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# An Argument for Documenting Casualties

Violence Against Iraqi Civilians 2006

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Katharine Hall, Dale Stahl

Prepared for the Office of the Secretary of Defense

Approved for public release; distribution unlimited



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## Preface

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Protecting the civilian population is one of the central tenets of U.S. counterinsurgency (COIN) doctrine. Until very recently, however, the U.S. military has not had a formal system for documenting the level of violence directed against Iraqi civilians. Therefore, other groups (such as nongovernmental organizations, the United Nations, and Iraqi ministries) have filled the vacuum in reporting, relying on media accounts, surveys, death certificates, and other open-source information to generate datasets of varying transparency and quality. The resulting statistics have generated widespread debate over sources, methods, and political biases. This study examines available open-source data on Iraqi civilian fatalities and assesses problems associated with previous collection and analysis efforts. The authors seek new observations about trends in targeting and weapons in 2006 and propose a framework for future civilian fatality data-collection efforts in Iraq and beyond.

This research was sponsored by the Office of the Secretary of Defense and conducted within the International Security and Defense Policy Center of the RAND National Defense Research Institute, a federally funded research and development center sponsored by the Office of the Secretary of Defense, the Joint Staff, the Unified Combatant Commands, the Department of the Navy, the Marine Corps, the defense agencies, and the defense Intelligence Community.

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## Summary

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The problem of measuring the number of civilian fatalities in Iraq gained widespread media coverage when the *Lancet* published a study in October 2004 claiming that more than 100,000 Iraqi civilians had been killed since the U.S. invasion in March 2003. The authors of this study later released another report, published in October 2006, asserting that 655,000 Iraqi civilians had been killed since the invasion.<sup>1</sup> The findings of both *Lancet* studies were widely debated along with other efforts to count civilian fatalities, such as the Iraq Body Count (IBC). This debate has highlighted the problems associated with measuring civilian fatalities in a violent, unstable situation.

Until recently, the U.S.–led Coalition did not have a formal system for documenting the level of violence directed at Iraqi civilians; the only publicly available sources of data were independent studies (*Lancet*, IBC), United Nations figures, and Iraqi government statistics. Because protecting the population is one of the central tenets of U.S. COIN doctrine, it can be surmised that trends related to Iraqi civilian fatalities should be a chief concern for the U.S. military. Thus, in order to develop a better picture of what is happening to the civilian population and support the creation of more-effective strategies to protect it, this document examines and analyzes available data on violent incidents involving Iraqis. While these data provide insight into the nature and characteristics of this violence, what can be gleaned from nonmilitary sources is somewhat limited. This limitation suggests that

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<sup>1</sup> Sarah Boseley, “655,000 Iraqis Killed Since Invasion,” *The Guardian*, October 11, 2006.

the U.S. military may wish to organize its own effort to gather this kind of information.

This document begins by evaluating the open-source data currently available. Much of these data are problematic because of how they were collected—e.g., through media reporting, politicized government agencies, or incomplete police or hospital reports—or because of their level of fidelity (i.e., there are limits on what can truly be known about violence from simple statistics). The first chapter of this document analyzes the problems associated with various collection efforts.

In response to these limitations, the RAND study team compiled a more robust dataset for 2006 by combining two extant databases, the IBC dataset and RAND's own RAND–Memorial Institute for the Prevention of Terrorism Knowledge Base dataset. Because of the means by which both of these sources collect information, the team was able to conduct a detailed coding of the new dataset to extract and standardize information. (Note that lack of detail and standardization is one of the main flaws associated with other data collection methods.) RAND's new dataset provides a great deal of relevant information about each violent incident, including attack type, target, weapon type, and location. This dataset provided the RAND study team with a basis for a thorough analysis of violence against Iraqi civilians in 2006.

Two of the key findings from the 2006 data analysis are (1) that the majority of attacks against civilians were directed at individuals without any identifiable affiliation and (2) that most attacks were carried out using firearms. These findings, among others documented in this monograph, imply a high level of widespread and regular violence beyond the spectacular and deadly attacks that result from car and suicide bombs. This type of violence has generated a large refugee problem and poses a significant challenge for both the Coalition and Iraqi Security Forces.

Important recommendations and conclusions for data collection can be drawn from this study's close examination of Iraqi civilian fatalities. As demonstrated through the analysis of the 2006 data, collecting detailed information on Iraqi fatalities is useful and necessary to accurately assess the level and nature of violence in the country. However, beyond some of the statistics set forward during the congressional testi-

mony of GEN David H. Petraeus, it is not clear that anyone in the U.S. military or Coalition is systematically collecting and analyzing these data. Had there been a more robust effort to collect accurate information on Iraqi civilians, military strategists and political leaders might have acted more determinedly to secure the civilian population prior to the carnage of 2006. The final chapter of this document reviews developments in 2007, in terms of the level of violence and the U.S. military's effort to catalogue it.

The Coalition, now under the guidance of General Petraeus, the author of the U.S. Army's December 2006 COIN field manual, has made the goal of securing the population the centerpiece of its strategy. Although General Petraeus' September 2007 congressional testimony demonstrates that the U.S. military has begun to collect data on Iraqi civilian fatalities, these data have not been made available, and it is thus difficult to determine their quality and accuracy. Consequently, this document concludes with a proposed framework for future collection efforts.





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# Abbreviations

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CAP	Combined Action Program
CI	confidence interval
CIOC	Coalition Intelligence Operations Center
COIN	counterinsurgency
CORDS	Civil Operations and Rural Development Support
COSIT	Iraqi Central Organization for Statistics and Information Technology
ESRI	Environmental Systems Research Institute, Inc.
FM	field manual
IBC	Iraq Body Count
IED	improvised explosive device
IFHS	Iraq Family Health Survey
ISF	Iraqi Security Forces
JIEDDO	Joint Improvised Explosive Device Defeat Organization
MIPT	Memorial Institute for the Prevention of Terrorism
MoH	Ministry of Health [Iraqi]
MoI	Ministry of the Interior [Iraqi]

NGO	nongovernmental organization
PRT	provincial reconstruction team
SIGACTS	significant activities
UN	United Nations
UNAMI	United Nations Assistance Mission to Iraq
VBIED	vehicle-borne improvised explosive device

## Introduction

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As expressed in the U.S. Army counterinsurgency (COIN) field manual (FM), two of the main goals of military operations in the COIN context are to secure the population and separate the insurgency from the populace.<sup>1</sup> Achieving these aims is of paramount importance to realizing other objectives of a COIN campaign. Logically, securing the population requires some understanding of what is happening to it:

- the level of violence it is experiencing
- the types of hostilities occurring and the targets being attacked
- the effects that these hostilities have on the population and on the organizations seeking to respond to the population's needs
- the role the military believes it should assume in response to this situation.

This monograph examines these requirements in the context of current COIN operations in Iraq and seeks to address the question of how the U.S. military can collect information on civilian violence to improve its COIN campaigns in general.

This document's findings are primarily based on an examination of two sources. The RAND Corporation first examined quantitative material on violence against Iraqi civilians produced by various non-RAND organizations, including the United Nations (UN), the Iraqi government, and independent institutions. It then became apparent that RAND itself had the capacity to provide additional quantitative

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<sup>1</sup> U.S. Department of the Army, FM 3-24, *Counterinsurgency*, December 2006.

material that would enable a more complete analysis. RAND therefore generated its own dataset of violent incidents against civilians in Iraq. This second dataset, the primary source for this document, represents a compilation and filtering of two different collection efforts: the Iraq Body Count (IBC), undertaken by a group of independent scholars, and the RAND–Memorial Institute for the Prevention of Terrorism (MIPT) database, a joint project between RAND and MIPT. Based on the requirements of time and funding, this dataset is limited to 2006. However, it demonstrates the potential of a more robust information collection and analysis effort. In addition to these two data sources, the RAND study team carried out field research in Amman, Jordan, in May 2007 to obtain firsthand accounts from on-the-ground observers of the conflict. These observers included journalists, independent researchers, Iraqi citizens, nongovernmental organization (NGO) workers, UN officials, and others.

The second chapter of this document describes and examines the current, publicly available quantitative data on Iraqi civilian fatalities. Much of these data are contradictory or subject to political considerations, and the second chapter also provides an analysis of these issues. The third chapter presents an analysis of RAND's own 2006 dataset, which represents the most comprehensive compilation of open-source material on the subject. This analysis introduces some important findings regarding attacks on Iraqi civilians, and raises a number of important questions. The fourth chapter reviews recent developments in Iraqi civilian fatalities in 2007 and seeks to place the findings of the previous two chapters into the context of U.S. military COIN doctrine. The final chapter proposes a framework for better documentation of civilian fatalities in Iraq and in general.

## Counting Iraqi Civilian Deaths

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To begin an analysis of violence against Iraqi civilians, the RAND team examined currently available open-source information on violent incidents and civilian fatalities. This chapter outlines the methodologies and findings of four major datasets: the *Lancet* study, the UN, IBC, and the Iraqi government. This examination also highlights the limitations of each, demonstrating the need for better collection efforts. Table 2.1 provides an overview of this comparison.

### The *Lancet* Studies

Iraqi civilian fatalities became a hot topic in the media and in the U.S. Congress when the *Lancet* published a 2006 study that reported an estimated 655,000 civilian deaths in Iraq since the March 2003 invasion, the largest estimate at the time (and to date). The study was conducted by a group of researchers from Johns Hopkins University and led by epidemiologist Dr. Les Roberts, whose previous research experience includes surveying conflict-related fatalities in Rwanda and the Congo. The research was a continuation of work published in the *Lancet* in September 2004.<sup>1</sup>

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<sup>1</sup> Les Roberts, Riyadh Lafta, Richard Garfield, Jamal Khudhairi, and Gilbert Burnham, "Mortality Before and After the 2003 Invasion of Iraq: Cluster Sample Survey," *The Lancet*, Vol. 364, No. 9448, November 20, 2004, pp. 1,857–1,864; Gilbert Burnham, Riyadh Lafta, Shannon Doocy, and Les Roberts, "Mortality After the 2003 Invasion of Iraq: A Cross-Sectional Cluster Sample Survey," *The Lancet*, Vol. 368, No. 9545, October 21, 2006, pp. 1,421–1,428.

**Table 2.1**  
**Comparison of Studies**

Study	Duration	Approximate Number of Violent Fatalities	Approximate Deaths Per Day	Sources
Lancet	March 2003 to June 2006	655,000 (CI 392,979 to 942,636)	538 (CI ~322 to 773)	Cluster sample survey
Iraq Family Health Survey (IFHS)	March 2003 to June 2006	151,000 (95 percent CI 104,000 to 223,000)	124 (CI ~85 to 183)	Cluster sample survey
UN	2006	34,000	93	Ministry of Health (MoH); Medical Legal Institute
IBC	February 2003 to mid-October 2007	75,000 to 82,000	43 to 48	Media reports
Iraqi statistics (MoH and Ministry of the Interior [Mol])	2006	14,000 to 23,000	38 to 63	Morgue or hospital reports; police reports

NOTES: The statistics provided in the various datasets cover different periods and include varying levels of specificity. This table compares the major reports according to deaths per day, which provides a rough estimate of the level of violence described in each dataset.

