

5-2015

## **Policing and the Likelihood of Terrorism: A Community Structural Approach to an Uncertain Relationship**

Andy Bellamy Brooks  
*University of Arkansas, Fayetteville*

Follow this and additional works at: <https://scholarworks.uark.edu/etd>



Part of the [Criminology Commons](#)

---

### **Citation**

Brooks, A. B. (2015). Policing and the Likelihood of Terrorism: A Community Structural Approach to an Uncertain Relationship. *Graduate Theses and Dissertations* Retrieved from <https://scholarworks.uark.edu/etd/1096>

This Thesis is brought to you for free and open access by ScholarWorks@UARK. It has been accepted for inclusion in Graduate Theses and Dissertations by an authorized administrator of ScholarWorks@UARK. For more information, please contact [scholar@uark.edu](mailto:scholar@uark.edu).

Policing and the Likelihood of Terrorism:  
A Community Structural Approach to an Uncertain Relationship

Policing and the Likelihood of Terrorism:  
A Community Structural Approach to an Uncertain Relationship

A thesis submitted in partial fulfillment  
of the requirements for the degree of  
Master of Arts in Sociology

by

Andrew Brooks  
University of Arkansas  
Bachelor of Arts in Criminal Justice & Sociology, 2013

May 2015  
University of Arkansas

This thesis is approved for recommendation to the Graduate Council.

---

Dr. Casey Harris  
Thesis Director

---

Dr. Jeffrey Gruenewald  
Committee Member

---

Dr. Christopher Shields  
Committee Member

---

Dr. Brent Smith  
Committee Member

## **Abstract**

Prior research on terrorism has argued that local law enforcement play an important role in counterterrorism though the mechanisms by which the police should prevent terrorism are empirically unsettled and atheoretical in nature. Even less understood is how policing might differentially impact terrorism across specific ideological movements (e.g., far-right, environmental, Islamic extremism). Drawing from prominent sociological and criminological theories (i.e., Environmental perspectives, Social Disorganization, Conflict/Marxist) the current study addresses several key gaps in prior literature by utilizing data from the American Terrorism Study (ATS) paired with data from the FBI Uniform Crime Report and U.S. Census Bureau. Results suggest that counties with greater police presence and heavier officer workloads are associated with greater likelihood of terrorism, for terrorism overall and also equally across unique ideological movements, net of key controls. These findings have strong theoretical implications for the study of terrorism outcomes going forward. Additional implications for policy and future research are discussed.

## **Acknowledgements**

I would like to extend warm thanks, first and foremost to my family for standing by my side for 6 grueling years of college and graduate school. No matter the circumstance, my family sustained me from start to finish, through whatever means necessary. Without my mom Marilyn and stepfather Jerry, I wouldn't have accomplished any of this. Their teachings of the value of hard work, integrity, and the discipline to succeed did not fall on deaf ears. I love them both.

Second, I want to thank my thesis committee. Dr. Casey Harris, Dr. Jeff Gruenewald, Dr. Brent Smith, and Dr. Chris Shields have been instrumental in my development as a student, scholar, and man. Dr. Harris devoted an insane amount of effort into this thesis, personally investing in my success. Dr. Gruenewald's brilliant insight at each stage of this project forced me to think about things in a new way, strengthening my paper each time. Dr. Shields, my first mentor and oldest friend, has been my rock before I ever considered graduate school. To him, I would say, (or more accurately, admit) thank you for *coercing* me into graduate school. Finally, I feel honored to have worked for Dr. Smith and more so to have him serve on my committee.

Third, I want to thank my close friends and colleagues, Brent Klein, Noah Schneider, and Kayla Allison. You three have become my best friends who I could always count on to share a laugh with, to share stories with, and to vent to when school became too much. We finally made it, and I'm sure I would never be to this point without your constant friendship.

Finally, I want to thank the love of my life, Sarah King. You carried my burdens, my frustrations, my tears, and my sleepless nights more than anyone else through this ordeal. You've seen me through the absolute worst of times and you stood by my side, and without a doubt I didn't make it easy for you. Thank you for listening to me vent, for allowing me to bounce ideas off of you, and for all the late nights spent listening to my presentations.

## **Dedication**

This thesis is dedicated to my dear friends Brent Klein, Noah Schneider, and Kayla Allison and to my girlfriend Sarah King, if for any other reason, because they're some of the few folks who actually know what this thesis is about.

But, this project is also dedicated to: my parents Jerry and Marilyn Blum for their unwavering support and love, my Grandmother Anita Mars for years of warm coats, sugar cookies and fudge, my late Grandfather Leonard Mars for warming the truck up every morning, my late Father Stephen Brooks for the few precious years we had together and the many left on the table, my late Uncle Larry Romero for teaching me the ways of life and the value of *luxury consumption*, and finally, my cousin Corporal Jason Sutliff (ret.) the one to blame for me wanting to be a cop.

In addition, I dedicate this work to the men and women of law enforcement for their daily service to this great country, whom I hope to join very soon.

## Table of Contents

I.	Introduction	1
II.	Review of Relevant Research	3
	Terrorism as a Form of Crime	3
	Community Characteristics and Terrorism	5
	Policing and Terrorism at the Macro-Level: An Uncertain Role	6
	Scarcity and Ambiguity of Empirical Research On The Policing-Terrorism Nexus	9
III.	Theoretical Frameworks	11
	Policing and Terrorism Overall	12
A.	Policing and Specific Terrorism Ideologies	15
	Far-right Extremism	15
	Environmental Extremism	18
	Islamic Extremism – Al Qaeda and Affiliated Movements (AQAM)	19
IV.	The Current Study	21
	Data Sources	21
	Unit of Analysis	22
	Data Pairing	24
	Dependent Variables	24
	Policing Variables	25
	Key Control Variables	26
	Analytic Techniques	27
V.	Results	28
	Univariate Analyses	28
	Bivariate Analyses	31
	Multivariate Analyses: Overall Incident Occurrence	32
	Multivariate Analyses: Ideology-Specific Incident Occurrence	34
	Supplemental Models: Detailed Policing Predictors	36
	Supplemental Models: Terrorism Incident Counts	37
VI.	Discussion	39
	Directions for Future Research	44
	Implications	45
VII.	References	48

## Tables

Table 1. Review of Empirical Literature Demonstrating the Scarcity of Terrorism	55
Table 2. Operationalization of Key Variables	56
Table 3. Descriptive Statistics For United States Counties Years, 2000 and 2010	57
Table 4. Correlation Matrix of Key Variables N=6264	58
Table 5. Penalized Maximum-Likelihood Logistic Regression of Overall Incident Occurrence on Policing Predictors and Other Key Controls	59
Table 6. Penalized Maximum-Likelihood Logistic Regression of Ideology-Specific Incident Occurrence On Policing Predictors and Other Key Controls N=6264	60
Table 7. Penalized Maximum Likelihood Logistic Regression of Overall Incident Occurrence On Detailed Policing Predictors and Other Key Controls N=6264	61
Table 8. Negative Binomial Regression of Incident Counts On Policing Predictors and Other Key Controls	62

## **I. Introduction**

September 11<sup>th</sup>, 2001 was an enormous wake-up call to the realities of terrorism in which the United States was no longer immune from a global threat that had largely plagued European and Middle Eastern nations. The subsequent decade resulted in a scramble by the newly created Department of Homeland Security (DHS) to transform law enforcement and terrorism prevention practice from top to bottom, including investing \$11 billion in terrorism preparedness at the local level by 2004 (Randol 2012). In spite of a renewed emphasis on terrorism prevention by local police, recent events, including the Boston Marathon bombing, suggest that further examination by both policy makers and terrorism scholars regarding the role of the police in detecting and preventing terrorism is perhaps warranted.

Scholars have long argued that local police play a critical role in counterterrorism within their own communities. Yet, this role is “unclear and indeed controversial” (Bayley and Weisburd 2011:81). As Pelfrey (2007:319) suggests, “America’s law enforcement agencies are told to work hard to prevent terrorism without being provided implementations to achieve that end or metrics to assess effectiveness.” More broadly, the response by police agencies and scholars alike (Carter and Carter 2009; Docobo 2005; McGarrell, Freilich, and Chermak 2007) has been to promote two alternative policing strategies – community-oriented policing and intelligence-led policing – that emphasize either disrupting terrorism by utilizing community relations to detect early stages of terrorism planning in the course of general patrol functions or by creating special intelligence units to operate within local police agencies that specifically seek out terrorism activities. As such, the mechanisms through which police should impact terrorism - or whether they should at all - remains unsettled.

Regardless of the practical application of these various contemporary police and homeland security tactics, it is also clear that there is a shortage of research examining how variation in policing across communities relates to the likelihood of terrorism occurring (described in more detail below). Certainly, this paucity of empirical scholarship parallels a broader dearth of studies addressing the community factors, including policing, that play a role in preventing terrorism. This is somewhat surprising since, as Kelling and Bratton (2006) note, more than 700,000 local law enforcement officers work in the United States compared to only 12,000 federal agents (a ratio of nearly 60 to 1). Moreover, local police officers live and work in the communities they are sworn to protect and (many argue) have the best opportunity to detect, deter, and respond to a terrorism incident even through localized criminal behavior and suspicious activities. This suggests that the war on terrorism is, at least to some extent, fought within communities by the police rather than at a state or a federal level.

A careful review of the literature reveals very few studies that seek to determine how characteristics of policing at the macro-level impact terrorism outcomes. Thus, the general conclusion to be drawn from the literature is that the relationship between policing and terrorism at the community-level is empirically unsettled. Drawing from prominent sociological and criminological theories, the current study will seek to address this oversight and expand existing knowledge regarding local police structure and functionality as it regards the likelihood of terrorism incidence across counties. Specifically, the current study asks the following research questions:

1. *Does policing affect the likelihood of a terrorist incident occurring, net of other key community characteristics?*

2. *Does policing affect the likelihood of specific types of terrorist incidents (e.g., far-right, environmental, Islamic extremist, etc.) occurring?*

This project unfolds as follows. First, this paper will review prior work that addresses the macro-level predictors of terrorism, focusing on both the empirical research that has examined the broader geo-spatial and structural dimensions of terrorism occurrence and the few empirical studies that have examined the link between policing and terrorism-related outcomes at the community-level. Second, this study reviews prominent theoretical perspectives in both sociology and criminology that generate competing expectations with regard to how policing and terrorism are linked at the macro-level both overall (i.e., for terrorism on the whole) and for specific terrorist ideological movements. Third, an outline of the parameters for the current study will be described, including data sources, key dependent and independent variables, and analytic methods as they pertain to resolving the research questions noted above. Fourth, findings of several regression models are presented, as well as a series of supplemental models and robustness checks, followed by concluding remarks and a discussion of these findings, their broader implications, and directions for future research.

## **II. Review of Relevant Literature**

### *Terrorism as a Form of Crime*

Despite a growing body of research, particularly in response to a surge of terrorism-driven policy, few criminological or sociological studies have empirically examined community-level predictors of terrorist attacks in the United States (Chermak and Gruenewald 2015; LaFree and Bersani 2014; LaFree and Freilich 2012). This may be due in large part due to a common argument that terrorism is conceptually different than common forms of crime (see LaFree and Dugan 2004 for a review). Indeed, this argument is supported by the fact that in the United

States, until recently, there was no specific criminal category for terrorism, but instead terrorists were prosecuted using a variety of criminal offenses associated with terrorism (Smith 1994). In addition, terrorism is often met with political and diplomatic responses as an international relations issue, instead of a criminal justice matter (Klitz and Ramsay 2012). Nevertheless, despite a paucity of empirical and theoretical research in terrorism broadly, many scholars posit that the conceptualization, method, and theoretical applications of terrorism dovetail quite well with that of crime, with some concluding “terrorism should be an important area of study for criminologists” (LaFree and Dugan 2004:54).

In this vein, Clarke and Newman (2006) argue “terrorism is a form of crime in all essential respects.” Indeed, from a definitional standpoint, criminologists have suggested that it is surprising that terrorism and crime more broadly are commonly treated independently. As LaFree and Hendrickson (2007) note, terrorism undoubtedly meets the most widely accepted definitions of criminology that encompasses “the breaking of laws and reactions to the breaking of laws” (Sutherland and Cressey 1978:3). As Smith and associates (Smith 1994; Smith and Damphousse 2002; Smith, Damphousse, and Roberts 2006) point out, terrorist acts are comprised of one or more criminal acts or are crimes in of themselves (murder, possession of weapons, racketeering) committed in furtherance of political or social goals. Furthermore, the FBI definition of terrorism most commonly endorsed by state police agencies (Freilich et al. 2009) identifies terrorism as criminal conduct, a fact repeatedly emphasized by the FBI (Smith 1994).

In addition to definitional similarities, scholars have noted that terrorist events can be methodologically studied similar to criminal events. As LaFree and Dugan (2004:67) point out, both criminal and terrorist events can be “counted and display non-random temporal and spatial

patterns that are likely associated with endogenous and exogenous characteristics of offenders, targets, and situations.” Accordingly, they continue, it becomes possible to study trends and distributions, utilize geospatial mapping, employ time-series, and causal analyses of terrorism, much in the same way as has been done with crime more generally (see also LaFree and Freilich 2012). Therefore, it may be that theories and methods that criminologists have employed are also relevant to research in terrorism (Forst 2011; LaFree and Bersani 2014) and to developing counter-terrorism policy (Klitz and Ramsay 2012; LaFree and Hendrickson 2007).

