

Civilian Abuse, Wartime Informing, and Counterinsurgent Operations*

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Abstract

Civilian support is central to the success of counterinsurgent campaigns. Harm to civilians, and who harms them, influences when and with whom non-combatants collaborate. Drawing on newly declassified military records as well as survey data, we find robust, direct evidence that civilians respond to insurgent victimization by providing intelligence to security forces in Afghanistan. We then show that these tips improve the success of subsequent counterinsurgent operations. These results clarify the conditions under which civilian casualties can shape the course of internal war, with implications for future research on political violence.

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What are the strategic effects of civilian victimization in civil war? Classic theories of counterinsurgency (Galula, 1964), as well as modern theories of the strategic logic of violence (Kalyvas, 2006), assert that civilians condition their support of armed actors on how they are treated, an argument formalized in recent work (Berman, Shapiro and Felter, 2011). One particularly valuable component of non-combatant support is the provision of local intelligence on insurgent activity, including rebel recruitment, force movement, and planned attacks. As Kalyvas (2006, 174) observes, “[i]t is widely accepted that no insurgency can be defeated unless the incumbents give top priority to and are successful in building an intelligence organization.” Civilian abuse, therefore, can shape the course of internal conflict through its effects on civilian sharing of sensitive information.

In their review of this research agenda, Berman and Matanock (2015) note that direct evidence on theories of asymmetric conflict centered around civilian sharing of information is largely missing. Instead, researchers have leveraged increased access to survey and conflict microdata to test the observable implications of informational theories and have shown that: (1) self-expressed willingness to inform is linked to coethnicity with security services in surveys from Afghanistan (Lyall, Shiraito and Imai, 2015); (2) in Iraq, technological changes—which reduce the risks to informing—are associated with lower intensity of insurgent activity (Shapiro and Weidmann, 2015); and (3) insurgent-initiated violence in Iraq at the district level is lower in the week following insurgent attacks that injure or kill non-combatants in that district, and higher in weeks after Iraqi or American forces did so (Condra and Shapiro, 2012). The latter finding is consistent with civilians responding to harm from insurgents by withdrawing their support and sharing intelligence with security forces, but is not direct evidence. And prior work also tended to focus only on one step at a time.¹ This dearth of direct empirical evidence for all steps in the theory is due in no small

¹Shaver and Shapiro (forthcoming), for example, provide evidence from Iraq that harm to civilians influences hotline tips, but do not evaluate the downstream impact on counterin-

part to the lack of available data on actual information sharing. As Lyall, Shiraito and Imai (2015, 833) observe: “Information about insurgent groups is a central resource in civil wars: counterinsurgents seek it, insurgents safeguard it, and civilians often trade it. Yet despite its essential role in civil war dynamics, the act of informing is still poorly understood, due mostly to the classified nature of informant ‘tips.’”

The central contribution of this research note is therefore to provide systematic direct evidence of the full relational chain in the informational theory. We use newly declassified data on insurgent attacks that caused civilian casualties, as well as incidents of civilian intelligence sharing with the government, between 2006 and 2014 in Afghanistan. We show that harm to civilians affects information flow and that changes to that flow directly affect counterinsurgency effectiveness, as measured through meaningful operational outcomes such as government missions to clear roadside bombs, neutralize weapons factories, conduct safehouse raids, and detain suspected insurgents. The fact that civilian tips in Afghanistan were strongly positively associated with increased battlefield success by government forces provides the most complete evidence yet that civilian cooperation is indeed a *central resource* in civil wars.

Empirical Design

The newly declassified military records were compiled by both International Security Assistance Force (ISAF) and Afghan forces (ANDSF). These records of significant activities (SIGACTS) cover 2003 through 2014, documenting more than 270,000 separate events, including: insurgent attacks on government forces, harm to civilians, and civilians’ provision

insurgent activity. Schutte (2017) studies how harm influences one battlefield outcome (IED turn in’s), but lacks an evaluation of civilian information sharing and relies on leaked data covering a shorter time period than we do. And Lyall, Blair and Imai (2013) study how civilians views’ of harm depend on the identity of the perpetrator.

of local intelligence to security forces. The data were collected systematically by security forces, not derived from media sources, which avoids concerns about reporting biases in data collected from newspapers and other media, both in Afghanistan and in other conflicts (Weidmann, 2016).² These data are the most complete account of security operations in Afghanistan currently in the public domain (see SI section A.1).