Both *Lancet* studies used a cluster sampling survey to estimate Iraqi deaths. Accordingly, the research team assigned clusters to each governorate depending on the size of the population. For example, in the 2004 study, seven clusters were allocated to the Baghdad Governorate, which had a population of 5.1 million people, and two clusters were allocated to the Basra Governorate, which had a smaller population of 1.3 million people. The study team visited and surveyed 30 adjacent households in each cluster, asking residents about deaths occurring during a preinvasion period from January 1, 2002, to March 18, 2003, and a postinvasion period from March 19, 2003, to September 16, 2004. The research team used the numbers gathered for the preinvasion period as a baseline mortality rate because of the lack of avail-



able census data for the country. The number of households in each cluster increased to 40 for the second study.

The 2004 study estimates that 98,000 excess deaths occurred during the 18 months that followed the March 2003 invasion. Excess deaths were those that fell above the baseline preinvasion level. Most of these were violent deaths, which the study team defined as “those brought about by the intentional acts of others.”<sup>2</sup> This figure excludes data collected from Fallujah, which the study team deemed a statistical outlier because of its (1) high levels of violence compared to other cities and (2) significantly larger number of abandoned houses compared to other surveyed areas. Comparing the postinvasion death estimate with the preinvasion crude mortality rate results in a 1.5-fold increase in mortality after the Coalition invasion.

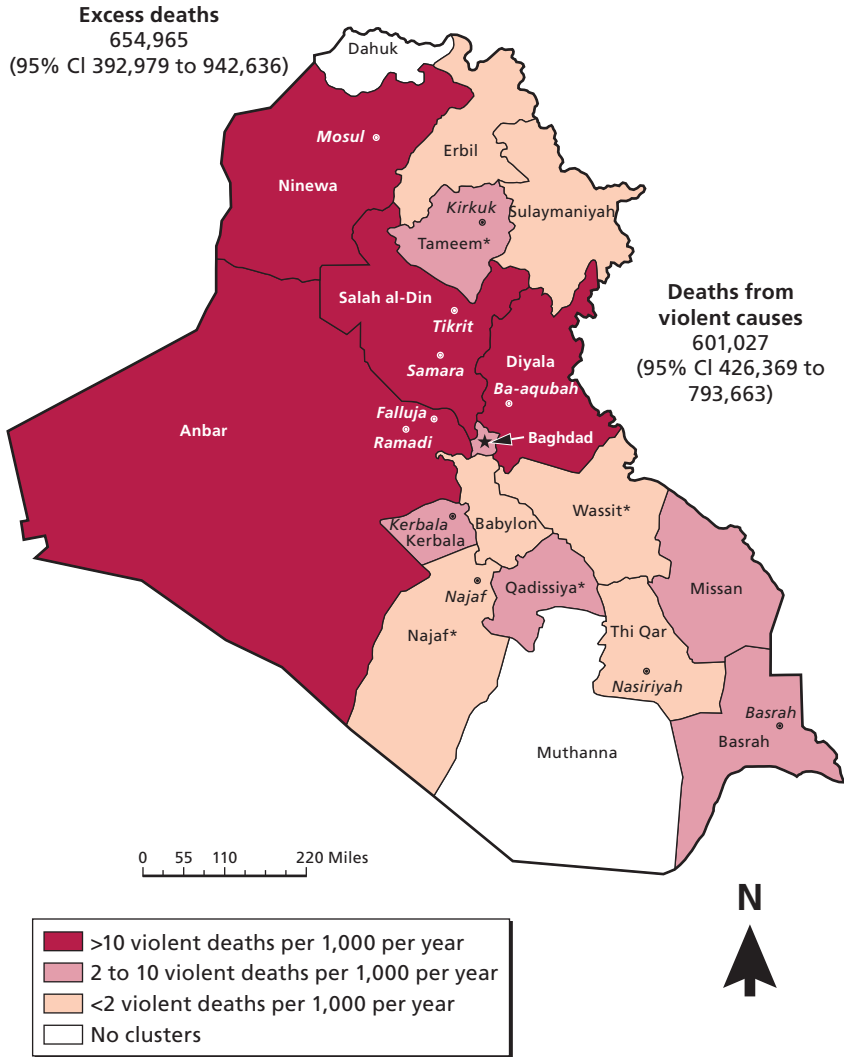
The 2006 study estimates that more than 650,000 excess deaths occurred during the 40 months that followed the invasion. The 2006 findings corroborate the 2004 study, showing 112,000 deaths in the first 18 months of this period. However, the risk of death increased from 1.5 times the preinvasion rate during March 2003 to April 2004 to 3.6 times the baseline from June 2005 to June 2006. Figure 2.1 shows the violent death rates by governorate, as plotted by the *Lancet* study team. The 2006 survey also examined more closely the types of violent attacks. Gathering information from the respondents and from the cause of death recorded on death certificates, the survey team categorized total deaths into major causes: Coalition (31 percent), other (24 percent), and unknown (45 percent). The survey team also noted specific causes of death: gunshot (56 percent), car bomb (13 percent), other explosion or ordnance (14 percent), air strike (13 percent), unknown (2 percent), and accident (2 percent).

Such a high number of deaths (2.5 percent of the total population) indicates an extreme level of violence and insecurity, suggesting the need for equally intense measures to produce calm. As debated in the media and among policymakers when the 2006 article was published, these measures could have included a major influx of Coalition troops or a radical change in force deployment and configuration.

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<sup>2</sup> Roberts et al., 2004, p. 1,859.

**Figure 2.1**  
**2006 *Lancet* Study Deaths Due to Violent Causes, by Governorate**



\*Uncertain estimate  
(<3 clusters, no prior survey)

SOURCE: Burnham et al., 2006, p. 1,426. Used with permission.

RAND MG740-2.1

(The 2007 U.S. “surge” is an example of such an influx of troops.) This elevated death rate may also have indicated that the Coalition was no longer fighting an insurgency, but a full-blown civil war.

Cluster sample surveys are frequently used for this type of analysis, and the methodology of the *Lancet* study is widely considered appropriate. However, the *Lancet* study has been criticized.<sup>3</sup> Most of these critiques are based on study limitations specific to Iraq. For example, critics charged that the estimate of deaths relies heavily on the correct calculation of the preinvasion baseline mortality rate. However, as noted above, no recent census data were available. (The last official census in Iraq was conducted in 1997.) Second, the clusters allocated by the research group covered predominately urban areas, and security conditions limited the surveyors’ travel outside of major population centers. However, roughly 33 percent of Iraqis (9 million people) live in rural areas,<sup>4</sup> and the high concentration of attacks in urban centers means that the study may have inflated actual mortality rates. These and additional critiques of the study appeared in a January 2007 issue of the *Lancet*.<sup>5</sup> Critics also noted overreliance on death certificates during survey data collection, the small number of clusters surveyed, and potential biases due to overreporting and household selection. The study team countered most of these criticisms, particularly defending the small number of clusters surveyed (47), noting that if they had missed significant areas, their estimate was lower (not higher) than reality. Debate over the *Lancet* study has been revived in two recent and critical articles in the *Boston Globe* and the *National Journal*.<sup>6</sup> These critiques go farther than those published in the *Lancet*, calling into question the political biases of the study (the survey findings were released before elections), the sampling methodology and small

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<sup>3</sup> *Lancet* has published these critiques and allowed the study authors to respond.

<sup>4</sup> Estimates based on statistics from the Food and Agricultural Organization, homepage, 2003.

<sup>5</sup> See “Letters to the Editor,” *The Lancet*, Vol. 369, No. 9556, January 13, 2007.

<sup>6</sup> Jacoby, Jeff, “A War Report Discredited,” *The Boston Globe* (online), January 13, 2008; Neil Munro and Carl M. Cannon, “Data Bomb,” *National Journal* (online), January 4, 2008.

number of clusters, and the lack of transparency of the survey team's methodology and findings. The *Lancet* team has not released its raw data, and the Iraqi contact who organized the surveys in the country will not discuss his methods, according to these reports. These facts make it difficult to address the questions brought forward by criticisms of the study, but it should also be noted that no serious peer-reviewed analysis of the *Lancet* study has been published as of this writing.<sup>7</sup>

Instead, a new survey, also based on household clusters, serves as a counterpoint to the *Lancet* study. The IFHS Study Group and the World Health Organization released their report in January 2008.<sup>8</sup> The IFHS used a clustering methodology similar to the *Lancet* team's, although it sampled a much larger number of household clusters (1,086). The IFHS report estimates 151,000 Iraqi deaths due to violence from March 2003 to June 2006 (a time frame similar to that used by the *Lancet* team). This estimate is significantly lower than the *Lancet* studies', with a number of deaths per day closer to that reported by IBC (see Table 2.1). Although the IFHS study was just released, a debate about its findings, especially as compared to the *Lancet* studies', is already in progress. Addressing the large gap in the estimates of violent deaths during comparable time periods, Dr. Roberts has argued that the two studies actually found similar results (approximately a twofold increase in deaths after the U.S. invasion) but that the *Lancet* studies attribute more of these deaths to violence than does the IFHS study.<sup>9</sup> A continuing debate over these two survey studies will help illuminate the challenges of conducting surveys in Iraq, particularly those seeking to measure levels of violence.

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<sup>7</sup> There is support for the *Lancet* study in peer-reviewed journals. See Scott Zeger, "Estimating Excess Deaths in Iraq Since the US—British-Led Invasion," *Significance*, Vol. 4, No. 2, June 2007, pp. 54–59.

<sup>8</sup> Iraq Family Health Survey Study Group, "Violence-Related Mortality in Iraq from 2002 to 2006," *The New England Journal of Medicine*, Vol. 358, No. 5, January 31, 2008, pp. 484–493.

<sup>9</sup> Stephen Fidler and Steve Negus, "Post-Invasion Death Toll in Iraq Put at Over 150,000," *Financial Times*, January 10, 2008.

## United Nations Reports

The UN Assistance Mission to Iraq (UNAMI) reported a death toll of 34,452 Iraqis during the 2006 calendar year. This figure was released in the UNAMI Human Rights Report that covered November 1 to December 31, 2006.<sup>10</sup> The data were compiled from information on Iraqi deaths provided by the Iraqi MoH and the Medical Legal Institute of Baghdad. As discussed below, the Iraqi MoH collects data primarily from morgues and hospitals around the country. The report compares its 2006 figure to an estimate of 30,000 Iraqi deaths from April 2003 to December 2005. UNAMI did not perform its own data collection for this estimate, citing “open sources” instead.

According to the UN report, violence against Iraqi civilians was higher in 2006 compared than in earlier years. The report identifies three major characteristics of violence against civilians. First, the violence was widespread: No ethnic or religious group was spared. Second, the effects of violence were not limited to a specific age or gender. Although men suffered the majority (roughly 90 percent) of fatalities, women and children were also affected. For instance, the male fatality rate led to higher numbers of women-only households. Finally, the report draws conclusions about the nature of the violence. Most deaths were caused by gunshot wounds, and many victims also suffered from torture, although the UN provides few specific data to support the latter assertion. The report also indicates that fewer Iraqis were dying from explosions, suggesting that suicide bombings and car bombs, while spectacular, may not have been the main cause of Iraqi civilian deaths in 2006.

