

# Iraq Casualties: U.S. Military Forces and Iraqi Civilians, Police, and Security Forces

#### Hannah Fischer

Information Research Specialist

October 7, 2010

**Congressional Research Service** 7-5700 www.crs.gov R40824

### Summary

This report presents U.S. military casualties as well as governmental and nongovernmental estimates of Iraqi civilian, police, and security forces casualties.

For several years, there were few estimates from any national or international government source regarding Iraqi civilian, police, and security forces casualties. Now, however, several Iraqi ministries have released monthly or total casualty statistics. The U.S. Department of Defense (DOD) releases the monthly trend of Iraqi civilian, police, and security forces deaths. In addition, the United Nations Office for the Coordination for Humanitarian Affairs (OCHA) has charted the trend of civilian casualties from August 2007 to April 2009, and the United Nations Assistance Mission for Iraq (UNAMI) reported on the number of deaths by suicide bombers in 2008.

Nongovernmental sources also have released various estimates of Iraqi civilian, police, and security forces casualties. This report includes estimates from the *Associated Press*, the Brookings Institution, Iraq Body Count, the Iraq Coalition Casualty Count, Iraq Family Health Survey, the most recent study published in the *Lancet*, and the British survey firm, Opinion Research Business.

Because the estimates of Iraqi casualties contained in this report are based on varying time periods and have been created using differing methodologies, readers should exercise caution when using them and should look to them as guideposts rather than as statements of fact.

This report will be updated as needed.

## Contents

U.S. Casualties	1
Iraqi Casualties	2
Iraq Ministries' Data	
U.S. Department of Defense Data	
Nongovernmental Data	7

### Figures

Figure 1. Iraq Ministries: Civilian and Police/Security Forces Deaths, January 2008-	5
September, 2010 Figure 2. Department of Defense: Iraqi Civilian Deaths, January 2006-May 2010	
Figure 3. Department of Defense: Iraq Security Forces Deaths, January 2006-May 2010	

### Tables

Table 1. Operation New Dawn, U.S. Fatalities and Wounded	1
Table 2. Operation Iraqi Freedom, U.S. Fatalities and Wounded	2
Table 3. Iraq Ministries: Civilian and Police/Security Forces Deaths, January 2008-         September 2010	3
Table 4. Nongovernmental Iraqi Civilian and Police/Security Forces Casualty Estimates	

### Contacts

uthor Contact Information10
-----------------------------

## U.S. Casualties

On August 31, 2010, President Obama announced that the U.S. combat mission in Iraq had ended. A transitional force of U.S. troops will remain in Iraq with a different mission: "advising and assisting Iraq's Security Forces, supporting Iraqi troops in targeted counterterrorism missions, and protecting our civilians."<sup>1</sup> This mission is now called Operation New Dawn (OND). **Table 1** provides statistics on fatalities and wounds in OND.

**Table 2** provides statistics on fatalities and wounds during Operation Iraqi Freedom, which began on March 19, 2003, and ended August 31, 2010. Statistics may be revised as circumstances are investigated and as all records are processed through the U.S. military's casualty system. More frequent updates are available at DOD's website at http://www.defenselink.mil/news/ under "Casualty Update."

A detailed casualty summary that includes data on deaths by cause, as well as statistics on soldiers wounded in action, is available at DOD's website at http://siadapp.dmdc.osd.mil/personnel/CASUALTY/castop.htm.

	Total Deaths	Hostileª	Non-Hostile <sup>b</sup>	Wounded in Action, Returned to Duty	Wounded in Action, Not Returned to Duty
U.S. Military	6	2	4	14	16
U.S. DOD Civilian	_	_	_		
Totals	6	2	4	Total wo	unded: 30

Table 1. Operation New Dawn, U.S. Fatalities and Wounded

As of October 1, 2010, 10 a.m. EST

**Source:** http://www.defense.gov/news/casualty.pdf.

a. According to the Department of Defense *Dictionary of Military and Associated Terms*, as amended through 31 August 2005, a "hostile casualty" is a victim of a terrorist activity or a casualty as the result of combat or attack by any force against U.S. forces, available at http://handle.dtic.mil/100.2/ADA43918.

b. The above-named reference defines a "non-hostile casualty" as a casualty that is not directly attributable to hostile action or terrorist activity, such as casualties due to the elements, self-inflicted wounds, or combat fatigue.