### *Community Characteristics and Terrorism*

Though relatively limited, previous studies in terrorism provide some evidence that features of communities are key determinants of whether terrorism is likely to occur or not. For example, Nemeth, Mauslein, and Stapley (2014) argue that variation in sub-national characteristics are a critical determinant of domestic terrorism. As they see it, traditional analyses of terrorist attacks focus primarily on broad state-level features that tend to overlook more localized characteristics. In contrast, utilizing smaller units of analysis, they empirically examine the likelihood of terrorism occurrences more precisely at a localized level, including characteristics of incidents as they vary by terrain, proximity to the state’s capital, local economic development, community political activity, racial and ethnic heterogeneity, population density, and other features that contribute to certain areas being terrorist “hot-spots.”

Similarly, Smith and associates’ (2006) spatial and temporal analysis of pre-incident indicators of terrorism found that offenders typically lived relatively close to the very communities they ultimately attack, with nearly one-half residing within 30 miles of their target. Thus, understanding the contextual features of communities in which terrorist incidents (and the precursor activities leading up to them) occur is especially useful. Meanwhile, Pelfrey (2007)

points out that the majority of the bombers from the attacks on 9/11 instead spread throughout the nation in big and small communities, though the characteristics of these places remains unsettled. Regardless of the communities they live in, these scholars suggest that there are salient features of communities in which terrorists reside, commit crimes, plan, prepare, and operate for months at a time that likely impact the likelihood of terrorism occurring.

Finally, LaFree and Bersani (2014) investigate county-level structural indicators of social disorganization as predictors of terrorist attacks. In particular, they find that community characteristics such as language diversity, percentage of residents who are foreign born, residential instability, and percentage of the county that is urban increases the likelihood of a terrorist attack. In addition, contrary to traditional crime, they determine that terrorism is associated with lower levels of concentrated disadvantage, rather than higher levels. Not only do these scholars draw support for a community-level analysis, they do so with the application of criminological theory to the empirical study of terrorism, which has largely been atheoretical (discussed in more detail below).

#### *Policing and Terrorism at the Macro-Level: An Uncertain Role*

While some previous research exists examining the structural and spatial features of communities as they relate to terrorism, prior research on policing and terrorism at the macro-level is long on assertion but short on empirical evidence. Nevertheless, terrorism scholars have suggested that the police are a central feature of communities that should impact terrorism. In particular, scholars note that, following the events of September 11, 2001, local and state law enforcement have experienced constant scrutiny to adapt new strategies reactive to community demands and pressures related to terrorism (Clarke and Newman 2007; Kelling and Bratton 2006; McGarrell et al. 2007; Roberts, Roberts Jr., and Liedka 2012). However, the question of

how to adapt (and what social pressures to adhere to) continues to be a problem, providing little clarity on what role the police should take, particularly for smaller agencies with considerably lower perceptions of risk for a terrorism attack (Greene 2011; McGarrell et al. 2007; Schafer, Burruss, and Giblin 2009). The result has ultimately been ambiguity in the role of the police as it regards terrorism at local levels, including miscommunication between federal, state, and local agencies, unequal distribution of funding, and lack of uniform preparedness and training (Pelfrey 2007; Roberts et al. 2012).

In this vein, law enforcement strategy has generally taken one of two trajectories, if it has changed at all: community-oriented policing and intelligence-led policing. Broadly, these strategies focus on police developing relationships with the citizens in local communities in order to gather information on potential terrorist activity, relying heavily on local law enforcement officers who have the best chance of making contact with terrorists in the course of their preparatory or planning activities. In spite of their shared, overarching theme, these approaches are often pitted against one another, as well as against more traditional policing roles.

On the one hand, community-oriented policing (COP) focuses on solving crime and social disorder through police-transparency and partnerships between the community and the police (Docobo 2005; Greene 2000; 2011). While traditional policing demands its officers be reclusive and reactive to crime, COP shifts the “philosophy of police operations and management” towards proactive interaction with community members and leaders to address concerns and solve neighborhood problems (Carter 1996; Gordner 1996; Ortiz, Hendricks, and Sugie 2007). Several studies examining the effects of community policing have noted its success in reducing crime (Gordner 1996) and strengthening community relations (Greene 2000; 2011; Thatcher 2005). Greene (2011) suggests that community policing had a large hand in

altering police and community interactions, reducing community fear of the police, and improving police legitimacy, factors that scholars have argued the police can utilize to prevent terrorism (Docobo 2005; Friedmann and Cannon 2007; McGarrell et al 2007; Murray 2005; Thatcher 2005).

Indeed, because terrorism is a local crime (Docobo 2005; McGarrell et al. 2007; Smith et al. 2006) committed predominantly by homegrown radicals (Bergen, Hoffman, and Tiedemann 2011; Dahl 2011) relationships between the police and local community are seen as having tremendous value in disrupting terrorism in its preparatory stage. Extant literature suggests that police in their day-to-day function are in an ideal position to prevent terrorism because they live and work in the communities they are sworn to protect (Clarke and Newman 2007; Kelling and Bratton 2006). As Pelfrey (2007) notes, the belief is that, with relatively inexpensive training, police officers can be effective in identifying terrorist activities and personnel in the course of responding to crime in the community and as they build relationships with the residents of the community (Bayley and Weisburd 2011). Put simply, COP efforts see preventative activities running hand-in-hand with traditional law enforcement activities.

On the other hand, rather than the police operating visibly in uniformed patrol functions, intelligence-led policing (ILP) builds on the community-policing concept by creating intelligence units to target specific forms of crime for investigation and prosecution, including terrorism (Carter and Carter 2009). Clarke and Newman sum up this approach to terrorism as a way of “combining discrete pieces of information about terrorist activities, that only makes sense when considered together” (2007:11; original Peterson 2005). In this manner, Dahl (2011:622) argues that most failed terrorist plots are disrupted when “intelligence and law enforcement agencies obtain very precise information about specific plots being planned by specific groups.” Like

community-oriented policing, ILP is dependent on communication with the public (McGarrell et al. 2007), though (in contrast to COP) it does so with the specific focus of terrorism intelligence-gathering utilizing specific workforce units rather than in conjunction with traditional law enforcement duties (Bayley and Weisburd 2011; McGarrell et al. 2007; Randol 2013).

ILP has a multitude of shortcomings that have resulted in very few departments implementing specific intelligence divisions. For example, Schafer et al. (2009) conclude that many small and medium size police agencies cannot afford to implement homeland security measures due to costs associated with hiring specific terrorism personnel, though the small Illinois agencies in this particular study report a much lower perception of risk of terrorist attacks and are less likely to implement ILP regardless of cost. In addition, scholars have noted that ILP can very easily be construed as overstepping constitutional rights (Carter and Carter 2009; Bayley and Weisburd 2011; Greene 2011; Schafer et al. 2009). Nevertheless, some academics and policy makers see ILP as a viable alternative to community-oriented policing and further emphasize the role of local police (albeit with specialized units) acting to prevent or deter terrorism across communities.

#### *Scarcity and Ambiguity of Empirical Research On The Policing-Terrorism Nexus*

Regardless of the role police are asked to take in dealing with terrorism in their communities, empirical research examining the role of policing and terrorism at the macro-level is scarce. Indeed, a careful review of the literature reveals only six studies that tackle this relationship. These studies are summarized in Table 1 below.

(INSERT TABLE 1 HERE)

The primary conclusions to draw from this table are that, first, research has only recently begun examining the link between community-level variation in policing and terrorism: all of these

studies have been conducted within the past eight years and, as a result, empirical research is still in its infancy. Moreover, second, the focus has predominantly focused on terrorism preparedness rather than the likelihood of a terrorist incident occurring. Third, even within the study of police preparedness for terrorism, there is little consensus on the features of “policing” at the macro-level that should most strongly impact terrorism outcomes.

It is worth emphasizing this last point in particular. That is, more than just competing perspectives regarding how police should operate (COP versus ILP), there also remains considerable ambiguity in what is actually meant by “policing” at the community-level and, in turn, how to properly measure it. Research on policing suggests several different markers of successful, effective policing as captured at the community-level. For example, one common marker of “policing” is an agency’s police per capita rate, often argued to be important because of the common perception that hiring more police reduces crime generally by augmenting detection and prevention efforts. Though research is mixed on whether this is true or not (see for example Bradford 2011; Pare, Felson, and Ouimet 2007; Tao 2005), though it is consistent with the assertions of some terrorism scholars that an increase in police presence around valuable targets is the best strategy for preventing terrorism (Clarke and Newman 2007).

Additionally, others suggest the need to move “policing” at the macro-level beyond the mere presence of law enforcement to include a measure of police effectiveness. In this vein, crime clearance rates are often argued to capture how well agencies identify, investigate, and apprehend suspects. Some scholars (Pare et al. 2007) argue that high crime clearance rates, as a result of effective policing, act as a form of crime deterrence, which may have relevance to deterring the likelihood of terrorism from occurring (Dugan, LaFree, and Piquero 2005). Other

scholars have been critical of their use due to inconsistent definitions and reporting practices (Pare et al. 2007; Roberts 2014).

Likewise, some academics have suggested that differences in workload might best capture variation across communities in policing because when police handle more offenses, they are then unable to devote as much time and resources to solving less severe crimes, thus decreasing overall effectiveness (see Pare et al. 2007:245 for a discussion on this topic). Thus, it may be that busier police agencies are less likely to devote as much effort towards what may be considered menial terrorism-prevention tasks, such as idly guarding targets, investigating suspicious activity, or building community relations in the anticipation of detecting terrorist activities.

### **III. Theoretical Frameworks**

Compounding the lack of empirical research on policing and terrorism at the macro-level, there has been very little theorizing as to why policing should impact terrorism incidents. Indeed, only within the past decade have criminologists begun to really turn their attention to the severe lack of theorizing on terrorism generally, noting that prior work is often founded in “simple definitions, typologies, and other atheoretical approaches” (Boyns and Ballard 2004:5; see also LaFree and Bersani 2014; LaFree and Freilich 2012). Nevertheless, as Smith (1994:150) suggests, “explanations of the causes and consequences of this phenomenon can be derived from sociological theories.”

Furthermore, as noted above, despite few fundamental differences, criminological theory should apply to terrorism because of the numerous shared elements with crime, including definitional and methodological similarities (Clarke and Newman 2006; Forst 2011) and the consistent display of non-random spatial and temporal patterns (LaFree and Dugan 2004).

Therefore, consistent with recent scholarship and in much the same way as terrorism can be studied methodologically as crime, so too can criminological theories extend to the study of terrorism.

As the following review demonstrates, prominent sociological and criminological theories generate competing expectations as to how policing and terrorism are linked at the macro-level. In addition, some theoretical perspectives suggest a relationship between the police and terrorism overall, while others imply that the relationship might vary by type of terrorism ideology, to be reviewed in later sections.

### *Policing and Terrorism Overall*

Though still underdeveloped, theorizing on the structural correlates of terrorism has predominantly focused on the ecological factors that make an act of terrorism favorable or unfavorable (Clarke and Newman 2007; 2009; Dugan et al. 2005). In particular, environmental criminology (or related opportunity perspectives) suggests that crime is the result of a motivated offender acting upon an opportunity for crime. These opportunities, emerge as the result of situational factors, such as the presence or absence of police, that might create a favorable or unfavorable situation for an offender who is otherwise predisposed to commit the crime (Clarke 1980). Environmental and opportunity perspectives therefore stress the role of guardians, including police and other law enforcement, as key actors in the offender-victim criminal event such that the absence of a guardian is a necessary component that must be present for crime to occur. For example, Cohen and Felson (1979) theorize that crime generally will not occur unless a motivated offender acts upon a suitable target in the absence of capable guardianship, thus implying that situations and targets can be manipulated to prevent crime.

Environmental criminology, as some scholars have insisted (Boba 2009; Clarke and Newman 2006; 2007i; 2007ii; 2009; Dugan et al. 2005), would logically extend to terrorism in a practical manner such that if structures can be protected and opportunities to commit an attack removed, terrorism can be prevented not unlike any other crime (Clarke and Newman 2009:86). Though not fully explored (for an exception, see Gruenewald, Allison, and Klein 2015), Clarke and Newman (2006) and Boba (2009) have operationalized and applied tenets of opportunity/environmental theories to the prevention of terrorism by identifying factors capturing the vulnerability of a potential terrorist target (Boba 2009). These scholars argue that potential targets that are exposed, vital, iconic, legitimate, destructible, occupied, near, or easy (EVIL DONE) are more at-risk to be attacked. However, with proper analysis and risk assessment, they suggest that law enforcement can alter prevention strategies and more effectively guard likely targets. Following this logic, police officers increase guardianship, in turn presenting a more difficult, unfavorable situation that would reduce the likelihood of a terrorism incident occurring.

Other prominent sociological perspectives suggest that police may, in much the same manner, work to reduce the likelihood of terrorism occurring, especially in certain types of communities. In particular, social disorganization theory, developed out of the Chicago School by Shaw and McKay in 1942, argues that a socially disorganized community, whether inner-city or rural (Osgood and Chambers 2000), that is characterized by poverty, high residential mobility, and racial and ethnic heterogeneity exhibits much higher rates of crime as a result of weak social institutions and a loss of social control (Krivo and Peterson 1996; 2000; Wilson 1987). In more recent works, Sampson and associates (Sampson and Groves 1989; Sampson, Raudenbush, and Earls 1997) have expanded upon the original Shaw and McKay thesis, finding that the conditions

of social disorganization increase crime by hampering local community networks, organizational participation, and social cohesiveness. In other words, communities that are crippled by concentrated disadvantage lack collective efficacy, and therefore are unable to exercise informal social controls resulting in unchecked disorder and crime.

