Time for Change

An Evidence-Based Approach to Crime Prevention and Environmental Change

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10/1/2015

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ACKNOWLEDGEMENTS

This paper is the result of a collaborative effort involving criminal justice and student life experts, practitioners, lawmakers, and several other key stakeholders in the surrounding community. It draws on an extensive review of the literature and related research, observations from the field, feedback from community leaders, advisory group discussions, and lengthy interview methods. Each resource that aided in the development of the current research initiative added greatly to our understanding of the many viewpoints of crime in each hospitality district. This white paper is written to guide lawmakers and other key stakeholders on how to facilitate improvements in an effort to reduce crime in the hospitality districts surrounding Columbia, South Carolina. The Department of Student Life at the University of South Carolina provided funding, and without their support this study would not have been possible.
TIME FOR CHANGE: AN EVIDENCE-BASED APPROACH TO CRIME PREVENTION AND ENVIRONMENTAL DESIGN

EXECUTIVE SUMMARY

Predatory crime in Columbia and elsewhere occurs in a context. It requires motivated offenders, suitable or vulnerable victims/targets, and usually occurs in the absence of capable guardians. The context of crime also includes structural and environmental factors that influence crime, such as criminogenic buildings and alcohol outlet density. In order to understand the factors influencing crime in the hospitality districts bordering the University of South Carolina, the researchers conducted a comprehensive study that included quantitative analyses of environmental factors, as well as qualitative interviews aimed to understand what the community feels contributes to crime in these areas and a thorough review of the current literature in the field.

The results of this study suggest that crime can be reduced, and the brunt of the responsibility should not be shouldered by law enforcement. With that being said, it is important that officers are adequately trained in enforcing alcohol statutes and ordinances in order to be more effective in their patrols. Policymakers should examine the statutory, regulatory, and enforcement framework to ensure the application of the law with respect to alcohol is consistent with its language and intent. Other key judgments focus on environmental and situational changes. For instance, our results suggest that vacant premises are positively associated with criminal activity, indicating a need to upkeep these lots. Additionally, there is a need to diversify the types of activities bringing people to the hospitality districts. Including more non-alcohol-related activities and establishments in the districts could help reduce crime. Finally, results
from our interviews suggest that there is a disconnect between the government, business owners, the police, and the University. Cooperation between these institutions is essential to ensuring the safety of the community, while still providing an opportunity for businesses to flourish.
STAKEHOLDER INTERVIEWS: SUMMARY AND HIGHLIGHTS

In order to glean perspectives from the community regarding crime in Five Points and the Vista, we interviewed approximately 15 key stakeholders and met with more than 30 community members over the course of the project. Our interviewees included neighborhood association leaders, bar and restaurant owners, beer wholesalers, city and university police officers, and government and university officials. The goal of these interviews was to understand what members of the community view as root causes of crime in the hospitality districts and how these individuals think crime can be reduced.

The key questions from these interviews included the following:

1. What do you feel are the local contributing factors of crime in the hospitality districts?
2. Do you think that there is a difference between the hospitality districts in Columbia?
3. What do you feel are the barriers to preventing crime in the hospitality districts?
4. How do you think we can overcome these barriers?
5. What do you feel can reasonably be done within the restraints of resources and barriers to help solve the problem of crime in the hospitality districts?

Throughout these interviews, it became clear that crime in the hospitality districts affected individuals and organizations from all levels of the community. Interestingly, a large portion of stakeholders mentioned that they believe crime in the Vista is as common as in Five
Points, but the media sensationalizes the stories occurring in Five Points. Overall, stakeholders view crime in the hospitality districts as an important issue that needs to be addressed.

The Issues

Despite the fact that the stakeholders represented different organizations with varying levels of interest in the hospitality districts specifically, there was a large consensus regarding the causes of crime. Stakeholders mentioned local causes as well as overarching political causes for crime in the hospitality districts. Some of the perceived local causes included predatory crimes, the availability of alcohol, an inability to enforce alcohol regulations consistently, the importance of neighborhoods surrounding the districts, and the number of potential victims. The perceived overarching causes included the lack of resources directed to the hospitality districts, opposing interests between the University and city, and the inability to remove problem businesses from the area in a timely manner.

The Solutions

When discussing possible solutions for crime, the differences in stakeholder interests became more apparent. Due to the variety of participants, the suggested solutions covered many realms of possible resolutions. The police were frequently referenced. Stakeholders believe that increased and mobile (i.e., walking around, rather than congregating) police presence can reduce crime. Additionally, a few stakeholders believed that if officers are better trained in alcohol enforcement and officers actually target alcohol violations, their presence will be even more effective.

Other solutions centered on altering the environment of the hospitality districts. These suggestions included adding secure parking decks to help patrons avoid walking to darker streets after leaving establishments and increasing the lighting. Still other suggestions focused on
governmental modifications, such as changing ordinances and enforcing sanctions for businesses that do not adhere to those regulations. Stakeholders also strongly believe that the students who frequent the hospitality districts need to be thoroughly educated on how to help prevent victimization.

Furthermore, a few stakeholders also mentioned the need for the University of South Carolina to hold students accountable for their behavior while in the hospitality districts. Similarly, some stakeholders expressed the need for cooperation between the University, the police, and the businesses in the hospitality districts. Participants expressed belief in the ability for crime to be reduced if these institutions worked together.
INTRODUCTION

In October 2013, a University of South Carolina freshman student was hit by a stray bullet in the Five Points area of Columbia, South Carolina while awaiting transportation back to her living quarters on campus. The incident, which left the young woman paralyzed without the use of her legs, followed a steady stream of reports about violence in Five Points, a popular hangout area for students from the University of South Carolina and surrounding colleges. Five Points is known for its concentration of establishments that serve low-priced drinks, which in turn attracts students from nearby academic institutions.

The shooting caused alarm within the surrounding communities and the President of the University published a call for increased police protection in and around the Five Points area. In addition, the University also included several other safety measures such as a shuttle bus system to safely transport students to and from Five Points, as well as increased police presence for those students congregating in designated waiting areas for the shuttle.

It is extremely common for police presence to be increased in situations where a highly publicized crime takes place. The increased police presence is typically accomplished largely through suppression efforts in that area. It should also be noted that crime occurs in a context of environmental and structural factors, which oftentimes compound the crime problem and make suppression efforts more complicated. The current research seeks to identify environmental and structural factors perceived to be influential in the context of crime. In an effort to fill a gap that
has been left in the literature, the present study analyzes violent and property crimes in two of the major hospitality districts in Columbia.

The purpose of the examination of two districts, rather than simply observing Five Points solely, is to better understand the relationship among environmental factors, location of alcohol establishments, and subsequent crime rates. An overwhelming body of research has emerged examining the effects of alcohol outlet density in relation to a wide variety of crimes (property, violent, and other offenses), demonstrating that increases in alcohol establishments in highly-trafficked, smaller areas generally produce higher levels of alcohol-related harms and crimes. Drawing on this evidence, the current research initiative draws on evidence-based interventions that have proven to be successful in previous studies in order to assimilate a blueprint for identifying feasible solutions for the current research.