We observe details on 97,006 intelligence collection events. These represent a combination of calls to anonymous hotlines, one-off tips from direct civilian-to-security force interactions and reporting by cultivated sources, but do not include intelligence derived from monitoring insurgent communications.³ Our data contain records on 120,247 direct fire, 28,974 indirect fire, and 38,205 IED explosion events. To measure civilian abuse by insurgents, we isolate all insurgent-initiated attacks that caused either a civilian injury or death that was observed by or occurred in the presence of government forces.

We restrict our analysis to insurgent-inflicted harm to civilians because while our data account for all insurgent-initiated engagements with coalition and host nation forces that also injure or kill civilians, we have not been able to obtain similarly systematic records of government harm to civilians due to the sensitivity of such information. We explain below how we address potential concerns related to this issue.

To estimate the effect of civilian abuse by insurgents on information sharing with security forces, we begin with the assumption that, conditional on appropriate controls for trends in the conflict, collateral damage to civilians caused by insurgent attacks on military forces is “as if” randomly assigned. This approach is the benchmark specification in previous work (Condra and Shapiro, 2012; Shaver and Shapiro, forthcoming). After conditioning out district and week fixed effects, as well as short-run trends in overall violence, we identify

²Weidmann (2016, 210-211) describes the military records used in our study as the “universe” of insurgent-initiated combat activity.

³Author interview with senior official responsible for data collection and management, May 24, 2017.

the residual variation in civilian abuse that is arguably random. We conduct our analysis at the district level because this is the level at which ISAF, ANSF, and Taliban forces were organized during the campaign. To begin, we sum all collected intelligence reports, all insurgent attacks with civilian casualties, and all insurgent operations—including direct line-of-sight attacks, indirect mortar and rocket engagements, and improvised explosive device (IED) detonations—by district-week and standardize per 1,000 district inhabitants. Our base model is captured by equation 1:

$$Y_{dt}^a = \alpha + \beta_1 CIVCAS_{dt-1} + \zeta_j \sum_{j=1}^4 (V_{dt-k}) + \mu_d + \eta_t + \epsilon_{dt} \quad (1)$$

where Y_{dt}^a is the number of intelligence reports shared with counterinsurgents in district d in week t where the superscript a indicates the type of tip ((1) all tips, (2) threats to COIN forces, (3) threats to civilians, (4) tips about insurgent activity); $CIVCAS_{dt}$ is the sum of insurgent attacks resulting in civilian harm in a given district; V_{dt-k} is the lagged sum of insurgent attacks in previous week k (direct fire, indirect fire, IED explosions); μ_d is a district fixed effect; η_t denotes a week fixed effect; and ϵ_{dt} is the error term. In all models we cluster standard errors at the district level, and regressions are weighted by district population.

Despite authors' repeated efforts over several years to gain access to declassified data detailing government-caused civilian casualties, neither U.S. Central Command nor other agencies intend to release this information. This could lead to biased estimates under two scenarios. First, we may worry that insurgent and government harm occur in offsetting-cycles, such that harm caused by insurgents is correlated with future (but not present) government harm. This would imply that insurgent and government harm are negatively correlated. If government harm is also negatively correlated with tipping (as the informational theory hypothesizes), then our estimates of the impact of insurgent harm would be biased upward (larger magnitude) since government harm remains an omitted variable. Second, civilians might react to relative harm—which actors hurt them more—as opposed to

absolute harm. This would lead to a similar type of bias in our estimates. While we cannot evaluate these patterns empirically, we have not found systematic qualitative evidence suggesting these dynamics occurred in Afghanistan.

We therefore turn to survey data for evidence that neither of these mechanisms drive the results. We study the relationship between self-reported willingness to inform (the survey analogue of tipping) and perceived level of care government or insurgent forces exercise to avoid harming civilians (the survey analogue of measured harm) in eight waves of the Afghanistan Nationwide Quarterly Assessment Research (ANQAR) survey from 2013 to 2015 ($n = 99,666$ respondents). The survey included questions about insurgent *and* government attempts to avoid civilian harm as well as the willingness of respondents to report roadside bombs (see data description in SI section A.2 for more details).

Since we observe perceived harm by both actors, we can evaluate (a) whether we replicate the results from the observational data and (b) if our estimates of that relationship are sensitive to omitting measures of government harm using equation 2:

$$Y_{idw} = \alpha + \beta_1 GovtNoEffort_{idw} + \beta_2 InsNoEffort_{idw} + \gamma X_i + \mu_d + \eta_w + \epsilon_{idw} \quad (2)$$

where Y_{idw} is whether or not an individual i is ‘very likely’ to report IED placement to security forces in district d and survey wave w ; $Govt/InsNoEffort_{idw}$ is perception that the government/insurgents do not do enough to prevent civilian casualties; μ_d is a district fixed effect; η_w is a survey wave fixed effect; X_{idw} is a vector of individual-level demographic controls that vary across specifications; and ϵ_{idw} is the error term. In all models we cluster standard errors at the district level, and regressions use district-specific survey weights.

