

Acknowledgements

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First Mile Geo



RESEARCH

Dr. David Kilcullen, Principal Investigator Nate Rosenblatt, Lead Analyst and Report Writer Jwanah Qudsi. Research Assistant

TECHNICAL SUPPORT

Matthew McNabb, Principal Investigator & CEO, First Mile Geo Steve Kashishian, Chief Technical Officer, First Mile Geo

EDITORIAL

Zoe Bockius-Suwyn, Copy Editor & Production Designer

FIELD

We would like to thank our local Syrian research staff for their commitment and courage. Without them this report would not have been possible. They remain anonymous for security reasons.

Visit http://www.firstmilegeo.com/case_studies/aleppo to see the online version of this report.

"We liberated the rural parts of this province. We waited and waited for Aleppo to rise, and it didn't. We couldn't rely on them to do it for themselves so we had to bring the revolution to them."

-Rebel fighter outside Aleppo during the first offensive to capture the city, September 2012



Map of Aleppo, Syria

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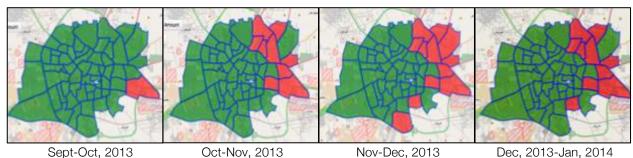
Executive Summary

Caerus worked with local research teams in Aleppo from September 2013 to January 2014 to conduct a four-month hyper local assessment of the conflict in the city. This included a monthly survey of 561 residents and bi-weekly assessments of checkpoints and bakeries. The goal was to understand Aleppo's urban security and the humanitarian impacts of the conflict.

Below are ten insights based on a detailed understanding of conflict dynamics in Aleppo. These findings illustrate Syria's urbanized conflict and reveal the strategies of control employed by the Syrian government and armed opposition. Together, they help inform our understanding of the Syrian conflict, of urban public safety, and of humanitarian dynamics in civil war.

Top-Line Insights from Aleppo's Conflict

1. Al Qaeda-affiliates remain strong in Aleppo despite conflict with other opposition groups. From September-December 2013, the Islamic State of Iraq and Syria (ISIS) gained control of one-third of all neighborhoods in opposition-controlled Aleppo. Although armed opposition groups began fighting to push ISIS out of Aleppo in late December 2013, by January 2014 SIS still controlled more neighborhoods (10) than any other opposition group. Despite this, ISIS is unpopular in Aleppo: they control the most restrictive and intimidatory checkpoints in the city, which residents often avoid altogether.

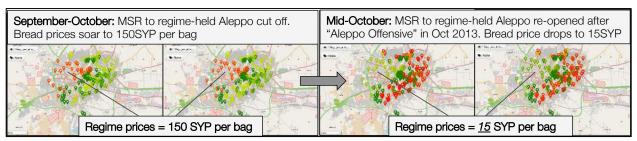


The Rise of the Islamic State of Iraq and Syria in Aleppo (neighborhoods controlled in red)

- 2. The Syrian government may be actively restricting basic services in opposition-held Aleppo. Nearly all residents in regime-held neighborhoods reported receiving more than 12 hours of daily electricity from the government grid, while most residents in opposition-held Aleppo have 6 or fewer hours of grid electricity. None of the pre-existing municipal service-providing institutions work in opposition-held Aleppo today.
- 3. The Syrian government faces deteriorating public support despite its military superiority. This is particularly true in regime-held areas *away* from the conflict's front lines, where 2-4 in 10 residents consistently believed that the Assad regime was the "greatest threat to Syria." These residents were among the least likely to receive a salary, and were more likely to say they trusted "no one" to resolve local disputes or crimes.
- 4. There is no national institution that Aleppans regard as a "legitimate" representative of Syrians. Nearly half of Aleppo residents believed that "No One" represents the Syrian people, across opposition- and regime-held areas of the city. In comparison, only 12.1% of

Aleppans believe the Assad regime legitimately represents the Syrian people, while less than 2% of respondents saw the national Syrian opposition (the "Etilaf") as legitimate.

5. The Syrian government has only one land-based Main Supply Route (MSR) into Aleppo. When this MSR is cut, the price of basic necessities in government-controlled areas rises dramatically. In September 2013, when regime-controlled districts were cut off from the outside world, the price of bread rose to a high of SYP150 (130SYP = 1USD). By mid-October, as the MSR was re-opened, regime-held area bread prices returned to pre-war bread prices, dropping to SYP15. By January 2014, this price was five times cheaper than opposition-held areas.



- 6. Armed groups on all sides post restrictive checkpoints along the busiest roads, killing movement in the city. Nearly 75% of the "most restrictive" checkpoints in Aleppo are stationed along the highways entering the city and the two ring roads surrounding it. This prevents travel and stops governing structures from growing beyond the neighborhood level.
- 7. There are fewer armed opposition groups in Aleppo because large groups are getting bigger while smaller battalions are disappearing. Large armed groups in Aleppo are growing more powerful, often by adding or eliminating smaller, local groups. This coalescence of opposition groups into a smaller number of larger entities represents a consolidation of opposition forces around militarily capable groups that can exercise effective territorial control.
- 8. Humanitarian aid does not appear to be reaching the most vulnerable neighborhoods in Aleppo. Based on a scored survey of resident perceptions of humanitarian conditions, we identified the areas in Aleppo that were most lacking in terms of basic services and security. When we compared this to resident responses about receiving aid and salaries, we found that residents in opposition-held neighborhoods that scored the lowest in terms of humanitarian conditions frequently did not receive salary or aid.
- 9. The Syrian government relies on its Air Force Intelligence, the most feared agency in its security apparatus, to suppress dissent in regime-held neighborhoods in Aleppo. The number of neighborhoods in which the Air Force Intelligence Agency is deployed has risen consistently through our study. They are now in charge of almost half of regime-held Aleppo.
- 10. More than 40% of all bakeries in opposition-held Aleppo are closed, destroyed or damaged, as compared to less than 10% in regime-held areas. Human Rights Watch accused the Syrian regime of "recklessly indiscriminate" shelling of bakeries. In response, all bakeries in opposition-held Aleppo now deliver bread through local neighborhood councils. This means bread price stability, but at higher total cost: the average price of a bag of bread rose from 54SYP in September 2013 to 74SYP in January 2014.

Introduction

February 2014







"Aleppo was a great city in Syria, but not of it, nor of Anatolia, nor of Mesopotamia. There, the races, creeds, and tongues of the Ottoman Empire met and knew one another in a spirit of compromise. The clash of characteristics, which made its streets a kaleidoscope, imbued the Aleppine with a lewd thoughtfulness which corrected in him what was blatant in the Damascene. Aleppo had shared in all the civilizations which turned about it: the result seemed to be a lack of zest in its people's belief. Even so, they surpassed the rest of Syria. They fought and traded more; were more fanatical and vicious; and made more beautiful things: but all with a dearth of conviction which rendered barren their multitudinous strength."

- T.E. Lawrence, Seven Pillars of Wisdom (1926), page 342

1. Why this study?

Conflict assessments and post-conflict planning in highly unstable areas are expensive, dangerous, and complex. They also pose significant challenges for researchers, analysts, and policymakers, who ask how can we collect, share, and analyze reliable information and relevant community perceptions in fluid and dangerous environments? How can policy-makers understand population dynamics, needs, risks, and challenges before committing to a humanitarian or stabilization response? In previous conflicts, these challenges have sometimes meant that international efforts lacked persistent, reliable, and actionable information for planning and decision-making.

This study is driven by two convictions: first, that humanitarian and stabilization agencies must improve our ability to sense – and make sense of – complex, conflict-affected environments. Second, that critical, relevant data for humanitarian assistance are often common knowledge among local residents of strategically important, unstable areas. These data (which may be completely hidden to outside observers, including expatriate and émigré nationals who may be advising policy-makers) are not secrets. Rather, they are open information that happens to be known only in hyper-local contexts, in areas that are often denied to outside access.

Our research team designed a study to understand the conflict dynamics Syria, a highly fluid conflict that remains opaque to many international agencies and humanitarian NGOs. Key to this research are revolutions in open source technologies and cloud services, which have reduced the cost and complexity of means for local researchers to convey their understanding.

Yet despite these advancements, Syria is a paradoxical case in which quantifiable, verifiable, and actionable data is extremely scarce. Protest-organizing activists have formed civilian reporting agencies, such as Sham News Network, and uploaded more videos on their YouTube channel than CBS News, CNN, Fox News, ABC News, and the Associated Press combined. A senior security official in Damascus griped about the role of civilian reporters in 2011: "Today, every Syrian with a mobile phone can turn himself into a live satellite television broadcaster."

However this information-rich environment remains analytically poor. In order to make sense of this ongoing conflict, we provided training and cloud-based tools to help local actors collect locally understood knowledge about their conflict for rigorous analysis. By using in-situ field teams, we were able to derive insights on how the conflict in Syria, specifically Aleppo, reveals shifts in political strategies or control.

If Syria remains an opaque, highly localized, analytically poor environment, it will likely have tremendous consequences for humanitarian assistance and contingency planning. Syria has become the single most disruptive and protracted conflict in the region. The victims of Syria's violence are staggering: by December 2013, 125,000 Syrians had been killed, 2.2 million were registered refugees, 6.5 million were internally displaced, and the UN estimated that 9.3 million people were vulnerable to humanitarian disaster. As the civil conflict evolves, future opportunities for stability will face intersecting complexities: demilitarization challenges reminiscent of present struggles in Libya, de-Ba'athification challenges like those of Iraq, and chronic ethno-sectarian tensions as in Lebanon. To address these challenges, the international community must

¹¹ International Crisis Group, "Popular Protests in North Africa and the Middle East (VII): The Syrian Regime's Slow-Motion Suicide," Report No. 109, July 13, 2011, page 9.

understand and adapt to evolving social and political realities on the ground. Yet humanitarian actors remain woefully under-resourced, and late to the game: in December 2013, the UN launched the biggest aid appeal in its history for what it called "the greatest humanitarian catastrophe in modern times." At this point the conflict had been going for almost two years, and donors had repeatedly failed to deliver on pledges of humanitarian assistance.

As the war drags on, opposition groups are not only fighting the regime but also each other, with zones of control and key strategic resources in the balance. In a separate study of civilian leadership across Syria, our researchers found an intense struggle between different armed groups to control key border crossings that deliver humanitarian assistance to Syria's northern provinces. Similar fights occur, at a very intense level, within Syria's cities, where divisions among opposition armed groups, extremists, and pro-regime loyalists create security vacuums in which looting, warlordism, and vigilantism thrive. "Warlords are a reality on the ground now," writes David Ignatius, quoting a recent report circulating in the US State Department, "A [failed] state is the most likely outcome of the current condition, unless adjustment [is] done." To plan and prepare for these conditions, more must be known about how both old and emergent social tensions translate to political considerations, humanitarian impacts, and control.

All of this underscores the importance of hyper-local research. We hope this study will push the boundaries of present conflict assessment strategies and provide policymakers the ability to plan, prepare, and adapt their interventions with improved local understanding. Doing so may help reduce the local blind spots that have led to significant missteps in recent interventions.

2. Why Syria? Why Aleppo?

Over the course of the civil war, Syria's conflict has urbanized, morphing into a fight for the control of its cities. The devastation in Homs, Syria's third-largest city, now resembles that of Grozny at the height of the First Chechen War. Urban-dwellers in some districts of Damascus, Syria's second-largest city, have been literally starved to death for their opposition to Assad's government. In Aleppo, the deliberate shelling of bakeries and food queues, and the dropping of barrels of TNT laced with nails and ball-bearings from regime helicopters into Aleppo's most crowded neighborhoods, have made Syria's largest city the bloodiest place in the country. These three cities – Syria's largest – have as a result become the bloodiest battlegrounds in the country's ongoing conflict.

We chose to study Aleppo because, in many ways, it is a microcosm of Syria's conflict. In addition to present ethno-sectarian and urban-rural dynamics, Aleppo is Syria's industrial capital, its most populous city, and its most diverse. Before the conflict, Aleppo produced approximately 35% of Syrian manufactured goods, and accounted for 35% of the country's non-oil exports. This city of approximately 2.5 million reflects Syria's heterogeneity: in addition to having the second-largest Christian community in the Middle East, the city's minority groups include Kurds, Alawites,

² Sherlock, Ruth, "UN makes record Syria appeal to avert 'greatest humanitarian crisis in modern history," *The Telegraph*, December 16, 2013, http://www.telegraph.co.uk/news/worldnews/middleeast/syria/10520329/UN-makes-record-Syria-appeal-to-avert-greatest-humanitarian-crisis-in-modern-history.html

³ Ignatius, David, "Worries about a 'failed state' in Syria," Washington Post, January 11,

^{2013.} http://www.washingtonpost.com/opinions/david-ignatius-syria-descending-toward-anarchy-state-department-reports/2013/01/11/7a524326-5b58-11e2-9fa9-5fbdc9530eb9_story.html

Circassians, Turkmen, Yezidi, and Ismaili. The city is only 55km from the Turkish border, making it an important entry point for humanitarian assistance, foreign fighters and smuggled weapons alike.

Historically, the Assad regime used a combination of patronage and intimidation to secure the allegiance of Syria's cities. This control technique had two main targets: city-dwelling minority communities, such as Christians, Alawites, and other sects; and rich, urban elites. Nationally, minority communities comprise one-third of the country's population. As the conflict gathers force, the regime has accelerated ethno-sectarian rhetoric to garner support. Ambassador Frederic Hof argued recently, "the Assad regime has hijacked the Alawite community and large components of other minorities, holding them hostage to the survival of rule by clan and clique." This sectarian rhetoric dominates the landscape of Syria's conflict, especially in Syria's cities. As the late Anthony Shadid reported from Homs: "Fear has become so pronounced that, residents say, Alawites wear Christian crosses to avoid being abducted or killed when passing through the most restive Sunni neighborhoods."

In addition to minority communities, the regime also sought allegiances from rich, urban-based elites. It was particularly attuned to ensuring the support of Damascus and Aleppo over provincial capitals like Dera'a, or mainly-Sunni rural districts. The urban-rural divide helps drive Syria's conflict: "Those who have money in Aleppo only worry about their wealth and interests," explained Osama Abu Mohammed, a car mechanic-turned-rebel commander, "when we have long lived in poverty." It is a truism among Syrians that Aleppo arrived late to their 2011 uprising. When the Free Syrian Army finally stormed Aleppo in August 2012, one commander declared, "We waited and waited for Aleppo to rise, and it didn't. We couldn't rely on them to do it for themselves so we had to bring the revolution to them."

Like its present, Aleppo's future is closely tied to Syria's fate. Events in the city offer an important example of the failure of the opposition to unify. Since the start of the uprising, opposition-held parts of the city have been controlled by multiple local governing councils, each in turn failing to build a joint, civilian-military cooperative body that can manage governance and coordinate military action. Caerus research on civilian leadership across Syria over the past year indicates that opposition governance structures consistently lack the professionalism, experience, and resources to move beyond the very local, district level, or to attempt to govern larger areas with more complex needs.

The inability of opposition groups to aid residents of neighborhoods they control suggests Aleppo – and Syria as a whole – will become a mosaic of small, intersecting fieldoms, each providing assistance to its respective neighborhood without regard to macro-level concerns for national governance and reconciliation. Growing warlordism may be particularly acute in Aleppo, where economic rent-seeking opportunities will attract armed gangs who will attempt to seize control of its neighborhoods. These "conflict entrepreneurs" will have little incentive to end a conflict from

⁴ Hof, Frederic, "Syria 2013 – Will the Poison Pill of Sectarianism Work?" Middle East Voices, January 8, 2013. http://middleeastvoices.voanews.com/2013/01/insight-syria-2013-will-the-poison-pill-of-sectarianism-work-28733/ - ixzz2l3vcs349 5 Shadid, Anthony, "Sectarian Strife in City Bodes III for All of Syria," New York Times, November 19, 2011. http://www.nytimes.com/2011/11/20/world/middleeast/in-homs-syria-sectarian-battles-stir-fears-of-civil-war.html?pagewanted=all&_r=0

⁶ Hendawi, Hamza, "Syrian rebels in Aleppo mostly poor, pious, rural," Associated Press, October 16,

^{2012.} http://bigstory.ap.org/article/syrian-rebels-aleppo-mostly-poor-pious-rural

⁷ Solomon, Erika, "Rural fighters pour into Syria's Aleppo for battle," Reuters, July 29,

^{2012.} http://www.reuters.com/article/2012/07/29/us-syria-crisis-aleppo-idUSBRE86S06T20120729

which they derive power, prestige, and profit. Even in the event of peace, Aleppo's strategic location will help these actors establish roots for illicit networks that may endure well beyond the present conflict. Moreover, as a non-capital city, Aleppo will not benefit from national government attention. Instead, Aleppo's future may resemble that of similarly conflict-plagued second cities in the Middle East, such as Mosul in Iraq or Benghazi in Libya. These cities are plagued by warlordism and dominated by illicit economies. They have quickly become safe havens enabling terrorist networks to plan, recruit, and launch attacks.

Analyzing Aleppo's present, as a means to peer into its future, can help anticipate future humanitarian challenges in Syria and their potential impact on the region. Aleppo may thus be a useful bellwether – which is why it is essential to study the city today.

3. The methodology and structure of this report

From September 16, 2013 to January 6, 2014, we collected four types of information: a monthly survey of perceptions among 560 residents in Aleppo's 56 neighborhoods, biweekly location and status data for bakeries (a key indicator of humanitarian conditions due to the centrality of bread in the Syrian diet), biweekly location and status data on security checkpoints (a key indicator of security, territorial control and public safety conditions), and a monthly neighborhood-level assessment filled out by our enumerators. These four data streams not only allowed the research team to detect and visualize shifts in the environment in near-real time, but also provided an extremely rich source of insights on the geo-social dynamics at play. All field research was conducted in Arabic. Researchers included Syrian native speakers, non-Syrian Arabic speakers, Arab-American researchers and non-Arab analysts with postgraduate qualifications in Arabic and relevant area studies and social science disciplines.

1. Checkpoints (biweekly)

Every two weeks since mid-September, our field teams have recorded the locations of each known checkpoint across Aleppo. In addition, they have answered key questions about each, including who controls it, types of armaments and defenses used, whether it is fixed or mobile, and the level of disruption it imposes on traffic flows. Each subsequent week, field teams verify and amend locations as well as these associated qualitative variables to capture change over time. By using paper-based geolocation methods, we conduct sensitive mapping activities while maintaining a comparatively low risk for researchers involved.

In our work thus far, we have identified a relatively constant (and therefore probably terrain-driven) number of approximately 177 checkpoints in the city, of which roughly 70% are controlled by the Syrian regime. We have also identified a major hospital in the center of the city that is under control by the largest al-Qaeda affiliated group in the area, the Islamic State of Iraq and Syria (ISIS). Through analysis of changes in checkpoint location and status over time, particularly when compared against the other data streams, we can see how political control has been exerted – including by ISIS. We believe this could have important implications for understanding radical influence in Aleppo and potentially elsewhere in Syria, on which we elaborate in the "Security Conditions," "Political Allegiances," and "Governing Terrain" sections of this report.

2. Bakeries (biweekly)

In addition to biweekly reports on checkpoints, we also conducted biweekly assessments of bakeries throughout the city. As a staple commodity in the Syrian diet, the availability of bread and

the means for its distribution provide an important window into humanitarian conditions in the city. When compared to perception surveys (conducted monthly as described below), data related to bakeries offers what we call an "honest signal" or proxy indicator: that is, an objective, non-verbal indicator of local conditions based on observed behavior. In our experience, we find such honest signals useful in conflict-affected areas because local respondents often lack incentives to provide accurate information – either seeking some gain or avoiding some harm.

In collecting data on bakeries we identified each bakery location, then repeatedly revisited the site to assess whether it was operational, to ascertain the local price of bread (in a standard, comparable 7-8 loaf bag), and to determine whether local community councils support its distribution. Across the roughly 185 bakeries in Aleppo, we have seen wild fluctuations in bread prices – most starkly differentiated between government and non-government held areas (described in the "Humanitarian Conditions" section of this report). We have also seen impact on bread prices from the rise of functioning local governing bodies in certain opposition held areas more than others, which have assumed responsibility for bread distribution.

3. Perceptions (monthly)

A third assessment, conducted monthly, captured local perceptions from 560 residents segmented across varying demographics, with approximately 10 respondents for each of Aleppo's 56 neighborhoods. These respondents served as a panel for each survey throughout the reporting period. This data was collected via a structured survey that included questions ranging from security, to access to electricity and trash pickup services, to perceptions about political legitimacy. With these panels, we detected changing attitudes over time and considerable variability among neighborhoods.

Through these surveys, we isolated by neighborhood those locations where respondents indicated the lowest level of humanitarian and food security, as expressed through access to electricity and the presence of operational bakeries. The ability to move from macro-level analysis into a neighborhood-by-neighborhood picture helped our research team identify actionable patterns for immediate use by humanitarian agencies.

4. Presence of Key Groups (monthly)

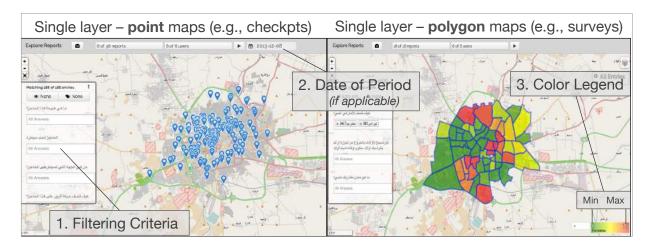
Finally, we used local enumerators to identify major groups operating within each neighborhood. This "observables" assessment allowed us not only to identify which groups exerted the greatest degree of control over territory within the city, but also to identify the local presence of groups previously unknown to outside observers. We can classify these groups, and compare their activities against external observable indicators including the presence of military checkpoints, functioning bakeries, and community perceptions, as a means to improve our understanding of how the city functions, and to understand in great detail the *modus operandi* of key military and governance groups operating in Syria.

4. Orientation to our Maps

There are three different types of maps in this report: "single layer" maps that show results from one of the four data streams explained above, "multi-layer" maps that display and compare two or more data streams in a single map (e.g., resident surveys over checkpoint locations), and "scoring maps" in which we combine responses from different surveys, score them to develop an index,

and display that index on a map. The "scoring map" helps combine and rank a suite of risk factors, allowing us to determine which neighborhoods in Aleppo are the most vulnerable to humanitarian disaster.

"Single layer" maps

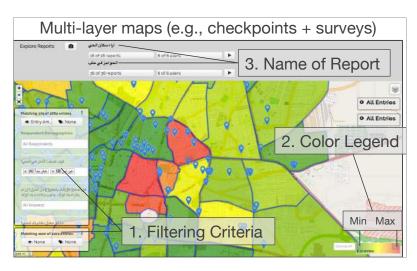


The maps above show two different examples of "Single layer" maps: 1) maps with point-based collections (bakery and checkpoint locations, above left), and 2) maps with the neighborhood as the unit of analysis, shown as *polygon* maps (surveys and observations, above right).