**THEORETICAL FOUNDATION**

**Routine Activities Theory**

Violent crime may be instrumental (goal-oriented) or expressive (emotive). Both types occur in Five Points. Expressive violent crime is manifested in confrontational crime: assaults and aggravated assaults often fueled by alcohol. Instrumental violent crime is often manifested in predatory crimes, such as armed robbery or retaliatory violence. It was a retaliatory shooting where the shooter missed the intended victim that paralyzed the freshman in October 2013.

While the expressive crimes have and may result in serious injury, it is predatory crime that normally garners the most public and media attention in Five Points, according to many of the stakeholders interviewed in connection with this research.
Predatory violent crime is often explained and analyzed through the lens of routine activities theory, which has three components: 1) a motivated offender, 2) a suitable target/vulnerable victim, and 3) the absence of capable guardians, such as police or surveillance (Cohen & Felson, 1979). Routine activities theory suggests that predatory crime requires the convergence in time and space of the three components. Each of the components must be present for a crime to occur. Conversely, if any of the three components is eliminated, then the crime cannot occur; therefore, crime prevention strategies may focus on one or more of the components (Cohen & Felson, 1979).

**Motivated offenders.** The tenets of routine activities theory are easily applied to each hospitality district being observed within the current research. A likely offender can be anybody (Felson & Eckert, 2015); therefore, any of the individuals who frequent bars in either district has the potential to be an offender. When the opportunity for crime arises (i.e., when there is a suitable target and the absence of a capable guardian), the would-be offender will strike. An entertainment district, full of bars, provides an ideal setting for the convergence of the components necessary for crime according to routine activities theory. Felson and Eckert (2015) state that bars are settings that encourage many types of crime: robbery committed or experienced by people heading to or leaving the bar, motor vehicle theft occurring when people are inside the bar, drug interactions inside or near the bar, and assaults between patrons of the bar.

Predatory crimes, such as robbery, require the presence of a motivated offender. The challenge for law enforcement in preventing crime is to identify likely offenders and disrupt their intended behavior. The balance between civil liberties and order maintenance is delicate, because predicting an individual’s behavior in advance requires uncommon skills and perception.
In an effort to prevent crime, law enforcement may feel pressure to adopt an aggressive policing style (e.g., liberally using “stop and frisk” tactics) to deter would-be criminals and take guns off the street. These techniques create the risk of accusations of racial profiling and diminished perceptions of police legitimacy (Gau & Brunson, 2010; Gelman, Fagan, & Kiss, 2007).

Public pressure for increased police presence often follows criminal activity, and the police may respond with increased numbers to deter criminal activity through high police visibility. According to a senior police official, these efforts are costly and unsustainable. They are usually accomplished with overtime funding, adding to the expense, and personnel working overtime experience fatigue after working at an accelerated tempo over time.

A senior law enforcement official advised that mere police presence is insufficient to thwart violence in places like Five Points. He attributed much of the violence to the presence of gang members; therefore, he believed that employing law enforcement specialized gang units to identify gang members in Five Points, as well as their gathering places is critical to enforcement efforts. In particular, the official cited law enforcement efforts targeting a Five Points bar that attracted gang members. When the bar was closed as a public nuisance, gang members were denied safe haven, resulting in the disruption of their activities.

**Suitable targets.** A suitable target is anyone or anything that seems to be inviting a crime through its value, accessibility, visibility, and inertia (i.e., factors that influence resistance, such as the size and weight of a person or object) (Cohen & Felson, 1979). By providing alcohol to students away from parental supervision, the bars in each hospitality district contribute to the creation of suitable targets. Alcohol decreases an individual’s ability to process and physically react to visual information, as well as impairs attention and the ability to think abstractly (Tzambazis & Stough, 2000). These effects make it easier and less risky for an offender to attack
a person who has been drinking because the victim will be less able to think and react quickly enough to defend himself. Additionally, alcohol reduces a person’s ability to fully understand cues from the environment (Steele & Josephs, 1990), making it more likely that the person would be unaware they are entering a potentially dangerous situation.

Interventions involving the reduction of suitable targets take many forms, including education, enforcement of alcohol laws targeting drinkers and alcohol-related businesses, and crime prevention through environmental design. Reducing the vulnerability of targets is a legitimate intervention to prevent predatory crimes, such as those that may occur in Five Points.

At the University of South Carolina, education efforts involve the collection of data from students about risky behavior, including alcohol consumption, through AlcoholEdu. This program, required of all incoming undergraduate students under the age of 23, is an online training and assessment tool that provides information about the safe use of alcohol. By mandating this program, the University hopes to prepare students “to be better decision makers” (University of South Carolina, n.d.). While the long-term effectiveness of AlcoholEdu is unclear, research suggests that the program helps reduce alcohol-related victimization and problems such as self-destructive behavior among freshmen during the semester immediately following course completion (Paschall, Antin, Ringwalt, & Saltz, 2011).

The data collected from AlcoholEdu show that during the 2013-2014 academic year 29% of incoming freshman and transfer students reported drinking in bars. Because the overwhelming majority of those completing the AlcoholEdu survey are freshman, the sample was presumably dominated by students under age 21, the legal drinking age threshold. The survey was completed by 6016 students; therefore, approximately 1744 presumably underage
students reported drinking in bars. The survey is not repeated for sophomores, juniors, and seniors, who likely continue their drinking behavior.

AlcoholEdu data demonstrate that drinking begins to accelerate on Thursday nights, increasing through Friday, and peaking on Saturday night. Students reported that Thursday night is the start of their weekend, because many do not have Friday classes. A neighborhood activist with close ties to the University echoed that his/her neighborhood, which is very near to the University experiences a high level of disturbances on Thursday night, much of it obviously associated with alcohol, according to his/her observations. This activist recommended that the University consider returning to a regime in which Friday classes were the norm for those with Monday and Wednesday classes in order to deter students from considering Thursday night the beginning of the weekend.

Absence of capable guardians. The final tenet of routine activities theory to apply to the hospitality districts being examined is the absence of a capable guardian. Felson and Eckert (2015) suggest that the most important guardians are ordinary citizens, as they are the most likely to be present during the commission of a crime. The authors state that police officers and security guards are not the most capable guardians as they are unlikely to be present at the time of the event. Five Points has a number of capable guardians typically present in the district itself. Patrons of the establishments, security guards for the bars, as well as a number of police officers who regularly patrol the area, all serve as capable guardians. Students are likely at a greater risk when leaving the area. The number of guardians thins significantly as students get closer to campus.

