B., Spencer, S., Schmader, T., Wolfe, C., & Crocker, J. (1998). Coping with negative stereotypes about intellectual performance: The role of psychological disengagement. *Personality and social psychology bulletin*, *24*(1), 34-50. doi: 10.1177/0146167298241003

Manning, R. E. (2010). *Studies in outdoor recreation. Search and research for satisfaction.* Corvallis, OR: Oregon State University Press

Marotti, A. (2016, November 1). Housing prices on the rise around The 606. *Chicago Tribune*. Retrieved from http://www.chicagotribune.com/business/ct-606-housing-prices-1101-biz-20161031-story.html

Massey, D. S., & Denton, N. A. (1993). *American apartheid: Segregation and the making of the underclass.* Cambridge, MA: Harvard University Press.

McConahay, J. B. (1986). Modern racism, ambivalence, and the modern racism scale. In J.F. Dovidio & S.L. Gaertner (Eds.). *Prejudice, discrimination, and racism*, (pp.91-125). San Diego, CA: Academic Press

McCormack, G. R., Rock, M., Toohey, A. M., & Hignell, D. (2010). Characteristics of urban parks associated with park use and physical activity: A review of qualitative research. *Health & place*, *16*(4), 712-726.doi: 10.1016/j.healthplace.2010.03.003

Miles, M. B., Huberman, A. M., & Saldana, J. (2013). *Qualitative data analysis: A methods sourcebook.* Thousand Oaks, CA: Sage.

Moore, L. V., Roux, A. V. D., Evenson, K. R., McGinn, A. P., & Brines, S. J. (2008). Availability of recreational resources in minority and low socioeconomic status areas. *American Journal of Preventive Medicine, 34*(1), 16-22. doi: 10.1016/j.amepre.2007.09.021

Mortice, Z. (2015). The express lane: Chicago's elevated rail park, the 606, was conceived and funded as transit infrastucture. *Landscape Architecture Magazine, 105*(4), 80.

Mumm, J. (2016). Gentrification in color and time: White and puerto rican racial histories at work in Humboldt Park. *Centro Journal, 28*(2), 88-125

Neckerman, K. M., Lovasi, G. S., Davies, S., Purciel, M., Quinn, J., Feder, E., ... & Rundle, A. (2009). Disparities in urban neighborhood conditions: evidence from GIS measures and field observation in New York City. *Journal of Public Health Policy*, *30*(1), S264-S285.

Neuberg, S. L., Smith, D. M., & Asher, T. (2000). Why people stigmatize: Toward a biocultural framework. In T. Heatherton (Ed). *The social psychology of stigma*, (pp 31-61). New York, NY: Gilford Press

Nosek, B. A., Smyth, F. L., Hansen, J. J., Devos, T., Lindner, N. M., Ranganath, K. A., . . . Greenwald, A. G. (2007). Pervasiveness and correlates of implicit attitudes and stereotypes. *European Review of Social Psychology, 18*(1), 36-88. doi: 10.1080/10463280701489053

Papachristos, A. V., Smith, C. M., Scherer, M. L., & Fugiero, M. A. (2011). More coffee, less crime? The relationship between gentrification and neighborhood crime rates in Chicago, 1991 to 2005. *City & Community*, *10*(3), 215-240. doi: 10.1111/j.1540-6040.2011.01371.x

Park, R. E., McKenzie, R. D., & Burgess, E. W. (1967). *The city*. Chicago, IL: University of Chicago Publishing

Pérez, G. (2004). *The near northwest side story: Migration, displacement, and Puerto Rican families.* Berkeley, CA*:* University of California Press.

Pérez, G. M. (2002). The other" real world": Gentrification and the social construction of place in Chicago. *Urban Anthropology and Studies of Cultural Systems and World Economic Development,31*(1) , 37-68.

Perkins, D. F., Borden, L. M., Villarruel, F. A., Carlton-Hug, A., Stone, M. R., & Keith, J. G. (2007). Participation in structured youth programs: Why ethnic minority urban youth choose to participate—or not to participate. *Youth & Society, 38*(4), 420-442. doi: 10.1177/0044118X06295051

Pinel, E. C. (1999). Stigma consciousness: The psychological legacy of social stereotypes. *Journal of Personality and Social Psychology, 76*(1), 114-128. doi: 10.1037/0022-3514.76.1.114

Pinel, E. C. (2002). Stigma consciousness in intergroup contexts: The power of conviction. *Journal of Experimental Social Psychology, 38*(2), 178-185. doi: 10.1006/jesp.2001.1498

Pokémon GO (n.d.). *Pokémon Video Games.* Retrieved from https://www.pokemon.com/us/pokemon-video-games/pokemon-go/

Price, A. E., & Reed, J. A. (2014). Use and nonuse of a rail trail conversion for physical activity: Implications for promoting trail use. *American Journal of Health Education*, *45*(4), 249-256.

Price, A. E., Reed, J. A., & Muthukrishnan, S. (2012). Trail user demographics, physical activity behaviors, and perceptions of a newly constructed greenway trail. *Journal of Community Health, 37*(5), 949-956.

Rigolon, A., & Németh, J. (2018). "We're not in the business of housing:" Environmental gentrification and the nonprofitization of green infrastructure projects. *Cities*. https://doi.org/10.1016/j.cities.2018.03.016

Rinaldo, R. (2002). Space of resistance: The Puerto Rican cultural center and Humboldt Park. *Cultural Critique, 50*(1), 135-174. doi: 10.1353/cul.2002.0010

Rodkin, D. (2017, June 1) Would anti-gentrification plan kill construction around The 606? *Crain's.* Retrieved from http://www.chicagobusiness.com/realestate/20170601/CRED0701/170609998/would-anti-gentrification-plan-kill-construction-around-the-606

Rodriguez, N. (2012). Urban redevelopment and mexican american barrios in the socio-spatial order. In D. Diaz & R. Torres (Eds.) *Latino Urbanism: The Politics of Planning, Policy, and Redevelopment, (*pp. 87-110). New York, NY: New York University Press

Rodríguez-Muñiz, M. (2016). Riot and Remembrance: Puerto Rican Chicago and the Politics of Interruption. *Centro Journal*, *28*(2), 204-217.

Rúa, M. M. (2012). *A grounded identidad: Making new lives in Chicago's Puerto Rican neighborhoods.* New York, NY: Oxford University Press.

Sampson, R. J. (2012). *Great american city: Chicago and the enduring neighborhood effect* Chicago, IL: University of Chicago Press.

Sampson, R. J., & Raudenbush, S. W. (2004). Seeing disorder: Neighborhood stigma and the social construction of "broken windows". *Social Psychology Quarterly, 67*(4), 319-342. doi: 10.1177/019027250406700401

Sampson, R. J., & Raudenbush, S. W. (2005). Neighborhood stigma and the perception of disorder. *Focus, 24*(1), 7-11.

Sanders, B. (2004). *Youth crime and youth culture in the inner city.* New York, NY: Routledge.

Sharaievska, I., Stodolska, M., Shinew, K. J., & Kim, J. (2010). Perceived discrimination in leisure settings in Latino urban communities. *Leisure/Loisir, 34*(3), 295-326. doi: 10.1080/14927713.2010.521319

Shinew, K. J., Floyd, M. F., & Parry, D. (2004). Understanding the relationship between race and leisure activities and constraints: Exploring an alternative framework. *Leisure Sciences, 26*(2), 181-199. doi: 10.1080/01490400490432109

Shinew, K. J., Stodolska, M., Floyd, M., Hibbler, D., Allison, M., Johnson, C., & Santos, C. (2006). Race and ethnicity in leisure behavior: Where have we been and where do we need to go? *Leisure Sciences, 28*(4), 403-408. doi: 10.1080/01490400600745902

Shinew, K. J., Stodolska, M., Roman, C. G., & Yahner, J. (2013). Crime, physical activity and outdoor recreation among Latino adolescents in Chicago. *Preventive Medicine, 57*(5), 541-544. doi: 10.1016/j.ypmed.2013.07.008

Sinah, A. (2014). *Slow landscapes of elevated linear parks: Bloomingdale trail in chicago* doi:10.1080/14601176.2013.830428

Solecki, W. D., & Welch, J. M. (1995). Urban parks: Green spaces or green walls? *Landscape and Urban Planning, 32*(2), 93-106. doi: 10.1016/0169-2046(94)00193-7

Shmool, J. L., Yonas, M. A., Newman, O. D., Kubzansky, L. D., Joseph, E., Parks, A., ... & Clougherty, J. E. (2015). Identifying perceived neighborhood stressors across diverse communities in New York City. *American journal of community psychology*, *56*(1-2), 145-155. doi: 10.1007/s10464-015-9736-9

Spielman, F. (2017, May 23). Aldermen propose hefty fees to stop 606 gentrification. *Chicago Sun Times.* Retrieved from http://chicago.suntimes.com/news/aldermen-propose-hefty-fees-to-stop-606-gentrification/

Stodolska, M., Acevedo, J. C., & Shinew, K. J. (2009). Gangs of Chicago: Perceptions of crime and its effect on the recreation behavior of latino residents in urban communities. *Leisure Sciences, 31*(5), 466-482. doi: 10.1080/01490400903199773

Stodolska, M., & Shinew, K. J. (2010). Environmental constraints on leisure time physical activity among latino urban residents. *Qualitative Research in Sport and Exercise, 2*(3), 313-335. doi: 10.1080/19398441.2010.517038

Stodolska, M., Shinew, K. J., Acevedo, J. C., & Izenstark, D. (2011). Perceptions of urban parks as havens and contested terrains by mexican-americans in Chicago neighborhoods. *Leisure Sciences, 33*(2), 103-126. doi: 10.1080/01490400.2011.550220

Stodolska, M., Shinew, K. J., Acevedo, J. C., & Roman, C. G. (2013). "I was born in the hood": Fear of crime, outdoor recreation and physical activity among mexican-american urban adolescents. *Leisure Sciences, 35*(1), 1-15. doi: 10.1080/01490400.2013.739867

Stodolska, M., Shinew, K., Floyd, M., Walker, G. (2013). *Race, ethnicity, and leisure.* Champaign, IL: Human Kinetics.