As a response to weak informal social controls, some scholars suggest that disadvantaged communities rely more heavily upon formal social control from criminal justice agencies, including local law enforcement (Bursick and Grasmick 1993). Support for this is found in related research demonstrating that police are more efficient at clearing crimes in poorer communities (Pare et al. 2007). Indeed, poorer communities tend to experience “full law enforcement” by which residents are subject to excessive arrests for violent crimes (Eitle 2005; Eitle, Stolzenberg, and D’Alessio 2005; Kane 2005) and drug crimes (Eitle and Monahan 2009). In this vein, disadvantaged communities with higher rates of crime might devote greater police attention and resources to patrolling neighborhoods, thus reducing the likelihood of terrorism. Consistent with this theme, both Pelfrey (2007) and Randol (2013) have noted that larger agencies with greater resources are more likely to invest in terrorism preparedness, including employing a terrorism-specific task force or terrorism intelligence experts. Likewise, community-policing perspectives place significant emphasis on the role of police in enhancing arrest probabilities and deterring crime in poor, socially disorganized communities in ways that theoretically might extend to terrorism, as well. In other words, it may be that communities with visibly greater police presence (as a result of an over-reliance on formal social control mechanisms) deter potential terrorists who view these targets as more heavily defended and difficult to successfully attack.

Indeed, in a recent work empirically assessing a criminological approach to terrorism, LaFree and Bersani (2014) applied several key propositions of social disorganization to the frequency of domestic terrorist attacks. These scholars find that counties with greater population heterogeneity and more residential instability are at greater risk for terrorist attacks. However, in contrast to prior findings of social disorganization theory on common street crimes, these scholars find that concentrated disadvantage is actually associated with fewer incidents of terrorism, which they suggest might reflect that “ordinary criminals may operate in their own neighborhoods (which might be characterized as high in concentrated disadvantage), while terrorists are more often drawn to attack wealthy counties” that likely contain symbolic targets that are more attractive and more likely to garner media coverage (2014:20).

#### *Policing and Specific Terrorism Ideologies*

While the perspectives outlined above suggest that policing should be negatively associated with terrorism overall, it is also possible that the relationship may be contingent upon the type of terrorism ideology in question. That is, the presence and effectiveness of police may act to deter some types of terrorism in ways that are broadly consistent with environmental criminology and systemic social control perspectives, while at the same time aggravating other conditions for some specific terrorist groups. Before discussing the relationship between policing and terrorism as it varies by ideology, it is useful to note the substantive, historical underpinnings of the various groups that contribute to the broader terrorism landscape in the United States.

#### *Far-right Extremism*

Though loosely coupled and broadly defined far-right extremists - encompassing such groups as racist skinheads, neo-Nazi groups, militia/patriot groups, and sovereign citizens -

generally see the federal government as the enemy. Often, they declare themselves free of federal authority under a common-law statute of *posse comitatus* that only recognizes the authority of local and county government (Barkun 1997). For a brief period during the early 80s, and trailing off through the 1980's and 90's, the far-right flourished under this statute, retreating to compounds following a "rural revolutionary" model of paramilitarism (Smith 1994), stockpiling weapons and training as armed "survivalists" drawing the federal government into several violent standoffs, such as the Ruby Ridge and Waco sieges. However, many scholars (Carter et al. 2014; Chermak et al 2009; Parkin et al. 2014; Smith 1994) suggest that in recent years the far-right has evolved from a defensive "survivalist" position to an aggressive stance against the government, and law enforcement in particular, with the rising threat of such groups as the "sovereign citizens" (see Anti-Defamation League 2012) and others who utilize Lewis Beam's (1992) method of leaderless resistance to break off into independent cells or act as individual "lone wolf" terrorists.

In much the same way that Quinney (1979) refers to the police as "repressive workers," far-right extremists may see the presence of law enforcement officers as a visible sign of government encroachment that serves as an ideological trigger. This is often manifested through violent attacks against the local law enforcement personnel that enforce the laws of the federal, state, or municipal government. In this vein, first, conflict and Marxist perspectives would suggest that policing might be associated with an increased incidence of far-right terrorism. Originating in the Marxist views of the proletariat workers rising against the Bourgeois capitalists, conflict criminology argues that crime and conflict cannot be understood without recognizing the dominance of the wealthy, ruling class over the powerless (Lynch and Michalowski 2000). As a result of economic and political inequality, those in power define what

is criminal, how the law is enforced, and exploit the legal system to protect and promote their own interests (Quinney 1977; Reiman 1984). Crime, therefore, is a response to structural inequality in which the oppressed pursue their survival through illegitimate gains (Gordon 1973). Far-right terrorism may also be viewed in the same lens.

Indeed, law enforcement agencies consistently view far-rightists as a significant threat to local, state, and national security (Freilich, Chermak, and Simone 2009; Parkin, Freilich, and Chermak 2014). For example, sovereign citizen extremists have, without warning, shot and killed local police on several documented occasions (Bjelopera 2013), just as Timothy McVeigh and similar far-right extremists viewed their conflict as a war with (federal) law enforcement agents (Michel and Herbeck 2001:239). As a result, in recent years, law enforcement perceptions about the greatest threat to their communities have changed, placing sovereign citizens and similar rightist groups at the highest threat level (Carter et al. 2014). Therefore, in contrast to what we might expect for terrorism more broadly, from a conflict and Marxist perspective, policing may be positively associated with far-right extremism.

Second, and in the same manner, environmental theories might predict a negative relationship between policing and terrorism overall (Clarke and Newman 2007), but suggest that increasing the number of police officers in a community, or even immediately at a likely target of attack, may increase the likelihood of far-right terrorism. Building on the observations of Cohen and Felson (1979) and the guardian-target relationship, this might be an instance in which the police – traditionally viewed as the capable guardian – serve as the target. Therefore, from an environmental theory standpoint, it is plausible to assume that policing may have a positive association with some types of terrorism, specifically far-right extremism.

### *Environmental Extremism*

Beginning in 1971, with a group of high school students calling themselves the “Eco-Raiders” vowing to stop urban sprawl through a mass spree of several thousand vandalisms, the environmental and animal-rights extremism evolved into an international above-ground movement. Legitimized in 1976 with the creation of the Animal Liberation Front in Europe, and the “Earth First” movement in the U.S. by David Foreman in 1980, the movement recognized the insufficiency of political action and adopted direct violent action as a means to preserve the ecosystem (Arnold 2010; Smith 1994). Though often overlooked in terrorism research, recent studies have shown that environmental terrorism committed by members of the Environmental Liberation Front (ELF, formed from the remnants of Earth First! in 1992) and the Animal Liberation Front (ALF) is the most prominent of the last few decades, accounting for more acts of destruction and monetary damages than any other category (Carson, LaFree, and Dugan 2012; Leader and Probst 2003; Trujilo 2005).

Environmental extremists commit acts of terrorism in the name of biocentrism, a belief that everything in nature, living or inanimate, is of equal value, and should be protected (Carson et al. 2012). Consistent with this ideological belief in the value of life, environmentalists commit arsons and sabotage (“ecotage”) with careful attention to the avoidance of detection or the risk of harming people. Often this entails attacking “soft,” low-security targets during late night operations conducted by one to six people when they are unlikely to run into guardians and people are unlikely to be inside the targeted structure (Leader and Probst 2003; Smith et al. 2006).

In contrast to what may be expected of terrorism in general, and for far-rightist in particular, the environmental criminology and opportunity perspectives reviewed above might

suggest that environmental extremism may be less likely to occur in places with greater policing presence. As Trujillo (2005) has noted, environmentalists conduct extensive operational planning in order to identify the vulnerabilities of their targets, and have postponed or cancelled attacks altogether at the first sign of detection or security. Consistent with the notion that the presence of guardians, such as the police, deters crime by increasing the difficulty and risk of punishment that may be particularly impactful on environmental extremism, enhanced policing in a community should decrease the likelihood of this specific form of terrorism.

### *Islamic Extremism*

To a large extent, the Islamic extremist conflict with the United States originates in the Muslim struggle against Israel and forthright Western aid to the Israelis (Martin 2014; Post et al. 2003) as well as U.S. involvement with Iraq during the Iran-Iraq war of the 80's. As a result of U.S. interference in this, and other economic, social, and religious practice in the Middle East, followers of this breed of terrorism view the U.S and its allies at war with Islam.

Consistently considered to be the gravest threat to homeland security, Islamic extremism is distinguished by a pursuit of lesser jihad, a radical interpretation of Islam that instructs believers to violently defend the Islamic religion against non-believers (Piazza 2009). Prior research suggests that radical Islamic-inspired violence is the most violent form of terrorism (2009), particularly because it promotes martyrdom in mass-casualty attacks against all members of society, rather than government officials or military personnel alone (Mahan 2007; Martin 2014; Post, Sprinzak, and Denny 2003). In addition, Smith and associates (2006) note that in the time prior to an attack, Islamic extremists typically reside in the communities they attack, committing crimes, surveying targets, and otherwise preparing for their attack while remaining unnoticed. However, despite this telltale proximity to the eventual target, Bergen, Hoffman, and

Tiedemann (2011) point out that the Islamic extremist threat has diversified since 9/11 in that there is no set profile or identifying characteristics of this type of terrorist, particularly due to a surge in homegrown radicalization.

Just as conflict and environmental theories generate competing hypotheses regarding the link between policing and specific types of terrorism, social disorganization theory also suggests alternative relationships regarding Islamic extremists. In particular, on the one hand, while police in urban, inner city communities might supplement weak informal social control with formal measures that effectively decrease the likelihood of terrorism overall, Islamic extremists often target urban communities containing targets with great American symbolism, greater population densities (in hopes of high death counts), and where their acts are more likely to garner media coverage as a vehicle to voice their cause. In this case, the presence of police may be positively related to Islamic extremism simply because both the police and Islamic terrorists are more prevalent in disorganized communities (i.e., a spurious relationship). Indeed, considering the prevalence of racial and ethnic heterogeneity in socially disorganized communities, it is likely to suspect that Islamic extremists choose these types of communities due to the ease in which they could blend in. As LaFree and Bersani (2014) conclude, terrorist attacks are more likely to occur in more heterogeneous and unstable populations because foreign offenders can more easily perpetrate attacks while surrounded by other foreigners within communities that “raise unique challenges for law enforcement resulting in less effective prevention” (2014:18).

In sum, there are several competing hypotheses regarding how the presence of police may both increase and decrease the likelihood of a terrorist attack, depending on the type of terrorist ideology examined. Building on these frameworks, the current study seeks to move beyond the

rather limited prior research on policing and terrorism at the macro-level to examine whether and how policing impacts terrorism both overall and across specific ideologies. The subsequent section describes the data and methods employed by the present analysis.

#### **IV. The Current Study**

To reiterate, the current study asks two related questions: (1) whether and how various dimensions of policing are associated with the likelihood of a terrorist incident occurring at the macro-level, net of other key community characteristics and (2) whether the association between policing and terrorism at the macro-level is dependent on the type of terrorism (e.g., far-right, environmental, Islamic extremist, etc.).

##### *Data Sources*

In order to answer these questions, the current study draws on data from three sources. First, information on terrorist incidents is derived from the American Terrorism Study (ATS) for the years 1996 through 2012 (Smith 2001; Smith and Damphousse 2000). The ATS is the result of ongoing research efforts associated with the Terrorism Research Center (TRC) housed in Fulbright College of the University of Arkansas. The current ATS database is the result of several funded projects through the National Institute of Justice (NIJ), with supplemental research and funding provided by the Department of Homeland Security (DHS) and the National Consortium for the Study of Terrorism and Responses to Terrorism (START). Data are drawn from federal criminal cases resulting in an indictment under an FBI terrorism enterprise investigation. The database currently contains over five hundred completed, planned, and prevented terrorism incidents from 1980 to the present (including detailed records on the categorization of terrorism and group affiliations). The ATS categorizes ideology into seven unique ideological movements, though recent terrorism cases predominantly reflect activity by

the three specific categories described above to be specifically analyzed here: far-right, environmental, and Islamic extremist.

Second, policing measures are constructed from both the FBI Uniform Crime Reporting Program's (a) Law Enforcement Officers Killed and Assaulted (LEOKA) and (b) county-level offenses known and cleared databases. Although primarily used for information on police officers feloniously killed and assaulted yearly, LEOKA data provides annual counts of sworn officers and staff members for every UCR agency and offers important details on police presence and support staff strength. As a complementary source, the offenses known and cleared data allow for the compilation of police agency clearance rates and measures of workload that have been used in previous research on police effectiveness (see key independent variables below).

Third, information on the structural characteristics of communities is derived from the United States Census Bureau's decennial Censuses and American Communities Survey (ACS). More than just data on raw population of the country, the U.S. Census collects data on a host of social indicators for various geographic units, including poverty rates, age and sex distributions, racial and ethnic makeup, employment status, and other community-level structural characteristics that function as key controls for the multivariate analysis described below.

