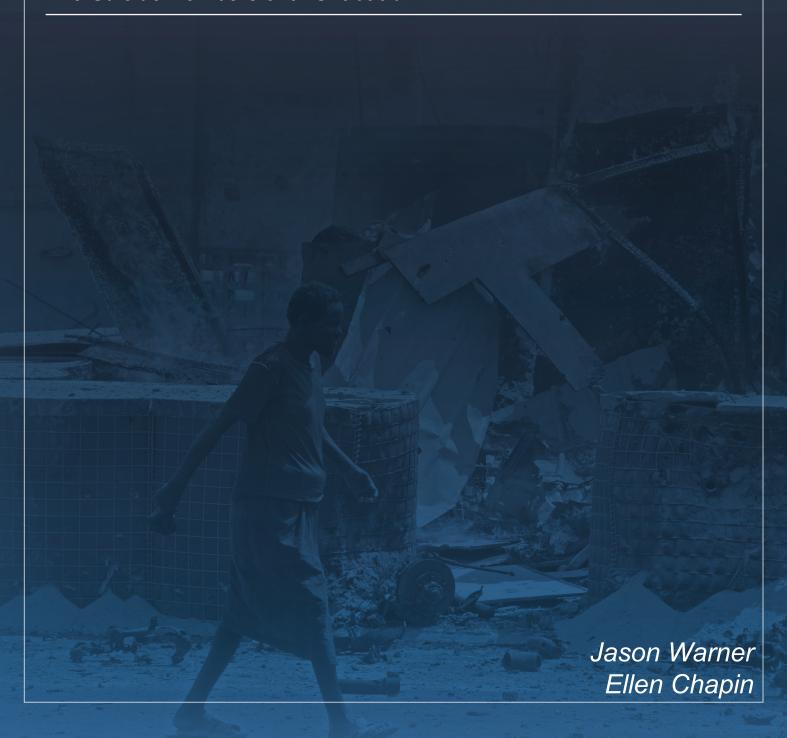


# Targeted Terror:

The Suicide Bombers of al-Shabaab



# Targeted Terror: The Suicide Bombers of al-Shabaab

Jason Warner Ellen Chapin

Combating Terrorism Center at West Point

United States Military Academy



www.ctc.usma.edu

The views expressed in this report are the authors' and do not necessarily reflect those of the Combating Terrorism Center, United States Military Academy, Department of Defense, or U.S. Government.

February 2018

Cover Photo: A man walks past the scene of a suicide attack in Mogadishu, Somalia, on July 31, 2016. The attack was claimed by al-Qa`ida-linked al-Shabaab militants fighting to overthrow Somalia's internationally backed government. (Mohamed Abdiwahab/AFP/Getty Images)

#### COMBATING TERRORISM CENTER

Director

LTC Bryan Price, PhD

Deputy Director

Brian Dodwell

Research Director

Dr. Daniel Milton

Distinguished Chair

LTG (Ret) Dell Dailey

Class of 1987 Senior Fellow

Amb. Michael Sheehan

George H. Gllmore Senior Fellow

Prof. Bruce Hoffman

Senior Fellow

Michael Morell

Senior Fellow

Chief Joseph Pfeifer, FDNY

Class of 1971 Senior Fellow

The Honorable Juan Zarate

#### CONTACT

**Combating Terrorism Center** 

U.S. Military Academy

607 Cullum Road, Lincoln Hall

West Point, NY 10996

Phone: (845) 938-8495

Web: www.ctc.usma.edu

The views expressed in this report are

those of the authors and not of the United

States Military Academy, the Department

of the Army, or any other agency of the

U.S. Government.

#### **ACKNOWLEDGMENTS**

This report has been possible thanks to the support of various individuals and institutions to whom we are indebted.

We are profoundly thankful to Caleb Weiss, without whom this report would not be possible. In his role as the first architect of the al-Shabaab suicide bomber database and his sharp insights into Somali politics, his assistance was instrumental to the project's success. We are also grateful for David Freifeld in his role as our ever-insightful (and patient) expert in data visualization. External reviews from Rashid Abdi (International Crisis Group), Tricia Bacon (American University), and Paul Williams (George Washington University) were additionally crucial in strengthening our arguments, our writing, and our analysis. Discussions with colleagues from within various offices of the U.S. government, the United Nations, the media, and academia have been likewise important. Among others, we thank Mia Bloom, Ryan Cummings, Hilary Matfess, and Robyn Kriel for insights from their scholarship, reporting, lectures, and Twitter feeds.

We are each thankful to our host institutions, the United States Military Academy at West Point and the Combating Terrorism Center (Warner) and Yale University's Jackson Institute (Chapin), for the various genres of support offered to this project. At West Point, we are grateful for CTC Director LTC Bryan Price's ever-enthusiastic leadership, in addition to helpful discussions on this topic with Amira Jadoon, Assaf Moghadam, Daniel Milton, Muhammad al-`Ubaydi, Brian Dodwell, and Seth Loertscher. Krissy Hummel's consistent and keen editing eye similarly helped us cross the finish line with a product of which we are proud. Within the United States Military Academy more broadly, we are thankful for unwavering support from COL Suzanne Nielsen, the head of the Department of Social Sciences at West Point, as well as senior USMA leadership. At Yale, we thank Lloyd Grieger and David Simon for lending their support to this project.

Jason Warner and Ellen Chapin

## TABLE OF CONTENTS

EXECUTIVE SUMMARYIV
Introduction1
Part 1: Methodology
1.1: Data Collection and Verification5
1.2: Definitions5
1.3: CAVEATS AND LIMITATIONS OF SEARCH STRING AND METHODOLOGY6
Part 2: Operational Overview of al-Shabaab's Suicide Bombers
2.1: A Bird's-Eye View of al-Shabaab's Suicide Bombing Program7
2.2: Chronology of al-Shabaab's Suicide Bombing Attacks9
Part 3: Targeting and Tactics
3.1: Targeting Trends
3.2: The Strategic Logic of al-Shabaab's Targeted Suicide Bombing16
Part 4: Trends Informed by Target Practices
4.1: Demographic Trends in al-Shabaab's Suicide Bombers
4.2: Delivery Trends of al-Shabaab's Suicide Bombers
4.3: Timing Trends in al-Shabaab's Use of Suicide Bombers
4.4: Geographies of al-Shabaab's Suicide Bombing Attacks
4.5: The Failures of al-Shabaab's Suicide Bombers
4.6: Al-Shabaab's Use of Linked Suicide Bombers34
PART 5. CONCLUSIONS

### LIST OF TABLES

Table 1: Assassinations
List of Figures
Figure 1: Al-Shabaab Suicide Attacks (September 2006-October 2017)
Figure 2: Al-Shabaab Suicide Attackers per Target (September 2006-October 2017)
Figure 3: Al-Shabaab Suicide Attackers per Target Over Time (September 2006-October 2017)13
Figure 4: Al-Shabaab Suicide Attack Targets (September 2006-October 2017)
Figure 5: Al-Shabaab Suicide Attack Assassinations Over Time (September 2006-October 2017)17
Figure 6: Al-Shabaab Attacker Breakdown by Gender (September 2006-October 2017)
Figure 7: Al-Shabaab Attacker Breakdown by Detonation Type (September 2006-October 2017)
Figure 8: Al-Shabaab Suicide Attackers Deployed by Weekday (September 2006-October 2017)
Figure 9: Al-Shabaab Suicide Attackers Deployed by Month (September 2006-October 2017)
Figure 10: Al-Shabaab Suicide Attackers Deployed per Region (September 2006-October 2017)
Figure 11: Al-Shabaab Suicide Attackers Deployed per Country (September 2006-October 2017)
FIGURE 12: AL-SHARAAR'S TYPES OF SHIGHE ATTACKS (SEPTEMBER 2006-OCTORER 2017)

#### **Executive Summary**

Al-Shabaab, an Islamist terrorist group that has been plaguing Somalia since 2006, was named the most deadly terror group in Africa in 2017 by the Armed Conflict Location & Event Data Project (ACLED). One tactic that al-Shabaab uses in its reign of terror is suicide bombing. Despite the recognition of the seriousness of the threat that al-Shabaab's suicide bombers pose, very little is known about how, when, and why al-Shabaab elects to employ the tactic of suicide bombings. This report attempts to answer these questions.

By analyzing a unique dataset compiled by the Combating Terrorism Center at West Point that tracks all instances of al-Shabaab suicide bombings between the group's first suicide attack on September 18, 2006, to the end of our data collection in October 2017, we offer the most comprehensive account to date on the emergence, evolution, and efficacy on al-Shabaab's suicide bombers. Following the introduction, the first section of this report elucidates the methodological choices employed to create the database.

Second, in the operational overview section of the report, we offer a macroscopic picture of al-Shabaab's suicide bombing efforts. Herein, we track the longitudinal trends of al-Shabaab suicide bombings by month between September 2006 and October 2017. We find that al-Shabaab has deployed at least 216 suicide attackers who carried out a total of 155 suicide bombing attacks, killing at least 595 and as many as 2,218 people. As such, al-Shabaab is second only to Boko Haram in its use of suicide bombings in Sub-Saharan Africa. Overall, our data indicates that al-Shabaab tends to kill more people per average per operation than other global terrorist groups, at 14.3 kills per operation, and that it is far more efficacious—killing more than double the number of persons per attacker—than its closest analogue African jihadi group, Boko Haram. Moreover, we also show that al-Shabaab's suicide attacks have injured somewhere between 249 and 1,429 persons. We next analyze our data longitudinally, tracking al-Shabaab's use of suicide bombings over time. Here, we emphasize that al-Shabaab's suicide bombing efforts have followed a consistent pattern since 2006: the group employs the tactic between zero and four times a month, and its program does not seem to show signs of significant upswings and terminations of the use of suicide bombings in the manner of other Sunni suicide-bombing African jihadi groups like Boko Haram. Finally, we present a chronology of al-Shabaab's suicide bombing program, tracing its efforts through four periods, from its inception as a tactic in 2006 through its use as of late 2017.

Third, the targeting section of the report, which forms the core argument of our analysis, presents data on the targets of al-Shabaab's suicide bombers. Our data shows that al-Shabaab suicide bombers' most frequent targets are: a) personnel and symbols of the Somali state (Somali government and security sector officials as well as Somali government buildings and institutions) to which it deployed approximately 36.6% of its suicide bombers; b) personnel and symbols of the *international community* (officials and personnel of the AMISOM mission, the African Union, or the United Nations) to which it deployed approximately 24.5% of its suicide bombers; and c) spaces where personnel in the two demographics tend to congregate (hotels and restaurants) to which it deployed approximately 32.4% of its suicide bombers. This section emphasizes that al-Shabaab's suicide bombing efforts appear to be tactically planned to target and degrade specific enemy institutions and especially personnel, and not simply to generally engender shock and awe in civilian populations. Indeed, al-Shabaab's suicide bombing efforts generally do not appear to target non-combatant civilians indiscriminately, for example, in the ways that Boko Haram's do. We next discuss the rationale for al-Shabaab's targeting practices when employing suicide bombing. Specifically, we argue that al-Shabaab has an apparent interest in using suicide bombings to assassinate high-level individuals, which approximately 13.9% of its attackers seek to do, and it attempts to avoid unnecessary non-combatant civilian casualties via suicide bombings, falling in line with global directives on how to carry out jihad as articulated by al-Qa`ida, to which it pledged allegiance in 2008.

Given that al-Shabaab has deployed suicide bombers with the express intention of targeting specific enemies, the fourth section of this report investigates various secondary effects of its decision to use (generally) highly targeted suicide bombing. These include the demographics of al-Shabaab's suicide bombers, who tend to be well-trained and committed men, with less than 5% of its suicide bombers being identified as female; the geographies of al-Shabaab's suicide efforts, which are overwhelmingly concentrated in Somalia and tend to cluster in Mogadishu and in southern Somalia; the detonation delivery mechanisms for al-Shabaab's suicide bombers who detonate their own devices, of which 59.7% are vehicle-borne bombs and of which 28.7% are strapped to the bomber via vest or belt; the timing of al-Shabaab's suicide bombing attacks, which tend to spike during the work week; the causes of the rare capture of al-Shabaab's suicide bombers; and al-Shabaab's use of suicide bomber teams, a tactic that it uses when deploying almost half (approximately 46.8%) of its suicide bombers.

The final section concludes the report, detailing potential solutions to mitigate the impact of al-Shabaab's suicide bombers in the future. These suggestions include degrading its suicide bomber training programs; engaging in counterintelligence campaigns; hardening targets; generating innovative solutions to protect vulnerable communities; continuing knowledge-sharing among international partners; and undertaking countering violent extremism programming.

#### Introduction

"When a double truck [suicide] bombing shattered the night in Mogadishu on Saturday [October 14, 2017], rescue workers began the grim search for survivors that has become all too common as Somalia battles an Islamist insurgency. They picked through burned-out cars and hunted as best they could in a collapsed hotel. But it was only on Sunday, as emergency workers pulled body after body from the rubble of a nearly leveled downtown street, that the magnitude of the latest attack came into focus ... 'This is the deadliest incident I ever remember' since the 1990s, when the government collapsed, a shaken Senator Abshir Ahmed said in a Facebook posting."

\*\*\*

"Police in Uganda have found a suicide vest laced with ball bearings in a Kampala nightclub, suggesting that Sunday night's [al-Shabaab] bombers planned more attacks in the capital ... [P]olice chief Kale Kayihura said that the vest, packed in a laptop bag and connected to a detonator, could have been used by a suicide bomber or detonated remotely ... The death toll from the bombings, which ripped through two venues a crowded restaurant and a rugby club showing the World Cup final between the Netherlands and Spain, rose to 76 yesterday, as fears began to grow that al-Shabab could be planning more attacks in east Africa."

\*\*\*

"Three Somali Cabinet ministers and sixteen other people were killed in a suicide bombing at a university graduation yesterday morning. The bomber, reportedly a man dressed as a woman, blew himself up during the ceremony at a Mogadishu hotel in a supposedly safe part of the city. Government officials, journalists, students and family members had crowded into a hall at the Shamo Hotel when the bomber struck. Witnesses described a huge explosion that left the hall strewn with bodies. Many of those killed or injured were students, 43 of whom were due to graduate. 'A lot of my friends were killed,' said Mohamed Abdulqadir, a student. 'I was sitting next to a lecturer who died.' He had been speaking to the gathering just a few minutes before the explosion, he said."

\*\*\*

Since 2005, the most intractable terrorist threat in Sub-Saharan Africa has come from the Somalia-based Islamist terrorist group known as "Harakat al-Shabaab," or colloquially as "al-Shabaab." Translated into English as "The Youth" or "The Guys," al-Shabaab has wreaked havoc throughout East Africa since the group's formation in 2005, attacking Somali government forces, civilians, and representatives of the international community in its bid to install a strict interpretation of sharia law in the country, oust the non-Somali outsider forces fighting it, and contribute to the broader global jihadi struggle.<sup>4</sup> As a U.S.-designated Foreign Terrorist Organization (FTO) since 2008<sup>5</sup> and an official branch of al-Qa 'ida since 2010,<sup>6</sup> al-Shabaab is at the very epicenter of the jihadi threat in East Africa, and in many ways, the African continent more generally. With an estimated fighting force of between

<sup>1</sup> Hussein Mohamed, Eric Schmitt, and Mohamed Ibrahim, "Mogadishu Truck Bombings Are Deadliest Attack in Decades," New York Times, October 15, 2017.

<sup>2</sup> Jody Clarke, "Another suicide vest found in Kampala nightclub," Irish Times, July 14, 2010.

<sup>3</sup> Tristan McConnell, "Graduation-day bomber dressed as woman kills 19; Somalia," Times (London), December 4, 2009.

<sup>4</sup> Stig Jarle Hansen, *Al-Shabaab in Somalia: The History and Ideology of a Militant Islamist Group* (Chicago: Oxford University Press, 2013).

<sup>5</sup> For its part, the United Kingdom designated al-Shabaab an FTO in March 2010.

Al-Shabaab has been an official branch of al-Qa`ida since February 9, 2012. However, it had first pledged allegiance to Usama bin Ladin and the organization in 2008. In 2010, then-leader of al-Qa`ida bin Ladin had privately recognized the group as an affiliate and began treating it like the other affiliates in terms of guidance, including on operations and targeting.