To interpret the maps, note that we include *filtering criteria* for each map, where applicable (e.g., all regime-controlled military checkpoints).⁸ Also note at the top of each map, where the date of the associated report is included. This is often important when we review time series data (e.g., change in resident attitudes about safety over time). For polygon maps, we include a color legend at the bottom right. The polygon map above shows resident responses to the question "how safe would you describe this neighborhood?" Neighborhoods in red responded most frequently "unsafe," or "dangerous," on down through orange, yellow, light green, and green, which show neighborhoods with the *fewest* responses of "unsafe" or "dangerous."

"Multi-layer" maps

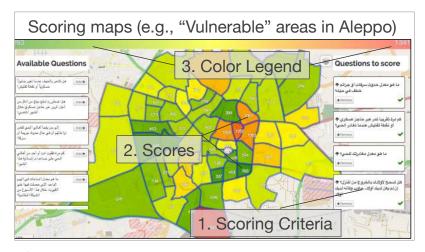
"Multi-layer" maps combine data from two or more single-layer maps. Their layout is the same as a single-layer map but also displays the name of each report at the top of the map. The map above shows the location of checkpoints in a particular part of Aleppo on top of the results of a resident survey.



⁸ Maps reflect original data and questions, which were designed and implemented in Arabic.

"Scoring" maps

"Scoring" maps display an index of combined and weighted data from one or more reports. For example, the map at right highlights "vulnerable" areas in Aleppo first depicting by questions responses to associated with resident safety how "safe" residents describe their community, how frequently they travel outside their neighborhood, how frequently they witness crime,). Those questions are shown as "scoring



criteria" on the right side of the map. Second, the answers are scored according to how much the researcher chooses to weigh the importance of each answer, and the cumulative "score" for each area is displayed over each area survey (in this case, neighborhoods in Aleppo).

One note on *territorial control*: we determined control based on territory but could not include population densities because there is no reliable data on population levels in Aleppo's neighborhoods post-2011. More needs to be done to assign population to specific neighborhoods or territory in order to gain a more comprehensive insight into how much "control" one group exerts in a given area.

One final note on *neighborhood boundaries*: We developed neighborhood boundaries and names by comparing internationally available maps with Aleppo municipal maps sourced from within the city, and then reviewed them with residents of the city to delineate 56 urban neighborhoods. We combined some small neighborhoods, particularly in the old city, into larger multi-neighborhood areas, to simplify data collection and analysis.

Security Conditions in Aleppo

February 2014



"Thus did the city that was once a twin of Vienna become a desolate place, peopled by frightened ghosts. The sons of the old families had lost their influence and now grieved for the old world. They were forced to become in-laws of the sons of the countryside, joining them at backgammon, overlooking their crude ways."

- Khalid Khalifa, In Praise of Hatred (2006) on Aleppo in the 1980s

Security Conditions in Aleppo

Summary of findings

Aleppo has been one of the bloodiest places in Syria since the first attempts to liberate it began in August 2012. The Syrian regime controls the balance of power in the city: it has the strongest weapons and the largest number of well-fortified checkpoints, yet only controls one-third of Aleppo's neighborhoods and controls only one single main supply route (MSR) into the city. From September 2013 to January 2014, the city has seen a multi-sided conflict in which the nationalist opposition has fought the regime's forces as well as the Al Qaeda-backed Islamic State of Iraq and Syria (ISIS). In this process, ISIS has been transformed from near-obscurity in Aleppo at the beginning of the conflict, into the most powerful armed group in the city today.

Our study of security conditions in Aleppo, including research in both regime- and opposition-held neighborhoods, generated eight key insights:

- 1. ISIS is taking over in Aleppo, with a focus on seizing neighborhoods in eastern Aleppo. The group transformed itself from a marginal player that controlled only one neighborhood in September 2013, into a major force controlling twelve neighborhoods by December. Though ISIS lost two neighborhoods in early 2014 to new rebel coalitions formed to fight it, it still controls more neighborhoods (10) than any other armed opposition group.
- 2. ISIS also may have some of the poorest relations with Aleppo residents: its checkpoints are the most restrictive and avoided checkpoints in Aleppo. This does not necessarily explain their rise to power but may foreshadow the potential for their removal from the city.
- 3. There is only one location where residents can cross between regime- and opposition-controlled Aleppo; unsurprisingly, this is one of the tensest places in the city. Not only is there significant military buildup in this district, but residents in the neighborhood also report growing criminality. Most respondents in the nearby neighborhoods now witness crimes committed on a weekly or daily basis.
- 4. The regime is increasingly reliant on the Air Force Intelligence, its most feared and loyal intelligence agency, to police neighborhoods that are away from the front lines of combat. The Air Force Intelligence has expanded its control from only seven neighborhoods in September 2013 to ten in January 2014, representing nearly half of the twenty-two neighborhoods in regime-held Aleppo.
- 5. In opposition areas, residents' perceptions of safety are more closely correlated with how frequently they witness crimes. By contrast, in regime-held areas, residents report their neighborhood as "dangerous" while hardly witnessing any crime at all. This may indicate that residents in opposition-held Aleppo are more concerned with local lawlessness than with the front lines of the conflict; alternatively, it may suggest that the biggest threat to local safety arises in areas that are contested among several groups rather than in neighborhoods where a single group dominates—so that even an unpopular group can increase local perceptions of safety by achieving a monopoly of control.

- 6. The total number of different armed opposition groups in Aleppo has declined in each reporting period, mostly because of the disappearance of local battalions that operate in only one neighborhood. Thus, armed opposition groups are coalescing into a smaller number of larger groups, with each major group getting bigger at the expense of smaller, more local battalions. This "franchising" and coalescence of opposition groups has seen larger groups like Liwa al-Tawhid become more powerful by adding or eliminating smaller, local groups.
- 7. Armed groups are halting movement into and around the city by establishing the most restrictive checkpoints along the busiest roads. Indeed, there is a strong correlation between density of urban flows within Aleppo and presence of restrictive checkpoints. Nearly 75% of the checkpoints in Aleppo that were rated "most restrictive" in local residents' survey responses are stationed along the highways entering the city, and the two ring roads surrounding it.
- 8. They regime tries to represent the hard protective shell that it maintains around the territory it controls, using the Army to defend its perimeter, while using intelligence and security agencies to police its internal territory.

This section examines the security situation in Aleppo, one of the bloodiest places in the Syrian conflict. We analyze two studies conducted during the research: first, the location of checkpoints in the city, a directly observable indicator that helps provide objective assessments of which groups control the city and how they do so. Second, we examine how residents respond to questions about their security environment through a 561-person survey. The approach of layering objective, observable data over survey-based perception research provides greater insight into how to collect reliable data in Syria. These findings also help us draw broader conclusions about the trajectory of the Syrian conflict.

1. What areas of Aleppo are least safe, and why?

To answer this question, we first used data from reports on the location of checkpoints in the city, (recording who controlled the checkpoint, number of people stationed there, and the types of barricades and weapons deployed) to map the constellation of forces in the city. Our enumerators submitted checkpoint reports on a biweekly basis from mid-September 2013 to early January 2014, allowing us to not only see the deployment of different forces in the city, but how those forces' territorial control changed over time. We then compared checkpoint data against "observables," in which enumerators were asked to identify groups working in each neighborhood. Finally, we included survey responses from 561 resident respondents from each of Aleppo's 56 neighborhoods to compare direct observables to the subjective perceptions. The table below lists the specific questions addressed in this section of the study.

Survey Type	Survey Question	Response Options
Checkpoints	Who controls this checkpoint?	Regime, Opposition, Other
Checkpoints	Is this checkpoint permanent, semi-permanent, or mobile?	Permanent, Semi- Permanent, Mobile
Checkpoints	What group controls the checkpoint?	[Name of group]
Checkpoints	How busy would you say this checkpoint is?	Very Busy, Somewhat Busy, Not Busy, People Avoid It
Checkpoints	How many people/cars who attempt to cross the checkpoint get stopped for more than 1 minute?	>50%, 25-50%, 10-25%, <10%
Checkpoints	Approximately how many people are stationed at the checkpoint?	>20, 10-20, 5-10, <5
Checkpoints	What kind of weaponry do they protect it with?	AK-47s or other machine guns, RPGs, Tanks, Sniper Rifles, Armed Trucks ("Technicals"), Other
Checkpoints	What kind of fortification exists at the checkpoint?	Improvised barricades (e.g., tires, rocks), Barrels/concrete/road blocks, Kiosk/Booth, Sandbags, Cars or Trucks, There is no

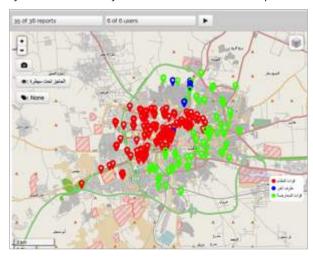
		fortification just armed guards, Other
Observables	What group is providing security in this neighborhood?	[Free text]
Observables	What group is the strongest in this neighborhood?	[Free text]
Resident Survey	How safe is your neighborhood?	Very Safe, Safe, Moderate, Not Safe, Dangerous
Resident Survey	How often do you let your children out of the home? (if you do not have children, answer as if you did)	Always, Sometimes, Rarely, Never
Resident Survey	About how many times do you travel outside of your neighborhood?	More than 1x/day, 1x/day, 2-6x/week, 1x/week, <1x/week, Never, Depends on Security
Resident Survey	About how many times do you cross a checkpoint when you travel outside your home?	>5, 3-5, 1-2, 0
Resident Survey	How often do you feel concerned for your safety when you cross a checkpoint?	Frequently, Sometimes, Rarely, Never
Resident Survey	Have you ever had to pay to get through a checkpoint in the past month?	Yes, No
Resident Survey	How frequent are crimes such as stealing or kidnapping in your neighborhood?	Daily, Weekly, Monthly. Never/Hardly Ever

2. Checkpoints in Aleppo

Where are they?

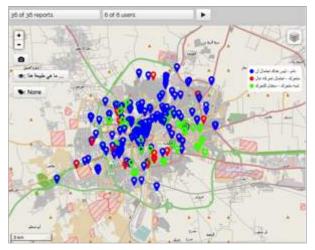
The map at right shows the aggregate distribution of 1,462 checkpoints in Aleppo city from September 16, 2013, to January 6, 2014, as surveyed at bi-weekly intervals. The most important

distinction to note here is between the regime-held checkpoints (in red/darkest shade) and those controlled by opposition-affiliated groups (in green/lightest shade). The regime controls or partially controls approximately 35% of the city (about 20 in 56 neighborhoods), but deploys nearly 70% of the checkpoints (1054 out of 1462 aggregate checkpoints). This suggests that the regime has heavily fortified its position in the areas it controls. Regime checkpoints number more than twice those of the opposition: 1054 to 408. The density of checkpoints—including in areas far from the front lines of the conflict—suggests that the regime is using checkpoints



not only to secure these areas against the opposition, but also to control the resident population within these districts. This in turn suggests that the regime regards the loyalty of local residents in the 35% of the city it controls as uncertain, or at least regards a dense security presence as essential in preserving popular confidence in the regime.

How permanent are they?



The map at left shows the distribution of checkpoints in terms of their degree of permanence. The majority of checkpoints in the city are permanent (shown in blue/darkest shade), defined as having hardened buildings and other structures that would make the installation difficult to move. Other checkpoints in the city include semi-permanent checkpoints (shown in red/darker shade), and "flying" checkpoints (shown in green/lighter shade), which temporary checkpoints often manned individuals on "technicals," pickup trucks with high-caliber guns mounted to the decks. "Flying" checkpoints may set up for only a few hours, and

are frequently deployed at night by criminal gangs. This makes them very difficult to track systematically; nevertheless, our field teams estimate that flying checkpoints operated by criminal gangs represent only about 20% of the total number of flying checkpoints in the city.

One interesting observation about "flying" checkpoints is that they are never on the front lines. There are two distinct clusters of such checkpoints: in west/northwest Aleppo (firmly regime-controlled) and in the east/southeast section of the city (firmly opposition-controlled), which suggests that they are not used for defense against other armed groups, but rather for control and

exploitation of local residents.

As one Aleppo resident explained, "it is difficult to track these checkpoints because they often come up only at night. While checkpoints during the day are often set up to protect neighborhoods, flying checkpoints are used for everything from population control (e.g., keeping people in their homes after a curfew) to extortion and kidnapping."

In contrast to regime checkpoints, opposition checkpoints tend to be closer to frontlines and along main supply routes,

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rather than in purely residential areas. This pattern, which contrasts with that of regime checkpoints noted above, suggests that opposition groups are less concerned with using checkpoints to control or assure the loyalty of local residents, and more concerned with using them to maintain a defensive perimeter against the regime and to control movement of key commodities and people through the city's major arterial roads.

Who controls them?

Below is a list of the ten groups who controlled the most checkpoints cumulatively in Aleppo from September 2013 to January 2014.

Rank	Opposition/Regime	Name of Group	Number of Checkpoints
			Controlled (aggregate)
1	Regime	Syrian Arab Army	327
2	Regime	Ba'ath Party Brigades	206
3	Regime	State Security Branch	161
4	Regime	Air Force Intelligence	116
5	Regime	Military Security Branch	87
6	Opposition	Liwa Tawhid	71
7	Opposition	Islamic State of Iraq and	66
		Syria (ISIS)	
8	Regime	Political Security Branch	63
9	Regime	Military Police	55
10	Opposition	Liwa Ahrar Souria	40

The Syrian military, and its associated security forces and irregular militias, controls approximately 70% of the checkpoints in Aleppo city, so it is not surprising that the top five groups (and seven out of ten overall) are affiliated with the Syrian regime. Here we will profile five of the groups listed above and the parts of the city they control.

Syrian Arab Army

The Syrian Army (i.e. the regular military forces of the Assad regime) controls the most checkpoints

in the city, is deployed primarily along front lines, is the most heavily armed and, in absolute terms, runs the most restrictive checkpoints in the city. Syrian Army checkpoints are mostly concentrated on three battlefronts in the city. First, they defend the main supply route into regime-controlled Aleppo, the highway from the southwest, and control the highway as it enters the Aleppo City neighborhoods of al-Furqan, al-Martini, al-Maridiyan, and al-Kawakbi (1). This area



extends deeper into Aleppo along the flank of the highly contested, pro-opposition neighborhood of Bustan al-Qasr. Second, the Syrian Army defends the front lines in the northern part of the city, in the neighborhoods of Tishrin and Nile Streets, Masakin Sbeil, and Ashrafiye (2). Third, the Army is heavily deployed along the front lines in the east (al-Maidan, Suleiman al-Halabi, and Suleimaniyah, Jabriyeh, and al-Feilat) (3). There are a few exceptions, including a major roundabout near Aleppo University (4), and around the Officers Club in central Aleppo (5).

Because of the Syrian army's superior resources, including relatively lavish supplies of weapons, equipment and engineering materials, it has the most heavily armed checkpoints, the greatest number of restrictive checkpoints, and the strongest checkpoints (in terms of personnel numbers) in Aleppo. 16.6% of the checkpoints controlled by the army deploy tanks, compared to the average of all other checkpoints, which is 1%. In addition, 13.3% army checkpoints have RPGs, far

greater than the rest of the city average of 1.5%. The Army also has the most restrictive checkpoints in the city: the highest total number of checkpoints in which those who cross are stopped for more than one minute.⁹

The Syrian Army also has the most troops deployed to protect its checkpoints. Overall, 48.5% of checkpoints in the city deploy 5 or fewer troops, 37.5% of checkpoints have 5-10 fighters, and only 14% have more than 10 troops present. But over 30% of Army checkpoints have 10 or more troops deployed stationed - double the average. The Syrian Army still forms the backbone of the regime's military advantage in Aleppo, as its checkpoints are the most heavily armed in the city and deploy the most personnel.

State Security Branch

Syrian State Security Branch is part of the Syrian government's intelligence agency. It is called the "State Security Branch" because it would refer arrested dissidents to the "State Security Court." In some parts of Syria, "State Security Branch" has been used interchangeably with the "General Intelligence Administration." ¹⁰ In keeping with their mission as an intelligence agency, the group monitors civil society and critical infrastructure



but does not project force widely within the city. Its checkpoints are heavily concentrated near civilian locations: the eastern entrances of Aleppo University and the busy Nile Street. These checkpoints protect the Aleppo University Medical School and Abdul Wahhab Agha Hospital just north of the university's main campus. While 11.5% of checkpoints in the city are termed "very busy," none of state security's checkpoints are busy. Nearly all checkpoints are pass-throughs: almost no one is stopped at State Security checkpoints for more than one minute. More than 75% of State Security checkpoints are manned by five or fewer officers, and no checkpoint is controlled by more than ten. And these officers are armed with only basic weapons, such as Kalashnikovs or other similar small arms. This suggests that despite controlling the third largest number checkpoints in Aleppo, the group may not be as essential as other intelligence agencies and military divisions for the Syrian government in Aleppo.



Air Force Intelligence

Air Force Intelligence checkpoints are deployed to protect its headquarters in the northwest corner of the city, as shown in the map at right. Air Force Intelligence is the most feared intelligence service in the country, owing its reputation to the legacy of Hafez al-Assad, Syria's first Ba'athist president and former head of the Air Force, who staffed the intelligence service

9 When asked 'How many people/cars who attempt to cross the checkpoint get stopped for more than 1 minute?' enumerators check one of the following four options: 'greater than 50%,' '25-50%,' '10-25%,' '<10%.' Based on these options, we can say the first option is 'most restrictive,' followed by 'restrictive,' 'moderately restrictive,' or 'not restrictive.'

10 "Witness Reports: Report on the Khateeb Branch – State Security," Violence Documentations Center in Syria, August 2013. http://www.vdc-sy.info/index.php/en/reports/khatibbranch#.UvG3xkJdWhh

leadership with ruthless and talented officers he could trust. It appears that the purpose of the Air Force Intelligence checkpoints is to protect approaches to their headquarters. The only main approach to the building that is not protected by Air Force personnel appears to be on the ring road (1) controlled by Military Police.

Liwa al-Tawhid

Armed opposition groups in control of checkpoints take one of two forms: 1) Groups that are extremely small, local to the specific neighborhood from which they recruit most of their fighters; or 2) Larger groups with a presence across the city. These smaller groups tend to control only a few

checkpoints in a particular community. Nearly 70% of opposition groups fit into this category, controlling 5 or fewer total checkpoints over 4 months. Liwa al-Tawhid, the armed opposition group with the most checkpoints in Aleppo, is in the second category. An "ideologically fuzzy, big-tent movement with ties to the Muslim Brotherhood," ¹¹ Tawhid is one of the most powerful groups in northern Syria. In Aleppo,its presence is well entrenched: 86.5% of Tawhid's checkpoints are permanent or semi-permanent.



However, Tawhid fighters are more permissive than their restrictive regime counter-parts: three-quarters of residents who cross their checkpoints are rarely or never stopped for more than one minute. This group forms the backbone of the opposition defense of eastern and southern Aleppo.

Islamic State of Iraq and Syria (ISIS)

An Al Qaeda affiliate known for its brutal tactics, fighters from the Islamic State of Iraq and Syria (ISIS) generate significant resentment among Syrians for their heavy-handed imposition of extreme Salafi Islamic law. They also use population control tactics that include intimidation and coercion: "They use violence and abuses to crush dissent" an activist explained to AFP, "They are only Islamic in name. All they want is power." During the period of our study, ISIS detained, tortured, and sometimes murdered rivals, often targeting activists and local armed group commanders. For example, the body of Dr. Hussein al-Suleiman, an Aleppo-based commander in the group Ahrar al-Sham, was found tortured to death on December 31, 2013. ISIS has also targeted residents accused of blasphemy, such as Muhammad al-Qatta, a fifteen-year-old boy who was executed in al-Sha'ar. ISIS, or "Da'ash," as the group is generally known, is the most ruthless and least popular armed opposition group in the city, according to our perception surveys.

These characteristics are related to the group's behavior at checkpoints: ISIS checkpoints are the most restrictive in Aleppo. See the table below:

Question: "What percent of cars and people are stopped at this checkpoint for more						
than one minute?"						
Answer Options ISIS City Average Difference						

¹¹ Lund, Aron, "Sorting Out David Ignatius," Syria Comment, April 3, 2013, http://www.joshualandis.com/blog/sorting-out-david-ignatius/

¹² Al Jazeera, "Syria rebels demand al-Qaeda group surrender," January 4, 2014,

http://www.aljazeera.com/news/middleeast/2014/01/syria-rebels-demand-al-qaeda-group-surrender-20141413149507176.html 13 Al Jazeera, "Syrian rebels 'execute teenager' in Aleppo," June 9, 2013,

http://www.aljazeera.com/news/middleeast/2013/06/201369175918244221.html

A. >50%	40.9%	13.2%	+27.7%
B. 25-50%	7.5%	19.1%	-11.6%
C. 10-25%	11.3%	19.9%	-8.6%
D. <10%	41.5%	47.8%	-6.3%

It is also clear that ISIS' relations to Aleppo residents are neither cordial nor calm, since ISIS fighters detain those who cross their checkpoints far more regularly than average. Unsurprisingly, people are more likely to avoid ISIS checkpoints as well. Note the table below:

Question: "How would you describe traffic at this checkpoint?"					
Answer Options	ISIS	City Average	Difference		
A. Very Busy	5.7%	11.5%	-5.8%		
B. Somewhat Busy	50.9%	33.5%	+17.4%		
C. Not Busy	17%	34.1%	-17.1%		
D. People Avoid the Checkpoint	30.3%	20.8%	+9.5%		

These findings indicate that ISIS actively intimidates or coerces populations in areas that it controls, to the point of unpopularity. It is also worth reviewing which of the checkpoints controlled by ISIS



are most avoided. These checkpoints are highlighted in the map to the left.

The highlighted checkpoints at left were avoided and heavily restrictive. Not only did people avoid them throughout our research, but more than 50% of those who crossed the checkpoints were stopped for more than one minute. It is clear that this area was heavily guarded, but what was ISIS protecting?

Switching to satellite imagery, we see that the heavily-avoided checkpoints lie on either end of a street leading to the entrance of one of Aleppo's largest hospitals, the Aleppo National Hospital.

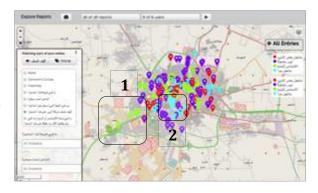
ISIS controlled the hospital throughout the entire period of data collection, until January 8, 2014 when reports surfaced that rebel fighters stormed the ISIS headquarters and took over the hospital. Since the takeover, stories have emerged about the treatment of prisoners by ISIS. In one videotaped testimonial, Milad Shehabi, a freed prisoner, said the ISIS fighters stepped on his neck with a military boot, and said, "'you dogs, you want a revolution?! This is your revolution!" Shehabi added later, "We'd pray for the planes to



hit us [with an airstrike], to release us from this torture."14

Where are they busiest?

The busiest checkpoints in Aleppo are shown at right (busy checkpoints are in blue/darkest shade; avoided checkpoints in lime green/lightest shade). As can be seen, there are no evident, macro-level trends to report regarding the distribution of checkpoints that are the busiest or most avoided. Even when reviewing each of the eight collection periods in sequence, there are no significant trends.