#### *Unit of Analysis*

The current study aggregates all measures to the county-level. This will be done for several substantive and methodological reasons. First, due to the focus of the current study on the structural characteristics of local law enforcement, the county level is most appropriate because, while city agencies have primary responsibility for municipalities and urban areas, a large proportion of law enforcement primarily patrols rural communities beyond the boundaries of alternative geographic units (e.g., metropolitan statistical areas, census places) and failing to

capture these non-urban locals might miss ideological movements, such as far-right extremism, that have been shown to occur in predominately rural locales. Additionally, law enforcement, including state police agencies, generally recognizes county lines as jurisdictional boundaries or patrol “beats.”

Second, the county is easily defined and consistently reported. County boundaries are static over the study period and, as mentioned above, are generally recognized as jurisdictional boundaries. Other units of analysis, particularly micro-level units, such as metropolitan areas and census blocks, change boundaries frequently as cities and neighborhoods grow and reincorporate. As Bursick and Grasmick (1993) point out, even something as easily understood as a “neighborhood” has a multitude of definitions and understandings and, therefore, a unit of analysis with more rigid boundaries can alleviate some of the concern associated with tracking social phenomena in geographic units over time.

Third, and as a practical constraint, data is only available from all sources and the analyzed time period at the county level. As a result, data must be aggregated to the county in order to empirically examine the research questions at hand. Unfortunately, more specific geographic identifiers for terrorism incidents are not always available, but county-level data is readily accessible for most terrorism incidents. By choosing the county, the current study retains the most cases that can be paired with key measures of policing and macro-social characteristics that function as controls.

The Federal Information Processing Standard (FIPS) codes for states and their counties, which are a standardized measure used to uniquely identify standard geographic units and their equivalents, are used for aggregation and data merging purposes.

### *Data Pairing*

As described above, county-level information on policing and terrorism is readily available and consistent over time, but is unfortunately not available for each individual year for the entire period of time under examination (1996 through 2012). For example, the LEOKA data is first available in 1996 and continually reported annually through the present, but the U.S. Census only reports full population and social characteristics (e.g., poverty, mobility) every 10 years in the decennial Censuses until yearly estimates became available via the American Community Survey beginning in the mid-2000s. As such and in order to construct a data set with a satisfactory number of covariates, terrorism incidents occurring between 1996 and 2004 are matched with year 2000 data (a nine year period), and incidents from 2005 through 2012 are paired with 2010 Census and LEOKA data (eight years). Using this data pairing strategy, all 3144 U.S. counties are represented for both time points with the exception of 12 for which complete data could not be gathered. The final sample size is 6264 county years. Within this larger sample there are 110 incident county-years comprising 225 coded terrorism incidents occurring in 99 unique U.S. counties during the seventeen years examined here.

### *Dependent Variables*

Table 2 summarizes the included measures for the current study. The dependent variables are dichotomous/dummy measures of *terrorism incident occurrence* for both (a) all terrorism and (b) for three different types of terrorist ideology (far-right, environmental, Islamic extremist). Specifically, these four variables measure whether a county experienced a terrorist incident both overall, and for each of the three types of terrorist ideology, respectively. To create the overall occurrence variable, all counties that experienced a terrorist incident at either time point were coded as a 1, while the remaining non-incident counties received a 0, for a total of

110 terrorism incident counties. This procedure was then used to code the remaining ideology-specific binary variables, similarly yielding 64 counties in which an environmental extremist attack occurred, as well as 28 far-right incident counties, and 21 Islamic extremist incident counties.<sup>1</sup>

(INSERT TABLE 2 HERE)

### *Policing Variables*

As demonstrated by the literature review above, the term “policing” is ambiguous and can be operationalized in a number of different ways. As such, the current study draws from prior research by using several measures in an effort to capture the multi-faceted ways the police might impact terrorism incidence across communities. First, *police per capita* is coded as a continuous variable measuring the number of sworn officers per 1000 individuals in the county. Next, total *staff per capita* captures the number of employees of all agencies within the county, per 1000 individuals that may tap into the support structures available to officers in terrorism policing (see supplemental analyses).

Additionally, the current study measures the *total clearance rate* as a ratio-level variable, recoded from the UCR’s offenses known and cleared data as the number of total offenses cleared per 1000 total crimes reported. Derived in the same manner, *violent clearance rate* captures the rate of violent crimes cleared per 1000 violent reported crimes (see supplemental analyses). Clearance rates, while not perfect, provide an accessible measure of police effectiveness in clearing crime (or serious crime) that may also be related to police effectiveness at detecting and preventing terrorism.

The current study also measures *total crimes per officer* as a ratio-level variable, derived from a combination of the offenses known and cleared data and LEOKA data, as the total

number of crimes reported per sworn officer. Similarly, *violent crimes per officer* is measured as the number of violent crimes reported per sworn officer (see supplemental analyses). These variables represent a measure of the reported workload per officer, which is likely to be related to how much time and manpower an agency can devote to terrorism prevention efforts.

### *Key Control Variables*

In addition to the key policing measures, the current study controls for a number of important structural covariates drawn from prominent theoretical perspectives (e.g., social disorganization) and prior literature on community policing. First, this study includes several baseline population measures. *Total population* is a raw count of the number of persons in the county and *urbanicity* measures the proportion of a county's population that resides in an urban area. Because a large portion of attacks occurred in the *West region* of the country (37.1% of the sample), a dummy variable is constructed to identify it.

In order to draw upon social disorganization theory, this study includes measures of racial and ethnic heterogeneity operationalized as *percent Black*, *percent Hispanic*, and *percent foreign born*. In addition, the models include several structural measures of disadvantage commonly included as predictors of crime. *Poverty* measures the percent of persons in the county below the poverty line (as defined by the U.S. Census). *Unemployment* measures the percentage of the civilian labor force that is unemployed. *Low Education* is the percentage of the population that is 25 and older without a high school degree or equivalent, and *female headship* is the percentage of single parent, female-headed families.

Due to the known multiplicative effects of disadvantage, as well as the tendency for these measures to be highly correlated in macro-level data, there is the potential for multicollinearity. As a result, these are combined into a *concentrated disadvantage* index using standard principal

component methods (see Land, McCall, and Cohen 1990 for a review of this method). Not only does this method reduce issues of collinearity, but also it is consistent with recent research empirically assessing the effects of concentrated disadvantage on the likelihood of terrorism occurrence (LaFree and Bersani 2014). Given the methodological and conceptual similarities of terrorism and crime more generally, it is theoretically relevant to expect that concentrated disadvantage may similarly exacerbate conditions conducive to the likelihood of a terrorist incident.

### *Analytic Techniques*

This study employs a three-step analysis. First, descriptive statistics are run to gain insight on the distribution of terrorism across counties and over time, as well as variation in policing and important macro-structural characteristics. Second, bivariate correlations are presented in order to examine the one-to-one relationships between terrorism, policing, and macro-structural characteristics. The goal here is to explore any initial relationships between the various policing measures and terrorism likelihood before simultaneously controlling for a multitude of structural and demographic covariates.

Third, the study employs multivariate penalized maximum likelihood logistic regression analyses to address the two central research questions – whether policing is associated with terrorism overall and/or for specific types of terrorism by ideology. Given the dichotomous nature of the dependent variables coupled with the continuous form of many of the independent variables, logistic regression is the preferred method. However, because of the rarity of terrorism incidents<sup>ii</sup> (Adameczyk et al. 2014; LaFree and Bersani 2014) there is the potential for bias in the estimation of standard logistic regression models (King and Zeng 2001). As a result, penalized models are more appropriate because they account for the disproportionate influence

of a small number of rare events in a large sample of observations by generating lower variance estimates of logit coefficients and their variance-covariance matrix (Adamczyk et al 2014). Standard logistic regression analysis, as King and Zeng (2001) point out, can “sharply underestimate the probability of rare events” (pp. 138). This third stage of the analysis presents odds (though the odds ratios are discussed) in order to assess the extent to which terrorism is more or less likely to occur in counties with different policing structures after controlling for other key macro-structural traits.

## **V. Results**

### *Univariate Analyses*

The present study begins by looking at means and standard deviations for all key independent and outcome variables that are presented in Table 3. The focus here is on the distribution of key outcome variables, including total incident counts and whether an incident occurred for terrorism overall, and by ideological movements. The table also displays the distribution of the key policing variables, as well as the control variables described above.

(INSERT TABLE 3 HERE)

Key findings are as follows. First, terrorism is a rare event. Across all counties in the United States and the 17 years comprising the sampling frame, only 99 unique counties experienced at least one terrorism incident, with 70 of those counties experiencing just one incident. Due to the rarity of incidents, the average number of terrorism incidents per county is small (.036). Of those, the majority of incidents were committed by environmental extremists (.020), who committed more than double the number of incidents than the next most active movement - the far-right (.008) - and nearly four times the incidents committed by Islamic extremists (.006). This is consistent with prior literature reporting that environmentalists are the

most active terrorist movement in the United States (Leader and Probst 2003). The remaining movements (single-issue, unknown ideology, far-left) have not been active in the years of this study, though they are presented for comparison purposes (means  $<.001$  per county). Given the pooled cross-section methodology employed here, it should be noted that 110 U.S. county-years in which an attack was recorded (using the described pairing strategy) account for 1.8% of all units. Of these, 1% of all counties experienced an environmental attack, while far-right and Islamic extremists attacked less than .5% of U.S. counties (.4% and .3%, respectively).

Second, despite the rarity of terrorist events, it is also of note that there is large variation among counties in the number and prevalence of terrorism incidents in total and by ideology. This suggests that while only a small percentage of counties were attacked, several of those counties were attacked multiple times. Upon closer inspection of the data, some skew emerged among ideology. For example, 64 counties were attacked by environmentalists, 8 of which were attacked more than 5 times each. Similar variation is observed for each movement.

Third, Table 3 also reveals large variation in the different policing measures among counties across the U.S. On average, 2 sworn police officers represent 1000 residents, though variation greater than the mean suggests that certain counties have high police-to-citizen representation, while some counties have very few officers per 1000 residents. Likewise, the average county has 1 civilian support staffer per 1000 residents, with similar variation greater than the mean. Police in the average county clear 287 type one index felonies per 1000 reported crime, but fare much better against violent index crimes clearing 523 per 1000 violent crimes. Police officers in U.S. counties respond to an average of 17 type one index felonies per officer, and more than 5 violent crimes per officer, but there is considerable variation among agencies

indicating that officers in certain counties are more “overworked” relative to the experience in other counties with considerably smaller workloads.

Furthermore, fourth, Table 3 reveals variation among theoretically relevant predictors of crime consistent with criminological literature. Of note, factors that generally contribute to concentrated disadvantage (poverty, unemployment, female headship, and poor education) show some moderate variation among U.S. counties. Approximately 15% of county residents from both combined time periods live in conditions of poverty, while around 4% of residents are unemployed, 9 % of families are headed by a female, and almost 20% have received less than a high school education. However, the remaining population and demographic variables show considerable variation. U.S. counties, on average, are 40% urban (sd=31). As for racial and ethnic composition, black residents compose just fewer than 9% of the population (sd=15), Hispanics approximately 7% (sd=12), and persons born outside the U.S. 4.27% of the county population (sd=6). Though, there is considerable variation suggesting some counties are far more, or less, racially diverse. Approximately 13% of U.S. counties fall in the Western region of the country as defined by the Census (sd=34).

In addition, Table 3 also presents means and standard deviations of the individual measures that comprise each key-policing variable. Again, descriptive statistics reveal that counties across the U.S. vary considerably in the structural makeup of the police. Certain measures, such as total officers and total known offenses have standard deviations several times larger than the mean. Certain counties, such as New York and Los Angeles counties, with thousands of officers and hundreds of thousands of crimes, skew the mean dramatically.

Though univariate analyses reveal considerable disparity across U.S. counties regarding the occurrence of terrorism, presence and effectiveness of the police, and the structural makeup

of the counties, these analyses speak nothing to the statistical relationships that may exist among key variables. The next section turns to bivariate analyses displaying Pearson's correlation coefficients to examine the initial one-to-one associations of variables to be examined in subsequent multivariate analyses.

(INSERT TABLE 4 HERE)

### *Bivariate Analyses*

Table 4 reveals the bivariate associations between each variable. The focus here is on the key policing measures and their relationships with the terrorism incident measures. Overall, these results demonstrate that statistically significant relationships exist between many of the policing variables and the four terrorism incident occurrence measures. In particular, Table 4 reveals a positive and significant relationship exists between overall incident occurrence and police per capita ( $r=.048$ ,  $p<.001$ ) and crimes per officer ( $r=.066$ ,  $p<.001$ ), but not with total clearance rate. This suggests some preliminary support for the first research hypothesis. Similarly, columns 2-4 reveal unique associations among the policing measures and each primary ideologically affiliated incident occurrence. Of note, it appears that greater police presence is significantly associated with far-right ( $r=.027$ ,  $p<.05$ ) and Islamic extremist ( $r=.081$ ,  $p<.001$ ) incidents, but not with environmental extremism ( $r=.017$ ,  $p=.188$ ). On the other hand, police officers with higher workloads initially appear to be associated with the occurrence of far-right ( $r=.055$ ,  $p<.001$ ) and environmental extremist attacks ( $r=.057$ ,  $p<.001$ ), but not with Islamic extremism ( $r=.004$ ,  $p=.728$ ). Higher clearance rates only appear to be associated with fewer Islamic extremist attacks, but this relationship is not significant at traditional significance levels ( $p<.10$ ). Consistent with research question 2, there appears to be some initial, significant

variation in the relationships between policing at the macro-level and the incidence of terrorism by ideological movement.

