Our study shows that the 114 reported drone strikes in northwest Pakistan from 2004 to the present have killed between 830 and 1,210 individuals, of whom around 550 to 850 were described as militants in reliable press accounts, about two-thirds of the total on average. Thus, the true civilian fatality rate since 2004 according to our analysis is approximately 32 percent.

The bomber, a Jordanian doctor linked to al Qaeda, detonated his explosives on December 30, 2009, at an American base in Khost in eastern Afghanistan, killing himself and seven CIA officers and contractors who were operating at the heart of the covert program overseeing U.S. drone strikes in Pakistan’s volatile northwestern tribal regions. The suicide attack was a double cross: Humam Khalil Abu-Mulal al-Balawi, the bomber, had earlier provided information to the CIA that was used in targeting some of those drone attacks.¹

Mustafa Abu al-Yazid, the current number three in al Qaeda, praised the suicide attack, saying it was “to avenge our good martyrs” and listing several militant leaders felled by drone strikes.² The chief of the Pakistani Taliban, Hakimullah Mehsud, appeared alongside al-Balawi in a prerecorded video released on January 9, 2010, saying the attack was revenge for the drone strike that killed Mehsud’s ruthless predecessor, Baitullah Mehsud, in August 2009.³

The drone program had a busy year in 2009; under the Obama administration, there were 51 reported strikes in Pakistan’s tribal areas, compared with 45 during the entire administration of George W. Bush. Besides Baitullah Mehsud, those killed by Predator drone missiles included Saleh al-Somali, al Qaeda’s external operations chief and the link between the militant group’s central leadership and its affiliates abroad, in December, and a prominent leader of the Islamic Jihad of Uzbekistan, in September.⁴ All told, as many as 10 militant leaders fell to the drones in 2009, in addition to hundreds of lower-level militants and civilians.¹

The killing of civilians in drone attacks is an important and politically charged issue in Pakistan. The strikes are quite unpopular among Pakistanis, who view them as violations of national sovereignty; according to a Gallup poll from August 2009, only 9 percent approved of such attacks.⁵ Statistics compiled by Pakistani authorities in early January

¹ Saad bin Laden, one of Osama bin Laden’s sons; Ilyas Kashmiri, an al Qaeda leader in Pakistan; and Tahir Yuldashev, head of the Islamic Movement of Uzbekistan, were all reported killed by drone strikes at some point in 2009, only to surface later; we count their current status as unclear.

Peter Bergen, CNN’s national security analyst and author of The Osama bin Laden I Know, is the co-director of the Counterterrorism Strategy Initiative and a senior fellow at the New America Foundation, where Katherine Tiedemann is a policy analyst.
2010 indicated that more than 700 civilians were killed by the drones in 2009 alone.\textsuperscript{6}

At the other end of the spectrum, an anonymous U.S. government official told the New York Times in early December that “just over 20” civilians and “more than 400” fighters had been killed in less than two years.\textsuperscript{7}

Other commentators have suggested that the civilian death rate from the drone attacks in Pakistan is 98 percent, while one study claims it is only 10 percent.\textsuperscript{8} Trying to ascertain the real civilian death rate from the drone strikes is important both as a moral matter and as a matter of international law, which prohibits indiscriminate attacks against civilians.\textsuperscript{9}

Compounding the issue is that the civilians who die in these strikes are the citizens of a U.S. ally, and just as it has become a core doctrine of U.S. military operations in Afghanistan that civilians must be protected, so too it should be across the border in Pakistan.

A better understanding of the real costs and benefits of the drone strikes in Pakistan might also make the program less controversial there. The lower the civilian casualty rate in such strikes, the more likely the Pakistani public will balance their effects with the fact that the militants targeted in these strikes have themselves masterminded or carried out operations in which more than a thousand Pakistani civilians have died in the last year alone.