Finally, we attempt to complete the causal chain of the informational channel, which hypothesizes civilian cooperation positively influences battlefield success by counterinsurgents. To quantitatively investigate whether variation in information flow is strategically valuable, we estimate the short term effects of tipping on various counterinsurgent operations condi-

tional on trends in combat violence and insurgent harm using equation 3:

$$Y_{dt}^b = \alpha + \beta_1 Tips_{dt-1} + \zeta_j \sum_{j=1}^4 (V_{dt-j}) + \theta_j \sum_{j=1}^4 (CIVCAS_{dt-j}) + \mu_d + \eta_t + \epsilon_{dt} \quad (3)$$

where b denotes the type of counterinsurgent outcome in Y_{dt}^b , which can be the number of (1) roadside bombs found and cleared, (2) weapons caches found, (3) safe house raids, or (4) insurgents captured and detained in district d in week t . $Tips_{dt}$ is the sum of all tips or the sum of tips specifically related to IED deployment in a given district-week. As in equation 1, we control for previous levels of insurgent violence. We also control for previous levels of insurgent-caused civilian casualty events. All models are weighted by district population and include district and time fixed effects. We cluster standard errors at the district level.

Results

We find that civilian abuse by insurgents is associated with a significant increase in information sharing with state security forces. These results are robust and substantial. Table 1 shows the estimated impact of civilian abuse on wartime informing using equation 1. The dependent variable in Column 1 is tips aggregated across all types. Columns 2-4 decompose tips by type: threats to counterinsurgents; threats to civilians; and insurgent activities.

Across specifications, there is a statistically significant association between (lagged) insurgent attacks that result in civilian casualties and the number of tips that counterinsurgents receive from civilians. A one standard deviation increase in attacks resulting in civilian casualties (0.415 more civilian casualty events per week in an average sized district) is associated with a 18% increase in informant reports over the weekly mean level (Column 1). This overall effect is driven largely by tips related to threats against counterinsurgents (2), but note that there is also a statistically significant increase in tips on threats to civilians (3) and insurgent activities (4), though the estimated increase is relatively smaller.

To address potential concerns that these results are substantially biased by the absence of government-caused (unintended) civilian casualties in our main specification, we report on

Table 1: Effects of insurgent-initiated civilian casualties on civilians’ wartime informing to security forces

	(1)	(2)	(3)	(4)
	All Tips	Threats to COIN Forces	Threats to Civilians	Tips about Insurgent Activity
CIVCAS (1 WEEK LAG)	0.189*** (0.0519)	0.128*** (0.0325)	0.00953*** (0.00340)	0.0333* (0.0172)
SUMMARY STATISTICS				
Outcome Mean	0.00804	0.00529	0.000374	0.00304
Outcome SD	0.0284	0.0201	0.00289	0.0138
PARAMETERS				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends				
MODEL STATISTICS				
Number of Observations	171936	171936	171936	171936
Number of Clusters	398	398	398	398

Notes: Outcome of interest is tips on specific threats, as noted in column headings. All models are weighted by district population and include district and week fixed effects. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

the relationship between self-expressed willingness to inform and perceived level of effort in avoiding civilian harm in Table SI-3 (estimated via equation 2). The size and significance of the association between willingness to tip and perceived lack of insurgent effort to minimize harm to civilians is in the direction predicted by the informational theory and moves by less than 4% with the inclusion or exclusion of the corresponding measure of perceived government effort (see Figure SI-1a and SI-1b for visualization of the key results). The magnitude of these effects is large, with those reporting they think insurgents do not try to avoid killing civilians being approximately 25% more likely to say they are ‘very likely’ to provide a tip on an IED if they know about one.

Next, we report how information sharing affects meaningful operational outcomes. In Table 2 we show the effects on IEDs found and cleared (Column 1), weapons caches found and cleared (2), insurgents captured (3), and tactical safe house raids (4). Insurgent-inflicted

civilian casualties lead to a subsequent increase in each of these operational outcomes that are vital to the success of counterinsurgency. The effects are substantively large. A one standard deviation increase in IED-related tips (0.616 more IED-related tips per week in an average sized district), for example, is associated with a 16.8% increase in roadside bombs found and cleared over the weekly mean level. Together with the evidence on increased information sharing, this stands as remarkably strong and consistent evidence that harm inflicted on civilians in civil war has strategic consequences.