<sup>&</sup>lt;sup>1</sup> The White House, Office of the Press Secretary, Remarks by the President in Address to the Nation on the End of Combat Operations in Iraq, August 31, 2010, at http://www.whitehouse.gov/the-press-office/2010/08/31/remarks-president-address-nation-end-combat-operations-iraq.

	Total Deaths	Hostileª	Non-hostile <sup>b</sup>	Wounded in Action, Returned to Duty	Wounded in Action, Not returned to Duty
U.S. Military	4,408	3,483	925	19,051	12,883
U.S. DOD Civilian	13	9	4		
Totals	4,421	3,492	929	Total wounded: 31	,934

### Table 2. Operation Iraqi Freedom, U.S. Fatalities and Wounded As of October 1, 2010, 10 am, EST

Source: http://www.defense.gov/news/casualty.pdf.

- a. According to the Department of Defense *Dictionary of Military and Associated Terms*, as amended through 31 August 2005, a "hostile casualty" is a victim of a terrorist activity or a casualty as the result of combat or attack by any force against U.S. forces, available at http://handle.dtic.mil/100.2/ADA43918.
- b. The above-named reference defines a "non-hostile casualty" as a casualty that is not directly attributable to hostile action or terrorist activity, such as casualties due to the elements, self-inflicted wounds, or combat fatigue.

### Iraqi Casualties

#### Iraq Ministries' Data

In October 2009, the Iraq Ministry of Human Rights published a new report with a tally of 51,675 "martyred victims," or civilians who have died and been identified, and 34,019 "bodies found," or civilians who have died but who were not identified, for a total of 85,694 civilian deaths from 2004 through 2008. <sup>2</sup> This total includes only those deaths due to terrorist attacks, defined as "direct bombings, assassinations, kidnappings, and forced displacement of the population."<sup>3</sup> In other words, the Iraq Ministry of Human Rights does not include in its total any civilian deaths that may have been due to coalition occupation or fighting between militias within Iraq.

Some media sources misrepresented the data by seeming to confuse the "bodies found" category and adding it to the total of civilian deaths, which already included the "bodies found" number.

In addition to the report by the Iraq Ministry of Human Rights, the Ministry of Defense, Ministry of the Interior, and Ministry of Health have, on an irregular and incomplete schedule, reported monthly death statistics for Iraqi civilians, police, and security forces. The process of collecting and distributing such data on the deaths of civilians, police, and security forces seems now to have become more standardized, and over the past year, all three ministries have regularly released similar information to the news media, though not in the form of official press releases.<sup>4</sup>

<sup>&</sup>lt;sup>2</sup> Rebecca Santana, "85,000 Iraqis killed in almost 5 years of war," Associated Press, October 15, 2009.

<sup>&</sup>lt;sup>3</sup> Iraq Ministry of Human Rights, "The Mechanism of a Comprehensive Periodic Review/Iraq," October 2009.

<sup>&</sup>lt;sup>4</sup> News reports continue to differ slightly. For instance, August 2009 articles differed on whether there were 223 or 224 Iraqi civilian deaths in July 2009. Also, data from April and June 2008 are missing.

These Ministries have not, however, provided estimates of the total number of civilian deaths. The Ministries' statistics are provided in **Table 3** and, in chart form, in **Figure 1**, below.