The conclusions of the UN report differ from those of the *Lancet* study. The UN found that the level of violence against civilians in Iraq in 2006 was considerably lower, with approximately 93 deaths per day, as opposed to the *Lancet*'s 546 deaths per day. Moreover, since the UN

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<sup>10</sup> UN Assistance Mission to Iraq, *Human Rights Report 1 November–31 December 2006*, n.p., n.d.. This report is part of a series of human rights reports that UNAMI has issued approximately every three months. As of this writing, the latest UNAMI human rights reports, issued for January–March 2007 and April–June 2007, did not include civilian casualty data because the Iraqi government did not provide the relevant information.

report suggests that firearms were the main cause of violent deaths, the Coalition may wish to focus more attention on armed gangs, criminal activity, and general lawlessness. While car bombs may cause many fatalities in a single incident, the UN figures indicate that this type of attack posed less of a threat to the populace in 2006. This fact may encourage a greater focus on policing efforts to restore order in the short term, rather than on hunting down groups that use terror techniques. Capturing these “high-value individuals” would be a longer-term goal to be pursued after the population is more secure.

The UN figures have several limitations. First, in terms of useful data, the UN report does not provide much more than the total monthly or yearly estimate, because it does not list specifics about individual incidents or deaths. Instead, it details only “significant” attacks, and the criteria for such a designation are not explained. Second, much of the UN data comes from the Iraqi MoH and are therefore subject to political considerations. For example, the *New York Times* reported that the Iraqi government told hospitals to stop releasing information to the United Nations because it wanted to have greater control over information that could be used to show whether government strategies were working.<sup>11</sup> As noted above, the Iraqi government did not make its statistics available for the most recent UNAMI human rights reports. Third, not all bodies make it to a hospital or morgue. There is evidence of mass graves and reluctance on the part of Iraqis to bring bodies to a hospital. Finally, since the identities of the bodies are not provided, there is no way to ascertain how many of the dead were combatants rather than noncombatants or civilians. Based on the figures provided by the UN, analysts are unable to guess what motivated the violence or who perpetrated it.

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<sup>11</sup> Warren Hoge, “U.N. Says Iraq Seals Data on Civilian Toll,” *New York Times*, October 21, 2007, p. 7.

## Iraq Body Count

The IBC was founded in February 2003, before the invasion, by a group of academics led by Hamit Dardagan, a freelance researcher based in London, and John Sloboda, a psychologist at the University of Keele (and also the executive director of the Oxford Research Group). IBC collects information on Iraqi deaths from media reports and uses these data to maintain an online database of violent incidents.<sup>12</sup> For an incident to be recorded, it must be verified by two separate media sources. These sources include English-language international and U.S. media outlets, such as the British Broadcasting Corporation, Al Jazeera, the *New York Times*, the Associated Press, Reuters, and the *Jordan Times*.

Each IBC database entry contains a record of the incident date, time, location, target, weapon, maximum fatalities, minimum fatalities, and media sources. Compared to the UN data, IBC collects more detail on each incident, making it possible to further analyze trends in attack types, frequency, and targets. IBC has already completed some of this analysis and posted it to its Web site.<sup>13</sup>

According to its database, IBC has identified 59,000 to 64,000 Iraqi civilian fatalities “attributed to our [Coalition] military intervention in Iraq”<sup>14</sup> from just before the start of the war in February 2003 through March 13, 2007. This range represents the minimum and maximum fatalities reported in the database and the uncertainty results from conflicting media reports for the same event. By reporting a minimum and maximum, IBC tries to account for discrepancies in reporting. IBC numbers include Iraqi police fatalities but do not include COIN police special forces, commandos, paramilitaries, Iraqi National Guards, or new members of the Iraqi Army. IBC includes the following causes of violence in its database: military (Coalition), paramilitary (insurgency or sectarian violence), and criminal activity (caused by the breakdown of law and order since the invasion). IBC’s emphasis on fatalities resulting from military and paramilitary actions

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<sup>12</sup> IBC, homepage, 2003–2007.

<sup>13</sup> See IBC, “A Dossier of Civilian Casualties in Iraq 2003–2005,” July 2005.

<sup>14</sup> IBC, 2003–2007.

demonstrates its early focus on recording collateral damage during and immediately after the Coalition invasion.

The IBC report released in July 2005 analyzes data from March 20, 2003, through March 19, 2005, and assigns responsibility for fatalities to one of the following four parties: U.S.-led forces, antioccupation forces, unknown agents, and criminals. The report claims that 37 percent of civilian deaths during this period were attributable to U.S.-led forces acting alone. Criminals accounted for a similar amount, 36 percent. Antioccupation forces were responsible for 9 percent of deaths.

The IBC's categories are somewhat imprecise. For instance, the report does not provide a precise definition of what kinds of attacks it attributes to criminals, although it does indicate that it includes deaths reported at morgues in this category. Unknown agents are defined as "those who do not attack obvious military/strategic or occupation-related targets."<sup>15</sup> It is not clear how the attacks made by unknown agents differ from criminal killings, except that they include cases in which targets were not related to the occupation. The IBC acknowledges that there might be some overlap between categories.

Further IBC analysis shows that more than 80 percent of victims were adult men and that many attacks (45.3 percent) occurred in Baghdad. Where the occupations of the victims could be defined, police and security employees were the most targeted, followed by political and governmental figures and inactive Iraqi military personnel. Finally, the report identifies the major methods of attack. Explosive devices were the weapon of choice for 53.0 percent of incidents; of these, 64.0 percent of the attacks are attributed to air strikes, presumably from Coalition forces. Car bombs (suicide and nonsuicide) caused 7.7 percent of fatalities.

The major message of the IBC analysis is that antioccupation forces played a relatively small role in causing civilian deaths through 2005. Thus, efforts to protect the population should have focused on reducing collateral damage and defeating criminal elements. Somewhat problematically for any analyst interested in the current (or more recent) situation, the IBC database and related analyses include inci-

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<sup>15</sup> IBC, 2005.



dents that occurred during the invasion. A more detailed examination of the postinvasion period is necessary and is attempted in RAND's own dataset.

The IBC dataset is problematic in several respects. First, its reliance on media reports may “favor” particular types of attacks, such as ones with higher fatalities, and regions where media outlets are concentrated, such as Baghdad. Therefore, undercounting is likely. Second, there are problems with the dataset's organization. The entries in the dataset are not standardized, and collectors may fill out the fields however they please. For instance, place names can be spelled in various ways, which makes geographic analysis of the dataset difficult. The entries in the location, weapons, and target fields are particularly idiosyncratic. While some standardization was apparently accomplished for the July 2005 IBC analysis, this standardized information is not readily available, and it is not clear whether IBC will undertake further analysis. Finally, as noted above, the conceptual framework that IBC created for its analysis does not provide a particularly useful level of fidelity, considering the fact that the violence occurring in Iraq from 2006 to 2007 differs substantially from that occurring during the invasion period. Moreover, the categorization methods chosen are vague and may overlap, leading to a murky conceptual framework and opaque analysis.

## **Iraqi Government Statistics**

There is no Iraqi government central office dedicated to collecting fatality statistics. Instead, fatality-related data are gathered by the MoH and the MoI. These collection efforts are conducted separately, however, and they rely on different sources. The MoH data on civilian fatalities are based on death certificates and reported numbers from morgues and government hospitals. The MoI data, on the other hand, are collected from police reports and do not include deaths that occur after a person is wounded, fatal kidnappings, deaths that result from U.S. or Iraqi forces, or unidentified bodies. Neither dataset has been publicly released; the ministries have only provided information through selec-

tive statements to the press. Thus, it is very difficult to gauge the comprehensiveness of these data and the methods used to ensure accuracy.

Moreover, the reports from the two ministries have been confusing and suggest that political considerations have exerted considerable influence over the reporting. On January 1, 2007, the MoH and the MoI issued a joint statement claiming that 13,895 Iraqi civilians, police, and soldiers died in 2006.<sup>16</sup> Strangely, the MoH issued another statement a week later claiming 22,950 Iraqi deaths in 2006.<sup>17</sup> These releases may have been intended to counter higher numbers that appeared in a UN report that was published around the same time (this report was mentioned above). Then–health minister ‘Ali Hussein al-Shamari stated that the UN’s numbers were mistaken:

Yes, we have casualties, but not that huge number of casualties. The true number might be a quarter that, although we feel sorry for those who are dying. But they want to mislead the world about conditions in Iraq.<sup>18</sup>

Moreover, the dysfunction in the system is not simply caused by political or religious differences but is particularly exacerbated by the violence that targets the Iraqi government and its security infrastructure.

Because the detailed civilian fatality data collected by the Iraqi government are not available to the public, it is difficult to draw any conclusions from the numbers that are reported. It is also not clear what format the data are recorded in and whether the two ministries work together to produce or analyze the data. Because this information is not collected centrally or with any detectable oversight, it is most likely that each ministry—each with its own political affiliations—collects data the way it wants. In addition, the limited collection efforts of each ministry suggest that some deaths are not being reported. Cer-

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<sup>16</sup> Steven R. Hurst, “Iraq: 12,000 Civilians Killed in ‘06,” Associated Press, January 2, 2007.

<sup>17</sup> Sudarsan Raghavan, “War’s Toll on Iraqis Put at 22,950 in ‘06,” *Washington Post*, January 8, 2007, p. A01.

<sup>18</sup> Nancy Trejos, “Death Toll for Iraqis Reaches New High; 3,709 Civilians Killed in October, U.N. Says,” *Washington Post*, November 23, 2006, p. A01.

tain attacks, such as kidnappings, may not be reported to authorities for fear of retaliation.

The limitations of the government's data suggest that it may be useful to establish a centralized and transparent statistics-gathering and analysis center or ministry. The rebuilt Iraqi Central Organization for Statistics and Information Technology (COSIT) could be expanded and used to generate an updated Iraqi census.<sup>19</sup>

## Conclusions

The various sources of available statistics on violence against Iraqi civilians provide incomplete and often conflicting information. The high numbers generated by the *Lancet* studies may have been skewed by limitations stemming from the specific conditions in Iraq, despite the use of a methodology used to document civilian fatalities during other conflicts. The UN and Iraqi government statistics are politically implicated and lack the fidelity necessary to gain a more sophisticated picture of the situation on the ground. Finally, the IBC numbers, which rely on media reports (the only source of unclassified information that can be safely harvested), would benefit from greater detail and further analysis.

Overall, the state of information gathering on the situation of Iraqi civilians is extremely poor. This poverty of information enables speculation, as is clear from the conclusions reached by the various studies reviewed. According to the *Lancet*, Iraq was suffering a catastrophic civil war, and the Coalition's efforts to limit the effects of its operations on the civilian population were woefully inadequate. If the IBC analysis is to be believed, U.S.-led forces and amorphous criminal elements posed the most significant threat to Iraqi civilians. These various conclusions require different policy and tactical actions. A more robust information gathering effort is clearly needed. The next chapter

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<sup>19</sup> The Iraqi COSIT had originally planned to carry out a new country census. However, these plans have stalled, and the status of this effort is unknown. More information on COSIT is available online at Iraqi Central Organization for Statistics and Information Technology, "Introduction," n.d.

details RAND's efforts to build a more complete and useful unclassified record of violent incidents against Iraqi civilians in 2006. However, even this effort is not sufficient, and it too suffers from some of the same problems as other information-gathering projects. Although it is an improvement compared to currently available data, the RAND dataset comes with caveats, which are presented along with the data in the next chapter. The overall difficulties associated with collecting complete and useful information on Iraqi civilians are addressed in a later chapter, where this document presents a framework for better information gathering and data analysis that will be useful to policymakers and troops on the ground.