In addition, Table 4 reveals interesting associations between terrorism outcome measures and the structural controls. Notably, contrary to substantial amounts of prior criminological research, concentrated disadvantage has no bivariate association with terrorism occurrence overall, though, this may reflect the combination of the various relationships across different ideologies. Indeed, higher levels of disadvantage are associated with a lower likelihood of occurrence of environmental extremism ( $r=-.036$ ,  $p<.01$ ), but higher incidence of Islamic extremism ( $r=.027$ ,  $p<.05$ ). In addition, terrorism is consistently associated with more populous counties, more urban counties, and higher concentrations of Hispanic and foreign-born residents. These findings suggest that several alternative explanations may exist for increasing the likelihood of terrorism overall, but also that some explanations may be unique to certain ideologies.

Overall, findings from Table 4 suggest it is important to include these structural predictors in multivariate models to simultaneously account for alternative, spurious relationships. The remaining sections present results of several multivariate models predicting the likelihood of terrorism occurring net of policing, structural characteristics, and key controls.

#### *Multivariate Analyses: Overall Incident Occurrence*

In order to assess research hypothesis 1, Table 5 displays the results from a penalized maximum-likelihood logistic regression analysis examining the effects of key policing measures on the likelihood of an overall terrorism incident occurring. All models include a full set of structural controls variables (e.g., concentrated disadvantage, total population, urbanicity, percent black, percent Hispanic, percent foreign born, and a dichotomous measure identifying

the Western region). The first three models regress overall incident occurrence on the independent effects of police per capita (model 1), total crime clearance rate (model 2), and crimes per officer (model 3). The fourth model simultaneously examines each policing measure in a saturated model.

(INSERT TABLE 5 HERE)

Of note, model 1 reveals that police per capita, net of a full set of structural controls, significantly increases the likelihood of a terrorist attack occurring in United States counties ( $b=.068, p<.001$ ). Using the odds ratio, an increase of one police officer per 1,000 residents is associated with a 7.1% increase in the odds of a terrorism incident occurring. Models 2 and 3, testing the effects of crime clearance rate and crimes per officer, respectively, have no significant impact on terrorism incident likelihood. Model 4, with the inclusion of all 3 policing measures and a full set of controls produces a stronger police per capita effect ( $b=.082, p<.001$ ), while also revealing the suppressed effect of crimes per officer ( $b=.020, p<.01$ ). In other words, an increase of one police officer per 1,000 residents is associated with an 8.5% increase in the odds of a terrorism incident occurring while an increase of one crime per officer is simultaneously associated with a 2.1% increase. Taken together, Table 5 reveals that counties with greater police presence incur a greater likelihood of a terrorist attack. At the same time, counties where police officers have greater workloads are more likely to be attacked, as well.

Also of note, Table 5 reveals that terrorism is more likely to occur in more populous counties ( $b=.725, p<.001$ ) in the Western region of the nation ( $b=1.60, p<.001$ ), though not necessarily in urban centers. Western counties, as defined by the Census, are almost 5 times as likely to have a terrorism incident compared to counties in other parts of the United States once other important macro-structural characteristics are taken into account. Racial and ethnic makeup

does not have a statistical effect, other than a slight protective Hispanic effect that approaches statistical significance but falls out in the saturated model. These findings support the notion that terrorism may be unique to larger communities, though not urban metropolitan areas.

(INSERT TABLE 6 HERE)

#### *Multivariate Analyses: Ideology-Specific Incident Occurrence*

This study now turns attention toward the differences in the policing-incident relationship as it varies across terrorist movements, identified in research question 2: *does policing affect the likelihood of specific types of terrorist incidents occurring?* To address this question, Table 6 replicates the previous analysis by considering each ideology-specific outcome independently. Model 1 regresses far-right incident occurrence on a full set of controls and policing measures, while model 2 predicts environmental extremist incident likelihood, and model 3 regresses Islamic extremism on policing and key controls. To reiterate, while there exist a number of other ideologies, the number of incidents falling within the other sub-categories (e.g., single issue, unknown, far left) is too small to estimate even penalized models, necessitating a focus on the three more prevalent ideological categories.

The following findings emerge. First, consistent with the findings in Table 5, a greater presence of police officers increases the likelihood of far right attacks ( $b=.099$ ,  $p<.001$ ) and also appears to be positively related to environmental attacks ( $b=.082$ ,  $p<.001$ ) counter to theoretical expectations. In other words, an increase of 1 police officer per 1,000 county residents constitutes a 10% increase in the odds of a far-right attack, and an 8.5% increase in the odds of an environmental attack. Consistent with this finding, it is noted that far-rightists target law enforcement officers who enforce the will of the federal government. On the other hand, environmental extremist tactics typically involve actors that avoid encounters with law

enforcement, contrary to these findings. In addition, counties with greater workloads among police officers are also more likely to be attacked by far-rightists ( $b=.034$ ,  $p<.001$ ) and environmentalists ( $b=.022$ ,  $p<.001$ ), though these effects are less prominent and only increase the odds of an attack by 3.5% and 2.2%, respectively.

In the same manner, model 3 predicts the likelihood of Islamic extremist attacks. As with previous models, Islamic extremist incidents are also strongly predicted by greater police presence ( $b=.154$ ,  $p<.001$ ), as is theoretically expected, and by higher numbers of crimes per officer ( $b=.049$ ,  $p<.01$ ). In other words, an increase of 1 police officer per 1,000 residents results in a 16% increase in the odds of an Islamic extremist attack, while an increase of 1 crime per officer is similarly associated with a 5% increase in the odds of an Islamic extremist attack. Somewhat interesting is the result that concentrated disadvantage has no statistical impact on Islamic extremism. Theoretically, as described above, it was expected that a spurious relationship might exist between disorganization and police per capita, such that Islamic extremists attack disorganized communities where greater police presence supplements weakened social controls. However, with the inclusion of concentrated disadvantage, and other measures of social disorganization, police per capita retains statistical significance.

Other important findings emerge among individual movement attack likelihood when considering key control measures. Concentrated disadvantage reduces the likelihood of environmental terrorism ( $b=-.313$ ,  $p<.10$ ) consistent with eco-ideology. All movements are attracted to counties with greater populations. Both environmentalists ( $b=2.18$ ,  $p<.001$ ) and far-rightist groups ( $b=1.13$ ,  $p<.05$ ) are statistically more likely to attack populous counties in the West which may suggest that Western counties are target-rich compared to other parts of the country, especially for eco-terrorists who commit a majority of their attacks in Washington,

Oregon, and California (68 out of 124 total incidents). Western counties are almost 9 times as likely to experience an eco-attack compared to counties in other regions of the United States. Unique to Islamic extremists is the finding that a greater proportions of the foreign-born population also increase the likelihood of Islamic extremism ( $b=.110$ ,  $p<.01$ ) possibly due to a greater chance of blending in to avoid early detection. In sum, while there appear to be little to no differences in the effect of policing on ideology-specific incident likelihood, some key differences emerge when considering characteristics of the counties themselves.

*Supplemental Models: Detailed Policing Predictors*

As discussed above, the term “policing” is ambiguous, particularly in macro-level analysis. While the policing measures used in primary models are routinely used in previous research, the current study turns now to several alternative measures that may provide a more detailed explanation of the policing-terrorism relationship. To examine the robustness of the above findings and to further parse out the intricacies of the key relationships observed above, a series of supplemental models were constructed substituting alternative policing variables, including law enforcement civilian staff per capita, violent crime clearance rates, violent crime workload per officer, and similar measures, which are displayed in Table 7. Model 1 presents results substituting law enforcement civilian staff members per capita, and controls, for police per capita. Model 2 includes the violent crime clearance rate plus controls in lieu of the total crime clearance rate, and model 3 measures the specific violent crime workload per officer plus controls, in place of the total crime workload per officer.

(INSERT TABLE 7 HERE)

The supplemental examination produces two key findings. First, consistent with primary models, law enforcement civilian support staff per capita (model 1) as an alternative to police per

capita strongly increases the likelihood of a terrorism incident ( $b=.166, p<.001$ ), net of all controls. An increase of 1 civilian staff member per 1,000 residents is associated with an 18% increase in the odds of a terrorist attack. Increased civilian support network may be considered a resource to officers on the streets while also accounting for intelligence personnel specific to terrorism prevention. However, increased law enforcement presence, whether sworn or civilian, increases the likelihood of a terrorism incident, though this may reflect the size of the agencies in the county proportionate to the population of the county (which is also a significant predictor of terrorism, though it is not shown).

Second, models 2 and 3 substituting violent crime clearance rate and violent crime workload, respectively, indicate that clearing or even working to clear violent crimes have little to do with predicting terrorism outcomes. Specifically, neither violent crime clearance rates or violent crime workload are associated with terrorism incident occurrence, though total crime workload significantly increases the likelihood of an attack ( $b=.019, p<.05$ ). In other words, higher volume of type one violent index crimes have no impact on whether an attack is likely to occur, but when police officers are inundated with type one property crimes (i.e., motor vehicle theft, larceny/theft, burglary), an attack is more likely to occur. In sum, these findings help to address the research question of whether characteristics of the police affect the likelihood of terrorism. Specifically, counties that have greater police presence, but are overwhelmed with property crimes are more likely to be victimized by a terrorist attack.

#### *Supplemental Models: Terrorism Incident Counts*

In addition to the above supplemental analyses, this study further parses out the policing and terrorism relationship by replicating the primary analysis utilizing negative binomial modeling procedures regressing an alternative outcome measure of terrorism incident *count* per

county on the three primary policing measures plus controls, in Table 8. Negative binomial regression techniques are employed, given the continuous but integer (count) nature of the dependent variable with evidence of significant over-dispersion (Osgood 2000). This strategy is more appropriate than OLS models when a large number of zero values appear in the data, as is the case in the present study. Model 1 presents findings using the full sample of 6264 counties while model 2 uses the subsample of 110 counties that have experienced at least one attack. As noted previously, terrorism is a rare event in which less than 2% of U.S. counties have been attacked in the studied time period. However, several of those counties were attacked multiple times, including 9 counties having been attacked more than 5 times. This analysis bears on the separate question of whether characteristics of the police affect the number of times a county is attacked.

(INSERT TABLE 8 HERE)

The results of the negative binomial analysis are as follows. Model 1, analyzing all U.S. counties reveals consistent results with the primary analysis. Police per capita as well as crime workload per officer are significantly associated with terrorism. In addition, consistent with LaFree and Bersani (2014) concentrated disadvantage is negatively associated with the number of incidents of terrorism. Model 2 replicates model 1, but only for the subsample of 110 incident counties to determine if policing affects the number of terrorist incidents in places that actually experience attacks. Here again, police per capita and crimes per officer significantly increase the number of terrorist attacks, though the effect is somewhat smaller. Interestingly, of places that have been attacked, counties with greater populations are less likely to be attacked more than once. Also of note, counties in the Western region are more likely to be attacked, but not more than once, while counties with a higher representation of black residents are positively associated

with the number of terrorism incidents. In sum, Table 8 reveals a remarkable consistency among the primary policing structural measures in which police per capita and crimes per officer increase terrorism incident occurrence. This study now turns to a discussion of the importance of these findings.

## **VI. Discussion**

The current study investigated whether macro level characteristics of the police predicted the likelihood of a terrorism incident at the county level, whether overall or by ideological category (i.e., far-right, environmental, Islamic extremist, etc.), net of other key structural predictors. Prior studies have identified salient characteristics of communities that likely increase their attractiveness and vulnerability, thus making them more likely to be attacked over others. In addition, prior research has recognized the importance of local law enforcement in detecting and preventing terrorism. However these studies have largely focused on terrorism preparedness (and only a handful provide empirical evidence) as opposed to exploring the relationship between policing and the likelihood of a terrorism incident occurring. Moreover, much prior research is atheoretical, whereas the present study applied relevant criminological and sociological perspectives to the understanding of the role of local police in terrorism prevention, particularly how the policing/terrorism relationship may vary by terrorist movements.

Utilizing data from the American Terrorism Study, the Uniform Crime Report, and the U.S. Census, this study examined patterns of terrorism and policing across both incident and non-incident counties from years 1996 to 2012 to address two primary questions: (1) whether and how policing is associated with the likelihood of a terrorist incident occurring at the macro-level, net of other key community characteristics and (2) whether the association between

policing and terrorism at the macro-level is dependent on the type of terrorism. Three primary and unique policing measures were drawn from a breadth of policing literature, including police per capita, crime clearance rates, and officer workload. As directed by an extensive body of criminological literature, a host of control measures were included as common community-level predictors of crime.

