\$ SUPER

Contents lists available at ScienceDirect

Journal of Criminal Justice

journal homepage: www.elsevier.com/locate/jcrimjus





Territory, residency, and routine activities: A typology of gang member mobility patterns with implications for place-based interventions

Matthew Valasik ^{a,*}, Jason Gravel ^b, George E. Tita ^c, P. Jeffrey Brantingham ^d, Elizabeth Griffiths ^e

- a Department of Criminology and Criminal Justice, The University of Alabama, 430 Farrah Hall, Box 870320, Tuscaloosa, AL 35487, United States of America
- b Temple University, Department of Criminal Justice, 551 Gladfelter Hall, 1115 Polett Walk, Philadelphia, PA 19122, United States of America
- ^c Masters in Public Policy Program, Livable Cities Lab, Criminology, Law and Society, University of California, Irvine, 2307 Social Ecology II, Irvine, CA 92697, United States of America
- d Department of Anthropology, University of California, Los Angeles, 368 Haines Hall, Los Angeles, CA 90095, United States of America
- e School of Criminal Justice, Rutgers University Newark, Center for Law and Justice, 123 Washington Street, Suite 552, Newark, NJ 07102, United States of America

ARTICLE INFO

Keywords: Street gangs Mobility polygons Territoriality Spatial typology Gang intervention

ABSTRACT

Purpose: The current study examines the mobility patterns of gang associates in East Los Angeles using Field Investigation (FI) cards collected by police officers to document informal encounters with civilians.

Methods: We construct a typology classifying each stop in relation to a gang associate's claimed territory, residence, and the location of the stop. We then report on the distribution of mobility types and describe the individual-, event-, and gang-level characteristics commonly associated with each.

Results: Our findings suggest that there is significant variability in the mobility patterns of gang associates, and that associates often live outside their gang's turf, sometimes returning to their turf, but often spending time away from their turf.

Conclusions: These results have implications for place-based gang interventions and suggest that all gangs may not be equally suited to interventions such as civil gang injunctions.

1. Introduction

Physical spaces are important in the lives of gang associates and are often intrinsically equated with the identity and history of a group. It is for this reason that classic gang studies paid close attention to the spaces occupied by these groups. For (Thrasher, 2013 [1927]), spontaneous playgroups would almost inevitably emerge from the crowded conditions of the city, and soon they came to occupy convenient locations such as parks, alleys, and street corners. The locations where associates congregate are places of critical importance for the gang. In describing the significance of these spaces for the creation of a certain mythology for the group, Thrasher (2013 [1927]: 123) notes:

Every gang has its own domain [...] This is a realm of adventure centering in the hang-out, which the gang boy regards as his castle. The area

immediately surrounding this cherished spot is home territory, beyond whose borders lie the lands of the enemy and the great unknown world.

Subsequent studies have found that gangs are composed of associates who live close to one another (Decker & Van Winkle, 1996; Durán, 2013; Grannis, 2009; Miller, 1966/2011; Moore, 1991; Schneider, 1999; Short Jr. & Strodtbeck, 1965; Stuart, 2020; Suttles, 1968; Vigil, 1988; Whyte, 1955). However, with increases in residential mobility, the availability of public transportation, and expanding school choice, the concept of gang turf has become more blurred and less determined by neighborhood boundaries (see Aldridge, Ralphs, & Medina, 2011; Brunson & Miller, 2009; Mondani & Rostami, 2021; Moore, Vigil, & Garcia, 1983; Simi, 2006; Watkins & Moule Jr., 2014).

The current study seeks to examine the assumption that residential locations of gang associates are mostly found within the confines of their

E-mail addresses: mavalasik@ua.edu (M. Valasik), jgravel@temple.edu (J. Gravel), gtita@uci.edu (G.E. Tita), branting@ucla.edu (P.J. Brantingham), eg345@scj.rutgers.edu (E. Griffiths).

^{*} Corresponding author.

¹ There is substantial breadth in defining gang membership, due to the complexities of gang life and/or law enforcement's discretion in identifying constituents. The term gang associate is used, instead of gang member, to identify an individual who is perceived as, labeled as, formally or informally, or self-reports as an actual gang member (see Rios, 2017; Stuart, 2020).

gang's territory (see Griffiths & Tita, 2009). Much like Moore et al. (1983), we find that a substantial proportion of associates of street gangs claiming turf in the Hollenbeck Community Policing Area of Los Angeles actually live outside their gang's territorial boundaries. We argue that such a finding is important given the influence that both gang associates' residential locations (Grannis, 2009; Huebner, Martin, Moule Jr., Pyrooz, & Decker, 2016; Katz & Schnebly, 2011) and the location of gang set spaces² (Valasik, 2018) have on the spatial distribution of crime and gang-related violence in a community. As Brantingham, Valasik, and Tita (2019: 18) point out "how far people move plays an important role in the generation of crime patterns and presumably plays an important role in the formation and maintenance of gang territories." Furthermore, many gang activity prevention strategies are designed to alter the behaviors of gang associates without being dependent on arrests and incarceration (see Gravel, Bouchard, Descormiers, Wong, & Morselli, 2013). Such strategies focus particularly on the activities of the group, instead of the individual, with the intention of disrupting antisocial behaviors (e.g., loitering, gun carrying) of gang associates in particular locations (e.g., parks, public housing) (see Valasik & Torres, 2022). One of the most salient gang prevention tactics, civil gang injunctions, are explicitly place-based interventions (Rosen & Venkatesh,

Built on the assumption that most of the activities of gang associates are group-oriented and confined to the gang's territory, civil gang injunctions are framed as a mechanism to both increase neighborhood solidarity and reduce gang-related violence by targeting associates of gangs partaking in nuisance behaviors, principally publicly associating with one another (Grogger, 2002; Muñiz, 2015; O'Deane, 2012; Thomas, Riordan, & Shiner, 2009). The intention behind civil gang injunctions is to disrupt gang associates' routine activities by inhibiting the group's ability to associate in public. This, in turn, should decrease group cohesiveness and hinder enjoined gangs from disseminating information to associates, recruiting, promoting the group's reputation, and maintaining territory (Thomas et al., 2009). Civil gang injunctions are tailored restraining orders prohibiting associates in an enjoined gang from participating in a set of behaviors³ within a delineated area, referred to as a "safety-zone." The novelty of civil gang injunctions is in their legal hybridity of criminal, civil, and administrative law in suing a gang as an unincorporated criminal entity (Beckett & Herbert, 2009; Muñiz, 2015; Valasik & Torres, 2022). While a civil gang injunction transpires in a civil court, violations of the court order result in criminal sanctions wherein prosecutors have the flexibility to pursue penalties in either civil or criminal court (Muñiz, 2015). While place-based gang interventions have had some success (e.g., Braga & Weisburd, 2015; Ridgeway, Grogger, Moyer, & MacDonald, 2018), a more refined understanding of gang associates' mobility patterns could better inform how and when such interventions should be used, and under what circumstances.

Given the importance of both residential location and gang set spaces for the spatial distribution of gang-related activities, we examine the mobility patterns of gang associates in relation to both their residence and their gang territory using data from field investigation (FI) cards (see Huebner et al., 2016; Hughes, Schaible, & Kephart, 2022; Valasik, 2018). FI cards document interactions among civilians and police by police officers and are regularly used by gang unit officers to record the activities of gang associates (see Brayne, 2021, Faust & Tita, 2019; Fox, 2013; Gravel, 2018; Papachristos, Braga, & Hureau, 2012; Papachristos, Braga, Piza, & Grossman, 2015; Rios, 2011; Valasik, 2018; Valasik, Reid,

& Phillips, 2016; Vigil, 2007). It may be argued that FI cards do not perfectly represent gang associates' mobility patterns, given the discretion of police officers and their potential to introduce bias (see Brayne, 2021), and advances in smartphone technology would better provide social scientists the ability to study "hard-to-reach, highly mobile, and less technologically skilled groups" (e.g., formerly incarcerated individuals, refugees, etc.) (Sugie, 2018: 479; see also Keusch, Leonard, Sajons, & Steiner, 2021). As such, it could be argued that smartphones are a more appropriate tool to examine the mobility patterns of gang associates. Browning et al. (2021; 115), however, astutely point out that "individuals may not be inclined to provide data when in unknown and potentially threatening situations." Given gang associates' furtive behavior, avoiding rival gangs and steering clear of law enforcement, along with paranoia and safety concerns, having their movement constantly tracked and shared if researchers, makes it extremely challenging to utilize smartphones to examine their routine activity patterns in any systematic and reliable manner (see Stuart, 2020). Furthermore, many studies have shown that gang associates are routinely observed loitering around in known set spaces within their gang's claimed turf, which is also associated with where gang violence is documented (see Brantingham, Tita, Short, & Reid, 2012; Klein, 1995; Tita, Cohen, & Engberg, 2005; Valasik, 2018; Valasik & Torres, 2022). It is around these locations where police are most likely to observe and stop gang associates.

To describe these patterns, we develop a typology differentiating the mobility of gang associates vis-à-vis their residence, their gang's claimed territory, and their interactions with law enforcement. We also compare and contrast the factors associated with each mobility type. This paper begins with discussing broadly the literature on human territoriality, paying particular attention to how it relates to street gangs and their membership. Next, we trace the social ecology of gang territoriality with foundational studies on ecological succession in Chicago (e.g., Suttles, 1968; Thrasher, 2013 [1927]) contrasted with ecological patterns in Los Angeles (see Moore et al., 1983). We then highlight the importance of understanding gang associates' activity and mobility patterns in order to better implement effective place-based interventions. After describing the study site, data, spatial typology, measures, and analytic strategy, we present the results and provide a discussion about each type of mobility pattern. We conclude with the implications of these mobility patterns for common place-based interventions of street gangs.

2. Literature review

2.1. Territoriality and residency

Human territoriality is generally defined as a spatial strategy employed by an individual or a group to control specific areas and the resources within them (Lyman & Scott, 1967; Sack, 1983). Researchers have routinely emphasized the territorial aspect of street gangs, sometimes even including territoriality as part of the definition of gangs (Klein & Maxson, 2006; Miller, 1975). According to Moore et al. (1983: 184), gang territoriality generally implies:

1) that the gang's activities (playing, hanging-out, partying) are concentrated within a 'turf'; 2) that the turf is relatively clearly bounded; 3) that the turf is defended against invaders and that fights with other gangs center on intentional invasions of territory; and 4) that members and their families live inside the territory.

Initially, a gang stakes out a public space (e.g., street corners, parks, alleys, etc.) establishing a "home territory" that provides associates an area where they can feel secure and behave freely (Lyman & Scott, 1967: 240). Through the fortifications provided by both urban contours (i.e., streets, highways, railways, buildings, etc.) and symbolic barriers (i.e., spaces demarcated with graffiti), a gang is able to construct a defined and defended neighborhood area yielding a distinct zone of influence (see Adamson, 2000; Brantingham et al., 2012; Ley & Cybriwsky, 1974; Philips, 1999; Schneider, 1999; Taylor, 1988). The gang's cognitive

² Tita et al. (2005: 273) refer to the places where gang associates regularly loiter, hangout and congregate as their gang's "set space" (see also Blasko, Roman & Taylor, 2015; Klein, 1995; Taniguchi et al., 2011).

³ Civil gang injunction proscriptions include illegal behaviors (e.g., possession of firearm, drug, or graffiti paraphernalia) and legal behaviors (e.g., associating in public with other associates, violating curfews).

mapping of these territorial boundaries is reified through rituals that emphasize competition with rival gangs; consequently, gangs are able to objectify these areas through what Lefebvre (1991: 33) refers to as "representations of space." Gang territoriality becomes a type of "learned behavior with intergenerational adherence to historical boundaries and rules of engagement" (Pickering, Kintrea, & Bannister, 2012: 951). Through the creation and maintenance of territory, the gang is able to send a message to others, particularly rivals, that access to the area is restricted to outsiders (Brantingham et al., 2012). As such, it is not uncommon for gangs to name themselves after the local streets, landmarks, and neighborhoods where they originate (see Ley & Cybriwsky, 1974; Moore, 1991; Monod, 1967; Philips, 1999; Thrasher, 2013 [1927]). For instance, in the City of Los Angeles, the Avenues gang exists in the Northeast Community Policing Area where all of the streets begin with the word 'avenue' and the gang and its cliques (e.g., Avenue 43) have appropriated these street labels into their group's name (Leap, 2012; Rafael, 2007).

2.2. The social ecology of gang territoriality: The Chicago School vs. the Los Angeles context

Classic research on gangs in Chicago found that they routinely originated in the specific locations of child and early adolescent playgroups and were predominantly comprised of a single ethnic group (Suttles, 1968; Thrasher, 2013 [1927]). As such, there was little discussion of the residency patterns of gang associates. It was presumed that the associates of a gang must reside in close proximity to one another and to where their gang's claimed territory is located. Once a gang associate moved away from the gang's turf, their ties to the group became strained and ultimately contact with the gang was lost (Thrasher, 2013 [1927]; Glaser, 1998). Additionally, the location of a gang associate's residence was not investigated because of the ephemeral nature of the gang. That is, gangs often quickly emerged in a specific location and then disappeared over a short period of time, while the groups that endured were "relatively rare in comparison with the great number of rudimentary forms" (Thrasher, 2013 [1927]: 37). Thus, gang territoriality was treated as a rather static feature for each gang, bound to specific locales and containing all of a gang's associates within their claimed space, at least for the period of the gang's existence.