Stodolska, M., & Walker, G. J. (2007). Ethnicity and leisure: Historical development, current status, and future directions. *Leisure/Loisir, 31*(1), 3-26. doi: 10.1080/14927713.2007.9651371

Strack, R. W., Magill, C., & McDonagh, K. (2004). Engaging youth through photovoice. *Health Promotion Practice, 5*(1), 49-58. doi: 10.1177/1524839903258015

Strauss, A. L. (1987). *Qualitative analysis for social scientists.* Cambridge, UK: Cambridge University Press.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* . Thousand Oaks, CA: Sage Publishing.

Suarez, R. (1999). *The old neighborhood: What we lost in the great suburban migration, 1966-1999.* New York, NY: Simon and Schuster.

Taylor, D. E. (1999). Central Park as a model for social control: urban parks, social class and leisure behavior in nineteenth-century America. *Journal of Leisure Research*, *31*(4), 420-477.

Taylor, K. (2010, July 14). After high Line's success, other cities look up. *New York Times.* Retrieved from http://www.nytimes.com/2010/07/15/arts/design/15highline.html

The story. (n.d.). *The 606*. Retrieved from http://www.the606.org/about/the-story/

Toro-Morn, M. (2016). De bandera a bandera (from flag to flag): New scholarship about the puerto rican diaspora in Chicago. *CENTRO Journal, 28*(2), 4-35.

Trail mix event series. (n.d.). *The 606*. Retrieved from http://www.the606.org/explore/trailmix/

U.S. Census Bureau (2015). 2010 American Community Survey. American Fact Finder. Washington, DC: U.S. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml#

Vivanco, L. (2016a, May 17). Marchers take to The 606 trail to protest gentrification. *Chicago Tribune*. Retrieved from http://www.chicagotribune.com/news/local/breaking/ct-606-trail-march-gentrification-met-0517-story.html

Vivanco, L. (2016b, June 3). The 606 trail, a study in contrast, celebrates its first birthday. *Chicago Tribune*. Retrieved from http://www.chicagotribune.com/news/ct-606-trail-anniversary-met-0531-20160602-story.html

Wang, C. C., Cash, J. L., & Powers, L. S. (2000). Who knows the streets as well as the homeless? promoting personal and community action through photovoice. *Health Promotion Practice, 1*(1), 81-89. doi: 10.1177/152483990000100113

Wang, C., & Burris, M. A. (1997). Photovoice: Concept, methodology, and use for participatory needs assessment. *Health Education & Behavior : The Official Publication of the Society for Public Health Education, 24*(3), 369-387. doi: 10.1177/109019819702400309

Wang, C. C., Morrel-Samuels, S., Hutchison, P. M., Bell, L., & Pestronk, R. M. (2004). Flint photovoice: Community building among youths, adults, and policymakers. *American Journal of Public Health, 94*(6), 911-913. doi:94/6/911

West, P. C. (1989). Urban region parks and black minorities: Subculture, marginality, and interracial relations in park use in the detroit metropolitan area. *Leisure Sciences, 11*(1), 11-28. doi: 10.1080/01490408909512202

Whiting, J. A., Larson, L. R. Green, G. T., & Kralowec, C. (2017). Outdoor recreation motivation and site preferences across diverse racial/ethnic groups: A case study of Georgia State Parks. *Journal of Outdoor Recreation and Tourism*, 18, 10-21. doi: 10.1016/j/jort.2017.02.001

Who We Are (n.d.). *Friends of the Bloomingdale Trail.* Retrieved from https://www.bloomingdaletrail.org/about-us

Wilson, D., & Grammenos, D. (2005). Gentrification, discourse, and the body: Chicago's Humboldt Park. *Environment and Planning D: Society and Space, 23*(2), 295-312. doi: 10.1068/d0203

Wilson, W. J., & Taub, R. P. (2006). *There goes the neighborhood: Racial, ethnic, and class tensions in four Chicago Neighborhoods and their meaning for America* (1st ed.). New York: Knopf.

Wolch, J. R., Byrne, J., & Newell, J. P. (2014). Urban green space, public health, and environmental justice: The challenge of making cities 'just green enough'. *Landscape and Urban Planning, 125*, 234-244. doi: 10.1016/j.landurbplan.2014.01.017

Wolch, J. R., Tatalovich, Z., Spruijt-Metz, D., Byrne, J., Jerrett, M., Chou, C. P., ... & Reynolds, K. (2010). Proximity and perceived safety as determinants of urban trail use: findings from a three-city study. *Environment and Planning A*, *42*(1), 57-79.

Wolch, J., Wilson, J. P., & Fehrenbach, J. (2005). Parks and park funding in los angeles: An equity-mapping analysis. *Urban Geography, 26*(1), 4-35. doi: 10.2747/0272-3638.26.1.4

Wolch, J., & Zhang, J. (2004). Beach recreation, cultural diversity and attitudes toward nature. *Journal of Leisure Research, 36*(3), 414-443.

Yin, R. K. (2013). *Case study research: Design and methods*. Thousand Oaks, CA: Sage publications.

Chapter IV: Appendix A (Interview Participant Information)

Table 1: *Pseudonyms and Demographic Information for Interview Participants*

Pseudonym	Race	Gender	Age	Neighborhood
Ally	Latino/a/Hispanic	Female	32	Humboldt Park/Logan Square
Adam	Asian	Male	41	Humboldt Park/Logan Square
Adrian	Latino/a/Hispanic	Male	28	Humboldt Park/Logan Square
Alan	White	Male	25	Bucktown/Wicker Park
Alan	Latino/a/Hispanic	Male	19	Humboldt Park/Logan Square
Alice	Latino/a/Hispanic	Female	28	Humboldt Park/Logan Square
Ana	Latino/a/Hispanic	Female	35	Humboldt Park/Logan Square
Avery	White	Female	54	Humboldt Park/Logan Square
Bella	Latino/a/Hispanic	Female	45	Humboldt Park/Logan Square
Brad	White	Male	22	Bucktown/Wicker Park
Brent	White	Male	54	Non-resident
Brian	White	Male	45	Non-resident
Brittany	White	Female	21	Non-resident
Brook	White	Female	46	Humboldt Park/Logan Square

Carla	Latino/a/Hispanic	Female	54	Humboldt Park/Logan Square
Caroline	White	Female	34	Bucktown/Wicker Park
Carter	White	Male	22	Bucktown/Wicker Park
Chris	Latino/a/Hispanic	Male	18	Humboldt Park/Logan Square
Cynthia	Latino/a/Hispanic	Female	26	Humboldt Park/Logan Square
Daniel	Latino/a/Hispanic	Male	37	Non-resident
Danielle	Latino/a/Hispanic	Female	35	Humboldt Park/Logan Square
Dante	Latino/a/Hispanic	Male	40	Humboldt Park/Logan Square
Diego	Latino/a/Hispanic	Male	36	Humboldt Park/Logan Square
Dylan	White	Male	24	Bucktown/Wicker Park
Edwin	Latino/a/Hispanic	Male	33	Humboldt Park/Logan Square
Emily	White	Female	30	Bucktown/Wicker Park
Emma	Latino/a/Hispanic	Female	26	Humboldt Park/Logan Square
Franco	Latino/a/Hispanic	Male	19	Humboldt Park/Logan Square
Garrett	Black	Male	29	Humboldt Park/Logan Square
Gloria	White	Female	46	Non-resident
Grace	White	Female	31	Humboldt Park/Logan Square
Gwynn	White	Female	50	Non-resident
Haley	White	Female	52	Bucktown/Wicker Park
Hannah	Latino/a/Hispanic	Female	18	Humboldt Park/Logan Square
Harry	White	Male	24	Bucktown/Wicker Park
Henry	White	Male	33	Bucktown/Wicker Park
Hugo	Latino/a/Hispanic	Male	18	Humboldt Park/Logan Square
Hunter	White	Male	36	Non-resident
Isabella	Latino/a/Hispanic	Female	24	Humboldt Park/Logan Square
Jackson	White	Male	28	Humboldt Park/Logan Square
Jacob	White	Male	38	Humboldt Park/Logan Square
James	Black	Male	42	Humboldt Park/Logan Square
Jennifer	White	Female	28	Humboldt Park/Logan Square
Jessica	White	Female	21	Humboldt Park/Logan Square
Jordan	Latino/a/Hispanic	Male	18	Humboldt Park/Logan Square
Julia	White	Female	28	Bucktown/Wicker Park
Julian	Latino/a/Hispanic	Male	53	Humboldt Park/Logan Square
Katrina	Black	Female	24	Non-resident
Kevin	White	Male	25	Bucktown/Wicker Park
Kyle	Latino/a/Hispanic	Male	18	Humboldt Park/Logan Square
Lauren	White	Female	26	Bucktown/Wicker Park
Leah	Middle Eastern	Female	24	Non-resident
Liam	White	Male	39	Non-resident
Lily	Latino/a/Hispanic	Female	31	Humboldt Park/Logan Square

Lonnie	Latino/a/Hispanic	Male	27	Humboldt Park/Logan Square
Lorenzo	Latino/a/Hispanic	Male	50	Humboldt Park/Logan Square
Lucas	Latino/a/Hispanic	Male	24	Humboldt Park/Logan Square
Luis	Latino/a/Hispanic	Male	19	Humboldt Park/Logan Square
Maria	Latino/a/Hispanic	Female	43	Humboldt Park/Logan Square
Martin	Latino/a/Hispanic	Male	36	Humboldt Park/Logan Square
Mason	White	Male	44	Bucktown/Wicker Park
Mateo	Latino/a/Hispanic	Male	29	Humboldt Park/Logan Square
Max	White	Male	41	Humboldt Park/Logan Square
Maya	Latino/a/Hispanic	Female	48	Humboldt Park/Logan Square
Michelle	White	Female	32	Bucktown/Wicker Park
Mila	Latino/a/Hispanic	Female	68	Humboldt Park/Logan Square
Morgan	White	Female	23	Bucktown/Wicker Park
Nathan	White	Male	33	Humboldt Park/Logan Square
Oliver	White	Male	27	Bucktown/Wicker Park
Patty	White	Female	28	Humboldt Park/Logan Square
Preston	White	Male	28	Bucktown/Wicker Park
Riley	White	Female	34	Bucktown/Wicker Park
Robert	Black	Male	18	Humboldt Park/Logan Square
Ryan	White	Male	32	Humboldt Park/Logan Square
Sam	White	Male	27	Bucktown/Wicker Park
Sofia	Latino/a/Hispanic	Female	35	Humboldt Park/Logan Square
Susan	Latino/a/Hispanic	Female	39	Humboldt Park/Logan Square
Teresa	White	Female	56	Humboldt Park/Logan Square
Thomas	White	Male	46	Bucktown/Wicker Park
Tori	White	Female	32	Humboldt Park/Logan Square
Tucker	Black	Male	18	Non-resident
Victoria	Latino/a/Hispanic	Female	24	Humboldt Park/Logan Square
Will	White	Male	58	Non-resident
Wyatt	Latino/a/Hispanic	Male	19	Humboldt Park/Logan Square
Zelda	White	Female	63	Humboldt Park/Logan Square
Zoe	Latino/a/Hispanic	Female	66	Humboldt Park/Logan Square