As the campus is less than a mile away from Five Points, a large number of students walk to the district, creating unguarded opportunities for victimization between campus and Five
Points. In an effort to provide more guardianship for students, after the freshman was shot, the University began running a shuttle bus from campus to Five Points on Thursday, Friday, and Saturday nights. The buses run from 11:15 p.m. to 3:00 a.m. – an hour after most of the bars close. This free student resource costs the University $186,000 a year.

In an effort to assess the role of the shuttle bus, we conducted a study which involved observing the number of students utilizing the bus, observing the behavior of the students, as well as interviewing a number of students as to their activities in Five Points. Over the course of three evening observations (a Thursday, Friday, and Saturday), we observed 567 students boarding the shuttle and 452 exiting the shuttle. Due to personnel limitations, we were unable to observe every on-campus stop each night. As expected, we observed more behavioral cues of intoxication for students who were returning from Five Points. Of the 160 students we were able to interview, 77% reported that they were going to Five Points to drink, as opposed to eat, shop, and socialize. Sixty-nine percent of the interviewed students admitted to being under 21.

Our exploratory analysis of the shuttle bus program suggests that while it may provide a capable guardian in the form of a bus driver and reduce the opportunity for offenders, it is a highly underutilized resource. The bus has helped at least 452 students return home safely after being in Five Points, and that number only includes those students we were able to count over the course of three nights. Additionally, the program is relatively new, having been implemented less than two years ago, so we expect participation to increase as students become more aware of the bus as a resource.

A review of the AlcoholEdu data demonstrated an increase from 14% in 2012 to 29% in 2013 regarding the percentage of freshman and younger transfer students reporting that they drank in bars. The difference between 2012 and 2013 is best explained by the presence of the
shuttle. This increase of over 100% raises the question of whether the provision of the shuttle bus acts as an enabler of underage student drinking. This becomes more problematic when data on alcohol-related harms is considered. Alcohol-related harms include increased risk of injury, sexual assault, and poor academic performance.

Balanced against the possibility that the shuttle bus acts as an enabler is the security the bus service provides in safely transporting students—especially inebriated one—between Five Points and campus. The shuttle bus, according to a senior police official, is a reliable means to mitigate alcohol-related harms as well as reduce student exposure to violent crime occurring in areas with less police protection and less natural surveillance on the peripheries of Five Points. The shuttle bus, therefore, acts as a capable guardian for students moving between Five Points and the University campus.

The Columbia Police Department has also experimented with various approaches to staffing the Five Points Hospitality District from utilizing patrol from its South Region command, which includes Five Points, to the creation of a specialized unit comprised of police, Code Enforcement zoning specialists, and Fire Marshals. The multi-disciplinary unit was largely unsuccessful because civilian employees were unaccustomed to the hours and tempo involved in Five Points enforcement, according to a police official.

Resources to staff police presence in Five Points are often augmented using overtime. Police officials note that the tempo of dedicated resources to Five Points creates officer fatigue, is a strain on the overtime budget, and is politically unpopular because it may divert resources from neighborhoods, according to a police official.

Under Chief Skip Holbrook, the Columbia Police Department has committed additional resources to Five Points and the Vista. In anticipation of an increased student presence in the
downtown area, much of it resulting from new student housing projects, he is planning the creation of a division dedicated to policing the entertainment districts.

**Crime Prevention through Environmental Design**

As originally coined by Jeffery (1971), crime prevention through environmental design (CPTED) aims to reduce opportunities for crime by changing environmental conditions. This approach to crime reduction is a clear departure away from other prevention efforts in that it shifts the focus away from the offender to focus mainly on the environmental aspects that may inhibit crime. In this regard, Armitage (2014) notes that this specific approach differs in its consideration of whom should be held responsible for the reduction of crime. For instance, rather than a strict focus on traditional criminal justice responses to combat crime, city planners, architects, and owners and managers of public spaces could also prove to be influential factors in reducing crime. Because such prevention efforts place a large emphasis on spaces rather than specific individuals, the opportunities for crime become a highly contested issue within the literature.

The concept of CPTED is similar to the tenet of capable guardians in routine activities theory, excepting the guardians are elements of the environmental design. The key strategies of CPTED include defensible space, territorial reinforcement, natural surveillance, natural access control, activity support, image and space management, and target hardening. Defensible space is the core concept, as the other strategies are intended to “defend the space” (Moffatt, 1983), and the strategies work together to reduce victimization.

Territorial reinforcement is the strategy designed to create a sense of concern and ownership around a space (Cozens, 2008). Territorial reinforcement is intended to define ownership for a specific area in order to make an offender feel unable to commit a crime without
being overseen. Things that might work to create territorial reinforcement, for example, include fences, landscaping, and signs (Cozens, 2008). Residential burglars have been shown to consider territorial reinforcement in their decision to offend (Brown & Bentley, 1983), but these offenders are likely rational at the time of the offense. It has yet to be determined if similar results can be seen with different types of crimes in more commercial areas.

Natural surveillance is the strategy that includes designing a space to increase the ability for legitimate users to witness events while going about their normal activities (Cozens, 2008; Moffatt, 1983). Similar to territorial reinforcement, the idea behind natural surveillance is to make an offender feel like he would be seen. Windows and lighting can increase natural surveillance (Moffatt, 1983), but other forms of surveillance have also been suggested, like police patrols, security guards, and closed-circuit television (CCTV) (Cozens, 2008). A meta-analysis by Farrington and Welsh (2002) reviewed a number of surveillance strategies and found that improved lighting can reduce crime by 20%, and CCTV reduced vehicle crime but not violent crime.

Five Points is a showcase in a public-private partnership of surveillance cameras, which the police have used to solve a multitude of crimes. The Five Points Association, a business guild, on its own initiative, placed cameras throughout Five Points. The cameras were placed cameras just above head-high, which was a departure from normal security company practices that use cameras placed high above foot and vehicle traffic to provide an overview. This departure was done to allow cameras to capture images of suspects from only a few feet away. The City of Columbia provided dollar-for-dollar grant money for a time to generate additional cameras in hospitality districts; later, the City embarked on a program to purchase and operate its own surveillance cameras. Police officials advised the images have been very effective in
clearing cases, which, in turn, prevents additional crimes by the same offender once the offender has been incapacitated through incarceration.

Access control strategy is intended to limit access to a space and is designed to keep targets inside the space safe by keeping offenders out (Cozens, 2008). In older versions of CPTED, access control included using symbolic and psychological barriers (Moffatt, 1983), like those used in the territorial reinforcement strategy. More modern versions include physical controls, such as security guards and locks (e.g., gated communities) (Cozens, 2008). One study demonstrated that security guards in parking garages could reduce motor vehicle theft, but not necessarily reduce the theft of items from vehicles (Poyner, 1991). This suggests that vehicle-related crimes could be reduced in the hospitality districts if the public parking areas were to become more regulated.