Date	Civilian	Police/Security Forces	Sources
January 2008	463	78	"Iraqi civilian deaths down in Jan to 23 month low," <i>Dow Jones International News</i> , February I, 2008.
February 2008	633	85	Paul Tait, "Iraq Wrapup 3 -Iraq casualties rise again after Qaeda bombs," <i>Reuters</i> , March 1, 2008.
March 2008	923	156	"Iraqi casualties at highest level since mid-2007," <i>Reuters</i> , April 1, 2008.
April 2008	N/A	N/A	
May 2008	504	59	"Iraq violence dips as U.S. records lowest monthly toll," <i>Agence France Presse</i> , June 1, 2008.
June 2008	N/A	N/A	
July 2008	387	78	"Iraq monthly toll down," Agence France Presse, September I, 2008.
August 2008	383	48	"Iraq monthly toll down," Agence France Presse, September 1, 2008.
September 2008	359	81	"Iraq violence kills 440 in September," <i>Agence France Presse</i> , October 1, 2008.
October 2008	278	40	Tina Susman, "World; U.S., Iraqi deaths dip in October," <i>Los Angeles Times</i> , November 1, 2008.
November 2008	297	43	"Iraq death toll rises in November," <i>Agence France Presse</i> , December 1, 2008.
December 2008	240	76	Salam Faraj, "Iraq hails lowest monthly death toll in nearly three years," <i>Agence France Presse</i> , January 1, 2009.
January 2009	140	51	"Iraq death toll 'lowest since invasion," Agence France Presse, February 1, 2009.
February 2009	211	47	Ammar Karim, "Iraq death toll rises to 258 in February: ministries," <i>Agence France Presse</i> , March I, 2009.
March 2009	185	67	"March violence claims claims 252 Iraqi lives," Agence France Presse, April 1, 2009.
April 2009	290	65	"April toll in Iraq the deadliest for seven months," <i>Agence France Presse</i> , May 1, 2009.
May 2009	134	31	Sameer N. Yacoub, "May sees dramatic drop in Iraq deaths following bloodiest month of the year; Bombing kills four in Baghdad Monday, signaling capital is far from secure," <i>Associated</i> <i>Press</i> , June 2, 2009.

# Table 3. Iraq Ministries: Civilian and Police/Security Forces Deaths,January 2008-September 2010

Date	Civilian	Police/Security Forces	Sources
June 2009	370	68	Liz Sly, "June death toll of Iraqis is highest in 11 months; The sharp increase in fatalities could be tied to the U.S. troop withdrawal from cities," <i>The Los Angeles Times</i> , July 2, 2009, p. A-24
July 2009	223	52	"Iraqi death toll down in July: ministries," Agence France Presse, August 1, 2009.
August 2009	393	63	"Iraq death toll in August highest in 13 months," Agence France Presse, September 1, 2009.
September 2009	125	78	"Iraq death toll falls by half in September: officials," <i>Agence France Presse</i> , October 1, 20009.
October 2009	343	67	"Iraq death toll doubles in October: officials" Agence France Presse, November 2, 2009.
November 2009	88	24	Ammar Karin, "Iraq November death toll lowest since US invasion," <i>Agence France Presse</i> , December 1, 2009.
December 2009	306	61	"Iraq death toll in 2009 lowest since the invasion," Agence France Presse, January 1, 2010.
January 2010	135	N/A	"Iraqi civilian deaths drop sharply in January," <i>Reuters</i> , February 1, 2010. This report did not distinguish between civilian and security forces deaths; we have put the total deaths, 135, in the civilian casualties column.
February 2010	211	141	Prashant Rao, "Iraq death toll spikes ahead of election," Agence France Presse, March 1, 2010.
March 2010	216	151	"Iraq says March deadliest month so far this year," Agence France Presse, April 1, 2010.
April 2010	274	54	"Iraq civilian death toll rises sharply in April," Reuters, May 1, 2010.
May 2010	275	35	"Iraqi civilian toll in May highest this year," Agence France Presse, June 1, 2010.
June 2010	204	80	"Bombs and gunmen kill three Iraqi civilians," Agence France Presse, July 1, 2010.
July 2010	396	139	Prashant Rao, "US 'refutes' July death toll in Iraq," Agence France Presse, August 1, 2010.ª
August 2010	295	131	"426 killed in Iraq as US ended combat mission," Agence France Presse, September 1, 2010.
September 2010	185	88	"War casualities in Iraq decline in September," <i>Reuters</i> , October 1, 2010.
Totals	9,466	2,237	

Source: Prepared by CRS using noted sources.