CHAPTER V: THE URBAN GREENWAY PARADOX

Introduction

The final chapter of this dissertation synthesizes the findings from the pilot study on neighborhood crime and the two manuscripts on intimate segregation and neighborhood stigma for a final discussion regarding The 606 and the neighborhoods it traverses. More specifically, this chapter will take a final look at the urban greenway paradox created by The 606 in Humboldt Park and what it means moving forward. This chapter will begin by revisiting both the benefits of The 606 in the Humboldt Park community and how these benefits have been attenuated by pervasive stereotypes imbued on the neighborhood and the residents living within its boundaries. Next, this chapter will

re-examine the role of The 606 in accelerating gentrification in Humboldt Park and how these findings may translate to other cities seeking to place similar infrastructure in diverse areas. Overall, the goal of this final chapter is to highlight the implications of inserting urban greenways into communities of color for both park directors and city officials. Following the aforementioned discussions, this chapter will incorporate the researcher's final thought and make suggestions for future directions in research on urban greenways assimilated into minority enclaves.

Greenway Benefits

Similar to other studies on greenways in urban centers, the study found that The 606 is benefiting the communities in which it traverses in regard to both the physical and social environments (Coutts & Miles, 2011; Larson, Jennings, & Cloutier, 2016; Lindsey, 2003; Moore & Ross, 1998; Sandy, Tchernis, Wilson, Liu, & Zhou, 2013; Shafer, Lee, & Turner, 2000). Physically, The 606 has transformed the once abandon railway corridor into a vibrant space for passive and active recreational activities, social interactions, and environmental sustainability. The 606's unique physical characteristics (e.g., elevated, cascading through numerous communities, surplus of local vegetation, art) has attracted people from all parts the city and tourists visiting for the weekend - a new occurrence for city's western side, not previously perceived as one of the city's destinations (Kindelsperger, 2016; Vivanco, 2016). For the neighborhoods of Humboldt Park and Logan Square, which were deemed to be "park poor" before the trail's construction, the trail has provided many low-income families unprecedented park access, allowing them to engage one another, ride bicycles, and enjoy the Chicago skyline without having to

travel to another location in the city (Kamin, 2015). As previous literature on the efficacy of urban greenways in low-income communities has shown, when residents are provided access, greenways can be a mechanism to stimulate positive physical and mental health (Coutts, 2008; Coutts & Miles, 2011; Gomez-Feliciano et al., 2009; Sandy et al., 2013; Shafer et al., 2000). Bringing opportunities for both social interaction and physical exertion, The 606 is a welcome amenity to the neighborhoods and Chicago as a whole.

In addition to the revitalization of the railway itself, The 606's construction has attracted many new commercial and residential developments to the adjacent neighborhoods. While some of these developments were occurring before the trail's construction, particularly in the neighborhood of Logan Square, the trail has accelerated construction and further extended it into the Humboldt Park neighborhood (Biasco, 2016; Kamin, 2015; Vivanco, 2016). In Humboldt Park, new developments have replaced abandon lots and decaying infrastructure, attracting new residents to the neighborhood. Chapter II presented in this dissertation illustrated how the increase in residential and commercial traffic created by The 606 has helped reduce crime and disorder historically present in the lower-income neighborhoods (i.e., Humboldt Park and Logan Square) adjacent to the corridor. These findings provided support for previous work on the CPTED (Crime Prevention Trough Environmental Design) concept of activity support (Cozens, Saville, & Hillier, 2005; Sohn, 2016) and Jacob's seminal "eyes on the street" theory (Jacobs, 1961). While these theories vary slightly in terms of phrasing and interpretation, each is built on the premise that the mixing of commercial and residential properties in an area will naturally increase traffic. The increase in traffic heightens the

risk for criminals of being caught (i.e., increase in number of eyes on the street), leading to their avoidance of the space. Supporting the notion that the trail was helping to alleviate crime problems in the area were the testimonials from Humboldt Park residents in Chapter III of the dissertation related to intimate segregation and territoriality. As Humboldt Park residents acknowledged, the insertion of The 606 and subsequent development of the area along the trail has led to the displacement of gangs and criminal activity in the space.

According to participants, since the construction and opening of The 606, several "trap houses" the once belonging to local gang affiliates have been removed by developers and/or renovated by neighborhood newcomers. These interviews also helped provide support for another theory related to crime and disorder, the theory of broken windows (Wilson & Kelling, 1982). This theory is predicated on the idea that when physical infrastructure is allowed to decay and remains unrepaired, neighborhood social controls weaken and potential offenders become emboldened. As the space continues to decline, crime is able to embed itself within the very structure of the community (Bratton & Kelling, 2006; Harcourt & Ludwig, 2006; Wilson & Kelling, 1982). "Fixing" broken windows then can have mediating effects by alleviating fear of the space and allowing the social interactions needed to foster social capital (Garvin, Cannuscio, & Branas, 2013; McCormick & Holland, 2015). This notion holds true for urban parks and the spaces around them (McCormick & Holland, 2015; Moore, 2017). For example, working with park directors in urban areas across the country, McCormick and Holland (2015) found that when physical incivilities (graffiti, litter, dilapidated infrastructure) were removed

from park structures and enhancements made to the physical environment, park usage increased as fear of the space declined. Results showed that in Humboldt Park, the revitalization of both the abandon railway and physical infrastructure proximate to The 606 was not only making the space more aesthetically appealing and attracting newcomers, but benefiting longtime Latino/a residents by removing deeply-seeded criminal activity previously embedded in the enclave (Biasco, 2015; Harris, Larson, & Ogletree, 2017). As interviews revealed, the dearth of crime on and around The 606 has benefited the social environment in the Humboldt Park enclave, as residents are able to engage and interaction without the threat of victimization.

Throughout the course of the study, residents of Humboldt Park continually spoke to the trail as being a "safe space" for interactions and social engagements. As previous studies have shown, the threat of gang crime often serves to constrain the park use of Latino/as living in low-income communities (Stodolska, Acevedo, & Shinew, 2009; Stodolska, Shinew, Acevedo, & Izenstark, 2011; Stodolska, Shinew, Acevedo, & Roman, 2013). As participants articulated, because The 606 has removed the threat of gang violence, at least in proximate areas, residents are less fearful of occupying and engaging in leisure in the space. Because Latino/as are more likely to participant in passive leisure and in collective groups (Stodolska, 2013), the fact that the trail is perceived as safe and free of deviance is vital for their inclusion. In this line, while The 606 has provided all residents of the Humboldt Park community with an increased opportunity to network and be together, in no group is the utility of the trail as a safe space more apparent than in that of Latino/a youth. Throughout the course of the study the researcher frequently witnessed

Latino/a youth occupying the trail's grassy areas, benches, and stadium seating. Speaking with a number of Latino/a youth, it was clear that for many of them The 606 was a safe haven - a place away from the neighborhood where they could escape and disengage from the perils they often faced in their communities (e.g., gang violence) and simply be with their peers. In addition to The 606 reducing gang presence and being a safe space for youth socialization and recreation, another benefit of the greenway included its applicability for transportation purposes. While this was not commonly reported by participants in an overt fashion, they often revealed their use of the greenway when traveling to and from bars, restaurants, and friend's residences.

Neighborhood Stigma

While The 606 provided numerous benefits to the Humboldt Park community, both Chapters III, on intimate segregation, and Chapter IV, on neighborhood stigma, showed that these benefits are often attenuated. As results showed, The 606 stands as a divisively dichotomous environment with local communities connected by the corridor often standing in direct contrast to one another. Much of the discourse on the trail was found to be linked to pervasive stereotypes assigned to the Humboldt Park community and the bodies of residents by many White users and residents in connected neighborhoods. Preconceived notions of crime and deviance acted as a constraint, inhibiting recreation and leisure of both Whites and Latino/as on the trail. Interviews with residents in each neighborhood along the trail revealed that the Humboldt Park community was often viewed as truant and disorderly by White trail users and residents. As interviews with White trail users in Chapter IV more clearly showed, despite not

actually observing deviance on The 606 or in Humboldt Park, perceived conceptions of disorder and the fear of victimization led many White trail users and residents to stigmatize the Humboldt Park community and avoid segments of trail located within its boundaries.

Shaped by the neighborhood's history of disorder, which has included riots, arson, gang violence, and wide-poverty (Pérez, 2004; Rodríguez-Muñiz, 2016; Rúa, 2012), the study revealed that the reputation of Humboldt Park as a dangerous space occupied by the dangerous other was often perpetuated through anecdotal mediums and rhetorical hearsay. Numerous White trail users indicated that the only knowledge they had of Humboldt Park was from the accounts of friends and family members, many of whom had never actually been to the enclave. For others, perceptions of the Humboldt Park community were found to be based on information received by the local media, which as they indicated, often painted the picture of the space as haven for disorder. As prior research has shown, media representations of communities of color, although not anecdotal, are often narrowly set and only highlight negative occurrences (Mastro & Tukachinsky, 2011; Tukachinsky, 2015). As Krysan and Bader (2009) pointed out in their work on racial blind spots, because Whites possess little actual knowledge of minority enclaves they will often choose to avoid the spaces all together, instead electing to segregate themselves in all-White or mostly-White neighborhoods. By avoiding contact with residents of color and their communities, "armchair exploration" becomes normalized. Here, information, whether factually accurate or not, becomes filtered through a racial lens and rationalized using generic preconceptions (Power, Neville,