The activity support strategy involves creating expectancies for use out of public spaces (Cozens, 2008). This includes creating a positive environment, creating the opportunity for activities attractive to law-abiding citizens, and generally making a space that discourages offender use (Crowe, 2000). Some research suggests that providing multiple types of activities in a space decreases crime (Pettersson, 1997; Poyner & Webb, 1991), likely because there are more citizens on the street to observe and deter crime (Cozens, Saville, & Hillier, 2005).

The image and space management strategy involves the upkeep of a space. This includes maintaining buildings, as well as utilizing the buildings in the space (Cozens, 2008). One point of interest for the image and space management strategy is the vacant lot. Although his research focused on residential areas, Spelman (1993) found that blocks with secured, abandoned buildings had calls-for-service numbers that were approximately 30% higher than those blocks
without abandoned buildings. Applying this logic to each hospitality district, one would expect a reduction in crime if buildings were utilized rather than being left vacant spaces.

The final strategy is target hardening which is intended to make it more difficult for an offender to access a target (Cozens, 2008). Target hardening can be completed through access control (Cozens, 2008), but it can also be done by improving the physical environment (Moffatt, 1983). A large portion on the research regarding target hardening focuses on residential burglary and how locks and other security measures deter offenders. For instance, the percentage of houses with a deadbolt experiencing an attempted burglary was 50%, according to the British Crime Survey, while the percentage for those houses experiencing successful burglary was 41% (Budd, 1999). Applying this strategy to businesses or vehicles, updated security systems could help prevent thefts.

**Alcohol Outlet Density**

The focus on alcohol and crime within the field of criminology is not a new concept. Recent developments on the literature pertaining to the relationship between alcohol and crime have increasingly focused on how environmental factors compound the relationship. Dating back to the late 1980s, scholars began to focus efforts on better understanding the relationship between rates of violence within contexts that examined alcohol availability (Parker, 2004). Of particular importance was the effect alcohol establishments had on subsequent crimes within the specific area of interest. Over the past several decades, numerous studies examining the effect of alcohol on crime have produced a plethora of evidence indicating a positive relationship between outlet density and a variety of crimes.

An important distinction to be made within the literature focused on outlet density and alcohol-related harms is the delineation between on-premise establishments and off-premise
establishments. On-premise establishments can be characterized as venues where alcohol is purchased and consumed within the building; these establishments include (but are not limited to) bars, taverns, and restaurants. Off-premise establishments generally include convenience stores, grocery stores, and other establishments where alcohol is purchased for the purposes of consuming the product elsewhere. While numerous studies have explored the relationships among and between each type of establishment, the current research examines only on-premise outlets as the primary focal concern as a means to better understand the relationship between alcohol establishments and situational crime prevention strategies. Toomey et al. (2012) have also noted that the association between outlet density and violent crime in particular were much stronger for on-premise outlets than off-premise outlets.

In addition to the assertion that types of alcohol establishments matter in the context of crime, a litany of other empirical research has also bolstered the claim that these establishments tend to promote an atmosphere conducive to crime (see Gruenewald, Freisthler, Remer, LaScala, & Treno, 2006; Roncek & Maier, 1991; Scribner, MacKinnon, & Dwyer, 1995). More pointedly, the density of these establishments offers an increased risk of violence for individuals in and around these areas. Moreover, the more populated an area is with alcohol establishments, the more likely there will be alcohol-related harms and crime. Research has produced consistent findings that lend evidence to the notion that areas with higher alcohol outlet densities are more likely to have alcohol-related harms and higher crime rates across jurisdictions (Gorman et al., 2005; Gruenewald et al., 2010; Gyimah-Brempong & Racine, 2006; Scribner et al., 2010; Toomey et al., 2012). As will be shown, these establishments are often located in areas with less guardianship, an increased pool of at-risk populations, and a diminished capacity to respond to situations (see Gruenewald et al., 2006).
As noted by Gyimah-Brempong and Racine (2006), understanding the relationship between alcohol availability and crime trends has significant implications for alcohol control as well as crime prevention. If areas with higher alcohol outlet densities generate more alcohol-related harms and crime, a cautionary tale is in place. Many authors have noted that if alcohol availability positively affects crime rates, then alcohol concentrations in these high-crime areas should be reduced (Gyimah-Brempong & Racine, 2006). In their analysis of violent crime, economic crime, and murder, the authors found that increased alcohol establishments in a relatively small geographical location had a positive and statistically significant impact on all crime rates being observed. Therefore, the consumption of alcohol in areas with a high alcohol outlet density leads to an assumption that individuals will either become involved in crime in these areas either as perpetrators or victims.

While numerous studies have concluded that gradual changes in the density of alcohol establishments were associated with changes in rates of violent crimes, many other studies have begun focusing on the impact of decreasing alcohol outlets in areas with a large number of alcohol establishments already. For instance, Gruenewald and Remer (2006) estimated that an average reduction of one bar in each of the postal codes they observed in their exploration of alcohol establishments in California, there would have been an average of 290 fewer assaults over the six year period in which they observed. Similarly, in their analysis of violent crime, Yu et al. (2008) found that a 10% reduction in alcohol outlets corresponded with a 2.6% reduction in violence. Campbell et al. (2009) also note that “alcohol outlet density is associated with increased alcohol consumption and related harms, including medical harms, injuries, crime, and violence; this convergent evidence comes both from studies that directly evaluated outlet density...
(or changes in outlet density) and those that evaluated the effects of policy changes that had a substantial impact on outlet density” (p. 565).

These findings shed light on a significant issue regarding community development. In areas where there are numerous alcohol establishments in a relatively small space, the authors suggest that this environment breeds the likelihood that crime will take place. As noted by Livingston (2011), theoretical frameworks that attempt to disentangle the relationship between alcohol establishments and crime has been missing from the literature. Although these studies reach similar conclusions, many lack the theoretical foundation necessary to address the issue of why an increase in alcohol establishments could possibly lead to higher crime rates. In order to assess these claims, Livingston points to routine activities theory as a foundation in which to better understand the context of crime in specific places.

In their development of routine activities theory, Cohen and Felson (1979) focus specifically on social structures in which crimes take place. The shift away from the offender towards environmental aspects led many scholars to view environments as being conducive to violence. Roncek and Maier (1991) add credence to this notion, arguing that the effects on crime are compounded when alcohol establishments are located in areas with characteristics related to lower guardianship and anonymity. In order to better understand the context in which situational aspects influence crime trends, the aforementioned discussion on the routine activities approach proves to be of paramount importance.

**Alcohol Enforcement**

Enforcement of alcohol laws targeting drinkers has been the “third rail” of Five Points enforcement. Parents of students often consider underage drinking in Five Points a rite of passage for college students; students, themselves, assert that their violations are victimless; law
enforcement officials disagree about its effectiveness; and alcohol establishments resent the implication that alcohol sales are related to victimization. Taken together, these factors may drive enforcement efforts away from targeting underage drinkers.