Several key findings emerged. First, police per capita and police officer crime workload are associated with an increase in overall likelihood of a terrorism incident, while crime clearance rates had no effect. In response to the first research question, the results demonstrated that characteristics of the police have an important relationship with terrorism, net of concentrated disadvantage and other key predictors of crime. However, second, these relationships did not always follow the theoretical expectations proposed by prominent sociological and criminological frameworks. Contrary to what situational crime prevention and other environmental theories predict it appears that greater police presence is unlikely to deter terrorism, but rather invite its occurrence. Indeed, while it may be expected that counties with more police officers for their citizens may be able to devote attention to terrorism-prevention tasks, thus preventing preparatory terrorist activity and ultimately incidents to slip through the cracks, counties with greater police presence consistently showed a positive association with terrorist incident occurrences net of all controls. Though, at the same time, greater police workload also appeared to attract terrorist incidents inherently supporting these same theories. Consistent with the principles posited by Cohen and Felson (1979) and other environmental theorists, *capable* guardianship may be defined by officer availability and attention more so than simply the presence of officers.

Third, as evidenced in supplemental models, despite the highly violent nature of terrorism, the existing prevalence of violent crimes has little to do with the likelihood of terrorism. Instead, property and non-violent crimes seemingly occupy the resources of the police, increasing the likelihood of terrorism. As summed up by Pare and colleagues (2007), when an agency is bogged down by cases, they have less time and resources to devote to a particular case. While it may be practical to ignore minor crimes in general to focus on serious crimes, other scholars (Clarke and Newman 2007; McGarrell et al. 2007; Smith et al. 2006) suggest that terrorism prevention requires the investigation of minor crimes in order to detect and prevent terrorism in its preparatory and planning stages. Frequent property and non-violent crimes that require individual officer attention may therefore disproportionately consume the time of officers and prevent them from general patrol functions that would allow them to detect terrorism prior to an incident.

Fourth, characteristics of the police do not appear to differentially affect incidence of the three largest terrorist movements. On the contrary, police per capita and officer workload were positively associated with the likelihood of a far-right, environmental, and Islamic extremist attack. Indeed, Z-tests for coefficient differences (see Paternoster, Brame, Mazerolle, and Piquero 1998) reveal that none of the policing variables statistically differ across ideologies at standard significance levels ( $p < .05$ ). That far-right extremist attacks are positively influenced by greater police presence generally coincides with previous studies by Freilich et al. (2009) and Parkin and associates (2014) who suggest that far-right affiliates pose a grave threat to law enforcement, indicating that rightists may actually seek out law enforcement rich communities. However, positive associations between police presence and environmental and Islamic extremist attacks were less expected. Environmentalists have been known to avoid law

enforcement and guardians alike, and call off plots at the first hint of detection. Similarly, it was expected that any police associations with Islamic extremist attacks would work through characteristics of the victimized community, such as concentrated disadvantage. Yet, police per capita was significantly associated with this movement despite the inclusion of disadvantage (non-significant), total population ( $b=1.19, p<.01$ ), and percent foreign born ( $b=.110, p<.01$ ).

Fifth, supplemental analyses also revealed that police per capita and officer workload impacts not only whether an incident is likely to occur, but also the *number* of incidents that do occur. While terrorism is a highly irregular event, certain counties experienced multiple incidents (as many as 14 incidents) during the time period studied. Regressing on the total number of incidents per county rather than occurrence, the supplemental analyses found that police presence and workload were associated with a higher number of incidents, for both all U.S. counties and the smaller subsample of incident counties. In other words, the same mechanisms that increase the likelihood of an attack also increase the number of attacks that occur. Therefore, the presence of police and their workload is consistently associated with an increase in terrorism.

While not providing any direct tests of specific criminological theories, these findings have broad implications for theory directed at terrorism outcomes. Notably, this study considered tenets of social disorganization theory, conflict theories, and environmental/opportunity theories. Considering social disorganization theory, recall that this study included a measure for concentrated disadvantage, urbanicity, and measures of racial and ethnic diversity (i.e., percent Hispanic, black, and foreign born). The results of these variables provide mixed conclusions for a social disorganization approach to terrorism. Consistent with LaFree and Bersani (2014), but in contrast to the effects of social disorganization on broader types of crime, the results here indicated that concentrated disadvantage was not associated with

terrorism, but in some cases reduced its likelihood. However, greater police presence consistently predicted terrorism occurrence, suggesting that socially disorganized communities may rely more heavily on formal social control mechanisms.

Additionally, these findings seemingly contradict the expectations generated by environmental criminology, which suggest that guardianship in the form of police presence should create an unfavorable environment and deter terrorism from occurring. Quite the contrary, these results consistently reveal that greater police presence seemingly invites terrorism, both overall and across ideological movements. However, it should be noted that this study was limited to the county level unit of analysis and it may be that localized variation in police presence are overlooked, wherein attacks that did occur in this sample were the result of displacement to a secondary, less defended target.

Finally, this study suggest that conflict and Marxist theories provide theoretical leverage for understanding the ideologically driven motivations of far-right extremists, particularly against law enforcement and government targets. Again, the results here revealed that increased police presence was associated with higher likelihood of a far-right attack, consistent with recent empirical studies that find that law enforcement perceive the greatest threat from far-right groups, such as sovereign citizens (Carter et al. 2014). While conflict theory is empirically difficult to test, an understanding that rightists view themselves as the proletariat and law enforcement as the arm of the bourgeois may allow for the establishment of a theoretical framework by which to measure government and law enforcement action in the context of conflict theory.

Research in terrorism has been long on assertion and speculation, particularly given its extremely rare nature. Beyond that, very few empirical pieces employ multivariate analyses to

its study. As LaFree and Freilich (2012) note, a mere 3% of terrorism journal articles employed inferential statistics. However, given the innovation of statistical methods and software, the study of rare events, such as terrorism becomes much more accessible. This study, and recent others (Adamczyk et al 2014), have employed penalized maximum likelihood techniques (King and Zeng 2001) to study terrorism and extremism. As King and Zeng note, methods such as their own “enable scholars... to collect much more meaningful explanatory variables” to employ more “efficient sampling designs for making valid inferences” making rare event study, such as terrorism, more feasible (2001:137).

#### *Directions for Future Research*

Future research might extend the analysis in several ways. First, as alluded to above, the present study was limited to county-level analysis. While there are many advantages in choosing the county, terrorism prevention may be considered a situational and localized phenomenon best captured at more micro-level units. For instance, a community policing perspective may suggest that the best understanding of the role of police in terrorism prevention may be ascertained at the neighborhood (or block-group level) given that beat police officers are often assigned to particular neighborhoods. Researchers in the future should consider alternative ecological units of analysis to detect variation that may have been lost at the county level.

Second, the present study had several data constraints, limiting the choice of variables to be included. Several of the key policing measures were only available back to 1996, which excluded many notable terrorism cases, including a major ideological movement (far-left wing extremists) that would have provided a unique potential relationship with local law enforcement. In addition, as a result of data pairing strategies, many substantively important policing and community structural indicators were not readily available at all years and had to be left out of

analysis for sake of reliability. Notably, future studies should attempt to include additional policing measures such as police expenditures, presence of a terrorism task force, training requirements, and law enforcement accreditation status that have been shown to be important terrorism preparedness factors. Alternative community variables, such as residential mobility, and other theoretically relevant controls should also be included moving forward.

Third, this study was limited to analyzing terrorism incidents. A case could be made that terrorism prevention extends prior to the occurrence of an actual terrorism incident. In other words, there is value in analyzing terrorist precursor behavior as an outcome as well, and what characteristics of the police, and their communities, influence the likelihood of a terrorist preparing and planning an incident in those communities. An analysis of sorts may have more validity to actually preventing an incident (in its preparatory stages) than actually examining terrorist incidents themselves. Future research should seek to incorporate these behaviors by geospatially pinpointing address information for relevant criminal behavior.

### *Implications*

The results of this study have real implications for policymakers and practitioners alike. First, as is by now well noted (Adamczyk et al 2014; LaFree and Bersani 2014), terrorism is an extremely rare event and geographically concentrated when it does occur. This suggests that perhaps an all-hands approach to terrorism prevention is somewhat overemphasized. In other words, the common notion in the aftermath of 9/11 that each local police agency bears a vital responsibility to homeland security and terrorism prevention efforts thus necessitating vigilance and expertise among all local police agencies may be for naught (Shafer et al. 2009; White and Escobar 2008). Second, and extending the last point, counties that are the most likely to experience an attack have identifiable characteristics, such as the presence of a large population,

and are typically in the Western region for all movements but Islamic extremists. As a result, terrorism prevention policy and strategy may benefit by a general refocusing and reallocation of resources to certain counties with these characteristics, rather than to the broader group of less populated, geographically disperse counties and agencies.

More directly as it pertains to policing, the results provide few definitive policy implications, though they do point to some important considerations. The rational response to overworked police agencies is to increase police staffing, thereby increasing the police per capita ratio. Generally, the results presented above suggest conflicting responses wherein higher police per capita and greater officer workload simultaneously increase the likelihood of attack. However, the best response to what appears to be a broad contradiction may be to advance an alternative explanation of police presence. Perhaps, it's not about increasing the number of patrol officers, but rather keeping patrol officers available and visible. This may be accomplished by limiting the functions of patrol officers in larger agencies by expanding the use of specialized divisions (i.e., traffic control, vice crimes, gang units). In other words, rather than relying upon general patrol officers to respond to a variety of calls for service, departments should consider assigning selected patrols officers to certain specialty calls. In particular, it may be very beneficial to assign time-consuming property crimes to some groups of officers to allow general patrol units to remain vigilant for violent crimes and other indicators of terrorist preparatory conduct.

Despite a prominent focus on the role of police in preventing terrorism within public and political discourse (and, increasingly, within academic circles), few empirical studies to date have examined how policing impacts the likelihood of terrorism, particularly how it might differentially impact specific ideological movements. Even fewer consider how prominent

theoretical frameworks inform this important relationship. As such, little is known with regard to the efficacy of policing as a key institution for coping with terrorism and crime more broadly. Clearly, the United States is still coping with homeland security infrastructure and has yet to fully untangle whether and how fundamental law enforcement structures impact terrorism outcomes. Hopefully the current study will provide some momentum toward sorting out these issues.

## References

- Adamczyk, Amy, Jeff Gruenewald, Steven M. Chermak, and Joshua D. Freilich. 2014. "The Relationship Between Hate Groups and Far-Right Ideological Violence." *Journal of Contemporary Criminal Justice* 30(3):310-332.
- Anti-Defamation League. 2012. *The Lawless Ones, the Resurgence of the Sovereign Citizen Movement: List of Recent Sovereign Citizen Incidents, by State*. Retrieved from <http://www.adl.org/assets/pdf/combating-hate/sovereign-citizen-incidents-by-state-2007-2010.pdf>
- Arnold, Ron. 2010. *EcoTerror: The Violent Agenda to Save Nature: The World of the Unabomber*. Bellevue, Washington: Free Enterprise Press.
- Barkun, Michael. 1997. *Religion and the Racist Right: The Origins of the Christian Identity Movement*. Chapel Hill and London: University of North Carolina Press.
- Bayley, David H. and David Weisburd. 2011. "Cops and Spooks; The Role of Police in Counterterrorism." *To protect and serve: policing in an age of terrorism* 81-99.
- Bergen, Peter, Bruce Hoffman, and Katherine Tiedemann. 2011. "Assessing the Jihadist Terrorist Threat to America and American Interests." *Studies in Conflict and Terrorism* 34(2):65-101.
- Bjelopera, Jerome P. *The Domestic Terrorist Threat: Background and Issues for Congress*. January 17, 2013. Retrieved October 10, 2013. (<http://www.crs.gov>)
- Boba, Rachel. 2009. "EVIL DONE." *Crime Prevention Studies* 25:71-91.
- Boyns, David and James David Ballard. 2004. "Developing a Sociological Theory for the Empirical Understanding of Terrorism." *The American Sociologist* 35(2):5-25.
- Bradford, Ben. 2011. "Police Numbers and Crime Rates: a Rapid Evidence Review." *HM Inspectorate of Constabulary* (<http://www.hmic.gov.uk/media/police-numbers-and-crime-rates-rapid-evidence-review-20110721.pdf>).
- Bursick, Robert J. and Harold G. Grasmick. 1993. *Neighborhoods and Crime: The Dimensions of Effective Community Control*. New York: Lexington Books.
- Carson, Jennifer V, Gary LaFree, and Laura Dugan. 2012. "Terrorist and Non-Terrorist Criminal Attacks by Radical Environmental and Animal Rights Groups in the United States, 1970-2007." *Terrorism and Political Violence* 24(2): 295-319.
- Carter, David L. 1996. "Measuring Quality: The Scope of Community."