Devereux, Haynes, & Barnes, 2013). Because positive and negative information is cognitively processed asymmetrically, with negative information carrying more weight (Fiske, 1998), any negative information about the community of color becomes grossly inflated and used to affirm preexisting conceptions. Again, because most Whites living in urban areas have little knowledge about minority enclaves, any act of deviance becomes distinctive and assigned as a common characteristic (Hamilton, 2015). As the study on neighborhood stigma showed, while The 606 assisted in fostering positive changes in Humboldt Park, because these changes were not common knowledge or enshrouded by negative information, stigma remained intact, constraining recreational endeavors of all trail users. Taken together the information in the chapters on intimate segregation and neighborhood stigma helped to highlight how a negative stigma imbued on a community of color can become perceived as a universal truth and directly lead to avoidance behaviors (Krysan & Bader, 2007; Krysan & Bader, 2009). These results provided support for Sampson and Raudenbush's theory of neighborhood stigma (Sampson & Raudenbush, 2004; 2005)

While the stigma surrounding the neighborhood of Humboldt Park led many White trail users to avoid western segments of the trail, interviews with trail users and residents also revealed that the stereotypes of deviance and disorder transcended the neighborhood and were extended to bodies of Latino/as when entering spaces on The 606 that were predominantly White (i.e., Wicker Park and Bucktown). Results from the study showed that Latino/as often felt unwelcomed and excluded in eastern trail segments. This was particularly true of Latino/a youth who were often stereotyped as gang affiliated and

a disruption to trail welfare. While the recreational activities of Latino/a youth were often found to deviate from that of White users (i.e., racing bicycles, listening to loud music in large groups), at no time did the researcher observe gang activity or speak with anyone who had witnessed deviance first-hand on the trail. Similar to the results found by Sharaievska et al. (2010) in Little Village, a predominantly Mexican-American community located in Chicago, interviews with in Humboldt Park youth showed that discrimination on the basis of stereotypes often manifested as calls to law enforcement. When this occurred, youth were frequently made to vacate the area or at the very least questioned about their presence. The likelihood of this occurring was heighted when youth were assembled in larger groups in eastern trail segments that traverse more affluent White communities. The action of calling law enforcement by White users and residents and subsequent threat of expulsion resulted in many Latino/a youth choosing to remain on the western trail segments. According to Latino/a youth, in choosing to remain in western trail segments, they were able to socialize without the threat of being displaced by local police. These findings add to the literature on the discrimination of Latino/as within park settings (Byrne & Wolch, 2009; Byrne, 2012; Floyd & Gramann, 1995; Manning, 2010; Sharaievska, Stodolska, Shinew, & Kim, 2010; Stodolska & Jackson, 1998; Stodolska & Shinew, 2010) and provide support for Dovidio and Gaertner's (1986) work on aversive racism and the influence of implicit bias on individual behavior (Dovidio, Kawakami, & Gaertner, 2002; Dovidio & Gaertner, 2000).

Overall the stigma attached to the neighborhood of Humboldt Park and its Latino/a residents was found to play a key role in overall user behavior on The 606. For

White users, the trail segment passing through the more eastern neighborhoods of Bucktown and Wicker Park were perceived to be safer, better maintained, and ideal for engaging in active recreation. Conversely, many White users believed the trail's western end to be more insidious in nature, possessing an increased risk of victimization and housing gang affiliated individuals. Adding to the denigration of the western end was the perception that it was not well maintained, poorly lit, and offered few desirable commercial attractions. Opposed to this viewpoint, many Latino/a residents felt excluded on the eastern side of the trail, perceiving it as unwelcoming, overcrowded, and elitist in nature. This lead many Latino/as to choose to remain and recreate in the more western trail segments located in Humboldt Park and Logan Square. According to numerous Latino/a participants, the western end of the trail was inclusive, offered a sense of ownership, and was a safe space where they could gather and engage in passive leisure without the threat of ridicule. These diametrically opposed attitudes caused the trail to become binary environment, embodying the characteristics of what Mumm (2008) referred to as "intimate segregation". As Mumm (2008) articulated intimate segregation can be described as a divisive state where actors existing within the same environment, such as a neighborhood or park, use structural (fences/walls) and social (avoidance) techniques to avoid contact with those not considered part of the collective. Although no structural mechanisms existed on The 606 to divide or stratify users, avoidance was commonly practiced technique and interactions were rare.

Speaking to the effects of racial disparities Loury and Loury (2009) articulated that dark skin is an easily observed trait that has become imbued with meaning of

deviance and disorder. As the study found negative stereotypes associated with race and ethnicity not only have the ability to stigmatize a classification of people, but the enclaves in which they reside. As Philipp (2000) explained, "no where else does race matter as much as during leisure" (p. 121). With urban greenways quickly become a trend in cities across the country (Harnik, 2012), numerous minority and low-income communities are surely to be impacted. It is then vital for park and recreation managers to not only recognize the implications of neighborhood stigma, but take steps to mitigate its effects. As outlined the study, these steps not only include activating the space with programs that are organized, supervised, and cost-friendly, but directly partnering with local organizations, business, schools, and community influencers to organically communicate and distribute information about the activities occurring in the space. As research on park space in at-risk communities has shown, park programming that is both supervised and organized is the strongest predictor of park engagement (Cohen et al., 2009; Cohen et al., 2016) and may help different racial and ethnic groups to successfully integrate (Coutts & Miles, 2011; Gobster, 2002; Peters, 2010; Shinew, Glover, & Parry, 2004). Furthermore, when built to traverse culturally centric communities like Humboldt Park, instead of aspiring to make the greenway's surface reflect an idyllic image of White residents, park directors should allow local residents to integrate the art, music, and cultural symbols that define the identity of the neighborhood. Only through the celebration of diversity and deliberate movement toward social equity where every community served by the greenway is given a voice can the space truly become inclusive and the impacts of stigma lessened.

Environmental (Green) Gentrification

While this study was successful in showing that the benefits of an urban greenways can be mitigated by neighborhood stigma, community disharmony caused by the trail's role in accelerating environmental gentrification quickly emerged as a salient discussion topic communicated to the researcher by both White and Latino/a residents (Checker, 2011; Eckerd, 2011; Gould & Lewis, 2016; Hagerman, 2007). Throughout this dissertation, environmental or green gentrification has been defined as a multi-stage process where cities create or restore environmental amenities that subsequently attract wealthier groups who desire access and displace lower-income residents who can no longer afford to reside in the area (Gould & Lewis, 2016). The process, previously seen in places like Brooklyn and Harlem in New York, both of which have become trendy areas for affluent White urban dwellers and creatives (Checker, 2011; Gould & Lewis, 2012; Gould & Lewis, 2016), now threatens the area of Humboldt Park and the Puerto Rican culture superimposed in the space since the 1960's (Mumm, 2016; Pérez, 2004; Rúa, 2012).

Prior scholarship in West Town has shown the area to possess a unique amalgamation of longtime Latino/a (largely Puerto Rican) residents and White newcomers (Betancur, 2002). However, recent gentrification in the once Latino/a enclave of Logan Square (Gomez-Feliciano et al., 2009; Rúa, 2012) and the arrival of more and more White newcomers into Humboldt Park has made gentrification an ever present topic promulgated by local Latino/a residents. However, unlike other studies centered around the growing threat of gentrification in Humboldt Park (Betancur, 2002; Mumm, 2016;

Rinaldo, 2002; Wilson & Grammenos, 2005), results from this study placed The 606 at the forefront of the discussion. In both Chapters III and IV we were successful in capturing the perspective of Latino/as living in the enclave, White newcomers, and White residents living in the eastern neighborhoods of Bucktown and Wicker Park on trail's role (or in some case lack thereof) in expediting gentrification.

The testimonies of Latino/a residents in Chapter III showed that The 606 exists in dramatic contrast in the Humboldt Park community. On one hand, almost all residents praised the newfound recreational opportunities provided by The 606 and its role in decreasing crime. On the other hand, however, many of these same Latino/as felt excluded in the neighborhood's future trajectory and believed the trail was being used by urban elites (i.e., developers, real estate companies, White newcomers) to displace them from the enclave. This ushered in feelings of anger, anxiety, and territoriality by many residents, subsequently leading to avoidance and collective resistance. As many residents explained, displacement meant more than just the loss of their home; it also meant the loss of vital social connections needed for sustainability in the city, a finding shown in other studies on gentrification in Chicago (Brown-Saracino, 2009; Mumm, 2008; Mumm, 2016; Pérez, 2004). As Brown-Saracino (2009) found in her study on gentrification in Chicago, Maine, and Cape Code, while minorities may be plagued by economic hardships and social burdens, many are able to take comfort in the existing connections within their neighborhood and the people in it. Similar to these findings, interviews with Latino/a residents showed Humboldt Park to be a sanctuary, particularly for Puerto Ricans, who saw the space as part of their culture and belonging to the collective.

Results from Chapter IV helped to reaffirm that gentrification fueled by the trail's presence was threatening the enclave and the culture superimposed onto the space. Findings showed that developers were using both The 606 and a narrative built around neighborhood clean-up to rebrand the space and accelerate development efforts. What's more, for White residents in Bucktown and Wicker Park, the fear of Humboldt Park led them to view green gentrification through a pragmatic lens. Here, the development of Humboldt Park was a way to alleviate the fear of victimization that constrained their use of the entire 606 corridor. Before the integration of The 606, White residents located in the eastern neighborhoods were able to remain stratified from what they perceived as a crime-plagued enclave. Isolated in homogeneous spaces, White residents located outside of Humboldt Park were largely disconnected and protected from the perceived threats in the enclave and the Latino/a bodies within its bounds. However, the integration of The 606 had not only made them aware of crime in Humboldt Park, but eager to see it removed. From conversations, green gentrification and development along The 606 seemed to provide this solution. While many White residents expressed empathy for longtime Latino/a residents in Humboldt Park and the plight they faced in dealing with potential displacement, results from the study showed that they also believed that developing the area would bring a reprieve from localized gang activity and increase their overall quality of life. Similar sediments were echoed in the portion of Brown-Saracino (2009)'s study based in the northern Chicago neighborhood of Argyle. However, in Brown-Saracino (2009)'s study, it was White newcomers, not a neighboring White community, that justified their orientation on gentrification by stating that they believed

displacement could separate the space from a deviant past. While other studies have shown that gentrification can alleviate crime (Kirk & Laub, 2010; Papachristos, Smith, Scherer, & Fugiero, 2011), to the researchers' knowledge this study was the first to provide the perspective of White residents about green gentrification in a neighboring a community of color under the threat of green gentrification.