5,000 and 9,000 soldiers<sup>7</sup> as of late 2017, al-Shabaab has garnered the lamentable distinction as the deadliest terror group in all of Africa thus far in the 21st century.<sup>8</sup>

In the course of its violent campaign, al-Shabaab has used a range of tactics. These include the use of gunmen, IEDs, drive-by shootings, targeted assassinations, ambushes, and raids, among others. In addition, the group is known to use stonings, amputations, and beheadings to punish and intimidate those in its area of control who do not abide by its interpretation of sharia. Yet perhaps the most pernicious—and little-understood—tactic in al-Shabaab's arsenal of violence is its use of suicide bombers.

Given the varying interpretations of suicide bombing and its ever-evolving definitions, the phenomenon has been studied through many frames over time. <sup>11</sup> In particular, academic literature has sought to examine suicide terrorism as a philosophical concept, including its genesis; <sup>12</sup> its global history; <sup>13</sup> and the methodological issues associated with its study. <sup>14</sup> Separately, academics and policymakers have studied the organizational logic behind terrorist groups' use of suicide bombings, to include its efficacy in helping groups achieve their goals; <sup>15</sup> suicide bombing as a terrorist innovation; <sup>16</sup> and the strategic logic of suicide bombings. <sup>17</sup> Equally, authors have sought to study bombers themselves, including their motivations; <sup>18</sup> the extent of their rationality <sup>19</sup> and/or the psychosis behind suicide bombers; <sup>20</sup> the nexus

<sup>7 &</sup>quot;Somalia: Country Policy and Information Note, Somalia (South and Central): Fear of Al-Shabaab," Government of the United Kingdom, July 2017, p. 10.

<sup>8</sup> Clionadh Raleigh, "Al Shabaab and Boko Haram: Patterns of Violence," Acled Data, October 9, 2017; Conor Gaffey, "Al-Shabab has overtaken Boko Haram as the deadliest militant group in Africa," Newsweek, June 2, 2017.

<sup>9 &</sup>quot;Somalia: Country Policy and Information Note," p. 10.

<sup>10 &</sup>quot;Al-Shabab," Counter Extremism Project, 2016.

<sup>11</sup> Murad M. Khan, Robert Goldney, and Riaz Hassan, "Homicide bombers: Life as a weapon," *Asian Journal of Social Science* 38:3 (2010): pp. 481-484.

<sup>12</sup> Scott Atran, "Genesis of suicide terrorism," *Science* 299:5612 (2003): pp. 1,534-1,539; Riaz Hassan, "Global Rise of Suicide Terrorism: An Overview," *Asian Journal of Social Science* 36:2 (2008): pp. 271–291.

<sup>13</sup> James M. Poland, "Suicide Bombers: A Global Problem," *Humboldt Journal of Social Relations* 2:2 (2003): pp. 100-135; Farhana Ali and Jerrold Post, "The History and Evolution of Martyrdom in the Service of Defensive Jihad: An Analysis of Suicide Bombers in Current Conflicts," *Social Research* 75:2 (2008): pp. 615-654.

<sup>14</sup> Scott Ashworth, Joshua D. Clinton, Adam Meirowitz, and Kristopher W. Ramsay, "Design, Inference, and the Strategic Logic of Suicide Terrorism," *American Political Science Review* 102:2 (2008): pp. 269–273.

<sup>15</sup> Robert A. Pape, "Methods and Findings in the Study of Suicide Terrorism," American Political Science Review 102:2 (2008): pp. 275–277.

<sup>16</sup> Michael C. Horowitz, "Nonstate Actors and the Diffusion of Innovations: The Case of Suicide Terrorism," *International Organization* 64:1 (2010): pp. 33–64.

<sup>17</sup> Robert A. Pape, "The Strategic Logic of Suicide Terrorism," *American Political Science Review* 97:3 (2003): pp. 343-361; Louis-Jean Duclos and Daniel Hermant, "Mort Volontaire Combattante: Sacrifices et Stratégies," *Cultures et Conflits* 63 (2006): pp. 7–11.

John Rosenberger, "Discerning the Behavior of the Suicide Bomber: The Role of Vengeance," *Journal of Religion and Health* 42:1 (2003): pp. 13-20; Arie W. Kruglanski, Xiaoyan Chen, Mark Dechesne, Shira Fishman, and Edward Orehek, "Fully Committed: Suicide Bombers' Motivation and the Quest for Personal Significance," *Political Psychology* 30:3 (2009): pp. 331-357.

<sup>19</sup> Ehud Sprinzak, "Rational fanatics," Foreign Policy 120 (2000): p. 66.

<sup>20</sup> Neil Krishan Aggarwal, "Depictions of Suicide Bombers in the Mental Health Scholarship," in *Mental Health in the War on Terror: Culture, Science, and Statecraft* (New York: Columbia University Press, 2015), pp. 107-132.

of rationality and culture in suicide bombing; <sup>21</sup> social, <sup>22</sup> familial, <sup>23</sup> regime-type, <sup>24</sup> and cultural <sup>25</sup> determinants of suicide bombing; and the nexus of suicide bombing and gender <sup>26</sup> and religion. <sup>27</sup> Separately, another genre of study has answered many of these questions by focusing on the process of suicide bombings in the contexts of specific terrorist groups, including al-Qa `ida, <sup>28</sup> the Islamic State, <sup>29</sup> Chechen rebels, <sup>30</sup> the Tamil Tigers, <sup>31</sup> Hezbollah, <sup>32</sup> the Kurdistan Workers' Party (PKK), <sup>33</sup> and Narodnaya Volya, <sup>34</sup> among others. Only in limited instances have scholars sought to understand suicide bombing in Sub-Saharan Africa, though these efforts—including our own <sup>35</sup> and those of others <sup>36</sup>—have largely focused on Boko Haram.

Despite the recognition of the seriousness of the threat that al-Shabaab's suicide bombers pose, very little is known about how, in what circumstances, and why al-Shabaab elects to use suicide bombings

- 21 Mohammed M. Hafez, "Rationality, Culture, and Structure in the Making of Suicide Bombers: A Preliminary Theoretical Synthesis and Illustrative Case Study," *Studies in Conflict & Terrorism* 29:2 (2006): pp. 165-185.
- 22 Ami Pedahzur and Arie Perliger, "The Changing Nature of Suicide Attacks: A Social Network Perspective," *Social Forces* 84:4 (2006): pp. 1,987-2,008; M. Najeeb Shafiq and Abdulkader H. Sinno, "Education, Income, and Support for Suicide Bombings: Evidence from Six Muslim Countries," *Journal of Conflict Resolution* 54:1 (2010): pp. 146-178.
- 23 Jean-Paul Azam, "Suicide-Bombing as Inter-Generational Investment," Public Choice 122:1/2 (2005): pp. 177-198.
- 24 Sara Jackson Wade and Dan Reiter, "Does Democracy Matter? Regime Type and Suicide Terrorism," *Journal of Conflict Resolution* 51:2 (2007): pp. 329-348; James A. Piazza, "A Supply-Side View of Suicide Terrorism: A Cross-National Study," *Journal of Politics* 70:1 (2008): pp. 28-39.
- 25 Robert Braun and Michael Genkin, "Cultural Resonance and the Diffusion of Suicide Bombings: The Role of Collectivism," *Journal of Conflict Resolution* 58:7 (2014), pp. 1,258-1,284.
- Mia Bloom, "Female Suicide Bombers: A Global Trend," Daedalus 136:1 (2007): pp. 94-102; Claudia Brunner, "Occidentalism Meets the Female Suicide Bomber: A Critical Reflection on Recent Terrorism Debates; A Review Essay," Signs 32:4 (2007): pp. 957-971; Amal Amireh, "Palestinian Women's Disappearing Act: The Suicide Bomber Through Western Feminist Eyes," Arab and Arab American Feminisms (Syracuse, NY: Syracuse University Press, 2011), pp. 29-45; Jennie Stone and Katherine Pattillo, "Al-Qaeda's Use of Female Suicide Bombers in Iraq: A Case Study," Women, Gender, and Terrorism (Athens, GA: University of Georgia Press, 2011), pp. 159-175; Katherine E. Brown, "Blinded by the Explosion?: Security and Resistance in Muslim Women's Suicide Terrorism," Women, Gender, and Terrorism (Athens, GA: University of Georgia Press, 2011), pp. 194-226.
- 27 Robert J. Brym, "Religion, Politics, and Suicide Bombing: An Interpretive Essay," *Canadian Journal of Sociology/Cahiers Canadiens de Sociologie* 33:1 (2008): pp. 89-108; Jeremy Ginges, Ian Hansen, and Ara Norenzayan, "Religion and Support for Suicide Attacks," *Psychological Science* 20:2 (2009): pp. 224-230.
- 28 Assaf Moghadam, "Motives for Martyrdom: Al-Qaida, Salafi Jihad, and the Spread of Suicide Attacks," *International Security* 33:3 (2008): pp. 46-78; Stone and Pattillo; Domenico Tosini, "Al-Qaeda's Strategic Gamble: The Sociology of Suicide Bombings in Iraq," *Canadian Journal of Sociology/Cahiers Canadians de Sociologie* 35:2 (2010): pp. 271-308.
- 29 Clare Ellis, "With a little help from my friends: an exploration of the tactical use of single-actor terrorism by the Islamic State," Perspectives on Terrorism 10:6 (2016); Michael Weiss and Hassan Hassan, ISIS: Inside the Army of Terror (updated edition) (New York: Simon & Schuster, 2016).
- 30 Robert W. Kurz and Charles K. Bartles, "Chechen suicide bombers," *Journal of Slavic Military Studies* 20:4 (2007): pp. 529-547; Anne Speckhard and Khapta Ahkmedova, "The making of a martyr: Chechen suicide terrorism," *Studies in Conflict & Terrorism* 29:5 (2006): pp. 429-492.
- 31 Daya Somasundaram, "Suicide Bombers of Sri Lanka," *Asian Journal of Social Science* 38:3 (2010): pp. 416-41; Eleanor Pavey, "Les Kamikazes Sri Lankais," *Cultures et Conflits* 63 (2006): pp. 135-154.
- 32 Azam.
- 33 Eunyoung Kim and Minwoo Yun, "What works? Countermeasures to terrorism: a case study of PKK," *International Journal of Comparative and Applied Criminal Justice* 32:1 (2008): pp. 65-88.
- 34 Astrid Von Borcke, "Violence and Terror in Russian Revolutionary Populism: The Narodnaya Volya, 1879–83," *Social Protest, Violence and Terror in Nineteenth-and Twentieth-century Europe* (London: Palgrave Macmillan, 1982), pp. 48-62.
- Jason Warner and Hilary Matfess, Exploding Stereotypes: The Unexpected Operational and Demographic Characteristics of Boko Haram's Suicide Bombers (West Point, NY: Combating Terrorism Center, 2017); Ellen Chapin, "Target Practice(s): An Analysis of the Gendered Targeting Trends of Suicide Bombers," Terrorism and Political Violence (forthcoming 2018).
- Elizabeth Pearson, "Wilayat Shahidat: Boko Haram, Islamic State, and The Question of the Female Suicide Bomber," in Jacob Zenn ed., Boko Haram Beyond the Headlines: Analyses of Africa's Enduring Conflict (West Point, NY: Combating Terrorism Center, 2018); Jacob Zenn, "Demystifying Al-Qaida in Nigeria: Cases from Boko Haram's Founding, Launch of Jihad and Suicide Bombings," Perspectives on Terrorism 11:6 (2018); Jacob Zenn and Elizabeth Pearson "Women, Gender and the Evolving Tactics of Boko Haram," Journal of Terrorism Research 5:1 (2014); Freedom C. Onuoha and Temilola A. George, "Boko Haram's Use of Female Suicide Bombing in Nigeria," Al Jazeera Centre for Studies, March 18, 2015.

within its broader profile of violence. To that end, this report seeks to answer the following questions: What has been the historical evolution of al-Shabaab's suicide bombing program? How do its suicide bombers deploy, what detonation mechanisms do they use, and how effective are they at reaching their targets? Who serves as suicide bombers for al-Shabaab? What entities do al-Shabaab's suicide bombers target, what are the group's strategic rationales for such targeting, and in what ways do those targeting efforts align with and illuminate the group's strategic ends?

#### **Analysis**

By analyzing a unique dataset compiled by the Combating Terrorism Center at West Point that tracks all instances of al-Shabaab suicide bombings between the group's first suicide attack on September 18, 2006, to the end of our data collection in October 2017, we offer the most comprehensive account to date on the emergence, evolution, and efficacy on al-Shabaab's suicide bombers. Following the introduction, the first section of this report elucidates the methodological choices employed to create the database.

Second, in the operational overview section of the report, we offer a macroscopic picture of al-Shabaab's suicide bombing efforts. Herein, we track the longitudinal trends of al-Shabaab suicide bombings by month between September 2006 and October 2017. We find that al-Shabaab has deployed at least 216 suicide attackers who carried out a total of 155 suicide bombing attacks, killing at least 595 and as many as 2,218 people. As such, al-Shabaab is second only to Boko Haram in its use of suicide bombings in Sub-Saharan Africa. Overall, our data indicates that al-Shabaab tends to kill more people per average per operation than other global terrorist groups, at 14.3 kills per operation, and that it is far more efficacious—killing more than double the number of persons per attacker—than its closest analogue African jihadi group, Boko Haram. Moreover, we also show that al-Shabaab's suicide attacks have injured somewhere between 249 and 1429 persons. We next analyze our data longitudinally, tracking al-Shabaab's use of suicide bombings over time. Here, we emphasize that al-Shabaab's suicide bombing efforts have followed a consistent pattern since 2006: the group employs the tactic between zero and four times a month, and its program does not seem to show signs of significant upswings and terminations of the use of suicide bombings in the manner of other Sunni suicide bombing African jihadi groups like Boko Haram. Finally, we present a chronology of al-Shabaab's suicide bombing program, tracing its efforts through four periods, from its inception as a tactic in 2006 through its use as of late 2017.

Third, the targeting section of the report, which forms the core argument of our analysis, presents data on the targets of al-Shabaab's suicide bombers. Our data shows that al-Shabaab suicide bombers' most frequent targets are: a) personnel and symbols of the *Somali state* (Somali government and security sector officials as well as Somali government buildings and institutions) to which it deployed approximately 36.6% of its suicide bombers; b) personnel and symbols of the international community (officials and personnel of the AMISOM mission, the African Union, or the United Nations) to which it deployed approximately 24.5% of its suicide bombers; and c) spaces where personnel in the two demographics tend to congregate (hotels and restaurants) to which it deployed approximately 32.4% of its suicide bombers. This section emphasizes that al-Shabaab's suicide bombing efforts appear to be tactically planned to target and degrade specific enemy institutions and especially personnel, and not simply to generally engender shock and awe in civilian populations. Indeed, al-Shabaab's suicide bombing efforts generally do not appear to target non-combatant civilians indiscriminately, for example, in the ways that Boko Haram's do. We next discuss the rationale for al-Shabaab's targeting practices when employing suicide bombing. Specifically, we argue that al-Shabaab has an apparent interest in using suicide bombings to assassinate high-level individuals, which approximately 13.9% of its attackers seek to do, and attempts to avoid unnecessary non-combatant civilian casualties via suicide bombings, falling in line with global directives on how to carry out jihad as articulated by al-Qa`ida, to which it pledged allegiance in 2008.

Given that al-Shabaab has deployed suicide bombers with the express intention of targeting specific enemies, the fourth section of this report investigates various secondary effects of its decision to use (generally) highly targeted suicide bombing. These include the demographics of al-Shabaab's suicide bombers, who tend to be well-trained and committed men, with less than 5% of its suicide bombers being identified as female; the geographies of al-Shabaab's suicide efforts, which are overwhelmingly concentrated in Somalia and tend to cluster in Mogadishu and in southern Somalia; the detonation delivery mechanisms for al-Shabaab's suicide bombers who detonate their own devices, of which 59.7% are vehicle-borne bombs and of which 28.7% are strapped to the bomber via vest or belt; the timing of al-Shabaab's suicide bombing attacks, which tend to spike during the work week; the causes of the rare capture of al-Shabaab's suicide bombers; and al-Shabaab's use of suicide bomber teams, a tactic that it uses when deploying almost half (approximately 46.8%) of its suicide bombers.

The final section concludes the report, detailing potential solutions to mitigate the impact of al-Shabaab's suicide bombers in the future. These suggestions include degrading its suicide bomber training programs; engaging in counterintelligence campaigns; hardening targets; generating innovative solutions to protect vulnerable communities; continuing knowledge-sharing among international partners; and undertaking countering violent extremism programming.