Table 2: Effects of wartime informing on counterinsurgent operational outcomes

	(1) Roadside Bombs Found/Cleared	(2) Weapon Caches Found/Cleared	(3) Tactical Safe House Raids	(4) Insurgents Captured and Detained
IED TIPS (1 WEEK LAG)	0.0645*** (0.0131)	0.0272*** (0.00820)		
ALL TIPS (1 WEEK LAG)			0.0136*** (0.00300)	0.00260*** (0.000550)
SUMMARY STATISTICS				
Outcome Mean	0.00371	0.00121	0.00123	0.000108
Outcome SD	0.0179	0.00857	0.00622	0.00183
PARAMETERS				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends	Yes	Yes	Yes	Yes
MODEL STATISTICS				
Number of Observations	171936	171936	171936	171936
Number of Clusters	398	398	398	398

Notes: Outcome of interest is specific counterinsurgent outcomes, as noted in column headings. All models are weighted by district population and include district and week fixed effects. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

In Supporting Information (SI), we provide a series of robustness checks for the main results. First, we evaluate whether there is a substantial difference in estimated magnitudes across the full sample relative to the period characterized by the most intense annual fighting season (Tables SI-4, SI-5, SI-6 and SI-7). Results are largely unaffected. Second, we estimate the models with four lags of the dependent variable as added regressors (Tables SI-8 and SI-9). Third, we estimate unweighted regressions in Tables SI-10 and SI-11. Fourth, we provide further evidence that the informational mechanism drives the effects of tips on

counterinsurgent outcomes. While the estimated coefficients on all (lagged) tips and (lagged) tips specifically on IEDs deployed are statistically significantly related to IEDs and weapons caches found as outcomes, the size of the effect of specific tips is substantially larger (Table SI-12). Finally, we report results of a test to address concerns about reverse causality in our models. Tables SI-13 and SI-14 show results that cycle the contemporaneous, lagged, and lead values of the independent variables. When all three are included (Column 3), the leads are not statistically significantly related to outcomes.

Conclusion

In this manuscript, we present the most direct, comprehensive, and systematic empirical test to date of information sharing theories of civil war that have shaped the academic study and military doctrine of counterinsurgency for the last half century. Governments' political and military success depends on civilians sharing critical information about insurgent identities, whereabouts, and activities. Civilians, in turn, punish combatants for harming them by withholding support and local intelligence. While we provide compelling evidence connecting civilian harm, information sharing, and counterinsurgent operations, a macro-level political-military strategy involves broader considerations. As critics of the campaign in Afghanistan have argued, in addition to consolidating military control, foreign assistance must increase the legitimacy of the host government and its capacity for governance (Eikenberry, 2013). Information sharing helps government forces win battles; a broader strategy is required to win wars.

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SUPPORTING INFORMATION

— For Online Publication Only —

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A Data

A.1 Conflict Data

The data on insurgent activities, civilian casualties, and information received by ISAF and Afghan forces was received and processed by Authors. The data were declassified and released to them by the U.S. Department of Defense and provide the precise timing and locations (often accurate to the nearest minute and within several meters, respectively) of hundreds of thousands of incidents of insurgent violence throughout the Afghanistan war.

Insurgent Attacks and Civilian Casualties. The dataset is constructed from reports provided by U.S., Afghan, and other ISAF military and police units and includes more than 200,000 observations of attacks perpetrated by insurgents with corresponding details on the weaponry used, as well as whether civilians were (unintentionally) killed or injured in the course of the attack. We use these data as our measure of insurgent violence and civilian casualties in estimated models.

Information Sharing. The dataset also includes tens of thousands of specific incidents of information received by counterinsurgent forces about insurgents. These include specific threats posed by insurgents, frequently identified by the specific attack type (e.g., direct fire, indirect fire, improvised explosive device) as well as reported locations of insurgents. We do not observe the means of collection (in-person, hotline, etc.). Some reports may have been captured via signals, though former ISAF officials indicate these events were unlikely to be released with our records request. If present, however, these records would likely bias our results toward zero.

Counterinsurgent Outcomes. Finally, the dataset includes a variety of details related to operational outcomes, including IEDs found and cleared, weapons caches found and cleared, tactical raids of safe houses, and operations resulting in captured insurgents.