Returning to developers, while more longitudinal data is needed in Humboldt Park, it appears evident from the accounts of local residents and the interview with the developer in the area that The 606's construction has provided a gateway into the Humboldt Park enclave and made it easy to market the space it to White newcomers as "West Bucktown". While the "West Bucktown" label is not new (Mumm, 2008, 2016; Pérez, 2004), nor the gentrification of Latino/a communities in Chicago (Betancur, 2002; Mumm, 2016; Pérez, 2004; Rúa, 2012), what is new is the use of an urban greenway to displace minorities. Currently, only The High Line in New York shares similar characteristics as The 606 (Taylor, 2010). If the area surrounding the New York infrastructure provides any insight into the trajectory of Humboldt Park, economic development will eventually change the landscape to reflect White residents idyllic conceptions of urban living. As Gould and Lewis (2017) demonstrated in their work in communities of color in New York, the pillar of social equity is often sacrificed for the economic prosperity of White elites (Gould & Lewis, 2012, 2016). So while The 606 may help bring prosperity to Humboldt Park and provide a new mode of recreation and transportation, the future benefits may be largely realized by White newcomers and come at the expense of low-income residents, their culture, and the space they have called

home for decades (Gould & Lewis, 2016; Loughran, 2016). It should be noted that the conclusions drawn during this study regarding green gentrification and developers is in no way meant to paint these individuals as monolithic iconoclast. Rather, these data show that their motives for green initiatives and community change, which many times is economic prosperity, frequently stand in contrast to the needs of low-income residents and the culture existing within the space.

Finally, while developers served as the catalyst behind displacement in Humboldt Park, our results showed that the failure of policymakers to be proactive in ensuring the needs of longtime Latino/a residents were met before development on the trail, contributed to the advancement of green gentrification. As Gould and Lewis (2016) first stated, the needs of minorities must be placed at the forefront of green initiatives or they become forgotten casualties in the urban political economy. In other words, when policies addressing gentrification are not enacted on the frontend on green projects, such as The 606, only the upper- and middle-class residents benefit long-term (Gould & Lewis, 2012, 2016; Hagerman, 2007; Loughran, 2016) . The reason for this is that policymakers often operate in relative isolation from at-risk areas and under-resourced communities (Gould & Lewis, 2016). Here, because urban elites are separated from the potential consequences of their decisions (i.e. the threat of displacement that comes from introducing a new park or greenway), their capacity to fully understand the implications of green gentrification is attenuated. As Gould and Lewis (2016) pointed out, the inattention of policymakers to social equity at the beginning of green projects results in "urban greening that increases environmental racism and classism in terms of access to environmental amenities and

exposure to environmental risk" (p. 153). In Humboldt Park, disconnection has bred ambivalence among many officials forcing them to scramble to address green gentrification post-606 construction. While Chicago officials, working with local aldermen, are currently working to halt gentrification by placing a fee on developers that would make it more expensive to tear down multi-unit buildings for the purpose of building single-family homes (Bloom, 2017), for those already displaced, this ordinance is too little too late. Additionally, ordnances such as this do little to address the issue of rising property taxes and rents in Humboldt Park, which as participants in our study disseminated, are the main culprits of minority displacement. Although, the study here fails in offering a holistic solution for green gentrification, it does help confirm and add to the conclusions postulated by Gould and Lewis (2016) and highlight a need for future community-based research. Like Gould and Lewis (2016) our results show that when social equity is not placed at the forefront of green gentrification projects in communities of color, conflicts arise over ownership as minorities become displaced and excluded from their own community. Used for the profits of elites, these green amenities can not only fail to unify communities, but end up further perpetuating existing inequalities in access and inclusion.

As postulated in both Chapters III and IV to address issues associated with green gentrification, project sequencing is vital and should seek to minimize conflicts and mitigate the displacement of low-income residents before project implementation (Gould and Lewis, 2016). Issues such as affordable housing, rent control, and forgivable loans for low-income residents should be addressed and agreed upon by city officials and

developers before greenway construction ever begins. In the case of The 606, if social equity initiatives were given more attention at the beginning of the greenway construction, the current fear and discord felt by Humboldt Park's Latino/as could have been palliated. In addition to proactively addressing social equity issues, both city officials and park management must make every effort to involve enclave residents in the planning and design of the amenity. This should include acquiring the input of local community groups, local area youth, longtime residents, and local business owners. While gaining the perspective of every single voice in the community is unrealistic, if a broad sample of information is collected, city and park officials should have enough information to generate a vision of the urban greenway that is more inclusive to all the communities it is expected to serve. Finally, when placing an urban greenway in a community of color that is as culturally-centric as Humboldt Park, city officials and park staff must work with residents to ensure the preservation of all culturally significant iconography. Knowing that the placement of a greenway will create change in the built and social environments, iconography becomes critical in ensuring inclusivity, minority representation, and the maintenance of ownership over the space (Brown-Saracino, 2009). As our study highlights, while some changes in the enclave's built and social environments may be welcomed (i.e. renovating depilated housing, displacing drug dealers, developing abandon lots), removal of culturally–centric iconography leads to feelings of anger, anxiety, and exclusion.

Final Thoughts and Future Directions

According to the 2010 US Census there are over 50.5 million Latino/as living in the United States, representing 16.3% of the total population. Representing a wide variety of countries and ethnic groups, the recreation and leisure engagements of Latino/as are often shaped by their unique culture and culturally-salient norms (Cronan, Shinew, & Stodolska, 2008; Floyd, Bocarro, & Thompson, 2008; Gobster, 2002; Hutchison, 1987; Stodolska, 2013). However, despite the existing differences in culture and value orientation among Latino/a groups, research has shown that the desire to recreate as a collective and engage in shared experiences with family and in large groups of peers is nearly ubiquitous across groups (Stodolska, 2013). Unfortunately, as research has also shown, the recreational and leisure experiences of Latino/as is often constrained by a lack of access (Gómez & Malega, 2007; Stodolska & Shinew, 2010; Stodolska, 2013; Tinsley, Tinsley, & Croskeys, 2002), deviations from idyllic forms of White's leisure (Byrne, 2012; Hutchison & Fidel, 1984; Hutchison, 1987; Low, Taplin, & Scheld, 2009; Suarez, 1999), and discrimination (Byrne & Wolch, 2009; Byrne, 2012; Sharaievska et al., 2010; Stodolska & Shinew, 2010; Stodolska et al., 2011; Wolch, Wilson, & Fehrenbach, 2005). This study supports these prior findings and in fact serves to further validate the concept of discrimination. Additionally, the accumulation of results presented in this dissertation serve to confirm that stigma placed on an entire neighborhood, a concept understudied in the parks and recreation field, can lead to recreational segregation and further perpetuate existing inequalities between White and communities of color. As the study showed, despite decreases in crime in Humboldt Park due to the insertion of The 606, latent

stereotypes placed on the enclave and Latino/a bodies acted as a mechanism to discriminate and constrain the recreational endeavors of community residents.

While the studies presented in this dissertation serve to reaffirm the existence of discrimination in park and recreation settings, they also help to address a current gap in park and recreation research on urban greenways. More specifically, the studies here highlight that when placed in minority neighborhoods, urban greenways can foster exclusion and perpetuate existing inequalities that lead to "green walls" between communities. While previous studies have examined how neighborhood parks can serve to create these invisible barriers between White and communities of color (Gobster, 1998; Solecki & Welch, 1995), to date only the study by Coutts and Miles (2011) has looked at this concept in relation to urban greenways. However, unlike the Coutts and Miles (2011) study, the scholarship presented here was the first to be conducted within the context of a large urban environment or use an approach consisting of both quantitative and qualitative methodologies. While this dissertation was limited due to the unique location and cross-sectional design, it was successful in highlighting the potential paradox created by urban greenways and providing a foundation for future studies.

Along these lines, with urban greenway construction on the rise in cities across the country (Harnik, 2012), there remains a need to further understand how these corridors impact both the physical and social environments in the communities they traverse. To further understand the impact of urban greenways, future longitudinal studies are needed in the multiple urban locations. Although The 606 currently stands as an a

contemporary innovation in park design, with urban greenways sharing similar characteristics becoming more prevalent, comparative analysis across locations should easier for researchers in the future. Additionally, future studies involving the impact of urban greenways on communities of color should also look to involve the community through participatory action research (Castleden & Garvin, 2008; Minkler & Wallerstein, 2011; Ozanne & Saatcioglu, 2008; Wang, Yi, Tao, & Carovano, 1998). Floyd (2014) recently acknowledged that the use of community-based participatory action (CPAR) research should be used by park researchers working with marginalized population. As Floyd (2014) explained, the use of CPAR may lessen the dissonance between the researcher and the communities that are engaged, producing results "that can be understood and trusted by those affected and lead to meaningful community change" (p. 383). Here, the inclusion of minority residents in studies centered around the impacts of urban greenways on their communities would answer the call by Floyd (2014) and allow researchers to gain the insight necessary to better address the paradox created by these corridors. As Thoreau (2006) wrote in *Walden,* "Could a greater miracle take place than for us to look through each other's eyes for an instant?". Using CPAR to view urban greenways through the eyes of community members may be the perspective needed to make these structures truly inclusive.

Finally, the research presented in the dissertation was one of the first in the parks and recreation field to call attention to the use of urban greenways as a mechanism for accelerating green gentrification and subsequently fostering the exclusion of a minority population. In urban planning, a recent study by Rigolon and Németh (2018) on The 606

found that large green infrastructure projects (LGIPs) often fail to consider the housing needs of residents of color until after the gentrification process has started. The authors postulate that fragmentation between nonprofit organizations, that often take the lead on LGIPS, and housing authorities, who are responsible for planning affordable housing initiatives protecting residents, allow profit-driven actors to implement these projects without concern for environmental justice issues that may be associated (Agyeman, 2005; Low 2013). Other studies surrounding the concept of green gentrification (Checker, 2011; Curran & Hamilton, 2012; Gould & Lewis, 2012; Gould & Lewis, 2016; Wolch, Byrne, & Newell, 2014) have shown that the inclusion of a park in a community of color or increased access to a greenspace can result in the displacement of minority residents, however, the in the context of an urban greenway information remains scarce. Moreover, this study was also one of the first to postulate that green gentrification may be viewed by Whites as a pragmatic solution to removing a perceived recreational and community constraint imposed on them by a stigmatized neighborhood. For affluent Whites, green gentrification offers an opportunity to remove the presence of the stigmatized minority space they feat and remake it into an area that reflects their ideologies and sense of urban well-being. This finding is particularly important because it helps in answering the call of Arai and Kivel (2009), who challenged park and recreation scholars to further explore how White privilege operates in and through leisure spaces, impacting the recreational experience of people of color. In this study, White privileges manifested itself through ambivalence to gentrification with White residents of affluent communities along The 606 knowing that the detrimental impacts of gentrification (i.e., displacement, loss of

community) will primarily be felt by low-income Latino/as in the Humboldt Park enclave.