#### **PART 1: METHODOLOGY**

#### 1.1 Data Collection and Verification

The data for this report was assembled by the research team using LexisNexis to cull online newspaper stories containing the search string "Somalia OR al-Shabaab AND suicide bomb OR bomber." Given that LexisNexis may not capture articles where the bomber was not explicitly denoted as being a member of al-Shabaab, the Suicide Attack Database (run by the Chicago Project on Security and Threats), the group's own statements, and FDD's Long War Journal's dataset were used to supplement the database in many cases to ensure our analysis captured as many suicide attacks as possible.

The data was then coded to create a comprehensive database detailing 20 dimensions of each suicide bombing, where such data was available. Among the results returned from our search string, the database collected information regarding the date and location of bombing; demographic information on bombers (including number, gender, and approximate age); the nature of targets (including status as a human target or a non-sentient, physical institutional target); the nature of destruction wrought (including reported number of deaths and injuries); whether the bombing was intended to be an assassination; and instances of non-detonation or prevented suicide attacks.

#### 1.2 Definitions

One of the most important methodological issues that deserves attention is the vocabulary used throughout this report. Particularly, we highlight the ways in which we employ the terms "bomber," "linked bomber," "attack," and "operation." Although colloquially, these terms might seem to be more or less interchangeable, each carries a specific meaning in the context of this report:

"Suicide bombing" for the purposes of this report refers to a process in which a human attacker kills him or herself in the course of killing others for a politically or religiously motivated end.

"Bomber" refers to an individual suicide attacker. We use this term to describe an individual who has been deployed as a suicide attacker, even if he or she did not detonate, did not kill anyone once detonated, or did not reach his or her intended target. This term is interchangeable with "suicide bomber," "lone bomber," or "attacker."

"Linked Bombers" refer to the coordinated deployment of two or more bombers on the same day, in the same polity, in an effort that typically—though not exclusively—targets the same entity.

"Attack" or "Operation" refers to the deployment of an individual "attacker" or "linked attacker" suicide teams. However, not every "attacker" sent out on an "attack" or "operation" successfully carries out his or her mission. Throughout this report, while we do not define attacks as "successful" or "unsuccessful" in a binary sense, we do capture instances in which individual attackers failed to detonate their explosives, failed to kill anyone with their attack, or failed to reach their target at all.

#### 1.3 Caveats and Limitations of Search String and Methodology

Though LexisNexis searches both domestic and international newspapers writing about Somalia and al-Shabaab, it is less adept at capturing local-level, non-national newspapers that are written within East Africa, particularly during times of conflict. Thus, it is possible we did not capture suicide bombing instances reported exclusively in such smaller outlets. Further, we did not capture any articles not written in English, creating the possibility for uncoded incidences if they were not reported by national media in English. Since some of al-Shabaab's destruction has occurred in remote areas where press access is extremely curtailed or absent, it is possible that some attacks were unreported. With these limitations in mind, we are still confident in the relative accuracy of our dataset, particularly since suicide bombing is a tactic, at least in part, undertaken to send a political message, ensuring a higher likelihood of the incident being reported in the media.

Another limitation of our study is that demographic and logistical information was absent in the reporting of certain attacks, attributable both to the nature of the attacks and the limited media access and capacity in the region. As a result, not all of our entries for each suicide attack are complete. For example, many media reports did not identify the gender or age of the bomber. For 216 al-Shabaab suicide bombers, we were able to find sex markers for only 68 of them, a reporting rate of 31.5%. Intuitively, this prevalence of ungendered bombers complicates the discussion of what proportion of bombers are male or female. Moreover, some bombers were assumed to be male and were thus not explicitly identified by media sources after the attacks. Conversely, it is possible that media sensationalism resulted in higher rates of identification of female bombers. Even fewer bombers had listed ages, or were photographed before detonation, presenting an additional challenge in identifying young or elderly bombers.<sup>37</sup>

In some news reports, the fatalities wrought by al-Shabaab's suicide bombers were combined with fatalities caused by al-Shabaab's gunmen or IED explosions that were part of the same broader operation. When data was presented by media sources in this manner, it was not possible to parse how many fatalities were attributable to the suicide bombing versus other tactics. This is particularly salient for al-Shabaab, which often uses suicide bombings in conjunction with a non-suicide bombing or shooting.

Our database identifies the highest number of reported fatalities, in addition to the lowest number of reported fatalities. This is because many of the articles discussing these bombings rely on estimated death counts (which, because they are unconfirmed and written in the immediate aftermath of an attack, tend to undercount the casualties). Accordingly, all statistics in this report rely on the highest-listed fatality count, so as not to grossly underestimate those killed by al-Shabaab's suicide attacks. Our database similarly tracks failed suicide bomb attempts, which no other suicide database captures. This necessarily lowers the number of casualties per deployed attacker and serves to offset any artificially inflated fatality counts.

Furthermore, our dataset seeks to track the methods by which individuals detonate explosives in a

<sup>37</sup> Only four of al-Shabaab's suicide bombers had approximate ages listed by media, for a reporting rate of less than 2%.

suicide attack. However, such information is rarely reported by media outlets, especially if detonators are never found. Therefore, given that collecting and reporting on such data is so problematic, we do not offer conclusions about the act of self-detonation versus detonation from afar.

## PART 2: OPERATIONAL OVERVIEW OF AL-SHABAAB'S SUICIDE BOMBERS

This section of the report offers a broad overview of al-Shabaab's suicide bombing efforts. Herein, we track the longitudinal trends of al-Shabaab suicide bombings by month between September 2006 and October 2017. We find that al-Shabaab has deployed at least 216 suicide attackers who carried out a total of 155 suicide bombing attacks, killing at least 595 and as many as 2,218 people. As such, al-Shabaab is second only to Boko Haram in its use of suicide bombings in Sub-Saharan Africa. Overall, our data indicates that al-Shabaab tends to kill more people per average per operation than other global terrorist groups at 14.3 kills per operation, and that it is far more efficacious—killing more than double the number of persons per attacker—than its closest analogue African jihadi group, Boko Haram. Moreover, we also show that al-Shabaab's suicide attacks have injured somewhere between 249 and 1,429 persons. We next analyze our data longitudinally, tracking al-Shabaab's use of suicide bombings over time. Here, we emphasize that al-Shabaab's suicide bombing efforts have followed a consistent pattern since 2006: it employs the tactic typically between zero and four times a month, and its program does not seem to show signs of significant upswings and terminations of the use of suicide bombings in the manner of other Sunni suicide bombing African jihadi groups like Boko Haram. Finally, we present a chronology of al-Shabaab's suicide bombing program, tracing its efforts through four periods, from its inception as a tactic in 2006 through its use by late 2017.

#### 2.1: A Bird's-Eye View of al-Shabaab's Suicide Bombing Program

Total Attacks: The Second-Highest in Sub-Saharan Africa

In total, our dataset shows that from the group's formation in 2005 through October 2017, at least 216 al-Shabaab suicide attackers carried out a total of 155 suicide bombing attacks. To recall, there were more *attackers* than *attacks* because al-Shabaab sometimes sends "teams" of suicide bombers to carry out attacks together. Thus, two or more attackers could collectively carry out one attack. To give this number some context, a previous CTC report by Warner and Hilary Matfess revealed that at least 434 Boko Haram suicide bombers had undertaken 238 attacks between April 2010 and July 2017.<sup>38</sup> This point of comparison reveals that al-Shabaab is not the most pervasive user of suicide bombings in Sub-Saharan Africa. However, given that the tactic has historically been little-used among terrorist groups in Sub-Saharan Africa, we are almost certain that al-Shabaab is second only to Boko Haram in its use of the tactic.

We also seek to highlight the consistent tempo of al-Shabaab's use of suicide bombers. As per the graphic below, while increasing its deployment, al-Shabaab has been rather stable in its use of suicide bombers over time, deploying between zero and four bombers per month for the past 11 years. This consistency stands in contrast to the use of suicide bombers by other groups, including Boko Haram, which had significant swings in the number of suicide bombers deployed by month over time.<sup>39</sup>

<sup>38</sup> Warner and Matfess.

<sup>39</sup> For example, in July 2015, Boko Haram launched 23 attacks. One month later, in August 2015, the group launched only two. Ibid.

#### Total Lethality: An Unclear Range

According to the best available data—which we emphasize is approximate and inexact—we show that to date, al-Shabaab's suicide bombers have killed at least 595 and as many as 2,218 people. The range, it should be noted, results from the fact that our data is derived from assessing multiple accounts of the same event, some of which give drastically varying lethality totals.

Lethality Per Bomber: Below Average Globally, Above Average for Sub-Saharan Jihadi Groups

When assessing suicide bombers' lethality, most studies on suicide bombing have focused on the number of fatalities per attack or operation, which, we recall, can be carried out by *multiple individual attackers*. For his part, Moghadam's study of all suicide-bombing attacks between 1981 and 2007 estimates an average of 11 killed per suicide-bombing operation. The University of Chicago's dataset approximates Moghadam's, estimating that between 1974 and 2016, the average suicide-bombing operation killed roughly 10 people.<sup>40</sup> Relying on the highest number of kills, al-Shabaab's lethality rises above both of these averages, at approximately 14.3 fatalities per operation.

However, the average number of fatalities per operation is skewed upward by virtue of the October 2017 suicide operation in Mogadishu, which killed 512. Excluding this outlier event, its lethality rate per operation falls to around 11 deaths per operation, approximately average among global groups using suicide bombing.<sup>41</sup>

When discussing lethality, however, it should be noted that al-Shabaab appears to be far less concerned with the sheer number of people its suicide bombers kill, and far more concerned with the targeting of particular individual or institutions. Put otherwise, though we suggest that al-Shabaab has a higher average lethality rate per attack as compared to other groups that use the tactic (albeit skewed by one massive attack), a large numbers of casualties is likely a secondary objective in its overall decision to employ suicide bombing at all.

#### Injuriousness

According to our data, al-Shabaab's suicide bombers have injured between 249 and 1,429 persons. While we are unclear about the accuracy of our lethality statistics, we are confident that the injuries statistics skew toward the higher end of this estimated range (if not exceed it) precisely because injuries are reported on a rolling basis by the media. Police will continue to estimate injuries as they investigate suicide bombings, often reporting numbers quickly after the attack and failing to follow up once injuries are confirmed.

When gauging overall injuriousness, we find that the average al-Shabaab suicide bomber injures 6.6 people per attacker and 9.2 per people operation using the high estimate of injuries. This is far lower than the global averages for injuries per suicide operation. Recent data suggests that the average suicide attack (between 1974 and 2016) wounded approximately 25 people per operation and 20 people per suicide bomber. However, it is important to note that most sources are reporting immediately following the attack, so estimates of injuries are likely to be both low and ultimately inaccurate. Similarly, if the emergency services or healthcare in Somalia could not save a number of the injured, this could account for the high fatality count in addition to the low injury count per attack. Again, this low injury

<sup>40</sup> Using the aggregate totals on the CPOST website (5,430 total attacks and 55,022 total deaths) between 1981 and the site's last update, the authors calculated a lethality rate of 10.1 casualties per operation. See "Suicide Attack Database," Chicago Project on Security and Terrorism (CPOST), 2016.

<sup>41</sup> The authors thank The New York Times' East Africa bureau chief, Jina Moore, for bringing this observation to their attention.

<sup>42 &</sup>quot;Suicide Attack Database (October 12, 2016 Release)," Chicago Project on Security and Terrorism (CPOST), October 12, 2016.

count is commensurate with our thesis that lethality and injury rate may not be al-Shabaab's priority. Instead, the importance of the victim may take precedence over the sheer quantity of those killed.

#### 2.2 Chronology of al-Shabaab's Suicide Bombing Attacks

Al-Shabaab's suicide bombings have, in general, followed a steady cadence over time. However, even as we argue that the tempo of al-Shabaab's suicide bombing attacks have remained relatively consistent, there are still distinguishable variations in its use of the tactic over time. As a result, history allows us to best contextualize the group's suicide bombing practices in four distinct phases.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Grand Total
January					1		2	1	2	2	2	3	13
February				1	1	1	2	1	3	1	3		13
March							1	2	2	3	1	1	10
April		2	1		1		3	1		3	2	2	15
May				1		1	1	1	3		3	2	12
June		2		1		1	1	1	1	3	3	2	15
July					1			2	2	4	2		11
August					1	1	1		1	1	3	1	9
September	1			1	3	1	3	2	2	2	1	4	20
October		1	3			4	1	2			4	2	17
November	1					1	1	2	1	2	1		9
December				2		1	2	1	2		3		11
Grand Total	2	5	4	6	8	11	18	16	19	21	28	17	155

Figure 1: Al-Shabaab Suicide Attacks (September 2006-October 2017)

#### Chronological Overview

After the fall of President Siad Barre in 1991, Somalia's devolution into a series of clan-based, warlord-run fiefdoms gave way to a national security vacuum. During this time, al-Ittihad al-Islami (AIAI), al-Shabaab's predecessor that worked to create an Islamist emirate in Somalia, grew in strength. In 2003, a rift erupted between AIAI's old guard (whose stated goal was to establish a new political front) and the group's younger members (who sought a larger goal of imposing fundamentalist Islamic rule). The younger members, who would eventually become al-Shabaab ("the youth"), allied with the Islamic Courts Union (ICU), which sought to impose order over a landscape marked by feuding warlords in the capital city.

The ICU began to gain both strength and territory, taking over Mogadishu during the first half of 2006. Ethiopia intervened, and its involvement in Somalia's territory began a decades-long conflict between al-Shabaab and the international community. Today, the Federal Government of Somalia (FGS), installed in 2012, continues to battle with al-Shabaab, abetted in its fight by the African Union Mission in Somalia (AMISOM), a 22,000-strong force comprised of troops from Ethiopia, Kenya, Uganda, Djibouti, and Burundi. Despite some success, however, fatigue in fighting al-Shabaab has set in. AMISOM began withdrawing some of its troops, as part of a reformulated exit strategy, in Decem-

ber 2017.<sup>43</sup> Given the tentative plan to exit from Somalia in 2020, Kenya's President Uhuru Kenyatta has urged the United Nations and African Union to consider more "practical" timelines, arguing that "Somalia is not yet ready to take on full responsibility for security."

As al-Shabaab continues its suicide bomber deployment, the United States has continued to increase its kinetic operations in Somalia. The Bureau of Investigative Journalism reports that in 2017 alone, the United States undertook 34 air or drone strikes in Somalia<sup>45</sup> and that seven of those strikes took place between November 9th and 14th.<sup>46</sup> Rather than being deterred by the increased drone strikes and AMISOM's presence, however, al-Shabaab has not altered its targeting pattern: it continues to attack hard targets, like military headquarters and U.N. compounds, adapting to additional protection by using several car bombs at one time. Additionally, the group has succeeded in striking moving targets (like convoys and temporary camps), having learned from AMISOM's movements and tactics over time. With the threat from al-Shabaab far from contained, the group's history in suicide bombing merits careful study in looking to the future.

#### Period 1: A Tepid Testing of the Waters (September 2006 - September 2009)

Al-Shabaab's earliest efforts in suicide bombing indicate a slow initial willingness to utilize the tactic. Specifically, its first suicide bombing effort can be traced back to September 2006, when the Transitional Federal Government (TFG) and Islamic Courts Union began peace talks in Khartoum.<sup>47</sup> The suicide attack, which targeted then-President Abdullahi Yusuf Ahmed outside parliament in Baidoa, was one of the first violent efforts by al-Shabaab, which had previously attempted assassinations by snipers.<sup>48</sup> While the group has not made statements about its decision to begin using suicide bombings, Roland Marchal notes that al-Shabaab's use of suicide bombing constituted a "radically new choice that had never been part of the Somali culture of war until 2006."<sup>49</sup> The Baidoa attack thus foreshadowed several of the trademarks that would come to define the group's suicide bombing operations, in particular highly targeted strikes on powerful enemy individuals and institutions.

However, after the group's first foray into suicide bombing, it did not consistently deploy suicide bombers for several years. Indeed, between September 2006 and September 2009 al-Shabaab averaged less than one suicide attack per month. What explains this generally tepid interest in suicide bombing? We suggest that the infrequent use of suicide bombing during al-Shabaab's early life can be explained by the group's efforts to maintain its territorial holdings in Somalia as outside actors, like the Ethiopian Army and other international actors, sought to regain control of both Mogadishu and al-Shabaab's strongholds in the southern port of Kismayo.<sup>50</sup> In short, in its effort to maintain its holdings, al-Shabaab focused on waging conventional warfare rather than resorting to the more niche and asymmetric tactic of suicide bombing.