Nevertheless, there are two interesting checkpoint clusters. The first is a chain of four avoided checkpoints in the southwest corner of the city (1). They are deployed along the M5 highway that connects Aleppo with Damascus. This highway is the main supply route (MSR) connecting regime-



controlled Aleppo city with the rest of the regime's territory. The Syrian Arab Army controls all these four checkpoints, and they are among the most heavily guarded checkpoints in all of Aleppo. All four checkpoints are permanent and stop more than 50% of those who cross are detained for more than one minute. They are also some of the largest in the city: one checkpoint has 10-20 deployed troops, while the other three have more than 20 troops deployed (only 5.8% of all checkpoints are staffed by over 20 troops).

There are tanks stationed at one of the checkpoints, one of only ten locations in the city in which tanks are located. These checkpoints are heavily guarded most likely because they protect the only entrance to regime-controlled Aleppo City, and because they also protect the Aleppo Military College highlighted in the map, a key center of Syrian government presence. In an extensive New York Times interview in March 2013, General Salim Idriss, chief of staff of the Free Syrian Army and

former professor at the college, predicted that one of the last battles for Aleppo would occur at this heavily guarded location.¹⁵

The second area of interest is a cluster of "very busy" checkpoints along the front lines near the center of the city. These checkpoints represent the only area in the city from which residents can cross between regime- and



¹⁴ Dick, Marlin, "Ex-ISIS detainees tell horror stories of captivity," The Daily Star, January 8, 2014, http://www.dailystar.com.lb/News/Middle-East/2014/Jan-09/243522-ex-isis-detainees-tell-horror-stories-of-captivity.ashx#ixzz2pr1JjrKe

¹⁵ MacFarquhar, Neil, "Syrian Rebel Deals with Ties to Other Side," The New York Times, March 1, 2013, http://www.nytimes.com/2013/03/02/world/middleeast/syrian-rebel-leader-deals-with-old-ties-to-other-side.html?pagewanted=all&_r=0

opposition-held Aleppo. See the map at right. 16



Buses are stacked to prevent cars from crossing the "Checkpoint of Death," the only crossing between regime- and opposition-controlled Aleppo (source: Aleppo News Network)

All the checkpoints in the boxed-in area are "very busy." Our field research teams estimate that approximately 35-50,000 people cross between regimeopposition-held Aleppo at each checkpoint per day. In September-October, a period of intense food scarcity in regime-held neighborhoods due to the opposition blockade of the city, 17 our enumerators estimated that approximately 60% of those who crossed did so from the regime side to the opposition side in order to buy basic foodstuffs. As of early 2014, opposition armed groups have banned the sale of foodstuffs to residents from regime-held Aleppo. Still, huge numbers from both sides cross the checkpoint to collect salaries, visit

family, and, it is rumored, cross into regime-controlled Aleppo to pay their utility bills.

This is especially true of the so-called "checkpoint of death" (*ma'aber al-mout*). Residents cross this checkpoint – between the neighborhoods of Bustan al-Qasr and those of Jamiliyeh, Feid, Masharqa, and Bustan al-Zahra – in order to get from regime-controlled Aleppo to opposition controlled Aleppo. Snipers on both sides of the checkpoint often fire at each other, and, occasionally, on pedestrians who cross. Because many pedestrians carry purchases like basic foodstuffs (shown in the photo), there is now a market for young boys who charge residents a fee to carry bags across. This shows up in our data: while less than 10% of residents across Aleppo report paying a fee to cross a checkpoint, over 90% of residents in the neighborhood north of Bustan al-Qasr (Jamiliyeh, Feid, Masharqa, and Bustan al-Zahra) have paid to cross a checkpoint.

Where are they the most restrictive?

The relationship between fighters and civilians at checkpoints can give us insight into the political support and local allegiances of the surrounding community. On our checkpoint survey, we get at this phenomenon by asking "what percent of cars and people are stopped at this checkpoint for more than one minute?" This provides an objective observable indicator of the relationship between each armed group and the community: checkpoints that stop more than 50% of those who cross (and therefore significantly disrupt local civilians' freedom of movement) are graded "very restrictive;" those that stop 25-50% are rated "restrictive;" those that stop 10-25% are "moderately restrictive;" and those that only stop less than 10% are "not restrictive." Groups with an unusually high number of "very restrictive" checkpoints, after controlling for key terrain and

¹⁶ To determine "areas of control" we asked our enumerator to answer the question "who do people think controls this neighborhood?" with answer options "regime," "mostly regime," "contested," "mostly opposition," and "opposition." The color-coded map shows in red the neighboorhods that are or mostly are under regime control.

¹⁷ For more detail on this period, please refer to the part of the humanitarian conditions section of this report that deals with bakeries and bread prices.

¹⁸ For a detailed exposé of life around *ma'aber al-mout*, also known as *karm al-hajez*, please see this report from Aleppo News Network: http://www.youtube.com/watch?v=HazytbYBIKc. There is also this report, a collection of videos taken while residents would cross under gunfire (graphic): http://www.youtube.com/watch?v=VNyJwVHuyCQ).

critical infrastructure being guarded, may have a more oppressive relationship with the community, and less personal familiarity with local civilians. Conversely, there are several reasons a group may have a larger number of unrestrictive checkpoints: they do not have the manpower to restrict travel on locals, they possess a greater familiarity with local communities, or they may not have a mandate to stop and search as frequently as other groups. The latter is true for the State Security Branch, for example, which controls the third-most checkpoints in Aleppo but with almost no restrictive locations.

The map below shows the distribution of "very restrictive" checkpoints, representing 13.2% of all checkpoints in the city. Below the map is a table listing the six groups with the greatest number of "very restrictive" checkpoints.

Checkpoints along ring roads and entry points into Aleppo

Where are the "very restrictive" checkpoints?

Armed groups in Aleppo with the most "very restrictive" checkpoints (city average								
=13.2%)								
Group Name	Total number of checkpoints controlled by each group	Total number of restrictive checkpoints controlled by each group	Percentage of restrictive checkpoints controlled by that group					
1. Syrian Arab Army	327	78	23.85%					
2. Islamic State of Iraq and Syria (ISIS)	66	27	40.9%					
3. Ba'ath Party Brigades	206	16	18.4%					
3. State Security Branch	161	16	22.5%					
5. Sharia Commission	36	14	21.2%					
6. Liwa al-Tawhid	71	12	19%					

Two key features are apparent in the map. First, many restrictive checkpoints are located on highways leading into Aleppo or along the city's two major ring roads. 60-70% of the city's most restrictive checkpoints are located along its busiest roads. This suggests what is quite evident to casual observers of Aleppo, and certainly for residents: groups are strangling movement into and around the city by establishing highly restrictive checkpoints along the busiest roads. It also suggests that checkpoints on key terrain corridors (including main supply routes) and around critical infrastructure are more likely to restrict population movement.

Second, another busy but restrictive area, a t-shaped cluster slightly south and west of the city center, is located in the area mentioned earlier, where people can cross between regime- and opposition-held Aleppo. This indicates that while people are allowed to cross the main checkpoint, they are treated with intense suspicion once they arrive on either side. This is the area around ma'aber al-mout, the checkpoint of death. Not only is this area of the city heavily trafficked with residents trying to cross between opposition- and regime-held Aleppo, but the checkpoints controlling population movement are among the most restrictive in the city. This is not surprising given the sensitivities around allowing populations to cross battle lines in a war zone, but adds to our understanding that this area is one of the most sensitive in all of Aleppo city.

Where are they the most fortified?

The final three questions of our checkpoint assessment help to build an understanding of how fortified checkpoints are in the city. These questions are:

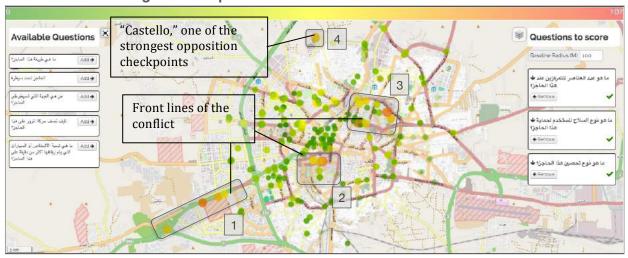
Survey Type	Survey Question	Response Options (bold = "most fortified" option)	% "Most Fortified" Checkpoints (bolded in response column)
Checkpoints	Approximately how many people are stationed at the checkpoint?	>20, 10-20, 5-10, <5	5.8% of checkpoints have more than 20 people
Checkpoints	What kind of weaponry do they protect it with?	AK-47s or other machine guns, RPGs, Tanks , Sniper Rifles, Armed Trucks ("Technicals"), Other	4.45% of checkpoints have tanks
Checkpoints	What kind of fortification exists at the checkpoint?	Improvised barricades (e.g., tires, rocks), Barrels/concrete/road blocks, Hardened buildings, Sandbags, Cars or Trucks, There is no fortification just armed guards, Other	9.5% of checkpoints have concrete roadblocks and hardened buildings

To get a better sense of not only *where* checkpoints are located, but also *how much force they project*, First Mile Geo developed a scoring system for point-based surveys. We use this scoring system to assess the relative strength of checkpoints. Unsurprisingly, the strongest checkpoints are controlled by the Syrian Arab Army. Below are the scoring rubric and the map of where the "strongest" checkpoints are located.

Survey Question	Question Score	Response Options	Response Score
Approximately how many people are	20	More than 20	20
stationed at the checkpoint?		10-20	10
		5-10	5
		Less than 5	2
What kind of weaponry do they protect	20	Tanks	20

it with?		Armored Trucks	14
		RPGs	12
		Sniper Rifles	8
		AK-47s and small arms	4
		Other	2
What kind of fortification exists at the	20	Hardened buildings	20
checkpoint?		Barrels/concrete roadblocks	10
		Cars or Trucks	10
		Improvised Barricades	7
		No fortification	3
		Other	2

Where are the strongest checkpoints?



There are four areas where the "strongest" checkpoints are deployed, all but one of which has already been identified.

Area 1. is controlled by the Syrian Arab Army, which deploys tanks and heavily manned guards. These checkpoints protect the only regime supply route into the city, and the al-Assad Military College, indicating the degree of importance the regime places on this area as key terrain.

Area 2. includes checkpoints controlling either side of the *ma'aber al-mout*. In the regime-controlled northern part of this area, the Syrian Arab Army and "Ba'ath Party Brigades" control the checkpoints, while in the southern opposition-controlled section, the Sharia Commission and Liwa Ahrar Zawiya, an affiliate of the Free Syrian Army, control checkpoints. The strength of these checkpoints reflects the presence of battle lines in this area overlaid on the strength of population movement flows between regime and opposition-controlled Aleppo.

Area 3. reflects the current front line of the conflict. Checkpoints in this area are regime-controlled, split between the Syrian Arab Army, Ba'ath Party Brigades, and People's Committees. They are heavily manned with tanks, armored trucks, and hardened buildings. They represent the

^{19 &}quot;People's Committees" (lijan as-sha'abi) are regime-created armed neighborhood watch groups.

protective shell that the regime maintains around the territory it controls, using the Army to defend its perimeter, while using intelligence and security agencies to police its internal territory.

Area 4. is centered around "Castello," one of the strongest checkpoints controlled by an opposition group. It continues to be guarded by Badr Martyrs Brigade, an infamous group accused of rampant criminality. In a November 11, 2013, report for Al-Monitor, Edward Dark, an Aleppo resident writing under a pseudonym, provided significant detail on the group. He describes it as a criminal gangled by a man named Khaled Harani, whose "infamy stems from his well-documented escapades, including organized looting, kidnapping, extortion, highway robbery, and indiscriminate shelling of civilians adjacent to areas his faction controls with his improvised and lethal Jehanem (Hell) cannon."20

"Castello" (shown at right) is the only checkpoint controlled by the Badr Martyrs Brigade, but it is one of Aleppo's strongest checkpoints. The checkpoint, which has been protected by a variety of improvised barriers, expanded from less than 5 fighters deployed in September 2013 to 5-10 in October, to more than 20 by November when Edward Dark's report was filed. That number has declined in December and

The image above is from an ISIS video proving that they removed checkpoint "Castello" the road into Aleppo from Haritan. It is identified below in First Mile GEO.



January, but the Badr Martyrs Brigade still controls this checkpoint, which guards (or rather, preys upon) a highly trafficked entry route into northern Aleppo from the countryside.

At the checkpoint, which functions effectively as an illicit roadblock for criminal extortion, the group has stolen so many goods from passing traffic that the head of the group, Harani, taunted a passenger bus, "Haven't you people run out of money yet?" he said, "I'm getting tired of carrying it all away."21

Dark reported that Harani was tried and scheduled for execution for his crimes by the Al Qaedaaffiliate, the Islamic State of Iraq and Syria (ISIS). This behavior is consistent with other observed efforts by the group to gain popular support by stamping out petty, non-political crime in areas it controls. Our field reporting team noted that while ISIS seized the checkpoint, Harani escaped by barricading himself in the Bani Zayed neighborhood. In late 2013, Harani attempted, and failed, to recapture the checkpoint, and it remains open for travel for those entering to Aleppo city from the north.

3. Enumerator observations on neighborhood control

²⁰ Dark, Edward, "Islamic militants expels criminal gangs from Aleppo" Al-Monitor, November 11, 2013, http://www.almonitor.com/pulse/originals/2013/11/isis-hayani-badr-syria-aleppo.html 21 Ibid

In their monthly report on individual neighborhoods, our enumerators answered questions such as "who do people think controls their neighborhood?" and "what groups provide security/services in this neighborhood?" and, "which of the groups listed do you believe is the strongest group in this neighborhood?" This section of our survey is known as "observables," and helps compare the presence of checkpoints and responses of residents with the presence and relative strength of different groups in Aleppo and the evolution of territorial and population control over time.

The total number of armed groups counted in Aleppo is thirty-eight. Of these, six are statistically relevant in terms of neighborhoods they control. The evolution of control in neighborhoods is listed below.

Quest	Question: What are the groups that provide security services in this neighborhood?							
Rank Name		Total	Sept-Oct,	Oct-Nov,	Nov-Dec,	Dec, 2013-		
		Neighborhoods	2013	2013	2013	Jan, 2014		
1	The Syrian Regime	88	22	22	22	22		
2	Liwa al-Tawhid	44	17	15	12	7		
3	Sharia Commission	22	8	7	7	7		
4 Tajma' Fastqm Amrt		20	7	7	6	-		
5	Ahrar Souriya	19	7	6	6	6		
6	ISIS	15	1	8	6	5		
5 Islamic Front		9	-	-	-	9		
Total number of brigades			32	23	21	17		
Total number of "single			21	14	12	7		
neighb	orhood battalions"							

There are four interesting patterns to note from this table.

- 1. Liwa al-Tawhid, the most powerful opposition brigade providing security services in Aleppo, continues to lose influence, as measured by the number of neighborhoods in which it operates.
- 2. The Islamic Front, a newly formed coalition of Islamist brigades created in late 2013, operates in more neighborhoods than any armed opposition group as of January 2014. This group is actively fighting ISIS in Aleppo, which may explain why ISIS' neighborhoods declined from 8 in Oct-Nov to only 5 in Dec-Jan, as the Islamic Front gained control of new territory (see table on page 19).
- 3. The total number of brigades fell by almost half between September and December, with the majority of that drop coming from "single neighborhood brigades." These are often local, neighborhood-level brigades that often become subsumed by larger brigades that often operate as "franchises," buying up the loyalty of local battalions.
- 4. Regime control—as measured in terms of territory in which regime-aligned actors are the dominant groups—has remained steady throughout the period of this study. Thus the regime consistently controls a minority of the territory in the city, while the major changes in territorial control in the rest of the city have occurred due to infighting among rebel groups, including the rise and subsequent fall of ISIS.

Rather than groups providing security services, we will examine in greater detail which groups are the *strongest* in each neighborhood. This list yields *ten* statistically relevant groups, as our enumerators were able to parse out the different regime factions to determine which of them controlled the operations in each of the 22 regime-controlled neighborhoods.

Questi	Question: What group is the <i>strongest</i> in this neighborhood?						
Rank	Name	Regime/ Opposition	Total Neighborhoods	Sept-Oct, 2013	Oct-Nov, 2013	Nov-Dec, 2013	Dec, 2013-Jan, 2014
1	Air Force Intelligence	Regime	34	6	8	10	10
2	ISIS	Opposition	32	1	9	12	10
3	Liwa al-Tawhid	Opposition	31	8	9	10	4
4	Syrian Arab Army	Regime	20	3	5	6	6
5	Republican Guard	Regime	19	6	5	4	4
6	Tajma' Fastqm Amrt	Opposition	14	5	5	4	-
7	Liwa Ahrar Souriya	Opposition	12	3	3	3	3
8	Military Security Branch	Regime	11	2	3	3	3
9	Sharia Commission	Opposition	9	3	2	2	2
10	Political Security Branch	Regime	8	2	2	2	2
Jan. only	Jaish al- Mujahideen	Opposition	5	-	-	-	5
Jan. only	Islamic Front	Opposition	5	-	-	-	5
	umber of brigades			29	22	21	20
Total no battalio	umber of "single nei ons"	ghborhood		16	12	10	8

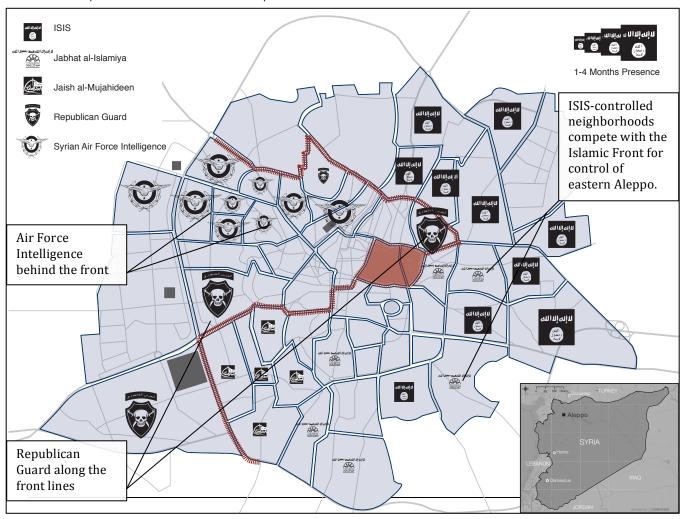
There are five interesting trends to note from the table above.

- 1. ISIS has risen from almost nonexistence to controlling the most neighborhoods in Aleppo by December 2013. While ISIS has grown in Aleppo, its heavy-handed tactics have frustrated other armed groups, who fought back against ISIS in January 2014 and reduced the neighborhoods it controlled from 12 to 10.
- 2. Liwa al-Tawhid was the most territorially dominant opposition armed group in Aleppo until ISIS' 12 neighborhoods surpassed its 10 in Nov-Dec, 2013. Two factors contributed to Tawhid's continuing loss of territory, to the point where it controlled only 4 neighborhoods in January 2014: the group's commander, Abdulqader Salih, died, and the group joined the Islamic Front and was absorbed into the larger coalition.

- 3. "Single-neighborhood brigades" are quickly disappearing from Aleppo. These brigades are only identified in one neighborhood in the city, and are being swallowed up by larger groups, which either "franchise" the battalion or push it aside.
- 4. Unlike the previous chart, we can identify *two* new groups that have formed in Aleppo in January 2014: the Islamic Front and Jaish al-Mujahideen. Both new coalitions are fighting ISIS for control of the city.
- 5. Air Force Intelligence, despite its small number of checkpoints, controls more neighborhoods than any other regime faction. Air Force Intelligence is the only intelligence agency to control any neighborhoods in Aleppo, and is the most feared group in Syria, which suggests that the regime trusts them to suppress dissent in regime-controlled neighborhoods. The correlation of significant territorial control with few checkpoints suggests that Air Force intelligence uses other methods than checkpoints—including arrests, informers, and covert observation—to control the neighborhoods it dominates. It is also possible that many checkpoints are not required since the neighborhood is not as contested as those on the frontlines.

By looking at group control on a map of Aleppo city, we can identify other trends not readily observable in the foregoing chart.

- 1. In September 2013, ISIS was almost nonexistent in Aleppo. The group took over many neighborhoods, in part due to a regime offensive outside the eastern outskirts of Aleppo in a village called Safira.²² The map below shows what neighborhoods ISIS controlled in Aleppo in January 2014.
- 2. A coalition of rebel brigades has fought back against ISIS and challenged the group's authority in opposition-controlled Aleppo. Two brigades, Jaish al-Mujahideen and the Islamic Front, fought back against ISIS, and one (Islamic Front) captured areas formerly controlled by the group.
- 3. The Air Force Intelligence,²³ appears to work in tandem with the Republican Guard, an elite mechanized division. The Air Force oversees regime-controlled Aleppo away from the front lines, while the Republican Guards is deployed to protect some of Aleppo's most tense frontline areas. Their cooperation is shown in the map below.



²² Erika Solomon, "Syrian army captures strategic town at approaches to Aleppo," Reuters, November 1, 2013, http://www.reuters.com/article/2013/11/01/us-syria-crisis-safira-idUSBRE9A00LO20131101

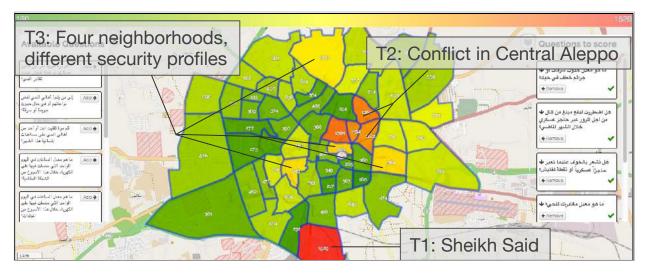
²³ In the testimonials given by the prisoners who were released from the ISIS-controlled hospital in Aleppo in January 2014, they mentioned that their captivity was "worse than the Air Force Intelligence."

4. Resident Survey - Where do residents feel unsafe?

This section compares the presence of armed groups and checkpoints with residential perceptions of security, as reflected in locations where residents feel unsafe as reported in our 561-person survey. We selected several questions from the survey and scored them to identify the least safe neighborhoods in Aleppo.

Survey Question	Question Score	Response Options	Response Score
How safe is your neighborhood?	30	Very Safe	0
		Safe	1
		Moderate	5
		Not Safe	15
		Dangerous	30
How often do you let your children out of the home? (if	10	Always	0
you do not have children, answer as if you did)		Sometimes	3
		Rarely	7
		Never	10
About how many times do you travel outside of your	10	More than 1x/day	0
neighborhood?		Once per day	0
		2-6 times per	1
		week	
		Once per week	3
		Less than once	7
		per week	
		Never	10
		Depends on	3
		security	
How often do you feel concerned for your safety when	10	Frequently	10
you cross a checkpoint?		Sometimes	7
		Rarely	3
		Never	0
Have you ever had to pay to get through a checkpoint in the past month?	10	Yes	10
		No	0
How frequent are crimes such as stealing or	30	Daily	30
kidnapping in your neighborhood?		Weekly	15
-		Monthly	7
		Never/Hardly Ever	2





Our scoring system identifies three tiers of insecurity in Aleppo. The first tier is the least secure neighborhood in the city, Sheikh Said. The second tier is a cluster of four neighborhoods north of the citadel in the city center, and the third tier is four neighborhoods, each scored over 900 (shown in yellow), in different parts of the city: Bustan al-Qasr to the southwest, Sheikh Maqsoud to the north, al-Bayada and al-Suweiga in central Aleppo, and Karm al-Qaterji/Jourat Awad in the east.