Moving forward, more research is needed to gain a more complete understanding of the relationship between urban greenways and green gentrification. Currently, the neighborhood of Humboldt Park represents an opportunity for researchers to explore this dynamic in real-time across the gentrification spectrum (Bates, 2013). Bates proposed that this spectrum exist on a continuum from susceptible to early to dynamic to mid to late and finally to full loss. Although Humboldt Park does not present the ability to look at environmental gentrification in the early stages, as this seems to have occurred before The 606's openings in 2011-2012 (Rigolon & Németh, 2018), pockets along the trail present the ability for researcher to examine environmental gentrification in the mid (currently) to late (if not quelled) stages. Additionally, with residents of Humboldt Park vehemently resisting further enclave penetration by developers and White newcomers, Humboldt Park currently provides researchers the opportunity to gain further knowledge on gentrification resistance. The study of the gentrification resistance is vastly understudied and has been set forth as a primary agenda by Brown-Saracino (2016) for gentrification researchers over the next decade. While researchers must the impacts of green gentrification both before and during the process, researchers must also look examine shifts in the recreational patterns of minority residents that are able to remain in the enclave. In the case of Humboldt Park, as White newcomers begin to try to change the norms constructed around The 606, it remains to be seen if recreational patterns of Latino/as on The 606 will remain monophonic or come to reflect the recreation behaviors

of White users over time (Floyd & Gramann, 1993). Along with further examining the relationship between urban greenways research and green gentrification, future research must also investigate new green amenities, such as public bike sharing, that are becoming more prevalent in communities of color (Hyra, 2015). In cities like Washington D.C., the integration of bike infrastructure into communities of color has already been shown to be a mechanism used by developers to attract White newcomers and promote gentrification in minority spaces (Hyra, 2015).

Future research on green gentrification should empower community members to work in collaboration with researchers on policy evaluation studies (Brown-Saracino, 2016). Strategies should focus on addressing green gentrification at the city level, employing a comparative case study analysis across multiple locations aimed at gaining a thorough understanding of the factors that spark, sustain, and quell green gentrification (Brown-Saracino, 2016). With the construction of new rail trails traversing diverse communities now underway in major metro areas such as Philadelphia (Dent, 2017) and Memphis (Chelsea Greenline, n.d.), it is time that the park and recreation field make green gentrification (and the associated consequences) a research priority.

References

Agyeman, J. (2005). *Sustainable communities and the challenge of environmental justice*. NYU Press.

Bates, L. K. (2013). Gentrification and Displacement Study: implementing an equitable inclusive development strategy in the context of gentrification. *Urban Studies and Planning Faculty Publications and Presentations. 83.* Retrieved from https://pdxscholar.library.pdx.edu/usp_fac/83

Betancur, J. J. (2002). The politics of gentrification: The case of west town in Chicago. *Urban Affairs Review, 37*(6), 780-814. doi: 10.1177/107874037006002

Biasco, P. (2015, September 29). Neighbors hope $750,000 Logan Square townhomes push gang problem away. *DNA Info*. Retrieved from https://www.dnainfo.com/chicago/20150929/logan-square/50-townhomes-slated-replace-factory-near-blue-lineswestern-stop

Biasco, P. (2016, February 22). As Area Near 606 Gentrifies, Loans Give Longtime Humboldt Residents Hope. *DNA Info.* Retrieved from https://www.dnainfo.com/chicago/20160222/west-humboldt-park/606-loan-program-aims-stop-gentrification-humboldt-park

Bratton, W., & Kelling, G. (2006). There are no cracks in the broken windows. *National Review. Retrieved from http://www.nationalreview.com/article/216913/there-are-no-cracks-broken-windows-william-bratton-george-kelling*

Brown-Saracino, J. (2009). *A neighborhood that never changes : Gentrification, social preservation, and the search for authenticity*. Chicago, IL: University of Chicago Press.

Brown-Saracino, J. (2016). An agenda for the next decade of gentrification scholarship. *City & Community, 15*(3), 220-225. doi: 10.1111/cico.12187

Byrne, J. (2012). When green is white: The cultural politics of race, nature and social exclusion in a los angeles urban national park. *Geoforum, 43*(3), 595-611. doi: 10.1016/j.geoforum.2011.10.002

Byrne, J., & Wolch, J. (2009). Nature, race, and parks: past research and future directions for geographic research. *Progress in Human Geography*, *33*(6), 743-765. doi: 10.1177/0309132509103156

Castleden, H., & Garvin, T. (2008). Modifying photovoice for community-based participatory indigenous research. *Social Science & Medicine, 66*(6), 1393-1405. doi:10.1016/j.socscimed.2007.11.030

Checker, M. (2011). Wiped out by the "greenwave": Environmental gentrification and the paradoxical politics of urban sustainability. *City & Society, 23*(2), 210-229. doi: 10.1111/j.1548-744X.2011.01063.x

Chelsea Greenline (n.d.). Greater Memphis Greenline. Retrieved from: http://greatermemphisgreenline.com/current-projects/

Cohen, D. A., Golinelli, D., Williamson, S., Sehgal, A., Marsh, T., & McKenzie, T. L. (2009). Effects of park improvements on park use and physical activity: Policy and programming implications. *American Journal of Preventive Medicine, 37*(6), 475-480. doi: 10.1016/j.amepre.2009.07.017

Cohen, D. A., Han, B., Derose, K. P., Williamson, S., Marsh, T., Raaen, L., & McKenzie, T. L. (2016). The paradox of parks in low-income areas: Park use and perceived threats. *Environment and Behavior, 48*(1), 230-245. doi: 10.1177/0013916515614366.

Coutts, C. (2008). Greenway accessibility and physical-activity behavior. *Environment and Planning B: Planning and Design, 35*(3), 552-563. doi: 10.1068/b3406

Coutts, C., & Miles, R. (2011). Greenways as green magnets: The relationship between the race of greenway users and race in proximal neighborhoods. *Journal of Leisure Research, 43*(3), 317-333. doi: 925052823

Cozens, P. M., Saville, G., & Hillier, D. (2005). Crime prevention through environmental design (CPTED): A review and modern bibliography. *Property Management, 23*(5), 328-356. doi: 10.1108/02637470510631483

Cronan, M. K., Shinew, K. J., & Stodolska, M. (2008). Trail use among Latinos: Recognizing diverse uses among A specific population. *Journal of Park & Recreation Administration, 26*(1), 62-86.

Curran, W., & Hamilton, T. (2012). Just green enough: Contesting environmental gentrification in Greenpoint, Brooklyn. *Local Environment, 17*(9), 1027-1042. doi: 10.1080/13549839.2012.729569

Dent, M. (2017, September 8). 5 things to know about philly's future rail park. *Billy Penn.* Retrieved https://billypenn.com/2017/09/08/5-things-to-know-about-phillys-future-rail-park/

Dovidio, J. F., Kawakami, K., & Gaertner, S. L. (2002). Implicit and explicit prejudice and interracial interaction. *Journal of Personality and Social Psychology, 82*(1), 62-68. doi: 10.1037/0022-3514.82.1.62

Dovidio, J. F., & Gaertner, S. L. (2000). Aversive racism and selection decisions: 1989 and 1999. *Psychological Science, 11*(4), 315-319. doi:10.1111/1467-9280.00262

Eckerd, A. (2011). Cleaning up without clearing out? A spatial assessment of environmental gentrification. *Urban Affairs Review, 47*(1), 31-59. doi: 10.1177/1078087410379720

Fiske, S. (1998). Stereotyping, Prejudice, and Discrimination. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.) *The Handbook of Social Psychology* (4th edition)., (pp. 357-411). New York, NY: Oxford University Press

Floyd, M. F. (2014). Social justice as an integrating force for leisure research. *Leisure Sciences, 36*(4), 379-387. doi: 10.1080/01490400.2014.917002

Floyd, M. F., Bocarro, J. N., & Thompson, T. D. (2008). Research on race and ethnicity in leisure studies: A review of five major journals. *Journal of Leisure Research, 40*(1), 1-22.

Floyd, M. F., & Gramann, J. H. (1993). Effects of acculturation and structural assimilation in resource-based recreation: The case of Mexican Americans. *Journal of Leisure Research*, *25*(1), 6-21.

Floyd, M. F., & Gramann, J. H. (1995). Perceptions of discrimination in a recreation context. *Journal of Leisure Research*, *27*(2), 192-199.

Garvin, E. C., Cannuscio, C. C., & Branas, C. C. (2013). Greening vacant lots to reduce violent crime: A randomised controlled trial. *Injury Prevention : Journal of the International Society for Child and Adolescent Injury Prevention, 19*(3), 198-203. doi:10.1136/injuryprev-2012-040439.

Gobster, P. H. (1998). Urban parks as green walls or green magnets? Interracial relations in neighborhood boundary parks. *Landscape and Urban Planning, 41*(1), 43-55. doi: 10.1016/S0169-2046(98)00045-0

Gobster, P. H. (2002). Managing urban parks for a racially and ethnically diverse clientele. *Leisure Sciences, 24*(2), 143-159. doi: 10.1080/01490400252900121

Gómez, E., & Malega, R. (2007). Residential attributes, park use, and perceived benefits: An exploration of individual and neighbourhood characteristics. *Leisure/Loisir, 31*(1), 77-104. doi: 10.1080/14927713.2007.9651374

Gomez-Feliciano, L., McCreary, L. L., Sadowsky, R., Peterson, S., Hernandez, A., McElmurry, B. J., & Park, C. G. (2009). Active living Logan Square: Joining together to create opportunities for physical activity. *American Journal of Preventive Medicine, 37*(6), 361-367. doi:10.1016/j.amepre.2009.09.003

Gould, K. A., & Lewis, T. L. (2012). The environmental injustice of green gentrification.. In J. DeSena & T. Shortell (Eds.), *The World in Brooklyn: Gentrification, Immigration, and Ethnic Politics in a Global City., (pp.* 113-146). Plymouth, UK: Lexington Books

Gould, K. A., & Lewis, T. L. (2016). *Green Gentrification: Urban sustainability and the struggle for environmental justice*. New York, NY: Routledge

Hagerman, C. (2007). Shaping neighborhoods and nature: Urban political ecologies of urban waterfront transformations in Portland, Oregon. *Cities, 24*(4), 285-297. doi: 10.1016/j.cities.2006.12.003

Hamilton, D. L. (2015). *Cognitive processes in stereotyping and intergroup behavior.* New York, NY*:* Psychology Press

Harcourt, B. E., & Ludwig, J. (2006). Broken windows: New evidence from new york city and a five-city social experiment. *The University of Chicago Law Review, 73(1)*, 271-320. doi: 4495553

Harnik, P. (2012). *Urban green: Innovative parks for resurgent cities*. Washington, DC: Island Press

Harris, B., Larson, L., & Ogletree, S. (2017). Different views from the 606: examining the impacts of an urban greenway on crime in Chicago. *Environment and Behavior*. doi: 10.1177/0013916517690197

Hutchison, R. (1987). Ethnicity and urban recreation: Whites, Blacks, and Hispanics in Chicago's public parks. *Journal of Leisure Research*, *19*(3), 205-222.