A.2 Survey Data

We use waves 20-27 of the Afghanistan Nationwide Quarterly Assessment Research (ANQAR) platform for models reported in Table SI-3. The Afghan Center for Socio-Economic and Opinion Research (ACSOR) enumerated these waves of the survey. Using a grid-based random walk method, the firm surveyed ten households from the randomly sampled villages within a district. When ACSOR could not access sampled villages, intercept interviews were used to collect information from residents traveling in neighboring areas.

We analyze responses to three questions in the ANQAR surveys:

1. “If you knew that an IED had been planted, how likely would you be to report it?”
Coded 1 if response was ‘very likely’ and 0 otherwise.
2. “Do you think the Afghan National Defense and Security Forces (ANDSF) do enough to prevent the killing or injuring of civilians?” Coded 1 if the response is “No, I think the ANDSF doesn’t do anything” and 0 otherwise.
3. “Do you think the insurgents do enough to prevent the killing or injuring of civilians?”
Coded 1 if the response is “No, I think the insurgents don’t do anything” and 0 otherwise.

B Descriptive Statistics

Table SI-1: Summary statistics for violence data

Variable	Mean	Std. Dev.	Min.	Max.
All Tips	0.008	0.0284	0	2.6667
Threats to COIN Forces	0.0053	0.0201	0	1.2121
Threats to Civilians	0.0004	0.0029	0	0.5
Tips about Insurgent Activity	0.003	0.0138	0	1.831
IED Tips	0.0022	0.0097	0	0.5389
Roadside Bombs Found/Cleared	0.0037	0.0179	0	1
Weapon Caches Found/Cleared	0.0012	0.0086	0	0.6475
Insurgents Captured and Detained	0.0012	0.0062	0	0.5319
Tactical Safe House Raids	0.0001	0.0018	0	0.2878
Ins. CIVCAS	0.0009	0.0051	0	0.5
Combat activity	0.0158	0.063	0	3.0135

Notes: summary statistics are calculated for the sample studied in the main estimating equations (four digits shown). All variables are standardized by district population (per capita) and weighted by district population (following the main specification).

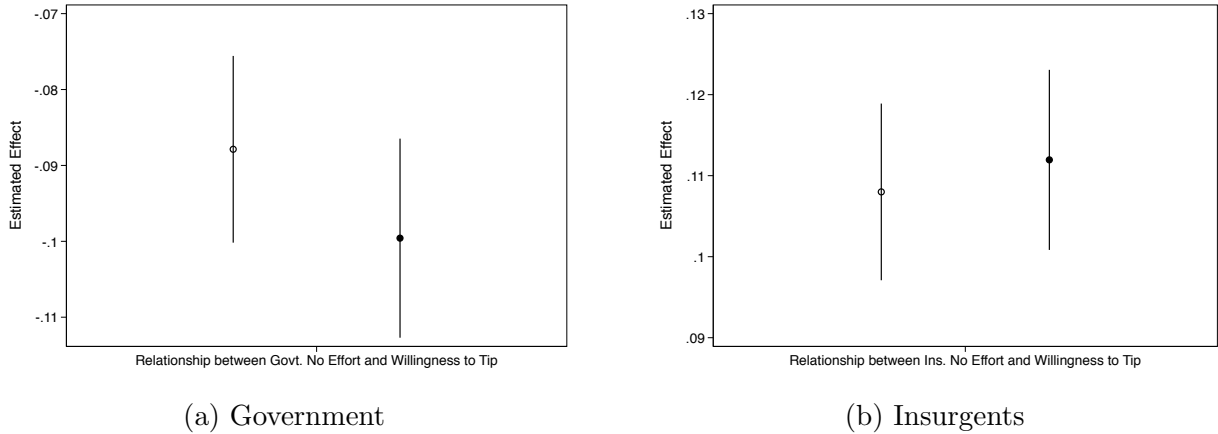
Table SI-2: Summary statistics for ANQAR survey data

Variable	Mean	Std. Dev.	Min.	Max.
Very likely to report IED	0.442	0.497	0	1
Govt. No Effort to prevent CIVCAS	0.089	0.285	0	1
Ins. No Effort to prevent CIVCAS	0.648	0.478	0	1

Notes: summary statistics are calculated for the sample studied in the main estimating equations (three digits shown). All variables are weighted by district population (following the main specification).