- Carter, David L., and Jeremy G. Carter. 2009. "Intelligence-Led Policing: Conceptual and Functional Considerations for Public Policy." *Criminal Justice Policy Review* 20(3):310-315. Originally published online 5 December 2008.
- Carter, David, Steve Chermak, Jeremy Carter, and Jack Drew. 2014. "Understanding Law Enforcement Intelligence Processes." Report to the Office of University Programs, Science, and Technology Directorate, U.S. Department of Homeland Security.
- Chermak, Steven M., and Jeff Gruenewald. 2015. Laying the Foundation for the Criminological Examination of Right-Wing, Left-Wing, and Al Qaeda-inspired Extremism in the United States. *Terrorism and Political Violence* 27(1):133-159
- Clarke, Ronald V. 1980. "Situational Crime Prevention: Theory and Practice." *British Journal of Criminology* 20:136-147.
- Clarke, Ronald V. and Graeme R. Newman. 2006. *Outsmarting the Terrorists*. New York: Praeger.
- Clarke, Ronald V. and Graeme R. Newman. 2007. "Police and the Prevention of Terrorism" *Policing* 1(1): 9-20.
- Clarke, Ronald V. and Graeme R. Newman. 2007. "Situational Crime Prevention and the Control of Terrorism." *Understanding and Responding to the Terrorism Phenomenon* 285-297.
- Clarke, Ronald V. and Graeme R. Newman. 2009. "Reducing the Opportunities for Terrorism: Applying the Principle of Situational Crime Prevention." *Terrorism and Torture: An Interdisciplinary Perspective* 86-105
- Cohen, Lawrence and Marcus Felson. 1979. "Social Change and Crime Rate Trends: A Routine Activity Approach" *American Sociological Review* 44:588-608.
- Dahl, Erik J. 2011. "The Plots that Failed: Intelligence Lessons Learned From Unsuccessful Terrorist Attacks Against the United States." *Studies in Conflict and Terrorism* 34(8):621-648.
- Docobo, Jose. 2005. "Community Policing as the Primary Prevention Strategy for Homeland Security at the Local Law Enforcement Level." *Homeland Security Affairs* 1(1):1-12.
- Dugan, Laura, Gary LaFree, and Alex R. Piquero. 2005. "Testing a Rational Choice Model of Airline Hijackings." *Criminology* 43(4):1031-1065.
- Eitle, David. 2005. "The Influence of Mandatory Arrest Policies, Police Organizational Characteristics, and Situational Variables on the Probability of Arrest in Domestic Violence Cases." *Crime and Delinquency* 51(4):573-579.

- Eitle, David, Lisa Stolzenberg, and Stewart J. D'Alessio. 2005. "Police Organizational Factors, the Racial Composition of the Police, and the Probability of Arrest." *Justice Quarterly* 22(1): 30-57.
- Eitle, David, and Susanne Monahan. 2009. "Revisiting the Racial Threat Thesis: The Role of Police Organizational Characteristics in Predicting Race-Specific Drug Arrest Rates." *Justice Quarterly* 26(3):528-561.
- Freilich, Joshua D., Steven M. Chermak, and Joseph Simone Jr. 2009. "Surveying American State Police Agencies About Terrorism Threats, Terrorism Sources, and Terrorism Definitions." *Terrorism and Political Violence* 21:450-475.
- Forst, Brian. 2011. "Criminal Justice and Terrorism: A Research Agenda." Pp. 443-459 in *Criminologists on Terrorism and Homeland Security*, edited by B. Forst, J. R. Greene, and J. P. Lynch. Cambridge University Press.
- Friedmann, Robert R. and William J. Cannon. 2007. "Homeland Security and Community Policing: Competing or Complementing Public Safety Policies." *Journal of Homeland Security and Emergency Management* 4(4):1-20.
- Gordner, Gary. 1996. "Community Policing: Principles and Elements." *Office of Community Oriented Policing Services*. U.S. Department of Justice. (DOJ Grant No. #96-CK-WX-011).
- Gordon, David M. 1973. "Capitalism, Class, and Crime in America." *Crime and Delinquency* 19:163-186.
- Greene, Jack. 2000. "Community Policing." *Criminal Justice*, edited by J. Horney. Washington, D.C: National Institute of Justice.
- Greene, Jack R. 2011. "Community Policing and Terrorism: Problems and Prospects for Local Community Security." Pp. 208-244 in *Criminologists on Terrorism and Homeland Security. Vol. 1*, edited by B. Forst, J.R. Greene, and J. P. Lynch. Cambridge: Cambridge University Press.
- Gruenewald, Jeff, Kayla Allison, and Brent R. Klein. 2015. "Assessing the Attractiveness and Vulnerability of Eco-Terrorism Targets: A Situational Crime Prevention Approach." *Studies in Conflict and Terrorism*. Advance online publication: doi10.1080/1057610X.2015.1009798
- Kane, Robert J. 2005. "Compromised Police Legitimacy as a Predictor of Violent Crime in Structurally Disadvantaged Communities." *Criminology* 43(2):469-494.
- Kelling, George L. and William J. Bratton. 2006. "Policing Terrorism." *Civic Bulletin* 43(9):1-6.

- King, Gary and Langche Zeng. 2001. "Logistic Regression in Rare Events Data." *Political Analysis* 9:137-163.
- Klitz, Linda and James D. Ramsay. 2012. "Perceptual Framing of Homeland Security." *Homeland Security Affairs* 8(15):1-20.
- Krivo, Lauren J. and Ruth D. Peterson. 1996. "Extremely Disadvantaged Neighborhoods and Urban Crime." *Social Forces* 75(2):619-648.
- Krivo, Lauren J. and Ruth D. Peterson. 2000. "The Structural Context of Homicide: Accounting for Racial Differences in Process." *American Sociological Review* 65(4):547-559.
- LaFree, Gary and Bianca E. Bersani. 2014. "County-Level Correlates of Terrorist Attacks in the United States." *Criminology & Public Policy* 13(3):1-27.
- LaFree, Gary and Laura Dugan. 2004. "How Does Studying Terrorism Compare to Studying Crime?" *Sociology of Crime, Law, and Deviance* 5:53-74.
- LaFree, Gary and Joshua D. Freilich. 2012. "Editor's Introduction: Quantitative Approaches to the Study of Terrorism." *Journal of Quantitative Criminology* 28:1-5.
- LaFree, Gary and James Hendrickson. 2007. "Build a Criminal Justice Policy for Terrorism." *Criminology and Public Policy* 6(4):781-790.
- Land, Kenneth C., Patricia L. McCall, and Lawrence E. Cohen. 1990. "Structural Covariates of Homicide Rates: Are There Any Invariances Across Time and Social Space?" *American Journal of Sociology* 95(4):922-963.
- Leader, Stefan H. and Peter Probst. 2003. "The Earth Liberation Front and Environmental Terrorism." *Terrorism and Political Violence* 15(4):37-58.
- Lynch, Michael J., and Raymond J. Michalowski. 2000. *The New Primer in Radical Criminology: Critical Perspectives on Crime, Power, and Identity*. 3<sup>rd</sup> ed. Monsey, N.Y.: Criminal Justice Press.
- Mahan, Sue and Pamala L. Griset. 2008. *Terrorism in Perspective*. 2<sup>nd</sup> ed. Thousand Oaks, CA: Sage.
- Martin, Gus. 2014. *Essentials of Terrorism: Concepts and Controversies*. 3<sup>rd</sup> ed. Thousand Oaks, CA: Sage.
- McGarrell, Edmund F., Joshua D. Freilich and Steven Chermak. 2007. "Intelligence-Led Policing as a Framework for Responding to Terrorism." *Journal of Contemporary Criminal Justice* 23(2):142-158.

- Michel, Lou and Dan Herbeck. 2001. *American Terrorist: Timothy McVeigh and the Oklahoma City Bombing*. Diane Publishing Company.
- Murray, John. 2005. "Policing Terrorism: A Threat to Community Policing or Just a Shift in Priorities?" *Police Practice and Research* 6:347-361.
- Nemeth, Stephen C., Jacob A. Mauslein, and Craig Stapley. 2014. "The Primacy of the Local: Identify Terrorist Hot Spots Using Geographic Information Systems." *The Journal of Politics* 76(2):304-317.
- Ortiz, Christopher W., Nicole J. Hendricks, and Naomi F. Sugie. 2007. "Policing Terrorism: The Response of Local Police Agencies to Homeland Security Concerns." *Criminal Justice Studies: A Critical Journal of Crime, Law, and Society* 20(2):91-109.
- Osgood, D. Wayne. 2000. "Poisson-Based Regression Analysis of Aggregate Crime Rates." *Journal of Quantitative Criminology* 16(1):21-43.
- Osgood, D. Wayne, and Jeff M. Chambers. 2000. "Social Disorganization Outside the Metropolis: An Analysis of Rural Youth Violence." *Criminology* 38(1):81-116.
- Pare, Paul-Philippe, Richard B. Felson, and Marc Ouimet. 2007. "Community Variation in Crime Clearance: A Multilevel Analysis with Comments on Assessing Police Performance." *Journal of Quantitative Criminology* 23:243-258.
- Parkin, William S., Joshua D. Freilich, and Steven M. Chermak. 2014. "Ideological Victimization: Homicides Perpetrated by Far-Right Extremists." *Homicide Studies* 1-26.
- Paternoster, Raymond, Robert Brame, Paul Mazerolle, and Alex Piquero. 1998. "Using the Correct Statistical Test for the Equality of Regression Coefficients." *Criminology* 36(4):859-866.
- Pelfrey, William V. 2007. "Local Law Enforcement Terrorism Prevention Efforts: A State Level Case Study." *Journal of Criminal Justice* 35:313-321.
- Peterson, Marilyn. 2005. *Intelligence-Led Policing: The New Intelligence Architecture*. Washington, DC: U.S. Department of Justice, Bureau of Justice Assistance.
- Piazza, James A. 2009. "Is Islamist Terrorism More Dangerous?: An Empirical Study of Group Ideology, Organization, and Goal Structure." *Terrorism and Political Violence* 21(1):62-88.
- Post, Jerrold M., Ehud Sprinzak and Laurita M. Denny. 2003. "The Terrorists in Their Own Words: Interviews with 35 Incarcerated Middle Eastern Terrorists." *Terrorism and Political Violence* 15(1):171-184.
- Quinney, Richard. 1977. *Class, State, and Crime*. New York: Longman.

- Quinney, Richard. 1979. "The Production of Criminology." *Criminology* 16(4):445-457.
- Randol, Blake M. 2012. "The Organizational Correlates of Terrorism Response Preparedness in Local Police Departments." *Criminal Justice Policy Review* 23(3):304-326.
- Randol, Blake M. 2013. "An Exploratory Analysis of Terrorism Prevention and Response Preparedness Efforts in Municipal Police Departments in the United States: Which Agencies Participate in Terrorism Prevention and Why." *The Police Journal*. 86:158-181.
- Reiman, Jeffrey H. 1984. *The Rich Get Richer and the Poor Get Prison: Ideology, Class, and Criminal Justice*, 2<sup>nd</sup> edition. New York: John Wiley.
- Roberts, Aki. 2014. "Adjusting Rates of Homicide Clearance by Arrest for Investigation Difficulty: Modeling Incident-and Jurisdiction-Level Obstacles." *Homicide Studies* 1-28.
- Roberts, Aki, John M. Roberts Jr., and Raymond V. Liedka. 2012. "Elements of Terrorism Preparedness in Local Police Agencies, 2003-2007: Impact of Vulnerability, Organizational Characteristics, and Contagion in the Post-9/11 Era." *Crime and Delinquency* 58(5):720-747.
- Sampson, Robert J. 2013. "The Place of Context: A Theory and Strategy for Criminology's Hard Problems." *Criminology* 51(1):1-31.
- Sampson, Robert J. and W. Byron Groves. 1989. "Community Structure and Crime: Testing Social-Disorganization Theory." *American Journal of Sociology* 94:774-802.
- Sampson, Robert J., Stephen W. Raudenbush, and Felton Earls. 1997. "Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy." *Science* 227:918-924.
- Schafer, Joseph A., George W. Burruss, Jr., and Matthew J. Giblin. 2009. "Measuring Homeland Security Innovation in Small Municipal Agencies: Policing in a Post 9/11 World." *Police Quarterly* 12(3):263-288.
- Shaw, Clifford R. and Henry D. McKay. 1942. *Juvenile Delinquency and Urban Areas*. Chicago: University of Chicago Press.
- Smith, Brent L. 1994. *Terrorism in America: Pipe Bombs and Pipe Dreams*. Albany: State University of New York Press.
- Smith, Brent L. 2001. "Measuring Terrorism Through Court Records: Combining the Smith 1980s data with the 1990s American Terrorism Study to create a National Terrorism Database." Invited presentation to MIPT and NIJ representatives; Washington, D.C., January 22.

- Smith, Brent L. and Kelly Damphousse. 2000. "The National Terrorism Database: An Extension of the American Terrorism Study." Invited presentation to MIPT and NIJ regarding database collaboration, Oklahoma City, OK, December 5, 2000.
- Smith, Brent L. and Kelly R. Damphousse. 2002. *American Terrorism Study Patterns of Behavior, Investigation, and Prosecution of American Terrorists, Final Report*. Available online: <http://www.ncjrs.gov/pdffiles1/nij/grants/193420.pdf>.
- Smith, Brent L., Kelly R. Damphousse, and Paxton Roberts. 2006. "Pre-Incident Indicators of Terrorist Incidents: The Identification of Behavioral, Geographic, and Temporal Patterns of Preparatory Conduct." Final Report for NIJ Award #2003-DT-CX-0003. National Institute of Justice, Washington, DC. March 2006.
- Sutherland, Edwin H. and Donald R. Cressey. 1978. *Criminology*. Philadelphia, Pa.: J.B. Lippincott Company.
- Tao, Hung-Lin. 2005. "The Distribution of Regional Property Crime and Police Deployment-The Price of Equality." *The Annals of Regional Science* 39:167-183.
- Thatcher, David. 2005. "The Local Role in Homeland Security." *Law and Society Review* 39(3):635-676.
- Trujillo, Horacio R. 2005. "The Radical Environmentalist Movement." Chapter 6 in *Aptitude for Destruction: Case Studies of Organizational Learning in Five Terrorist Groups*, vol. 2. Edited by B. A. Jackson, J. C. Baker, K. Cragin, J. Parachini, H. R. Trujillo, and P. Chalk. Prepared for the NIJ Award #2003-IJ-CX-1022. RAND Corporation.
- Wilson, William Julius. 1987. *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*. The University of Chicago Press.