Jacobs, J. (1961). *The death and life of great american cities* .New York, NTY: Vintage

Kamin, B. (2017, June 6). The 606 landscape grows, as do concerns about displacement. *Chicago Tribune.* Retrieved from http://www.chicagotribune.com/news/columnists/ct-606-trail-kamin-met-0606-20170606-column.html

Kamin, B. (2015, June 2). Chicago's new 606 trail a boon for open space, neighborhoods it links. *Chicago Tribune*. Retrieved from http://www.chicagotribune.com/news/columnists/ct-606-trail-kamin-met-0531-20150529-column.html

Kindelsperger, N. (2016, May 12). Get your kicks along the 606. *Chicago Tribune*. Retrieved from http://www.chicagotribune.com/explore-chicago/ct-summer-explore-the-606-20160512-story.html

Kirk, D. S., & Laub, J. H. (2010). Neighborhood change and crime in the modern metropolis. *Crime and Justice*, *39*(1), 441-502. doi: 10.1086/652788

Krysan, M., & Bader, M. (2007). Perceiving the metropolis: Seeing the city through a prism of race. *Social Forces, 86*(2), 699-733. doi: 10.1093/sf/86.2.699

Krysan, M., & Bader, M. D. (2009). Racial blind spots: Black-white-latino differences in community knowledge. *Social Problems, 56*(4), 677-701.

Larson, L. R., Jennings, V., & Cloutier, S. A. (2016). Public parks and wellbeing in urban areas of the United States. *PloS One, 11*(4), 1-19. doi: 10.1371/journal.pone.0153211.

Lindsey, G. (2003). Sustainability and urban greenways: Indicators in indianapolis. *Journal of the American Planning Association, 69*(2), 165-180. doi: 10.1080/01944360308976304

Loughran, K. (2016). Imbricated spaces: The high line, urban parks, and the cultural meaning of city and nature. *Sociological Theory, 34*(4), 311-334. doi: 10.1177/0735275116679192

Loury, G. C., & Loury, G. C. (2009). *The anatomy of racial inequality*. Cambridge, MA: Harvard University Press.

Low, S. (2013). Public space and diversity: Distributive, procedural and interactional justice for parks. In G. Young, & D. Stevenson (Eds.). *The Ashgate research*

companion to planning and culture (pp. 295–310). Surrey, England: Ashgate Publishing.

Manning, R. E. (2010). *Studies in outdoor recreation. Search and research for satisfaction.* Corvallis, OR: Oregon State University Press

Mastro, D., & Tukachinsky, R. (2011). Exemplar versus prototype-based processing of media content and the influence on racial/ethnic evaluations. *Journal of Communication, 61*, 916-937. doi: 10.1111/j.1460-2466.2011.01587.x

McCormick, J. G., & Holland, S. M. (2015). Strategies in use to reduce incivilities, provide security and reduce crime in urban parks. *Security Journal, 28*(4), 374-391.

Minkler, M., & Wallerstein, N. (2011). *Community-based participatory research for health: From process to outcomes.* San Francisco, CA: John Wiley & Sons.

Moore, M.T., (2017). Remaking Vacant Lots to Cut Crime. *Stateline.* Retrieved from http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2017/01/06/remaking-vacant-lots-to-cut-crime

Moore, R. L., & Ross, D. T. (1998). Trails and recreational greenways: Corridors of benefits. *Parks & Recreation (Ashburn), 33*(1), 68-79.

Mumm, J. (2008). Report from the field: Redoing chicago: Gentrification, race, and intimate segregation. *North American Dialogue, 11*(1), 16-19. doi: 10.1111/j.1556-4819.2008.00007.x

Mumm, J. (2016). Gentrification in color and time: White and puerto rican racial histories at work in Humboldt Park. *Centro Journal, 28*(2), 88-125

Ozanne, J. L., & Saatcioglu, B. (2008). Participatory action research. *Journal of Consumer Research, 35*(3), 423-439. doi: 10.1086/586911

Papachristos, A. V., Smith, C. M., Scherer, M. L., & Fugiero, M. A. (2011). More coffee, less crime? the relationship between gentrification and neighborhood crime rates in chicago, 1991 to 2005. *City & Community, 10*(3), 215-240. doi: 10.1111/j.1540-6040.2011.01371.x

Pérez, G. (2004). *The near northwest side story: Migration, displacement, and Puerto Rican families.* Berkeley, CA*:* Univ of California Press.

Peters, K. (2010). Being together in urban parks: Connecting public space, leisure, and diversity. *Leisure Sciences, 32*(5), 418-433. doi: 10.1080/01490400.2010.510987

Philipp, S. (2000). Race and the pursuit of happiness. *Journal of Leisure Research*, *32*(1), 121-124.

Power, M. J., Neville, P., Devereux, E., Haynes, A., & Barnes, C. (2013). 'Why bother seeing the world for real?': Google street view and the representation of a stigmatised neighbourhood. *New Media & Society, 15*(7), 1022-1040. doi: 10.1177/1461444812465138

Rigolon, A., & Németh, J. (2018). "We're not in the business of housing:" Environmental gentrification and the nonprofitization of green infrastructure projects. *Cities*. https://doi.org/10.1016/j.cities.2018.03.016

Rinaldo, R. (2002). Space of resistance: The Puerto Rican cultural center and Humboldt Park. *Cultural Critique, 50*(1), 135-174. doi: 10.1353/cul.2002.0010

Rodríguez-Muñiz, M. (2016). Riot and Remembrance: Puerto Rican Chicago and the Politics of Interruption. *Centro Journal*, *28*(2), 204-217.

Rúa, M. M. (2012). *A grounded identidad: making new lives in Chicago's Puerto Rican neighborhoods*. New York, NY: Oxford University Press.

Sampson, R. J., & Raudenbush, S. W. (2004). Seeing disorder: Neighborhood stigma and the social construction of "broken windows". *Social Psychology Quarterly, 67*(4), 319-342. doi: 10.1177/019027250406700401

Sampson, R. J., & Raudenbush, S. W. (2005). Neighborhood stigma and the perception of disorder. *Focus, 24*(1), 7-11.

Sandy, R., Tchernis, R., Wilson, J., Liu, G., & Zhou, X. (2013). Effects of the built environment on childhood obesity: The case of urban recreational trails and crime. *Economics & Human Biology, 11*(1), 18-29. doi: 10.1016/j.ehb.2012.02.005

Shafer, C. S., Lee, B. K., & Turner, S. (2000). A tale of three greenway trails: User perceptions related to quality of life. *Landscape and Urban Planning, 49*(3), 163-178.

Sharaievska, I., Stodolska, M., Shinew, K. J., & Kim, J. (2010). Perceived discrimination in leisure settings in latino urban communities. *Leisure/Loisir, 34*(3), 295-326. doi: 10.1080/14927713.2010.521319

Shinew, K. J., Glover, T. D., & Parry, D. C. (2004). Leisure spaces as potential sites for interracial interaction: Community gardens in urban areas. *Journal of Leisure Research, 36*(3), 336-355.

Sohn, D. (2016). Residential crimes and neighbourhood built environment: Assessing the effectiveness of crime prevention through environmental design (CPTED). *Cities, 52*, 86-93. doi: 10.1016/j.cities.2015.11.023

Solecki, W. D., & Welch, J. M. (1995). Urban parks: Green spaces or green walls? *Landscape and Urban Planning, 32*(2), 93-106. doi: 10.1016/0169-2046(94)00193-7

Stodolska, M., Acevedo, J. C., & Shinew, K. J. (2009). Gangs of Chicago: Perceptions of crime and its effect on the recreation behavior of latino residents in urban communities. *Leisure Sciences, 31*(5), 466-482. doi: 10.1080/01490400903199773

Stodolska, M., & Jackson, E. L. (1998). Discrimination in leisure and work experienced by a white ethnic minority group. *Journal of Leisure Research, 30*(1), 23-46.

Stodolska, M., & Shinew, K. J. (2010). Environmental constraints on leisure time physical activity among latino urban residents. *Qualitative Research in Sport and Exercise, 2*(3), 313-335. doi: 10.1080/19398441.2010.517038

Stodolska, M., Shinew, K. J., Acevedo, J. C., & Izenstark, D. (2011). Perceptions of urban parks as havens and contested terrains by Mexican-Americans in Chicago neighborhoods. *Leisure Sciences, 33*(2), 103-126. doi: 10.1080/01490400.2011.550220

Stodolska, M., Shinew, K. J., Acevedo, J. C., & Roman, C. G. (2013). "I was born in the hood": Fear of crime, outdoor recreation and physical activity among Mexican-American urban adolescents. *Leisure Sciences, 35*(1), 1-15. doi: 10.1080/01490400.2013.739867

Stodolska, M., Shinew, K., Floyd, M., Walker, G. (2013). *Race, ethnicity, and leisure.* Champaign, IL: Human Kinetics.

Taylor, K. (2010). After high Line's success, other cities look up. *New York Times.* Retrieved from http://www.nytimes.com/2010/07/15/arts/design/15highline.html

Thoreau, H. D. (2006). *Walden*. New Haven, CT: Yale University Press.