## Detailed Analysis of RAND's Civilian Violence Dataset

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In an effort to obtain more-comprehensive data on Iraqi civilian fatalities, RAND has compiled its own dataset. Work to create this database started under another RAND project, sponsored by the Department of Defense Joint Improvised Explosive Device (IED) Defeat Organization (JIEDDO),<sup>1</sup> to examine civilian fatalities due to IEDs, but the database was completed and fully analyzed for 2006 during this study. Like the IBC dataset, the RAND dataset relies on media reporting; however, it also combines the RAND-MIPT Terrorism Knowledge Base with IBC incidents.

RAND's database on incidents of terrorism around the world is maintained in coordination with the MIPT.<sup>2</sup> Data are collected primarily from media reports, following a methodology similar to IBC's (see Chapter Two for a detailed description of IBC). Specifically, the RAND-MIPT database collects information about incidents from open-source material gathered by RAND analysts and research assistants. This information is entered into a database and reviewed by

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<sup>1</sup> JIEDDO is the task force established by the Department of Defense to address the issue of IEDs in Iraq.

<sup>2</sup> The database is available online at MIPT Terrorism Knowledge Base: A Comprehensive Databank of Terrorist Incidents and Organizations, homepage, n.d. Information about the database methodology is available online MIPT Terrorism Knowledge Base, "TKB Data Methodologies," n.d. From 1968 to 1997, the RAND-MIPT Incident Database collected material on international terrorism incidents, i.e., terrorism incidents that crossed international borders. Since 1998, the RAND-MIPT Terrorism Knowledge Base has monitored all incidents of terrorism worldwide.

a small team of analysts for accuracy and relevance. The Terrorism Knowledge Base focuses expressly on terrorism incidents; therefore, it does not capture all instances of violence in Iraq.<sup>3</sup> However, IBC data can be checked against it, and the combination of the two increases the number of incidents captured and allows better organization of the data.

RAND's database on Iraqi civilian fatalities, therefore, is a merged version of the Terrorism Knowledge Base and IBC datasets. It provides standardized information on the incident date, time, location, target, weapons or tactic, average fatalities, and whether the attack resulted from an IED, vehicle-borne IED (VBIED), or suicide mission. While this dataset still suffers from the same problems as any media-based collection effort, the media are often the only nongovernmental, unclassified source of information about individual violent incidents against Iraqi civilians (see Chapter Two for a discussion of the range and limitations of current collection efforts). This dataset represents an improvement over available other datasets in the following respects:

- It provides greater detail and better standardizes information, such as target type and weapons used, than do the *Lancet*, Iraqi government, and UN reports.
- To the extent that media reports can be corroborated, its data are reviewed and verified by two separate collection efforts.
- Its data do not rely on an artificial baseline or on potentially politicized Iraqi government organizations.
- It standardizes location information for more-effective incident mapping.
- Its merging and standardization of two separate databases yields a more-comprehensive understanding of the data than could be achieved by examining the two sources separately.

While merging the two datasets, RAND developed a tool that searched for duplicate entries and cross-referenced each incident in

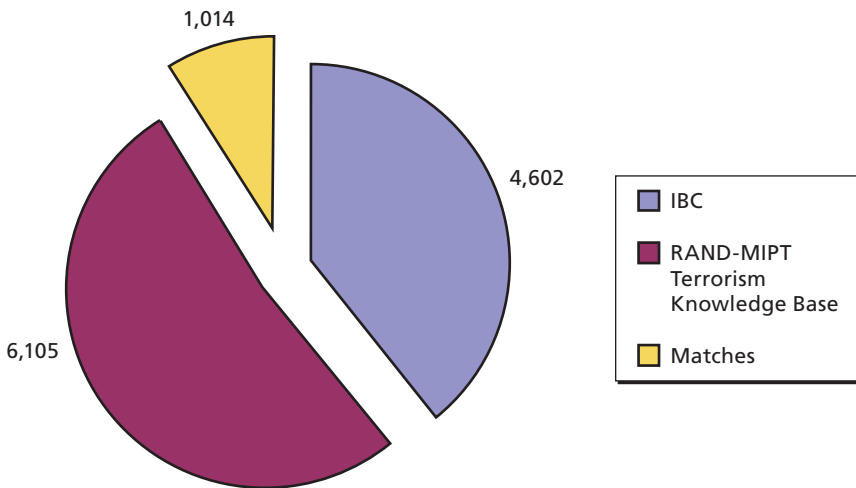
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<sup>3</sup> For the MIPT Terrorism Knowledge Base's definition of terrorism, see MIPT Terrorism Knowledge Base, "Glossary," n.d.

the new dataset with its match or matches in the original datasets. A RAND analyst then checked the matches flagged by the tool to minimize duplications, especially of high-fatality attacks that could significantly affect overall results. (While this time-intensive process created a comprehensive dataset on violent incidents against civilians in Iraq and eliminated redundancies, it should be noted that duplicate entries may still exist). Figure 3.1 shows the number of matched entries in the resulting database and demonstrates the added value of merging the two datasets.<sup>4</sup>

The duplicate search tool also standardized entry data and therefore enables more-accurate analysis of location, target, and attack trends. The RAND tool added additional fields to each entry and coded them

**Figure 3.1**  
Comparison of MIPT Terrorism Knowledge Base's Incidents to IBC Data



RAND MG740-3.1

<sup>4</sup> The RAND-MIPT database focuses only on incidents of terrorism, so many incidents reported in the IBC database do not appear in the RAND-MIPT database. For instance, the IBC database contains information on bodies found, morgue casualties, and random shootings, whereas such information is not recorded in the RAND-MIPT dataset. In theory, the IBC database should contain all the incidents found in the RAND-MIPT database. However, this is not the case.

using standardized categories that were later used during analysis. Location names were standardized according to the city and province names in the Environmental Systems Research Institute, Inc. (ESRI) Iraq shapefile. This recoding of location information was important for incident data mapping. Neither the RAND-MIPT Terrorism Knowledge Base nor the IBC dataset follows any standard naming convention for Iraqi place names.

## The RAND Dataset

The RAND team focused most of its analytic efforts on 2006 and undertook a significant recoding of data to better analyze incidents from that year. However, the full dataset includes information from 2003 through 2006, although data prior to 2006 is not standardized or coded at the same level of detail. However, it is useful to point out some of the important trends in this data to set the stage for a deeper, more-sophisticated analysis of the 2006 information.

RAND's estimate puts Iraqi fatalities from May 2003 through mid-January 2007 at approximately 52,000.<sup>5</sup> This number does not include Iraqis killed during the invasion because this study seeks to analyze the violence that occurred after major combat operations. As noted in the discussion of IBC's numbers, it is likely that fatality statistics based on media reporting will undercount, particularly considering the size of Iraq and the longevity of the conflict. Moreover, since the estimate does not account for Iraqi deaths during major combat operations, the total number of Iraqis who died as a result of the Coalition invasion and subsequent deterioration of security in Iraq is certainly higher, perhaps considerably. As is also clear from RAND's dataset, 2006 was a very violent year in Iraq: 27,000 of the 52,000 fatalities captured by the database occurred in 2006. Table 3.1 compares the RAND dataset to the other studies examined in the previous chap-

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<sup>5</sup> These numbers are approximate because the RAND-MIPT database records a single fatality count, whereas the IBC records a range if different numbers are found in various sources. To compensate for the difference between how the two databases record fatalities, the new RAND dataset uses the average of the IBC count.



**Table 3.1**  
**Comparison of Studies, Including RAND's Dataset**

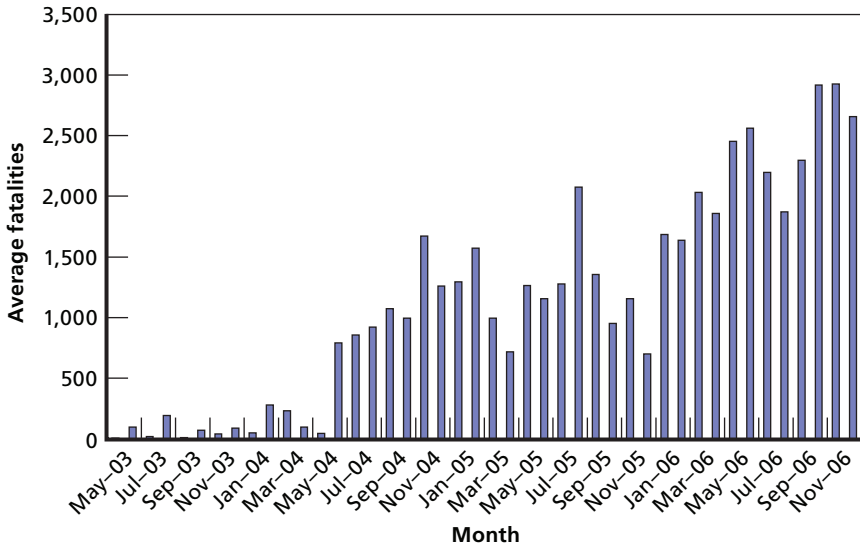
Study	Duration	Approximate Number of Fatalities	Approximate Deaths Per Day	Sources
<i>Lancet</i>	March 2003 to June 2006	655,000 (CI 392,979 to 942,636)	538 (CI ~322 to 773)	Cluster sample survey
IFHS	March 2003 to June 2006	151,000 (95 percent CI 104,000 to 223,000)	124 (CI ~85 to 183)	Cluster sample survey
UN	2006	34,000	93	MoH; Medical Legal Institute
RAND dataset	2006	27,000	73	Media reports; IBC and RAND
IBC	February 2003 to mid-October 2007	75,000 to 82,000	43 to 48	Media reports
Iraqi statistics (MoH and Mol)	2006	14,000 to 23,000	38 to 63	Morgue or hospital reports; police reports

ter and includes RAND's 2006 total only (for easier comparison with the UN and Iraqi government figures). According to the approximate number of fatalities per day, RAND's numbers suggest a level of violence similar to that indicated by the IBC and UN numbers.

As of this writing, the number of recorded Iraqi deaths has been steadily growing since June 2004. In June 2004, when the U.S.-led Coalition transferred sovereignty to the new government of Iraq, civilian deaths jumped to approximately 790, up from 44 the previous month. The number of civilian deaths per month has exceeded 500 since June 2004. Figure 3.2 shows the number of Iraqi civilian fatalities since the end of major combat operations in May 2003.

While the upward trend displayed in Figure 3.2 is obvious, Figure 3.3 provides a clearer sense of magnitude by showing the monthly averages for each year from 2003 through 2006.

**Figure 3.2**  
**Iraqi Fatalities, May 2003 to December 2006**



NOTE: This figure shows the number of Iraqi fatalities each month since the end of major combat operations in May 2003. These numbers have not been filtered to exclude the deaths of Iraqi police or security forces.

