Policy in Action Piece

Hardening Soft Targets

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Terrorism was once a scattered, intermittent concern for the global community. It is now an everyday security problem that primarily affects large urban centers that have not been secured. Proper risk assessment, intelligence collection, public awareness, organizational collaboration, and improvements in technology are key areas and points that need to be emphasized in terrorism prevention. When it comes to implementing effective counterterrorism practices, places such as New York City have made strides. The city’s ability to prevent attacks can be contributed to their extensive use of surveillance systems, as well as their robust information-sharing and collaborative abilities. This paper assesses the major findings in counterterrorism literature and in practice, providing examples of advances that New York City has utilized in order to keep people safe from terrorist attacks.

Policy Problem and Historical Context

Terrorist attacks and their effects on people throughout the world have been a protracted concern for the past twenty years. Although the methods in which these types of attacks have varied, a vast majority of them have occurred in places that can be defined as soft targets (French, 2015). Soft targets are locations that are accessible to large numbers of people and that have limited security or protection methods in case of an emergency. In order to effectively keep soft targets as safe as possible from attacks, there must be a systematic aggregation of preparedness and prevention in place. Key points in soft target hardening and terrorism prevention include a proper assessment of risk, the collection of intelligence, public awareness, organizational collaboration, and improvements in technology. This paper will explore various practices that research has shown to be effective in reducing incident risk while highlighting successes in New York City, a location that continues to keep counterterrorism and soft target hardening at the forefront of their public safety concerns. In addition to this analysis, the following paper will recommend improvements that can be made to bolster practices and procedures in developing better public safety standards and outcomes.

Terrorism and Soft Targets

There is no universally accepted definition for terrorism, but it is generally defined as: attacks that inflict a sense of fear to further a cause or political effort (“Terrorism - Our World in Data,” 2018). The Global Terrorism Database lists terrorism as, “the threatened or actual use of illegal force and violence by a non-state actor to attain a political, economic, religious, or social goal through fear, coercion, or intimidation” (“Terrorism - Our World in Data,” 2018). This is the definition that will be used in this paper because of the amount of examples referenced from the Global Terrorism Database. The prevalence of attacks has
increased around the globe both in number and
diversity over recent decades. Between 1969 and
2009, there were 38,345 instances of terrorism
around the world (Muhlhausen & McNeill,
2011), while in 2016 alone there were 13,488
terrorist attacks (“Terrorism - Our World in
Data,” 2018). These numbers reinforce the idea
that it is a necessity for countries, governments,
even and local cities to take action to deter these
attacks in any way possible.

As early as 1968, the Popular Front for
the Liberation of Palestine held Israeli
passengers on board Israeli El Al Flight 426 to
coerce the release of Arab prisoners
(“Terrorism - Our World in Data,” 2018). Other
elements of the use of terrorism with air
can be seen in the form of hijackings,
such as the September 11th, 2001 attacks, as well
as the utilization of improvised explosive
devices on airlines, like that of the attempted
shoe bomber attack in December 2001 (“The
Ongoing Battle against Innovative Suicide
Bombers,” 2016). In the wake of these attacks,
security standards were heightened and the
locations were forced to harden because of their
clearly exposed vulnerabilities (Stewart, 2016). A
major concern regarding the location of attack
targets is their occurrence in low security areas
with a greater potential to harm more people.

Air travel had initially been a frequent area of
concentration for terror attacks. Attackers
targeting softer targets, or locations where the
security is weaker, illustrates a systemic shift in
attack methodology. The difficulty in adapting
to this methodological change is that they
require a shift in resources. Many times, the
money is not considered and there are not
enough resources to staff the security needs or
fund the protective practices that are vital to the
efforts of keeping vulnerable areas safe all over
the world.

These shifting trends in attack
methodology must be recognized before
addressing other research on the topic of soft
targets. As mentioned above, there have been
consistent indications of the evolution of
terrorist attacks, from airplane hijackings to the
use of improvised explosive devices. Even with
an improvement in the capabilities of the
technology that prevents these attacks, terrorists
simultaneously find ways to evade such efforts.

A concern is the growing tendency of
improvisation in terror attacks, which has made
access to destruction easier. Rather than seeing
complicated and coordinated attacks, attackers
are using vehicles, random explosives, and
firearms in places where they can achieve large
amounts of damage in small amounts of time
(Hesterman, 2014). One example of this is the
increased use of improvised explosive devices,
or IEDs. These devices are easy to assemble
and can cause large amounts of damage when
detonated. In 2015, suicide bombings utilizing
IEDs occurred in over 10% of member states
within the United Nations, which is more than
had ever been recorded (UNODA, n.d.). While
the locations of the attacks have varied, the
targets have maintained a focus on their present
vulnerabilities. It is worth noting that both
attack methodology and use of IEDs have
resulted in an increase in attacks’ lethality
(Gatekeeper Intelligent Security, 2018). Since
terrorism’s goal is to induce fear through the
use of physical and sometimes deadly force,
these trends are highly relevant to the
prevention of attacks and further damage.