Notes: Does not include data from the Iraq Ministry of Human Rights report.

a. The United States Forces – Iraq (USF-I) took the unusual step of refuting these numbers, stating that 222 people total were killed in Iraqi violence in July 2010. United States Forces – Iraq, "United States Forces- Iraq July 2010 casualties statistics," Press Release 20100801-01, August 1, 2010, at http://www.usf-iraq.com/news/ press-releases/corrected-copy-july-2010-casualties-statistics.



Figure 1. Iraq Ministries: Civilian and Police/Security Forces Deaths, January 2008-September, 2010

**Source:** Iraqi government figures as reported in various news stories; see "Sources" column in **Table 3**, above. **Note:** Does not include data from the Iraq Ministry of Human Rights report.

### U.S. Department of Defense Data

DOD also tracks Iraqi civilian, police, and security forces deaths, but they only release trends and not the statistics themselves. Readers should therefore note that DOD has not released the specific numbers associated with either **Figure 2**, on Iraqi civilian deaths, or **Figure 3**, on Iraqi security forces deaths, and that instead these charts are estimated renditions of DOD's original charts. DOD's tracking has shown an overall decline in war-related deaths from 2008 through 2009.

Until the September 2009 quarterly DOD report, *Measuring Security and Stability in Iraq*, two civilian casualty estimates were given: one, a combination of coalition and Iraqi estimates, and the other (much lower) estimate from coalition sources alone. Now, however,

As a consequence of the movement of U.S. combat forces out of Iraqi cities on June 30, 2009, the United States has reduced visibility and ability to verify Iraqi reports. Without a robust U.S. presence, United States Forces-Iraq (USF-I) metrics include host nation reports that are not independently verifiable. The overall trends between U.S. force data and host nation data are very close, but some values may differ. Current charts show a combination of U.S. and host-nation reported data. The combination of these reports causes baseline numbers to increase, making it difficult to compare these charts with those from previous publications of this report ...  $^{5}$ 

<sup>&</sup>lt;sup>5</sup> Department of Defense, *Measuring Stability and Security in Iraq, June 2010*, http://www.defense.gov/pubs/pdfs/June\_9204\_Sec\_Def\_signed\_20\_Aug\_2010.pdf, p. iii.

In practical terms, this has meant that, in addition to getting rid of the lower coalition casualtyonly estimate for civilians, DOD has also revised all of the security forces casualty estimates upward. For instance, in a previous update of this report and using DOD's charts, it was estimated that there had been 30 Iraqi security forces deaths in May 2009. However, in a later version of the *Measuring Stability and Security in Iraq* report using DOD's revised figures, it was estimated that there were 90 Iraqi security forces deaths in the same month.





**Source:** CRS rendition of DOD graph, as derived from *Measuring Stability and Security in Iraq, June 2010*, p.29, at http://www.defense.gov/pubs/pdfs/June\_9204\_Sec\_Def\_signed\_20\_Aug\_2010.pdf.