C Supplementary Results

Figure SI-1: Civilians' willingness to tip as function of perceived effort by armed actors to minimize harm to civilians



Notes: Panel A displays the estimated effect of no perceived Government effort to minimize civilian harm on willingness to tip when the model includes the variable on no perceived Insurgent effort (open circle, Column 3 of Table SI-3) and when the model excludes the variable (filled circle, Column 4 of Table SI-3). Panel B displays the estimated effect of no perceived Insurgent effort to minimize civilian harm on willingness to tip when the model includes the variable on no perceived Government effort (open circle, Column 3 of Table SI-3) and when the model excludes the variable (filled circle, Column 5 of Table SI-3). Bars indicate 95% confidence intervals.

Table SI-3: Civilians' willingness to tip as function of perceived effort by armed actors to minimize harm to civilians

	(1)	(2)	(3)	(4)	(5)
	Baseline	Baseline w. Political Controls	Baseline w. Political and Security Controls	Baseline w. Political and Security Controls	Baseline w. Political and Security Controls
Govt. No Effort	-0.103*** (0.00829)	-0.0951*** (0.00786)	-0.0879*** (0.00746)	-0.0996*** (0.00795)	0.112*** (0.00674)
Ins. No Effort	0.115*** (0.00703)	0.112*** (0.00691)	0.108*** (0.00661)		
SUMMARY STATISTICS					
Outcome Mean	0.442	0.442	0.442	0.442	0.442
Outcome SD	0.497	0.497	0.497	0.497	0.497
PARAMETERS					
District FE	Yes	Yes	Yes	Yes	Yes
Demographic Controls	Yes	Yes	Yes	Yes	Yes
Interacted Model	No	Yes	Yes	Yes	Yes
Govt. going Wrong Direction	No	Yes	Yes	Yes	Yes
Police Patrols Weekly	No	No	Yes	Yes	Yes
Village Insecure	No	No	Yes	Yes	Yes
Taliban Gaining Strength	No	No	Yes	Yes	Yes
MODEL STATISTICS					
N	99666	99666	99666	99666	99666
Clusters	377	377	377	377	377

Notes: Outcome of interest is respondent reporting being 'very likely' to report tip on IED if known (from ANQAR survey waves 20-27). 'Govt./Ins No Effort'=1 if respondent thinks government/insurgents does not do enough to prevent the killing and injuring of civilians; non-response to both questions are parameterized separately (coefficients omitted). All models include survey sample weights. All models include fixed effects for district, SES, ethnicity, gender, and ANQAR survey wave. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table SI-4: Effects of insurgent-initiated civilian casualties on civilians' wartime informing to security forces (June-October only)

	(1)	(2)	(3)	(4)
	All Tips	Threats to COIN Forces	Threats to Civilians	Tips about Insurgent Activity
CIVCAS (1 WEEK LAG)	0.191*** (0.0553)	0.141*** (0.0371)	0.00794** (0.00345)	0.0339** (0.0143)
SUMMARY STATISTICS				
Outcome Mean	0.00845	0.00571	0.000384	0.00317
Outcome SD	0.0285	0.0207	0.00292	0.0132
PARAMETERS				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends				
MODEL STATISTICS				
Number of Observations	89550	89550	89550	89550
Number of Clusters	398	398	398	398

Notes: Outcome of interest is tips on specific threats, as noted in column headings. Estimated only during the short fighting season (June to October). All models are weighted by district population, include district and week fixed effects. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table SI-5: Effects of wartime informing on counterinsurgent operational outcomes (June-October only)

	(1)	(2)	(3)	(4)
	Roadside Bombs Found/Cleared	Weapon Caches Found/Cleared	Insurgents Captured and Detained	Tactical Safe House Raids
IED TIPS (1 WEEK LAG)	0.0632*** (0.0162)	0.0197*** (0.00711)		
ALL TIPS (1 WEEK LAG)			0.0130*** (0.00360)	0.00312*** (0.000701)
SUMMARY STATISTICS				
Outcome Mean	0.00395	0.000961	0.00129	0.000114
Outcome SD	0.0178	0.00637	0.00658	0.00209
PARAMETERS				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends	Yes	Yes	Yes	Yes
MODEL STATISTICS				
Number of Observations	89550	89550	89550	89550
Number of Clusters	398	398	398	398

Notes: Outcome of interest is specific counterinsurgent outcomes, as noted in column headings. Estimated only during the short fighting season (June to October). All models are weighted by district population, include district and week fixed effects. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table SI-6: Effects of insurgent-initiated civilian casualties on civilians' wartime informing to security forces (May-October only)