Research

Assessing Risks and Coordinating Plans

Although there is a plethora of locations
that can be classified as soft targets, not all need
be the focus of intense hardening. Terrorist
organizations choose targets that not only have
a large amount of people, but also ones that
have high symbolic value. One example of this
is from March 2004, when al-Qaeda claimed
responsibility for the bombing of four Madrid
commuter trains which resulted in 191 deaths
and more than 1,800 injuries (Counter
Extremism Project, n.d.). Another example
would be the specific targeting of Chelsea, an
affluent community in New York City that was
subjected to a bomb explosion in September
2016. Al-Qaeda used an online propaganda
journal to prompt its followers to not only
attack crowded public areas, but also to target
wealthy ones (“Inspire Guide,” 2016). In the
journal, the terror group had identified Manhattan as the “administrative and economic center of New York” (“Inspire Guide,” 2016). It went on to outline how the inhabitants of the Chelsea neighborhood were notably from the upper class, and therefore an attack there would be more likely to harm someone of importance (“Inspire Guide,” 2016). These locations were intentionally attacked based on the relevance they have to the citizens that use them, in respect to the train bombings, and those that reside there, in respect to the Chelsea bombings.

More standardized risk assessments are needed to improve the identification of potential targets as well as prepare the stakeholders that might be involved in a response (Waugh, 2018). A study that was conducted following an attack on the Westgate Mall in Nairobi, Kenya demonstrated an example of when a proper risk assessment would have been beneficial, because the location can be related to many shopping malls around the world (Barrett, 2014). Barrett explains how a risk assessment is necessary to create an effective security plan, and how a planning team comprised of risk managers and professional security personnel should create this security plan (2014). This planning team must ensure that the necessary personnel are trained, evaluate the current physical security facility, conduct threat assessments, implement security plans, and make sure that plans are being implemented and are effective (Barrett, 2014). Finally, Barrett insisted, the plan must align with a developed threat assessment. Although some organizations may not have the means to properly conduct such well-developed assessments, local law enforcements and governments are often willing to share and assist the organizations (Barrett, 2014).

Stepping back from risk assessments, simple coordination and information sharing are both essential in hardening of soft targets. A 2011 study by Uddin and Hossain looked at the network relationship between emergency agencies and shopping malls in regards to their preparedness to coordinate during an emergency. It found that connectedness and the strength of soft target organizations like shopping malls directly correlated with an increase in the frequency of information sharing, as well as an increase in the degree of rehearsal between these organizations and emergency agencies. Furthermore, improvements in the training of security staff and emergency responders is one of the most important actions that a soft target organization can take to bolster their counter-terrorism preparations (Uddin & Hossain, 2011).

**Surveillance**

Surveillance is not only a method that is employed to protect people from imminent danger but is also used post-attack to research and evaluate what happened and, what can be improved upon. Research suggests that with the advancement of technology, the use of artificial intelligence (AI) is a growing area of consideration in regard to surveillance. Since not every municipality and local government has the assets or resources to frequently use active surveillance, increased use of artificial intelligence systems may prove to be just as effective. With implementation, agencies are able to focus their efforts on more areas of concern while using intelligent systems as a supplement to law enforcement and public safety (La Vigne et al., 2011). These AI systems have capabilities to take in more information in more places while seeing more than an employee or officer can, and then analyze the information to alert the necessary officials (Slessor, 2018). One concern surrounding the use of AI is the cost of implementation and setup; however, research shows that they can prove to be cost-effective over time. The New York Police Department’s, NYPD’s, Domain Awareness System, DAS, is an example of cost-effectiveness. From its use, it has saved the NYPD and estimated $50 million per year (Levine et al., 2017). Systems like the DAS can also be useful for other security purposes for major sporting events such as the World Cup or the Summer Olympics.
Community Engagement
Conducting various methods of prevention is critical because, as illustrated before, terrorism is a complex and prevalent issue. Crime prevention through environmental design, or CPTED, is one possible method of terrorism prevention. CPTED is a method that focuses on the reduction of conditions that can make an area vulnerable. Some of the most common features of CPTED involve the presence of sufficient lighting, physical structures such as fences or barriers, and camera usage. One study found that CPTED encourages and strengthens territoriality and natural surveillance within communities. The study also related its findings to the demographic diversity of the neighborhoods in question (Reynald, 2011). The study looked into residents’ willingness, and more so, ability to naturally survey their community for crime related or abnormal occurrences, while also looking at the likelihood of said residents to intervene if the opportunity arose. The study found that residents of low crime communities were more willing to actively supervise their neighborhoods and also intervene directly in suspicious activity, while the inverse was found to be true for high crime communities (Reynald, 2011).