**Notes:** This graph uses USF-I J5 Assessments SIGACTS III Database (U.S. and Iraqi Reports) as of June 5, 2010. Does not include civilian deaths due to accidents unrelated to friendly or enemy actions. According to *Measuring Stability and Security in Iraq*, "As a consequence of the movement of U.S. combat forces out of Iraqi cities on June 30, 2009, the United States has reduced visibility and ability to verify Iraqi reports. Without a robust U.S. presence, United States Forces-Iraq (USF-I) metrics include host nation reports that are not independently verifiable. The overall trends between U.S. force data and host nation data are very close, but some values may differ. Current charts show a combination of U.S. and host-nation reported data. The combination of these reports causes baseline numbers to increase, making it difficult to compare these charts with those from previous publications of this report."



Figure 3. Department of Defense: Iraq Security Forces Deaths, January 2006-May 2010

**Source:** CRS rendition of DOD graph, as derived from *Measuring Stability and Security in Iraq, June 2010*, p.28, at http://www.defense.gov/pubs/pdfs/June\_9204\_Sec\_Def\_signed\_20\_Aug\_2010.pdf.

**Notes:** According to *Measuring Stability and Security in Iraq*, this chart uses "USF-I J5 Assessments SIGACTS III Database (U.S. and Iraqi Reports), DoD News Releases, and CIDNE as of June 5, 2010. Includes deaths within Iraq only ... As a result of the June 30, 2009 withdrawal from cities, USF-I now relies on host nation reporting as the primary data source. Current charts show a combination of U.S. and host nation reported data. The combination of these reports causes baseline numbers to increase, making it difficult to directly compare these charts with those presented prior to June 2009."

#### Nongovernmental Data

In 2006, researchers from Johns Hopkins University and Baghdad's Al-Mustansiriya University published their most recent cluster study on Iraqi civilian casualties, commonly referred to in the press as "the *Lancet* study" because it was published in the British medical journal of that name. The study surveyed 47 clusters and reported an estimate of between 426,369 and 793,663 Iraqi civilian deaths from violent causes since the beginning of Operation Iraqi Freedom to July 2006.<sup>6</sup>

In a more recent cluster study, a team of investigators from the Federal Ministry of Health in Baghdad, the Kurdistan Ministry of Planning, the Kurdistan Ministry of Health, the Central Organization for Statistics and Information Technology in Baghdad, and the World Health Organization formed the Iraq Family Health Survey (IFHS) Study Group to research violence-related mortality in Iraq.<sup>7</sup> In their nationally representative cluster study, interviewers visited

<sup>&</sup>lt;sup>6</sup> Gilbert Burnham, Riyadh Lafta, Shannon Doocy et al., "Mortality After the 2003 Invasion of Iraq: A Cross-Sectional Cluster Sample Survey," *The Lancet*, October 21, 2006, 368 (9545), pp. 1421-1429.

<sup>&</sup>lt;sup>7</sup> Iraq Family Health Survey Study Group, "Violence-Related Mortality in Iraq from 2002 to 2006," *The New England Journal of Medicine*, January 31, 2008, pp. 484-492.

89.4% of 1,086 household clusters; the household response rate was 96.2%. They concluded that there had been an estimated 151,000 violence-related deaths from March 2003 through June 2006 and that violence was the main cause of death for men between the ages of 15 and 59 years during the first three years after the 2003 invasion. This study seems to be widely cited for violence-related mortality rates in Iraq. Neither the *Lancet* study nor the IFHS study distinguish between different victims of violence, such as civilians versus police or security force members. The studies do not reflect trends that occurred during the period of the most intense civil violence from early 2006 through the end of 2008.

In 2007, a British firm, Opinion Business Research (OBR), conducted a survey in Iraq in which they asked 2,411 Iraqis, "How many members of your household, if any, have died as a result of the conflict in Iraq since 2003 (i.e., as a result of violence rather than a natural death such as old age)? Please note that I mean those who were actually living under your roof?" Extrapolating from their results, OBR estimated "that over 1,000,000 Iraqi citizens have died as a result of the conflict which started in 2003."<sup>8</sup>