<sup>43</sup> Paul D. Williams, "Somalia's African Union Mission has a new exit strategy. But can it actually leave?" Washington Post, November 30, 2017.

<sup>44 &</sup>quot;Uhuru faults withdraw of African Union troops," Business Daily, January 28, 2018.

<sup>45 &</sup>quot;Somalia: Reported US Actions in 2017," Bureau of Investigative Journalism, 2017.

<sup>46</sup> Conor Gaffey, "ISIS Claims Suicide Bombing as It Vies with Al-Shabab in Somalia," *Newsweek*, May 24, 2017; Barbara Starr and Ryan Brown, "US airstrike in Somalia kills more than 100 al-Shabaab militants," CNN, November 21, 2017.

<sup>47</sup> Bill Roggio, "The Rise & Fall of Somalia's Islamic Courts: An Online History," FDD's Long War Journal, January 4, 2007.

<sup>48</sup> Xan Rice, "Somali president escapes car bomb suicide attack," *Guardian*, September 19, 2006; "Car bomb attack kills 8 in Somalia," CNN, September 18, 2006.

<sup>49</sup> Roland Marchal, "Harakat al-Shabaab al-Mujaheddin in Somalia," CRNS, March 2011, p. 54.

<sup>50</sup> Ibid.; "Polity IV Country Report 2010: Somalia," Systemic Peace, 2011.

#### Period 2: Increased Strength and Increased Suicide Deployment (October 2009 - January 2011)

By mid-2009, al-Shabaab continued to rapidly grow in strength and influence. The group overtook the city of Baidoa, subsequently launching an onslaught against Mogadishu, and began to advance into southern Somalia. In February 2010, it publicly acknowledged its alliance with al-Qa`ida. Thereafter, it began to focus on using new methods to assist in its major effort to capture Mogadishu and expand its attack profile outside of Somalia's borders. Especially with additional recruits and prestige, suicide bombings seemingly became a more viable option as part of its arsenal of violence. As AMISOM sought to launch offensives and expand outward, al-Shabaab increased its person and vehicle-borne IED attacks to halt any forward progress. As such, this phase saw al-Shabaab exerting an increasing effort to respond to pressure from external actors with renewed force, including in its use of suicide bombings. The group's suicide bombings increased steadily over this period, nearing one bombing per month, up from less than five attacks per year.

#### Period 3: Weakness Brings Suicide Bombings to the Forefront (February 2011 to December 2014)

The period between February 2011 and December 2014 saw al-Shabaab struggling to maintain its territory, resulting in an increase in its deployment of suicide bombers. In August 2011, Somalia saw al-Shabaab pulling out of Mogadishu in what it called a "tactical move" and the group's loss of Baidoa and Afgoye to Somali government, African Union, and Kenyan forces. <sup>53</sup> That same year, Somalia's parliament was sworn in at Mogadishu airport for the first time in 20 years, and MPs then elected academic and civic activist Hassan Sheikh Mohamud as president. <sup>54</sup> In the wake of such success, pro-government forces captured the port of Merca, and AU and Jubaland forces recaptured Kismayo, an al-Shabaab stronghold and the country's second-largest port. <sup>55</sup> In so doing, the Kenyan forces temporarily cut al-Shabaab off from a significant source of funding. <sup>56</sup>

The success of the Somali government and its backers provided more targets for al-Shabaab's suicide bombers to strike, and the group responded with force. The legitimacy of the existing government coincided with an increase in al-Shabaab's general attack cadence. In a seeming zero-sum gain, every advance and victory by the Somali state coincided with an increase in al-Shabaab's ability (and willingness) to respond with suicide attackers. Interestingly, in 2013, internal rifts within al-Shabaab erupted into all-out warfare between leaders in the organization, and suicide bombings dropped in this period. After al-Shabaab was able to regroup and regain strength, it appeared to continue to grow its suicide bombing arsenal.<sup>57</sup>

Similarly, al-Shabaab's investment in suicide bombing may have ties to its 2008 pledge of allegiance to and ascendance into al-Qa`ida. In addition to its expanding military coercive power, 2010 and 2011 saw significant upticks in the group's tendency to use suicide bombings against both Somali and international forces. Similarly, the group increasingly deployed several suicide bombers to attack the same target, likely to increase the probability of successful degradation. Indeed, while al-Qa`ida had been deeply involved in assisting in other aspects of al-Shabaab's operations even *prior* to the official 2012 merger, in the aftermath, al-Shabaab's tactics seemingly changed, especially with respect to its

<sup>51 &</sup>quot;Somalia Profile: Timeline," BBC, January 4, 2018.

<sup>52</sup> Ibid

<sup>53</sup> Matt Freear and Cedric De Coning, "Lessons from the African Union Mission for Somalia (AMISOM) for Peace Operations in Mali," Stability: International Journal of Security and Development 2:2 (2013).

<sup>54</sup> David Smith, "Somalia's first parliament since 1991 inaugurated in Mogadishu," Guardian, August 20, 2012.

<sup>55 &</sup>quot;Somalia Profile: Timeline."

<sup>56</sup> Kathleen Caulderwood, "Al-Shabab's Finances: The Militant Group Gets Funding From Local Businesses, Sources Abroad," IBI Times, September 4, 2014.

<sup>57</sup> Richard Mugisha,"Uganda: Is Al-Shabab Disintegrating?" AllAfrica, September 8, 2013.

suicide bombing program. Indeed, as one report argues, "under the auspices of core al-Qaeda, [al-Shabaab] has increasingly focused on its explosives and suicide bomber program." <sup>58</sup>

#### Period 4: A Vicious Cycle (January 2015 - October 2017)

The period between 2015 and October 2017 saw al-Shabaab's suicide bombings surge again as the group redoubled its commitment to its mission. In what we believe to be a response to the late 2014 killing of the group's then-leader, Ahmed Abdi Godane, by a U.S. drone strike, al-Shabaab ratcheted up its suicide attacks on local leaders and international soldiers, falling back into a consistent, but increased, deployment of suicide bombers. <sup>59</sup> Importantly, Godane had consolidated power over a more extreme al-Shabaab. He had purged from the group any individuals who had reservations about al-Shabaab's violence and tactics, so the remaining operatives were likely more willing to engage in violence, like suicide bombings. <sup>60</sup>

Since, 2014, the number of suicide attacks each year has steadily increased. The year with the greatest total number of al-Shabaab's suicide bombings was 2016, with a total of 28, or more than two per month. Though our data extends only through October 2017, the group was on track to experience a slight decline in its use of bombings for the year, at less than two per month.

Nevertheless, despite these fluctuations in the frequency of the use of the tactic over time, as is highlighted in the subsequent section, al-Shabaab's use of suicide bombings has remained consistent in the nature of its intended targets.

#### **PART 3: TARGETING AND TACTICS**

In this section of our report, we focus on the targeting tendencies of al-Shabaab's suicide bombers. Our data shows that al-Shabaab suicide bombers' most frequent targets are: a) personnel and symbols of the Somali state (Somali government and security sector officials as well as Somali government buildings and institutions) to which it deployed approximately 36.6% of its suicide bombers; b) personnel and symbols of the *international community* (officials and personnel of the AMISOM mission, the African Union, or the United Nations) to which it deployed approximately 24.5% of its suicide bombers; and c) spaces where personnel in the two demographics tend to congregate (hotels and restaurants) to which it deployed approximately 32.4% of its suicide bombers. This section emphasizes that al-Shabaab's suicide bombing efforts appear to be tactically planned to target and degrade specific enemy institutions and especially personnel, and not simply to generally engender shock and awe in civilian populations. Indeed, al-Shabaab's suicide bombing efforts generally do not appear to target non-combatant civilians indiscriminately, for example, in the ways that Boko Haram's do. We next discuss the rationale for al-Shabaab's targeting practices when employing suicide bombing. Specifically, we argue that al-Shabaab has an apparent interest in using suicide bombings to assassinate high-level individuals, which approximately 13.9% of its attackers seek to do, and attempts to avoid unnecessary non-combatant civilian casualties via suicide bombings, falling in line with global directives on how to carry out jihad as articulated by al-Qa'ida, to which it pledged allegiance in 2008.

#### 3.1 Targeting Trends

**Overall Targeting Trends** 

<sup>58 &</sup>quot;IGAD Report: Al-Shabaab as a Transnational Security Threat," IGAD, August 15, 2016.

<sup>59</sup> Christopher Anzalone, "The Life and Death of Al-Shabab Leader Ahmed Godane," CTC Sentinel 7:9 (2014): pp. 19-23.

<sup>60</sup> Ibid.

Al-Shabaab's suicide bombing targeting patterns are, most simply, directly in line with its effort to rid the country of the Somali government and the international community forces that seek to support it and that also work together to degrade al-Shabaab itself. As such, it is essential to recognize that al-Shabaab's suicide bombing primarily—though not exclusively—focuses on targeting the institutions and individuals that seek to end its reign of terror. As per the visualization below, we show that al-Shabaab's suicide bombers primarily seek to attack personnel and buildings of the *Somali government*; members and institutions of the *international community* working to combat the group; and *spaces where personnel from each of these two groups tend to congregate*, primarily in Mogadishu.<sup>61</sup> These findings track with what others have anecdotally found to be the case.<sup>62</sup>

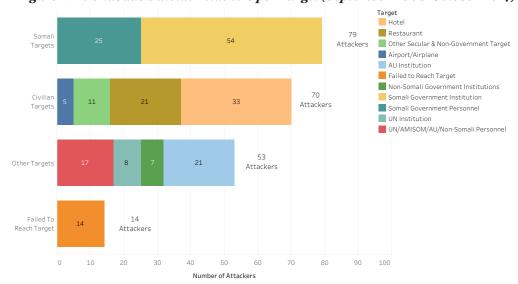
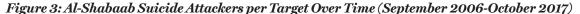
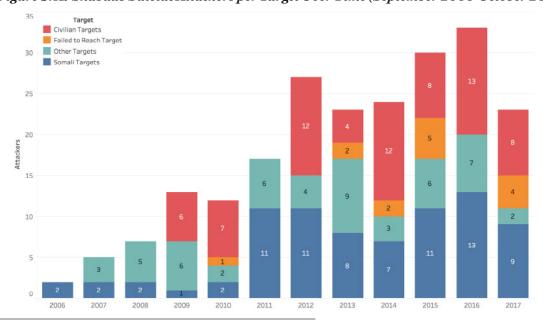


Figure 2: Al-Shabaab Suicide Attackers per Target (September 2006-October 2017)





<sup>61</sup> In its 155 attacks, the group targeted 162 venues, since some linked attacks deploy bombers to separate targets in the same proximate area. Therefore, in this section, all percentages will be derived from these numbers.

<sup>62</sup> See, for example, "Somalia: Country policy and Information Note," pp. 6-7, 21.

#### Targeting the Somali State: Attacking Somali Institutions and Personnel

In light of the general vacuum of federal governmental power that Somalia has endured since 1991, al-Shabaab's primary goal is to establish itself as a viable alternative to any perceived legitimate governing body. To that end, the group's suicide bombers have targeted a combination of Somali government institutions and Somali government representatives on 62 occasions, together comprising 38.3% of its overall targets.

For example, in May 2011, al-Shabaab conducted one of its most deadly attacks in Mogadishu. A suicide attacker detonated a truckload of explosives "at a security checkpoint outside a compound housing four ministries, including the Ministries of Education and External Relations." Personnel were similarly targeted with frequency. As will be described later, assassination attempts via suicide bomber are somewhat common. In January 2013, the group attacked the presidential compound. Later, al-Shabaab released a statement, saying that "the operation is part of a renewed campaign of attacks against Western puppets in Somalia, reminding them that the Mujahideen will get to them, whatever security precautions they take."

Although its focus on Somali government targets is clear, from a macroscopic perspective, what strategic logic underlies al-Shabaab's attempts to destabilize the Somali government via suicide bombing? Given al-Shabaab's history with the Somali government, attacks on its figures and locations fit perfectly into the group's existential narrative of serving as a viable—and indeed, unchallengeable—force in East Africa. In line with findings from Pape that terrorist groups tend to use suicide bombings when they interpret their territory to be occupied by an external force, it is the case that al-Shabaab's suicide bombers during the era of the TFG (2004 to 2012) were likely used to intimidate the incipient government, attempting to discourage the cobbled-together authorities to cease to remain in once-held al-Shabaab territories. However, interestingly, counter to Pape, al-Shabaab did not conduct suicide attacks in Ethiopia during its initial occupation of Somalia. Perhaps at this time, the group did not have the numbers or the influence to deploy suicide bombers outside of the country's borders.

#### Targeting AMISOM, the African Union, and the United Nations

Having been designated as a terrorist organization by Australia, Canada, the United Arab Emirates, the United Kingdom, and the United States, efforts by the International Somalia Contact Group to police and protect Somalia from terrorism have been viewed with unabashed hostility by al-Shabaab. Therefore, for as long as al-Shabaab has existed (since 2005), the group has unleashed unrelenting violence on the African Union Mission to Somalia (AMISOM), the United Nations, and any international personnel on the ground in Somalia. As of October 2017, 38 of al-Shabaab's intended targets, or approximately 23.5%, were international institutions and their personnel.

Targeting Physical International Institutions (African Union and/or U.N. Buildings): Al-Shabaab struck physical locations of these international institutions in 12.4% of its attempted attacks. These attacks were, even over time, some of the most lethal suicide bombings the group has ever carried out. In the 20 times these locations were targeted, an estimated 418 individuals were killed—a devastating lethality rate of 20.9 individuals killed per attack, much higher than its average 14.3 fatalities

<sup>63</sup> Zoe Flood and Abukar Albadri, "Massive al-Shabaab suicide bomb kills over 80 in Somali capital Mogadishu," Telegraph, October 4, 2011.

<sup>64</sup> Mike Pflanz, "'Al-Shabaab suicide bomber dies in attack on Somalia presidency," Telegraph, January 29, 2013.

For example, as Le Sage writes, "In mid-2006, AQ made [a statement] encouraging its followers to undertake a jihad against any international peacekeeping operations in Somalia. The call to arms was both an indictment by al-Qa`ida of the United Nations as a pro-Western, anti-Islamic grouping and a warning even to Muslim states such as Tunisia not to partake in any planned peacekeeping deployments." Andre Le Sage ed., African Counterterrorism Cooperation: Assessing Regional and Subregional Initiatives (Washington: Potomac Books, 2007.)

#### per operation.

One of the group's first attacks was undertaken against the U.N. offices in Mogadishu during October 2008. According to those on the ground at the time, the deployment of the three suicide bombers appeared to have been timed to coincide with a meeting of East African leaders in Nairobi, Kenya, hosted by the Intergovernmental Authority on Development (IGAD) to discuss a new peace deal. The group used car bombs to attack three targets in Hargesia: a government office, a U.N. compound, and the Ethiopian embassy, killing 23 individuals, including at least six Burundian peacekeepers. <sup>66</sup> Attacks like these, especially those that damage both infrastructure and personnel, seek to accomplish one of al-Shabaab's main goals: the removal of international interventions from Somali territory.

International Personnel from AMISOM and/or the United Nations: Al-Shabaab's suicide bombers appear to strike peacekeepers more often than they attack the buildings in which they work. Eighteen attacks targeted personnel serving in AMISOM, the United Nations, and other non-Somali interveners or 11.1% of its overall suicide targets. These attacks killed 97 individuals, for a lethality rate of 5.4 individuals killed per operation, lower that its normal rates.

However, as discussed previously, its lethality rates are likely not the most important metric of success for al-Shabaab's suicide operations. Al-Shabaab's suicide bombers appear to be remarkably adept at striking *ephemeral or temporary* targets—most specifically, convoys, short-term military camps, and vehicles moving international operations' personnel throughout Somalia. In March 2014, witnesses say "a suicide bomber rammed his car into an AMISOM convoy" near a checkpoint on the road linking Mogadishu and Afgoye. Given that these targets change location on a day-to-day basis, attacking them requires significant planning. This indicates that al-Shabaab's intelligence and surveillance system is particularly effective, and the targeting of these non-stationary groups via suicide bombing illustrates the investment that the group has made in thwarting global efforts to create peace in the region.