In another study, the United States Department of Homeland Security made complementary findings pertaining to public awareness of suspicious activity. In this study, many people reported that they would be more likely to report suspicious activity if it were closer to home, mainly because of their ability to differentiate between normal and abnormal activity within their own communities (U.S. DHS, 2012). The study goes on to explain how the public’s awareness of suspicious activity is a critical asset in community safety. There should be campaigns and efforts being consistently made to improve ease of reporting from the public, while also educating community members on what suspicious activity entails (U.S. DHS, 2012).

Funding
When examining the assortment of research that relates to counterterrorism practices, paying for these advancements in methods is also a very important topic of research, such as surveillance and data collection. Some of the research discussed in prior sections suggested the need for extensive funding, which is not feasible everywhere. One study addressing funding limitations looks into Greece’s expenditures on technology, infrastructure, and capital equipment as a policy option for counterterrorism. It found that greater spending improves the capacity for security forces to fight against terrorism, and was an overall effective measure for reducing the prevalence of terrorism (Kollias, Messis, Mylonidis, & Paleologou, 2009). The study also discusses how non-cost options such as legislation are also effective when utilized in conjunction with the spending on counterterrorism improvements (Kollias et al., 2009). These findings are extremely relevant when it comes to considering the outcomes of organizations or countries looking to invest in better technology as a method to prevent or lessen the presence of terrorism.

Intelligence
Intelligence plays a large role in the process of soft target hardening. While the motives behind each attack may vary, terror attacks all share the characteristic of aiming to kill and to send a message (“Terrorism – Our World in Data,” 2018). When attempting to prevent attacks from happening, it behooves organizations to maintain relevant intelligence on threatening terror groups in order to direct their various preventive measures meaningfully. One article, with data from the National Memorial Institute for the Prevention of Terrorism’s, MIPT, Terrorism Knowledge Base, examined the factors that make a terrorist organization more or less likely to attack (Asal et al., 2009). By looking at some of the motivations of multiple terrorist organizations, the study analyzed terrorist events that had occurred to see which groups have the propensity to attack. Based on their findings, a key determinant of an organization’s likelihood to attack is in the presence of a religious ideology, as well as those that combined...
religious and ethno-nationalistic ideologies, which points to the idea of religion as a key determinant. In addition, larger groups that have widespread influence and stronger networks were found to be more capable and likely to repeatedly attack a soft target (Asal et al., 2009). This is important when planning for what surveillance measures might need to be taken in order to protect people from organizations that have made it clear that they are threats to the safety of others.

Practice

**Surveillance**

There are many different organizations actively utilizing different technologies in their surveillance methods. The NYPD is one of the largest police forces in the United States, with approximately 36,000 officers (“New York Police Department,” 2018), and their use of technology in surveillance is significant. Many think of the use of surveillance cameras, otherwise known as closed-circuit television cameras, CCTVs, as one of the main pieces of technology used to accomplish surveillance. The NYPD incorporates approximately 9,000 CCTVs that are owned and operated by a mix of public and private sector entities. By integrating a subset of these cameras, gunshot spotting technology, license plate readers, and other logic-based rule sets within the NYPD, the police department developed a system that analyzes a constant influx of data. This is done by taking observations in the community with the use of sensors, informational databases, security or police software, and infrastructure, and using it to deliver tailored information to the police department. This system was originally designed for counterterrorism, but due to its effectiveness, was able to be used for every police precinct in the city for both counterterrorism and more typical law enforcement purposes (Levine et al., 2017). This system presents an extremely comprehensive way to gather situational data and share it with enough value to affect decisions the police department makes every day.

Other technological advances have been made to thwart terror plots that are not as mechanical as some of the other resources the NYPD deployed. The NYPD integrated the use of an advanced K9 unit into their Counterterrorism Bureau (Parascandola, 2018). The dogs serving in this unit go through an extensive training program to detect and pursue potential explosive threats in public spaces. They are known as Vapor Wake Dogs and can pinpoint explosive material on a moving target in a crowded place (Dunn, 2018). This addition supplements other surveillance practices and has become a great asset to active law enforcement.