Tinsley, H. E., Tinsley, D. J., & Croskeys, C. E. (2002). Park usage, social milieu, and psychosocial benefits of park use reported by older urban park users from four ethnic groups. *Leisure Sciences, 24*(2), 199-218. doi: 10.1080/01490400252900158

Tukachinsky, R. (2015). Where we have been and where we can go from here: Looking to the future in research on media, race, and ethnicity. *Journal of Social Issues, 71*(1), 186-199. doi: 10.1111/josi.12104

Vivanco, L. (2016, June 3). The 606 trail, a study in contrast, celebrates its first birthday.*Chicago Tribune*. Retrieved from http://www.chicagotribune.com/news/ct-606-trail-anniversary-met-0531-20160602-story.html

Wang, C. C., Yi, W. K., Tao, Z. W., & Carovano, K. (1998). Photovoice as a participatory health promotion strategy. *Health Promotion International, 13*(1), 75-86. doi: 10.1093/heapro/13.1.75

Wilson, D., & Grammenos, D. (2005). Gentrification, discourse, and the body: Chicago's humboldt park. *Environment and Planning D: Society and Space, 23*(2), 295-312. doi: 10.1068/d0203

Wilson, J. Q., & Kelling, G. L. (1982). Broken windows. *Atlantic Monthly, 249*(3), 29-38.

Wolch, J. R., Byrne, J., & Newell, J. P. (2014). Urban green space, public health, and environmental justice: The challenge of making cities 'just green enough'. *Landscape and Urban Planning, 125*, 234-244. doi: 10.1016/j.landurbplan.2014.01.017

Wolch, J., Wilson, J. P., & Fehrenbach, J. (2005). Parks and park funding in Los Angeles: An equity-mapping analysis. *Urban Geography, 26*(1), 4-35. doi: 10.2747/0272-3638.26.1.4

Dissertation Appendix A (Interview Questions)

Bloomingdale Trail Interview Questions:

In order to obtain rich data from various neighborhood residents and 606 users, the researcher will use systematic random along the trail, supplemented with a purposive snowball sampling utilizing existing contacts in the Chicago area.

Prompt:

Hi! My name is Brandon Harris and I am a PhD student at Clemson University conducting a study examining behavior and engagement on the Bloomingdale Trail. I wanted to see if I could take a few minutes of your time to answer a few questions regarding your personal use of the Bloomingdale Trail, as well as, your thoughts and perceptions pertaining to different areas along trail? If it is acceptable with you, I am going to take notes over the course our conversation for the purpose of later analysis (attain verbal confirmation)? Know that I will not be asking you any identifying information, other than the neighborhood of residence, your ethnicity, and your age. Each of these will be used only for demographic purposes and all of the information will be kept strictly confidential. Do you understand all of the information in which I provided and is it acceptable to you (attain verbal consent)? Before we begin do you have any questions?

1. What is your ethnicity of origin?

2. What is your age?

3. Do you live in close proximity to the 606?

→If yes, proceed to Question 4a

→ If no, why have you chosen to come to The 606 today and proceed to 4b?

4a. (If live in close proximity) Why did you choose to move live in this neighborhood?

→ What does this neighborhood mean to you?

→ Can you explain the influence that you believe The 606 has had on your neighborhood?

→ What are your thoughts regarding the other neighborhoods along the trail route?

→ Do you find all of the neighborhoods to be welcoming?

→ Does this influence how you use the trail?

→ Do you use the trail to access these neighborhoods? Why or Why not?

→ Has the trail impacted to way that you see these neighborhoods?

4b (If do not live around trail), What are your thoughts on the neighborhoods that the 606 passes though?

→ Did you have any thoughts, positive or otherwise, about these neighborhoods before coming to The 606?

→ When was the last time you were in these areas?

→ What is your general perception of these neighborhoods now that you have been on The 606?

5. Describe how you use the trail (transportation, recreation, socialization)?

6. Do you frequently interact with others along the trail not in your party?

→ Do you feel the trail has helped in bringing people from the different neighborhoods together?

7. When using the trail, do you typically travel from end-to-end? Why or why not?

→ Are there certain markers for you that signify the place where you turn around?

→ If no, why have you chosen to avoid these areas of the trail?

8. Have you noticed other individuals turn around at certain trail points?

9. Do you follow this same activity patterns at all times of the day?

→ Are you comfortable on the trail at night? Why or Why not?

10. Are there any areas of The 606 in which you feel unsafe? Can you describe these areas for me?

11. While using the trail have you ever experienced any type of crime or delinquent conduct along the trail? Can you please describe these for me?

12. What are your general impressions of the following neighborhoods?

- Humboldt Park
- Wicker Park
- Bucktown

13. Do you ever feel unwelcomed in any of these neighborhoods? Why? How so?

14. Tell me how the new construction is changing your neighborhood (this is really aimed at Humboldt Park residents)? Other neighborhoods?

→ Property Cost?

→ Neighborhood Composition?

15. So, The 606 is a beautiful amenity that currently serves a variety of individuals, moving forward how do you believe the mix of trail users will change or will it change at all?

16. What would you like to see added to the trail that is not currently present?

17. Do you take advantage of current programs and events that take place on The 606? Why or Why not?

→Do you believe increases in trail programming would enhance the trail experience for all neighborhood residents? Why or why not?

→What types of programs would you like to see added?

18. Overall, why do you believe this trail was constructed?

19. Is there anything else that you would like to share with me today?

Dissertation Appendix B (IRB Script)

An examination of the influence of the 606 on Chicago's Westside

Description of the Study and Your Part in It

Dorothy Schmalz and Brandon Harris are inviting you to take part in a research study. Dorothy Schmalz is faculty members at Clemson University. Brandon Harris is a graduate student at Clemson University, running this study with the help of Dorothy Schmalz. The purpose of this research is to investigate the impact of the Bloomingdale Trail on the surrounding neighborhood and the residents of these neighborhoods. This study is focused on trail user behaviors and activities, the perception of the surrounding neighborhoods and the impact these perceptions have on trail interactions, and finally, how the trail is bringing changes in the adjacent communities. The focus group is scheduled for an hour. The researcher will open the focus group by asking a general question and then proceed will follow up questions once a topic has been exhausted. While there is no order regarding answering the questions, as this is a conversational format, it is asked that everyone respect the thoughts and opinions of every other participant.

Risks and Discomforts

There are certain risks or discomforts that you might expect if you take part in this research. They include increased stress due to the nature of the questions and you may stop participating at any time. Also, some of the information shared during the group discussion may be personal, we ask that you respect the privacy of others in the group and keep the information shared private. Please do not share any information that may be sensitive or make you uncomfortable. You may refuse to answer or leave the discussion at any time if you become uncomfortable.

Possible Benefits

We do not know of any way you would benefit directly from taking part in this study. However, this research will be presented to local city official and leaders in the hope to better fully understand the influence of the Bloomingdale Trail in the community. Knowing this information may assist trail authorities in maximizing the benefits of the Bloomingdale Trail for all localized neighborhood residents, and Chicago as a whole.

Protection of Privacy and Confidentiality

We will do everything we can to protect your confidentiality. Any personally identifiable information collected during the survey will be kept strictly confidential and in locked files. Your identity will not be revealed in any publication or presentation that might result from this study. Should you choose to participate, you will be asked to respect the privacy of other focus group members by not disclosing any content discussed during the study, however, as inherit with the nature of a focus group and the format in which it is conducted, the researchers cannot guarantee your privacy. Researchers within the Department of Parks, Recreation and Tourism Management will analyze the data, but—as stated above—your responses will remain confidential, and no names will be included in any reports.

Choosing to Be in the Study

You do not have to be in this study. You may choose not to take part and you may choose to stop taking part at any time. You will not be punished in any way if you decide not to be in the study or to stop taking part in the study.

Contact Information

If you have any questions or concerns about this study or if any problems arise, please contact Dorothy Schmalz @ Schmalz@clemson.edu or Brandon Harris @ bsharri@g.clemson.edu

If you have any questions or concerns about your rights in this research study, please contact the Clemson University Office of Research Compliance (ORC) at 864-656-0636 or irb@clemson.edu. If you are outside of the Upstate South Carolina area, please use the ORC's toll-free number, 866-297-3071.

I understand this information and agree to participate fully under the conditions stated above.

Sign name: _____

Date:_____

Print name:_____

Dissertation Appendix C (IRB Approval and Extension Approval)

Dear Dr. Schmalz,

The Clemson University Institutional Review Board (IRB) reviewed the protocol identified above using exempt review procedures and a determination was made on **March 16, 2016** that the proposed activities involving human participants qualify as **Exempt under category B2** based on federal regulations 45 CFR 46. **Your protocol will expire on September 30, 2016.**

The expiration date indicated above was based on the completion date you entered on the IRB application. If an extension is necessary, the PI should submit an Exempt Protocol Extension Request form, http://www.clemson.edu/research/compliance/irb/forms.html, at least three weeks before the expiration date. Please refer to our website for more information on the extension procedures, http://www.clemson.edu/research/compliance/irb/guidance/reviewprocess.html.

No change in this approved research protocol can be initiated without the IRB's approval. This includes any proposed revisions or amendments to the protocol or consent form. Any unanticipated problems involving risk to subjects, any complications, and/or any adverse events must be reported to the Office of Research Compliance immediately. All team members are required to review the IRB policies on "Responsibilities of Principal Investigators" and "Responsibilities of Research Team Members" available at http://www.clemson.edu/research/compliance/irb/regulations.html.

The Clemson University IRB is committed to facilitating ethical research and protecting the rights of human subjects. Please contact us if you have any questions and use the IRB number and title in all communications regarding this study.

Dear Dr. Schmalz,

The Clemson University Office of Research Compliance (ORC) reviewed your extension request using exempt review procedures and a determination was made on **October 07, 2016** that the proposed activities involving human participants continue to qualify as **Exempt under category B2**, based on the federal regulations 45 CFR 46. **Your protocol will expire on September 30, 2017.**

No change in this approved research protocol can be initiated without the IRB's approval. This includes any proposed revisions or amendments to the protocol or consent form. Any unanticipated problems involving risk to subjects, any complications, and/or any adverse events must be reported to the ORC immediately.

The Clemson University IRB is committed to facilitating ethical research and protecting the rights of human subjects. Please contact us if you have any questions and use the IRB number and title in all communications regarding this study.

Best,

Elizabeth

B. Elizabeth Chapman, MA, CACII