Even after a century, gang researchers often rely on the assumption that most of a gang's membership reside proximally to their gang's turf (see Brantingham et al., 2012; Grannis, 2009; Griffiths & Tita, 2009; Huebner et al., 2016; Katz & Schnebly, 2011). Based on an assumption, that the majority of a gang associate's daily activities, home life and gang life, transpire within the confines of their gang's claimed space it would be anticipated that they would be surveilled by law enforcement within their gang's territory. This expectation is expressed in hypothesis 1: H1 Gang associates who live within the boundaries of their gang's turf are more likely to interact with law enforcement in their gang's territorial space.

While this pattern may still be true in Chicago, there are many reasons to believe that gang territoriality will differ in other cities, if only because of differences in the historical antecedents of gang emergence (see Howell & Griffiths, 2018). An important counterpoint to the Chicago context is Los Angeles, a long-established comparison city for gang research (see Maxson & Klein, 1990, 1996, 2002; Moore, 1988). The emergence of Los Angeles gangs, much like Chicago's, can be described as a byproduct of the settlement patterns of newly arrived immigrant groups (Moore et al., 1983). Unlike Chicago, the formation and transformation of many Los Angeles' neighborhoods was the result of repeated waves of migrants from Mexico. Small cohorts of Mexican males, known as *palomilla*, who regularly migrated on trails back and forth from Mexico, through El Paso and Albuquerque to Los Angeles (Durán, 2018; Heller, 1966; Moore, 1978; Vigil, 1988, 2014), became

the predecessors to the first "boy gangs" in Los Angeles (Bogardus, 1926; Rubel, 1965). This process of resettlement was a multi-generational tradition in which Mexicans immigrated to barrios⁴ throughout Los Angeles, and Southern California more broadly (see also Durán, 2018; Tapia, 2017, 2019 for analogous patterns in Texas and New Mexico). As such, a cultural continuity was preserved in these neighborhoods, diverging from the ecological succession that was observed in cities in the Eastern United States, directly impacting the behavior patterns of local street gangs, specifically with respect to their territoriality and mobility (Adamson, 1998; Howell & Griffiths, 2018; Maxson & Klein, 2002; Moore et al., 1983), generating several segregated communities throughout Los Angeles (Romo, 1983).

This lack of ecological succession in Los Angeles failed to produce inter-ethnic conflicts between gangs. Instead, territoriality itself became the catalyst for gang violence (Adamson, 1998; Brantingham et al., 2012, 2019; Tapia, 2019; Vigil, 1988). A greater stability in the ethnic composition of neighborhoods meant that Los Angeles barrios produced Chicano gangs that were far less ephemeral than those described by (Thrasher, 2013 [1927]), Suttles (1968), and others (see Valasik & Tita, 2018). The gangs that developed within these barrios, particularly those east of Downtown and the Los Angeles River, persevered over time and through membership changes. Numerous Chicano gangs today trace their group's history to the beginnings of the 20th Century (Dunn, 2007; Hagedorn, 2008; Leap, 2012; Moore, 1978; Tapia, 2017; Vigil, 1988).

The enduring quality of Los Angeles gangs, coupled with the residential stability of the neighborhoods, cemented them as intergenerational institutions in their respective communities (Bogardus, 1926; Heller, 1966; Moore, 1978; Rubel, 1965; Vigil, 1988, 2014). Moore et al. (1983: 185) contend that many Chicano gang associates consider membership in the gang to be "permanent and lifelong." Pyrooz and Decker (2011: 423) found that "older members," including veteranos or Original Gangsters (OGs), maintained a socially active role within the group, even while reducing their propensity to engage in criminal activity (see Deane, Bracken, & Morrissette, 2007; Watkins & Moule Jr., 2014). Such an attachment to the gang, coupled with the stability of groups over time, meant that residing in the neighborhood was no longer a requisite for continued membership. This expectation is expressed in hypothesis 2: H2 Gang associates who live outside of the boundaries of their gang's turf are more likely to interact with law enforcement in their gang's territorial space.

2.3. Environmental criminology, routine activities, and commuting to turf

Environmental criminology views criminal events in terms of the "confluences of offenders, victims or criminal targets, and laws in specific settings at particular times and places" (Brantingham & Brantingham, 1991: 2). A critical concept of environmental criminology is the notion of awareness space—the knowledge and familiarity with certain locations acquired over time (Brantingham & Brantingham, 1982). Understanding the spatial distribution of crime requires a knowledge of the nodes-places where offenders spend significant amounts of time--and the pathways between these nodes. According to Brantingham and Brantingham (1981), people develop regular patterns of mobility anchored to important places such as the home, workplace, school, or other recreational areas. The routine activities of offenders help to shape their awareness space and guide their decisions to engage in criminal activities when opportunities arise (Brantingham & Brantingham, 1978; Cohen & Felson, 1979). Given the regularity and amount of time spent at certain locations, victimization is more likely to occur near activity nodes and along pathways between them, particularly if they overlap with those of potential offenders.

In the context of street gangs, an important and fairly predictable activity node is the gang's turf. Of course, if a gang associate resides

⁴ European Americans would consider these to be neighborhoods.

within his gang's turf, the co-location of these activity nodes does not greatly increase the awareness space of that particular associate, nor does it involve a lengthy pathway between nodes. However, if co-location of residence and turf is not the case, then the awareness space of the gang associate is likely more expansive and encompasses the pathway between nodes. This arrangement may have both costs and benefits. Gang associates who live outside their gang's turf may be more vulnerable to victimization given frequent travel to and from their gang's turf. They may be forced to transit territories claimed by rival gangs (see Garot, 2010; Stuart, 2020), or cross the activity paths of rival associates who themselves are commuting to their home turf. The awareness space of associates living outside their gang's territory, however, may also make them valuable co-offenders as they bring unique knowledge of different areas and criminal opportunities (see Aspholm, 2020; Bolden, 2014; Lopez-Aguado & Walker, 2021).

Despite the well-documented relationship between gangs and space in early ethnographic work (e.g., Suttles, 1968; Thrasher, 2013 [1927]), there remains limited knowledge about the spatial behaviors of gang associates, save for a few recent examples (Brantingham et al., 2012; Grannis, 2009; Huebner et al., 2016; Katz & Schnebly, 2011; Mondani & Rostami, 2021; Papachristos, Hureau, & Braga, 2013; Radil, Flint, & Tita, 2010; Taniguchi, Ratcliffe, & Taylor, 2011; Tita et al., 2005; Tita & Ridgeway, 2007; Valasik, 2018; van Gennip et al., 2013). Findings from these studies are generally in line with the predictions of environmental criminology. Violent crime, particularly gang-related violence, tends to be more prevalent near the residences of gang associates (Huebner et al., 2016; Valasik, 2018), gang territorial boundaries (Brantingham et al., 2012), and around frequent activity nodes such as gang set spaces (Tita et al., 2005; Valasik, 2018). This is particularly true if multiple groups frequent these areas (Papachristos, 2009; Taniguchi et al., 2011) and when important gang spaces (i.e., territories, set spaces) are in close proximity (Papachristos et al., 2013; Radil et al., 2010; Tita & Greenbaum, 2009). Given gang associates' disproportionate involvement in violence and the remarkably stable spatial concentration of gang violence (Papachristos et al., 2013; Valasik, Barton, Reid, & Tita, 2017), understanding variability and patterns of gang associate mobility has important implications for theory as well as for effective policy design and implementation.

Prior work on gang territoriality has generally found that the choice of gang turf is often related to the location of the residences of gang associates. In fact, membership in many gangs is predicated on one's association with a neighborhood or area of a city (Grannis, 2009; Griffiths & Tita, 2009; Huebner et al., 2016; Katz & Schnebly, 2011). This association is simply based on current or prior residence in the area claimed by a gang. Thus, to the extent that a gang associate's residence is confined within his group's territory, it is likely that a significant proportion of time would be spent within this area. On the other hand, if a gang associate lives outside their gang's territory, more time would be spent traveling to and from the gang's hangout. Gang researchers have rarely problematized the difference in residential location and gang turf (see Valasik, 2018). Yet, environmental criminology and routine activity theory suggests that the extent to which gang associates live outside their group's territory could have considerable implications for the distribution of crime in a city (see Valasik, 2018) and the effectiveness of place-based interventions, most notably civil gang injunctions (Grogger, 2002; Hennigan & Sloane, 2013; Maxson, Hennigan, & Sloane, 2005; O'Deane, 2012; Ridgeway et al., 2018). This expectation is expressed in hypothesis 3: H3 The observed mobility patterns of gang associates will be more diverse than either attached mobility (H1) or commuting to turf mobility (H2).

3. The current study

3.1. The context

The site for this study is the Hollenbeck Community Policing Area—a

15.2 square-mile region east of downtown Los Angeles (Fig. 1). Based on the 2010 Census, the majority (84.5%) of the 177,000 residents of Hollenbeck are Latino. Thirty percent of the population lives below the poverty line, the median household income is \$27,096 and 35% of the population 25 years of age or older have not completed high school (Minnesota Population Center, 2011).

Hollenbeck has long been home to intergenerational, territorial Latino gangs that are well documented by both LAPD and also gang scholarship (see Brantingham et al., 2012, 2019; Tita et al., 2003; Valasik, 2014, 2018; Valasik et al., 2017; Valasik & Reid, 2021; Vigil, 2007). The area had 31 active gangs at the time of the study, each associated with their own turf and collection of rivalries that have remained relatively stable over the last twenty years (see Brantingham et al., 2019; Valasik et al., 2017). Hollenbeck is a spatially isolated area of Los Angeles divided into eight distinct communities (i.e., Boyle Heights, El Sereno, Hermon, Hillside Village, Lincoln Heights, Montecito Hills, Monterey Hills, and University Hills) (Los Angeles Police Department (LAPD), 2019; Valasik et al., 2017). As a result, turf boundaries, social interactions, and rivalries between gangs have generally been circumscribed to Hollenbeck (e.g., Brantingham et al., 2019; Tita et al., 2003; Valasik, 2018). While outside groups occasionally interact with Hollenbeck gangs, we exclude these groups from the current analyses.

3.2. Data

There are three types of gang intelligence data that are used for the current study: gang territories, gang rivalries, and Field Investigation (FI) cards involving gang associates. All data come from the gang enforcement unit at the Hollenbeck Community Policing Area of the LAPD. A 2010 gang audit by Hollenbeck gang enforcement detectives produced a detailed map of gang territorial boundaries. This map is digitized by the authors in ArcGIS 10.6.1 to produce explicit, street-level gang boundaries (see Fig. 1). To identify the rivalries that connect gangs to each other a list-sort technique is used. Guided by the work of Tita and Radil (2011), gang enforcement and homicide detectives were provided with a survey asking each officer to "please identify all of the gangs that are an enemy of the <insert gang name>." There was perfect agreement among all law enforcement experts surveyed regarding the enmity connections between the 31 active gangs in Hollenbeck. Field Investigation (FI) cards collected by LAPD officers assigned to the Hollenbeck Community Policing Area that involve street gangs are physically kept by the gang enforcement unit. These index-sized cards (see Brayne, 2021: 64; Valasik & Brantingham, 2023) are stored in a locked filing cabinet within a secured room at Hollenbeck Station. The current study uses all FI cards (n = 1170) collected in 2009 on the 31 street gangs active in Hollenbeck. The information from these FI cards is directly entered into a database constructed by the authors for this study, circumventing the CalGang system. The FI cards capture gang associate/ police interactions in the construction of the spatial typology.

FI cards may be completed at encounters where an officer questions an individual in the field (e.g., a homicide investigation) but are required to be completed for every individual detained or searched (LAPD, 2018). FI cards are used by law enforcement agencies for variety of investigative reasons ranging from interviewing witnesses at a crime scene (e.g., murder, robbery, etc.) to documenting gang membership and affiliation. FI cards are a commonly used tool for gathering intelligence and chronicling the activity and associations of gang associates (Brayne, 2021; Fox, 2013; Gravel, 2013, 2018; Valasik, 2014, 2018; Valasik et al., 2016). For instance, ethnographic research in Hollenbeck

⁵ According to the LAPD Department Manual (Line Procedures 4/202.02, 4/269.30 & 5/15.43.01). Detention in this case refers to temporary detainment of the individual being stopped, in which they are not free to leave (LAPD, 2018). It should be noted that it is difficult to ascertain just how these procedures may deviate in practice between officers and across policing divisions.