#### Targeting Hotels and Restaurants Frequented by its Foes

While the bulk of al-Shabaab's suicide attacks do not target civilians, the group has nevertheless commonly struck locations where Somali citizens are collateral damage in the course of targeting specific individuals. In particular, the insurgency has targeted its avowed adversaries, to include members of the international community (AMISOM/African Union/United Nations) who may be only temporarily based in Somalia for the short-term. As such, hotels and restaurants frequented by Somali elites and members of the international community comprised a large portion of al-Shabaab's suicide campaign targets, accounting for 25.9% of its suicide attack targets.

Al-Shabaab's suicide bombers have hit hotels on 25 different separate occasions as 15.4% of its attempted targets. The targets, though, were often not civilians at or employees of these institutions themselves, but political guests from out of town. For example, in 2010, four al-Shabaab soldiers struck a hotel in Mogadishu, disguising themselves as government soldiers. According to one source, "guests, many of them politicians, escaped out of windows after confused government guards began to fire indiscriminately. The suicide bomber entered a room that was a popular meeting place for MPs and blew himself up with a grenade." The attack, which appeared to target diplomats or other members of the international community, used the hotel as a largely symbolic target: no matter where guests may be from, their presence on al-Shabaab's "home turf" is most unwelcome.

Restaurants were similarly struck with high relative frequency; 10.5% of al-Shabaab's overall attack targets were open-air dining areas for a total of 17 attacks. In September 2012, two suicide bombers walked into a restaurant in central Mogadishu and blew themselves up, killing at least six people, less

<sup>66 &</sup>quot;Deadly car bombs hit Somaliland," BBC, October 29, 2008.

<sup>67 &</sup>quot;MPs among 32 dead after militants' raid on hotel," Times (London), August 25, 2010.

than a week after militant bombers targeted the country's new president. <sup>68</sup> The restaurant, called "The Village," was apparently owned by a well-known Somali businessman who had returned to Somalia from the United Kingdom recently, perhaps making him an additional target.

Airport/Airplane **AU Institution** Failed to Reach Target Non-Somali Government Institutions Other Secular & Non-Government Target Restaurant Somali Government Institution Somali Government Personnel **UN Institution** UN/AMISOM/AU/Non-Somali Personnel

Figure 4: Al-Shabaab Suicide Attack Targets (September 2006-October 2017)

#### 3.2 Strategic Logic of al-Shabaab's Targeted Suicide Bombing

Based on al-Shabaab's choice to target highly valued institutions and personnel of its adversaries, what can observers then intuit regarding the strategic motivations that drive al-Shabaab to deploy suicide bombers? The literature suggests that terrorist groups may choose to deploy suicide bombers for many strategic purposes, including but not limited to inflicting maximum destruction on personnel and institutions; inflicting mass casualties on civilians; and cultivating a pervasive culture of "shock and awe." As the subsequent section details, we assert that al-Shabaab relies on suicide bombers in order to wreak maximum destruction on personnel and institutions—especially through assassinations of specific individuals—while generally avoiding targeting civilians and not explicitly seeking simply to engender a culture of shock and awe.

#### Al-Shabaab's Proclivity for Assassinations

In many of its suicide bombing efforts, al-Shabaab has attempted to kill high-level officials, both from Somalia and abroad, via assassination. To date, the group has deployed a total of 30 suicide bombers for the purpose of assassinating political opponents and dissidents. While this may not be an overwhelming number of its overall suicide operations—assassination attempts are only undertaken by 13.9% of its total suicide bombers—this has generally been a rarely used tactic amongst current terrorist groups, the notable exception being the Tamil Tigers of Sri Lanka, who used suicide bombings frequently to assassinate high-level individuals. However, since the beginning of 2016, our data suggests that al-Shabaab has only launched two suicide attacks that aimed to assassinate a particular leader or person of interest.

Al-Shabaab's efforts to use suicide bombers as assassins squares with much of the current literature

<sup>68 &</sup>quot;Somalia: Suicide Bomber Kills 10 in Mogadishu," Africa News, May 24, 2009.

on suicide bombings. For example, Perry and Hasisi have explained why in assassinations, suicide bombing is an ideal tactic. <sup>69</sup> Indeed, using suicide bombers as assassins forces observers to reconceptualize human bodies as "smart bombs" that are more effective at detonating in a lethal or destructive manner than unmanned or stationary IEDs, given that their carriers are motivated by maximizing their interests. Such assumptions about the benefits of suicide bombers as assassins underlie other seminal pieces in the suicide bombing literature, such as Efraim and Berrebi's 2007 article on human capital and productivity, which argues that human capital correlates with more kills in suicide bombings, and thus, according to their argument, terrorist organizations assign their best bombers to their most important targets to ensure high lethality.<sup>70</sup>

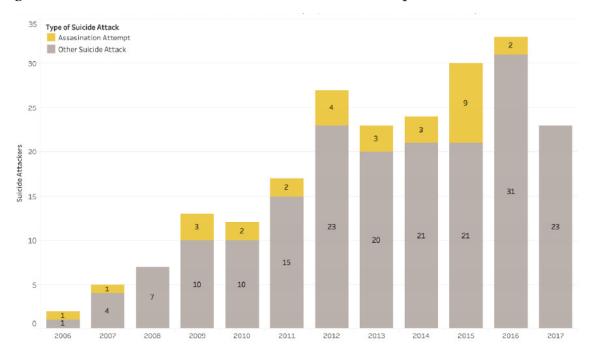


Figure 5: Al-Shabaab Suicide Attack Assassinations Over Time (September 2006-October 2017)

Of the ranking individuals that al-Shabaab's suicide bombers have targeted for known assassination, we offer insights below as to their name, affiliation, and date and location of assassination.

Target	Date	Location City	Location Country	Fatalities
TFG convoy	9/18/2006	Baidoa	Somalia	6
Prime minister house	6/4/2007	Mogadishu	Somalia	7
Madina Hotel and security minister	6/18/2009	Beledweyn	Somalia	25

Table 1: Assassinations

<sup>69</sup> Simon Perry and Badi Hasisi, "Rational choice rewards and the jihadist suicide bomber," *Terrorism and Political Violence* 27:1 (2015): pp. 53-80.

Figure 70 Efraim Benmelech and Claude Berrebi, "Human capital and the productivity of suicide bombers," *Journal of Economic Perspectives* 21:3 (2007): pp. 223-238.

Yusuf Mohamed Siyad, state defense minister	2/15/2010	Mogadishu	Somalia	5	
Presidential compound	9/20/2010	Mogadishu	Somalia	0	
Somali minister of interior	6/10/2011	Mogadishu	Mogadishu Somalia		
Security official	9/1/2011	Garowe	Somalia	0	
Former Somali warlord and one- time government police commander	1/31/2012	Galkayo	Galkayo Somalia		
Legislators	2/9/2012	Mogadishu	Somalia	15	
Military commander	4/8/2012	Mogadishu	Somalia	0	
Abdi Hassan, police chief and former warlord	10/13/2012	Galkayo	Somalia	2	
Presidential palace	1/29/2013	Mogadishu	Somalia	6	
Puntland police chief	2/11/2013	Galkayo	Somalia	10	
Intelligence official	3/18/2013	Mogadishu	Somalia	10	
Presidential palace	2/21/2014	Mogadishu	Somalia	3	
Military convoy	5/13/2014	Baidoa	Somalia	12	
Presidential palace	1/22/2015	Mogadishu	Somalia	1	
Sharif Hassan Sheikh Adan, president of the Southwestern State of Somalia autonomous zone	3/12/2015	Baidoa	Somalia	6	
UAE foreign officials	6/24/2015	Mogadishu	Somalia	9	
Foreign officials leaving building in U.N. convoy	9/21/2015	Mogadishu	Somalia	11	
State governor	11/11/2015	Mogadishu	Somalia	0	
Head of finances for Puntland	3/31/2016	Galkayo Somalia		9	
Somali general in a convoy	9/18/2016	Mogadishu	Somalia	8	

As shown above, al-Shabaab's tendency for assassinations via suicide bomber has been apparent from the group's first suicide attack, launched in 2006, when the TFG minister of national security was killed. Spotting the "weak transitional government of President Abdullahi Yusuf," a suicide car bomber

attacked the presidential convoy, only minutes after a speech to the transitional Parliament based out of the western town of Baidoa."<sup>71</sup> At the time, the attack was seen as "a decapitation attempt aimed not only at President Yusuf, but the fragile transitional Parliament."<sup>72</sup> Since that time, assassination attempts have been a common and crucial component of al-Shabaab's attack arsenal, especially when it is able to use suicide bombers to carry out the task.

In many cases, assassins use car bombs to ensure that any detonation is able to complete the operation's mission. For example, in 2013, an al-Shabaab suicide bomber "packed his car full of explosives and targeted a vehicle carrying the intelligence chief and soldiers" in another apparent assassination attempt. While, according to local reports, the bomber missed his target and hit a bus carrying passengers, those were assessed to be "auxiliary casualties," especially once the group designated that its target was Colonel Khalif Ahmed Ereg, chief of the National Intelligence and Security Agency. Residents of Mogadishu told reporters that it was one of the worst explosions they had seen in a long time. The same carrying passengers are considered as a security Agency. The same carrying passengers are carrying to the same carrying the intelligence and security Agency. Residents of Mogadishu told reporters that it was one of the worst explosions they had seen in a long time.

#### A Lack of Indiscriminate Targeting

Just as important as understanding what al-Shabaab's suicide bombers *do* target is understanding what they *do not* target. Our data shows that al-Shabaab largely avoids indiscriminately suicide bombing civilians and civilian spaces. This tendency to avoid targeting spaces where non-combatant or non-antagonistic civilians tend to gather contrasts starkly with the suicide bombing efforts of Boko Haram, some of whose *primary* targets include markets, bus stops, mosques, and churches. According to our data, al-Shabaab's suicide bombers have, only in rare instances, targeted these primarily civilian institutions. Indeed, as one recent report assessing al-Shabaab's targeting tendencies relayed, Although some people are regarded as 'legitimate targets,' the majority of civilians are not. Instead, it is the case that "the onus is on the [victim] to show that their profile and activities are such that they are reasonably likely to attract al-Shabaab's adverse attention and be targeted as a result. What factors lead to this seemingly concerted effort *not* to indiscriminately target civilians? Below, we discuss two rationales to explain why al-Shabaab generally avoids targeting non-combatant civilians in its suicide bombings: its need for legitimacy to govern and its general ethos of following al-Qa`ida's directives on suicide bombing, to include the non-targeting of civilians.

A Need for Legitimacy to Govern: One rationale for al-Shabaab's tendency not to indiscriminately target civilians lies in the fact that the group seeks to serve as a viable alternative of legitimate governance to the Somali government. Indiscriminately targeting civilians—with suicide bombings or otherwise—would fundamentally undermine this goal. Instead, the group seeks to primarily attack the groups that fill the governance space that it hopes to occupy. Attacks on the TFG, AMISOM, and individuals who seek the support of the public within a given institution help, from al-Shabaab's perspective, to highlight the existing weaknesses in these groups.

Al-Shabaab's Relationship with al-Qa `ida: More than its desire to portray itself as a legitimate source of governance, we argue that al-Shabaab's tendency to avoid indiscriminate killings via suicide bomber is likely profoundly informed by its close relationship with al-Qa `ida, which has clear rules about the

- 71 Rice.
- 72 Bill Roggio, "Suicide Strikes in Somalia," FDD's Long War Journal, September 18, 2006.
- 73 "Somalia: Intelligence Official Targeted in Suicide Car Bomb Attack," Africa News, March 18, 2013.
- 74 Ibid
- 75 Warner and Matfess.
- 76 "Somalia: Country Policy and Information Note," p. 6.
- 77 Ibid

<sup>78</sup> Examples of al-Shabaab's efforts at governance are wide-ranging, to include providing food and water, education, and security as well as providing an effective tax system, judiciary, and other public services.

admissibility of targeting. Al-Shabaab's allegiance to al-Qa`ida dates back before its own founding to the early 1990s, when al-Qa`ida sent several figures to Somalia to help train and recruit local fighters into the global organization and foment a local Islamic insurgency, al-Ittihad al-Islami, al-Shabaab's predecessor. Pespite initial dissatisfaction with al-Qa`ida's leadership in the way that al-Shabaab was governing, al-Shabaab bound itself to the directives set forth by al-Qa`ida's central leadership as to how it conducts its operations with its first pledge of allegiance to al-Qa`ida. When it comes to its track record in suicide bombings, al-Shabaab appears to have adhered to them closely. When the group would overstep its boundaries or make a mistake, as it did when attacking a hotel that was hosting a ceremony for medical students, al-Qa`ida's then-leader, Usama bin Ladin, was quick to reprimand the group and instruct them to be more careful, as described below.

Indeed, al-Qa`ida is specific in its rules for targeting individuals and institutions during the course of conducting jihad. Outlined by al-Qa`ida leader Ayman al-Zawahiri in 2013 in his "General Guidelines for Jihad"<sup>83</sup>—a compilation intended to serve as a centralized "rule book" for the global organization—the directive advises al-Qa`ida-affiliated jihadis on how to act in certain situations and how they should engage in "proper jihad." In the "Guidelines," al-Zawahiri clearly sets rules for how his jihadis should engage in terrorist acts, which al-Shabaab seems to follow in its suicide bombing operations. In particular, there are four rules that al-Qa`ida's branches, affiliates, and allies must adhere to:

Generally, avoid fighting or targeting those who have not raised arms against us or aided in any such hostile act and maintain focus primarily on the Crusader Alliance and then upon their local surrogates.

Refrain from killing and fighting against non-combatant women and children, and even if they are families of those who are fighting against us, refrain from targeting them as much as possible.

*Refrain from harming Muslims* by explosions, killing, kidnapping, or destroying their wealth or property.

Refrain from targeting enemies in mosques, markets, and gatherings where they mix with Muslims or with those who do not fight us.<sup>84</sup>

Al-Qa`ida again outlined explicit rules for "martyrdom operations," or suicide attacks, in a video re-

According to Caleb Weiss and FDD's Long War Journal, these figures included Abu Talha al-Sudani, Yusef al-Ayeri and Abdel Aziz al-Muqrin (both co-founders of al-Qa`ida in Saudi Arabia), Abu al Hasan al Sa'idi, Saif al-`Adl, Abu Muhammad al-Masri, Fazl Muhammad, and Abu Ziyad al-Iraqi. Some of these operatives reportedly even took part in the infamous "Black Hawk Down" battle in 1993. In an al-Shabaab video released in 2017 meant to highlight its al-Qa`ida pedigree, the group notes that these figures helped Somali veterans of the jihad in Afghanistan in forming Al Ittihad al Islami (AIAI). AIAI was the predecessor to the Islamic Courts Union, in which al-Shabaab would initially form as a military wing and then its own independent group after the collapse of the ICU in 2006. Several al-Qa`ida-linked commanders from AIAI and the ICU would also fill al-Shabaab's hierarchy, including its first leader Mukhtar Abu Zubayr, the aforementioned Abu Talha al Sudani, Omar Dheere, Hassan Dahir Aweys, and Saleh Nabhan.

<sup>80</sup> Indeed, under bin Ladin's reign, his correspondence with various figures shows his displeasure with the nature of al-Shabaab's governance tendencies. Not only did he lament the fact that al-Shabaab's leader Mukhtar Abu Zubayr had not succeeded in creating a viable means of economic production, but also believed al-Shabaab overly draconian in its interpretation of hudud, or the deterrent penalties for certain crimes. For more on bin Ladin's interpretations of the shortcomings of al-Shabaab, see Nelly Lahoud, Stuart Caudill, Liam Collins, Gabriel Koehler-Derrick, Don Rassler, and Muhammad al-`Ubaydi, Letters from Abbottabad: Bin Laden Sidelined? (West Point, NY: Combating Terrorism Center, 2012), pp. 38-42.

<sup>81</sup> According to Caleb Weiss and FDD's Long War Journal, al-Qa`ida long had an operational relationship with al-Shabaab and its predecessor groups, especially the Islamic Courts Union. However, Nabhan's pledge on behalf of al-Shabaab in 2008 was the first official pledge of allegiance to al-Qa`ida. Bin Ladin would later write to al-Shabaab's leadership to request they keep the relationship secret for fear of international retribution, but in 2010, al-Shabaab went public with the relationship. It was not until 2012 that al-Zawahiri publicly announced al-Shabaab would be an official branch of al-Qa`ida.