**Coordination Planning**

As seen from the research related to coordination and information sharing, coordination planning is notably one of the highest recommended methods to prevent terrorism on all levels of government. The NYPD currently uses a program called SHIELD. This initiative seeks to improve relations between the police department and others as a public-private partnership with a continuation of information sharing (NYPD, 2018b). SHIELD partners with security managers from the private sector with a strong understanding of industry specific safety and security measures. As a result, the collaboration between these entities allows for a greater dissemination of responsibility and proper information sharing.

Counterterrorism is critical to law enforcement and public safety, and thus the federal government has made efforts to assist and better coordinate a response for local and state agencies. The Department of Homeland Security is actively organizing and compiling best practices and standards to be used for state, local, tribal, and territorial governments. Additionally, collaboration and partnership building is continually recommended for use between private and public organizations. These practices, in conjunction with a major push regarding the unity of effort, are changing the way that governments plan to handle issues and
protect crowds and soft targets (U.S. DHS, 2018).

Community Engagement
The Department of Homeland Security is an organization that, amongst many other things, strives to enhance citizen and community preparedness (U.S. DHS, 2018). The role that citizens play in assisting the detection and prevention of terrorist attacks is extremely important. Through the increased focus on integrating the public into the counterterrorism process in any way possible, programs such as “If You See Something Say Something®,” have been utilized by the Department of Homeland Security to bridge the gap between civilians and law enforcement agencies (2014). The programs, therefore, build upon individuals’ capacities to report suspicious activity (“If you see something say something”, 2014). This program in particular was originally started in New York but has been adopted by other organizations as well. The United States Coast Guard has a public outreach program called “America’s Waterway Watch,” that looks to accomplish the same goal by urging people that notice any suspicious activity to report it to the proper authorities (2017). The Coast Guard makes it clear on their website who to contact and how to do so. This is another partnership that was set up through the Department of Homeland Security to improve coordination and boost public involvement in the surveillance and reporting process.

Analysis
According to the Department of Homeland Security, there are several areas that need further research. These areas include the lack of a standing coordinating body of knowledge; the lack of a unified picture of the department’s programs; the lack of affordability and scalability for soft target security; and the challenge of maintaining vigilance during the shift to new normal (U.S. DHS, 2018). Though the presence of these challenges allow for greater vulnerabilities, the comparisons between research and practice prove that there are ways in which these gaps can be closed.
highly controversial act of agencies profiling and surveying specific groups of individuals of religious similarity (Joseph & Edelman, 2016). Profiling stigmatizes people rather than behaviors, which can be inadvisable. Following the September 11th attacks in 2001, there was an enormous focus on the Muslim and Arabic communities within the United States. Profiling based on social connections and behavioral cues in conjunction with racial descriptions is considered acceptable and a more reliable form of surveillance (Smith & Mason, 2016). It becomes an issue when law enforcement officers focus solely on racial descriptions without considering the other two criteria. This is why there must be a greater emphasis on the education of community members on the behaviors to be aware of, while also using law enforcement combined with surveillance technologies to strengthen outcomes. This shift in emphasis towards a whole community and outreach approach in emergency management practices will continue to prove beneficial in the hardening of soft targets.

Terrorist attacks come at a price that is more than just a monetary cost. The price of terrorism is also paid with the fear of future attacks and with human life, which makes investing in counterterrorism a necessity. Although systems such as DAS have proven to be expensive, their implications make these investments exponentially worthwhile. Given that New York City alone was able to save $5 million per year with the use of DAS (Levine, Tisch, Tasso, & Joy, 2017) shows how investments in improved technology can pay for themselves in the long term. In addition to that, a study that was conducted by Kollias et al. further elaborated on spending as a valuable method to reducing the number of terrorist attacks (2009). Between these two studies, it is apparent that effective investment in counterterrorism should never be considered wasted funding.

Conclusion
The threat of terror is ever-present in our world, and it has not gone unnoticed. Countries everywhere have shown advances in ensuring their citizens are safe in as many ways as they can. Every attack that has ever occurred has caused suffering in the world, but by learning from them, we improve the fight against future treachery. There is a continued need for research to better understand our present threats, as well as a need to determine the best methods of implementation so safety responses can be personalized and applied to the communities, organizations, and individuals that need it.

References
Gatekeeper Intelligent Security. (2018, April 6). 3 Trends in Global Terrorism That We Must
Address. Retrieved October 9, 2018, from https://www.gatekeepersecurity.com/blog/3-trends-global-terrorism-must-address/