In addition, students seem to have little fear of the consequences of arrest for underage drinking, according to a police official. In contrast, the students are concerned about sanctions that may be administered by the University. For a time, the Columbia Police Department notified the University about students who were arrested in, or transported to a hospital from, Five Points; however, according to a police official, the notices to the University were halted by the 5th District Solicitor’s Office.

Local law enforcement agencies are largely limited by South Carolina statutes from enforcement of alcohol laws targeting the businesses. Alcohol enforcement jurisdiction lies almost exclusively with the South Carolina Law Enforcement Division (SLED), which has statewide jurisdiction. Alcohol regulation is vested in the South Carolina Department of Revenue. Statewide resources are limited and spread thin.

Interestingly, there are no “bars” in South Carolina. The South Carolina Constitution Article VIII, § A provides:

In the exercise of the police power the General Assembly has the right to prohibit and to regulate the manufacture, sale, and retail of alcoholic liquors or beverages within the State. The General Assembly may license persons or corporations to manufacture, sell, and retail alcoholic liquors or beverages within the State under the rules and restrictions as it considers proper, including the right to sell alcoholic liquors or beverages in containers of such size as the General Assembly considers appropriate. The General Assembly may prohibit the manufacture, sale, and retail of alcoholic liquors and beverages within the State, and may authorize and empower state, county, and municipal officers, all or either, under the authority and in the name of the State, to buy in any market and retail within the State liquors and beverages in such packages and quantities, under such rules and regulations, as it considers expedient. However, a license must not be granted to sell alcoholic beverages in less quantities than one ounce in licensed retail stores, or to sell them between seven o'clock p.m. and nine o'clock a.m., or to sell them to be drunk on the
premises; however, the General Assembly shall not delegate to any municipal corporation the power to issue licenses to sell alcoholic liquors or beverages. However, licenses may be granted to sell and consume alcoholic liquors and beverages on the premises of businesses which engage primarily and substantially in the preparation and serving of meals or furnishing of lodging or on the premises of certain nonprofit organizations with limited membership not open to the general public, during such hours as the General Assembly may provide [emphasis added].

The South Carolina Constitution authorizes the sale of alcohol to be consumed on premises in three specific areas:

1) businesses which engage primarily and substantially in the preparation and serving of meals

2) businesses furnishing of lodging; or

3) non-profit organizations with limited membership not open to the general public.

The plain language of the Constitution, therefore, does not provide authority for the sale of alcoholic liquors and beverages for on-premises consumption in a business that is not a restaurant, inn, or private club. This provision is echoed in the statutory framework, as well.

South Carolina Code of Law § 61-6-1610 authorizes the sale of alcoholic liquor and beverages, provided that liquors sales are prohibited between the hours of 2:00 A.M. and 10:00 A.M. and on Sunday.

Businesses in Five Points engaged in the sale of alcoholic liquors and beverages for on-premises consumption, generally, seek to be included in the restaurant provision. Observation studies conducted pursuant to this study indicate that most alcohol outlets have little, if any, food available for sale. Observers connected with this study noted that kitchens often consisted of only a microwave oven used in the preparation of “hot pockets” and other pre-prepared foods.

South Carolina Code of Law § 61-6-1610 provides:

1. “Kitchen” means a separate and distinct area of the business establishment that is used solely for the preparation, serving, and disposal of solid foods that make up
meals. The area must be adequately equipped for the cooking, serving, and storage of solid foods and must include at least twenty-one cubic feet of refrigerated space for food and a stove.

2. “Meal” means an assortment of various prepared foods available to guest on the licensed premises during the normal mealtimes that occur when the licensed business establishment is open to the public. Sandwiches, boiled eggs, sausages, and other snacks prepared of the licensed premises but sold there are not a meal.

3. “Primarily” means that the serving of the meals by a business establishment is a regular source of business to the licensed establishment, that meals are served upon the demand of guests and patrons during the normal mealtimes that occur when the licensed business establishment is open to the public, and that an adequate supply of food is present on the licensed premises to meet the demand.’

The plain language of the South Carolina Constitution and South Carolina Code of Law § 61-6-1610 requires establishments that are neither inns nor private clubs to serve meals as their primary and regular source of business. One official suggested that the State of South Carolina should follow the law, or change it. This official decried the influence of business interests that enable establishments which purport to be restaurants under the law and sell alcohol by the drink to operate without selling food or selling so little food that it amounts to a sham or fiction.

A former state official advised that the Department of Revenue’s core business function is to raise revenue for the state, and alcohol regulation is not a priority. This former official noted that an agency on the order of the abolished Alcohol and Beverage Control Commission, the primary duty of which is alcohol regulation and enforcement, is necessary to effectively administer the law as it applies to the sale of alcohol by the drink. He/she said that the State Law Enforcement Division’s priorities, similarly, do not include alcohol enforcement.

**Current Study**

**Methodology**
The present study utilizes an ecological design, based on environmental factors at the block level within Columbia, South Carolina. Specifically, two main hospitality districts were the focal concerns of the study: Five Points and the Congaree Vista. Each district is discussed in detail below.

**Hospitality Districts.** Hospitality districts are eligible for funds collected in a special tax authorized by the South Carolina legislature (S.C. Code § 6-1-720). The funds may be used to promote advertising and promotions related to tourism development, as well certain construction projects related to tourism. There are four hospitality districts in the City of Columbia: Five Points, the Vista, the Harbison area, and Main Street. Each of these hospitality districts has relatively large numbers of establishments that serve alcoholic beverages.

The hospitality districts were geographically defined in accordance with the Columbia Police Department’s (CPD) data. While we may include more blocks when defining Five Points and the Vista than other citizens, our geographical definition is largely inclusive of all businesses and residences generally thought to be a part of these two districts. In this study, the Five Points area was 0.24 square miles, spanning 61 blocks. The Vista area was 0.52 square miles, spanning 60 blocks. Although it has not been systematically studied, local residents generally believe Five Points to be more appealing to undergraduate students, while the Vista attracts more young professionals and older adults. Additionally, the residential areas surrounding Five Points are more numerous than those surrounding the Vista. There are currently a number of residential complexes being erected in the Vista.

**Five Points.** During the day, Five Points is well-known for its boutique shops, dining, specialty retail stores, and ambience. In the early evening, it transitions to a focus on dining. Five Points transitions again later in the evening as students begin to dominate the foot traffic,
and the tempo at alcohol-focused businesses increases. In the early morning hours, from 12:30 A.M. until 2:00 A.M., commerce involves, almost exclusively, by-the-drink alcohol sales.