	(1)	(2)	(3)	(4)
	All Tips	Threats to COIN Forces	Threats to Civilians	Tips about Insurgent Activity
CIVCAS (1 WEEK LAG)	0.204*** (0.0538)	0.141*** (0.0366)	0.00651** (0.00328)	0.0527*** (0.0157)
SUMMARY STATISTICS				
Outcome Mean	0.00850	0.00576	0.000379	0.00314
Outcome SD	0.0287	0.0210	0.00291	0.0132
PARAMETERS				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends				
MODEL STATISTICS				
Number of Observations	103878	103878	103878	103878
Number of Clusters	398	398	398	398

Notes: Outcome of interest is tips on specific threats, as noted in column headings. Estimated only during the long fighting season (May to October). All models are weighted by district population, include district and week fixed effects. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table SI-7: Effects of wartime informing on counterinsurgent operational outcomes (May-October only)

	(1)	(2)	(3)	(4)
	Roadside Bombs Found/Cleared	Weapon Caches Found/Cleared	Insurgents Captured and Detained	Tactical Safe House Raids
IED TIPS (1 WEEK LAG)	0.0627*** (0.0137)	0.0206*** (0.00717)		
ALL TIPS (1 WEEK LAG)			0.0121*** (0.00337)	0.00289*** (0.000719)
SUMMARY STATISTICS				
Outcome Mean	0.00386	0.00104	0.00125	0.000112
Outcome SD	0.0175	0.00695	0.00645	0.00201
PARAMETERS				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends	Yes	Yes	Yes	Yes
MODEL STATISTICS				
Number of Observations	103878	103878	103878	103878
Number of Clusters	398	398	398	398

Notes: Outcome of interest is specific counterinsurgent outcomes, as noted in column headings. Estimated only during the long fighting season (May to October). All models are weighted by district population, include district and week fixed effects. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table SI-8: Effects of insurgent-initiated civilian casualties on civilians' wartime informing to security forces, including lags of dependent variable

	(1)	(2)	(3)	(4)
	All Tips	Threats to COIN Forces	Threats to Civilians	Tips about Insurgent Activity
CIVCAS (1 WEEK LAG)	0.0237 (0.0225)	0.0279* (0.0150)	0.00676** (0.00278)	0.00585 (0.0101)
SUMMARY STATISTICS				
Outcome Mean	0.00804	0.00529	0.000374	0.00304
Outcome SD	0.0284	0.0201	0.00289	0.0138
PARAMETERS				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends				
MODEL STATISTICS				
Number of Observations	171936	171936	171936	171936
Number of Clusters	398	398	398	398

Notes: Outcome of interest is tips on specific threats, as noted in column headings. All models are weighted by district population, include four lags of the dependent variable, as well as district and week fixed effects. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table SI-9: Effects of wartime informing on counterinsurgent operational outcomes, including lags of dependent variable

	(1)	(2)	(3)	(4)
	Roadside Bombs Found/Cleared	Weapon Caches Found/Cleared	Insurgents Captured and Detained	Tactical Safe House Raids
IED TIPS (1 WEEK LAG)	0.0181** (0.00701)	0.00910*** (0.00286)		
ALL TIPS (1 WEEK LAG)			0.00659*** (0.00175)	0.00133*** (0.000492)
SUMMARY STATISTICS				
Outcome Mean	0.00371	0.00121	0.00123	0.000108
Outcome SD	0.0179	0.00857	0.00622	0.00183
PARAMETERS				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends	Yes	Yes	Yes	Yes
MODEL STATISTICS				
Number of Observations	171936	171936	171936	171936
Number of Clusters	398	398	398	398

Notes: Outcome of interest is specific counterinsurgent outcomes, as noted in column headings. All models are weighted by district population, include four lags of the dependent variable, as well as district and week fixed effects. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table SI-10: Effects of insurgent-initiated civilian casualties on civilians' wartime informing to security forces, unweighted regressions

	(1)	(2)	(3)	(4)
	All Tips	Threats to COIN Forces	Threats to Civilians	Tips about Insurgent Activity
CIVCAS (1 WEEK LAG)	0.0445 (0.0473)	0.0339 (0.0257)	0.00296 (0.00270)	-0.00105 (0.0199)
SUMMARY STATISTICS				
Outcome Mean	0.00952	0.00621	0.000424	0.00402
Outcome SD	0.0386	0.0267	0.00464	0.0210
PARAMETERS				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends				
MODEL STATISTICS				
Number of Observations	171936	171936	171936	171936
Number of Clusters	398	398	398	398