<sup>82</sup> We thank Tricia Bacon for her extensive comments on primary-source material on the relationship between al-Shabaab and al-Qa`ida.

<sup>83 &</sup>quot;General Guidelines for Jihad," As-Sahab Media, 2013.

<sup>84</sup> Ibid.

leased in 2015 by al-Qa`ida in the Arabian Peninsula (AQAP).<sup>85</sup> Many of the rules in this video echo what was earlier stated by al-Zawahiri, specifically that jihadis should not just avoid mass murder of civilians in markets or mosques, but that killing Muslims should be avoided even if they are being used to shield the jihadis' enemies.

More specifically, various declassified letters from the raid of bin Ladin's house in Abbottabad, Pakistan, revealed al-Qa`ida's exhortations to al-Shabaab to avoid targeting civilians. <sup>86</sup> One letter requests that its recipient:

"Please talk to the Somali brothers about reducing the harm to Muslims at Bakarah Market as result of attacking the headquarters of the African forces. Instead, they should focus on attacking them on their way to and from the airport. They should not carry out operations against their headquarters unless these are large, special operations." 87

Moreover, the letter's author expresses annoyance at how al-Shabaab's July 2010 suicide attacks in Kampala were carried out, lamenting that while al-Shabaab "were supposed to arrange a good plan for assassinating the President of Uganda, (Museveni) ... if they cannot, they should target vital military and economic targets." Presumably, this letter was written as a rebuke to al-Shabaab suicide bombers' targeting primarily civilians at a restaurant and a rugby club. In another, in December 2010, Abu 'Abd-al-Rahman requests:

"For the brothers in ... Somalia ... [any attacks on Western interests should] ... avoid harming Muslims, also taking care to avoid collateral damage among the crusaders and pagans in general (the civilian masses). If the brothers are absolutely certain that they can conduct very precise operations, with no possibility of incurring Muslim victims, such as kidnappings or the use of gunfire far from people—it's okay to target ... in this way."89

Perhaps most emblematic of this tendency to avoid indiscriminate targeting of civilians via suicide bomb were the massive dual truck suicide bombings in Mogadishu on October 14, 2017. That day, a truck laden with an estimated two tons of homemade explosives detonated near the central Zoobe Junction, a central traffic junction in Mogadishu. Citizens described the massive explosion unlike anything that they had experienced. The death toll from the explosion has been tallied to over 500. <sup>90</sup> While the explosion had all of the markers of an al-Shabaab operation, the group has yet to claim attack, primarily because of the extensive, unnecessary civilian casualties that it wrought. Indeed, although the dual truck bombers were believed by some to be targeting the Mogadishu airport compound, where the United Nations, most embassies, and the headquarters of the 22,000-strong AMISOM are based, <sup>91</sup> instead, the suicide bombings' victims were civilians. Thus, as regards al-Shabaab's nonclaim of the attacks, Abdillahi Sanbalooshe described, "The toll in the October 14 bombing was so high ... that the Shabaab didn't dare to claim responsibility and admit its murderous conduct even to its own members and sympathizers." In short, because the attack failed to reach its intended targets

<sup>85</sup> Martin Rudener, "'Electronic Jihad': The Internet as Al Qaeda's Catalyst for Global Terror," *Studies in Conflict & Terrorism* 40:1 (2017): pp. 10-23.

Broadly, an al-Qa`ida operative named Azmarai wrote, "Please remind the brothers in Somalia to be compassionate with the people and remind them of the Hadiths on this. Regarding the Sufi groups, make sure to tell them to do their best to keep them unaligned, and if some of them refuse to stay unaligned, they should not treat all of them the same way. We do not want them to become an instrument for the enemy to use against us. Any provocation from our side would push them more toward the enemy." "Letter dtd 7 Aug 2010," Bin Laden's Bookshelf, Office of the Director of National Intelligence, p. 2.

<sup>87</sup> Ibid., p. 2.

<sup>88</sup> Ibid., p. 3.

<sup>89 &</sup>quot;Letter to Abu Muhammed Salah," Bin Laden's Bookshelf, Office of the Director of National Intelligence, p. 2.

<sup>90</sup> Emily Sullivan, "Mogadishu Truck Bomb's Death Toll Now Tops 500, Probe Committee Says," NPR, December 2 2017.

<sup>91</sup> Jason Burke, "Thousands march in Somalia after attack that killed more than 300," Guardian, October 18, 2017.

<sup>92</sup> Abdillahi Mohamed Sanbalooshe, "Somalia Doesn't Need Tears. Help Us Fight Terrorism," New York Times, October 26, 2017.

and primarily killed civilians rather than government employees or members of the international community, al-Shabaab's attempted suicide attack undermined its own goals, painting it as a threat to citizens and offering the government the ability to respond favorably. As per the above discussion, it seems clear that al-Shabaab's stalwart affiliation with al-Qa`ida has served as a guiding principle for why it generally avoids targeting civilians in its suicide bombing operations.

#### PART 4: TRENDS INFORMED BY TARGET PRACTICES

Given that al-Shabaab has decided to deploy suicide bombers with the express intention of targeting specific enemies, this section investigates various secondary effects of its decision to use (generally) highly targeted suicide bombings against specific enemies and their physical institutions. These include the demographics of al-Shabaab's suicide bombers, who tend to be well-trained and committed men, with less than 5% of its suicide bombers being identified as female; the geographies of al-Shabaab's suicide efforts, which are overwhelmingly concentrated in Somalia and tend to cluster in Mogadishu and in southern Somalia; the detonation delivery mechanisms for al-Shabaab's suicide bombers who detonate their own devices, of which 59.7% are vehicle-borne bombs and of which 28.7% are strapped to the bomber via vest or belt; the timing of al-Shabaab's suicide bombing attacks, which tend to spike during the work week; the causes of the rare capture of al-Shabaab's suicide bombers; and al-Shabaab's use of suicide bomber teams, a tactic that it uses when deploying almost half (approximately 46.8%) of its suicide bombers.

#### 4.1: Demographic Trends in al-Shabaab's Suicide Bombers

#### A Male-Dominated Enterprise

Gathering data on the sex of al-Shabaab's suicide bombers proved difficult. Only approximately one-third of articles contained information on the bomber's sex, meaning that we do not have definitive sex markers for 68.5% of bombers. Nevertheless, the data available shows that 26.9% of all bombers were men and 4.6% were women. While the data is admittedly flawed, we consider it highly likely that the vast majority of the non-sex-identified bombers are, in fact, male. In instances where the media did not report the sex of a suicide bomber, we assumed that the bomber was likely male, as an attack by a female suicide bomber would be considered more anomalous and thus worthy of reporting.

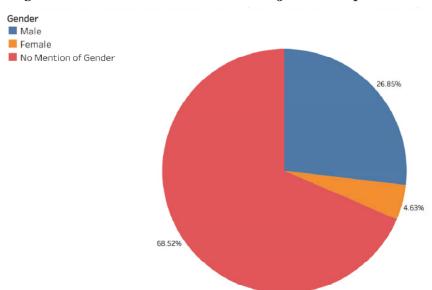


Figure 6: Al-Shabaab Attacker Breakdown by Gender (September 2006-October 2017)

Though the sex of al-Shabaab's suicide bombers is difficult to discern with complete accuracy, we can say that members of al-Shabaab that are deployed as suicide bombers go through what appears to be a lengthy vetting process. As the Counter Extremism Project reports, at a minimum, al-Shabaab recruits go through a six-month training process, to include religious studies and practice in combat. In the aftermath of completing this course, "graduates can sign up for a combat unit, become bomb-makers, or work for the group's security network, the Amniyat. Standout recruits have the opportunity to join the years-long waiting list for the Istishhadyin unit, the group's suicide brigade."<sup>93</sup>

The rigorous process entailed to become a suicide bomber for al-Shabaab, which requires significant training and joining a waiting list, offers important insights into its suicide bombing practices, purposes, and attacker selection. In other terrorist organizations, the group's leadership may deploy bombers for purposes other than lethality. In particular, some organizations, such as Boko Haram, deploy women, children, or even disabled individuals to create pervasive fear among the population. Such a reliance on untrained, coerced, or unexpected bombers means that there will be, in many cases, failures to detonate and kill others, while still succeeding in disrupting the social fabric of the community. Al-Shabaab, divergently, relies on attackers who have completed codified training and who have a high likelihood of completing their mission. These camps, regardless of their curriculum, underline the point that al-Shabaab is not singularly focused on shock and awe. Instead, its aim is to destroy carefully chosen, high-value targets, and thus complete its mission. Accordingly, the group needs high-quality bombers, those who are willing to exhibit sustained commitment to the mission, to complete training, to remain on a waitlist, and then to strike their designated targets with a high degree of efficacy.

#### A Smattering of Women Suicide Bombers

With the global rise in attention to women suicide bombers generally, a 2017 U.N. report suggested that when it comes to al-Shabaab's membership, "women are often recruited because they may attract less attention and can thus more easily carry out suicide bombings." Despite its overall inconclusive-

<sup>93 &</sup>quot;Al-Shabab," Counter Extremism Project.

<sup>94 &</sup>quot;Countering al-Shabaab Propaganda and Recruitment Mechanisms in South Central Somalia," UNSOM, 2017, p. 12.

ness on gender, our data paints a different story about women's role in al-Shabaab's suicide bombing efforts. Instead, it shows that al-Shabaab has deployed only 10 women and girls as suicide bombers since 2006, or 4.6% of its total bombers. This stands in contrast to Boko Haram, which had deployed at least 288<sup>95</sup> but as many as 422<sup>96</sup> female bombers as of November 1, 2017, constituting well over half of its suicide bomber workforce. Instead, al-Shabaab's use of women peaked in 2014 and 2015 and has since tapered off in 2016 and 2017, generally bucking the trend of more women serving as suicide bombers on the African continent, particularly in the Lake Chad Basin.<sup>97</sup>

Notable examples of al-Shabaab's use of women as suicide bombers include the April 4, 2012, attack on the national theater in Mogadishu, when the group used a teenage girl for its operation. In a February 2015 assassination attempt on the deputy prime minister, a female, identified as Lula Ahmed Dahir, was used in the coordinated assault. In June 2011, a Somali minister was killed after a female entered his residence and detonated her explosives vest. Some reports suggest that she was the minister's niece.

Importantly, the question bears asking: do al-Shabaab's female suicide bombers show any notable qualitative differences when compared to their male counterparts? In the main, the characteristic that unites most female al-Shabaab bombers is their lack of success in reaching their intended target. Only half of al-Shabaab's female suicide bombers actually succeeded in detonating their explosives. This is, in the case of five separate bombers, because they had yet to formally join the group, let alone complete its training. For example, in March 2015, three university students were arrested in Elwak town on the Kenya-Somalia border "as they attempted to sneak into Somalia to join al-Qa`ida-affiliated Somalian militants." <sup>101</sup> The three young women "boarded a bus from Mombasa" and "were to become jihadi brides and were supposed to be trained as suicide bombers." <sup>102</sup> However, they were arrested before reaching their targets. <sup>103</sup> Others were arrested while planning attacks, before they could even be deployed.

In conclusion, although al-Shabaab does attempt to recruit women, it does not appear to use them as suicide bombers, instead sending these women to training camps "for the sole purpose of being taken as brides." However, our data did reveal several instances of men dressing as female suicide bombers, as in the case of the December 2009 suicide bombing at a medical school graduation in Mogadishu. 106

#### An Unclear Picture of Ages

One of the most unsatisfying aspects of our data collection related to our ability to locate information on the ages of al-Shabaab's suicide bombers. In total, we were able to get so few age estimates (even in

- 95 Warner and Matfess.
- 96 Pearson.
- 97 Pearson; Chapin; Warner and Matfess; Zenn and Pearson.
- 98 Jenny Booth, "Bomb blast kills Somali Olympic Chief," *Tim*es (London), April 4, 2012.
- 99 Heather Saul, "Somalia suicide bombing: Al-Shabaab blast kills at least 11 and injures deputy prime minister; Militants claimed responsibility for bomb attack on hotel," *Independent*, February 20, 2015.
- 100 "Minister Killed in Mogadishu Suicide Attack," Shabelle Media Network, June 10, 2011.
- 101 "Somalia; Kenya Arrests Three Women Over Terror Links," AllAfrica, March 30, 2015.
- 102 Ibid.
- 103 While in most cases the authors would not include would-be attackers in their count, given that these women announced their intention to act as suicide bombers specifically and were arrested accordingly, these attackers were coded as having "failed to reach their target."
- 104 "Kenya Arrests Al-Shabaab Terror Suspects," AllAfrica, November 13, 2014.
- 105 "Al-Shabab," Counter Extremism Project.
- 106 "Blast kills 19 at medical school graduation in Somalia," CNN, December 4, 2009.

broad categories, such as "child," "teen," or "adult") that we do not discuss the ages of al-Shabaab suicide bombers here. We attribute this lack of data to a few potential causes. The most likely, we assume, is that the vast majority of al-Shabaab's suicide bombers are grown adults: men and women over the age of 18, or thereabouts. If homogeneously adults or young adults, it would be intuitive for the media not to report on what would amount to a mundane detail. This stands in contrast to reporting of ages of Boko Haram's suicide bombers (given that many of Boko Haram's suicide bombers are teenagers and children under the age of 13). West African media began to make a practice of commenting on the ages of bombers as soon as it began to notice variation in bomber ages. Of Given that we do not see reporting on this front, or other suggestions that teens or children are used, it appears that the vast majority of al-Shabaab's suicide bombers are adults, or, at least of consenting age.

Despite not having clear evidence to show that teens are being used as bombers, an assessment of al-Shabaab's general recruiting tendencies suggests that this might well be the case. To be sure, al-Shabaab (whose name itself means "The Youth") has been noted for targeting its recruiting efforts at Somali youth, especially those between the ages of 10 and 15. <sup>108</sup> By capitalizing on the grievances of youth—unemployment, lack of opportunities, disdain for government, and desire for revenge—as well as intimidating them to join the group—by suggesting that if they pursue higher education or work for the government, they will be targeted <sup>109</sup>—it is logical to imagine that many of al-Shabaab's suicide bombers are actually teens. However, based on our research methodology, we could not determine cases definitively.

#### Inconclusive Results Regarding the Presence of Foreign Fighters

Although al-Shabaab is known to play host to numerous foreign fighters from around the region and from the West,<sup>110</sup> rarely did news reports detail the nationality of al-Shabaab's suicide bombers. This may be because of the challenge in identifying bombers after they detonate their explosives and because of al-Shabaab's choice only to publicize the names of a few of their most successful bombers.

Indeed, despite the fact that researchers like Marchal have suggested that the Somali diaspora serves as a "strategic supplier" of al-Shabaab's suicide bombers, <sup>111</sup> our data confirmed evidence of only seven bombers with dual Somali and Western nationalities used in operations inside Somalia. In all seven cases, each was ethnically Somali, but the holder of secondary, non-Somali, citizenship. This includes American Shirwa Ahmed, who in October 2008 became al-Shabaab's first American suicide bomber when he detonated himself in Bosaso, Puntland. <sup>112</sup> In May 2011, Farah Mohamad Beledi, another Somali-American, detonated himself at a Somali military base in Mogadishu. Later that year, Abdisalan Hussein Ali, a Somali-American from Minneapolis, Minnesota, perpetrated a suicide bombing alongside another bomber on an African Union base in Mogadishu. That attack left at least 80 dead and dozens more wounded.

In 2014, Norwegian-born Abdullahi Ahmed Abdulle killed eight people and wounded 11 others after he detonated at a popular hotel in Mogadishu. He was reportedly 60 years of age at the time, according to an al-Shabaab statement. A year later, a man and woman, both of Dutch-Somali nationality, killed

<sup>107</sup> Warner and Matfess

<sup>108 &</sup>quot;Countering Al-Shabaab Propaganda and Recruitment Mechanisms in South Central Somalia," United Nations Assistance Mission in Somalia, 2017, p. 12.

<sup>109</sup> Ibid., p. 8.

<sup>110 &</sup>quot;Somalia: Country Policy and Information Note," p. 10.

<sup>111</sup> Marchal, p. 56.

<sup>112</sup> Andrea Elliot, "A Call to Jihad, Answered in America," New York Times, July 11, 2009.

<sup>113 &</sup>quot;'Somalia suicide bomber was Norwegian': Shebab," AFP, March 19, 2014.