Several persons interviewed in connection with this project noted that crime in Five Points is viewed out of proportion to its citywide context. One official believed that the news media focuses on crime in Five Points at the expense of reporting other crime with the same intensity. This official believed that the news media exploits a market interested in protecting University of South Carolina students. The official suggested that there is a racial element involved, because the majority of University students in Five Points are white. The attention by parents of these students translates, according to the official, into political pressure on the University, its police department, City of Columbia elected officials, and the Columbia Police Department.

*The Vista.* Five Points is often compared to the Congaree Vista, which is located to the north and west of campus, as little as three blocks away. The Vista is a Columbia showcase, the product of successful urban redevelopment, turning a warehouse district into a fashionable and attractive destination. It attracts a diverse array of visitors, including many young professionals and some students to the rich selection of restaurants in the district.

A review of menus for both hospitality districts reveals that although drink prices between each hospitality district are comparable, a key distinguishing feature between the Vista and Five Points is that larger quantities of alcoholic beverages are available in Five Points (e.g., mixed-drink pitchers and bowls that are advertised at several locations in Five Points). As a result, it is surmised that many students are attracted to Five Points where they can drink more alcohol for less money. Another distinguishing feature between the two districts is that food is more readily available in the Vista than in the establishments located in Five Points.
Several new student housing projects have been built, or will be built, within walking distance of the Vista. It remains to be seen whether the presence of these student housing projects will change the atmosphere in The Vista.

**Data.** Address-specific data pertaining to alcohol outlet densities, crime in the hospitality districts, and crime prevention through environmental design (CPTED) were aggregated at the level of city blocks. Of the 141 block groups obtained from the Columbia Police Department (CPD), 19 were excluded as they were not located in areas defined as the Vista or Five Points for purposes of this study.

Numerous studies employ a similar approach in using census blocks as their unit of analysis (see Roncek & Bell, 1981; Roncek & Pravatiner, 1989; Roncek & Maier, 1991). These scholars argue that in utilizing city blocks as a unit of analysis, the risk of misleading results that can arise from using larger units of analysis (such as census tracts) are significantly diminished. More pointedly, Toomey et al. (2012) note that this level of analysis is preferable in order to capture the variability in establishment density across communities. Taking into consideration the fact that two diverse hospitality districts are being examined within the current research, analysis at the block level is also utilized.

**Alcohol Outlet Density.** A complete list of alcohol outlets was obtained through the use of primary data collection. The researchers obtained a list of valid, open businesses by canvassing each block within the two hospitality districts. Alcohol outlet density can be defined as the specific number of establishments within a generally small geographical area. As will be discussed at length in the following sections, alcohol establishments are typically divided into two categories: on-premise and off-premise outlets. For purposes of the current research, on-
premise outlets were the only establishments examined. At the time of data collection, the Vista contained 45 alcohol outlets, and Five Points contained 39 alcohol outlets.

**Crime.** We obtained crime data from the Columbia Police Department (CPD) from January 1, 2013 to December 31, 2013 (the most recent data available at the time of data collection) for the locations defined as the Vista and Five Points within the city of Columbia, South Carolina. This dataset included the primary offense and address for each incident recorded. We recoded each offense as a means to glean a better understanding of the relationship between increased alcohol establishments and a variety of different crimes in order to ascertain the relationships that may emerge among varying crime types. The following is a list of how crimes were coded: 1 = property; 2 = violent; 3 = drug; 4 = alcohol, including alcohol-related traffic offenses; 5 = other traffic offenses, 6 = other incidents (e.g., begging and information reports); and 7 = weapons. Traffic offenses and other incidents were excluded from all analyses.

Additionally, we aggregated the address-specific incidents to the block level. If an address for a crime fell outside the boundaries for either hospitality district, it was deleted from our final dataset. Crime rates in the hospitality districts were calculated by matching specific addresses to each block.

**Situational Crime Prevention.** As previously discussed, the theory of crime prevention through environmental design is based on the notion that crime results partly from opportunities afforded by the physical environment (Clarke, 1997). In this regard, the components of CPTED become of increasing importance in our understanding of crime in the hospitality districts. In order to assess the impact of CPTED qualities in each district, the researchers examined the key concepts of the literature.
Territorial reinforcement in each hospitality district was defined by a business’s inclusion of outdoor seating and/or fencing around the area. Each territorial reinforcement was summed per block to include a count of all possible observations. Natural surveillance for each hospitality district included the number of windows and lights per city block. Windows were counted even if they were not transparent (e.g., covered with posters, tinted, etc.) and lights were counted as either city lights or business lights (e.g., street lamps or lighting provided by businesses themselves). It should be noted that windows belonging to vacant premises were excluded from our count as well as windows that were not located on the ground level.

As noted by Cozens (2008), more modern versions of natural access control included security personnel working at each establishment in each hospitality district. Each security guard was summed per block to include a count of all possible observations. In order to ensure uniformity, observations of the presence of security guards were measured by personnel outside of premises that were visible at 10:00 on Saturday evening. It is possible that visible security personnel could vary between the four hours where the researchers initially observed and the closing of the establishments (i.e., security personnel located outside of the establishments could increase during busier hours).

The image and space management component of CPTED was measured by counting the number of vacant premises per block in each district; each vacant lot was summed per block to include a count of all possible observations. Lastly, parking availability was observed to be a measure of target hardening, with the assumption that increased safety measures would make it more difficult for would-be offenders to commit a vehicle-related crime. For example, the literature on target hardening prescribes that surveillance (such as guards or video surveillance) serve as a means to decrease the likelihood that a crime will take place. In this regard, parking
availability was coded as follows: 0=no parking available on the block, 1=public parking on the block, and 2=private parking on the block. It is assumed that the level of parking within each block of analysis should have an impact on vehicle-related criminal activity.

Results

The current research examining differences in each hospitality district proved to be extremely informative regarding the way in which each district was developed and utilized. In context of the discussion on the relationship between alcohol establishments and subsequent crime, the makeup of each district is further explained. While some blocks in each district had little to no alcohol establishments, several blocks had more than five alcohol establishments. Five of the six blocks with the most alcohol establishments were located in Five Points (Table 1). In general, the main streets within each district contained between six and eight alcohol establishments. Figure 1 provides a graphical representation of the relationship among alcohol outlet density, violent crime, and alcohol offenses. In Five Points, violent and alcohol-related crime largely overlapped with higher alcohol outlet density, while the relationship was less apparent in the Vista.