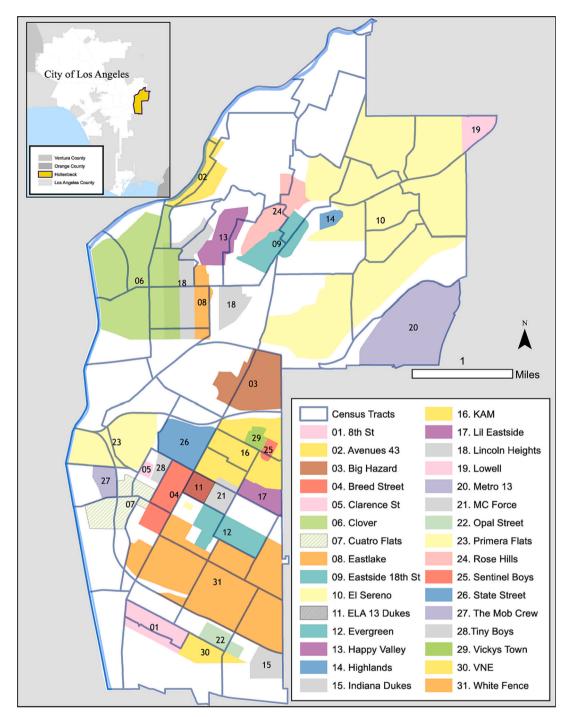


Fig. 1. Map of the LAPD Hollenbeck Community Policing Area with Gang Turfs.

by Vigil (2007: 21) has documented police monitoring gang associates with "officers stopping and questioning gang members in order to fill in field identification [FI] cards even if no crime was committed so that the cards can later be used as evidence in courts to show gang affiliation. 6"

Information about the event leading to a FI card is also recorded, including: date, time, location, and the reason for stopping the individual. Lastly, the outcome of the encounter and whether the individual was released, cited, or arrested is documented. Among the 1170 FI stops of gang associates in the current study, 33% resulted in an arrest, 37% of individuals were released, and 10% received a citation. The outcomes

⁶ The LAPD Department Manual (Line Procedures 4/269.20 defines the indicators for gang membership as when an individual meet at least two of the following criteria: admits to being a gang associate, arrested for offenses consistent with gang activity, been identified as a gang associate by a reliable source, observed associate with documented gang associates, observed brandishing gang symbols / hand signs, observed frequenting gang areas, observed wearing gang dress, or has gang tattoos.

for the remaining 20% of FI stops were not specified, most likely because no further actions were pursued. 7

Gang associates' furtive behavior, avoiding rival gangs, and steering clear of law enforcement makes it extremely challenging to examine their routine activity patterns in any systematic manner. As such, the territoriality and mobility patterns of street gang associates remain drastically understudied in the criminological literature (except see Moore et al., 1983). Yet, FI cards represent a unique data source on the movements of gang associates. Increasingly, FI cards are being used in research to construct social networks (e.g., Fox, 2013; Gravel, 2013; Papachristos et al., 2012), study the enforcement and effectiveness of civil gang injunctions (Gravel, 2018; Valasik, 2014), examine the impact of police gang units (Valasik et al., 2016), and in forecasting gang violence (Valasik, 2018). Building on this prior research, the current study uses FI cards to examine gang associates' mobility patterns.

4. Measures

4.1. Dependent variables: A spatial typology of gang associate mobility patterns

The dependent variable used in this study is derived from a typology of gang associate territoriality, activity, and mobility patterns. Mobility polygons have long been used to investigate spatial patterns in offending and victimization (Normandeau, 1968). For instance, Tita and Griffiths (2005) established a spatial typology to examine the mobility patterns of homicide participants (see also Corsaro, Pizarro, & Shafer, 2017; Griffiths & Tita, 2009). In their approach, the location of offender and victim residences and the location of the homicide were classified depending on whether each location was found in the same or different census tracts. We adopt a similar approach in this paper but use gang turfs as the primary areal unit rather than census tracts. The explicit, street-level gang turf boundaries are from detailed gang intelligence and digitized using ArcGIS 10.6.1 (see above). The FI cards provide point-level data for a gang associate's residence and the location of FI stops, which are geocoded with a 20 ft. offset to the street centerline file in ArcGIS 10.6.1. It would be expected that law enforcement officers' routine interactions with gang associates are most likely when they are observed loitering around. As such, we use the location of a FI stop as a spatial proxy for where a gang associate spends his time. The consequences of this assumption will be discussed below (see also Faust & Tita, 2019).

Our typology classifies the location of an FI stop, and the residence of the associate stopped, based on whether they are found within or outside the associate's gang's turf. As Table 1 depicts, the typology is divided into two groups with several mutually exclusive and exhaustive subtypes. The first group—Intra-turf Residential Mobility—combines together the mobility patterns of gang associates who live within the boundaries of their gang's turf. It is further divided into two subtypes: 1) Attached, when associates are stopped within their territory; and 2) Directed, when associates are stopped outside their territory.

The second group—Extra-turf Residential Mobility—combines together the mobility patterns of gang associates who live outside their gang's turf. It is subdivided into three subtypes: 1) *Commuting to turf*, when associates are stopped within their territory (see Gatz & Klein, 1993; Klein, 1995) 2) *Residence-centric*, when associates are stopped in the neighborhood of their home and outside their gang's territory; and 3) *Rootless*, when associates are stopped outside their territory and outside the neighborhood of their residence. To delineate between the residence-centric and rootless subtypes, we consider a stop in the same

Table 1Spatial typology of gang associate mobility

	Operationalization	Definition
Intra-Turf Reside	ence Mobility	
Attached	{Turf, Home, FI}	A Gang associate lives and is stopped in his gang's territory.
Directed	{Home, Turf} FI	A Gang associate lives inside of his gang's turf and is stopped outside of his gang's turf.
Extra-Turf Resid	ence Mobility	
Commuting to Turf	{Turf, FI} Home	A Gang associate lives outside of his gang's territory but is stopped in his gang's turf.
Residence- centric	{Home, FI} Turf	A Gang associate lives outside of his gang's territory and is stopped near his residence.
Rootless	{} Turf, Home, FI	A Gang associate's residence, turf, and where he is stopped occur in three unique areas.

neighborhood as an associate's home when it occurs within the same census tract of the residence. $^{\!8}$

4.2. Analytic strategy and independent variables

Our analysis uses a series of logistic and multinomial regression models to identify the important characteristics associated with each spatial type. It is important to note that the unit of analysis is the personevent. That is, the current study is not seeking to understand the behavior of any particular gang associate, but instead is attempting to better understand the mobility patterns of gang associates who socialize with territorial-oriented street gangs. As such, the same gang associate may be stopped multiple times in the data, positively skewing the distribution. Fig. 2 illustrates that 736 FIs involve a gang associate who is stopped by the police at least 1 time, of which 69% are unique individuals. The remaining 434 FIs involve gang associates who are stopped more than once by police, with one individual being stopped 11 times. Additionally, gang associates may be residentially unstable, living at multiple locations, yet, gang theories and prior research would still anticipate gang associates to be regularly observed by police "hanging out" at their gang's set space within their claimed turf (Brantingham et al., 2012; Grannis, 2009; Griffiths & Tita, 2009; Huebner et al., 2016; Klein, 1971, 1995; Ley & Cybriwsky, 1974; Moore, 1991; Taniguchi et al., 2011; Thrasher, 1927; Tita et al., 2005; Valasik, 2018). The

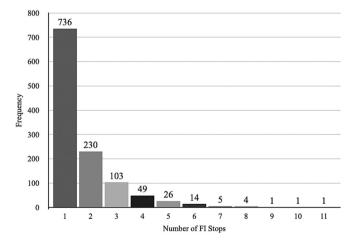


Fig. 2. Distribution of FI stops involving a recurrent gang associate (N = 1170).

 $^{^7\,}$ Most of these non-specified stops (80%) were pedestrian stops. According to Det. Victor "Cheech" Marin (personal communication, February 15, 2012), undocumented outcomes are unlikely when arrests and citations actually occur since officers often use FI cards to document criminal gang activity for potential prosecutions in the future.

 $^{^{\}rm 8}$ Tita and Griffiths (2005) employ a similar strategy in creating their spatial typology.

shifting location of that gang associate's residence, however, will affect their assigned spatial type.

To account for the skewness and potential bias in the data we randomly selected only one incident for gang associates who were stopped multiple times in the data. This reduces the dataset by 434 incidents leaving a final sample of 736 FI stops and provides a more conservative measure of the mobility patterns of gang associates. Accounting for the nested nature of the gang-level characteristics, all models employed cluster-adjusted standard errors (Hosmer Jr, Lemeshow, & Sturdivant, 2013). Since multinomial logistic regression' effect sizes are relative to a reference category, interpretations can be difficult. Marginal effects do not suffer from this issue and remain identical regardless of the reference category (see Mood, 2010). For this reason, the margins command in Stata 17 is used to estimate marginal effects assessing the differences in probability and testing for significance by spatial type.

Given the exploratory nature of this study, we consider the following independent variables:

Age. It is expected that as gang associates become older, they would exhibit greater mobility, particularly as legal access to automobiles may influence their territorial behavior (Cohen & Felson, 1979; Franzese, Covey, & Menard, 2006; Miller, 1966/2011).

Gang size. The total number of documented gang associates is used to approximate the size of a gang's active membership¹⁰ (see Brantingham et al., 2019). Gangs with more associates may be more likely to have associates living outside their territories, as housing availability will dictate residential options in claimed spaces.

Gang density. Gang density is measured as the number of gang associates per 1000 square feet. Gang density may influence territorial behaviors in several ways. For instance, large gangs occupying smaller territories may have more associates living outside their territories. Higher gang density may also contribute to both patterns of gang violence and to a gang's ability to endure over time amidst competition with larger street gangs (Brantingham et al., 2019).

Gang existence. The longevity of a gang, measured in years, may impact gang associate territoriality and residency. Gangs that have been established for longer periods of time often have legendary status and robust reputations among local communities (see Moore et al., 1983; Vigil, 1988, 2007). It is expected that the greater recognition of a more established gang will have more durable ties to their neighborhood, influencing the residency and territoriality patterns of gang associates, encouraging fellow associates to remain within their gang's area of influence (attached mobility) or to frequently return to their gang's turf to hang out (commuting to turf mobility).

Number of gang rivals. The number of rivals a gang has could also affect the mobility of gang associates in several ways. Having many rivals may restrict the mobility of associates. Associates of gangs with many rivals may be more discouraged and fearful of traveling away from the safety of their turf (Curtis et al., 2014; Stuart, 2020). On the other

hand, having many rivals may increase the likelihood of traveling outside the turf. As the number of rival gangs increases, the likelihood that an associate will be participating in violence also increases (Lewis & Papachristos, 2019; Nakamura, Tita, & Krackhardt, 2020; Papachristos et al., 2013; Vigil, 2020). This may encourage directed or rootless mobility types where associates venture into a rival gang's turf to engage in hostilities. Conversely, as the likelihood of violent encounters between rival gangs increases, gang associates may no longer feel safe within their territories, leading them (or their families) to choose to reside elsewhere, but return to their gang's turf to rendezvous with fellow associates. This territorial behavior is best represented by the commuting to turf spatial type (see Gatz & Klein, 1993; Klein, 1995).

Public housing claimed. The presence of public housing communities in a gang's turf could also influence territorial behavior. A dichotomous variable is used to capture whether public housing units are located within a gang's turf. It would be expected that a gang occupying the "projects" will be more likely to have associates residing and hanging out within the housing development (attached mobility). That said, it is not uncommon for families living in public housing (including those with gang associates) to be residentially unstable (Belkin, 1999; Eisenstadt, 2010; Popkin, Gwiasda, Olson, Rosenbaum, & Buron, 2000). Families that are able to improve their economic situation may relocate away from gang territory (Venkatesh, 2000; Vigil, 2007). For many relocated gang associates, however, being physically removed from the gang is not enough to sever ties to the old neighborhood and they may engage in commuting to turf mobility to reunite with fellow associates (see Barton, Valasik, Brault, & Tita, 2020; Moore et al., 1983).

Partitioned resources. Overlap with another gang's territory may also influence territoriality patterns. The coexistence of multiple rival gangs within the same geographic space could encourage increased competition for resources (Bichler, Norris, & Ibarra, 2021; Brantingham et al., 2012, 2019; Papachristos, 2007; Taniguchi et al., 2011; Vasquez, Wenborne, Alleyne, & Ellis, 2015), which may encourage gang associates to venture into the overlapping gang's territory (directed mobility) in an attempt to exert their group's claim over these spaces. Conversely, overlap in territory may lead associates to be more cautious of these borderlands and to restrict their movements as a way of avoiding potential confrontations with rivals (see Curtis et al., 2014; Stuart, 2020). Gang associates may also anticipate incursions by rival associates and constrain their activities to remain within their turf (attached mobility or commuting to turf) to discourage rivals. We account for this phenomenon with a dichotomous variable.

Enjoined. The presence of a civil gang injunction could also impact territoriality and mobility. A civil gang injunction is intended to restrict enjoined gang associates from engaging in certain behaviors within a geographically defined location (Grogger, 2002; O'Deane, 2012; Thomas et al., 2009; Valasik, 2014; Whitmer & Ancker, 1996). Specifically, civil gang injunctions are designed to inhibit groups of gang associates from loitering in public, directly disrupting where gang associates are able to gather and intervening in their daily activity patterns. Therefore, it may be that gang associates would relocate their activities or even their residences to areas outside of a civil gang injunction's jurisdiction (directed mobility or rootless mobility) to avoid the additional attention from law enforcement. A dichotomous variable is used to account for a gang being enjoined with a civil gang injunction.