The Iraq Body Count (IBC) website bases its online casualty estimates on media reports of casualties, some of which may involve security forces as well as civilians.<sup>9</sup> Using media reports as a base for casualty estimates can entail errors: some deaths may not be reported in the media, while other deaths may be reported more than once. The IBC documents each of the civilian casualties it records with a media source and provides a minimum and a maximum estimate. As of October 6, 2010, the IBC estimated that between 98,170 and 107,152 civilians had died as a result of military action. In a separate analysis of its data, the IBC also estimated that, between January 2006 and November 2008, 4,884 Iraqi police had been killed.<sup>10</sup>

The Iraq Coalition Casualty Count (ICCC) is another nonprofit group that tracks Iraqi civilian and Iraqi security forces deaths using an IBC-like method of posting media reports of deaths. ICCC, like IBC, is prone to the kind of errors likely when using media reports for data: some deaths may not be reported in the media, whereas other deaths may be reported more than once. The ICCC estimates that there were 48,796 civilian deaths from March 2005 through October 6, 2010, and 8,433 security forces were killed from January 2005 to October 6, 2010.<sup>11</sup>

The *Associated Press* (AP) has kept a database of Iraqi civilian, police, and security forces dead and wounded since April 2005. These numbers are considered by AP to be a minimum, based on AP reporting. The actual number is likely higher, as many killings go unreported or uncounted. The AP tallies civilian, Iraqi military, and Iraqi police deaths each day as reported by police, hospital officials, morgue workers, and verifiable witness accounts. The security personnel tally includes Iraqi military, police and police recruits, and bodyguards. Insurgent deaths are not included. According to the AP database, between April 28, 2005, and September 2, 2010, 41,120 Iraqi civilians and 8,094 Iraqi police and security forces have died.<sup>12</sup>

<sup>&</sup>lt;sup>8</sup> The Opinion Business Research, "New analysis 'confirms' 1 million+ Iraq casualties," January 28, 2008, at http://www.opinion.co.uk.

<sup>&</sup>lt;sup>9</sup> Iraq Body Count at http://www.iraqbodycount.net. IBC is a nongovernmental organization managed by researchers and volunteers.

<sup>&</sup>lt;sup>10</sup> Iraq Body Count at http://www.iraqbodycount.org/analysis/numbers/surge-2008/.

<sup>&</sup>lt;sup>11</sup> Iraq Coalition Casualty Count at http://icasualties.org/Iraq/IraqiDeaths.aspx. ICCC is a nongovernmental organization managed by researchers and volunteers.

<sup>&</sup>lt;sup>12</sup> CRS discussion with the Associated Press, September 2, 2009."

Finally, the Brookings Institution has used modified numbers from the U.N. *Human Rights Report*, the Iraq Body Count, the U.S. Central Command's General David Petraeus's congressional testimony given on September 10-11, 2007,<sup>13</sup> and other sources to develop its own composite estimate for Iraqi civilians, police, and security forces who have died by violence. By combining all of these sources by date, the Brookings Institution estimates that between May 2003 and April 2010, 112,625 Iraqi civilians died and between June 2003 and September 30, 2010, 9,721 Iraqi police and security forces died.<sup>14</sup>

**Table 4** provides Iraqi civilian, security forces and police officers casualty estimates from nongovernmental sources, as well as an estimate of deaths using the charts in **Figure 2** and **Figure 3**. These estimates are based on varying time periods and have been created using differing methodologies, and therefore readers should exercise caution when using and comparing these statistics.