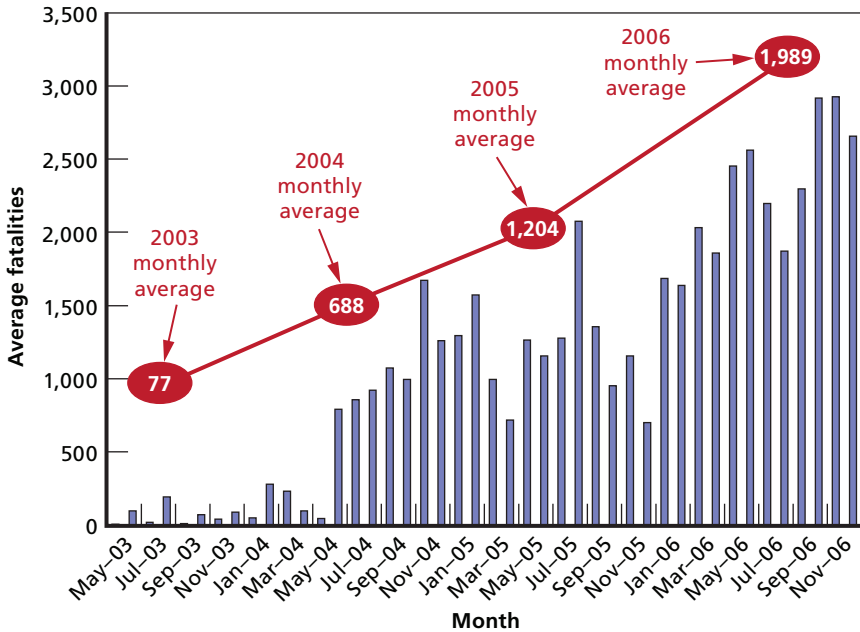
RAND MG740-3.2

U.S. fatalities did not also increase significantly, however. In fact, U.S. and Iraqi fatalities were increasing at about the same rate up until June 2004, after which U.S. fatalities plateaued while monthly Iraqi civilian fatalities continued to increase significantly (see Figure 3.4).

RAND’s dataset also includes attacks on Iraqi Security Forces (ISF). Figure 3.5 compares Iraqi civilian and ISF fatalities from March 2005 to April 2006. The data show that ISF fatalities as a percentage of total fatalities started decreasing in December 2005. However, the total number of fatalities increased during this period.

The decrease in the number of ISF fatalities has sometimes been used to declare success in setting up an Iraqi police force. However, a more-accurate measure of success would be the ability of the ISF to protect the Iraqi population, and the data indicate that neither the Coalition nor the ISF had much success in this regard during this period.

**Figure 3.3**  
**Monthly Averages of Iraqi Fatalities**



RAND MG740-3.3

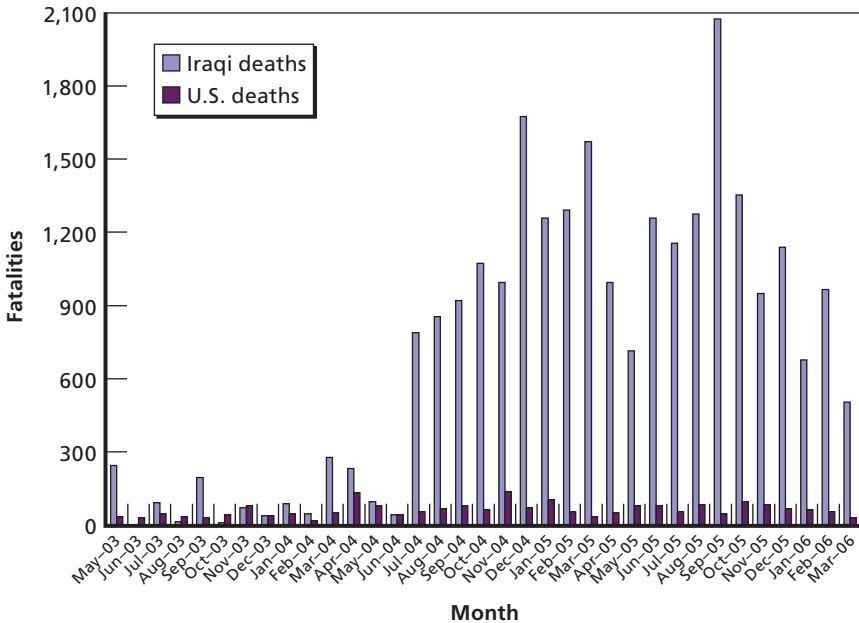
Later in this chapter, we further examine the various targets, including police and ISF, within the 2006 dataset.

### **A Closer Look at 2006: Who Is Being Attacked, Where, and How**

To obtain a more-detailed picture of the violence in Iraq, this study selected one year in the dataset (2006) and conducted a more-detailed coding of entries for target, location, and weapon information (refer to the beginning of this chapter for a list of coding terms used in this process).

The majority of fatalities in Iraq during 2006 are best described as “individuals” (see Figure 3.6), who accounted for 51.8 percent of deaths. This category includes attacks on private citizens, persons with

**Figure 3.4**  
**Iraqi Versus U.S. Fatalities**



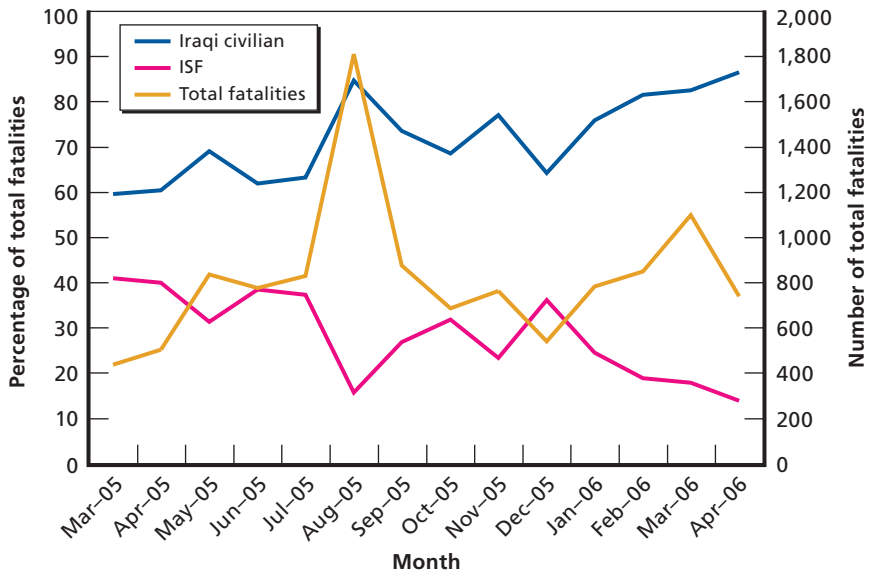
RAND MG740-3.4

no known association to some other target category, such as an educational institution or the government. Bodies found in a morgue, on the street, or elsewhere were included in this category, unless more information about an association with another target category could be determined.

**The Government and Its Security Forces**

The next major target of violence was the police, who constituted 15.5 percent of attacks. Police targets included ISF, Iraqi police, Iraqi firefighters, Iraqi border guards, Interior Ministry forces, Iraqi non-military security checkpoint guards, and Facilities Protection Service forces. Notice that this percentage of fatalities correlates with the trend suggested in Figure 3.5. At 3.4 percent, the government is the fourth-largest target category. Government targets included Iraqi government workers and officials, relatives of government officials, former officials,

**Figure 3.5**  
**Comparing ISF and Iraqi Civilian Fatalities**



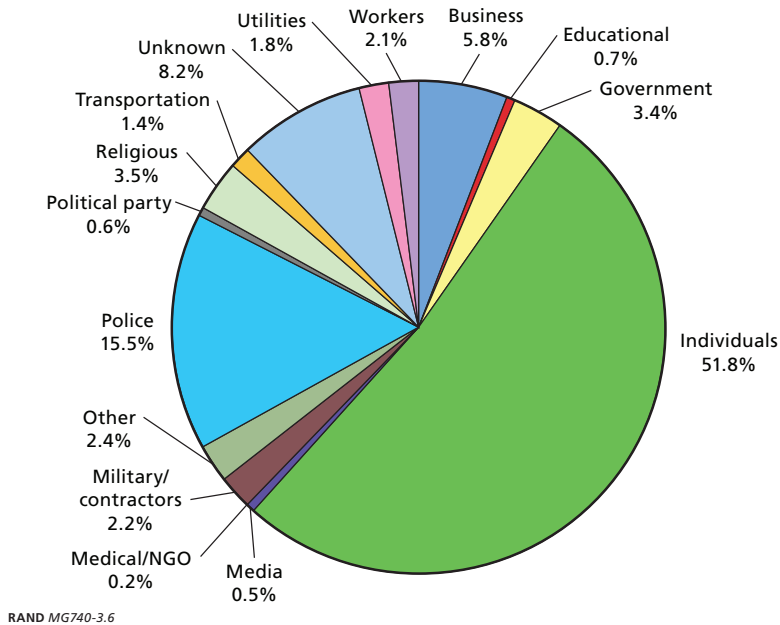
NOTE: The total number of ISF fatalities can be found at Iraq Coalition Casualty Count, homepage, 2003–2007.

RAND MG740-3.5

diplomats, and judges. Other government-related categories include political parties (0.6 percent) and military/contractors (2.2 percent). The former category includes attacks on political party offices and on political party officials and members not serving in the government. The latter category includes attacks on Iraqi or U.S. military or contractors that involved Iraqi civilian fatalities. Examples of targets in this category included translators, guides, civilian recruiters, Iraqi civilians at recruiting centers, relatives of soldiers or military officials, and bystanders who died as a direct result of a military operation. Thus, by combining these categories, it is clear that over one-fifth of the fatalities in Iraq were related to attacks on the government and its activities.<sup>6</sup>

<sup>6</sup> The effects of violence against government targets are significant for Iraq's future and underscore difficulties in asserting authority and maintaining morale. The violence poisons relationships between government officials, and these personality conflicts can make con-

**Figure 3.6**  
**Targets of Violence, 2006**



### Businesses and the Economy

Business is the third-largest category. Fatalities that occurred while the victims were frequenting or operating a business constituted 5.8 percent