Tier (T)	Neighborhood(s)	Insecurity Summary
Tier 1	Sheikh Said	Most insecure, most crime in Aleppo, little travel
(extreme		
insecurity)		
Tier 2	Central/North Aleppo	High insecurity, little travel
(very		
insecure)		
Tier 3	Bustan al-Qasr, Sheikh	Bustan al-Qasr: heightened insecurity; Sheikh Maqsoud:
(insecure)	Maqsoud,	divided neighborhood; Bayada/Suweiqa: Medium-High
	Bayada/Suweiqa, Karm	insecurity; Karm al-Qaterji/Jourat Awad: Initially dangerous,
	al-Qaterji/Jourat Awad	now safer

The most insecure neighborhoods in Aleppo

Tier 1 – Sheikh Said is the least safe neighborhood in the city according to residents' perceptions: nearly all residents (28/30) described the neighborhood as "dangerous" or "unsafe," and nearly all residents (26/30) witnessed crimes committed on a "daily" or "weekly" basis. Compounding the perception of danger, more than one-third of respondents said they left Sheikh Said one or fewer times per week.

Tier 2 – Comprised of the central/north Aleppo neighborhoods of 1) Midan and Suleiman al-Halabi; 2) Karm al-Jabal, Qarleq and Mishatiyeh; 3) al-Jadideh and al-Hamidiyeh; 4) Maysaloun, Aghyol, and Hanano Base, this is the frontline of Aleppo's conflict. In these places, the Syrian regime deploys tanks and heavily-manned checkpoints. Residents report these neighborhoods as some of the most dangerous: 70.8% of residents reported their neighborhoods were "dangerous" or "not

safe" during the study, while the city average was 22.6%/. And 75% of residents would "never" or "rarely" let their children outside the house, while the city average was 25.1%.

Tier 3 – Consisting of Bustan al-Qasr; Sheikh Maqsoud; al-Bayada and al-Suweiqa; Karm al-Qaterji and Jourat Awad, this tier has four neighborhoods from different parts of the city. Each has a different reason for residents' perceptions of insecurity:

- Bustan al-Qasr, a notoriously pro-opposition neighborhood in Aleppo, is also the location of ma'aber al-mout. It is the neighborhood from which BBC published a report "Aleppo: A city where snipers shoot children." Since that report, residents' perceptions of security, safety and crime in Bustan al-Qasr have further worsened. In October 2013, one in ten respondents said Bustan al-Qasr was "dangerous." That number rose to two in ten in November, and five in ten in December. Residents also witness deteriorated conditions in regard to crime: in October, one resident witnessed crime committed "weekly." By December, four respondents witnessed crime committed "weekly," and four more residents reported seeing crime committed "daily."
- Sheikh Maqsoud, one of Aleppo's largest neighborhoods, is in northern Aleppo on a hill overlooking the city. 25 Maqsoud is a mixed neighborhood of Kurds and Arabs, which may help explain why the neighborhood has among the most varied responses in Aleppo: nearly half of its residents said the neighborhood was "dangerous" or "unsafe;" nearly half had witnessed a crime "daily" or "weekly;" over one-third of the residents leave their neighborhood one or fewer times per week; over one-third would "never" or "rarely" let their children out of the house; and one-quarter of residents "sometimes" or "frequently" feel concerned for their safety when crossing checkpoints. Sheikh Maqsoud experienced rampant looting when it was "liberated" from the regime in April 2013 and has remained unsafe since, as measured by residents' perceptions.
- <u>al-Bayada/al-Suweiqa</u> has a similar profile to the nearby neighborhoods in Tier 2, albeit with less dire responses. For example, Tier 2 neighborhood Jadideh/Hamidiyeh had 21/30 respondents say their neighborhood was "dangerous" and 27/30 say they would "never" let their children out, while in Bayada/Suweiqa, 15/30 said their neighborhood was "dangerous" and 15/30 said they would "never" let their children out of the house.
- Karm al-Qaterji/Jourat Awad was initially perceived as unsafe, but has become less dangerous over time. For the first two months, four in ten residents reported that their neighborhood was "dangerous." But in December, no one called his or her neighborhood "dangerous" (though four in ten said it was "unsafe"). This neighborhood may have become safer in December because it resolved the issue of dispute governance. In October, three in ten residents went to the local council to resolve disputes; while by December, the entire neighborhood relied on Sharia Courts to resolve their disputes. This reliance may only be for practical purposes: in November, seven in ten supported "Islamic Brigades" as the legitimate representative of the Syrian people, but by December, that number had fallen to four in ten. Three had changed their vote of support from Islamic Brigades to "No one."

²⁴ Smith, Hannah Lucinda, "Aleppo: A city where snipers shoot children," BBC Magazine, August 17, 2013, http://www.bbc.co.uk/news/magazine-23696829

²⁵ Mroue, Bassem, "Syrians enter Sheikh Maqsoud, seize key Aleppo neighborhood," Huffington Post, March 30, 2013 http://www.huffingtonpost.com/2013/03/30/syrian-rebels-enter-sheik-maqsoud-aleppo_n_2984865.html

5. Conclusion

By combining checkpoint location and status data, enumerator observations regarding group territorial presence, and quantitative citywide surveys of residents, we can achieve a richer picture of Aleppo city's conflict dynamic. We can correlate "unsafe" neighborhoods with strategically important checkpoints, such as Bustan al-Qasr with the so-called "Checkpoint of Death" and Sheikh Maqsoud/Bani Zayed with the so-called "Castello" checkpoint. We can begin to quantify the territorial reach of groups such as ISIS by tracking the number of neighborhoods they control in the city. We can compare that information to the presence of other checkpoints and evaluate how restrictive these checkpoints are against population movement, helping provide hard evidence for anecdotal reporting suggesting that that ISIS is both powerful and unpopular in Aleppo,

This section also sheds light on realities in regime-held areas. It shows the relationship between key regime factions within feared and loyal organizations such as Air Force Intelligence and the Republican Guard. It also compares how different sides experience the conflict, for instance the way that regime-held neighborhoods are more likely to report security concerns on the front lines of the conflict while opposition-held neighborhoods are more likely to do so when there is a high rate of crime. This cross-pollination of information between checkpoints, basic identification of groups, and resident surveys offers a verifiable data-driven assessment of Aleppo's conflict dynamics. It also provides a baseline for potential future research or humanitarian assistance programming in the city.

Humanitarian Conditions in Aleppo

February 2014







"Oh Aleppo, rise from the pain!
Walk through my city
Oh, more blood is being spilled
Oh my city!
I am crying; my city is breaking my heart
And my children have become strangers
Oh, my city!"

-Abdel Karim al-Hamdani, 2012

Humanitarian Conditions in Aleppo

Summary of findings

Our research project confirms that Aleppans experience withheld services and limited access to basic necessities. In addition to identifying the city's most vulnerable neighborhoods, our research also suggests that some opposition-controlled neighborhoods are receiving significant assistance while others receive little. Amid Aleppo's tragedy, which also includes the destruction of UNESCO World Heritage sites, our study of humanitarian conditions finds nine key insights in both regimeand opposition-held Aleppo.

- 1. The Syrian regime may be withholding electricity from opposition-held neighborhoods in Aleppo. All of the neighborhoods receiving more than 10 hours of electricity are in regime-controlled areas. In wintertime, this is causing major heating shortages in opposition-held Aleppo, with residents cutting down trees on the street for firewood.
- 2. More than 40% of bakeries in opposition-held Aleppo are closed, destroyed, or damaged. Shelling has destroyed one-third of these bakeries, while less than 10% of bakeries in regime-held areas appear closed.
- 3. Since November 24, 2013 all bakeries now distribute bread through opposition councils in their areas of territorial control. This means that bread prices in opposition-held Aleppo have stabilized but have risen from an average of 54SYP (130SYP to 1USD) to 74SYP from September 2013 to January 2014.
- 4. Regime subsidies for bread, combined with the reopening of the regime's main supply route (MSR) into Aleppo from the west, have resulted in bread prices that are 2-4 times lower than in opposition-held areas as of January 2014. Prices are held steady at 15 SYP per bag.
- 5. The regime has one MSR into Aleppo, and residents of regime-held neighborhoods are dramatically affected when rebels cut that MSR, as happened in September and October 2013. Once the regime re-opened the MSR by force, lifting the rebels' western blockade of the city, the price of bread in regime-held neighborhoods dropped *tenfold*, from SYP150 to SYP15.
- 6. Residents in the center of the old city are pinned down by a conflict that is fought block by block in their neighborhoods. They have, by far, the most restricted freedom of movement of any residents in the city, being largely unable to move outside their immediate neighborhood.
- 7. Trash cleanup has improved citywide since the outbreak of Leishmaniasis in late 2012 and early 2013. Nearly every neighborhood in Aleppo reports that trash is being collected three or more times per week.
- 8. Opposition-held neighborhoods have significant income variance, containing the top-five highest income-earning districts as well as the bottom five lowest income-earning

- neighborhoods. In this study, "income" was scored by the frequency with which residents receive aid and/or a monthly wage.
- 9. Basic assistance does not appear to be reaching most neighborhoods that report high levels of insecurity, crime, and lack of services. Based on a scored survey of resident perceptions of humanitarian conditions, we identified the areas in Aleppo that were most lacking in terms of basic services, mobility, and security, along with areas of persistent crime. We then compared those areas to resident responses about receiving aid and salaries. In doing so, we found that if residents in neighborhoods with poor humanitarian conditions or "vulnerable" neighborhoods were in opposition-held areas, it was unlikely that they received salary or aid.

This section will provide a detailed assessment of humanitarian conditions in Aleppo's neighborhoods in order to identify vulnerabilities and highlight potential impact points for humanitarian agencies or NGOs interested in providing assistance in the city. We first outline findings from our monthly survey of 561 residents. We then assess the location of bakeries in the city, whether or not they function, and the price they charge for bread, using access to bread as a proxy indicator for overall food security. This assessment contributes to our development of a "humanitarian vulnerability index," which identifies areas in greatest need in Aleppo. We conclude this section by comparing the most vulnerable neighborhoods as identified by this index to the performance of those providing salaries and aid to residents in the city. The goal of this section is to identify vulnerable communities, determine what factors make conditions difficult, and evaluate current efforts to help people there. We believe this will have value not just in Aleppo, but also across Syria.

1. Survey findings on humanitarian conditions

To understand the relative vulnerability of communities, we analyzed responses from 561 residents in 56 neighborhoods across Aleppo City to questions concerning living conditions. The specific questions are listed below.

Issue	Survey Question	Response Options
	1. How many hours of government grid electricity does your family receive on a daily basis this week	0-24
Services	2. How many hours of generator electricity does your family use on a daily basis this week?	0-24
	0-Infinity (max response = 7)	
Cofoty	4. How safe is your neighborhood?	Very Safe, Safe, Moderate, Not Safe, Dangerous
Safety	5. How frequent are crimes such as stealing or kidnapping in your neighborhood?	Daily, Weekly, Monthly. Never/Hardly Ever
Mobility	6. About how many times do you travel outside of your neighborhood?	More than 1x/day, 1x/day, 2-6x/week, 1x/week, <1x/week, Never, Depends on Security
	7. How often do you feel concerned for your safety when you cross a checkpoint?	Frequently, Sometimes, Rarely, Never

At the end of this section, we combine the variables listed into an overall assessment of humanitarian vulnerability for each neighborhood in the city. By comparing vulnerability score to relative income, as measured by receiving a salary or humanitarian aid in a given month, we can build a richer picture of how each community experiences the conflict.²⁶

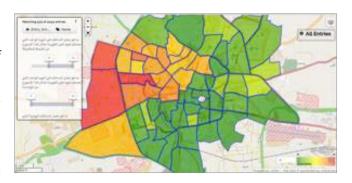
Caerus Associates | Mapping Aleppo's Conflict

¹ What is missing from this picture is a sense for areas that have been destroyed. For that, please refer to the AAAS study, "Conflict in Aleppo, Syria: A Retrospective Analysis" http://www.aaas.org/report/conflict-aleppo-syria-retrospective-analysis

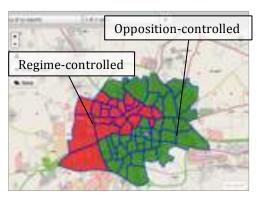
Services – Grid Electricity

"I receive more than 12 hours of electricity from the government grid"

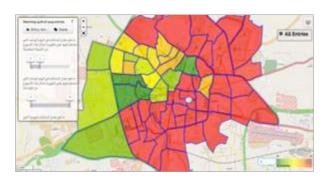
At left is a map showing the distribution of residents who report having 12 or more hours of electricity from the government grid, in red/darkest shade. Note the neighborhoods with more than 12 hours of



government grid electricity are almost exactly the same as the ones our enumerators report to be neighborhoods either mostly or completely under government control (see neighborhoods in red in the inset at left).



The presence of electricity exclusively in regime-held areas is likely attributed to several factors: regime-held areas are less battle-scarred than opposition-held areas; pre-revolutionary municipal institutions only operate in regime-held neighborhoods in the city (see "Governance" section for more), meaning they are able to fix broken lines faster and more easily than in opposition-held areas; and finally many – though not all – residents in opposition-held Aleppo are unable to pay their utility bill. The data may also suggest that the regime is actively withholding basic services to opposition-held Aleppo.



"I receive less than 6 hours of electricity from the government grid"

Neighborhoods in red/darkest shade in the map at left show the highest concentration of residents with 6 or fewer hours of government grid electricity. This is nearly all of opposition-held Aleppo, which relies on expensive and often scarce fuel to fire their generators. This lack of electricity is an acute problem in the wintertime.

Some reports indicate that the residents of opposition-held Aleppo have taken to cutting down trees on the street in order to stay warm.²⁷

Services – Generator Electricity

"I receive more than six hours of electricity from generators"

Residents in both regime- and opposition-held Aleppo have responded to inconsistent or



²⁷ Saadi, Salam, "Syrians Facing "Coldest" Winter Yet With No Diesel," Damascus Bureau, January 10, 2014, http://www.damascusbureau.org/?p=6294

absent electricity services from the government by purchasing generators. The red/darkest shade neighborhoods in the map identify communities that fuel their generators for more than six hours per day. There are multiple forces driving generator use: in regime-held western Aleppo, there may be an income effect where wealthy residents can afford to supplement their grid electricity use with fuel for their generators. Fuel delivered to the city may also arrive at many of the locations in the map above since neighborhoods ring the city limits. One exception that will require additional research is the string of neighborhoods running from southern Aleppo into the city center. All of these neighborhoods are able to afford 6 hours or more of generator electricity.



"I have received zero hours of electricity from the government and have had zero hours of electricity from generators"

These areas at right are where residents report receiving no electricity. There are two areas, marked in red on the map, where no surveyed residents reported access to electricity. The first is the predominantly Kurdish neighborhood of

Sheikh Maqsoud, in the northern part of the city. The lack of electricity in Sheikh Maqsoud is likely due to the looting that took place in the neighborhood after it was liberated in March 2013 by opposition forces. One group in particular, the Badr Martyrs Brigade, auctioned off anything of value, including electrical wires, to the highest bidder (see the "Security Conditions" section for more). The second area is a collection of three neighborhoods in the old city of Aleppo: Bab al-Nayrab, Bab al-Hadid, and Bayada/Suweiqa. These are densely packed lower-class residential communities of Sunni Arabs. Bab al-Nayrab, for example, is home to a major meat market. The combination of poor socioeconomic status, battle damage, and proximity to conflict are likely the reasons why these neighborhoods report so little electricity.

Services - Trash Collection

In addition to utilities, organizing municipal services like trash collection has been a major problem for Aleppo's residents during the conflict. Trash collection and disposal became a problem almost as soon as the fight for the city began in July 2012. "Trash collection services have almost completely broken down in rebel-held areas" reported one journalist in October 2012, "and mounds of rubbish are rising in the streets."²⁸

In February 2013, Mohamed Sergie, a reporter from Aleppo, explained that in his native city, "Only a third of the 165 garbage trucks are operational...and volunteers are hauling most of the trash." By April



A man walks through one of Aleppo City's massive trash sites in April 2013 (photo courtesy of International Committee of the Red Cross)

²⁸ Dunlop, W.G., "Rubbish piles up as battle for Syrian city rages," Agence France Presse,

 $http://www.google.com/hostednews/afp/article/ALeqM5gRdg6AyK3dOb7t_aPXMWsvfCMR_w?docld=CNG.7028582adc5b8b89c6e9632ff5db83ae.1a1\\$

²⁹ Sergie, Mohammed, "Aleppo's Rebels Struggle to Run City Under Fire," ABC News, February 21, 2013,

http://abcnews.go.com/International/aleppos-rebels-struggle-run-city-fire/story?id=18550262

2013, the Paris-based Union of Syrian Medical Relief Organizations (UOSSM – *Union des Organisations Syriennes de Secours Médicaux*) was calling on the World Health Organization and others to treat the spread of Cutaneous Leishmaniasis. Also known as "Aleppo Boil" or "Aleppo Evil," Cutaneous Leishmaniasis is a parasite that thrives in trash dumps and untreated raw sewage. By June 2013, the World Health Organization had identified over 1,000 cases of the disease in Syria, the majority of which occurred in Aleppo City, and in particular the neighborhood of Karm al-Jabal.³⁰

Aleppo's civil society and governing institutions in opposition-controlled areas responded to this health crisis by launching "Clean It Up" campaigns throughout the summer. These campaigns, led by the Aleppo City Council – a local community organizing effort to provide services in the opposition-controlled neighborhoods of the city – would pick up garbage and help fumigate households to remove pests and disease. The cleanup effort was so successful in Aleppo City that it became a model campaign for local community councils across northern Syria.

How do these efforts fare today? Because trash collection is organized by local governance groups, it can serve as a proxy indicator for the administrative effectiveness of these



The Aleppo City Council highlights neighborhoods (in green) that it worked in May/June during its summer "Clean it up" campaign (photo courtesy of the Aleppo City Council).

groups, as well as for population access to essential services. Analyzing trash collection thus illuminates the effectiveness of civil administration, the reach of Aleppo's different neighborhood councils, and how and where "volunteers" are operating. While analyzing the maps in this section, is important to note that trash collection in Aleppo occurs early every morning or late each night rather than weekly or bi-weekly as in the United States.

"How often does trash cleanup occur in your neighborhood on a weekly basis?"



Six or more times per week

Two or fewer times per week

One of the most striking aspects about the map above left is that there is not as strong a correlation between regime- and opposition-held areas as with electricity services. In fact, parts of the opposition-held areas of southern Aleppo have better trash removal services than most regime-held neighborhoods (with the exception of a collection of predominantly Christian, upper

³⁰ Damien Gayle, "Flesh-eating 'Aleppo boil' disease spreads through Syrian city as parasite-spreading flies thrive on mounting waste and sewage" Daily Globe and Mail, June 21, 2013,

http://www.dailymail.co.uk/news/article-2345972/Flesh-eating-Aleppo-boil-disease-spreads-Syrian-city-parasites-thrive-mounting-waste-sewage.html#ixzz2n5btGBeb

class neighborhoods in the northwest). The image above of the frequency of trash collection is generally constant across all periods of reporting from September through December.

However, the map above right shows that while some areas of opposition-held Aleppo have excellent trash removal services, others remain woefully underserved. The areas in red in the map above right are where more than half of residents report seeing trash pickup occur two or fewer times per week. There may be a strong correlation between areas that have low degree of trash collection and those that were subject to a messy takeover. Even though trash collection is something that CSOs are able to adjust quickly, these neighborhoods may continue to suffer from adjusting to life under control by ISIS, which often does not allow secular CSOs to work in areas it controls. Moreover, that these neighborhoods are also in opposition-held areas of Aleppo suggests that while regime-held areas may not be the best served areas in Aleppo, they have *consistency* of acceptable service (trash is collected four times a week fairly evenly across areas they control). Whereas some opposition-held areas may have superior trash service, other areas of opposition-held Aleppo are the most neglected in the city.

Using trash cleanup as a proxy for essential service delivery, these data suggest that northern and northeastern Aleppo city has among the lowest service delivery capacity across the city. This contributes to these areas' high vulnerability score, noted below.

Safety and Criminality in Aleppo

We examined public safety in the previous section, but it is worth restating several observations below, including resident perceptions on safety and criminality.



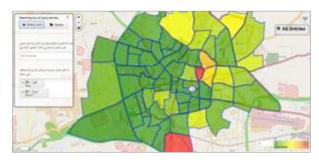
"I would describe my community as dangerous/unsafe"

Three neighborhoods that showed poor access to electricity also show up as highly unsafe in this map: the center/center north parts of the city where there is some of the highest military build-up, the southwest parts of the city where there is

the only crossing between opposition- and regime-held Aleppo, and Sheikh Said, the Arab Sunni blue collar neighborhood in the south.

"Crimes such as theft or looting are committed on a daily or weekly basis in my neighborhood"

Several of the same neighborhoods also have a majority of residents witnessing crimes committed at least on a weekly basis. What is surprising is that central Aleppo has few crimes being committed, despite residents reporting



high insecurity. In fact, crimes such as looting are not committed frequently almost anywhere along the front lines of the conflict. This suggests that the front lines of the conflict are not the most crime-ridden, most likely because these areas are too dangerous for all non-combatants (including criminal groups) to move freely, reducing both the availability of targets for criminals and the permissiveness of the environment for criminal actors.

Neighborhood Mobility

This section will examine the degree of civilian freedom of movement within different communities, and whether security issues limit travel. We ask the following two questions:

- 1. How frequently do residents travel outside their neighborhoods?
- 2. How often do residents feel concerned for their safety when they cross checkpoints?

Frequency of Travel

The first question examines the freedom of movement for residents outside of their neighborhood. Freedom of movement by residents is a proxy indicator for the degree of security risk in each neighborhood, as well as for the availability of key services: residents who feel unsafe will tend to limit their movement, while lack of key infrastructure or access to essential services may make movement more necessary. Both factors contribute to a higher overall vulnerability score for areas where freedom of movement is lower.



"I leave my neighborhood once or more times per day"

The map at left shows the most mobile neighborhoods in Aleppo city, while areas in red/darkest shade have more than 70% of respondents reporting traveling outside of their community on a daily basis. High-travel areas

occur mostly on regime frontlines. This may indicate that residents in these neighborhoods are able to travel freely in relatively safer areas that remain controlled by the regime.

"I leave my neighborhood once or fewer times per week"

The map at right shows the areas in Aleppo that are *least* mobile. More than 25% of Aleppo's residents only leave their neighborhoods one time or fewer per week. Areas in red/darkest shade indicate districts where over 50% of



respondents leave the neighborhood less than once per week. It is quite clear from the map that the *residents in the old city of Aleppo travel outside their neighborhood the least*. More than 50% of residents in over half the neighborhoods in Aleppo's old city report traveling outside their neighborhoods one time per week or less. This is where combat between the regime and opposition in Aleppo is the fiercest block-to-block fighting. Unlike other front lines, where opposing sides are clearly delineated, neither side fully controls these old city neighborhoods. The fluidity of the conflict in this area, combined with the high density of the communities in this area, severely restrict resident travel.