Traffic. FI cards indicate whether the incident was a result of a traffic stop (i.e., where a vehicle is present). Since a gang's territory is composed of tertiary street networks, delineated by either natural or built boundaries, gang associates should have a greater likelihood of traveling throughout their gang's territory on foot (Grannis, 2009). Therefore, we expect that police encounters with gang associates' exhibiting either attached or residence-centric mobility patterns will be more likely to produce pedestrian stops. Conversely, with automobiles facilitating travel, we expect that gang associates displaying a commuting to turf, directed, or rootless types of mobility will have a greater likelihood of being involved in a traffic stop (see Miller, 1966/

⁹ Two-level logistic regression models with fixed effects were also estimated, the findings were identical in statistical significance and direction for all spatial types. Additionally, we replicated out analysis using the entire sample. The distribution of spatial types and the statistical significance and direction of regression results were analogous.

¹⁰ This measure is derived directly from the CalGang system, a statewide database tracking gang membership in California. Information is only expunged from the database if a gang associate is able to avoid contact with law enforcement for more than five years. For instance, a consensual encounter with police, even if no crime has been committed, results in a record being updated with the date of that most recent event (CalGang, 2019). This measure, while possibly being both exaggerated and/or understated by law enforcement, provides a rough estimate of a gang's size and is the only viable metric available. It is possible that these disparities cancel each other out, or that documented numbers actually under-represent the actual total number of active gang associates (Barrows & Huff, 2009; Pyrooz & Sweeten, 2015).

2011).

Number of associates. The number of associates present at a FI stop may indicate that gang associates are participating in gang-related activity. The extant literature has observed that social groups, including gangs, routinely "hang out" together at a gang's set space (Klein, 1971, 1995; Ley & Cybriwsky, 1974; Moore, 1991; Taniguchi et al., 2011; Thrasher, 2013 [1927]; Tita et al., 2005). It is at these sub-neighborhood locales where the majority of a gang's activity occurs. In particular, scholars have documented that gang associates spend most of their day hanging around with fellow associates (Klein, 1995; Miller, 1966/2011). One would expect that gang associates engaging in either an attached or commuting to turf configuration of territoriality are more likely to be involved in a FI stop transpiring at a gang's set space where multiple gang associates are present.

5. Results & analysis

5.1. Descriptive characteristics of the sample and the spatial typology

The demographic characteristics associated with the individual involved in a FI stop, along with attributes of their gang and aspects of the FI stop are shown in Table 2. The mean age for a gang associate in this sample is around 27 years, although associates' range in age from 9 years to 66 years.

Just over a quarter of the 736 FI events (27.0%) are documented as traffic stops, with the remaining constituting pedestrian encounters. There also appears to be a lack of large groups of gang associates loitering in public. The mean FI stop involves a gang associate being observed with only one other associate (1.105 alters).

Among the 31 active gangs in Hollenbeck, the size of a gang varies substantially both in membership and territory claimed. The mean gang has a roster of approximately 157 associates; however, gangs range from 21 associates to 611 associates. The density of the mean gang, per 1000 square feet, is 0.04 but that can vary from just 0.003 to 0.14. While the mean longevity of gangs in East Los Angeles is just over half a century (53 years), these gangs' lifespan ranges between 23 years and 101 years. The mean number of rivals for a gang is four, with every gang having at least one rival and one gang having nine. Seven gangs (22.6%) claim turf in a public housing community. Three gangs (9.7%) reclaimed their turf following demolition and reconstruction of public housing (see Barton et al., 2020). The turfs of eight gangs (38.8%) overlap with rival gangs, forcing these gangs to share space and resources with other gangs. Lastly, seven (25.8%) of the gangs are enjoined with a civil gang injunction.

Fig. 3 reports the frequency distributions for each category in the spatial typology permitting an examination of gang associates' mobility patterns. The first noticeable observation is that while attached mobility

Table 2 Descriptive statistics for individual, event, and gang characteristics of individuals involved in a FI Stop (N = 736)

	Mean	SD	Minimum	Maximum	
Individual Characteristics (N = 736)					
Age	26.86	9.73	9	66	
Event Characteristics (N = 736)					
Traffic Stop	0.27	0.44	0	1	
Number of Associates	1.105	1.41	0	7	
Gang Characteristics ($N = 31$)					
Gang Size (Documented	157.258	140.014	21	611	
Associates)					
Gang Density (per 1000 sq. feet)	0.044	0.045	0.003	0.143	
Gang's Existence (years)	52.645	26.006	23	101	
Number of Rival Gangs	4	1.770	1	9	
Public Housing Claimed	0.226	0.425	0	1	
Reclaimed Projects	0.097	0.301	0	1	
Partitioned Resources	0.387	0.495	0	1	
Enjoined	0.258	0.445	0	1	

is the most common spatial category, it represents around a third of the sample (31.1%). In fact, there is not one spatial type representing a majority of gang associates' mobility behavior. This finding is important given that the ecological models established by the Chicago School expect gang associates to primarily exhibit a pattern of attached mobility, residing and hanging out in their gang's turf (e.g., Suttles, 1968;Thrasher, 2013 [1927])). Directed mobility would also not be incompatible with the premises of the Chicago School, in that gang associates are living within their gang's territory but are venturing outside of their gang's territory to engage in activities. Yet, even when both types of intra-turf mobility (attached and directed) are combined, they account for only 37.6% of the mobility patterns observed. This leaves the majority of events unexplained by the ecological expectations of the Chicago School.

Conversely, Moore et al. (1983) assert that gang associates need not reside within their claimed territory and instead engage in commuting to turf mobility (see also Gatz & Klein, 1993; Klein, 1995). Yet, the commuting to turf spatial category also fails to characterize a majority, representing just under a third (29.8%) of gang associates' mobility behavior. While commuting to turf is only slightly less observed than the mobility behaviors anticipated by the Chicago School, there is still a third (32.6%) of gang associates' mobility remaining theoretically unexplained (i.e., rootless and residence-centric). The distributions for these five categories of gang associate mobility suggest that neither the ecological premises established by the Chicago School, nor the premises offered by Moore et al. (1983), are adequate on their own to capture the patterns of mobility in relation to territoriality and residency seen with present-day gang associates.

Table 3 reports the results of logistic regression models predicting the mobility type category for each of the 736 events. Table 4 reports the marginal effects of the multinomial logistic regression models. The results from these two tables allow us to identify the characteristics that distinguish each mobility type.

5.2. Intra-turf residence mobility

Attached mobility. Attached mobility is exhibited when a gang associate's permanent residence and a FI stop occur within the claimed turf of his gang. Compared to the other mobility types (see Table 4), attached mobility is more likely to characterize younger gang members (-0.004, p < 0.10), is less likely to occur during traffic stops (-0.098, p < 0.01), is more likely to characterize the experiences of associates of larger gangs (0.001, p < 0.05), is more common among gangs with a lower density of associates (-3.615, p < 0.001), is less common among gangs that have existed in the community longer (-0.004, p < 0.01), and is more likely to occur among those gangs enjoined with a civil gang injunction (0.572, p < 0.05). These findings suggest that attached mobility may be a byproduct of the inherent mobility constraints of younger gang members. Given that youth under 16 years of age are not legally permitted to operate an automobile, their mobility is much more restricted. As such, the infrequency of traffic stops is likely the byproduct of conveyance constraints and a greater reliance on public transportation, walking, or cycling to venture around.

Gang territories are generally comprised of tertiary street networks, providing walking arenas that facilitate gang associates traveling by foot (see Grannis, 2009). Therefore, it is not surprising that gang associates exhibiting attached mobility are involved in significantly fewer traffic stops. Alternatively, this mobility type could be related to the characteristics of the gangs claimed by those associates. The combination of a positive effect of gang size and a negative effect of gang density may suggest that attached mobility could arise because there is simply no need to venture outside the safety of the territory; instead, the size of the gang's territory can accommodate the routine activities of its large membership (i.e., many resources and places to hang out, more associates/friends living in their territory, etc.) (see Brantingham et al., 2019; Grannis, 2009). It could also be that attached mobility arises as a

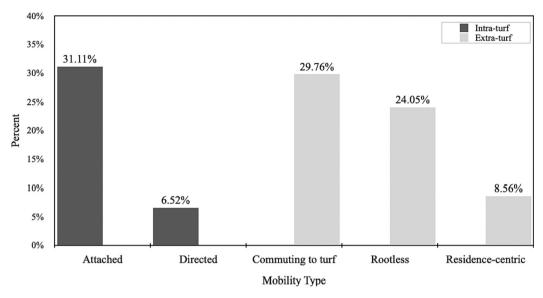


Fig. 3. Distribution of Gang Associate Mobility Types in Hollenbeck (N=736).

Table 3 Logistic regression models predicting each mobility type with cluster-adjusted standard errors (N=736)

	Intra-turf Residential Mobility		Extra-turf Residential Mobility		
	Attached	Directed	Commuting to turf	Residence-centric	Rootless
Individual Characteristics					
Age	$-0.023 (0.012)^{+}$	-0.034 (0.022)	0.002 (0.011)	$0.030~(0.016)^{+}$	0.023 (0.011)*
Event Characteristics					
Traffic	-0.633 (0.172)***	0.799 (0.397)*	-0.673 (0.201)**	-0.147 (0.332)	1.145 (0.256)**
Number of Associates	-0.077 (0.059)	-0.014 (0.139)	0.271 (0.049)***	$-0.226~(0.001)$ $^{+}$	-0.128(0.079)
Gang Characteristics					
Gang Size	0.003 (0.001)**	-0.001 (0.001)	-0.000 (0.001)	-0.001 (0.001)	$-0.001 (0.001)^{+}$
Gang Density	-21.890 (3.699)***	-6.542 (3.758) ⁺	-4.884 (4.704)	16.502 (3.207)***	17.042 (3.693)**
Gang Existence	-0.020 (0.008)*	0.015 (0.008)	-0.002 (0.006)	0.032 (0.007)***	0.010 (0.007)
Number of Gang Rivals	0.002 (0.088)	0.139 (0.097)	-0.099 (0.098)	-0.067 (0.100)	-0.067 (0.088)
Public Housing Claimed	0.185 (0.324)	$-0.612\ (0.363)\ ^{+}$	0.811 (0.208)***	$-0.598~(0.318)~^{+}$	-0.673 (0.332)*
Partitioned Resources	-0.075 (0.312)	0.011 (0.299)	-0.210 (0.294)	0.397 (0.284)	0.094 (0.311)
Enjoined	0.873 (0.377)*	-0.836 (0.340)*	0.174 (0.248)	-1.781 (0.466)***	-0.549 (0.433)
Intercept	0.716 (0.653)	-2.632 (0.786)***	-0.504 (0.650)	-4.354 (0.599)***	-2.308 (0.551)*
Pseudo R-Squared	0.137	0.066	0.068	0.112	0.139

Note: Data in the table represent the logit coefficient with standard errors in parentheses.

P < 0.001.

Table 4 Estimated marginal effects by mobility type (N = 736)

	Intra-turf Residential Mobility			Extra-turf Residential Mobility		
	Attached	Directed	Commuting to turf	Residence-centric	Rootless	
Individual Characteristics						
Age	$-0.004~(0.002)~^{+}$	-0.002 (0.001)	-0.000 (0.002)	0.002 (0.001)	0.004 (0.001)*	
Event Characteristics						
Traffic	-0.098 (0.034)**	0.046 (0.022)*	-0.116 (0.034)***	-0.006 (0.023)	0.174 (0.034)***	
Number of Associates	-0.0013 (0.011)	-0.001 (0.008)	0.048 (0.009)***	-0.016 (0.011)	-0.017 (0.013)	
Gang Characteristics						
Gang Size	0.001 (0.000)*	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	$-0.000~(0.000)~^+$	
Gang Density	-3.615 (0.650)***	-0.174 (0.176)	-0.178 (0.819)	1.259 (0.213)***	2.708 (0.492)***	
Gang Existence	-0.004 (0.001)**	$0.001 (0.000)^{+}$	-0.001 (0.001)	0.002 (0.001)***	0.001 (0.001)	
Number of Gang Rivals	0.003 (0.016)	$0.011\ (0.006)^{+}$	-0.005 (0.020)	-0.005 (0.009)	-0.004 (0.015)	
Public Housing Claimed	0.041 (0.058)	-0.0237 (0.022)	0.149 (0.032)***	-0.048 (0.021)*	-0.104 (0.045)*	
Partitioned Resources	0.004 (0.058)	0.001 (0.017)	-0.053 (0.056)	0.033 (0.021)	-0.015 (0.047)	
Enjoined	0.572 (0.069)*	-0.045 (0.022)*	0.061 (0.050)	-0.131 (0.039)***	0.057 (0.068)	

Note: Average marginal effects from multinomial logistic regression models reported with standard errors in parentheses.

 $^{^{+}}$ p < 0.10.

^{*} p < 0.10

^{**} p < 0.01

⁺p<0.10, *p<0.05, **p<0.01, ***P<0.001

defensive territorial strategy against the intrusion of other groups, given that this type is more likely when the number of associates relative to the turf size is low (i.e., gang density). Lastly, the greater likelihood of enjoined gang members exhibiting attached mobility aligns with Valasik's (2014) observations that civil gang injunctions actually fail to displace gang associates from their gang's claimed turf, with associates just shifting their loitering to less renowned locales.