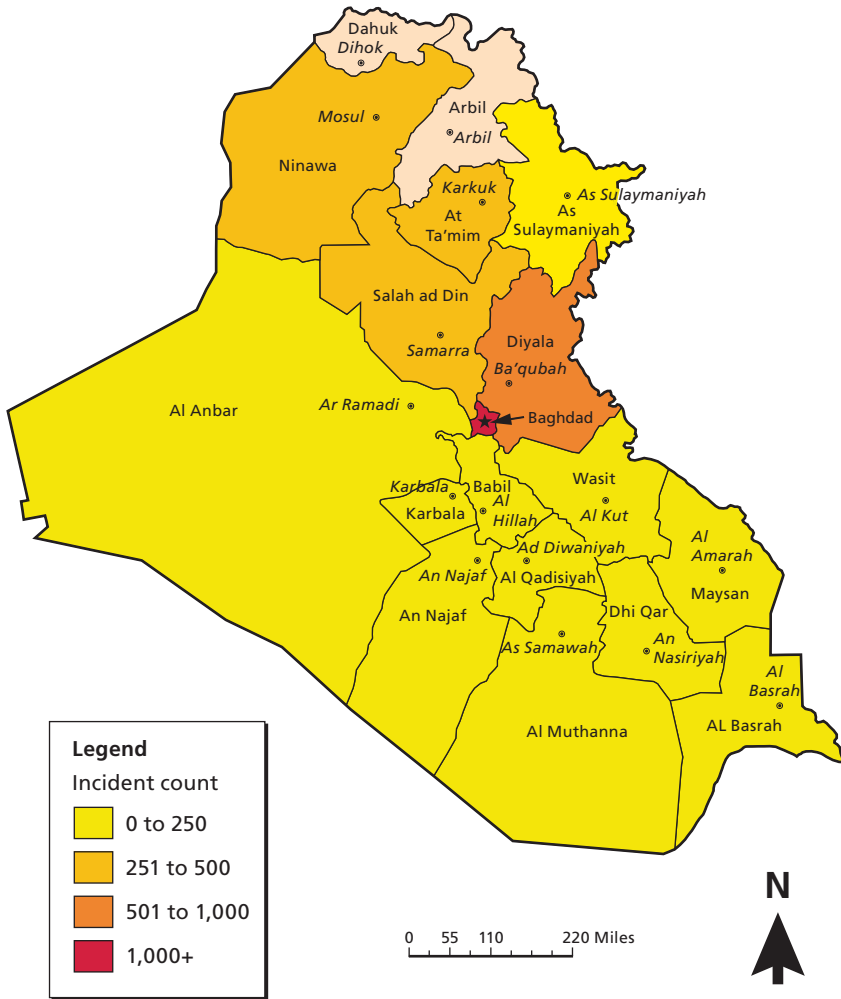
tinuing work impossible. Conversations with political NGOs in Amman that work with Iraqi legislators and bureaucrats indicated that violence plays a major role in reducing trust between parties. One observer noted that talks usually required a “cool-down” period and were often more productive if conducted outside the Middle East. Participants needed time to release angry rhetoric and the stresses of the situation under which they operated before any useful conversation might take place. Significant attacks against Iraqi officials included the October 2003 assassination of the deputy mayor of Baghdad, Faris Abdul Razzaq al-Assam, and the August 2007 assassinations of two provincial governors, Khalil Jalil Hamza of Qadisiya (August 11) and Mohammed Ali Hassani of the Muthanna province (August 20). Authors’ interview with representatives of political NGOs in Amman occurred in May 2007. See also Carol J. Williams, “Second Iraqi Governor Killed in Bombing; Radical Cleric Sadr’s Militia Is Suspected in the Deaths of the Two Leaders, Loyal to Rival,” *Los Angeles Times*, August 21, 2007, p. 7. In Jeffrey Gettleman, “The Struggle for Iraq,” *New York Times* (online), February 7, 2004, the journalist records a number of attacks on academics and lower-tier government workers.

of the total. This category includes a wide range of businesses, including markets, shops, stalls, restaurants, vendors, banks, and hotels. Still, this percentage does not adequately describe the level of violence aimed at debilitating Iraq's economy. Other targets in this category included workers (2.1 percent), utilities (1.8 percent), and transportation (1.4 percent). Iraqi civilians involved in economic activities—from transporting goods to repairing oil infrastructure—constituted 11.1 percent of the fatalities in 2006.

### **Geographical Distribution**

We also looked at the 2006 data spatially across Iraq. Figure 3.7 shows the distribution of fatalities across the country during the year. The map shows that the greatest number of fatalities occurred in and around Baghdad. Meanwhile, the northernmost and southernmost provinces were considerably less violent. The second-largest number of fatalities occurred in the Diyala province. No incidents were reported in Arbil or Dahuk, but this lack of reported incidents may have been due to the limited availability of fatality information because the region was controlled by the Kurdish regional government. This distribution of violence in 2006 indicates that Baghdad was, not surprisingly, the most violent area of Iraq, followed by Baqubah, Mosul, Samarra, and Kirkuk. It should be noted that the high concentration of fatalities in Baghdad was likely affected by the greater media presence in the capital; the media had better access to information in Baghdad and therefore reported more violent incidents. Also, a significant number of fatalities were reported from morgues, most of which are located in Baghdad. However, the assessment that the majority of attacks causing fatalities occurred in Baghdad was supported by the other datasets and by data provided by GEN David H. Petraeus in his September 2007 report to Congress (see Chapter Four).

**Figure 3.7**  
**Map of Violent Incidents in 2006**



NOTE: This map distorts Karbala, making it appear much larger than it actually is. This problem is prevalent in several maps of Iraq, and the RAND team has been unable to find an updated version. However, the distribution of incidents on the map is accurate.



### Tactics and Weapons

The U.S. media has focused an increasing amount of attention on attacks on U.S. forces conducted with IEDs and suicide bombs.<sup>7</sup> The latter have become a weapon of choice for Al-Qaeda affiliates in Iraq, while the former have been more common among local Iraqi insurgent groups and militias. VBIEDs are also sometimes combined with a suicide attack. Because of the attention given to IEDs and suicide attacks, the U.S. military has focused considerable effort on defeating IEDs. The RAND civilian dataset, however, shows that IEDs accounted for only 5 percent of the fatalities in attacks on Iraqi civilians in 2006. VBIEDs accounted for 19 percent, and suicide attacks accounted for 14 percent. In contrast, the database shows 15,547 deaths resulting from firearms, which represents 58 percent of the total deaths in 2006. Figure 3.8 provides a graphical representation of this relationship.

Moreover, when analyzing the weapons used against the largest category of fatalities, those of individuals with no known affiliation or association, the percentage killed by firearms rises to nearly 75 percent. Consequently, the up-arming and jamming techniques used by the Coalition to defeat IEDs may not be useful for reducing civilian fatalities, although these measures may save Coalition lives. To reduce civilian deaths, the Coalition and the Iraqi government need to implement measures to counter the types of armed attacks that are claiming the most lives.

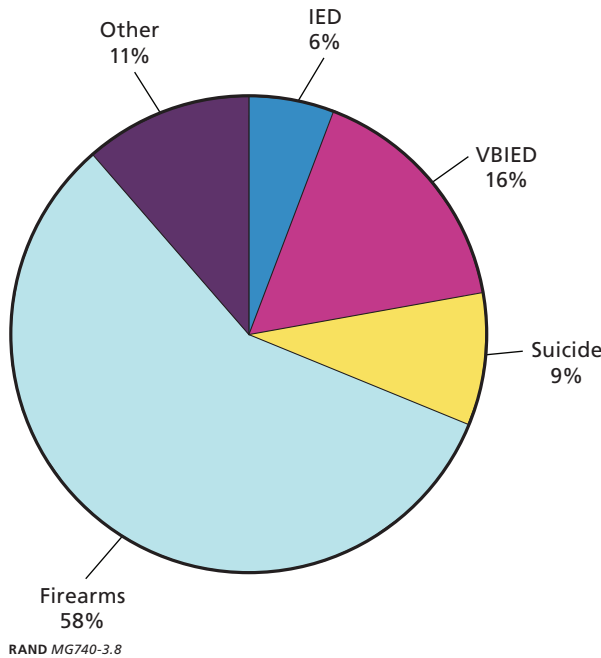
### Conclusions

This analysis of the RAND dataset of violent incidents against Iraqi civilians raises several significant issues. First, the RAND dataset suggests that the numbers produced by the Iraqi government are suspect—both the UN figures and RAND's own numbers indicate that the Iraqi government may be understating civilian fatalities. It

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<sup>7</sup> For example, the *Washington Post* ran an entire series of articles on the struggle against these devices. See Rick Atkinson, "Left of Boom: The Fight Against Improvised Explosive Devices," series, *Washington Post* (online), September 30–October 3, 2007.

**Figure 3.8**  
**Percentage of Iraqi Civilian Fatalities by Weapon Used**



is in the Iraqi government’s interest to deflate the number of civilian fatalities in order to appear effective to its own populace. Any study or analysis that relies upon figures provided by the Iraqi government should be cognizant of this situation.

Second, the suggestion that the ISF are more successful as a result of fewer ISF fatalities does not provide an adequate picture of their effectiveness vis-à-vis the civilian population. As a corollary to this, with nearly 60 percent of fatalities being due to the use of firearms, it is apparent that the emphasis on various types of IEDs has very little to do with securing the Iraqi population. The Coalition’s focus on IEDs betrays an emphasis on military force protection, and the data show that this force-protection priority resulted in little positive change in the situation of Iraqi civilians.

Third, the insurgency is specifically targeting the Iraqi government and the Iraqi economy. With over 30 percent of attacks aimed at these

two aspects of the Iraqi polity, it is apparent that the violence is directly aimed at reducing the ability of the Iraqi people to govern themselves and to generate an economy that can provide for the population.

Fourth, the preponderance of the violence is directed at, for lack of a better word, the common Iraqi civilian. The fatalities in this category for 2006 alone exceeded 14,000. This is a category for which there are no identifying data, no apparent or recorded reason, and no discernable affiliation or target. All we know of these people is that they were killed; this fact alone suggests that our capacity to understand, analyze, and effectively respond to the bloodshed is limited by a lack of information.

The next two chapters look at how these trends may have changed since 2006 and, most importantly, how the U.S. military might better collect useful information on Iraqi civilian fatalities.



## **Recent Developments: COIN and the U.S. Military's Data Collection Effort**

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In December 2006, three years after the U.S.–led Coalition invasion of Iraq, the U.S. Army published its first FM on COIN operations in over 20 years. The FM, which was written jointly with the U.S. Marine Corps, is the only current, official COIN-specific military guidance. While it can be argued that Iraq does not fit the mold of a traditional insurgency environment, the FM is the best source for understanding how the U.S. military conceptualizes its operations in Iraq, which have clearly extended beyond conventional warfare, and include the following: postcombat and stability operations, provision of essential services (military operations other than war), and information operations. Included in the military's COIN framework is a heavy emphasis on the host-nation population, both in providing for its security and in gaining its support. These two areas are of utmost importance for this study, which is concerned with the level of violence against the civilian population. This chapter examines the military's COIN guidance along with recent academic and policy COIN research as it relates to civilians. This chapter also reviews recent trends in civilian fatalities since 2006 and developments in military collection efforts highlighted by the congressional testimony of General Petraeus in September 2007.

## COIN and Iraq: Doctrine Versus Reality

Protecting the population is one of the main tenets of COIN doctrine and is explicitly stated in the FM as the military forces' primary function in COIN operations.<sup>1</sup> The FM's sections on civil security discuss civil control as an aspect of stability operations and also emphasize developing the host nation's security capabilities to protect the population. Suggested goals and objectives within the realm of civil security include the following:

- Secure the population continuously.
- Separate the insurgency from the populace by identifying and neutralizing the insurgency's political and support infrastructure.
- Counter crime.
- Secure national and regional borders and isolate the insurgency.
- Integrate with security forces and hand over responsibility on a case-by-case basis.<sup>2</sup>

As the last bullet suggests, the security of the population should be the responsibility of the host nation whenever possible, and the main priority of the U.S. military is to support the local government in carrying out this responsibility. In fact, ensuring that the host nation is able to maintain the security of areas within the country is one of the five "overarching requirements" listed in the FM for successful COIN operations.<sup>3</sup>

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<sup>1</sup> U.S. Department of the Army, 2006, p. 2-1.

<sup>2</sup> As listed in U.S. Department of the Army, 2006, Figure 5-2, "Example goals and objectives along logical lines of operations." The five main logical lines of operations are combat operations/civil security operations, host-nation security forces, essential services, governance, and economic development. Information operations are constant across all these lines.