Table 1. Most alcohol establishments by block

<table>
<thead>
<tr>
<th>Street</th>
<th>District</th>
<th>Number of Establishments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 Devine Street</td>
<td>Five Points</td>
<td>5</td>
</tr>
<tr>
<td>700 Saluda Avenue</td>
<td>Five Points</td>
<td>5</td>
</tr>
<tr>
<td>2000 Greene Street</td>
<td>Five Points</td>
<td>6</td>
</tr>
<tr>
<td>900 Gervais Street</td>
<td>Vista</td>
<td>6</td>
</tr>
<tr>
<td>600 Harden Street</td>
<td>Five Points</td>
<td>7</td>
</tr>
<tr>
<td>700 Harden Street</td>
<td>Five Points</td>
<td>8</td>
</tr>
</tbody>
</table>
Table 2 contains the frequency of crimes for each district. Five Points experienced over twice as many crimes as the Vista, supporting the general public’s opinion that Five Points has more criminal activity. When considering the breakdown for the different types of crime, Five Points is not as violent as perceived. Only 7.36% of the total crimes in Five Points were violent crimes. In the Vista, a larger percentage of crimes were violent, with violent crimes representing 9.49% of the total crimes. The majority of Five Points’ crimes were alcohol-related, while property crimes were the most common in the Vista. It should be noted that the geographical Vista area analyzed was larger than the Five Points area, and a large portion of the Five Points blocks were residential.

In an attempt to address this issue, a rate of crimes per 100 blocks was calculated (Table 3). These results suggest that by a standardized measure, Five Points does experience more crime than the Vista. The largest differences between the two hospitality districts are the drug and alcohol crimes rates.

Table 2. Occurrences and percentages of specific crimes by total crime separated by hospitality district

<table>
<thead>
<tr>
<th>Type of Crime</th>
<th>Five Points</th>
<th>Congaree Vista</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>306</td>
<td>264</td>
</tr>
<tr>
<td>Property</td>
<td>26.49%</td>
<td>52.17%</td>
</tr>
<tr>
<td>Violent</td>
<td>85</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>7.36%</td>
<td>9.49%</td>
</tr>
<tr>
<td>Drug</td>
<td>109</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>9.44%</td>
<td>4.55%</td>
</tr>
<tr>
<td>Alcohol</td>
<td>639</td>
<td>162</td>
</tr>
<tr>
<td></td>
<td>55.32%</td>
<td>32.02%</td>
</tr>
<tr>
<td>Weapon</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>1.39%</td>
<td>11.69%</td>
</tr>
</tbody>
</table>
Table 3. Crime rates by hospitality district

<table>
<thead>
<tr>
<th>Type of Crime</th>
<th>Five Points</th>
<th>Congaree Vista</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property</td>
<td>501.64</td>
<td>440.00</td>
</tr>
<tr>
<td>Violent</td>
<td>139.34</td>
<td>80.00</td>
</tr>
<tr>
<td>Drug</td>
<td>178.69</td>
<td>38.33</td>
</tr>
<tr>
<td>Alcohol</td>
<td>1047.54</td>
<td>270.00</td>
</tr>
<tr>
<td>Weapon</td>
<td>26.23</td>
<td>15.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1893.44</strong></td>
<td><strong>843.33</strong></td>
</tr>
</tbody>
</table>

Note. Rates are calculated per 100 blocks.

Finally, the relationship between environmental measures and crime was examined. Our results were opposite to those expected, with the number of territorial reinforcements, windows, lights, and security generally being related to more crime (Table 4). We suspect that our measures, intended to examine environmental and structural factors, actually measure opportunity. For instance, one would expect there to be more security in places that are busier, which means one would also expect more alcohol offenses to occur in locations that people are frequenting. A similar interpretation can apply to the property crime findings, with busier blocks providing more opportunity for crime to occur. The relationships between vacant premises and the different types of crime were in the expected direction, with blocks containing more vacant premises experiencing more crime.
Figure 1. Alcohol and violent crimes by block

Note. Polygons represent census blocks, rather than city blocks used elsewhere in this study.
Table 4. Relationship between CPTED measures and crime

<table>
<thead>
<tr>
<th></th>
<th>Property</th>
<th>Violent</th>
<th>Drug</th>
<th>Alcohol</th>
<th>Weapon</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>TR</td>
<td>0.17*</td>
<td>0.08</td>
<td>0.11</td>
<td>-0.02</td>
<td>0.06</td>
<td>0.06</td>
</tr>
<tr>
<td>Windows</td>
<td>0.28**</td>
<td>0.04</td>
<td>0.12</td>
<td>-0.04</td>
<td>0.17*</td>
<td>0.08</td>
</tr>
<tr>
<td>Lights</td>
<td>0.41**</td>
<td>0.17*</td>
<td>0.14</td>
<td>-0.04</td>
<td>0.15</td>
<td>0.12</td>
</tr>
<tr>
<td>Security</td>
<td>-0.11</td>
<td>0.11</td>
<td>0.08</td>
<td>0.28**</td>
<td>0.02</td>
<td>0.18**</td>
</tr>
<tr>
<td>Vacant Premises</td>
<td>0.34**</td>
<td>0.24**</td>
<td>0.22**</td>
<td>0.02</td>
<td>0.38**</td>
<td>0.17*</td>
</tr>
</tbody>
</table>

Note. *p ≤ 0.10, **p ≤ 0.05. Partial correlations controlling for alcohol outlet density. TR stands for territorial reinforcement.

CONCLUSION

Limitations

While the current research presents fruitful findings in regards to the current body of knowledge, it is not without its own limitations. It should be noted that the data obtained from CPD did not overlap with the primary data collected regarding CPTED observations. Crime data was from the year 2013, while CPTED data was obtained in the year 2015. While this is not an extreme deviation, it is important to understand that during this time period several changes could have occurred regarding the density of alcohol establishments in each district as well as the environmental design aspects that have been explained to have an impact on crime. A similar limitation regarding crime data refers back to the notion that these are only instances that were actually reported to the police, with actual numbers of crimes being unknown. Furthermore, crime data could reflect differential enforcement, meaning officers could target one of the districts or target specific crimes. This would lead to data that does not necessarily represent the actual amount of crime being committed.
Another possible limitation to the current research is that it was conducted in a small city in the southern region of the country, leading to the idea that the generalizability of the findings may be limited. Numerous studies examining a similar research question have also been conducted in only one city (Franklin et al. 2010; Gorman et al., 2005; Scribner et al., 1999; Toomey et al., 2012) and have produced much of the same findings. Additionally, it should be noted that the operationalization of hospitality districts in our study focuses on only two of the main districts within the confines of the city of Columbia. Areas in the northeastern part of the city, West Columbia, and Main Street establishments were excluded from our sample. Future research attempting to replicate the current approach should also examine these areas as a means to better ascertain the differences in crime rates among all hospitality districts in the city.

Given the time restraints of the current research, definitive conclusions must be made warily. In order to better assess the evidence on outlet density, longitudinal studies would prove to be extremely influential in reaching concrete conclusions. As Livingston, Chikritzhs, and Room (2007) note, longitudinal analyses allow the examination of changes in outlet density over a period of time, greatly reducing the possibility that the observed effects are related to other, unobserved, variables. Future research in the hospitality districts should focus on this aspect, identifying changes in outlet density over a period of time; such an analysis would bolster the claims previously made within the current study.