Notes: Outcome of interest is tips on specific threats, as noted in column headings. All models include district and week fixed effects. Models are unweighted. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table SI-11: Effects of wartime informing on counterinsurgent operational outcomes, unweighted regressions

	(1)	(2)	(3)	(4)
	Roadside Bombs Found/Cleared	Weapon Caches Found/Cleared	Insurgents Captured and Detained	Tactical Safe House Raids
IED TIPS (1 WEEK LAG)	0.0656*** (0.0112)	0.0223*** (0.00509)		
ALL TIPS (1 WEEK LAG)			0.0117*** (0.00289)	0.00231*** (0.000711)
SUMMARY STATISTICS				
Outcome Mean	0.00438	0.00138	0.00123	0.000131
Outcome SD	0.0215	0.0106	0.00800	0.00259
PARAMETERS				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends	Yes	Yes	Yes	Yes
MODEL STATISTICS				
Number of Observations	171936	171936	171936	171936
Number of Clusters	398	398	398	398

Notes: Outcome of interest is specific counterinsurgent outcomes, as noted in column headings. All models include district and week fixed effects. Models are unweighted. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table SI-12: Effects of wartime informing on counterinsurgent operational outcomes, comparing tip types

	(1)	(2)	(3)	(4)
	Roadside Bombs Found/Cleared	Roadside Bombs Found/Cleared	Weapon Caches Found/Cleared	Weapon Caches Found/Cleared
ALL TIPS (1 WEEK LAG)	0.0161** (0.00678)		0.0117*** (0.00403)	
IED TIPS (1 WEEK LAG)		0.0645*** (0.0131)		0.0272*** (0.00820)
SUMMARY STATISTICS				
Outcome Mean	0.00371	0.00371	0.00121	0.00121
Outcome SD	0.0179	0.0179	0.00857	0.00857
PARAMETERS				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends	Yes	Yes	Yes	Yes
MODEL STATISTICS				
Number of Observations	171936	171936	171936	171936
Number of Clusters	398	398	398	398

Notes: Outcome of interest is specific counterinsurgent outcomes, as noted in column headings. All models are weighted by district population, and include district and week fixed effects. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table SI-13: Effects of insurgent-initiated civilian casualties on civilians' wartime informing to security forces, falsification test

	(1)	(2)	(3)
	All Tips	All Tips	All Tips
CIVCAS (1 WEEK LEAD)	0.276*** (0.0492)	0.0595** (0.0283)	0.0168 (0.0219)
CIVCAS (CURRENT)	0.379*** (0.0525)	0.114*** (0.0316)	0.0798*** (0.0250)
CIVCAS (1 WEEK LAG)	0.309*** (0.0495)	0.0630*** (0.0226)	0.0364** (0.0182)
SUMMARY STATISTICS			
Outcome Mean	0.00805	0.00805	0.00805
Outcome SD	0.0284	0.0284	0.0284
PARAMETERS			
District FE	Yes	Yes	Yes
Time FE	Yes	Yes	Yes
Violence Trends (T+1, T, T-1)	No	Yes	Yes
Tips Lag	No	Yes	Yes
Tips Lead	No	No	Yes
MODEL STATISTICS			
Number of Observations	168354	168354	168354
Number of Clusters	398	398	398

Notes: Outcome of interest is all tips. All models are weighted by district population and include district and week fixed effects. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table SI-14: Effects of wartime informing on counterinsurgent operational outcomes, falsification test

	(1)	(2)	(3)
	Roadside Bombs Found/Cleared	Roadside Bombs Found/Cleared	Roadside Bombs Found/Cleared
IED TIPS (1 WEEK LEAD)	0.0560*** (0.0141)	0.0169** (0.00723)	0.00280 (0.00749)
IED TIPS (CURRENT)	0.0791*** (0.0131)	0.0360*** (0.00856)	0.0279*** (0.00813)
IED TIPS (1 WEEK LAG)	0.0689*** (0.0135)	0.0136* (0.00770)	0.0141* (0.00738)
SUMMARY STATISTICS			
Outcome Mean	0.00371	0.00371	0.00371
Outcome SD	0.0179	0.0179	0.0179
PARAMETERS			
District FE	Yes	Yes	Yes
Time FE	Yes	Yes	Yes
Violence Trends (T+1, T, T-1)	No	Yes	Yes
Tips Lag	No	Yes	Yes
Tips Lead	No	No	Yes
MODEL STATISTICS			
Number of Observations	168354	168354	168354
Number of Clusters	398	398	398

Notes: Outcome of interest is IEDs found and cleared. All models are weighted by district population and include district and week fixed effects. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.