<sup>3</sup> These requirements are (1) devising a plan for attacking the insurgents' strategy and focusing on restoring government legitimacy, (2) ensuring that host-nation forces secure the people continuously within one or more areas in the country, (3) initiating operations from the host nation's areas of strength against areas under insurgent control and the retaining this control, (4) expanding host-nation operations to regain control of insurgent areas, and

In addition to creating stability after major combat operations, protecting the population is also a key factor in another major tenet of COIN doctrine: winning over the local population. As the FM states, “[a]t its core, COIN is a struggle for the population’s support. The protection, welfare, and support of the people are vital to success.”<sup>4</sup> Not surprisingly, civilian attitudes and the population’s expectation that the military can protect it are key components of the security environment. According to the FM, ensuring the population’s safety, whether directly or through the host nation, is an important aspect of gaining the population’s support. The often-repeated saying of “separating the insurgents from the population” is meant in the FM both physically (through protection) and ideologically (through information operations). The FM implies that without both of these efforts, each focusing heavily on the local population, COIN operations will not succeed.

Recent academic and policy research has also highlighted the importance of protecting the population for successful COIN operations. As Bruce Hoffman wrote in a RAND-sponsored occasional paper, “[i]t is a truism of counterinsurgency that a population will give its allegiance to the side that will best protect it.”<sup>5</sup> Much of this research draws on lessons learned from COIN operations in Vietnam. In 2004’s “Back to the Street Without Joy,” Robert Cassidy evaluated the U.S. Marine Corps’ Combined Action Program (CAP), which brought together U.S. Marines and local forces in Vietnam. According to Cassidy, the CAP program brought U.S. forces into closer contact with the population, allowing better protection of the population as well as intelligence gathering. This program, along with the Civil Operations and Rural Development Support (CORDS) program, provided a good model for protracted counterinsurgencies. He writes that “[t]he invigorated civil and rural development program provided increased support, advisers, and funding to the police and territorial forces (regional forces

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(5) aggressively employing information operations. (U.S. Department of the Army, 2006, p. 5-1.)

<sup>4</sup> U.S. Department of the Army, 2006, p. 1-28.

<sup>5</sup> Bruce Hoffman, *Insurgency and Counterinsurgency in Iraq*, Santa Monica, Calif.: RAND Corporation, OP-127-IPC/CMEPP, 2004.

and popular forces).”<sup>6</sup> The CAP and CORDS programs are comparable to the provincial reconstruction teams (PRTs) the Coalition set up after Operation Iraqi Freedom. The PRT program pairs civilian teams with Coalition brigade combat teams at the provincial and local levels in Iraq. The purpose of the PRTs is to assist with rebuilding Iraqi government capacity, moderating against extremists, and launching reconstruction projects. The success of this program in Iraq, however, is ambiguous, primarily because of the lack of initiative and funding. A July 2007 White House assessment of U.S. operations in Iraq states that only half the allocated PRT personnel have been deployed and that money for assistance funds has not been released from Congress.<sup>7</sup>

Coalition efforts to train the ISF have also been lacking. According to the August 8, 2007, U.S. Department of State “Iraq Weekly Status Report,” the total number of trained and equipped ISF is approximately 353,100. This includes both MoI (police, national police, and other MOI forces) and Ministry of Defense (Iraqi Army, Air Force, and Navy) forces. The number of MoI forces alone is approximately 194,200. However, the MoI numbers include unauthorized absences and personnel who do not report for work.<sup>8</sup> The White House’s “Initial Benchmark Assessment Report” also acknowledged that satisfactory progress has not been made to “ensure that Iraqi Security Forces are providing even-handed enforcement of the law.” The report states that “ISF capability is increasing, but further ISF proficiency, improved logistics, and expanded forces are needed in order to assume more responsibility from Coalition Forces.”<sup>9</sup> Finally, the ISF have been unable to adequately protect themselves, as the RAND database shows. Police forces were the second most frequent target of violence in 2006. Although

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<sup>6</sup> Robert M. Cassidy, “Back to the Street Without Joy: Counterinsurgency Lessons from Vietnam and Other Small Wars,” *Parameters*, Vol. XXXIV, No. 2, Summer 2004, p. 77.

<sup>7</sup> U.S. White House, “Initial Benchmark Assessment Report,” July 12, 2007, pp. 2–3.

<sup>8</sup> The U.S. Department of State’s “Iraq Weekly Status Report” is produced by the Bureau of Near Eastern Affairs. The ISF statistics used in this chapter come from U.S. Department of State, Bureau of Near Eastern Affairs, “Iraq Weekly Status Report,” August 8, 2007.

<sup>9</sup> U.S. White House, 2007, p. 5.



the percentage in 2007 may have decreased from that of 2006, it still represents a significant proportion of attacks.

As an insight into what went wrong in Iraq in the extremely violent year of 2006, it is clear that operations on the ground, when compared to COIN doctrine and research, were not designed to effectively prosecute a COIN campaign. Put another way, the deteriorating security situation in Iraq during 2006, especially the increasing incidence of violence targeting civilians, did not indicate a primary or core effort to protect the population. Both aspects of civil security operations (protection and civilian support) appeared to be absent or failing. In fact, as discussed in Chapter Three, average Iraqi fatalities each month almost doubled from 2005 to 2006, with the majority of these being individuals targeted in indiscriminate attacks. Not only does this indicate that Coalition strategy was woefully misdirected after the end of major combat operations in May 2003, but it also suggests that, had there been a more-robust effort to collect accurate information on Iraqi civilians, military strategists and political leaders might have acted to secure the civilian population prior to the carnage of 2006.

## **The Reduction of Violence in 2007: General Petraeus and the Surge**

In an effort to quell the increased violence in 2006, the United States sent an additional 30,000 troops to Iraq in early 2007 (this deployment was part of a new security plan commonly known as the “surge”). President George W. Bush also replaced GEN George W. Casey, Jr., with General Petraeus as the top commander in Iraq.

In September 2007, General Petraeus presented Congress with a progress report on the surge. In his testimony, General Petraeus asserted that the Coalition was focusing on civilian violence as part of its COIN campaign.<sup>10</sup> This new focus has, according to wide agreement,

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<sup>10</sup> GEN David H. Petraeus, Commander, MNF-I, *Report to Congress on the Situation in Iraq*, Washington, D.C.: U.S. House of Representatives, Committee on Foreign Affairs and the Committee on Armed Services, September 10–11, 2007.

coincided with a reduction in civilian fatalities. Analysts disagree about the extent to which the surge has influenced the reduction of violence, but it appears that the additional manpower has had an effect.<sup>11</sup>

During his testimony, General Petraeus outlined an effort by MNF-I to collect better data on trends related to fatalities and ethno-sectarian violence during 2007. This effort involved data collection and analysis from both Coalition and Iraqi operations centers. According to General Petraeus' statement, these centers used "a methodology that has been in place for well over a year and that has benefited over the past seven months from the increased presence of our forces living among the Iraqi people."

Other than in the figures accompanying the testimony, however, these data have not been made publicly available. General Petraeus did not provide information on the specific sources MNF-I used, stating only that they involved a combination of Iraqi and U.S. statistics. It is not clear how the data collected from Iraqi sources differ from those provided thus far by the Iraqi MoI and MoH.

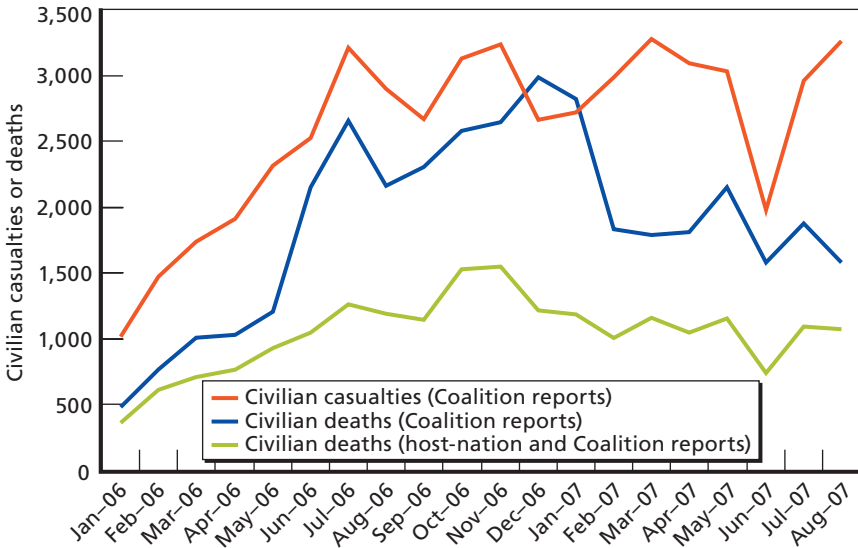
In a statement to the *Washington Post*, General Petraeus' spokesperson, COL Steven A. Boylan, tried to demonstrate the discrepancies between data available from the Coalition's "significant activities" (SIGACTS) database and the Iraqi government.<sup>12</sup> He provided the graph reproduced in Figure 4.1. The orange line depicts civilian casualties recorded in the SIGACTS III database. This line is the highest because it contains both injuries and fatalities. The green line depicts the number of civilian fatalities recorded by the Coalition in the SIGACTS database. The blue line represents the data used by General Petraeus during his testimony to Congress. This line is taken from information in the Coalition Intelligence Operations Center (CIOC) database; according to Colonel Boylan, these data include "unverified

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<sup>11</sup> Some analysts have argued that the drop in violence occurred partly because of other factors, including the completion of most of the ethnic cleansing and the condemnation of Al Qaeda by Iraqi Sunnis. See "Surge' and Go," *Los Angeles Times* (online), November 12, 2007.

<sup>12</sup> Coalition forces report all "significant activity" through daily SIGACTS reports, which sometimes include information on noncombatants killed and wounded.

**Figure 4.1**  
**Chart Showing Discrepancies in Data Used by General Petraeus**



SOURCE: Steven A. Boylan, "Statement by Colonel Steven A. Boylan, Spokesman for General David Petraeus, Commander, Multi-National Force–Iraq, to the Fact Checker," *Washington Post* (online), September 22, 2007.

RAND MG740-4.1

host nation reports" combined with the SIGACTS data. Consequently, this line is higher than the SIGACTS-only data.

Some of the claims that Colonel Boylan makes about these data are contradicted by the RAND database. Colonel Boylan argues that the host-nation reports are "inflated and redundant."<sup>13</sup> However, the RAND database suggests that the Iraqi ministries are actually *underreporting* fatalities. Colonel Boylan does not indicate whence these unverified reports originate. Moreover, the data collected in the SIGACTS database are known to report only those Iraqi fatalities that occur during Coalition-related incidents. Thus, there is a significant discrepancy between what is captured by the SIGACTS database and the number of fatalities described by the combined SIGACTS and host-nation information. While Colonel Boylan suggests that the combined

<sup>13</sup> Boylan, 2007.

numbers may be inflated, these combined numbers are actually very similar to what is reported in the RAND database for the months that can be compared.<sup>14</sup>

Colonel Boylan concluded that the U.S. military “completely stand[s] by our data as the most robust and accurate data available.”<sup>15</sup> However, without further information, it is difficult to assess the sources that the Coalition used, particularly given what is already known about how the Iraqi government and the Coalition collect and report information.