Source	Civilians	<b>Police/Security Forces</b>
Iraq Body Count	98,170 – 107,152ª	4,884 <sup>b</sup> (Police only)
	March 19, 2003 – October 6, 2010	January I, 2006 - November 30, 2008
Iraq Coalition Casualty Count <sup>c</sup>	48,796	8,433 (Security Forces only)
	March 2005 – October 6, 2010	January 2005 – October 6, 2010
Associated Press <sup>d</sup>	41,120 killed	8,094 killed
	53,219 wounded	8,771 wounded
	April 28, 2005 – October 6, 2009	April 28, 2005 – October 6, 2009
Brookings Iraq Index	12,625º	<b>9,721</b> <sup>f</sup>
	May 2003 - April 2010	June 2003 – April 30, 2010
Estimate using the Multi-National	58,115 (Coalition and Iraqi Reports) <sup>g</sup>	I 2,040 <sup>h</sup>
Corps - Iraq report, Measuring Stability and Security in Iraq, March	January 2006 - May 2010	(Security Forces only)
2009		January 2006 - May 2010
Opinion Business Research <sup>i</sup>	"Over 1,000,000"	
	March 2003 - September 2007	
The Iraq Family Health Survey	151,000	
(the "WHO study") <sup>j</sup>	(May include police and/or security forces)	
	March 2003 - June 2006	

## Table 4. Nongovernmental Iraqi Civilian and Police/Security Forces Casualty Estimates

<sup>&</sup>lt;sup>13</sup> Reproduced in the Department of State *Iraq Weekly Status Report*, September 12, 2007, at http://2001-2009.state.gov/documents/organization/92176.pdf.

<sup>&</sup>lt;sup>14</sup> Brookings Institution, *Iraq Index: Tracking Reconstruction and Security in Post-Saddam Iraq*, September 30, 2010, at http://www.brookings.edu/~/media/Files/Centers/Saban/Iraq%20Index/index.pdf.

Source	Civilians	<b>Police/Security Forces</b>
The Lancet, "Mortality after the	426,369 - 793,663	
2003 Invasion of Iraq" <sup>k</sup>	(May include police and/or security forces)	
	March 19, 2003 - July 31, 2006	

**Sources:** Prepared by CRS using noted sources below. These estimates are based on varying time periods and have been created using differing methodologies, and therefore readers should exercise caution when using and comparing these statistics.

- a. Iraq Body Count, June 11, 2010, at http://www.iraqbodycount.org/.
- b. Iraq Body Count, June 11, 2010, at http://www.iraqbodycount.org/analysis/numbers/surge-2008/.
- c. Iraq Coalition Casualties Count, June 11, 2010, at http://icasualties.org/Iraq/IraqiDeaths.aspx.
- d. CRS discussion with Associated Press, September 2, 2010. The Associated Press notes: "These numbers are considered a minimum, based on AP reporting. The actual number is likely higher, as many killings go unreported or uncounted. We tally civilian, Iraqi military and Iraqi police deaths each day as reported by police, hospital officials, morgue workers and verifiable witness accounts. The security personnel include Iraqi military, police and police recruits, and bodyguards. Insurgent deaths are not included."
- e. Brookings Institution, Iraq Index: Tracking Reconstruction and Security in Post-Saddam Iraq, September 30, 2010, p. 3, at http://www.brookings.edu/~/media/Files/Centers/Saban/Iraq%20Index/index.pdf.
- f. Ibid, p. 5.
- g. Derived from Measuring Stability and Security in Iraq, March 2010, p.29. http://www.defense.gov/pubs/pdfs/ June\_9204\_Sec\_Def\_signed\_20\_Aug\_2010.pdf.
- h. Ibid, p. 28.
- i. The Opinion Business Research, "New analysis 'confirms' I million+ Iraq casualties," January 28, 2008, at http://www.opinion.co.uk.
- j. Iraq Family Health Survey Study Group, "Violence-Related Mortality in Iraq from 2002 to 2006," *The New England Journal of Medicine*, January 31, 2008, pp. 484-492.
- k. Gilbert Burnham, Riyadh Lafta, Shannon Doocy et al., "Mortality After the 2003 Invasion of Iraq: A Cross-Sectional Cluster Sample Survey," *The Lancet*, October 21, 2006, 368 (9545), pp. 1421-1429.

#### **Author Contact Information**

Hannah Fischer Information Research Specialist hfischer@crs.loc.gov, 7-8989