**Table 1. Review of Empirical Literature Demonstrating the Scarcity of Terrorism Prevention Studies**

	<b>Author (Year)</b>	<b>Data Source</b>	<b>Level of Analysis</b>	<b>Policing Measures</b>	<b>Terrorism Outcome</b>	<b>Key Related Findings</b>
1	Pelfrey Jr. (2007)	South Carolina Law Enforcement Census (Survey)	All agencies, State level	Agency Size, Funding, Training	Terrorism Preparedness	The number of sworn officers (substantively, a function of funding) is positively related to terrorism <i>preparedness</i> . Funding is the most important predictor of <i>preparedness</i> .
2	Schafer, Burruss, Jr., and Giblin (2009)	Illinois Homeland Security Survey (IHSS) 2007	Small municipal police agencies	Agency Size	Perception of terrorism risk, Terrorism Preparedness	Smaller police agencies are less likely to engage in terrorism preparedness due to insufficient resources and less perceived risk of terrorism.
3	Randol (2012)	BJS 2003 LEMAS 2003	Agency level, Region	Organization Size, Budget per Capita, Police per capita	Terrorism Preparedness Index	Bigger police agencies with larger budgets per capita are engaged in terrorism preparedness efforts. Although, Urbanicity and Police per Capita were not related to terrorism response preparedness
4	Roberts, Roberts Jr., and Liedka (2012)	LEMAS (2003, 2007)	Agencies serving >100000 persons	Agency Size, Resources,	Terrorism Preparedness	Larger agencies are more likely to implement preparedness measures (special unit, terrorism personnel, etc...). Resources are not associated with preparedness.
5	Randol (2013)	LEMAS (2003) UCR (2003)	Agency level	Budget per Capita, Violent and Property Crime Rates	Terrorism prevention personnel CBRNE equipment, Response planning	Agencies with a large budget per capita as well as a high violent crime rate employ terrorism prevention personnel. Local Police Agencies are less likely to make progress/engage in terrorism prevention than terrorism response preparedness.
6	Carter, Chermak, Carter, and Drew (2014)	Survey of SLT intelligence personnel	Individual responses, aggregated to agency level	Information sharing, role in agency, perception of working relationships	Terrorism preparedness, threat perceptions from groups/incident type	Agencies with satisfactory working relationships with state/federal organizations and produce threat/risk assessments are more likely to be prepared. Fusion centers, FBI JTTFs, and DHS are useful for preparedness.

Key takeaways: (1) that very few empirical studies exist that look at the police-terrorism link;  
(2) Research has only begun to examine the link between policing and terrorism;  
(3) Most that do focus on terrorism preparedness rather than on terrorism incident likelihood; and,  
(4) There is little consensus on what features of policing should impact terrorism outcomes

**Table 2. Operationalization of Key Variables**

Variables	Data Source	Variable Type	Operationalization
<i>Dependent Variables:</i>			
Terrorism Incident Occurrence	ATS	Dichotomous	Whether a county was attacked or not measured for (a) all terrorism (b) disaggregated by ideology
Total Incident Counts	ATS	Continuous	Total number of terrorism incidents experienced by a county for (a) all terrorism (b) disaggregated by ideology
<i>Policing Variables:</i>			
Police per capita	LEOKA	Continuous	Sworn officers per 1000 persons in a county.
Civilian staff per capita	LEOKA	Continuous	Civilian employees per 1000 persons in a county.
Crime clearance rate	UCR Offenses Known and Cleared	Continuous	Total offenses cleared per 1000 crimes reported.
Violent crime clearance rate	UCR Offenses Known and Cleared	Continuous	Total number of violent offenses cleared per 1000 violent crimes reported.
Crimes per officer	LEOKA/UCR Offenses Known and Cleared	Continuous	Total number of crimes reported per sworn officer in a county
Violent crimes per officer	LEOKA/UCR Offenses Known and Cleared	Continuous	Total number of violent crimes reported per sworn officer in a county
<i>Control Variables:</i>			
Total Population (ln)	U.S. Census	Continuous	Natural log of the total population of the county
Urbanicity	U.S. Census	Continuous	Proportion of a county's population that reside in an urban area.
West	U.S. Census	Dichotomous	Control for West region of country
Concentrated Disadvantage	U.S. Census	Index	Principal Component Factor Analysis index comprised of poverty, low education, unemployment, and female-headed households
Poverty	U.S. Census	Continuous	Percentage of persons in a county below the poverty line.
Unemployment	U.S. Census	Continuous	Percentage of the civilian labor force that is unemployed in a county.
Female headship	U.S. Census	Continuous	Percentage of households that are headed by a female without a husband/father present
Poor education	U.S. Census	Continuous	Percentage of individuals with less than a high school diploma
Percent black	U.S. Census	Continuous	Percentage of the county that is Black
Percent Hispanic	U.S. Census	Continuous	Percentage of the county that is Hispanic
Percent foreign born	U.S. Census	Continuous	Percent of individuals born outside the United States

**Table 3. Descriptive Statistics For United States County Years, 2000 and 2010 (N=6264)**

Variables	Mean	Standard Deviation
<i>Dependent Variables:</i>		
Total incidents	0.036	0.386
Total environmental incidents	0.020	0.267
Total far-right incidents	0.008	0.184
Total Islamic incidents	0.006	0.126
Total single issue incidents	0.001	0.031
Total unknown incidents	0.001	0.025
Total far-left incidents	0.000	0.013
Incident occurrence (dummy)	0.018	0.131
Environmental occurrence	0.010	0.101
Far-right occurrence	0.004	0.067
Islamic extremism occurrence	0.003	0.058
Single issue occurrence	0.001	0.031
Unknown occurrence	0.001	0.025
Far-left occurrence	0.000	0.013
<i>Policing Variables:</i>		
Police per capita	2.02	2.26
Civilian staff per capita	0.969	1.30
Crime clearance rate	287.15	173.12
Violent crime clearance rate	523.17	277.64
Crimes per officer	16.85	12.61
Violent crimes per officer	5.43	4.96
Total male officers	203.87	927.89
Total male civilian staff	37.59	179.67
Total female officers	26.13	171.73
Total female civilian staff	60.21	299.62
Total officers	230.00	1094.02
Total civilian staff	97.80	474.64
Total crimes cleared	1124.84	3831.60
Total known offenses	4249.11	15830.60
Total violent crimes cleared	654.93	2365.64
Total violent crimes known	1298.62	4862.95
<i>Control Variables:</i>		
Poverty	14.84	6.50
Unemployment	3.90	1.77
Female headship	9.15	3.34
Poor education	19.77	8.56
Total population (ln)	10.25	1.43
Urbanicity	40.38	31.24
Percent black	8.83	14.55
Percent Hispanic	7.01	12.48
Percent foreign born	4.27	5.51
West (region dummy)	0.130	0.337

**Table 4. Correlation Matrix of Key Variables N=6264**

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) Incident occurrence	-													
(2) Far-right occurrence	.501***	-												
(3) Environ. occurrence	.760***	.112***	-											
(4) Islamic occurrence	.434***	.120***	.049***	-										
(5) Police per capita	.048***	.027*	.017	.081***	-									
(6) Total clear rate	-.017	.006	-.008	-.024†	.035**	-								
(7) Crimes per officer	.066***	.055***	.057***	.004	-.126***	.120***	-							
(8) Concentr. Disadvan.	-.011	.019	-.036**	.027*	.049***	-.056***	.113***	-						
(9) Total pop. (ln)	.210***	.118***	.139***	.147***	.000	-.017	.384***	.062***	-					
(10) Urban	.165***	.090***	.112***	.105***	.105***	.010	.305***	.042**	.754***	-				
(11) Percent black	.011	.021†	-.027*	.052***	.127***	-.028*	.052***	.594***	.136***	.096***	-			
(12) Percent Hispanic	.060***	.052***	.031*	.052***	.073***	.091***	.067***	.200***	.090***	.252***	-.104***	-		
(13) Percent foreign born	.188***	.098***	.108***	.189***	.095***	.056***	.097***	.072***	.408***	.456***	-.017	.651***	-	
(14) West (dummy)	.118***	.052***	.140***	-.006	.047***	.057***	.017	-.048***	-.015	.079***	-.202***	.253***	.240***	-

† p<.10, \* p<.05, \*\* p<.01, \*\*\* p<.001

**Table 5. Penalized Maximum-Likelihood Logistic Regression of Overall Incident Occurrence On Policing Predictors and Other Key Controls N=6264**

	Model 1	Model 2	Model 3	Model 4
<i>Policing variables:</i>				
Police per capita	.068*** (.019)	- -	- -	.082*** (.018)
Total clearance rate	- -	-.001 (.001)	- -	-.001 (.001)
Crimes per officer	- -	- -	.015 .009	.020** (.008)
<i>Control variables:</i>				
Concentrated disadv.	-.080 (.117)	-.073 (.117)	-.100 (.120)	-.145 (.122)
Total population (ln)	.779*** (.133)	.762*** (.134)	.736*** (.135)	.725*** (.135)
Urbanicity	.007 (.007)	.008 (.007)	.008 (.007)	.007 (.007)
Percent black	.007 (.012)	.009 (.012)	.011 (.012)	.010 (.012)
Percent Hispanic	-.026† (.014)	-.026† (.014)	-.026† (.014)	-.023 (.014)
Percent foreign born	.026 (.019)	.026 (.019)	.031 (.020)	.028 (.020)
West (dummy)	1.68*** (.259)	1.66*** (.258)	1.59*** (.263)	1.60*** (.261)

† p<.10, \* p<.05, \*\* p<.01, \*\*\* p<.001

**Table 6. Penalized Maximum-Likelihood Logistic Regression of Ideology-Specific Incident Occurrence On Policing Predictors and Other Key Controls N=6264**

	Model 1	Model 2	Model 3
	Far-Right	Environm.	Islamic
<i>Policing variables:</i>			
Police per capita	.099*** (.026)	.082*** (.021)	.154*** (.042)
Total clearance rate	.000 (.002)	-.001 (.001)	.001 (.003)
Crimes per officer	.034*** (.007)	.022** (.008)	.049** (.015)
<i>Control variables:</i>			
Concentrated disadv.	.047 (.225)	-.313† (.166)	.148 (.263)
Total population (ln)	.804** (.247)	.719*** (.172)	1.19** (.388)
Urbanicity	.009 (.014)	.006 (.009)	.028 (.033)
Percent black	.019 (.021)	-.019 (.023)	.013 (.026)
Percent Hispanic	.012 (.020)	-.032 (.020)	-.061 (.039)
Percent foreign born	-.015 (.035)	.005 (.028)	.110** (.040)
West (dummy)	1.13* (.481)	2.18*** (.330)	-1.12 (.808)

Note: Z-tests for coefficient differences indicate that none of the policing variables differ in statistically significant ways across ideologies at standard significance levels ( $p < .05$ )

†  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

**Table 7. Penalized Maximum-Likelihood Logistic Regression of Overall Incident Occurrence On Detailed Policing Predictors and Other Key Controls N=6264**

	Model 1	Model 2	Model 3
<i>Policing variables:</i>			
Police per capita	-	.079***	.069**
	-	(.018)	(.020)
L.E. staff per capita	.166***	-	-
	(.046)	-	-
Total clearance rate	-.000	-	-.000
	(.001)	-	(.001)
Violent clearance rate	-	.001	-
	-	(.001)	-
Crimes per officer	.019*	.019*	-
	(.008)	(.008)	-
Violent crimes per officer	-	-	-.008
	-	-	(.032)

Note: All models include a full set of controls as listed in the previous tables (not shown for sake of clarity)

† p<.10, \* p<.05, \*\* p<.01, \*\*\* p<.001

**Table 8. Negative Binomial Regression of Incident Counts On Policing Predictors and Other Key Controls**

	Model 1	Model 2
	All Counties	Incident Counties
<i>Policing variables:</i>		
Police per capita	.089* (.037)	.043* (.022)
Total clearance rate	-.000 (.001)	.000 (.001)
Crimes per officer	.021* (.009)	.014* (.007)
<i>Control variables:</i>		
Concentrated disadv.	-.322** (.124)	-.141 (.091)
Total population (ln)	-.112 (.151)	-.740*** (.110)
Urbanicity	.010 (.008)	-.003 (.006)
Percent black	.027* (.011)	.020* (.008)
Percent Hispanic	-.010 (.015)	-.005 (.011)
Percent foreign born	.015 (.023)	-.005 (.015)
West (dummy)	1.97*** (.289)	.235 (.199)
N	6264	110

† p<.10, \* p<.05, \*\* p<.01, \*\*\* p<.001

---

<sup>i</sup> “All-terrorism” includes the three largest ideological movements (far right, Islamic extremist, and environmental), as well as all far-left, single-issue, and attacks where ideological motive was not completely identified (unknown). However, in the time frame designated in this study, attacks falling within these latter three categories accounted for 6 or fewer attacks each (N=11) and, therefore, the sample size would have been inadequate to statistically examine these movements individually.

<sup>ii</sup> LaFree and Bersani (2014) found that over 92% of counties experienced 0 terrorist attacks from 1990 through 2011, and most of the remaining experienced only 1 attack.