25 people in an assassination attempt of the deputy prime minister of Somalia. $^{114}$  A few months later, a Somali of dual German-Somali nationality undertook a similar operation, killing  $13.^{115}$ 

However, reports of al-Shabaab suicide bombers from other African countries rarely occurred. While we find evidence of some individuals traveling *to* Somalia to become suicide bombers, few have been deployed thus far. Therefore, while we believe it to be is highly likely that foreign fighters from other African countries or beyond have indeed perpetrated suicide bombings for al-Shabaab in Somalia, some of those bombers may not have been trained yet or may be on the years-long waiting list. If these non-Somali bombers have been deployed, the data available in our study did not reveal this definitively. Our data did, however, reveal one instance of a Kenyan suicide bomber being used against Kenyan troops in Somalia, <sup>116</sup> although again, it is likely that there have been more.

#### Al-Shabaab's Suicide Bombers and the Question of Coercion

One pressing issue around terrorist groups' use of suicide bombers relates to the question of agency displayed by the bomber to undertake the action in question. While some who undertake such missions are rightly described as participating in "suicide bombings" or "martyrdom operations," others have suggested that coerced suicide bombers—especially women and children—are more appropriately characterized as "human-borne IEDS" (HBIEDs).<sup>117</sup>

While we see other groups, especially the Taliban and Boko Haram,<sup>118</sup> being prone to using coercion to recruit suicide bombers, al-Shabaab does not explicitly exhibit this tendency. In no media reports did we come across instances in which al-Shabaab's bombers were seemingly coerced into action. However, given al-Shabaab's broader tendencies for coercion more generally and in other fighting capacities—to include coercion of young people, especially children, to join the group, coercion of village elders to provide soldiers at regular intervals,<sup>119</sup> and coercion of financial support through bribes, ransom, and taxes<sup>120</sup>—we cannot be certain that the practice of coerced suicide bombing does not occur at all. Indeed, as Paul Williams has noted, given the seeming surfeit of recruits, the group need not coerce unwilling participants to serve as bombers.<sup>121</sup>

#### 4.2: Delivery Trends of al-Shabaab's Suicide Bombers

Our review of available data shows that there are three main genres of detonation for al-Shabaab's suicide bombers: vehicle-borne IEDs (VBIEDs), suicide vests or belts, and others. Below, we track their usage over time.

<sup>114 &</sup>quot;Dutch-Somali Nationals Carried Out Mogadishu Hotel Suicide Bombings," AFP, February 22, 2015.

<sup>115 &</sup>quot;Somalia bomber had ties to Germany, report says," Deutsche Welle, July 28, 2015.

<sup>116</sup> Cyrus Ombati, "Kenyan suicide bomber behind killing of KDF soldiers in Kulbiyow, Somalia," Standard, February 13, 2017.

<sup>117</sup> Warner and Matfess.

<sup>118</sup> Ibid.

<sup>119 &</sup>quot;Somalia: Country Policy and Information Note," p. 6.

<sup>120</sup> United Nations Assitance Mission in Somalia.

<sup>121</sup> Authors communication, Paul Williams, academic, January 2018.

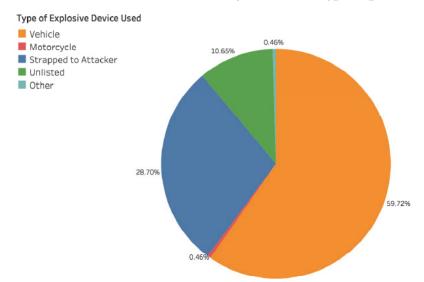


Figure 7: Al-Shabaab Attacker Breakdown by Detonation Type (September 2006-October 2017)

#### Vehicle-Borne Suicide Bombings

Al-Shabaab's most common tactic in its suicide bombing campaigns is suicide bombings borne by vehicles. According to our data, suicide car bombings comprise the majority of al-Shabaab's suicide bombing efforts: from 2006 to late 2017, 130 attackers have used suicide car bombs or motorcycle bombs, accounting for 59.7% of all of its suicide attacker attempts.

Using suicide car bombs (commonly referred to as suicide vehicle-borne improvised explosive devices, (SVBIED) as a tactic has long been employed by various terrorist groups from al-Qa`ida in Iraq to Hezbollah to the Afghan Taliban. Car bombs are relatively inexpensive to manufacture and are harder to detect than other methods of detonation. The use of vehicle bombs also allows for larger explosions, which serves the double purpose of also ensuring the destruction of brick-and-mortar institutions in crowded areas, like Mogadishu. While certain security measures can be applied to minimize the potential of car bombings, the tactic can still be applied to weaken hard targets. However, the downside of using VBIEDs is that they require 10 times as much explosive material as suicide belts or vests—100 kilograms per small VBIED bomb as compared to 10 kilograms for an average vest. 123

Al-Shabaab employs VBIEDs for a variety of purposes. First, it uses car bombs to soften hard targets before a larger assault team breaches the perimeter to attack a more central target. This genre of al-Shabaab suicide assault is most commonly perpetrated against institutions, with car bombs most frequently being used to strike hotels, government buildings, as well as Somali and African Union military bases. Second, and with less frequency, the group uses SVBIEDs in its efforts to assassinate government, military, or intelligence personnel.

#### Vest-Based Suicide Bombings

The second-most common delivery mechanism of al-Shabaab's suicide bombers are suicide vests or belts. According to our data, between September 2006 and October 2017, al-Shabaab conducted at least 62 attacks with suicide vests or belts, comprising 28.7% of its total attacks of the period in

<sup>122</sup> This number includes suicide and non-suicide car bombs. See Robert Baer, "Why the Car Bomb Is a Terrorist's Best Weapon," *Time*, September 22, 2008; Siri Agrell, "Car bombs almost impossible to detect," *Globe and Mail*, May 5, 2010.

<sup>123 &</sup>quot;Methods and Tactics," Office of Director of National Intelligence, 2017.

#### question.124

The use of suicide belts or vests is common and has evolved over various conflicts for decades. These types of explosives are relatively cheap, are easy to produce, and can be more easily concealed on a person, especially if the bomber is willingly complicit (that is, not coerced). This concealment can allow bombers to infiltrate spaces to which a group may not normally have access. As but one of myriad possible examples, in November 2014, a fighter from the Afghan Taliban was able to assassinate a police chief after infiltrating the Kabul police headquarters while wearing a suicide vest concealed under his clothes. <sup>125</sup>

For its part, al-Shabaab has also used suicide vests to infiltrate well-secured areas. In 2009, a man dressed in women's clothing detonated his explosives (concealed under his clothing) after being able to get close to Somali VIPs at a university graduation ceremony. Al-Shabaab has also been able to use this tactic to infiltrate medical clinics run by African Union forces, as it did in 2009 and in 2010. Vests, like suicide car bombs, have also been frequently used on restaurants and hotels.

Detonations with vests have also been used during suicide assaults in which many attackers storm a perimeter after a larger car bomb or when many attackers storm a complex with the intention of dying. This was the case in the March 12, 2015, suicide assault targeting Sharif Hassan Sheikh Adan, president of the Southwestern State of Somalia autonomous zone, in Baidoa. Five gunmen strapped with suicide vests stormed several government buildings in the city to assassinate Adan.

#### Other Types of Suicide Bombing Detonation Trends

Apart from these two main tactics, al-Shabaab's suicide bombers, in one instance, have tried to employ a more sophisticated method of attack, using a laptop bomb in a 2016 flight from Somalia to Djibouti. Officials initially suspected that the laptop bomb was smuggled on board by a suicide bomber who posed as a disabled passenger to avoid rigorous security checks, arguing that the bomber "was not properly screened." However, the investigation discovered that two men, seemingly airport workers, provided the laptop to the suspected suicide bomber. When detonated, the explosive device "tore a door-sized gap in the plane's fuselage, through which one passenger is believed to have been sucked out of the plane." This style of attack is consistent with al-Shabaab's efforts to deceive its targets, by dressing in uniform, traveling in stolen vehicles, or in this case, exploiting a weakness in Somalia's airport security. This is also linked to the wider jihadi effort to find new and innovative methods to target aviation.

#### 4.3: Timing Trends in Al-Shabaab's Use of Suicide Bombers

Given the availability of data, we also decided to analyze al-Shabaab's suicide bombing efforts temporally: that is, by day of the week and month of the year, to gauge any operational patterns. In so doing, we present what we believe to be an intriguing finding: al-Shabaab seems to try to "respect" to a certain extent, the sanctity of the Islamic weekly and yearly calendar, by decreasing its suicide bombings on holy days and months. A counterintuitive suggestion at first blush, we explain why this

<sup>124</sup> It should be noted that in the authors' dataset, bombers were coded as using a suicide vest when the article explicitly stated as much or when the article stated that the attacker "blew him/herself up."

<sup>125 &</sup>quot;Bomber infiltrates Kabul police HQ," BBC, November 9, 2014.

<sup>126 &</sup>quot;Deadly Suicide Bombing Kills Four Somali Ministers," Garowe Online, December 3, 2009.

<sup>127</sup> Bill Roggio, "Shabaab suicide bomber kills seven at Mogadishu medical clinic," FDD's Long War Journal, January 26, 2010.

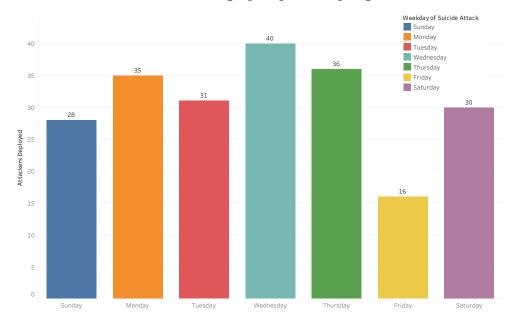
<sup>128</sup> Ibid.

<sup>129</sup> Harun Maruf, "Somali Officials: Man Killed in Plane Bombing Given Laptop Before Flight," Voice of America, February 7, 2017.

<sup>130 &</sup>quot;'Wheelchair-bound suicide bomber' responsible for attack on Somali airline," Telegraph, February 4, 2016.

might be the case subsequently.

Figure 8: Al-Shabaab Suicide Attackers Deployed by Weekday (September 2006-October 2017)



Days of the Week: Targeting the Work Week, Calming Down on Weekends, Avoiding Fridays

As concerns trends regarding days of the week, our data reveals three phenomena.

First, we see that al-Shabaab's suicide bombers are most prone to conducting suicide attacks on week-days, with Wednesdays being the most frequent. Given al-Shabaab's tendency to target specific anti-Shabaab personnel from the Somali government and the international community, we believe that the focus on these days is a result of its intended targets being at work, visible, and thus able to be targeted. Especially given that so many non-Somali government officials travel to Somalia during the weekend, and then begin work on Monday, this may explain the spike in attacks at the beginning of the week.

Second, and perhaps most interesting, we see a noticeable difference between al-Shabaab's deployment of suicide bombers on Fridays, the Muslim holy day, as opposed to other weekdays. We believe that this is not happenstance, but instead, rooted in al-Shabaab's larger ethos of its desire not to target civilians, as discussed previously.

Third, al-Shabaab's suicide bombing efforts declined slightly on weekends when compared to the non-Friday work week. The discrepancy between weekday and weekend attacks, while seemingly small, could be rooted in al-Shabaab's proclivity for targeting personnel. Attacks on Saturday and Sunday are almost exclusively undertaken against physical institutions or other brick-and-mortar locations, as opposed to individual, sentient targets. Of the 58 attackers deployed on a Saturday or Sunday, only approximately 8.62% were focused on personnel, as opposed to over 23.4% of attacks concentrated on personnel during the week. With such a reliance on assassination attempts and the weakening of military forces through destruction of its workforce, the discrepancy between weekend and weekday attacks fulfills the group's strategic logic for launching suicide attacks at all.

#### Targeting Trends by Month

We also tracked al-Shabaab's tendency to conduct suicide bombings by month. Our findings show that

September outstrips all other months (30 bombers deployed), while December is the least common month for suicide bombings (a mere 11 bombers deployed). What factors might explain these bombing trends by month?

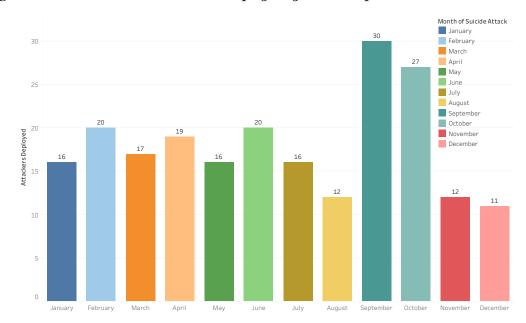


Figure 9: Al-Shabaab Suicide Attackers Deployed by Month (September 2006-October 2017)

Interestingly, our data shows that in general, al-Shabaab has not increased its suicide bombing efforts during the month of Ramadan. During the period in question, 2006 to 2017, Ramadan primarily occurred in the months of June, July, August, and some parts of September. This pattern is notable given that, in other instances, groups affiliated with the Islamic State—namely, Boko Haram—experienced a rise in suicide bombings during the period during which Ramadan falls each year. For al-Shabaab, the opposite appears to be the case, tracking with recent scholarship showing that jihadi violence does not tend to rise during Ramadan. At the very least, we suggest that al-Shabaab has, from 2015 to 2017, not heeded the calls of the Islamic State, which it strongly opposes, to step up suicide bombings during Ramadan.

#### 4.4: Geographies of al-Shabaab's Suicide Bombing Attacks

#### A Focus on Southern Somalia

In general, al-Shabaab's suicide bombers have most typically been deployed in southern Somalia. Al-Shabaab's focus on southern Somalia correlates with where the group itself has the most significant presence, and resultantly, most frequently battles with Somali and African forces for control over territory. In addition to the enemy-centric imperatives of operating in southern Somalia, observers have noted that two of al-Shabaab's suicide bomber training camps are located in Mogadishu and the

<sup>131</sup> During the 2006-2010 period, Ramadan did fall, at least partially, in September, during which time approximately 20% of all attacks in those years were in September.

<sup>132</sup> Michael J. Reese, Keven G. Ruby, and Robert A. Pape, "Days of Action or Restraint? How the Islamic Calendar Impacts Violence," American Political Science Review 111:3 (2017): pp. 439-459.

<sup>133</sup> Jason Warner and Caleb Weiss, "A Legitimate Challenger? Assessing the Rivalry Between Al-Shabaab and the Islamic State in Somalia," CTC Sentinel 10:10 (2017): pp. 27-32.

village of the Elberde in the Bakool region.<sup>134</sup>

However, while al-Shabaab's suicide bombing attacks have largely focused in the southern part of the country, a notable development occurred in May 2017, when the Islamic State in Somalia, led by Abdulqadir Mumin, launched its first—and to date, only—suicide bombing attack in Puntland, which killed five and injured 12. Al-Shabaab did not claim the attack, while the Islamic State's Amaq news did claim responsibility.<sup>135</sup> We find that al-Shabaab has only conducted seven suicide attacks inside Puntland and one in Somaliland since 2008.

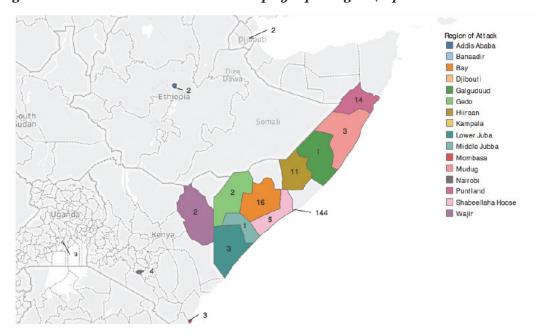


Figure 10: Al-Shabaab Suicide Attackers Deployed per Region (September 2006-October 2017)

#### Targets in the Greater Horn of Africa

While by and large, al-Shabaab's suicide bombers have held an acute focus on southern Somalia, they also deploy outside of the country as well. Our data shows that al-Shabaab suicide bombers have attacked or attempted to attack at least four countries outside of Somalia: Kenya (six bombers), Uganda (three bombers), Djibouti (two bombers); and Ethiopia (two bombers). However, many of these extra-Somali attempts have failed. We suggest that there is interesting variation in the capacity of al-Shabaab suicide bombers to effectively target outside of Somalia.