**Key Judgments**

The previous discussion lends credence to the notion that alcohol-related harms are not the effect of one primary cause. There are many contributing factors that are responsible for subsequent crime trends. In an effort to address such a myriad of sources, it is pertinent to take into consideration each aspect as an independent source. After addressing each individual source
as an area of contention within the literature, future researchers will be better equipped to make concrete policy statements regarding alcohol outlet density, situational crime prevention, and alcohol-related harms. From a policy standpoint, much can be surmised out of the current research.

**Enforcing Alcohol Regulations.** As Campbell and colleagues (2009) have contended, the density of alcohol outlets is routinely regulated by local and state agencies in an effort to combat excessive alcohol consumption and related harms. In effect, simple changes to existing policy or the reinforcement of regulations within a jurisdiction can have profound implications on the crime problem. Rather than a specific focus on police intervention as a reactive measure to combat crime, politicians and lawmakers alike can utilize alcohol control policies as a proactive measure to reduce crime in a community. Similarly, research has indicated that policies aimed at regulating drink prices have also been an effective tool in the effort to reduce harms. For instance, Chaloupka and Wechsler (1996) found that increases in alcohol prices have the potential to not only lead to reductions in binge drinking among college students, but also to a reduction in alcohol-related harms for those individuals. Ensuring that alcohol regulations are being met in each hospitality district provides a means to proactively address the harms of alcohol consumption.

**Situational Crime Prevention.** As has been discussed in the aforementioned sections, situational crime prevention is yet another way to take a proactive approach to reducing crime. Clarke (1997) has noted that crime prevention through environmental design has been an integral part of crime control policy over the past 40 years, with huge contributions in its application to town planning and architectural design. Undoubtedly, the same functions used over the past several decades can also prove to be of significant importance in the context of the current study.
Rather than a strict focus on more traditional criminal justice responses to crime, perhaps a better method to employ would be one that takes into consideration environmental aspects of crime.

The current study, as well as previous literature, supports the need for proper image and space management. While causal ordering could not be established in this study, vacant lots were highly correlated with all crimes relevant to this study, aside from alcohol offenses. This suggests that in order to reduce crime, the city should attempt to fill vacant lots or make every effort to ensure the lots do not become run-down.

**Alcohol Outlet Density.** The research on alcohol outlet density and subsequent alcohol-related harms and crime is of paramount importance to the current research agenda. Given that virtually each account of alcohol outlet density and crime point to a positive relationship, the discussion now shifts towards regulating the types of establishments located within each city block. Moreover, there should be an increased focus on attracting and promoting a diversity of businesses within each hospitality district within the current study as well as cities nationwide that may be experiencing similar problems. This method is consistent with previous research on alcohol outlet density and the activity support strategy of CPTED. Many students during the shuttle bus interviews suggested that they would go to the hospitality districts for something other than drinking (e.g. bowling or attending a movie) if the option were available. The use of regulatory authority (through zoning and licensing) that specifically addresses the types and quantities of certain businesses within a geographically defined location may prove to be beneficial in this regard.

**Economic Benefits of Reducing Crime.** According to the Centers for Disease Control and Prevention (2014), excessive alcohol use cost the United States $223.5 billion in 2006 as a
result of productivity losses, healthcare costs, and alcohol-related crime costs; during that same time frame, excessive alcohol use cost South Carolina $3.2 billion. These numbers are staggering, considering the amount of money that could be allocated to other resources within the community. In addition, the economic cost is not only a monetary amount, but also includes lives lost in its equation. According to the CDCP (2014), excessive drinking results in around 1,534 deaths and 47,267 years of potential life lost each year in South Carolina. Again, such an excessive number of alcohol-related deaths could easily be reduced with the application of proactive policies. Many of the policies utilized by South Carolina fall within a category that is either partial or not in accordance with supporting evidence and/or expert recommendations as noted by the CDCP (2014). Future policies should act in accordance with such practices and recommendations.

Aside from creating a safer environment for citizens, policies that address alcohol-related instances also have the potential to reduce violent crime, which also has economic benefits. One study of the costs of violent crime and the savings associated with reducing it found that violent crime costs Jacksonville, Florida approximately 1.4 billion dollars a year (Shapiro & Hassett, 2012). This amount stems from the direct costs, including medical expenses and the cost of the criminal justice system, as well as the indirect costs, such as the pain and suffering of the victim and reduced property values in violent areas. Shapiro and Hassett (2012) estimate that a 10% reduction in violent crime for Jacksonville could result in 100 million dollars in savings, and a 25% reduction could result in the city saving 251 million dollars.

Jacksonville, like Columbia, is located in the southeast region of the country and likely provides a better cost-benefit comparison for Columbia than the other cities analyzed by Shapiro and Hassett (i.e., Boston, Dallas, Chicago, Houston, Philadelphia, Milwaukee, and Seattle).
Columbia’s population accounts for 16.3% of Jacksonville’s population, but is relatively similar to Jacksonville on other important crime correlates (Table 5). If Columbia experienced savings relative to Jacksonville, a 10% reduction in violent crime could save 16.3 million dollars, and a 25% reduction could result in saving 40.7 million dollars. A more thorough analysis of the specific direct and indirect costs of violent crime Columbia needs to be completed for a more accurate description of potential savings.

Table 5. Comparison of Jacksonville and Columbia

<table>
<thead>
<tr>
<th>Correlate</th>
<th>Jacksonville</th>
<th>Columbia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>811,833</td>
<td>132,067</td>
</tr>
<tr>
<td>Percent below poverty</td>
<td>14.3%</td>
<td>23.8%</td>
</tr>
<tr>
<td>Percent black</td>
<td>30.5%</td>
<td>42.2%</td>
</tr>
<tr>
<td>Percent female-headed households</td>
<td>15.2%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Percent unemployed</td>
<td>8.8%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Percent high school graduates</td>
<td>86.9%</td>
<td>86.7%</td>
</tr>
</tbody>
</table>

(U.S. Census Bureau, 2014)

Discussion

Despite the aforementioned limitations, the current study contributes to the research literature on many levels. First, this study aims to address the theoretical foundation necessary to make causal explanations regarding crime and alcohol outlet density. Where other studies have shown a relationship exists, little research has been done to fully examine the reasons behind such a relationship. Utilizing a routine activities theory in conjunction with the CPTED literature, this study fills a gap in the literature. Additionally, many studies have looked at specific types of crimes as opposed to examining many different types in conjunction with one
another. Coding offenses separately allows the researchers to differentiate the relationships that may arise between alcohol establishments and specific crime categories. The analysis also yields conclusive results regarding specific crime categories in each district. In better understanding which types of crimes are more or less problematic in each district, policy makers as well as police officials will be better equipped to address the crime problem.


S.C. Code § 6-1-720

S.C. Code § 61-6-1610

S.C. Const. art. VIII, §A