According to General Petraeus, the combined CIOC data show that Coalition and Iraqi COIN operations have reduced civilian deaths since the beginning of 2007, including deaths from ethnosectarian violence (see Figures 4.2 and 4.3). General Petraeus asserts that this success is the result of Coalition actions against Al-Qaeda in Iraq, the increased capability of the ISF, and the support of tribal forces in Al Anbar to counter Al-Qaeda. General Petraeus’ evaluation of the surge depends on data that show a decrease in civilian fatalities in Iraq, although he acknowledges that the level of attacks is still too high.

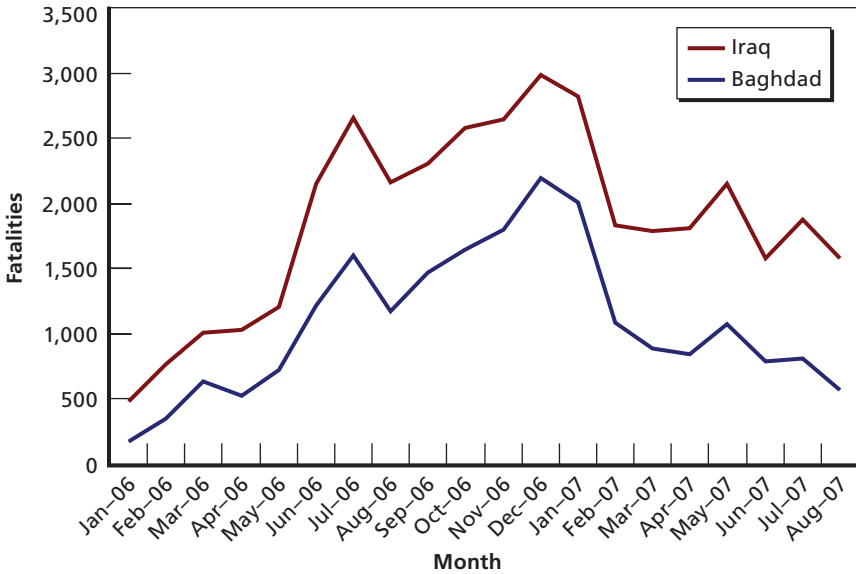
It is certainly significant that General Petraeus’ report shows that the Coalition now measures success in Iraq based on the level of civilian violence. The prominence given to attacks on civilians suggests that the Coalition is now applying many of the tenets of the new COIN FM. However, the lack of transparency regarding the data collection only leads to questions of quality and utility, particularly given the previous information-gathering efforts that this RAND document has analyzed.

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<sup>14</sup> The Coalition’s combined data can be compared to the RAND database from May 2006 to December 2006. The Coalition did not effectively combine data until May 2006, and the RAND database is coded only through the end of 2006.

<sup>15</sup> Boylan, 2007.

**Figure 4.2**  
**Iraq Civilian Deaths Reported by General Petraeus**



SOURCE: U.S. House of Representatives, Committee on Foreign Affairs and the Committee on Armed Services, 2007.

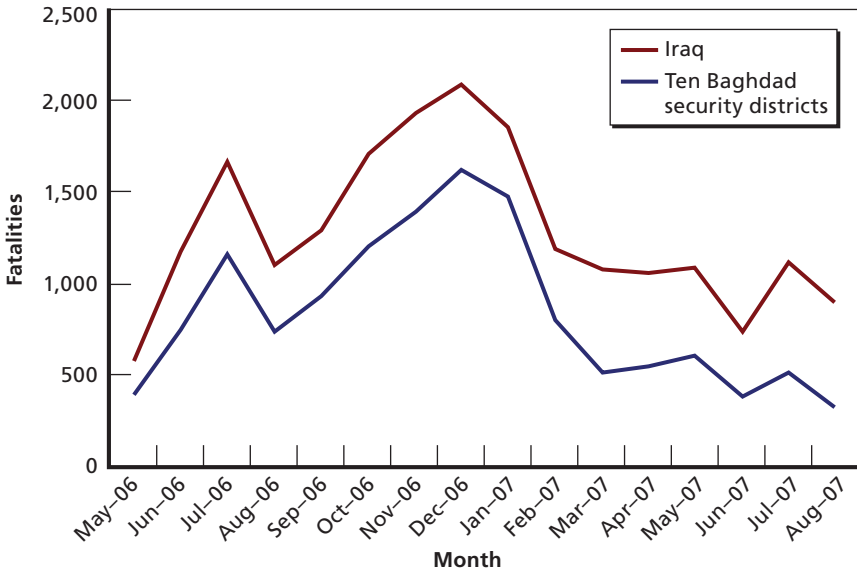
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## Conclusions

As observed in this analysis, the COIN FM clearly indicates that securing the civilian population is a main component of a COIN effort. The recent report by General Petraeus to Congress signifies a renewed commitment to the concepts set forth in the FM. Nevertheless, the Petraeus testimony and the data the Coalition has offered on violence against civilians in Iraq raise a number of questions of importance to this study about how information-gathering efforts have collected and analyzed data:

- How is the Coalition gathering and analyzing these data?
- Does the Coalition rely on the same politically “contaminated” sources that have been discredited by this and other studies?

**Figure 4.3**  
**Ethnosectarian Deaths Reported by General Petraeus**



SOURCE: U.S. House of Representatives, Committee on Foreign Affairs and the Committee on Armed Services, 2007.

RAND MG740-4.3

- How are policymakers and, by extension, the American people to independently verify and analyze this material?

The new emphasis on violence against Iraqi civilians is certainly a step forward in the U.S. military’s own conception of its role in COIN. As articulated by this document, a robust data collection effort may well provide the answers that lead to further decreases in Iraqi fatalities. Further funding and analysis of RAND’s dataset could produce results for 2007 that achieve levels of fidelity similar to those attained for 2006, allowing a verification of MNF-I data and perhaps more information regarding the effects of the surge. For example, an analysis of 2007 data might indicate target types or weaponry changed in correlation with MNF-I strategy, thus providing evidence for particular surge results.

The final chapter provides recommendations for how the U.S. military can extend its current efforts and establish a better framework for gathering and analyzing information on violence against Iraqi civilians and more generally.





## Conclusions and Recommendations: A Better Collection Framework

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This monograph has examined the violence directed against the civilian population in Iraq. After reviewing data available on violent attacks on Iraqis, the RAND study team has determined that a comprehensive source of information does not exist, particularly one that provides the detail necessary for U.S. military policymakers and troops on the ground. Using available unclassified information, the RAND study team merged two databases and conducted extensive coding to answer the key questions of who is being killed, where, and how. Accordingly, this study provides a detailed analysis in response to these questions for the year 2006. This analysis provides valuable insight into the types of attacks being conducted against civilians and the identities of the civilians being targeted. We found that individual, government, and economic targets were the top three objects of violence in 2006 and that civilians were primarily attacked with firearms. These findings shaped our recommendations for NGO involvement and for cooperation among the UN, MNF-I, and the Iraqi government. These organizations can play key roles in managing the effects of violence, which include a significant refugee problem.

Throughout the preceding pages, this document has identified the limitations of the data available. Indeed, when Central Intelligence Agency Director Michael Hayden commented that “[n]o single narrative is sufficient to explain all the violence we see in Iraq today,” he correctly described the difficulties faced in attempting any characterization

of the hostilities occurring in Iraq.<sup>1</sup> Nevertheless, it is clear from every study conducted that the violence in Iraq has been quite significant and that civilians have borne the brunt of the attacks. Consequently, quibbling about totals and this number or that seems counterproductive; rather, an effort should be made to determine *trends* and collect information that will allow a systematic response to reduce the violence. The analysis in this document demonstrates what can be done when more-complete information is placed within an effective analytical framework. Still, it is evident that even this more comprehensive effort falls short. In the end, the Coalition and the Iraqi government have the responsibility to either collect this data or create a mechanism with which policymakers can gain a clearer picture of what is happening in Iraq. Without an accurate assessment (or “situational awareness”) of what is happening to the civilian population, attempts to secure this population run the risk of achieving only partial success at best.

As has been discussed in the preceding pages, a number of plausible policies can be implemented to improve the analysis of the situation of civilians in Iraq. Any one of these policies would help the Coalition conduct a better COIN campaign. There is a clear need for better information gathering and analysis of violence against civilians in Iraq. As shown in Chapters Two and Three, there is significant disagreement regarding the number and causes of fatalities in Iraq. The wide range of estimates—from 14,000 in 2006 to nearly 650,000 from 2003 to 2006—suggests that a more effective information-gathering and analysis process would be extremely useful. While RAND’s dataset marks a step forward for more-detailed analysis, it still suffers from the problem of being media-centric. An improved information-gathering and analytical process could be designed and implemented by an Iraqi central statistics agency that is highly independent of government interference. It is already apparent that statistics on fatalities are a highly charged political topic.

As discussed in the previous chapter, recent testimony by General Petraeus indicates that the military is making a greater effort

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<sup>1</sup> Walter Pincus, “Violence in Iraq Called Increasingly Complex,” *Washington Post*, November 17, 2006, p. A19.

to track Iraqi civilian deaths. MNF-I should make these data publicly available, given that civilian fatalities have become a more prominent measure of progress for Coalition and Iraqi success in Iraq. At the very least, MNF-I should provide detailed information about what its dataset includes.

In these final paragraphs, we identify key elements that are necessary for a framework for collecting information on civilian violence and fatalities. These elements, based on our findings in this study, will be important for the Coalition or an outside agency to incorporate into its data collection and analysis.

First, any collection effort on civilian violence must pay attention to **categories of violence** and **incident detail**. As demonstrated through our coding of the RAND dataset for 2006, details about the nature of the attack, the targets, and the location are important for further analysis of fatality data. When this level of detail is available and systematically recorded, a clearer picture of what is happening can be achieved.

Second, a collection effort must be **transparent** and incorporate an **oversight** mechanism. In Iraq, this might require organization and collection by an outside agency, such as one affiliated with the UN or another international organization. As seen in both the *Lancet* study and in data collected by the Iraqi government, estimates are difficult to verify if the data are not publicly available or if the methodology for collecting that data is unknown.

Third, a collection effort for civilian fatalities, especially for Iraq, should incorporate **multiple sources**. With adequate information from the Iraqi government and from current surveys, a collection effort could figure out ways to merge and verify data from the household surveys, police and morgue reports, and the media. The “messiness” of the data available on Iraq is in part due to the instability and politicization of the Iraqi government and the difficulties of collecting information during a war. That does not mean, however, that all these data should be ignored.

Finally, new collection efforts should be aware of the difficulties of conducting **surveys** in Iraq. While the violence may be decreasing and while many who have fled their homes are reportedly return-

ing, the security situation is far from stable. This not only places great strain on those conducting the survey but also potentially skews survey results, particularly when surveys are based on households when the population is still greatly in flux.

These four elements could be incorporated into the current MNF-I effort to analyze civilian violence. Judging from General Petraeus' testimony, the military is already collecting information on suicide bombings and VBIED and IED attacks. This collection effort could be extended to include recording more details on these attacks. Releasing data already collected, as suggested above, would be a first step toward transparency. It would also allow improvements to be made regarding how to incorporate other data sources into the analysis effort. If it has not already, MNF-I should dedicate a permanent office or task force that interfaces with the Iraqi government to oversee and organize this information gathering. By interfacing with the Iraqi government, this task force would have a better sense of the reliability of Iraqi data sources and of surveys conducted in the country.

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