Safety of Travel

Having identified general resident behavior with regard to frequency of travel, we can examine where in Aleppo residents feel most insecure when traveling. This will help us begin to understand the connection between mobility and insecurity. Also, because the question asks respondents how often they feel unsafe traveling through *military* checkpoints, it can help us learn more about the connection between armed groups and the local community. The most surprising conclusion is that the majority of resident respondents who feel unsafe while crossing military checkpoints are in regime-held areas.



"I 'frequently' feel unsafe when crossing a military checkpoint"

The map at left identifies areas in Aleppo where residents report feeling unsafe crossing checkpoints. The percentage of all respondents is low: under 10% of all residents report feeling "frequently" fearful when crossing checkpoints

(half of all respondents say they are "never" fearful when crossing checkpoints), a relatively low percentage probably reflecting the fact that most checkpoints through which civilians move are (with the exception of the so-called "Checkpoint of Death") set somewhat back from the front lines. Moreover, residents are far more likely to feel fear when crossing checkpoints in regime-held areas of the city, particularly in the areas with the highest concentration of neighborhoods under Air Force Intelligence control (see "Political Allegiances" section).

2. Bakeries and basic food access in Aleppo

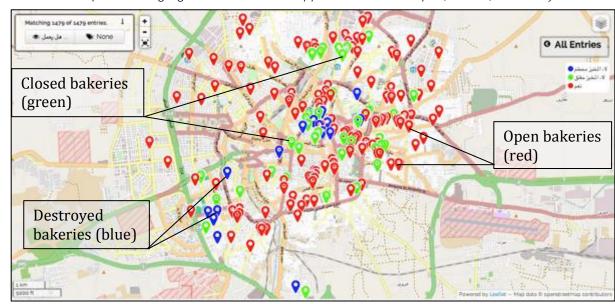
Bakery maps in Aleppo supplement survey responses by providing directly observable indicators of relative humanitarian conditions in each community. Again, access to a bakery is taken as a proxy indicator for food security because of the centrality of bread in the Syrian diet. In this section, we examine three key questions about bread:

- 1. Where are the bakeries in Aleppo?
- 2. Are they open, closed, or damaged?
- 3. What is the price they charge for bread?

Where are the bakeries in Aleppo?

The map below shows the presence of bakeries cumulatively from September 16, 2013 to January 5, 2014. First, we examine the concentration of bakeries in the city to see which residents have to travel furthest for bread, and second, which areas have the highest concentration of bakeries that are closed or damaged due to the ongoing conflict.

At first glance at the map, we can draw two apparent conclusions. First, it seems most difficult to find a bakery in the city's fringe neighborhoods, and second, *bakeries are more heavily concentrated in opposition-held areas* than in regime-held areas.



The maps below highlight bakeries are in Aleppo and which are open, closed, or destroyed.

These two visual conclusions imply different results: first, the absence of bakeries in fringe neighborhoods often means these areas are new developments that lack enough basic infrastructure to sustain local demand. The pre-existing lack of bread production in fringe neighborhoods like Sheikh Maqsoud to the north and along the south/southeastern edges of neighborhoods like Sheikh Said, Salhin, and Marjeh has become even more acute during the conflict, indicating that these neighborhoods are experiencing reduced food security. Second, wider dispersal of bakeries in regime-held areas does not imply greater humanitarian strain, because – as mentioned earlier – these areas are generally safer for travel. If residents in these areas were to suddenly feel great restrictions on their travel for safety reasons, the dispersed nature of bakeries in their community would become a greater concern.

Are bakeries open, closed, or damaged?

Many bakeries are closed or damaged in battle in Aleppo. Below is a table outlining the percentages of open, damaged, and closed bakeries.³¹

Percentages of Bakeries Open, Closed, and Damaged in all of Aleppo

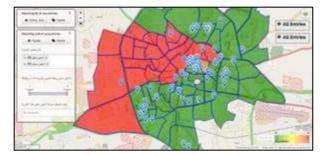
Date	Total Open	Total Closed	Total Closed	Total Open
	Bakeries	Bakeries	Bakeries due	Bakeries with signs
			to damage	of damage
September 29, 2013	67.3%	32.7%	11.9%	6.5%
October 13	69%	31%	10.3%	0.5%
October 27	67.5%	32.5%	10.2%	0%

³¹ The total number of bakeries varied between 184 and 185 throughout the study.

November 10	67%	33%	10.8%	1%
November 24	67.5%	32.5%	9.7%	0%
December 8	68.1%	31.9%	9.7%	1.6%
December 22	68.1%	31.9%	9.7%	1.1%
January 5, 2014	67.5%	32.4%	9.7%	1.5%

On average, just over 1/3 of all bakeries in Aleppo are damaged, or closed. Howver, this destruction is not evenly distributed: in fact, only four bakeries are 'closed' in regime-held

neighborhoods, and none have been damaged due to rebel action. The map at right shows the distribution of bakeries that are closed or destroyed over the areas of control by the regime (in red/darker shade) and the opposition (in green/lighter shade). It is clear that the damages are almost entirely located in opposition-held areas. Knowing this, we can control for the bakeries in government-held territory and re-examine the totals from above.



Percentages of Bakeries Open, Closed, and Damaged in Opposition-Held Aleppo

Date	Total Open	Total Closed	Total Closed	Total Open
	Bakeries	Bakeries	Bakeries due	Bakeries with signs
			to damage	of damage
September 29,	59.2%	40.8%	14.9%	8.1%
2013				
October 13	60.9%	39.1%	12.9%	0.7%
October 27	58.9%	41.1%	13%	0%
November 10	58.3%	41.7%	13.7%	1.4%
November 24	59%	41%	12.3%	0%
December 8	60.2%	39.7%	12.3%	2.1%
December 22	59.9%	40.1%	12.2%	1.3%
January 5, 2014	59.9%	40.1%	12.2%	2%

This is a drastically different picture from that of simple bread access in Aleppo City. In opposition-held Aleppo, over 40% of bakeries are closed, destroyed, or damaged. This is likely a result of what Human Rights Watch called "recklessly indiscriminate" attacks on bakeries and civilians standing in line waiting for bread that occurred over a year. The Human Rights Watch report included narration from a bakery in Bab al-Hadid (the "Gate of Iron"), a neighborhood built around one of nine gates to Aleppo's old city.

Witnesses told us that a helicopter had been circling around the area for hours by the time the bakery opened in the afternoon. It had, perhaps, 200 people lined up to get bread. Suddenly, the helicopter dropped a bomb that hit a building on the opposite side [of the street] from the bakery, spraying shrapnel and debris over the breadline. A volunteer working in the bakery said that after the explosion there was dust and debris everywhere, and that he could see dozens of people killed.³²

³² http://www.youtube.com/watch?v=YMfE9_q6kvw#t=12

The deliberate targeting of breadlines in opposition-controlled Aleppo may thus account for the greater proportion of bakery destruction in the city, suggesting that the regime is deliberately targeting food security for opposition supporters.

Responding to the danger of waiting in line for bread

At the start of our study, almost no bakeries in opposition-held areas are open to the public. Of the 57.4% of bakeries that remain open and intact in opposition-held Aleppo, more than 90% are closed to the public. Instead, these bakeries cooperate with neighborhood coordination committees in Aleppo City to *deliver* bread, rather than force residents to risk death by waiting in line for it. This effort began in August 2013, and by November 24, 2013 all bakeries in opposition-held Aleppo were working with neighborhood councils to deliver bread.



Human Rights Watch documents bread lines in Aleppo City as early as August 2012

Revisiting the map (on p.50), we can use the colored pinpoints, to indicate bakeries that are open (red/darkest shade), closed (green/lightest shade), or destroyed (blue/medium shade) in Aleppo city. This breakdown indicates that destroyed bakeries generally concentrate in Aleppo's old city, and southwest neighborhoods such as Ard al-Sabbagh, Seif al-Dowleh, and Salah ad-Din. Both areas have long been major battlegrounds in Aleppo City, so it is not surprising that the heaviest concentration of destroyed bakeries would occur there.

We can also make two conclusions about closed bakeries (green):

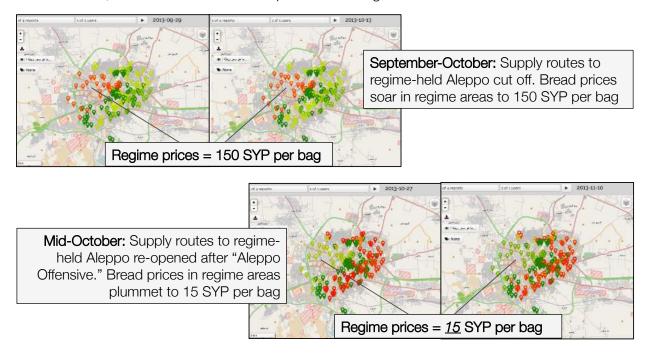
- 1. They are clustered in areas where there are also destroyed bakeries. Of the two neighborhoods, the villages to the southeast seem more concerning because communities would have to travel farther to reach an open bakery than in the center of the city, where bakeries are all packed more closely together.
- 2. The location of closed bakeries can differ from that of destroyed ones. There are two areas that fit this description: the area slightly southeast from the city center, and the cluster of closed bakeries in the northern part of the city. The area southeast of the city center is where Karm al-Qatarji, Karm al-Jabal, al-Sha'ar, and Bab al-Hadid are located, while in the north are the neighborhoods of Sheikh Maqsoud, Bustan al-Basha, and al-Hellak. Some of the latter neighborhoods, such as Sheikh Maqsoud, rank among the highest in Aleppo City for crime, insecurity, and a lack of basic services like electricity. One hypothesis for why these neighborhoods have closed bakeries, as opposed to closed and destroyed bakeries may be local mismanagement in terms of more basic services than just bread. We will examine governance in a subsequent section.

What is the price of bread in Aleppo?

As noted, bread prices can serve as a proxy indicator for humanitarian conditions in different areas of Aleppo. In regime-held neighborhoods, prices have remained constant since the opposition lifted its blockade. In opposition-held areas, they vary from 25 to 65 Syrian Pounds among bakeries, and fluctuate significantly over time. Despite this variability, bread prices do not directly

identify vulnerabilities at neighborhood level. Rather, they provide a perspective on the relative vulnerabilities of government- and opposition-held areas of Aleppo City. As the maps indicate, bread price fluctuations reflect conflict outside the city for control of supply routes. The map below shows relative bread prices (red being the most expensive, green being the least) in Aleppo over a two-month period. Bread prices are for 7-8 loaves of flat bread collected in a bag called a *rutba*.

The most obvious change in bread prices occurred between October 13 and 27, 2013, where the regime-held bakeries of Aleppo shifted from being coded red, or the most expensive bakeries in Aleppo, to green, or the least expensive.³³ In the first month of our study (the two topmost maps in the set above), the price of a *rutba* in all bakeries in regime-held areas was SYP150 (approximately US\$1.15). By comparison, bakery prices in opposition-held areas fluctuated generally between SYP33 and 65, three to four times less expensive than regime-held areas.



But the relative affordability of bread flipped at the end of October 2013, as shown by the maps above where bakeries in regime-held areas are now green (less expensive) while those in opposition-held areas became red (more expensive). The mean price of bread in opposition-held bakeries in Aleppo did not change, but price of bread decreased dramatically in regime held areas, from SYP150 SYP to 15 SYP, almost overnight.

As noted, the reason for the tenfold drop in bread prices in regime-held areas lay outside Aleppo city. During the first month of our study, a blockade led by the Free Syrian Army and Islamist groups such as Ahrar al-Sham, Liwa al-Tawhid, and the Al Qaeda-affiliated Jabhat al-Nusra prevented delivery of basic necessities to regime-held neighborhoods of Aleppo. The blockade was put in place when rebel forces seized the key peri-urban center of Khanassir, a village south of Aleppo that sits astride the main supply route for regime-held areas of the city. The rebels took the town, called the "only avenue of transport" into the city by pro-regime Watan newspaper, on

Caerus Associates | Mapping Aleppo's Conflict

³³ The darkest green points on the map show bakeries that are closed or destroyed because they are identified as having a bread price of 0.

August 26, 2013.³⁴ They held it until the end of October, when they succumbed to the October 2013 Offensive, a successful regime-led effort to break the siege. Once the siege was lifted, basic foodstuffs were able to re-enter regime-held neighborhoods of Aleppo and return bread prices to their heavily subsidized and fully standardized pre-siege rates (as opposed to rebel-held bakeries, whose price fluctuates regularly).

Price fluctuations in opposition-held Aleppo

Two impacts of bread prices are worth mentioning in rebel-held Aleppo. First, opposition-held bakery bread prices were cheapest while bread was 150SYP in regime-held neighborhoods. This suggests that supply of flour cut off from regime-held neighborhoods may have been diverted to rebel-held areas, lowering the price. Moreover, the price variations in September-October indicate that there was not a black market for opposition-held bread. Second, price variance in opposition-held areas has completely disappeared: by November 24, 2014 all bakeries were working with local councils to deliver bread, and the price of bread was steady at 75SYP. This suggests that, despite chaotic governance (see "Governance" section), there is coordination for this particular necessity across the city. Bread prices are a useful proxy indicator for food insecurity – as the conflict has settled on a relatively stable front line, bread prices have stabled. This suggests that the city has settled into a siege model of relatively stable food security.

Price of Bread in Opposition-Held Aleppo								
	9/29/2013	10/13	10/27*	11/10	11/24**	12/08	12/22	1/5/2014
Median	54.82	57.08	62.63	64.07	71.16	74.5	74.74	74.74
Price								
Standard	13.11	10.63	4.18	7.19	4.02	2.25	1.68	1.52
Deviation								
	* - this is when the main supply route to regime-held Aleppo re-opened							
Notes	** - all bakeries in opposition-held Aleppo were distributing bread through							
	neighborhood councils by this date							

3. Where are Aleppo's most "vulnerable" neighborhoods?³⁵

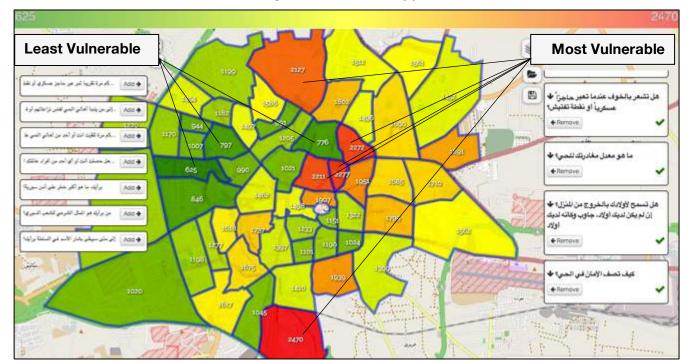
We asked several questions in addition to those listed previously to understand living conditions in each neighborhood in Aleppo. Below is a collection of objective and surveyed variables that we have combined into an aggregate "Humanitarian Vulnerability Index." This combination of factors allows us to identify some of the most "vulnerable" communities in Aleppo, or areas that signal low levels of public safety, lack of services, lack of mobility, and high levels of crime.

Survey Question	Question	Response	Response
	Score	Options	Score

^{34 &}quot;Rebels cut regime's only supply line to Aleppo" The Daily Star, August 27, 2013 http://www.dailystar.com.lb/News/Middle-East/2013/Aug-27/228792-rebels-cut-regimes-only-supply-line-to-aleppo.ashx#ixzz2fSRtpf4R

³⁵ By "humanitarian vulnerability," we specifically refer to a basket of questions that we ask regarding *resident perceptions of safety*, *crime, population mobility,* and *resident reported conditions of public services*. For detailed survey methods on "vulnerability," we referred to the EU Vulnerability and Crisis Assessment. http://imwg.humanitarianresponse.info/news/open-humanitarian-risk-index-ohri and the Open Humanitarian Risk Index http://www.ehs.unu.edu/article/read/worldriskreport-2011. But in a war zone, we also want to track perceptions of public safety and population movement.

How safe is your neighborhood?	20	Very Safe	0
Tiow sale is your neighborhood:	20	Safe	1
		Moderate	5
		Not Safe	12
		Dangerous	20
How often do you let your shildren out of the home? (if	10		
How often do you let your children out of the home? (if you do not have children, answer as if you did)	10	Always Sometimes	3
you do not have children, answer as it you did/			7
		Rarely Never	10
Aland land and the same and the	10		
About how many times do you travel outside of your	10	More than 1x/day	0
neighborhood?		Once per day 2-6 times per	0
		2-6 times per week	
			3
		Once per week Less than once	7
		Less than once per week	1
		Never	10
		Depends on	3
		security	3
How often do you feel concerned for your safety when	10	Frequently	10
you cross a checkpoint?		Sometimes	7
		Rarely	3
		Never	0
Have you ever had to pay to get through a checkpoint	10	Yes	10
in the past month?			
		No	0
How many hours of grid electricity per day have you	10	0-1	10
had this week?		1-5	7
		6-10	3
		11-15	1
		16+	0
How many hours of generator electricity per day have	10	0-1	3
you had this week?*		1-3	7
		4-6	10
This figure had a substitution effect and an income		7-10	3
effect.		11+	7
How many hours of internet did you access per day	10	0-1	10
this week?		2-4	5
		5+	0
How many times has trash been collected this week?	10	0-1	10
,		2-4	5
		4+	0
How frequent are crimes such as stealing or	20	Daily	20
kidnapping in your neighborhood?	20	Weekly	12
,, 5 , 5		Monthly	7
		Never/Hardly Ever	2
	I .	1.000// larary Evel	_



What are the most "vulnerable" neighborhoods in Aleppo?

Based on the map above, we can identify the ten most vulnerable communities in Aleppo, and the ten least vulnerable communities in Aleppo. They are listed in the table below. Interpreting these results indicates why the top five are the most vulnerable in the city.

Most	Vulnera	ble	Least Vulnerable		
Rank	Score	Neighborhood Name ³⁶	Rank	Score	Neighborhood Name
1	2470	Sheikh Said (O)	1	625	Aleppo University (R)
2	2277	Maysaloun/Aghyol/Hanano	2	776	al-Suleimaniyeh/al-
		Base (R)			Jabriyeh/al-Feilat (R)
3	2272	Midan/Suleiman Halabi (R)	3	797	Hayy Sbeil/Mogambo (R)
4	2211	al-Jadideh/al-Hamidiyeh (C)	4	846	Furqan/Mardini/Meridian/al-
					Kawakbi (R)
5	2127	Sheikh Maqsoud (O)	5	944	al-Andalus (R)
6	1951	Karm al-	6	990	Muhafaza (R)
		Jabal/Qarleq/Mishatiyeh (O)			
7	1939	Salheen (O)	7	991	Siryan Jadida (R)
8	1907	al-Bayada/al-Suweiqa (O)	8	1007	Shahba Qadima (R)
9	1891	Jabal Badro (O)	9	1020	al-Hamdaniyeh (R)
10	1802	Bustan al-Basha (O)	10	1021	al-Aziziyeh/Baghdad
					Station/al-Tel (R)

³⁶ R = regime controlled, O = opposition controlled, C = contested

Why are these the most vulnerable neighborhoods in Aleppo?

- 1. Sheikh Said (Vulnerability score of 2470) is the most vulnerable neighborhood in Aleppo by vulnerability score. This high score derives from three major factors: nearly all residents report the neighborhood to be "dangerous" or "unsafe;" nearly all residents report witnessing crimes committed on a "daily" or "weekly" basis; and all residents report receiving less than 2 hours of government grid electricity per day. Moreover, one-quarter of residents feel fear "frequently" or "sometimes" when crossing military checkpoints; one-third of residents leave their neighborhood once or fewer per week. These residents are also poorly connected to the outside world: no one reported using the Internet for more than one hour per day.
- 2. Maysaloun/Aghyol/Hanano Base (2277) is a regime-controlled neighborhood; its high vulnerability score appears to result from the fact that it lies on the front lines of the city's conflict. Nearly three-quarters of the residents term this area "unsafe" or "dangerous," and three quarters would "rarely" send their children out of the house. While one-third of these residents have had to pay money when crossing a checkpoint and nearly all residents have felt fear at some point when crossing a checkpoint, almost everyone in this neighborhood travels outside their neighborhood about once per day or more, though this does not correlate with the bakeries since those are open in Maysaloun. There is no obvious reason why residents here travel frequently, although another possibility is that they travel for work, since 100% of residents receive a salary. Though no one in this neighborhood receives more than 10 hours of government grid electricity, most supplement this with two hours or more of electricity from generators.
- 3. *Midan/Suleiman Halabi (2272)* shares a similar profile to nearby Maysaloun, the second-most vulnerable neighborhood. The major difference between the two is that Maysaloun residents witness crimes more frequently than residents in Midan/Suleiman Halabi: in Maysaloun, 85% report witnessing crimes on a "daily" or "weekly" basis, while in Midan that number is 50%.
- 4. *al-Jadideh/al-Hamidiyeh (2211)* is also similar to the preceding two districts in that it is a contested neighborhood in central Aleppo along the front lines of the city's conflict. Though more residents believe this neighborhood is dangerous than nearby Midan and Maysaloun, more than three-quarters of respondents say they "rarely" witness a crime committed. This may be because the neighborhood is so heavily contested armed groups are either unable to commit crimes because they are fighting each other or residents are unable to witness them because they are unable to leave their homes.
- 5. Sheikh Maqsoud (2127) is in the top five most "vulnerable" neighborhoods because it has the worst access to essential services in the city. Half the neighborhood has no electricity, no one has more than 4 hours of electricity, and almost no one receives any power from generators. No one accesses the Internet for more than one hour, and trash is hardly ever collected. Though the neighborhood has not witnessed crimes as frequently as those more vulnerable on this list, it may only be because there is nothing left to steal. In April 2013, when the neighborhood was "liberated" from regime-control, armed groups systematically looted the neighborhood block by block.³⁷

³⁷ For more on this story, please refer to the "Security" section.

4. Are Aleppo's most "vulnerable" neighborhoods getting assistance?

Assessing aid delivery efforts in Aleppo

The next question we ask is "how frequently did someone in your household receive aid." Respondents had three options: several times a month, about once a month, or never. The initial map looks very similar to the line delineating opposition and regime-controlled neighborhoods.

This map shows the concentration of areas where over 70% of residents report receiving aid once



or more per month. The most obvious conclusion is that the lowest concentration neighborhoods to receive aid is in regime-controlled neighborhoods. A secondary conclusion of interest that areas with high concentrations residents of reporting they received aid, such the south/southwest (neighborhoods such as Bustan al-

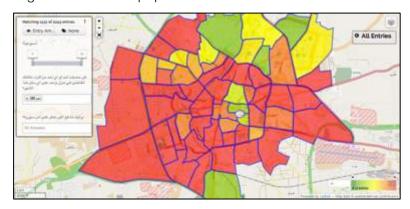
Qasr, Ard al-Sabbagh, al-Ansary, and Sukkari) and the east/north east (neighborhoods such as al-Sha'ar, Karm al-Jabal, Sakhour, and Hanano), are among the lowest scoring neighborhoods in Aleppo in terms of residents receiving salaries. This suggests that areas without government salaries are receiving aid, and vice versa.

What about salaries/wages?