Directed mobility. The spatial configuration of directed mobility is the most infrequently observed type of territorial behavior (6.5%). A gang associate practicing directed mobility resides within his gang's territory yet is observed traveling outside of these boundaries to engage in other activities that bring him into contact with law enforcement. The data available do not allow us to investigate what all of those potential activities might be; they could be mundane and unrelated to gang activities (i.e., going to work, running errands) or gang-related (i.e., attacking a rival gang) in nature. The results described in Table 4 suggest that directed mobility is more likely to experience traffic stops (0.046, p < 0.05), more likely among gangs that have existed in the community longer (0.001, p < 0.10), more likely among gangs that have a more rivals (0.011, p < 0.10), and less common for associates from gangs enjoined with a civil gang injunction (-0.045, p < 0.05). Given the fact that a gang associate in this scenario is observed traveling outside of their home/claimed turf and away from their residence, it is not surprising that they are more likely to be involved in a traffic stop. Brantingham et al. (2012) indicate that gang violence is more likely to cluster around the interstitial borderland areas between gangs' claimed turf to exert control and secure these spaces. The increased use of directed mobility by associates from gangs that have more rivals may suggest that the activities drawing intra-turf residents out of their gang's claimed turf are gang-related (i.e., attacking a rival gang) (see Gravel et al., 2023; Papachristos et al., 2013). Additionally, the lack of directed mobility by associates of enjoined gangs may be the result of heightened police scrutiny in their own gang's territory, which may encourage associates to lay low to avoid law enforcement. Taken together with attached mobility, it appears that enjoined intra-turf residents are actually less likely to leave their gang's turf, despite the increased scrutiny by law enforcement, and seem more likely to be shifting where they are hanging out within their gang's territory (see Valasik, 2014).

5.3. Extra-turf residence mobility

Commuting to turf mobility. Commuting to turf mobility refers to situations where a gang associate resides outside their gang's turf but is stopped inside his gang's territorial boundaries. It is the second most frequent mobility type (29.8%). According to the results shown in Table 4, this type is less likely to characterize traffic stops (-0.116, p <0.001), more likely to involve a greater number of associates during the stop (0.048, p < 0.001), and more likely to involve associates of gangs who claim territory within public housing communities (0.149, p < 0.001). Commuting to turf appears to reflect a pattern associated with socialization where associates living outside their turf come back to their turf to hang out with other associates (see Moore et al., 1983). As such, having a greater number of associates present during a FI stop is only associated with the commuting to turf configuration. There are two possibilities that could explain this finding. First, gang associates traveling to their gang's territory may be traveling in a group for protection purposes. Second, the gang associate commuting to turf is returning for an event at which additional gang associates are present, or the gang associate's return is enough to encourage fellow associates to gather. In other words, commuting to turf could motivate or be motivated by the social aspects of gang life (Klein, 1995). Furthermore, the positive association with public housing communities seems to reinforce the importance of turf for some groups and associates.

Surprisingly, age is not predictive of this type as would be suggested by the work of Moore et al. (1983). Furthermore, traffic stops are negatively related to commuting to turf mobility, suggesting that, even if

gang associates utilize a vehicle to return to their gang's territory, their interactions with police are more likely to occur around social activities (e.g., hanging out, partying, etc.). While gang research from Europe and Australia (Gatz & Klein, 1993; Klein, 1995; Lien, 2001; Polk, 1995; White, 2008) indicates that gang associates commonly use public transportation networks to travel to their gang's turf, this seems less likely in Los Angeles, where robust public transit is not as well-developed or utilized by the majority of the population. The fact that gang associates who are commuting to turf appear to be less likely to be using an automobile could also imply that commuting to turf gang associates reside proximally to their gang's territory and are walking or cycling as a means of transportation. Regardless of the mode of transportation, it appears that if a vehicle is used, it primarily facilitates a gang associate's reentry into his gang's turf and then the conveyance is relinquished.

Residence-centric mobility. Residence-centric mobility is exhibited when a gang associate is stopped near his primary residence, neither of which are located in his gang's claimed territory. This form of mobility is exhibited infrequently (8.6%). Residence-centric mobility is more likely to characterize associates of gangs with a higher density of associates per turf (1.259, p < 0.001) and with a longer existence (0.002, p < 0.001), but is less common among associates of gangs occupying public housing communities (-0.048, p < 0.05) and gangs enjoined with a civil gang injunction (-0.131, p < 0.001). In terms of density, gangs with more compact territories have limited amounts of residential space. As such, their involvement in residence-centric types of mobility may explain associates traveling to places outside of their gang's turf but close to associates' homes, possibly looking for scarce resources lacking within their gang's claimed area. Additionally, gangs with a lengthier existence are likely to have greater standing in the community than short-lived gangs, and having a more renowned reputation may assist in sustaining a pool of potential associates wanting to join the gang. These associates, however, may not be as committed to and less socially embedded in the gang, remaining on the periphery of the group (see Densley & Pyrooz, 2019; Pyrooz, Sweeten, & Piquero, 2013; Roks, 2018; Sweeten, Pyrooz, & Piquero, 2013). Taken together these results seem to suggest that gang associates practicing residence-centric mobility may be trying to distance themselves from their gang's sphere of influence and could have a greater likelihood of disengaging from gang life (Decker & Lauritsen, 2002; Decker, Pyrooz, & Densley, 2022; Pyrooz, Decker, & Webb, 2014).

Rootless mobility. Rootless mobility refers to situations where a gang associate does not live inside his gang's turf and is stopped neither inside his turf or close to his home. This type is the third most frequently observed category (24.1%). The findings suggest that rootless mobility is more likely among older gang associates (0.004, p < 0.05), more likely to involve traffic stops (0.174, p < 0.001), is more likely to characterize the experiences of associates of smaller gangs (0.000, p < 0.10), more likely to involve associates of gangs with a higher density of associates per turf (2.708, p < 0.01), and less likely to involve gangs claiming public housing communities (-0.169, p < 0.001). Both of the latter characteristics are also present in another form of extra-turf residence mobility, residence-centric. For instance, associates of gangs with territory in public housing are significantly less likely to exhibit rootless mobility. These findings are consistent with prior research (see Griffiths & Tita, 2009; Popkin et al., 2000) suggesting that the physical and social isolation of public housing communities actually insulate gang associates from the larger community. Again, given the finite number of residences within a gang's turf, as a gang's density increases and a gang's size is smaller, there is a greater likelihood that associates will reside beyond the boundaries of their gang's claimed territory. As such, it is unsurprising that older gang associates and traffic stops are associated with rootless mobility. These findings, however, could be interpreted as a special case of commuting to turf mobility in which a gang associate is stopped during their journey to or from their gang's claimed territory, even though there is no overlap with the characteristics associated with

each mobility type and are distinct (see Table 4). It is also possible that individuals engaging in rootless mobility are disengaging from gang life and going about their daily business (e.g., work, errands, etc.), similar to those associates experiencing residence-centric mobility. Conversely, as older gang associates become more criminally adept, displaying rootless mobility may be due to participating in criminal enterprises, such as home invasion robberies, or trafficking (drugs, human/ sex, weapons, etc.), that may be more detached from their gang's claimed territory (see Bichler & Norris, 2022; Densley, McLean, & Brick, 2023; Franchino-Olsen et al., 2022; Lugo, 2020; Twis, Gillespie, & Greenwood, 2022; Vigil, 2002; Vigil & Yun, 2002).

6. Discussion

Decker et al. (2013: 18) asserted that in the canon of gang research there is a "lack of focus on group processes in non-criminal behavior among gangs and gang members." This study begins to address this void building upon previous qualitative research (Moore et al., 1983) by quantitatively investigating gang associates' patterns of mobility, residency, and territoriality to discern which individual-, group-, and event-level factors influence mobility patterns. A more nuanced understanding of gang associates' mobility and territoriality patterns is necessary not just to inform the criminological theories surrounding gangs, but also can aid in guiding the kinds of interventions which could be effective at reducing gang activity and violence in a community (e.g., civil gang injunctions).

Guided by the limited and dated research on gang mobility and territoriality, the current study tested three hypotheses surrounding the spatial relationship between gang associates' residences, their gang's claimed turf, and where they are observed in space. Overall, this study failed to support the first hypothesis, suggested by either the Thrasher (2013 [1927]) and the Chicago School that gang associates' territorial mobility is constrained only to their gang's turf (i.e., attached mobility). Additionally, this study failed to support the second hypothesis, suggested by Moore et al. (1983) that gang associates' territorial mobility consists of them traveling from their residences, outside of their gang's territory, to their gang's turf (i.e., commuting to turf). With no single form of spatial mobility representing a dominant form of gang associate territorial behavior, the third hypothesis is supported. Gang associates were shown to exhibit all five of the unique spatial types, and none of the types constituted the majority of stops. In fact, nearly a third of the mobility behaviors practiced by gang associates (i.e., residence-centric and rootless) are theoretically unexplained in the existing gang literature. The findings may suggest that gang associates exhibiting either residence-centric or rootless mobility types are less affixed to their gang's claimed turf, which would also limit the effectiveness of placebased gang interventions (i.e., civil gang injunctions or nuisance abatements) that are generically applied to an enjoined gang's territory. For instance, older, more criminally experienced gang associates who focus on profit-oriented criminal offending, such as trafficking /smuggling rings (drugs, humans, weapons, etc.), robbery, or large-scale drug selling may be more mobile and less tied to their gang's turf, potentially reducing the efficacy of ill-directed place-based interventions (see Densley et al., 2023; Robinson, McLean, & Densley, 2019; Vigil, 2002; Whittaker et al., 2020). Furthermore, residence-centric or rootless mobility types could also be indicative of gang associates who are attempting to actively disengage from gang life (see Decker et al., 2022; Densley & Pyrooz, 2019). Based on the overall distribution of these spatial categories, future gang studies should consider that where a gang associate resides can be very different from where that individual hangs out and/or participates in crime (see Valasik, 2018; Valasik & Tita, 2018). As such, it would be beneficial for the field of gang research to develop new ecological paradigms about the mobility, residency, and territoriality patterns of modern street gang associates. Additionally, it would be valuable for law enforcement agencies to ascertain the mobility patterns of gang associates affiliated with a gang before

targeting the group with an intervention, particularly a place-based initiative, to assess if it is an appropriate strategy to effectively disrupt the intended gang activity.

The results of this study also indicate that many but not all characteristics of the individual, group, and event significantly differentiate the mobility patterns of street gang associates. Specifically, there is one gang-level characteristic that does not appear to influence a gang associate's mobility behavior: competition over shared resources. Based on the extant literature (see Brantingham et al., 2012, 2019; Nakamura et al., 2020; Taniguchi et al., 2011; Vasquez et al., 2015), increased competition for limited resources would be expected to increase the potential for violence between gangs with overlapping territorial claims and influence gang associates' mobility patterns. The results, however, do not support this prediction. Associates from gangs that are compelled to share common resources (i.e., space) are not differentiated by any specific mobility pattern. It may be that the intergenerational nature of East Los Angeles' gangs and stability of their territorial claims has contributed to this null finding. That is, over the years gang associates have either learned to share these local resources or are better able to navigate these spaces, thereby avoiding conflict and not requiring any particular type of territoriality to maintain their group's influence in the area (see Howell & Griffiths, 2018). That said, future research should continue to investigate this premise to determine if gangs with emerging territorial claims that overlap with a rival's turf generates a disparate pattern than that observed in this study.

Arguably, the more interesting findings from the current study are those able to shed some light on how gang activity prevention strategies and policies may actually influence the behaviors of gang associates, allowing for these approaches to be implemented and applied in a more meaningful way. One approach that has been employed to influence the mobility and undesirable behaviors of gang associates has been changing the built environment, either through restricting street access (Lasley, 1998) or through state-based gentrification (i.e., the demolition and reconstruction) of public housing communities (Barton et al., 2020; Smith, 2014).

The current study reveals that associates from gangs whose turf is contained within a public housing complex are more likely to be practicing commuting to turf mobility. Additionally, associates of gangs with territory in public housing are significantly less likely to exhibit extraturf residence mobility, particularly residence-centric or rootless types. These findings are consistent with prior research (see Moore et al., 1983) that the physical and social isolation of public housing communities provided a stability, cementing the gangs claiming turf within them as intergenerational institutions that continue to draw in gang associates even if they no longer have residences in the respective communities. For instance, even with state-based gentrification efforts, renovating and repopulating several public housing communities failed to nullify a gang's attachment to their territory. This finding supports prior research (Barton et al., 2020; Smith, 2014) indicating that the destruction of public housing is not enough to remove gang activity and violence from an area.