Al-Shabaab Suicide Attacks in Kenya: Outside of Somalia, Kenya has been the largest target for al-Shabaab's suicide bombing attacks. Al-Shabaab has sent at least nine suicide bombers to undertake operations inside Kenya, though each have either failed to reach their target or have been arrested well before the planned operation. The majority have been arrested in Nairobi, while both Mombasa and Wajir have seen attempted plots.

<sup>134 &</sup>quot;Al-Shabab," Counter Extremism Project.

<sup>135 &</sup>quot;Somalia: Suicide Bomber Kills Two at Bosaso Security Checkpoint," Africa News, May 23, 2017.

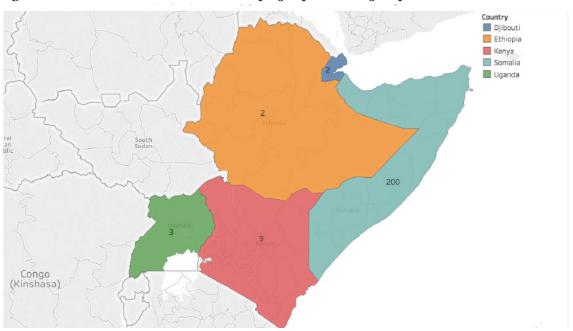


Figure 11: Al-Shabaab Suicide Attackers Deployed per Country (September 2006-October 2017)

*Al-Shabaab Suicide Attacks in Uganda:* Uganda has suffered only one al-Shabaab suicide bombing attack, though it was one of the group's biggest. In 2010, one of the group's most deadly overall attacks killed 74 individuals from across the region, in Kampala, Uganda. Uganda. Using three suicide bombers across the city, the group targeted citizens in an Ethiopian restaurant popular with expatriates and a rugby club packed with soccer fans watching the final moments of a World Cup match. While many civilians were killed, the intent of the attack appears to be in line with al-Shabaab's political long-term goals. Al Shahid, a Somali news agency, quoted a senior member of al-Shabaab saying the blasts were a retaliatory attack on Uganda for sending peacekeepers to Somalia to support the government of President Sheikh Sherif.

*Al-Shabaab Suicide Attacks in Djibouti:* In Djibouti, two suicide bombers (one male and one female) killed one and wounded 14 at a single attack in a popular restaurant in Djibouti city in 2014. That attack was meant to kill Western soldiers at the restaurant, but the French, Spanish, and Danish personnel present escaped only wounded. Danish personnel present escaped only wounded.

Al-Shabaab Suicide Attacks in Ethiopia: Although al-Shabaab has never successfully carried out a suicide bombing in Ethiopia, it has not been for lack of trying. It attempted to suicide bomb a soccer match in Addis Ababa in October 2013, which resulted in a detonation prior to deployment, killing the two would-be bombers. Three other attackers planned to lob bombs into the stadium, while the suicide bombers attempted to enter the facility and detonate their explosives. One year later, on the anniversary of the attempted attack, the U.S. Embassy in Addis Ababa issued an alert on a potential "imminent terrorist attack" and urged its nationals to avoid large crowds and hotels and restaurants in an upscale district of the capital Addis Ababa. While al-Shabaab has yet to launch a successful suicide attack within Ethiopia's borders, the group has launched five suicide attacks on Ethiopian troops, military camps, and institutions in Somalia. We suggest that one explanation for this effort is al-Shabaab's

<sup>136</sup> William Wallis, "Somali Islamists claim Uganda blasts," Financial Times, July 12, 2010.

<sup>137 &</sup>quot;Al-Shabaab Claims Responsibility for Djibouti Suicide Attack, Warns More to Come," Sabahi, May 28, 2014.

<sup>138</sup> Bill Roggio, "Suicide bombers attacked Western soldiers in Djibouti," FDD's Long War Journal, May 26, 2014.

<sup>139</sup> Aaron Maasho, "Ethiopia says arrests five suspects in soccer match bomb plot," Reuters, December 19, 2013.

suicide bombing camp located in El-Barde, Somalia, which lies on the border of Ethiopia. With little distance between Ethiopian military groups and individuals traveling to Somalia, these travelers may be inadvertently be trapped by al-Shabaab's suicide squad in this space.

#### 4.5: The Failures of al-Shabaab's Suicide Bombers

#### Failures to Detonate

Like other terrorist groups' suicide bombers, al-Shabaab's suicide bombers sometimes fail to achieve their objectives, which can occur in numerous ways. One notable means of failure is a bomber's inability to detonate his or her explosives, either by his or her own decision to surrender, by the device's mechanical error, or by being stopped by security forces prior to detonation. While we cannot capture instances where explosives fail to detonate and the would-be bombers are undetected, according to our data, 16.2%, of al-Shabaab's deployed suicide bombers did not detonate.

For example, in September 2011, a bomber sent to assassinate a Puntland security official instead turned himself over to Puntland authorities before the attack.<sup>140</sup> On July 17, 2014, a male suicide bomber was arrested by security forces before he could detonate his explosives-laden vehicle, <sup>141</sup> while in May 2017, two would-be suicide bombers were stopped and detained by security officials in Mogadishu after being tipped off by locals. <sup>142</sup>

When compared to other groups that use suicide bombings, we should note that al-Shabaab's non-detonation figures are somewhat higher than expected. In the case of Boko Haram, we see a relatively high percentage of non-detonations (19.4% of total bombers deployed), a phenomenon that we primarily attribute to the fact that Boko Haram uses "low-quality" bombers: that is, a workforce—composed primarily of women and children—that we believe often lacked agency in their decision to detonate. In contrast, we would have assumed that given its highly trained and non-coerced suicide bombing workforce, al-Shabaab's suicide bombers would have had a significantly lower non-detonation rate. Instead, despite the training that al-Shabaab's bombers receive, their detonation success is not significantly better.

#### Detonations but No Kills

Another means by which a suicide bomber can fail occurs when he or she deploys to a given target, actually detonates, but ultimately fails to kill anyone other than him or herself. Given that the purpose of a suicide bombing is to kill others, if a suicide bomber does not kill anyone but him or herself, the attempt is rightly considered a failure.

According to our data, al-Shabaab's suicide bombers were deployed, detonated, but failed to kill any-one other than the bomber him or herself a paltry 6.5% of the time. Indeed, this is a notable finding, especially compared to groups like Boko Haram, whose rate of detonations with no kills hovers closer to 25.7%. <sup>144</sup>

Most instances of al-Shabaab's detonations with no kills were the result of security forces killing the bomber before he or she could reach the intended target, but the explosives still detonating. One ex-

<sup>140 &</sup>quot;Puntland Security Official Target of Failed Bomb Attack," Garowe Online, September 1, 2011.

<sup>141 &</sup>quot;Allied Forces Clash With Al-Shabaab in Qoryooley," Sabahi, July 17, 2014.

<sup>142 &</sup>quot;Somalia: Security forces foil car bomb attack in Mogadishu," Garowe Online, May 15, 2017.

<sup>143</sup> Warner and Matfess.

<sup>144</sup> Ibid.

ample of this is a failed suicide attack on the presidential palace in Mogadishu on September 20, 2010. A male suicide bomber attempted to infiltrate the palace compound, but was shot by security forces, though his vest nevertheless detonated. On June 21, 2015, a suicide bomber was shot and killed by security forces as he drove toward them. The vehicle still exploded, but did not result in any casualties.

#### 4.6: Al-Shabaab's Use of Linked Suicide Bombers

#### Al-Shabaab's Tendencies to Use Linked Bombings

Like other terrorist groups that use suicide bombings, al-Shabaab has also been shown to use "teams" of linked suicide bombers—that is, groups of two or more bombers who are deployed on a given mission and who detonate in tandem. According to our data, 46.8% of al-Shabaab's suicide individual bombers are deployed as part of linked attacks.

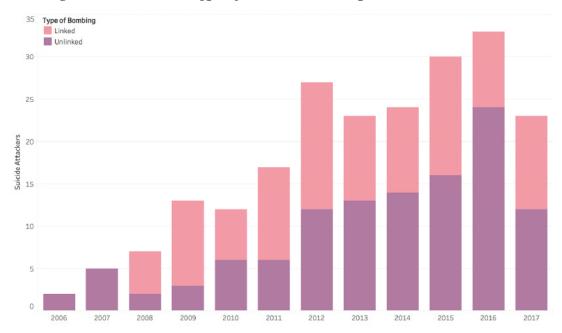


Figure 12: Al-Shabaab's Types of Suicide Attacks (September 2006-October 2017)

Al-Shabaab, in most cases, leverages linked bombings for two purposes. First, al-Shabaab has used linked attacks as a part of its larger suicide assault campaigns. In many instances, al-Shabaab deploys suicide bombers in coordination with gunmen, or broader attacks (as mentioned previously in the context of attackers deployed with suicide vests). In these cases, multiple suicide bombers may carry weapons themselves and will detonate their explosives in coordination after they have wreaked maximum damage with their other weapons.

Secondly, data shows that al-Shabaab tends to utilize linked bombings to amplify the probability that attackers will reach and destroy their target. Specifically, in many cases, multiple suicide bombers are deployed to the same location and will detonate simultaneously. As previously discussed, al-Shabaab has relied on car bombs to pack the largest punch, often setting up multiple vehicles for simultaneous explosion. Similarly, these vehicle-borne attackers may act as battering rams, using several bombers to weaken a gate or security post before sending a final attacker to hit the target itself.

<sup>145</sup> Bill Roggio, "Suicide bomber detonates inside Somalia's presidential compound," FDD's Long War Journal, September 20, 2010.

This linked attack hallmark is most visible in the group's most deadly attack, on October 14, 2017, which relied on car bombs detonating sequentially in order to reach a heavily guarded target. Specifically, the attack, for which casualties are still being tallied, relied on a small minivan and larger truck bomb to work in coordination. While there have been numerous theories, many journalists have since speculated that the target of the attacks was the Mogadishu airport compound, where the United Nations, most embassies, and the headquarters of the 22,000-strong AMISOM are based. According to investigators, the plan was for the minivan to blast open the Medina Gate entrance to the compound, which would in turn allow the truck (which held more explosives) to be driven into the compound and subsequently detonated. 447

#### **PART 5: CONCLUSIONS**

This report has sought to offer the most comprehensive view to date of how the Islamist terror group al-Shabaab incorporates the practice of suicide bombing into its broader tactical and strategic profile. In the course of presenting data on longitudinal, targeting, demographic, and operational trends, it has been motivated by several underlying theses.

#### **Findings**

Most pervasively, we argue that al-Shabaab uses suicide bombings to target individuals and institutions that it deems to be antithetical to its mission. In assessing and designing its suicide bombing profile, the ability to reach and destroy the target appears to be the first priority. While this recognition might seem self-evident, it should be noted that in many cases, terrorist groups use suicide bombings not for the degradation of people and institutions inimical to their interests, but instead, to engender shock and awe in civil society or to provoke a government reaction. Instead, al-Shabaab's suicide bombers generally seek to target high-value individuals and buildings of those working to combat it: the Somali government; members of the international AMISOM coalition, to include the United Nations, the African Union, and other representatives of the international community; and civilian spaces in which these personnel congregate. In the course of targeting these personnel and institutions, al-Shabaab's suicide bombing efforts attempt to avoid the indiscriminate targeting of civilians and tend to respect, to a degree, the sanctity of Islamic holy days and months. Acutely, al-Shabaab, in a minority of cases, uses suicide bombings for targeted assassinations.

Longitudinally, this report has shown that al-Shabaab's suicide bombing efforts have occurred at a rather steady tempo from its first suicide bombing in September 2006 through the end of our data collection in October 2017. During this time, at least 216 al-Shabaab suicide attackers carried out a total of 155 suicide bombing attacks, killing between 595 and 2,218 individuals. Overall, our data shows that al-Shabaab tends to kill more people per average per operation than other global terrorist groups and that it is far more efficacious—killing more than double the number of persons per attacker—than its closest analogue African jihadi group, Boko Haram. Despite relatively high lethality rates, we also show that al-Shabaab tends to injure fewer people per attack than the average terrorist group suicide attack.

This report has also shown that al-Shabaab's suicide bombers are mainly male, though we lack reliable data on their ages and countries of origin. Geographically, al-Shabaab's suicide bombers focus their efforts in southern Somalia, especially Mogadishu, and only rarely outside of Somalia. We do, how-

<sup>146</sup> Burke, "Thousands march in Somalia after attack that killed more than 300."

<sup>147</sup> Jason Burke, "Somalia bombing may have been revenge for botched US-led operation," Guardian, October 17, 2017.

<sup>148</sup> Gordon McCormick, "Terrorist Decision Making," Annual Review of Political Science 6:1 (2003): pp. 473-507.

ever, know that they deploy in "teams" of linked bombers, and once al-Shabaab's bombers detonate, they rarely fail to kill. Finally, we have emphasized that in terms of delivery style, al-Shabaab's suicide bombers use vehicle-borne IEDs most frequently, with vests or belts being used about half as often.

#### **Future Considerations**

Given the above profiles of al-Shabaab's suicide bombers, what lessons might be forwarded on how to minimize the threat this tactic poses? In concluding, we present some considerations for addressing the group's suicide bombers in the future:

Disrupt al-Shabaab's suicide bombing training programs: At the most macroscopic, the best way to degrade al-Shabaab's ability use suicide bombers is to disrupt the internal mechanisms that it uses to attract, train, and deploy such fighters. As such, intelligence gathered from field operations should explicitly seek to collect, centralize, and vigorously exploit battlefield information shedding light on the internal contours of the group's suicide bombing program, which occurs in at least two training camps in Mogadishu and Elberde.<sup>149</sup>

Engage in counterintelligence operations: Given al-Shabaab's ability to track and target visiting officials and convoys via suicide bomber, gaining greater insight into how it gathers and collects intelligence—and then engaging in counterintelligence campaigns against the group—would serve to protect moving targets.

Harden targets: Given the proclivity of al-Shabaab's suicide bombers to attack high-value Somali and international community personnel and institutions and the civilian spaces where they congregate (especially hotels and restaurants), extra resources could be dedicated for additional security to harden what al-Shabaab views to be high-value targets for its suicide bombers. Conversely, to the extent that al-Shabaab's suicide bombers tend not to target markets, bus stops, religious institutions, or spaces where high-value individuals do not tend to congregate, resources to combat the practice could be devoted elsewhere.

Generate innovative solutions to protect communities: In order to protect communities from suicide bombers in Somalia, lessons might be learned from other spaces where they have targeted communities. For example, although rural communities in Somalia have been shown to be less susceptible to suicide bombers than those living in urban spaces, innovative and cost-effective solutions like digging "anti-suicide bomber trenches" around small villages as has been done in Cameroon might be considered.<sup>150</sup>

Continue cooperation and knowledge-sharing among international partners: As the AMISOM coalition dedicated to degrading al-Shabaab begins 2018, continued cooperation and knowledge-sharing remain imperative. Reliable financing and troop contributions for AMISOM's operations, intelligence-sharing, and local capacity-building of Somali authorities are important. For example, in a pointed *New York Times* op-ed in October 2017, the Director General of Somalia's National Intelligence and Security Agency lamented that despite extensive assistance, Western partners seemed unwilling to help Somalia's national security forces develop the appropriate forensic capabilities to understand post-IED crime scenes.<sup>151</sup>

Undertake countering violent extremism (CVE) efforts: The employment of counter-radicalization, counter-messaging, and countering violent extremism (CVE) campaigns is an important step in prevent suicide bombing. Any attempted intervention that does not address the causes of terrorism and

<sup>149 &</sup>quot;Al-Shabab," Counter Extremism Project.

<sup>150 &</sup>quot;Cameroon Builds Anti-Terror Trench to Keep out Boko Haram Suicide Bombers," France 24, September 6, 2017.

<sup>151</sup> Sanbalooshe.

the reasons that young men and women may join al-Shabaab will be incomplete.

As the October 2017 dual suicide bombings in Mogadishu detailed at the beginning of this report showed, al-Shabaab's suicide bombers have the capacity to wreak significant havoc. And yet, with the future of the AMISOM mission to combat al-Shabaab at an inflection point, the global community's appetite for a prolonged fight against the group remains in question. While an uphill task, ending the group's ability to successfully carry out suicide attacks would strike a blow to al-Shabaab's capabilities. But in order to do so, the global community will need to agree on the spaces that would most benefit from its protection. If al-Shabaab remains unwilling to strike soft targets, counterterrorism forces will need to make hard targets even harder to strike. In so doing, they may begin the unraveling of al-Shabaab's targeted suicide terrorism.