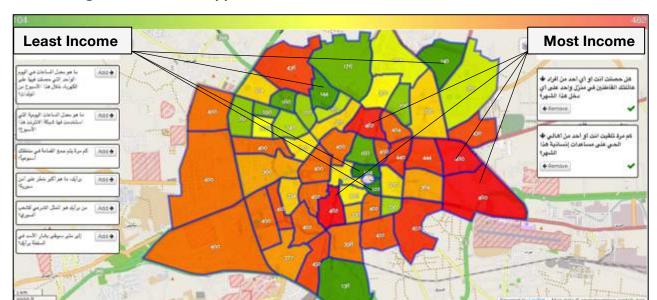
The distribution of salaries or wages³⁸ is surprising: nearly 70% of residents in Aleppo reportedly receive a salary, and at right (in red/darkest shade) we have mapped neighborhoods in Aleppo where respondents indicate at least one member of their household received a salary in the past month. The regime-held areas indicate that all or nearly all residents are receiving salary, but it is interesting to note that many residents in south-central Aleppo also receive salaries, and all residents in southeast Aleppo (al-Marjeh, al-Misr al-Jizmati, and Tareq al-Bab) receive salaries from the regime. In addition to the surprising fact that even populations in rebel-controlled areas still

appear to be receiving government salaries, it's also important to note that, in two neighborhoods, no residents report receiving a salary:

1) Sheikh Maqsoud to the north, and 2) Sheikh Said to the south (in both in green). Note that in the preceding section, we established that these neighborhoods also have almost zero hours of electricity.



³⁸ We do not differentiate in our question between government provided salaries and regular wages.



What neighborhoods in Aleppo receive the most "income"?

The map above shows a computed score for each neighborhood in Aleppo based on residents' combined responses to the aid and salaries questions. The scoring system, which we believe helps us ascertain resident "income," is as follows:

Question	Answer Options	Score	Rationale
Did you or someone in your household receive a wage ³⁹ this month?	Yes	10	Positive salary responses yield the highest bonuses because payouts are likely to be higher than aid receipt and more consistent over time
	No	0	No salary received
Did you or someone in	No	0	No aid received
your household receive aid this month?	Yes, once	4	Aid receipt is likely to be, on average, lower than one month of salary; also likely to be less reliable over time.
	Yes, more than once	6	See above, although score increases for frequency of aid delivered

³⁹ Wages – the survey does not distinguish between salaries provided by the government and those from other businesses.

From the scoring system listed above, we can rank the top ten neighborhoods by income (aid plus salaries):

Lowest total income Highest total inc			income ⁴⁰		
Rank	Score	Neighborhood Name	Rank	Score	Neighborhood Name
1	104	al-Bayada/al-Suweiqa (O)	1	482	Killaseh/Bab Antakya (O)
2	122	al-A'ajam (O)	2	480	Maysar al-Jizmati (O)
3	138	Sheikh Said (O)	2	480	Tareq al-Bab (O)
4	140	al-Haydariyah (O)	4	462	al-Suleimaniyeh/al-
					Jabriyeh/al-Feilat (R)
5	144	al-Ashrafiyeh (R)	5	450	al-Marjeh (O)
6	160	Tishrin Street/Nile Street (R)	6	444	al-Sha'ar (O)
7	168	al-Jadideh/al-Hamidiyeh (C)	7	440	Karm al-
					Jabal/Qarleq/Mishatiyeh (O)
8	176	Sheikh Maqsoud (O)	8	436	Bani Zayed (O)
9	190	al-Andalus (R)	9	432	Sukkari (O)
10	206	Sheikh Faris/Sheikh Khodr (O)	10	430	Jabal Badro O)

Comparing the neighborhoods in the list above with those that we identified as the most or least vulnerable, we find a mixed result.

Four of the top ten most vulnerable neighborhoods – or those with the worst reported humanitarian conditions – also receive the fewest salaries and the least aid. They are highlighted in gray bands in the table above left. Two of the top ten most vulnerable neighborhoods were in the top ten highest total income neighborhoods, highlighted in darker gray above (a third, Salheen, received the *eleventh*-most income). One neighborhood was among the top ten least vulnerable areas in the city and the highest total income, and this is al-Suleimaniyeh/al-Jabriyeh/al-Feilat (R).

5. Conclusion

This section is inherently limited in scope as compared to other, more comprehensive assessments of humanitarian conditions. The purpose of structuring this research project – but even specifically this study – is not to overwhelm the analyst with information nor provide the aid agency a full and complete picture of the needs of each community surveyed. Instead, this section is an attempt to identify *where* to work, not necessarily *how* to work or *what is needed*. We report patterns of behavior (e.g., resident travel, amount of electricity used), and combine that with resident surveys and directly observable phenomena (e.g., the presence of bakeries, the price of bread and its distribution), so that the researcher, policymaker, aid worker, and others who want to help know where help is most needed. At this point, we have identified a short list of 4-5 neighborhoods out of 56 that are in greatest need of assistance. With expansion and refinement, this is a process that can be conducted across Syria.

⁴⁰ In a possible follow on research project, we would want to make a distinction between government-sponsored salary vs. a regular wages, as well as the relative amount of the wages received, in order to develop more detailed insights about this aspect of the conflict.

Political Allegiances in Aleppo

February 2014



"We've been under siege for two and a half months in the youth dormitories in Ashrafiyeh. [Da'ash] stole the flour. Any backup that is sent to us is blocked from entering. Assad is in front of us and ISIS is behind us."

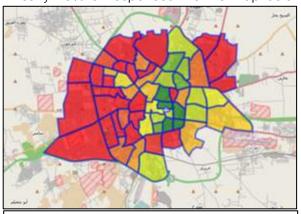
- A commander in the Aleppo Military Council January 2014.

Political Allegiances in Aleppo

Summary of findings

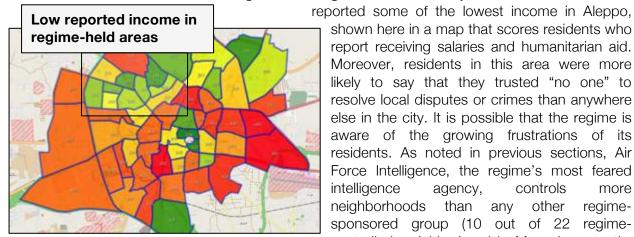
Our research found tremendous disillusionment with national political institutions in Aleppo. "No One" was the most common answer when residents were asked to name the legitimate representative of the Syrian people, accounting for nearly 40% of responses. As the map below

shows, this answer spanned regime- and opposition-held neighborhoods in Aleppo. The Syrian regime accounted for responses, mostly in regime-held neighborhoods along the front line of the conflict. This suggests that residents of frontline neighborhoods have closed ranks behind the regime, who they believe to be protecting them in the face of a clear external threat. However, support for the regime was not monolithic: in areas away from the front lines there was more disillusionment or even anti-regime sentiment. The Syrian National Coalition (the "Etilaf"), or the Syrian national political opposition, received less than 2% of overall responses. Women were also more likely to support "No One" (49%) or the "Regime" (22.7%) than the average respondent.



Map of Aleppo showing (in red) neighborhoods where 50% or more residents reported "no one" represented the Syrian people.

The regime may be better armed and resourced than the opposition in Aleppo, but its support base is deteriorating. In regime-held areas away from the front lines, between two and four in ten residents believed that the Assad regime is the "greatest threat to Syria." These residents also



shown here in a map that scores residents who report receiving salaries and humanitarian aid. Moreover, residents in this area were more likely to say that they trusted "no one" to resolve local disputes or crimes than anywhere else in the city. It is possible that the regime is aware of the growing frustrations of its residents. As noted in previous sections, Air Force Intelligence, the regime's most feared intelligence agency, controls more neighborhoods than any other reaimesponsored group (10 out of 22 regimecontrolled neighborhoods). More importantly,

this agency mainly controls neighborhoods that fit the profile of discontent explained above, and as noted earlier residents in these neighborhoods report the most fear while crossing checkpoints. It is possible that the regime is primarily using the Air Force intelligence to suppress dissent in those regime-controlled neighborhoods in Aleppo that are the least loyal to the Syrian government.

Political support in opposition-held Aleppo is widely anti-Assad but highly divided over the legitimacy of opposition groups fighting the regime. Residents in these areas overwhelmingly believe that the "Assad Regime" is the greatest threat to the Syrian people. But segments of the city are split between believing "No One," "The Free Syrian Army" or the "Islamic Brigades" were the legitimate representative of the Syrian people. Of the three groups, Islamic Brigades rose the fastest in public support over the four months of study.

While this research cannot definitely say why residents in one neighborhood support the regime or oppose it, the ability to geo-locate respondents creates a useful tool in evaluating competing hypotheses. By piecing together seemingly disparate information – receipt of salaries, support for political groups, organizational control of checkpoints – we can begin to build a richer picture of the dynamics of conflict and political support within Aleppo.

This section will address political allegiances in regime- and opposition-held Aleppo. It is divided into two parts: first, macro-level survey responses to three questions dealing with political allegiances; second, we examine specific neighborhoods in detail, comparing macro-level political allegiances with a list of groups providing security and basic services. The research may not provide definitive answers for why certain areas display political allegiance to one group over another, but it helps us disaggregate and geolocate critical survey data. This allows us to evaluate competing hypotheses by comparing our data to other sources, as well as provide an important baseline of political support for analysts, reporters, and researchers to look into further.

1. Resident support for national political institutions

What is the status of political institutions in Aleppo?

Examining panel responses to survey questions dealing with political legitimacy, this section reviews the macro-level picture, highlights specific neighborhood responses, and analyzes how these responses changed over time. We will review the geographic and demographic breakdowns of three questions from our 560-resident survey, with the same panel of respondents polled monthly from Sept 2013 – Jan 2014.

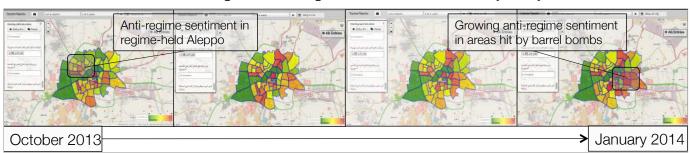
Survey Type	Survey Question	Variable Type	Response Options
Resident Survey	Who do you think is the greatest threat to Syria?	Nominal	Opposition groups, International countries, Islamic Brigades, the Assad regime, Other, All of the Above
Resident Survey	Who do you think is the legitimate representative of the Syrian people?	Nominal	The Assad regime, the Islamic Brigades, the Syrian Opposition Coalition ("Etilaf"), the Free Syrian Army, Other, No One
Resident Survey	When do you think the regime of Bashar al-Assad will fall?	Interval	Less than 6 months, 6-12 months, 1-2 years, more than 2 years, forever

Who do you think is the greatest threat to Syria?

	Question: Who do you think is the greatest threat to Syria?					
Rank	Name	Total % of Respondents	Sept-Oct	Oct-Nov	Nov-Dec	Dec-Jan
1	The Syrian Regime	52.1%	47.8	53.3	52.6	54.8
2	International Countries	17%	20.1	15.9	15.9	16.3
3	Islamic Brigades	9%	10	10.5	9.3	10.5
4	Opposition Groups	8.4%	8.7	8.6	8.4	6.8
5	All of the Above	8.3%	8.1	7.3	8.2	6.3
6	Other	5.2%	5.3	4.4	5.7	5.4

With the havoc it has wrought on Aleppo, via chemical weapons attacks, barrel bombs, and airstrikes targeting civilians, it would seem obvious that the Assad regime remains by far the greatest threat to Syria according to Aleppans. This is indeed the case based on survey responses, a pattern that became particularly pronounced in January 2014, when the regime ordered helicopters to drop TNT barrels loaded with ball bearings in opposition-held neighborhoods. During January 2014, Aleppo was the deadliest place in Syria. Aleppo residents responded by changing their political position against the Assad regime, while survey responses also reflected a slight rise in frustration with the international community (shown in the chart on the previous page).

What is most interesting about this survey is that respondent frustration with the Assad regime spans regime- and opposition-held neighborhoods. This is shown in red (darkest color) in the progression of maps below. The map of January responses at far right also highlights where some neighborhoods were most intensively bombed by the regime.



"The 'Assad Regime' is the greatest threat to security in Syria"

Some regime-held neighborhoods are anti regime - why?

Regime-held neighborhoods are not monolithic. Learning about neighborhoods that are anti-

regime will help us learn about the heterogeneity of resident opinion in regime-controlled Syria. What is interesting about the regime-held neighborhoods with anti-regime sentiment is that anti-regime survey responses are closely correlated with a lack of salaries. Note the pair of maps at right. Red (or darkly colored) neighborhoods in the map above right highlight neighborhoods in which 50% or more respondents said that the "Assad regime" was the "greatest threat to Syria." Note the correlation between anti-regime sentiment in regime-held Aleppo and neighborhoods that most report not receiving a monthly salary. The only neighborhoods in regime-held Aleppo that do not receive a salary are also the neighborhoods that are most anti-regime.

Correlation does not, of course, indicate causation – it is possible that anti-regime sentiment is driven by lack of salaries, that the withholding or absence of salaries is a

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punishment for anti-regime sentiment, or that both indicators are responding to a common third

variable. Whatever the cause, neighborhoods in regime-held areas might not be as supportive of the regime as outside observers might initially think. These neighborhoods, such as Tishrin and Nile Streets, Andalus, and New Shahba, are where some of Aleppo's wealthiest residents live (for more on these neighborhoods, please see the "Annex"). While the relationship between these residents' frustrations with the regime and their lack of economic opportunity will require greater study, this may be one of the constituencies within the so-called "moderate middle" in Syria. We suggest more focus on this particular group as it may help conflict mediators engage more effectively with key subpopulations who generally believe they are represented by neither side.

Who do you think is the legitimate representative of the Syrian people?

	Question: Who do you think is the legitimate representative of the Syrian people?					
Rank	Name	Total % of Respondents	Sept-Oct, 2013	Oct-Nov, 2013	Nov-Dec, 2013	Dec 2013- Jan, 2014
1	No One	38.7%	40.8	39	38.6	36.6
2	Islamic Brigades	26%	24.8	29.8	28.4	29.8
3	The Free Syrian Army	21.3%	19.1	17.6	18.8	21.1
4	The Assad Regime	12.1%	12.1	12.3	12.5	11.4
5	The "Etilaf"	1.4%	2.3	1	1.3	0.8
6	Other	0.4%	1	0.3	0.3	0.1

This question provides a baseline to assess political allegiances in Aleppo. Also, due to the popularity of "no one" as an answer, it gives some insight into the relative disillusionment of residents in different parts of Aleppo. By mapping survey responses from the chart above against areas in the city, we can derive five interesting conclusions.

- 1. Less than 2% of Aleppo City residents believe the Syrian Coalition ("Etilaf") represents the Syrian people; this lack of popularity was consistent in the city and across all periods of reporting.
- 2. Approximately 40% of the city believes "No One" represents the Syrian people; this answer is increasingly prevalent in *regime-held neighborhoods*. This suggests that while the regime may be militarily superior that the opposition, its support

base is deteriorating. See the map below, which shows the relative distribution of respondents who believed "No One" represented the Syrian people.

3. Disillusioned residents in opposition-held Aleppo are turning to support the Islamic Brigades. Support for Islamic Brigades rose the most during the four-month survey, increasing nearly 5% from September-October 2013 to January 2014. This

"No One" represents the Syrian people

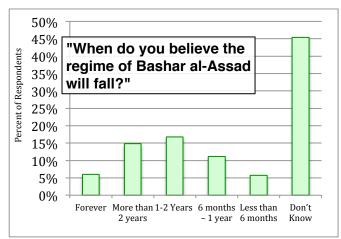
rise mostly came at the expense of residents in opposition-held areas who initially thought "No One" represented the Syrian people, indicating that these groups are gaining legitimacy without necessarily undermining that of other actors.

- 4. Women are less likely than men to support the opposition. Though only 15% of those surveyed were women, they had a markedly different profile of support: 49% believed that "no one" represented the Syrian people (10% more than the average), and 22.8% believed that the "Assad regime" represented the Syrian people (also 10% more than average).
- 5. Most of the 12.1% support for the Assad regime is concentrated in three neighborhoods along the front lines of the conflict: Suleimaniyeh/Jabriyeh/Feilat, Midan/Suleiman Halabi, and Aziziyeh/Baghdad Station/al-Tel.

When do you think the regime of Bashar al-Assad will fall?

There was little change in this question over the period of the study. After 45.4% said they "didn't know" when Bashar al-Assad would fall, the remaining answers were distributed in an even, bell-curve fashion. See bar chart at below, right.

Question: When do you believe the				
regime of Bashar al-Assad will fall?				
Rank	Answer	Total % of		
		Respondents		
1	Don't Know	45.4%		
2	More than 2	14.8%		
	years			
3	1-2 Years	16.8%		
4	6 months – 1	11.2%		
	year			
5	Forever	6%		
6	Less than 6	5.7%		
	months			



Geographic distribution of this question was also mixed. Every answer to this question was dispersed across the city, with one exception. Two neighborhoods together comprised a disproportionate number of all respondents who said that the Assad regime would "never" fall. These neighborhoods are under regime control on the frontlines of the city's conflict and also show disproportionately high support for the regime "as the legitimate representative of the Syrian people." This may suggest that it is unlikely that neighborhoods on the front lines will change sides without heavy fighting and, following that, suppression of dissent. Alternatively, it may suggest that residents of frontline neighborhoods have closed ranks behind the regime in the face of a clear external threat, whereas those in less threatened neighborhoods have less incentive to coalesce.

2. Political Allegiances and Local Governance

This section compares political allegiances to local governance. It examines three types of areas:

- 1. Pro-opposition neighborhoods that show support for Islamic brigades;
- 2. Pro-opposition neighborhoods that support the Free Syrian Army;⁴¹ and
- 3. Regime-controlled neighborhoods that show anti-regime tendencies.

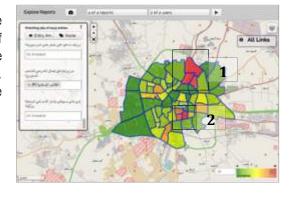
⁴¹ It is important to underscore in this section that Syrian civilians have a different perspective on "FSA" than the international community. The "FSA" in Syria is a more general term most often used to distinguish whether a brigade is "Syrian." Those brigades that are generally comprised or led by foreigners are referred to as "Mujahideen," or "Kataib Islamiya." It is this distinction, using the latter term, that we use in this report. For example, Liwa al-Tawhid has been termed "Salafist-leaning," but people in Aleppo often refer to them as "Jaish al-Hurr" ("The Free [Syrian] Army").

Who governs pro-Islamist neighborhoods?

Neighborhoods highlighted in red (darkest color) in the map at right show the highest concentration of respondents who believe "Islamic Brigades" are the most legitimate representative of the Syrian people. The map highlights two key areas, each including three neighborhoods:

The most pro-Islamist areas in Aleppo:

Pro-Islamist Area 1. Helleck/Ain al-Tel, Sheikh Faris/Sheikh Khodr, and Bustan al-Basha



Pro-Islamist Area 2. al-Asileh, Bab Maqam, al-Juloum/al-Ma'adi

Looking at these neighborhoods more closely, we can identify which groups provided services, levels of security, and which groups were the strongest over a four-month period. When analyzed against the average in opposition-held Aleppo, we can begin to deduce what makes these neighborhoods the most pro-Islamist in the city.

Pro-Islamist Area 1.

Helleck/Ain al-Tel, Sheikh Faris/Sheikh Khodr, and Bustan al-Basha

These three neighborhoods, the highest scoring in terms of support for Islamic Brigades, may have been coerced into supporting Islamist fighters. ISIS seized these three neighborhoods in October 2013 from Free Syrian Army brigades. Before then, from September-October, these neighborhoods were characterized by local legitimacy and inter-group cooperation. In Sheikh Faris/Sheikh



Khodr, for example, two different brigades worked together to provide security services. In Helleck/Ain al-Tel, the strongest group in the neighborhood derived its strength, in part, from "local legitimacy," according to our enumerators. But when ISIS took over the neighborhood, no other group has since provided security services. The ISIS monopoly over provision of security in this area thus preceded the subsequent emergence of widespread political support for ISIS in this area; this would tend to support the notion that "political support follows military strength" in civil war, rather than vice versa.

⁴² Those brigades were "Liwa al-Sultan Mohammed Fatah" in Helleck/Ain al-Tel, "Liwa Shuhuda' Souriya" in Bustan al-Basha, and "Jabhat Shabab al-Souri" in Sheikh Faris/Sheikh Khodr

Pro-Islamist Area 2.

al-Asileh, Bab Maqam, al Juloum/al-Ma'adi

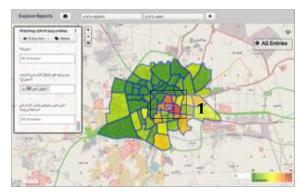
These three neighborhoods are the second-highest scoring in terms of support for Islamic Brigades, but instead of ISIS, Islamist-leaning groups led by Liwa al-Tawhid control the area. There is another major difference between Area 2 and Area 1: there are far fewer groups providing humanitarian services (e.g., relief assistance, community management, etc) in Area 2.



Whereas on average there are *ten* groups providing services in Area 1, there is only an average of *three* groups in area two. This suggests that provision of security trumps provision of humanitarian and economic support as a means of generating political support.

Who governs pro-FSA neighborhoods?

Neighborhoods highlighted in red (darkest color) at right show the highest concentration of respondents who believe the "Free Syrian Army" is the most legitimate representative of the Syrian people. In the absence of statistically relevant support for the Etilaf, this map provides us with the closest insight into what support remains for a Syrian-led secular, pro-democracy opposition that could potentially receive assistance from the international community. There is one distinct pro-



FSA area in Aleppo, comprised of five neighborhoods.

The most pro-FSA area in Aleppo:

Pro-FSA Area 1. al-Aajam, Bab Hadid/Qadi Askar/al-Ballat, al-Jadideh/al-Hamidiyeh, al-Bayada/al-Suweiga, al-Agabeh/Soug al-Hal/Bab Hanin

Looking at these five neighborhoods, we can identify which groups provided services, security, and which groups were the strongest over a four-month period. When analyzed against the average in opposition-held Aleppo, we can more concretely deduce what makes these neighborhoods pro-FSA.



Pro-FSA Area 1. al-Aajam, Bab Hadid/Qadi Askar/al-Ballat, al-Jadideh/al-Hamidiyeh, al-Bayada/al-Suweiqa, al-Aqabeh/Souq al-Hal/Bab Hanin

The five neighborhoods, marked by an asterisk at right, are the most pro-FSA neighborhoods in Aleppo. At first glance, the composition of armed groups that control these neighborhoods sheds little light on why these neighborhoods are more pro-FSA than elsewhere. Three of the five neighborhoods are controlled by Liwa al-Tawhid (which also controls one of the two most pro-Islamist neighborhoods mentioned previously).

FSA-affiliated brigades, including Liwa Ahrar Souriya, control the other two neighborhoods. Moreover, not only are there few groups providing basic services but the Aleppo Council is not present in several of these neighborhoods and there is influence of the Sharia Commission in one neighborhood (the westernmost Bab Hadid).