The current study's findings illuminate the influence that civil gang injunctions have on the mobility patterns of gang associates. Enjoined gang associates are more likely to reside inside of a civil gang injunction's "safety zone" and actually refrain from leaving their gang's territorial borders (i.e., intra-turf residence). Enjoined gang associates also seem less likely to be disengaging from their gang (i.e., residence-centric mobility). These results support prior research (Klein, 1995, 1998; Maxson et al., 2005; Valasik, 2014) suggesting that civil gang injunctions are not actually disrupting the ties between gang associates but instead are increasing the cohesiveness of the gang and restricting their activities to within their gang's turf. These findings are also consistent with research (Valasik, 2014) indicating that injunctions may lead to a shift in where gang associates hang out, but they still tend to remain within the designated civil gang injunction "safety-zone," in spite of additional police encroachment.

Further unpacking the policy implications of these findings, Fig. 4 uses the full sample of FI stops to map the distribution of mobility types aggregated at the gang-level (pie charts) by the percentage of associates stopped inside their turf (y-axis) and the percentage of associates living inside their turf (x-axis), as well as whether these gangs are enjoined with a civil gang injunction at the time of the study (stars) or not (circles). As place-based interventions, civil gang injunctions attempt to reduce the visibility of gang members in well-defined geographic areas, typically in public spaces where they may increase risks to public safety. Given the theory of change behind civil gang injunctions, their effectiveness and potential may be directly tied the mobility patterns of gangs. Fig. 4 shows that gang associates in Hollenbeck clearly spend a significant amount of time inside their turf (or at least are often stopped by police inside their turf), so it makes sense for place-based interventions to target these areas.

However, for the groups in the upper right corner of Fig. 4, it would be difficult to modify the routine activities of gang associates since many of them also live inside their turf. Even so, many of those gangs were subject to civil gang injunctions (i.e., Big Hazard, KAM, White Fence, Lincoln Heights). Not only is the effectiveness of these specific injunctions doubtful, but because these injunctions target community residents—as opposed to outsiders—they may be viewed particularly negatively by the community as a whole, likely causing more harm than good (see Valasik & Torres, 2022). Similarly, it is unlikely that a gang injunction restricting routine activities inside Eastlake's turf (and other gangs in the bottom left corner of Fig. 4) would have much of an effect. These groups' mobility patterns do not appear to revolve around their turf, nor do their members live in great numbers inside their gang's territory. That said, these gangs may be frequenting other locations that could be targeted by place-based interventions. Alternatively, given these groups high mobility, interventions focused on hindering associates' mobility-such as restricting the use of public transit or the suspension of driver's licenses—could be more appropriate and effective.

Gangs in the top left corner of Fig. 4 (i.e., Evergreen, Clarence Street, The Mob Crew, Clover) may in fact be the most receptive groups to be enjoined by a civil gang injunction in the future since their territories are generally not tied to associates' residences, and a majority of the gang's associates are commuting to turf to loiter and hangout. Still, findings related to mobility types requiring associates to actively choose to travel to their turf are inconsistent with a deterrent effect of injunctions. Most notably, associates from enjoined gangs were not significantly more or less likely to exhibit commuting to turf mobility. If injunctions deterred the congregating of associates in their gang's turf, one would expect members who live outside their turfs would choose to avoid the additional police scrutiny inside their gang's turf (see Valasik, 2014; Valasik & Torres, 2022). While the current study was not designed to disentangle the causal influence of injunctions on mobility patterns, the findings suggest that studies should consider mobility patterns in both the implementation and evaluation of civil gang injunctions and other place-based gang interventions.

Several limitations are worthy of consideration. First, this study relied on FI cards, a novel source for gang data that has only been used in a handful of criminological studies on the behavior of gang associates (Fox, 2013; Gravel, 2013, 2018; Papachristos et al., 2012; Valasik, 2014, 2018) and concerns remain about what this type of data may actually be measuring (see Brayne, 2021; Faust & Tita, 2019; Valasik & Brantingham, 2023). For instance, FI cards are likely to reify law enforcements perceptions of street gangs' criminal involvement, while inadvertently downplaying these groups' non-offending behaviors, which dominate gang life (see Klein, 1995, 1998).

Second, just like any other type of police-generated data, FI cards are not the result of random events and do not represent all locations where gang associates hang out and perform routine activities. FI stops reflect

the activities of gang associates from the point of view of law enforcement (see Brayne, 2021; Valasik & Brantingham, 2023). In fact, it is possible that the data-generating process behind FI cards overemphasizes certain categories of our typology. For instance, anti-gang unit officers who are well-informed about the gang landscape may be more likely to stop gang associates outside their territory because the behavior stands out to the officer (see Valasik et al., 2016). Conversely, anti-gang unit officers who are well aware of the typical hangout locations of gang associates may be visiting these locations more consistently.

Third, this study's sample is composed of only FI stops that transpire in one LAPD community policing area, Hollenbeck. As such, extra-turf residence mobility patterns (i.e., commuting to turf, residence-centric, and rootless) and even the intra-turf residence mobility's directed type may occur at higher frequencies than observed in the current study.

Future research needs to consider ways to model the sampling regime and correct for its potential biases. That being said, research has indicated that police gang data is reliably collected at both the local and national levels, with police clearly identifying more criminally involved individuals who associate themselves with a gang (Katz, Fox, Brit, & Stevenson, 2012; Katz, Webb, & Schaefer, 2000). Furthermore, only about 40% of the FI stops in the data involved an arrest or citation, suggesting that police officers are not simply documenting the criminal activity of gang members, but capturing non-offending behaviors, such as hanging out, which encapsulate the majority of gang life. Finally, given that a gang is a localized phenomenon that "has to be understood in its own terms and in its own 'backyard'" (White, 2011: 203), the findings may be limited to the unique character of gangs in Hollenbeck and may not be generalizable to other urban neighborhoods or cities. The current study's methodology can be easily replicated in other urban areas and future studies could provide comparative samples and increase generalizability.

7. Conclusions

In spite of these limitations, a valuable application of this spatial typology exists by providing criminal justice actors with the ability to develop a clearer picture of a gang's mobility patterns (e.g., see Fig. 4) to guide future interventions. Thrasher (2013[1927]: 544) asserts: "No adequate program can be formulated or carried on without definite knowledge of facts regarding the children of the area and their problems and the social influences which play upon them." The creation of this mobility typology will aid in ascertaining what will be the most appropriate type of intervention to interrupt and reduce gang activity. For instance, if the majority of a gang's membership are routinely hanging out in their gang's turf, then enjoining that gang with a geographically tailored civil gang injunction, prohibiting them from associating together in public, and disrupting their daily activities may be the most effective strategy. Similarly, if gang associates are practicing other mobility patterns but gathering at particular places outside of their gangs' claimed territory to engage in criminal activity, such as prostitution or sex trafficking out of a hotel, then a public nuisance abatement strategy targeting those specific locations could be utilized, similar to a civil gang injunction (see; O'Deane, 2012). However, if gang associates' mobility is more rootless or directed in nature, refraining from congregating in their gang's territory or any noteworthy space, then a civil gang injunction or other form of place-based intervention (e.g., restricting street access) will have little effect on the activities of that gang. Instead, a pulling levers approach (i.e., Operation Ceasefire) which targets individuals and their social networks, and not narrowly tailored to physical space, may be a more suitable approach to counter gang activity (Braga & Weisburd, 2015; Gravel et al., 2013; Papachristos, 2011; Tita et al., 2003, 2005). Nevertheless, even among group-based interventions there is value in ascertaining the mobility patterns of individuals being targeted with the intervention. For instance, gang associates most at risk for spreading gun violence exhibit extra-turf residence mobility, residing

¹¹ Figure 4 displays the proportion of stops per gang.

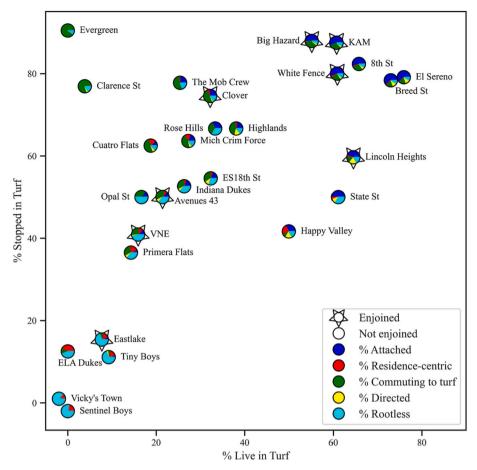


Fig. 4. Gang-level Aggregation of Mobility Types (Pie Charts) Mapped by the Percentage of Associates Living in their Gang's Turf, the Percentage of Associates Stopped in their Gang's Turf, and Civil Gang Injunction Status (*N* = 28).

Note: Gangs with <5 FIs are not included: Metro 13(1), Lowell (4), Lil Eastside (4).

some distance from their gang's turf, it may be more challenging for violence interrupters and community partners to effectively mediate individuals who may reside beyond the purview of the intervention area. Analogously, gang associates whose spatial mobility is an intra-turf residence type may be easier for violence interrupters to locate, conciliate, and maintain relationships with as they are more anchored to the intervention area.

Future research on the group processes of gang associates, whether it focuses on violent or non-violent behavior, should be more conscious of where gang associates are spending the majority of their day. The findings from this study highlight the importance of relying upon other information than where a gang associate sleeps at night, their primary residence, to be a proxy for where they are hanging out (see Huebner et al., 2016; Katz & Schnebly, 2011). Gang research should look to the neighborhoods and crime literature to investigate how the location of an associate's activity space influences their patterns of behavior, including mobility (see Boessen, 2014; Browning & Soller, 2014). Another invaluable avenue to explore is capturing a gang associate's travel patterns over time, what Boessen (2014) refers to as their "spatial footprint." This technique would further illuminate how gang associates' mobility is interrelated to their territorial behaviors and even the structure of violence in a region.

Declaration of Competing Interest

None.

Acknowledgements

This work was supported by AFSOR MURI grant [FA9550-10-1-0569]; ARO MURI grant [W911NF-11-1-0332]; ONR grant [ONR N00014-10-1-0221]; ONR grant [ONR N00014-08-1-1015]; and National Science Foundation FRG grant [DMS-0968309].

References

Adamson, C. (1998). Tribute, turf, honor and the American street gang: Patters of continuity and change since 1820. *Theoretical Criminology*, 2(1), 57–84.

Adamson, C. (2000). Defensive localism in white and black: A comparative history of European-American and African-American youth gangs. Ethnic and Racial Studies, 23 (2), 272–298.

Aldridge, J., Ralphs, R., & Medina, J. (2011). Collateral damage: Territory and policing in an English gang city. In B. Goldson (Ed.), Youth in crisis? 'Gangs', territoriality and violence (pp. 72–88). New York, NY: Routledge.

Aspholm, R. (2020). Views from the streets: The transformation of gangs and violence on Chicago's south side. New York, NY: Columbia University Press.

Barrows, J., & Huff, C. R. (2009). Gangs and public policy: Constructing and deconstructing gang databases. *Criminology & Public Policy*, 8(4), 675–702.

Barton, M. S., Valasik, M., Brault, E., & Tita, G. (2020). "Gentefication" in the barrio: Examining the relationship between gentrification and homicide in East Los Angeles. Crime & Delinquency, 66(13–14), 1888–1913.

Beckett, K., & Herbert, S. (2009). Banished: The new social control in urban America. New York, NY: Oxford University Press.

Belkin, L. (1999). Show me a Hero: A tale of murder, suicide, race, and redemption. Son, MA: Little, Brown and Company.

Bichler, G., & Norris, A. (2022). Crossing lines: Structural advantages of inter-racial criminal street gang violence. *Trends in Organized Crime*, 1–28.

Bichler, G., Norris, A., & Ibarra, C. (2021). Explaining the directionality of gang violence with court records. *Journal of Aggression, Conflict and Peace Research, 13*(2/3), 83–95.Blasko, B. L., Roman, C. G., & Taylor, R. (2015). Local gangs and residents' perceptions of unsupervised teen groups: Implications for the incivilities thesis and neighborhood effects. *Journal of Criminal Justice, 43*(1), 20–28.