Instead, what may help us distinguish pro-FSA neighborhoods from those more predisposed to supporting Islamist factions is the presence of *cooperation* between armed groups. All five neighborhoods that are most pro-opposition show extensive cooperation: over four months, the five neighborhoods collectively averaged more than two brigades providing security services.⁴³ Note the table below:

Groups pro	Groups providing security services in the most pro-FSA area of Aleppo							
	Sept-Oct, 2013	Oct-Nov, 2013	Nov-Dec, 2013	Dec 2013-Jan 2014				
al-Aajam	Badr Martyrs Brigade	Badr Martyrs Sharia Commission		Sharia Commission				
аг-лајан	Ahrar Souriya	Ahrar Souriya	Ahrar Souriya	Ahrar Souriya				
Bab Hadid/Qadi Askar/al-Ballat	Ahrar Souriya Ahrar Souriya Ahrar Souriya		Ahrar Souriya	Ahrar Souriya				
al-Jadideh/al-	Liwa al-Tawhid	Liwa al-Tawhid	Liwa al-Tawhid	Liwa al-Tawhid				
Hamidiyeh	Ahrar Souriya Regime Forces	Ahrar Souriya Regime Forces	Ahrar Souriya Regime Forces	Ahrar Souriya Regime Forces				
	Liwa al-Tawhid	Liwa al-Tawhid	Liwa al-Tawhid	Liwa al-Tawhid				
al-Bayada/al-	Badr Martyrs Brigade	Badr Martyrs Brigade	Badr Martyrs Brigade	Badr Martyrs Brigade				
Suweiqa	Independent Brigades	Independent Brigades	N/A	N/A				
al-Aqabeh/Souq al-	Liwa al-Tawhid	Liwa al-Tawhid	Liwa al-Tawhid	Liwa al-Tawhid				
Hal/Bab Hanin	Liwa al-Ansar	Liwa al-Ansar	Liwa al-Ansar	Liwa al-Ansar				

So might neighborhoods in which armed groups cooperate tend to support the FSA? Three possible hypotheses:

- 1. Civilians support the secular opposition when they see armed groups cooperating for a common cause. Where there is regular infighting among opposition groups, civilians may support whichever group they see as operating most effectively in their interest, especially in the provision of local security. Where such infighting is absent, civilians may be more open to supporting non-military groups.
- 2. When armed groups in a given district cooperate, that district becomes less vulnerable to takeover from Salafist groups like ISIS. As with the disappearance of local brigades in Aleppo, areas across Syria that have been liberated longest tend to be plagued by infighting. By developing good habits of cooperation, smaller armed groups like Ahrar

⁴³ Though the data does not discriminate between *competing* groups providing security services and those that *cooperate*, we know through context that the groups listed above work together.

Souriya may be able to protect themselves against Salafist takeover through the existence of virtual coalitions.

3. These groups are cooperating because they are fighting on the front lines in the city and don't have time for infighting. As in other civil wars and insurgencies, communities tend to coalesce politically in the face of a common external threat, while falling into infighting when that threat is removed. This is common in Syria: civilian-military cooperation is often strongest at the front lines.

The current data offer no single clear answer, but these three factors are likely interrelated: civilians may support the Free Syrian Army brigades fighting in central Aleppo because they cooperate, which also protects these districts from Islamist incursions, and these groups cooperate most likely because they face a common enemy.

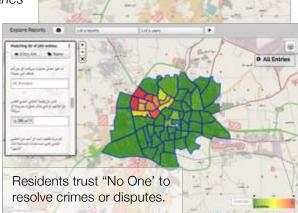
Who governs the most anti-regime neighborhoods in regime-controlled Aleppo?

Neighborhoods outlined in black at right show the highest concentration of respondents in regime-held Aleppo who believe the "Assad Regime" is the greatest threat to the Syrian people." This pattern remains consistent across all four periods of reporting.

Two factors characterize this area, as noted from reporting in previous sections:

1. This area receives the *least amount of salaries* of any area in regime-held Aleppo;

2. Residents in some regime-held areas do not trust anyone to resolve their disputes. When asked "Where do people turn to settle their disputes, or in the event of a crime or theft?" the area shown in the map at right was the only place in the city to consistently answer "No One." See the map at right – neighborhoods in red or orange are where the highest concentration of respondents said they trust "No One."





The regime seems to be aware of resident frustrations in this area. It has deployed its Air Force Intelligence, the most powerful and loyal intelligence agency in the country, to guard these neighborhoods. As one activist explained, "When you are taken by the Air Force Intelligence, you do not expect to see your family again." As can be seen from the map at left, the neighborhoods controlled by the Air Force Intelligence overlap almost

scompletely with the areas that are most anti-regime.

Alongside the previous two questions, responses suggested that provision of effective security to local populations correlates closely with (and predates) the emergence of political support for the dominant group in a given area. This pattern of support suggests that—perhaps second only to security—the provision of a system that facilitates dispute resolution, mediation, and enforcement of community norms (a normative system akin to "rule of law") is a key driver of popular support. In areas where such a system is lacking, but a single group dominates security provision, residents seem to support that group with varying but significant degrees of reluctance.

3. Conclusion

We can draw three conclusions from this section of our report. First, the regime is losing popular support but remains well-informed and responsive. It deploys a spectrum of coercive, administrative and persuasive means to maintain order in unfriendly neighborhoods and to generate popular support among residents on the front lines. Second, the democratic opposition to the regime succeeds when armed groups cooperate; where such cooperation is lacking, ISIS tends to divide-and-rule, takes over neighborhoods where local armed groups fail, and then coerces residents into supporting it. Third, geo-located opinion surveys and enumerator-answered observable reports are not a panacea: they show where to look, but cannot provide the necessarily detailed local context to answer why each area behaves the way it does. Still, this research allows us to disaggregate and geolocate critical information to evaluate competing hypotheses. Not only does this section indicate the need for persistent, detailed reporting, but also, in failing to answer why certain neighborhoods are pro-Islamist, it highlights the need for qualitative 'eyes-on-the-street' reporting. These conclusions are not specific to Aleppo – all three can be applied to issues across Syria.

Governance in Aleppo

February 2014





"The honored ones are those who bring the city to freedom and to whatever they crave and desire, and who protect freedom from the contradictions of their various wishes and against enemies who attack them, confining their own desires to what is necessary and no more. Such a one is honored, accorded precedence, and obeyed among them."

- Abu Nasr al-Farabi, "The Democratic City," Written in Damascus & Aleppo, 943 CE

Governance in Aleppo

Summary of findings

In a city as confined and contained as Aleppo, there is no single story that tells the tale of governance. Between the opposition and regime, there is a stark contrast: On the regime-controlled side, there are three state governing institutions that provide municipal services and basic management. These are non-existent in nearly all neighborhoods in opposition-held Aleppo, where delivery of services and simple local management is nothing short of chaotic. Within opposition-held Aleppo, there are also stark contrasts: between northern and eastern outskirts of Aleppo, where there are significant numbers of CSOs working for short periods of time, and the central and southern parts of the city, where there are fewer, more local community groups that tend to endure despite the proximity to ongoing conflict. There are six specific characteristics of governance in opposition-held Aleppo.

- Civil Society Organizations (CSOs) working in opposition-held areas are often small and impermanent. More than half of the 62 CSOs identified in Aleppo were mentioned 4 or fewer total times. In a four-month study with monthly reports, this means more than half of all CSOs either work in one neighborhood for several months, or multiple neighborhoods for short periods.
- 2. Governing environments are particularly chaotic on the outskirts of the northeastern and eastern Aleppo. This is likely for two reasons: first, it is more easily accessible from opposition-controlled highways running north to Turkey and east to Raqqa and Iraq. Second, these neighborhoods are removed from the front line so they spend more time struggling with governance than they do fighting the regime. Sakhour, in northeastern Aleppo, has 15 different CSOs, more than half of which appeared in only one month. Tareq al-Bab, on the eastern outskirts of the city, has had 18 different CSOs in the past four months.
- 3. Islamic-based CSOs are the most powerful charity groups working in opposition-held Aleppo. Three groups: the Sham Islamic Commission, the General Islamic Services Association (GISA), and the Sharia Commission are among the top ten most named groups in opposition-held Aleppo.
- 4. There is no simple answer for why different neighborhoods support Islamist groups. One area fits a profile one might presume to be pro-Islamist: their governance landscape was messy and convoluted before ISIS took over, imposed order in the community, and built support through coercion. But another equally pro-Islamist area was much different: they were each protected by a single armed group with FSA ties or, at least, non-extremist ideologies. They were also each governed by the three moderate, local CSOs. Follow on research may be necessary to determine reasons for evolving public support for Islamist groups (e.g., pre-revolutionary ideology, presence of charismatic pro-Islamist leadership figures).
- 5. Neighborhoods on the front lines of the conflict in central/north central Aleppo exhibit the strongest pro-FSA loyalties. These neighborhoods have a great deal in common: they make up one of the few, if not the only, areas in Aleppo still exclusively controlled and governed by

those who are pro-opposition and local to the city. It is perhaps the last FSA stronghold in Aleppo, but will continue to struggle with basic service provision (e.g., electricity) due to the intensity of the conflict in their area.

6. Presence of CSOs does not correlate to the quality of governance. In northern and eastern Aleppo, for example, there are the most CSOs in the city, but these areas rate the poorest in trash collection, a key service provision capability. This means that CSOs may even be slightly negatively correlated with governance.

This section draws on reports submitted monthly by our enumerators on the ground in Aleppo, who were asked to identify groups in each neighborhood that were providing humanitarian assistance, basic services, or security. This section is does not answer or review in detail the performance of specific groups, which can be only explained in detail through targeted research questions, but rather attempts to review the overall governance picture in the city. Furthermore, this section cannot answer what for many analysts and policymakers is the fundamental question: why does any one individual or neighborhood support one particular governance actor over another. There is no single dominating governance pattern in Aleppo, except for in the regime-controlled areas. However, what this section does reveal is the fractured nature of these groups and the specific geo-located contours of these subtleties.

Additionally, as noted in previous sections, enumerators identified groups that were considered the "strongest" by residents in each neighborhood and began to identify the reasons for *why* these groups were the strongest (i.e., community legitimacy, size of force). We also incorporate questions where necessary from the resident survey. The purpose of this section is to begin to connect the conflict dynamics of the city – security and humanitarian conditions, and political allegiances – to the observable behaviors of the particular groups involved. The goal is to explain not only how the city works, but also to identify those actors that operate within the city's conflict system and their relative impact.

1. Who is working in Aleppo?

Governance in Aleppo is crowded. Over four months' study, we counted 62 different Civil Society Organizations (i.e., humanitarian agencies, service-provision groups, local councils) and 38 different armed groups providing security – 32 of which were considered "strongest" in at least one neighborhood. That means that the average armed group in Aleppo controlled 1.75 neighborhoods in a city of 56 districts.

This section will focus on the Civil Society Organizations (CSOs), as the "Security Conditions" section of the report has already discussed armed groups in Aleppo. Below is a list of the ten CSOs that appear most during the course of our reporting:

Rank	Group Name	Type of Group	Number of Total Mentions
1	Local Council (LC)	Neighborhood governing council in opposition-held Aleppo	117
2	Aleppo Municipality (AM)	Traditional service provision institution in Aleppo; now only works in regime-held areas	84
3	City Council of Aleppo (CCA)	Traditional city governing institution, now only works in regime-held areas	80
4	Aleppo General Electricity Company (AGEC)	Aleppo city electricity company; serves only regime-held areas	80
5	The Local Council for the Free City of Aleppo (LCFA)	The city governing institution established to oversee opposition-controlled Aleppo	67
6	General Services Administration (GSA)	Service providing implementer that often works with LCs	36
7	Sham Islamic	A major Arab Gulf-supported Islamic	25

	Commission (SIC)	charity working in northern Syria	
8	General Islamic Services	A more religious version of the GSA, often	24
	Administration (GISA)	do not work in the same neighborhoods	
9	Sharia Commission (SC)	A service provision and rule of law	22
		organization established by conservative	
		armed opposition groups	
10	Syrian Arab Red	The local Syrian partner of the International	18
	Crescent (SARC)	Committee of the Red Cross/Red	
		Crescent	

We want to highlight two interesting points from this chart. First, the sharp drop-off in mentions, from 67 for the LCFA to 36 for the GSA, means many groups working in Aleppo work in only one or two neighborhoods. This probably contributes to, and also reflects, the chaotic governance situation in the opposition-held areas of the city. Second, we will examine the influence of the three Islamic CSOs that made this list.

Chaotic Governing Environment

Governance in opposition-held Aleppo is chaotic. More than half of the 62 CSOs identified in Aleppo were mentioned 4 or fewer total times in a monthly study conducted for four months. This means more than half of all CSOs are likely to work in one neighborhood or fewer (some were noted working in multiple neighborhoods, but only for short periods). Since all regime-held areas of Aleppo have only three governance-related groups (AM, CCA, AGEC), these small CSOs work entirely in opposition-held areas.

Governance conditions are particularly chaotic on the northeastern outskirts of Aleppo controlled by the opposition. This is likely for two reasons. First, the geography, road network, and relative distance from the front line make this area more permissible for CSOs to enter. Second, there is no winnowing effect to limit the number and type of groups operating in northern and eastern Aleppo. Whereas CSOs operating in central and southern Aleppo must build strong community ties in order to travel through the city and across areas closer to the front line, it is much easier for any CSO to work in the outskirts of the city in the north and east. Also, in the relative absence of direct pressure from the regime, CSOs in northeastern Aleppo spend more time on governance and avoid the "front line convergence effect" mentioned earlier.

Masakin Hanano, on the outskirts of northeastern Aleppo, registers 16 different CSOs, half of which only appeared once in the field reporting. Sakhour, an adjacent neighborhood, has 15 different CSOs, more than half of which only appeared once. Neighborhoods in eastern Aleppo face similar difficulties: Tareq al-Bab, a neighborhood on the eastern outskirts of the city, has seen 18 different CSOs over four months. Only one CSO, the Sharia Commission, worked in Tareq al-Bab for all four months of the study. This is in sharp contrast to regime-held areas in central Aleppo, where most neighborhoods average about three CSOs. This may be, in part, because the majority of CSOs come to Aleppo from outside the city, so that penetrating into the old city, the city center, or the parts of the city that are most violently contested along the conflict's front lines is difficult for these organizations, which consequently tend to operate in more peri-urban and outlying areas. Alternately, the regime may crowd out or actively repress CSOs competing with them for service provision and governance.

Rise of Islamic Charities

Islamic charities and governing structures are among the most powerful CSOs in opposition-held Aleppo after the neighborhood groups and the citywide council, the Local Council for the Free City of Aleppo (LCFA). Three groups: the Sham Islamic Commission, the General Islamic Services Association (GISA), and the Sharia Commission are respectively the fourth, fifth and sixth most named groups in opposition-held Aleppo, and all three are in the ten most named groups across Aleppo.

Sham Islamic Commission (SIC) The SIC is a large, Gulf-supported charity that is well known for its relief delivery efforts across northern Syria. SIC is the most known Islamic charity in Aleppo, but its work has declined in Aleppo consistently from September 2013 to January 2014. This is particularly true in eastern Aleppo, where the group went from being active in five neighborhoods in September and October 2013, including the previously mentioned Tareq al-Bab, to only two neighborhoods by January 2014. In addition to eastern Aleppo, SIC moved into the southern neighborhood of Sheikh Said, which we identified in previous sections as the most insecure and most vulnerable neighborhood in all of Aleppo. SIC works in Sheikh Said, and has been the only relief organization there since November 2013. The reasons for the group's relative decline remain opaque: our data does not reveal the reasons for this decline, nor is it searchable in publicly available data.

General Islamic Services of Aleppo (GISA) GISA was formed as an Islamic alternative to the basic services provided by the state in Aleppo. Its mission is to "secure basic services and general needs for citizens of Aleppo, including water, electricity and flour. [It] also maintains public facilities, improves hygiene and the environment, and provides communications in the name of God Almighty for Islam and all Muslims." Unlike the SIC, whose work has declined, GISA's presence in Aleppo has increased. From September 2013 to January 2014, the organization's presence has grown from four neighborhoods to seven. GISA now works in nearly all neighborhoods in northeast Aleppo.

Sharia Commission (SC) The Commission was founded in Aleppo in November 2012 in an effort to curb corruption and limit the exploitation of residents at the hands of rogue, armed battalions like the Badr Martyrs Brigade (the occupiers of the notorious Castello checkpoint -- see "Security Conditions"). The SC has a Shura Council, or parliament, through which all decisions are made. It believes in establishing an Islamic state based on Sharia law and rejects the principles of democracy and a civil state. It has its own Sharia police who enforce its laws, clerics who issue fatwas, a judicial body that resolves disputes, and a charity group that delivers services. The Commission is comprised of religious uluma' and armed groups which include, but are not limited to, Liwa' al-Tawhid, Ahrar al-Sham, al-Fajr al-Islam, Saqour al-Sham, Saqour al-Islam, and Ahrar Souriya. Jabhat al-Nusra, once part of the Commission, has withdrawn from the group.

The Sharia Commission is the only group among all opposition CSOs that provides a full spectrum of governance services and security services—the same spectrum from coercion, through administration to persuasion, including a rule of law function, as provided by the regime in regime-controlled areas. It is predominantly based in eastern Aleppo, in similar areas to those controlled by ISIS (see "Security Conditions"). But ISIS has its own structure for implementing Sharia Law that

⁴⁴ This mission statement comes from the GISA website: https://www.facebook.com/Islamicmanagementforpublicservices/info, Accessed January 27, 2014

often does not cooperate with the Sharia Commission. Rather than a uniting mechanism, the two groups' similarities often mean they compete over the same constituencies. The Sharia Commission is also better than ISIS at providing basic services, based on our findings. They were also the only CSO identified in our study as the "strongest" group in Aleppo across three neighborhoods: Masakin Hanano, al-Sha'ar, and Karm Qaterji/Jourat Awad.

2. Comparing governance to security, humanitarian, and political conditions

This section will compare neighborhoods identified in previous sections, using our findings on CSOs working in those areas, to identify trends and patterns in governance and, potentially, the relationship between good governance, the security environment, humanitarian conditions, and popular support.

Security Conditions

The end of the Security Conditions section identified three tiers of insecurity in neighborhoods in Aleppo:

A Summary of the most insecure neighborhoods in Aleppo

Security	Neighborhood(s)	Insecurity Summary
Tier (T)		
Tier 1 (most	Sheikh Said	Most insecure, most crime in Aleppo, little civilian
insecure)		freedom of movement
Tier 2 (highly	Central/North-central	High insecurity, little freedom of movement
insecure)	Aleppo	
Tier 3	Bustan al-Qasr, Sheikh	Bustan al-Qasr: heightened insecurity; Sheikh Maqsoud:
(insecure)	Maqsoud,	divided neighborhood; Bayada/Suweiqa: Medium-High
	Bayada/Suweiqa, Karm	insecurity; Karm al-Qaterji/Jourat Awad: Initially
	al-Qaterji/Jourat Awad	dangerous, now safer

Sheikh Said The constant – and often violent – change of control over Sheikh Said is a distinguishing feature of the neighborhood's poor governance profile. It was, by a considerable margin, the most insecure neighborhood in Aleppo. The military group controlling Sheikh Said changed every month among armed opposition groups who do not cooperate. One of the poorest neighborhoods in Aleppo, it was controlled by the Islamist group Liwa al-Tawhid, the FSA-affiliated Tajma' Fastqm Amrt, and the Al-Qaeda affiliated ISIS. When armed groups formed the Islamic Front and fought back against ISIS, Sheikh Said was one of the first neighborhoods they retook. The district is now controlled by the Islamic Front, a militant coalition of conservative Islamic factions that are fighting back against ISIS.

Central Aleppo These neighborhoods are the most hotly contested in the city and contain some of the city's most heavily fortified and personnel-heavy checkpoints. They are:

- 1. Midan and Suleiman al-Halabi;
- 2. Karm al-Jabal, Qarleg and Mishativeh;
- 3. al-Jadideh and al-Hamidiyeh;
- 4. Maysaloun, Aghyol, and Hanano Base

Two key governance insights arise from our research into these neighborhoods: first is the *strength* with which residents in these areas are loyal to whichever group – opposition or regime – controls their neighborhood. This is what we have termed the "front line convergence effect," and it is described in detail in the "Security Conditions" section.

The second insight illustrates an important theme: fully regime-controlled neighborhoods are well managed via a consistent set of three CSOs, while in contrast several different CSOs operate in opposition-controlled areas. Midan and Suleiman al-Halabi, for example, a neighborhood fully under regime control, has only three CSOs: AM, CCA, and AGEC. But neighboring Karm al-Jabal/Qarleq/Mishatiyeh, consistently identified as "mostly" under opposition control, has *twelve* CSOs working in the community. On the one hand, these groups provide important and necessary services to a community facing major security needs. But on the other, they complicate the environment considerably – not a single CSO worked in this neighborhood for all four months of the survey, and the lack of a unified administrative and social services structure created opportunities for armed groups to compete for control of the neighborhood.

Bustan al-Qasr, Sheikh Maqsoud, Bayada/Suweiqa, Karm al-Qaterji/Jourat Awad are the four different neighborhoods in what we identified as the third tier of insecurity in Aleppo. Their circumstances illustrate how variable conflict conditions are across Aleppo: though the Sharia Commission (SC) at one time controlled Bustan al-Qasr and Karm al-Qaterji/Jourat Awad, it gave up the latter to ISIS as that organization began taking over eastern Aleppo. Nine different CSOs work in Jourat Awad, a neighborhood firmly under opposition control, while there is only the LC in Bayada/Suweiqa, a heavily contested old city neighborhood. Finally, in-contrast to these neighborhoods relatively homogenous communities, Sheikh Maqsoud is a mixed Kurdish-Arab neighborhood whose control is split between an Arab brigade and a Kurdish one (the PKK-affiliated PYD).

Humanitarian Conditions

The end of the Humanitarian Conditions section identified the top ten most vulnerable neighborhoods in Aleppo. We asked whether these neighborhoods were most or least supported based on resident responses to whether they had received salary or assistance.

Most	Most Vulnerable								
Rank	Score	Neighborhood Name ⁴⁵	Top Ten Most Supported/Least Supported?						
1	2470	Sheikh Said (O)	Least supported by income						
2	2277	Maysaloun/Aghyol/Hanano Base (R)							
3	2272	Midan/Suleiman Halabi (R)							
4	2211	al-Jadideh/al-Hamidiyeh (C)	Least supported by income						
5	2127	Sheikh Maqsoud (O)	Least supported by income						
6	1951	Karm al-Jabal/Qarleq/Mishatiyeh (O)	Well supported						
7	1939	Salheen (O)	Well supported						
8	1907	al-Bayada/al-Suweiqa (O)	Least supported by income						
9	1891	Jabal Badro (O)	Well supported						
10	1802	Bustan al-Basha (O)							

⁴⁵ For all neighborhood names in this section: R = regime controlled, O = opposition controlled, C = contested

The four darkly shaded rows denote areas that were not only the most vulnerable, but also received among the least amount of support (e.g., aid, salaries) of any neighborhood in the city. While three rows that are lightly shaded denote areas that were vulnerable but also among the most *well supported* neighborhoods. This section will examine both areas: who works in vulnerable areas with little support and who works in vulnerable areas that are well-supported.