- Boessen, A. (2014). Geographic space and time: The consequences of the spatial footprint for neighborhood crime. PhD Diss: University of California, Irvine.
- Bogardus, E. S. (1926). The City boy and his problems: A survey of boy life in Los Angeles. Los Angeles, CA: House of Ralston.
- Bolden, C. L. (2014). Friendly foes: Hybrid gangs or social networking. Group Processes & Intergroup Relations, 17(6), 730–749.
- Braga, A. A., & Weisburd, D. L. (2015). Focused deterrence and the prevention of violent gun injuries: Practice, theoretical principles, and scientific evidence. *Annual Review* of Public Health, 36(1), 55–68.
- Brantingham, P. J., & Brantingham, P. L. (1978). A theoretical model of crime site selection. In M. Krohn, & R. L. Akers (Eds.), *Theoretical perspectives on crime and criminal justice* (pp. 105–118). Beverly Hills: Sage.
- Brantingham, P. J., & Brantingham, P. L. (1981). Notes on the geometry of crime. In P. L. Brantingham, & P. J. Brantingham (Eds.), *Environmental Criminology*. CA: Sage Publications, Beverly Hills.
- Brantingham, P. J., & Brantingham, P. L. (1991). *Environmental Criminology*. Prospect Heights, NJ: Waveland Press.
- Brantingham, P. J., Tita, G. E., Short, M., & Reid, S. E. (2012). The social ecology of gang territorial boundaries. *Criminology*, 50(3), 851–885.
- Brantingham, P. J., Valasik, M., & Tita, G. E. (2019). Competitive dominance, gang size and the directionality of gang violence. *Crime Science*, 8(1), 1–20.
- Brantingham, P. L., & Brantingham, P. J. (1982). Mobility, notoriety, and crime: A study in the crime patterns of urban nodal points. *Journal of Environmental Systems*, 11, 89–99.
- Brayne, S. (2021). Predict and surveil: Data, discretion, and the future of policing. New York, NY: Oxford University Press.
- Browning, C. R., Pinchak, N. P., & Calder, C. A. (2021). Human mobility and crime: Theoretical approaches and novel data collection strategies. *Annual Review of Criminology*, 4, 99–123.
- Browning, C. R., & Soller, B. (2014). Moving beyond neighborhood: Activity spaces and ecological networks as contexts for youth development. Cityscape, 6(1), 165–196.
- Brunson, R. K., & Miller, J. (2009). Schools, neighborhoods, and adolescent conflicts: A situational examination of reciprocal dynamics. *Justice Quarterly, 26*(2), 183–210.
- CalGang. (2019). Web 11 December 2019. http://oag.ca.gov/calgang.
- Cohen, L. E., & Felson, M. (1979). Social change and crime rate trends: A routine activity approach. American Sociological Review, 44(4), 588–608.
- Corsaro, N., Pizarro, J. M., & Shafer, J. (2017). The influence of planned aggression on the journey to homicide: An examination across typology classifications. *Homicide Studies*, 21(3), 179–198.
- Curtis, J. W., Shiau, E., Lowery, B., Sloane, D., Hennigan, K., & Curtis, A. (2014). The prospects and problems of integrating sketch maps with geographic information systems to understand environmental perception: A case study of mapping youth fear in Los Angeles gang neighborhoods. *Environment and Planning. B, Planning & Design.* 41(2), 251–271.
- Deane, L., Bracken, D. C., & Morrissette, L. (2007). Desistance within an urban aboriginal gang. *Probation Journal*, 54(2), 125–141.
- Decker, S. H., & Lauritsen, J. L. (2002). Leaving the gang. In C. R. Huff (Ed.), Gangs in America (3rd ed.) (pp. 51–70). CA: Sage: Thousand Oaks.
- Decker, S. H., Melde, C., & Pyrooz, D. C. (2013). What do we know about gangs and gang members and where do we go from here? *Justice Quarterly*, 30(3), 369–402.
- Decker, S. H., Pyrooz, D. C., & Densley, J. A. (2022). *On Gangs*. Philadelphia, PA: Temple University Press.
- Decker, S. H., & Van Winkle, B. (1996). Life in the gang: Family, friends and violence. New York, NY: Cambridge University Press.
- Densley, J., McLean, R., & Brick, C. (2023). In Contesting County Lines: Case Studies in Drug Crime and Deviant Entrepreneurship. Bristol, UK: Bristol University Press.
- Densley, J. A., & Pyrooz, D. C. (2019). A signaling perspective on disengagement from gangs. *Justice Quarterly*, 36(1), 31–58.
- Dunn, W. (2007). The gangs of Los Angeles. Lincoln, NE: iUniverse.
- Durán, R. J. (2013). Gang life in two cities: An Insider's journey. New York, NY: Columbia University Press.
- Durán, R. J. (2018). The gang paradox: Inequalities and miracles on the U.S-Mexico border. New York, NY: Columbia University Press.
- Eisenstadt, P. (2010). Rochdale Village: Robert Moses, 6,000 families, and new York City's great experiment in integrated housing. Ithaca, NY: Cornell University Press.
- Faust, K., & Tita, G. E. (2019). Social networks and crime: Pitfalls and promises for advancing the field. *Annual Review of Criminology, 2*(1), 99–122.
- Fox, A. (2013). Examining gang social network structure and criminal behavior. PhD Diss: Arizona State University.
- Franchino-Olsen, H., Martin, S. L., Halpern, C. T., Preisser, J. S., Zimmer, C., & Shanahan, M. (2022). Adolescent experiences of violence victimizations among minors who exchange sex/experience minor sex trafficking. *Journal of Interpersonal Violence*, 37(17–18). NP16277-NP16301.
- Franzese, R. J., Covey, H. C., & Menard, S. (2006). *Youth gangs*. Springfield, IL: Charles C Thomas Publisher, LTD.
- Garot, R. (2010). Who you claim: Performing gang identity in school and on the streets. New York, NY: New York University Press.
- Gatz, M., & Klein, M. W. (1993). Europe's new gangs break American pattern by crossing ethnic lines, commuting to turf. *Psychology. International*, 4(2), 1, 10–11.
- van Gennip, Y., Hunter, B., Ahn, R., Elliott, P., Luh, K., Halvorson, M., ... Bertozzi, A. L. (2013). Community detection using spectral clustering on sparse geosocial data. SIAM Journal on Applied Mathematics, 73(1), 67–83.
- Glaser, C. (1998). Swines, hazels and the dirty dozen: Masculinity, territoriality and the youth gangs of Soweto, 1960–1976. *Journal of Southern African Studies*, 24(4), 719–736.

- Grannis, R. (2009). From the ground up: Translating geography into community through neighbor networks. Princeton, NJ: Princeton University Press.
- Gravel, J. (2013). Jack-of-all-trades: Social capital, criminal versatility and brokerage in a street gang network. M.A. Thesis: Simon Fraser University.
- Gravel, J. (2018). On the use of police records for social network analysis. PhD Diss: University of California, Irvine.
- Gravel, J., Bouchard, M., Descormiers, K., Wong, J. S., & Morselli, C. (2013). Keeping promises: A systematic review and a new classification of gang control strategies. *Journal of Criminal Justice*, 41(4), 228–242.
- Gravel, J., Valasik, M., Mulder, J., Leenders, R., Butts, C., Brantingham, P. J., & Tita, G. E. (2023). Rivalries, reputation, retaliation, and repetition: Testing plausible mechanisms for the contagion of violence between street gangs using relational event models. *Network Science (Forthcoming)*.
- Griffiths, E., & Tita, G. (2009). Homicide in and around public housing: Is public housing a hotbed, a magnet, or a generator of violence for the surrounding community? *Social Problems*, *56*(3), 474–493.
- Grogger, J. (2002). The effects of civil gang injunctions on reported violent crime: Evidence from Los Angeles County. *Journal of Law and Economics*, 45(1), 69–90.
- Hagedorn, J. M. (2008). A world of gangs: Armed young men and Gangsta culture. Minneapolis, MN: University of Minnesota Press.
- Heller, C. S. (1966). Mexican American youth: Forgotten youth at the crossroads. New York, NY: Random House.
- Hennigan, K. M., & Sloane, D. (2013). Improving civil gang injunctions: How implementation can affect dynamics, crime, and violence. *Criminology & Public Policy*, 12(1), 7–41.
- Hosmer, D. W., Jr., Lemeshow, S., & Sturdivant, R. X. (2013). Applied logistic regression (Vol. 398). John Wiley & Sons.
- Howell, J. C., & Griffiths, E. (2018). *Gangs in America's communities* (3rd ed.). Sage Publications.
- Huebner, B. M., Martin, K., Moule, R. K., Jr., Pyrooz, D. C., & Decker, S. H. (2016). Dangerous places: Gang members and neighborhood levels of gun assault. *Justice Quarterly*, 33(5), 836–862.
- Hughes, L. A., Schaible, L. M., & Kephart, T. (2022). Gang graffiti, group process, and gang violence. *Journal of Quantitative Criminology*, 38(2), 365–384.
- Katz, C. M., Fox, A. M., Brit, C. L., & Stevenson, P. (2012). Understanding police gang data at the aggregate level: An examination of the reliability of National Youth Gang Survey data. Justice Research and Policy, 14(2), 103–128.
- Katz, C. M., & Schnebly, S. M. (2011). Neighborhood variation in gang member concentrations. Crime & Delinquency, 57(3), 377–407.
- Katz, C. M., Webb, V. J., & Schaefer, D. R. (2000). The validity of police gang intelligence lists: Examining differences in delinquency between documented gang members and nondocumented delinquent youth. *Police Quarterly*, 3(4), 413–437.
- Keusch, F., Leonard, M. M., Sajons, C., & Steiner, S. (2021). Using smartphone Technology for Research on refugees: Evidence from Germany. Sociological Methods & Research, 50(4), 1863–1894.
- Klein, M. W. (1971). Street gangs and street workers. Englewood Cliffs, NJ: Prentice Hill. Klein, M. W. (1995). The American street gang. New York, NY: Oxford University Press.
- Klein, M. W. (1998). The problem of street gangs and problem-oriented policing. In T. O'Conner Shelley, & A. C. Grant (Eds.), Problem oriented policing: Crime-specific problems critical issues and making POP work (pp. 57–88). Washington, D.C.: Police Executive Research Forum.
- Klein, M. W., & Maxson, C. L. (2006). Street gang patterns and policies. Oxford, NY: Oxford University Press.
- Lasley, J. (1998). Designing out gang homicides and street assault. Washington, DC: NIJ. Leap, J. (2012). Jumped in: What gangs taught me about violence, drugs, love, and redemption. Boston. MA: Beacon Press.
- Lefebvre, H. (1991). [1974] The production of space. D. Nicholson-Smith (trans.). Oxford, NY: Blackwell.
- Lewis, K., & Papachristos, A. V. (2019). Rules of the game: Exponential random graph models of a gang homicide network. Social Forces. https://doi.org/10.1093/sf/ soz106
- Ley, D., & Cybriwsky, R. (1974). Urban graffiti as territorial markers. Annals of the Association of American Geographers, 64(4), 491–505.
- Lien, I. (2001). The concept of honor, conflict, and violent behavior among youths in Oslo. In M. W. Klein, H. Kerner, C. L. Maxson, & E. G. M. Weitekamp (Eds.), The Eurogang paradox: Street gangs and youth groups in the U.S. and Europe (pp. 165–174). Dordrecht, NI.: Kluwer Academic Publishers.
- Lopez-Aguado, P., & Walker, M. L. (2021). "I don't bang: I'm just a blood": Situating gang identities in their proper place. Theoretical Criminology, 25(1), 107–126.
- Los Angeles Police Department (LAPD). (2018). LAPD Manual. Web. 28 May 2018. www.lapdonline.org/lapd_manual/.
- Los Angeles Police Department (LAPD). (2019). Hollenbeck community policing station. Retrieved from http://www.lapdonline.org/46ollenbeck_community_police_station.
- Lugo, K. (2020). Gang sex trafficking in the United States. In J. Winterdyk, & J. Jones (Eds.), The Palgrave international handbook of human trafficking (pp. 521–540). Cham, Switzerland: Palgrave Macmilan.
- Lyman, S. M., & Scott, M. B. (1967). Territoriality: A neglected sociological dimension. Social Problems, 15(20), 236–249.
- Maxson, C. L., Hennigan, K. M., & Sloane, D. C. (2005). "It's getting crazy out there": Can a civil gang injunction change a community? *Criminology & Public Policy*, 4(3), 577–606.
- Maxson, C. L., & Klein, M. W. (1990). Street gang violence: Twice as great, or half as great? In C. R. Huff (Ed.), Gangs in America (pp. 71–100). Thousand Oaks, CA: Sage.
- Maxson, C. L., & Klein, M. W. (1996). Defining gang homicide: An updated look at member and motive approaches. In C. R. Huff (Ed.), *Gangs in America* (2nd ed., pp. 3–20). Thousand Oaks, CA: Sage.

- Maxson, C. L., & Klein, M. W. (2002). "Play groups" no longer: Urban street gangs in the Los Angeles region. In M. J. Dear (Ed.), From Chicago to L.a.: Making sense of urban theory (pp. 239–266). Thousand Oaks, CA: Sage.
- Miller, W. B. (1966/2011). In S. H. Decker (Ed.), City gangs. Phoenix, AZ: Arizona State University.
- Miller, W. B. (1975). Violence by youth gangs and youth groups as a crime problem in major American cities. Washington, DC: U.S. Department of Justice, Law Enforcement Assistance Administration, Office of Juvenile Justice and Delinquency Prevention, National Institute for Juvenile Justice and Delinquency Prevention.
- Minnesota Population Center. (2011). National historical geographic information system (version 2.0). Minneapolis: University of Minnesota.
- Mondani, H., & Rostami, A. (2021). Uncovering the degree of criminal organization: Swedish street gangs and the role of mobility and co-offending networks. Social Science Research. 102657.
- Monod, J. (1967). Juvenile gangs in Paris: Toward a structural analysis. *Journal of Research in Crime and Delinquency*, 4(1), 142–165.
- Mood, C. (2010). Logistic regression: Why we cannot do what we think we can do, and what we can do about it. *European Sociological Review*, 26(1), 67–82.
- Moore, J. W. (1978). Homeboys: Gangs, drugs, and prison in the barrios of Los Angeles. Philadelphia, PA: Temple University Press.
- Moore, J. W. (1988). Gangs and the underclass: A comparative perspective. In J. Hagedorn (Ed.), *People and folks (pp. 3-16)*. Lake View Press.
- Moore, J. W. (1991). Going down to the barrio: Homeboys and Homegirls in change. Philadelphia, PA: Temple University Press.
- Moore, J. W., Vigil, D., & Garcia, R. (1983). Residence and territoriality in Chicano gangs. Social Problems, 31(2), 182–194.
- Muñiz, A. (2015). Police, power, and the production of racial boundaries. New Brunswick, NJ: Rutgers University Press.
- Nakamura, K., Tita, G. E., & Krackhardt, D. (2020). Violence in the "balance": A structural analysis of how rivals, allies, and third-parties shape inter-gang violence. Global Crime, 21(1), 3–27.
- Normandeau, A. (1968). Patterns in robbery. Criminologica, 6(3), 2–15.
- O'Deane, M. D. (2012). Gang injunctions and abatement: Using civil remedies to curb gangrelated crimes. Boca Raton, FL: CRC Press.
- Papachristos, A. V. (2007). Murder by structure: A network theory of gang homicide. PhD Diss: University of Chicago.
- Papachristos, A. V. (2009). Murder by structure: Dominance relations and the social structure of gang homicide. American Journal of Sociology, 115(1), 74–128.
- Papachristos, A. V. (2011). Too big to fail: The science and politics of violence prevention. *Criminology & Public Policy*, 10(4), 1053–1061.
- Papachristos, A. V., Braga, A. A., & Hureau, D. M. (2012). Social networks and the risk of gunshot injury. *Journal of Urban Health*, 89(6), 992–1003.
- Papachristos, A. V., Braga, A. A., Piza, E., & Grossman, L. S. (2015). The company you keep? The spillover effects of gang membership on individual gunshot victimization in a co-offending network. *Criminology*, 53(4), 624–649.
- Papachristos, A. V., Hureau, D. M., & Braga, A. A. (2013). The corner and the crew: The influence of geography and social networks on gang violence. *American Sociological Review* 78(3), 417-447
- Philips, S. A. (1999). Wallbangin': Graffiti and gang in LA. Chicago, IL: University of Chicago.
- Pickering, J., Kintrea, K., & Bannister, J. (2012). Invisible walls and visible youth: Territoriality among young people in British cities. *Urban Studies*, 49(5), 945–960.
- Polk, K. (1995). Masculinity, honour, and confrontational homicide. In T. Newburn, & E. A. Stank (Eds.), Just boys doing business? Men, masculinities and crime (pp. 166–188). New York, NY: Routledge.
- Popkin, S. J., Gwiasda, V. E., Olson, L. M., Rosenbaum, D., & Buron, L. (2000). The hidden war: Crime and tragedy of public housing in Chicago. New Brunswick, NJ: Rutgers University Press.
- Pyrooz, D. C., & Decker, S. H. (2011). Motives and methods for leaving the gang: Understanding the process of gang desistance. *Journal of Criminal Justice*, 39(2011), 417–425.
- Pyrooz, D. C., Decker, S. H., & Webb, V. J. (2014). The ties that bind: Desistance from gangs. Crime & Delinquency, 60(4), 491–516.
- Pyrooz, D. C., & Sweeten, G. (2015). Gang membership between ages 5 and 17 years in the United States. *Journal of Adolescent Health*, 56(4), 414–419.
- Pyrooz, D. C., Sweeten, G., & Piquero, A. R. (2013). Continuity and change in gang membership and gang embeddedness. *Journal of Research in Crime and Delinquency*, 50(2), 239–271.
- Radil, S. M., Flint, C., & Tita, G. E. (2010). Spatializing social networks: Using social network analysis to investigate geographies of gang rivalry, territoriality, and violence in Los Angeles. Annals of the Association of American Geographers, 100(2), 307–326.
- Rafael, T. (2007). The Mexican mafia. Jackson, TN: Encounter Books.
- Ridgeway, G., Grogger, J., Moyer, R. A., & MacDonald, J. M. (2018). Effect of gang injunctions on crime: A study of Los Angeles from 1988-2014. *Journal of Quantitative Criminology*, 119(1), 1–25.
- Rios, V. M. (2011). Punished: Policing the lives of black and Latino boys. New York, NY: New York University Press.
- Rios, V. M. (2017). Human targets: Schools, police, and the criminalization of Latino youth. Chicago, II: University of Chicago Press.
- Robinson, G., McLean, R., & Densley, J. (2019). Working county lines: Child criminal exploitation and illicit drug dealing in Glasgow and Merseyside. *International Journal* of Offender Therapy and Comparative Criminology, 63(5), 694–711.
- Roks, R. A. (2018). Crip or die? Gang disengagement in the Netherlands. *Journal of Contemporary Ethnography*, 47(5), 695–716.

- Romo, R. (1983). East Los Angeles; history of a barrio. Austin, TX: University of Texas Press.
- Rosen, E., & Venkatesh, S. (2007). Legal innovation and the control of gang behavior. Annual Review of Law and Social Science, 3, 255–270.
- Rubel, A. J. (1965). The Mexican American Palomilla. Anthropological Linguistics, 4, 92–97.
- Sack, R. D. (1983). Human territoriality: A theory. Annals of the Association of American Geographers, 73(1), 55–74.
- Schneider, E. C. (1999). Vampires, dragons, and Egyptian kings: Youth gangs in postwar New York. Princeton, NJ: Princeton University Press.
- Short, J. F., Jr., & Strodtbeck, F. L. (1965). Group process and gang delinquency. Chicago, IL: University of Chicago Press.
- Simi, P. (2006). Hate groups or street gangs? Emergence of racist skinheads. In J. F. Short, Jr., & L. A. Hughes (Eds.), Studying youth gangs (pp. 145–160). Lanham: AltaMira Press
- Smith, C. M. (2014). The influence of gentrification on gang homicides in Chicago neighborhoods, 1994 to 2005. *Crime & Delinquency*, 60(4), 569–591.
- Stuart, F. (2020). Ballad of the bullet: Gangs, Drill music, and the power of online infamy. Princeton, NJ: Princeton University Press.
- Sugie, N. F. (2018). Utilizing smartphones to study disadvantaged and hard-to-reach groups. Sociological Methods & Research, 47(3), 458–491.
- Suttles, G. D. (1968). The social order of the slum: Ethnicity and territory in the Inner City. Chicago, IL: The University of Chicago Press.
- Sweeten, G., Pyrooz, D. C., & Piquero, A. R. (2013). Disengaging from gangs and desistance from crime. *Justice Quarterly*, 30(3), 469–500.
- Taniguchi, T. A., Ratcliffe, J. H., & Taylor, R. (2011). Gang set space, drug markets, and crime around drug corners in Camden. *Journal of Research in Crime and Delinquency*, 48(3), 327–363
- Tapia, M. (2017). The barrio gangs of San Antonio, 1915–2015. Fort Worth, TX: TCU Press.
 Tapia, M. (2019). Gangs of the El Paso-Juarez borderland; a history. Albuquerque, NM:
 University of New Mexico Press.
- Taylor, R. B. (1988). Human territorial functioning: An empirical, evolutionary, perspective on individual and small group territorial cognitions, behaviors, and consequences. Cambridge, MA: Cambridge University Press.
- Thomas, E. E., Riordan, B., & Shiner, M. (2009). *Gang injunctions: How and why they work*. Los Angeles, CA: Office of the Los Angeles City Attorney.
- Thrasher, F. M. (2013 [1927]). The gang: A study of 131 gangs in Chicago. Chicago, IL: University of Chicago Press.
- Tita, G. E., Cohen, J., & Engberg, J. (2005). An ecological study of the location of gang 'set space'. *Social Problems*, 52(2), 272–299.
- Tita, G. E., & Greenbaum, R. T. (2009). Crime, neighborhoods, and units of analysis: Putting space in its place. In *Putting crime in its place* (pp. 145–170). Springer.
- Tita, G. E., & Griffiths, E. (2005). Traveling to violence: The case for a mobility-based spatial typology of homicide. *Journal of Research in Crime and Delinquency*, 42(3), 275–308.
- Tita, G. E., & Radil, S. M. (2011). Spatializing the social networks of gangs to explore patterns of violence. *Journal of Quantitative Criminology*, 27(4), 521–545.
- Tita, G. E., & Ridgeway, G. (2007). The impact of gang formation on local crime patterns.
 Journal of Research in Crime and Delinquency, 44(2), 208–237.
 Tita, G. E., Riley, K. J., Ridgeway, G., Grammich, C., Abrahamse, A. F., &
- Tita, G. E., Riley, K. J., Ridgeway, G., Grammich, C., Abrahamse, A. F., & Greenwood, P. W. (2003). Reducing gun violence: Results from an intervention in East Los Angeles. Santa Monica, CA: RAND.
- Twis, M. K., Gillespie, L., & Greenwood, D. (2022). An analysis of romantic partnership dynamics in domestic minor sex trafficking case files. *Journal of Interpersonal Violence*, 37(7–8), NP5394-NP5418.
- Valasik, M. (2014). "Saving the world, one neighborhood at a time": The role of civil gang injunctions at influencing gang behavior. PhD Diss: University of California, Irvine.
- Valasik, M. (2018). Gang violence predictability: Using risk terrain modeling to study gang homicides and gang assaults in East Los Angeles. *Journal of Criminal Justice*, 58, 10–21.
- Valasik, M., Barton, M. S., Reid, S. E., & Tita, G. E. (2017). Barriocide: Investigating the temporal and spatial influence of neighborhood structural characteristics on gang and non-gang homicides in East Los Angeles. *Homicide Studies*, 21(4), 287–311.
- Valasik, M., & Brantingham, P. J. (2023). "Somebody's watching me": Surveilling police surveillance of gangs. In J. A. Densley, D. C. Pyrooz, & J. Leverso (Eds.), The Oxford handbook of gangs and society. New York, NY: Oxford University Press (forthcoming).
- Valasik, M., & Reid, S. E. (2021). East side story: Disaggregating gang homicides in East Los Angeles. Social Sciences, 10(2), 48.
- Valasik, M., Reid, S. E., & Phillips, M. D. (2016). CRASH and burn: Abatement of a specialised gang unit. *Journal of Criminological Research*, *Policy and Practice*, 2(2), 95–106.
- Valasik, M., & Tita, G. E. (2018). Gangs and space. In G. J. N. Bruinsma, & S. D. Johnson (Eds.), The Oxford handbook of environmental criminology (pp. 843–871). Oxford University Press.
- Valasik, M., & Torres, J. (2022). Civilizing space or criminalizing place: Using routine activities theory to better understand how legal hybridity spatially regulates "deviant populations". Critical Criminology, 30(2), 443–463.
- Vasquez, E. A., Wenborne, L., Alleyne, E., & Ellis, K. (2015). Any of them will do: Ingroup identification, out-group Entitativity, and gang membership as predictors of group-based retribution. Aggressive Behavior, 41(3), 242–252.
- Venkatesh, S. A. (2000). American project: The rise and fall of a modern ghetto. Cambridge, MA: Harvard University Press.
- Vigil, J. D. (1988). Barrio gangs: Street life and identity in Southern California. Austin, TX: University of Texas Press.
- Vigil, J. D. (2002). A rainbow of gangs: Street cultures in the mega-city. Austin, TX: University of Texas Press.

- Vigil, J. D. (2007). The projects: Gang and non-gang families in East Los Angeles. Austin, TX: University of Texas Press.
- Vigil, J. D. (2014). Cholo!: The migratory origins of Chicano gangs in Los Angeles. In J. M. Hazen, & D. Rodgers (Eds.), Global gangs: Street violence across the world (pp. 49-64). Minneapolis, MN: University of Minnesota Press.
- Vigil, J. D. (2020). Multiple marginality and gangs: Through a prism darkly. Lanham, MD: Lexington Books.
- Vigil, J. D., & Yun, S. C. (2002). A cross-cultural framework for understanding gangs: Multiple marginality and Los Angeles. In C. R. Huff (Ed.), Gangs in America III (pp. 161-167). Thousand Oaks, CA: Sage.
- Watkins, A. M., & Moule, R. K., Jr. (2014). Older, wiser, and a bit more badass? Exploring differences in juvenile and adult gang Members' gang-related attitudes and behaviors. Youth Violence and Juvenile Justice, 12(2), 121-136.
- White, R. (2008). Disputed definitions and fluid identities: The limitations of social profiling in relation to ethnic youth gangs. Youth Justice, 8(2), 149–161.
- White, R. (2011). Gangs and transnationalisation. In B. Goldson (Ed.), Youth in Crisis? 'Gangs,' territoriality and violence (pp. 198-214). New York, NY: Routledge.
- Whitmer, J., & Ancker, D. B. (1996). The history of the gang injunction in California. Appendix M in SAGE: A handbook for community prosecution. Los Angeles, CA: Los Angeles County District Attorney.
- Whittaker, A., Densley, J., Cheston, L., Tyrell, T., Higgins, M., Felix-Baptiste, C., & Havard, T. (2020). Reluctant gangsters revisited: The evolution of gangs from postcodes to profits. European Journal on Criminal Policy and Research, 26(1), 1-22.
- Whyte, W. F. (1955). Street corner society. Chicago, IL: University of Chicago Press.