Vulnerable Neighborhoods with Little Support

The four neighborhoods listed above as the most vulnerable and least supported areas are also, unsurprisingly, identified in our Security Section as among the top ten most unsafe neighborhoods in Aleppo. Our data do not reveal whether the CSOs avoid the neighborhoods because they are "unsafe" or whether the neighborhoods are "unsafe" because they have limited governance and services. Though the reasons why these neighborhoods are insecure differ, they all have far fewer CSOs than most opposition-held neighborhoods. The four neighborhoods average 2.75 different CSOs through the entire study, and, though we cannot systematically calculate the average number of different CSOs mentioned per neighborhood, this is far less than most of opposition-held Aleppo. Al-Helleck/Ain al-Tel, adjacent to Sheikh Maqsoud, has 11 CSOs, and Salheen, adjacent to Sheikh Said, has 8 CSOs.

Vulnerable Neighborhoods that are Well-Supported

Current data yields few identifiable similarities between the three neighborhoods that vulnerable but also receive significant support in terms of salaries and aid.

- 1. Karm al-Jabal/Qarleq/Mishatiyeh has 12 CSOs and a fairly steady profile of control: Liwa al-Tawhid controlled the neighborhood for the first three months, and peacefully transitioned control to Jabhat al-Islamiya, the new Islamist coalition. More than 75% of the residents receive aid, which is among the highest ratio of respondents reporting receiving aid, and more than 75% of residents receive a salary, which is high, though not as high as other areas, which can be 85% or more.
- 2. Salheen has 8 CSOs, but none of them have worked in the neighborhood for more than one month. They experienced a violent transition of power when FSA battalions ceded control of the neighborhood to ISIS in November. Despite ISIS control, nearly 75% of residents receive aid and more than 75% receive salaries.
- 3. Jabal Badro also had 8 CSOs and none worked there for more than 2 months except the neighborhood council. They also experienced a violent transition in October from an FSA battalion to ISIS. The number of CSOs working in Jabal Badro declined from five to zero in the last two months of our study, indicating this neighborhood may not be receiving as much support today.

Political Allegiances

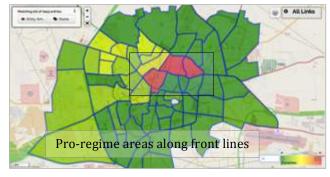
The political allegiances section identified support, at the neighborhood level, for different opposition groups and those who were for or against the regime. These neighborhoods are listed below:

Political Support	Neighborhood(s)
Anti-Regime	For more on these areas, please see the "Political Allegiances"
	chapter, under: "Who governs the most anti-regime neighborhoods in regime-controlled Aleppo?" (page 68)
Pro-Regime	Suleimaniyeh/Jabriyeh/Feilat
	Midan/Suleiman Halabi
	Aziziyeh/Baghdad Station/al-Tel
Support for "Free Syrian	al-Aajamal
Army" fighters	Bab Hadid/Qadi Askar/al-Ballat
	Jadideh/al-Hamidiyeh
	al-Bayada/al-Suweiqa
	al-Aqabeh/Souq al-Hal/Bab Hanin
Support for "Islamic	Area 1: Helleck/Ain al-Tel, Sheikh Faris/Sheikh Khodr, and
Brigades"	Bustan al-Basha
	Area 2: al-Asileh, Bab Maqam, al-Juloum/al-Ma'adi

Since we have covered anti-regime areas in Aleppo (see "Political Allegiances"), we will examine the governance situation in pro-regime areas and in those that are more likely to support the FSA or Islamic Brigades.

Pro-Regime Neighborhoods

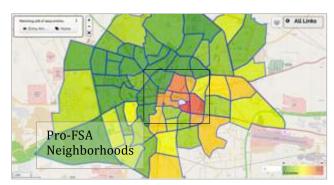
The map at right shows neighborhoods that most frequently answered "the Syrian Regime" when asked, "Who do you think is the legitimate representative of the Syrian people?" Across Aleppo, the Syrian regime received 12.1% of the popular vote, but the map at right shows that most of this support comes from only three neighborhoods. These neighborhoods are all regime-held and are



along the front line of the conflict. Of the residents in these three neighborhoods, 10.7% reported receiving assistance, but fully 100% reported receiving a salary in each of the four months of our study. It is not clear whether the regime is rewarding loyalty in these neighborhoods with salaries (meaning the popular support was pre-existing) or if salaries created the popular support (which is important for the regime to secure along the front lines in the city). The loyalty of pro-regime neighborhoods likely derives from a combination of financial support and regime protection against the perceived "enemy" of the opposition.

Neighborhoods that support "Free Syrian Army" fighters

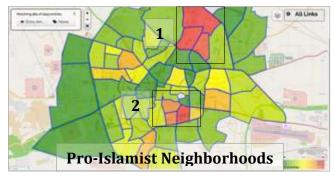
The five neighborhoods that report the most support for the "Free Syrian Army" exhibit all the characteristics of "Front Line Convergence" effect. They are either on the front lines of the conflict or are based in the highly contested old city of Aleppo. They are all either controlled by FSA-affiliated brigades, such as Ahrar Souriya or the Badr Martyrs



Brigade, or Liwa al-Tawhid, a conservative Islamic group not officially linked to the FSA but often considered so unofficially because their recruits are mostly local Syrians. There are also almost no CSOs working in these communities. The only groups that operate in these five neighborhoods are the Local Councils, the citywide council, or the GSA, which are all CSOs that generally favor the Free Syrian Army. So these neighborhoods have a great deal in common: it is one of the few, if not the only, area in Aleppo still controlled and governed by those fighting the regime who are likely local to the city.

Neighborhoods that support "Islamic Brigades"

From a governance standpoint, there is little in common between these two pro-Islamist neighborhoods. Area #1 fits the profile one would, at first, associate with neighborhoods in Syria that would be conducive to Islamist groups. The three neighborhoods in Area #1 average nine CSOs each, which means the governance landscape is contested and messy. This is often a contributing factor for support to Islamist groups, which are



generally seen as more effective at controlling chaotic governance situations in Syria. Unsurprisingly, all three experienced a takeover by ISIS from FSA-affiliated groups in October 2013. It is likely that ISIS, as they have done in similar chaotic environments elsewhere, imposed their will on the community and built support through coercion.

Area #2 is starkly different than Area #1. In fact, the profile of Group #2 matches much more closely with that of neighborhoods that showed support for the FSA brigades outlined above: they were protected by a single armed group with either FSA ties or connections to the community and they were governed by the three CSOs with strong connections to the community (the LCs, the LCFA, and the GSA). In reality, there is no simple answer for why different neighborhoods support Islamist groups. Follow on research beyond the scope of this project may be necessary (in terms of pre-revolutionary ideology, presence of charismatic pro-Islamist leadership figures) to determine these reasons.

Chaotic Governing Environment

Many findings in this report are not necessarily new: that regime-held Aleppo is better governed than opposition-held areas, that opposition-held areas are governed differently from neighborhood to neighborhood, and that there is a rise of Islamic charities. What this report has done is identified where these different dynamics are taking place, some of the contributing factors to why certain areas are more chaotic than others, and who is working in high-conflict areas as opposed to more accessible locations. These are the general dynamics of the conflict: more directed research questions play closer to the strength of our data and will yield more specific insights.

This said, our study only highlights where to look; it does not tell the whole story about each neighborhood. It has not been able to distinguish between why certain neighborhoods with different characteristics on face same similar support profiles. These dynamics require further study, but we believe this study will help point researchers in the right direction.

Aleppo Report - Annex

February 2014





"Now, I realized the village had come to the city, planting itself outside and growing in. The poor farmers were bringing their customs... to cosmopolitan Aleppo. ... They were turning their apartments into compact versions of their mud houses. It was not poverty, but tradition, that had put a whole family in one room."

- Charles Glass, *Tribes with Flags* (1990), on Eastern Aleppo

1. About Caerus

Caerus Associates is a strategic design firm that helps governments, local communities, and private enterprises succeed in complex, developing, disaster affected, and/or violent environments. Caerus Associates has built an analytical capability to understand complex system dynamics, particularly in regards to illicit networks and conflict-affected areas. This has specifically been the case in Syria, where Caerus has been conducting governance research, analysis, and data collection since December 2012.

Part of Caerus' focus on Syria arose from its in-house Syria-specific expertise that has been tracking opposition networks in the country before its uprising began. Caerus analysts have worked in Syria researching opposition networks before the Arab Spring, and continued to work with these groups of activists from diverse origins through the uprising that began in March 2011.

From these connections, Caerus expanded its capabilities to include a team of experts who are Syrian or have significant experience with Syria issues. They utilize their contacts and Caerus networks to conduct research, assessments, and analysis for both US government and foundations on governance, security, and development issues. By conducting field data collection and open source research, Caerus has been able to rapidly provide clients with responses to requests for information about events on the ground in Syria, assessments of current capabilities and perceptions of various governance entities, and policy and programming recommendations.

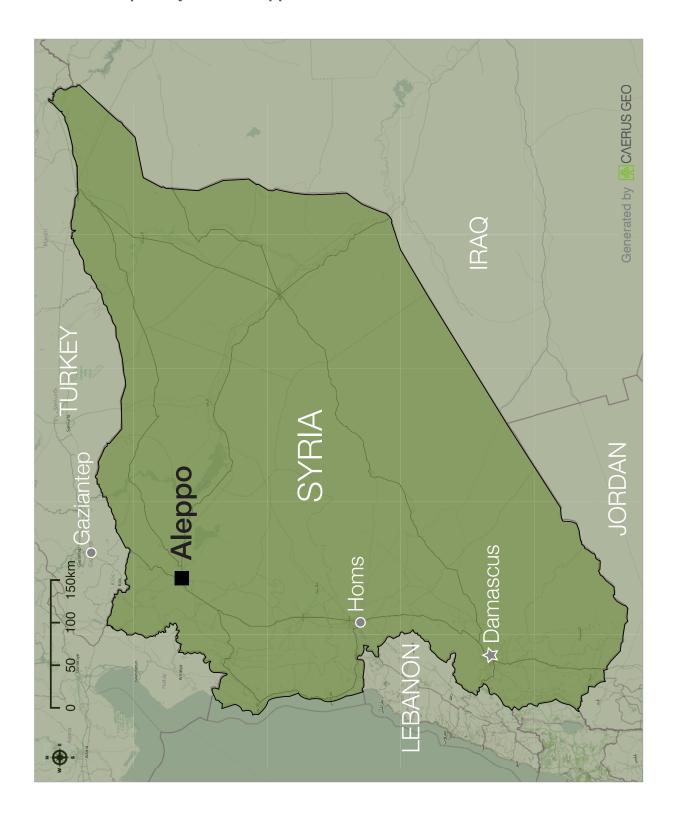
2. About First Mile GEO

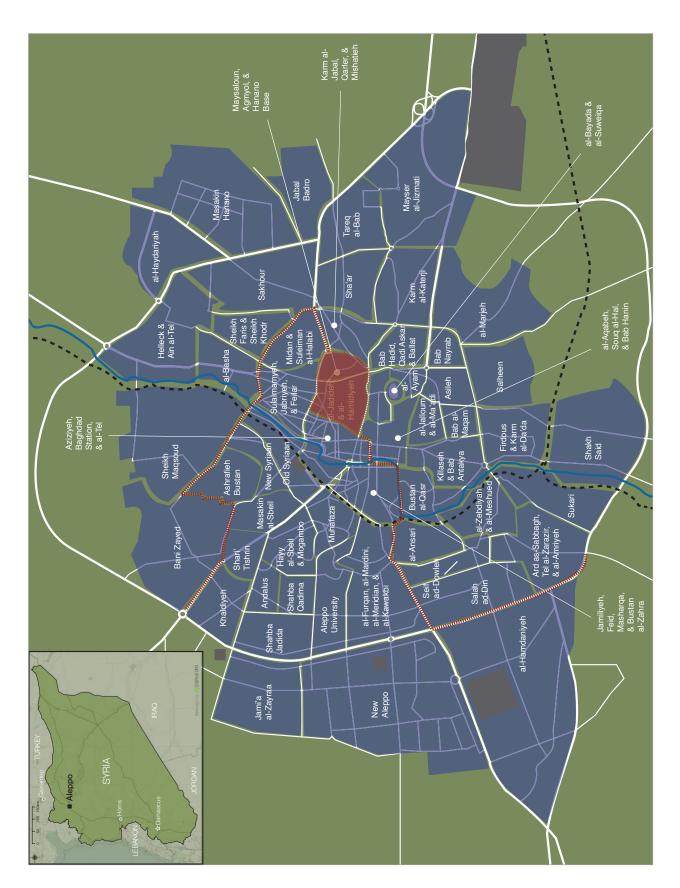
First Mile Geo is an open, online cloud-based platform for generating printed map surveys and online tools for collecting, analyzing, sharing, and visualizing social map data.

The First Mile Geo software platform is part of an integrated service and toolkit that makes social mapping and social data more accessible among governments, NGO's, and community groups who want to better understand the social dimensions of complex, conflict-affected places.

First Mile Geo's goal is to help communities and organizations create more sustainable geo-social information programs by lowering the barriers to access, aligning with local incentives, and improving the fidelity of mapping and analysis.

3. Base Maps – Syria and Aleppo





4. Aleppo Neighborhood Descriptions

	Name	Area (km²)	Religion	Socioecon.	Eth.	Description of Neighborhood
1	Jedaidah and Hamidiyah	0.91	Sunni- Christian	Lower-class	Arab	Historic neighborhood, extension of the old city
2	Farafra, Bayada and Suweiqa	0.45	Sunni	Lower-class	Arab	Souq al-Suweiqa is where you go to
3	Aqabeh, Souq al-Hal, Bab Jineen	0.76	Sunni	Lower-class	Arab	Souq el Hal is where you get all the spices
4	al-Jalloum, Qal'at al- Sharif and Sahet Bizzeh	0.63	Sunni	Lower-class	Arab	The Jaloum neighborhood has the old Aleppo market and is known throughout Aleppo as having old Aleppan families
5	Al-Ajam, al- Tunbugha	0.26	Sunni	Lower-class	Arab	Neighborhood around the Aleppo citadel
6	Al-Asileh	0.61	Sunni	Lower-class	Arab	Within the old city and south of the citadel
7	Bab al- Mawam	0.43	Sunni	Lower-class	Arab	One of the nine gates of Aleppo
8	Al Kallaseh, Bab Antaqia and Fardos	1.17	Sunni	Lower-class	Arab	Bab Antakya is one of the nine gates of Aleppo, Firdous neighborhood contains high density residential and slum residents of Aleppo - Kilasa is one of the old neighborhoods of Aleppo
9	Muhammad Bek (Bab al Nayrab)	0.45	Sunni	Lower-class	Arab	Bab al-Nairab is an area well known for its meat markets - many residents raise cattle and sheep and there many butchers here
10	Al Ballat and Bab al Hadid	0.8	Sunni	Lower-class	Arab	Bab Hadid is one of the nine gates to the old city
11	Maysalun and Hanano Military Base	0.37	Sunni	Lower-class	Arab	Maysaloon is a residential neighborhood, Hanano Military Base is near the industrial parks of Aleppo
12	Karm al Jabal and Dallalin	0.85	Sunni	Lower-class	Arab	Karm al-Jabal neighborhood is where the residents are generally involved in grain production
13	Bustan al Qasr	0.83	Sunni	Lower-class	Arab	Bustan al Qasr is where the biggest checkpoint in the city is, and also one of the most active neighborhoods during the beginning of the revolution

14	Jamiliyeh, Feid, Masharqa, and Bustan al-Zahra	1.17	Sunni	Lower-class	Arab	Jamiliyeh is where you get all the pirated movies and chinese-made electronics.
15	Azizieh, Baghdad and Tillal	1	Muslim, Armenian, Christian	Lower-class	Arab	Baghdad is where the historic Baghdad train station is, Azizieh is where all the nice restaurants are, there's a very famous Armenian sports club there.
16	Saad al- Ansari	0.88	Sunni	Lower-class	Arab	Neighborhood has an average income, with several government installations such as medical teachers Pharmacy
17	Sef el Doleh	0.75	Sunni	Lower-class	Arab	Seif El Dawla is an upscale neighborhood of Aleppo, which includes a huge commercial market
18	Zebdiyeh and Al- Ansari Mashhad	1.18	Sunni	Lower-class	Arab	Neighborhood with a large number of shops
19	Salaheddine	1.79	Sunni	Lower-class	Arab	District is where the population is from other Syrian governorates, especially Idlib
20	Ard al- Sabbagh and Tal al- Zarazir	1.79	Sunni	Lower-class	Arab	Very poor neighborhoods - damaged heavily during the conflict
21	Karm al- Da'da'	1.51	Sunni	Lower-class	Arab	Poor neighborhood - lacks the most basic services
22	Al-Sukkari	1.43	Sunni	Lower-class	Arab	Average income neighborhood contains a large commercial market for electronics
23	Sheikh Said	3	Sunni	Lower-class	Arab	A very poor neighborhood contains cement plant and the Electric Company
24	Hamdaniye h	7.4	Sunni	Lower- class/High- class	Arab	Hamdaniyeh is a neighborhood that's divided up into two parts: the very rich side with big villas and a lot of open space, and the poor side where a lot of the soldiers and their families live. The soldiers mostly work at the Assad Military Academy, which is also in Hamdaniyeh.
25	Salheen	1.5	Sunni	Lower-class	Arab	Very poor education levels in this neighborhood. Almost "non-existent" certificate holders
26	New Aleppo	6.11	Sunni	Middle-Class	Arab	A high-end neighborhoods of Aleppo contains several security points such as military security
27	Al-Zahraa and al- Wafaa	2.17	Sunni, Alawite	Middle-Class	Arab	Upscale neighborhood and the site of the Air Force Intelligence building

28	Marjeh	2.19	Sunni	Lower-class	Arab	A "people's" neighborhood - a simple people, the majority of whom come from neighboring villages
29	Myassar al Jazmati	4.17	Sunni	Lower-class	Arab	Popular neighborhoods contain a large proportion of the members of the Arab tribes
30	Karm al Qaterji, Karm al Myassar and Karm al Tahhan	1.84	Sunni	Lower-class	Arab	Industrial district contains many of the steel mills and industrial tools
31	Sha'ar	1	Sunni	Lower-class	Arab	A commercial district particularly known for its store call Sidd al-Lowz
32	Tareeq al- Bab	1.48	Sunni	Lower-class	Arab	A "people's" neighborhood located within the slums in Aleppo
33	Jabal Badro	1.24	Sunni	Lower-class	Arab	One of the poorest neighborhoods of Aleppo - socially marginalized neighborhood, lack of basic services
34	Hanano	3.96	Sunni	Lower-class	Arab	Most of the population of this district were working for the government and especially the military side
35	Haydarieh	1.7	Sunni	Lower-class	Arab, Kurd, Turkish	A poor neighborhood with a social mixture containing several industrial plants
36	Sakhur	2.61	Sunni	Lower-class	Arab	"People's" neighborhood with a lot of members of the Arab tribes
37	Ayn al-Tal	2.56	Sunni	Lower-class	Arab, Kurd, Turkish	Industrial area with several plants for the manufacture of textile and carpets
38	Sheikh Fares and Sheikh Khder	0.91	Sunni	Lower-class	Arab	Popular neighborhood with several mosques such as Naqshbandi in Sheikh Fares, in Sheikh Khader there is the headquarters of the water company
39	Midaan and Jabal Ghazzalat	0.83	Muslim, Christian	Lower-class, Middle class	Arab	Diverse neighborhood including several Christian minorities, Arab and Armenian
40	Sleimanieh and Jabrieh	1.18	Sunni, Christian	Lower-class, Middle Class	Arab	Sophisticated neighborhood with a Christian majority - neighborhood Jabriyah - with a lot of garment manufacturing workshops
41	Bostan Pasha	1.18	Sunni	Lower-class, Middle Class	Arab	Industrial neighborhood especially dealing with car repairs, includes social composition comprising Christian, Kurdish and Arab
42	Sheikh Maqsoud	3.77	Muslim, Christian, Yezidi	Lower-class	Kurdish	Hilly neighborhood with a predominantly Kurdish composition

43	Ashrafiyeh	0.97	Sunni, Yazidi	Lower-class	Kurdish	Neighborhood has a predominantly Kurdish population and includes a clothing market
44	Rasafeh	2.96	Sunni	Lower-class	Arab, Kurd	A simple, poor neighborhood with mostly Kurds
45	New Syriaan and Jalaa	0.59	Christian	High-Class	Arab, Armenian	Sophisticated neighborhood with Saudi/French Hospital and sports facilities
46	Old Syriaan (Syriac Quarter)	1.1	Christian	High-Class	Arab, Armenian	With a Christian majority neighborhood of middle-income and poor, especially the Eastern Orthodox Christian community
47	Tariq Bin Ziyad	0.72	Sunni, Christian	Middle-Class	Arab	Sophisticated neighborhood with the Aleppo military barracks
48	Share' al Nil	0.6	Sunni	Middle-Class, High-class	Arab	Sophisticated neighborhood with several markets for food and clothes and cars
49	Khaldiyeh	1.1	Sunni	Lower-class, Middle class	Arab	Commercial and residential area with cheap supermarkets and restaurants. Was beginning to become gentrified when revolution started.
50	New Shahba	1.17	Sunni	High-Class	Arab	Sophisticated neighborhood residents from the rich Aleppo
51	Andalus	0.38	Sunni	Middle-Class, High-class	Arab	Sophisticated neighborhood with Arab Medicine Hospital
52	Shahba	0.58	Sunni	High-Class	Arab	Rich Muslim area, landlords are known to refuse to sell houses to Christians.
53	University	1.16	Sunni, Alawite, Yazidi	Lower-class	Arab, Kurdish, Armenian, Other	Populated mostly by non-Aleppans
54	Furqan, Mardini, Meridien, Kawakbi	2.4	Sunni	Middle-Class, High-class	Arab	Furqan is one of the most elevated areas in the city
55	Hay al Sabil and Mogambo	0.94	Sunni,	High-Class	Arab	upscale neighborhood includes several government buildings like the military hospital
56	Muhafaza	0.79	Sunni,	High-Class	Arab	Where the governor's house is, mostly residential.

5. Acronym List

ISIS - Islamic State of Iraq and Syria

LCC - Local Coordination Committee

LC - Local Council

Etilaf – Syrian Coalition

MB - Muslim Brotherhood

SANA - Syrian Arab News Agency

IF - Islamic Front

JM – Jaish al-Mujahideen

JN – Jabhat al-Nusra

SOHR - Syrian Observatory for Human Rights

FSA - Free Syrian Army

CSO - Civil Society Organizations

AM - Aleppo Municipality

CCA - City Council of Aleppo

AGEC - Aleppo General Electricity Company

LCFA - The Local Council for the Free City of Aleppo

GSA - General Services Administration

SIC - Sham Islamic Commission

GISA - General Islamic Services Administration

SC - Sharia Commission

SARC - Syrian Arab Red Crescent

PKK – Partiya Karkerên Kurdistan

PYD - Partiya Yekîtiya Demokrat

ACC - Aleppo City Council

TRC - Transitional Revolutionary Council