Our analysis of the civilian death rate from the strikes presents a picture quite different from those of Pakistani authorities, the anonymous U.S. government official, and other commentators. But first, a word about our methodology: Our research draws only on accounts from reliable media organizations with deep reporting capabilities in Pakistan, including the New York Times, Washington Post, and Wall Street Journal, accounts by major news services and networks—the Associated Press, Reuters, Agence France-Presse, CNN, and the BBC—and reports in the leading English-language newspapers in Pakistan—the Daily Times, Dawn, and the News—as well as those from Geo TV, the largest independent Pakistani television network. (Links to all those reports are available from www.newamerica.net/drones, a website we are launching to track the drone strikes, where this research will be updated regularly.)

\textbf{Mapping the drones}

We have also constructed a map, based on the same reliable press accounts and publicly available maps, of the estimated location of each drone strike.\textsuperscript{10} Click each pin in the online version to see the details of a reported strike; the red border represents the extent of Pakistan’s tribal regions in the northwest of the country. And while we are not professional cartographers, and Google Maps is at times incomplete or imperfect, this map gives our best approximations of the locations and details of each reported drone strike since 2004.\textsuperscript{2}

As a whole, these news organizations cover the drone strikes as accurately and aggressively as possible, and

\begin{itemize}
  \item Red pin=2004-2007
  \item Pink pin=2008
  \item Dark blue pin=2009
  \item (Purple pin=Bush in 2009)
  \item Light blue pin=2010
\end{itemize}
though we don’t claim our research has captured every single death in every drone strike—particularly those before 2008, when the pace of the program picked up dramatically—it has generated some reliable open-source information about the number of militant leaders killed, a fairly strong estimate of the number of lower-level militants killed, and a reliable sense of the true civilian death rate.

One challenge in producing an accurate count is that it is often not possible to differentiate precisely between militants and civilians in these circumstances, as militants live among the population and don’t wear uniforms. For instance, when Baitullah Mehsud was killed by a drone last August, one of his wives and his father-in-law died in the strike as well. Further muddying the picture, government sources have an incentive to claim that all those killed in the strikes were militants, while the militants often do the opposite.

The true civilian fatality rate according to our analysis is approximately 32 percent.

The year 2009 presented a series of interesting developments in the burgeoning field of dronology. When Pakistan’s military began its much-anticipated operations in the Pakistani Taliban stronghold of South Waziristan on October 17, there was a halt in reported drone strikes in that tribal agency—after 26 strikes earlier in the year. At the same time, the pace of the attacks in neighboring North Waziristan picked up dramatically, from nine strikes in the first nine and a half months of 2009 to 13 in the last two and a half. The New York Times reported that the Pakistani military had requested the slowdown in South Waziristan, seemingly because of its large-scale operations in the area. This suggests more Pakistan-U.S. cooperation on the touchy issue of drone strikes, as Pakistan’s military and government—cognizant that American drones often target militants who are attacking the Pakistani state—offer less pushback than they did in 2008.

Our study shows that the 114 reported drone strikes in northwest Pakistan from 2004 to the present have killed between 830 and 1,210 individuals, of whom around 550 to 850 were described as militants in reliable press accounts, about two-thirds of the total on average. Thus, the true civilian fatality rate since 2004 according to our analysis is approximately 32 percent. Averaging the press reports in 2009 indicates that 502 people were killed, 382 of whom were described as militants, for an average civilian fatality rate of 24 percent.

Additionally, the White House reportedly authorized an expansion of the drone program in Pakistan to reinforce the efforts of the 30,000 new U.S. troops being sent to Afghanistan, even before the December attack on the CIA post in Khost. The Obama administration had already
dramatically increased the frequency of drone strikes in comparison to the Bush administration, but the flurry of 12 missile attacks in less than three weeks after the suicide attack on the CIA officers was unparalleled. Those strikes may have been a direct reaction to the December 30 blast; a current U.S. intelligence official told the Washington Post that al-Balawi’s attack would “be avenged. Some very bad people will eventually have a very bad day.”

So far in 2010, between around 80 and 140 reported militants have been killed in drone strikes—which, for the most part, have still avoided South Waziristan. Hakimullah Mehsud, like his forerunner Baitullah Mehsud, seems to have been a frequent target of the strikes, and was reportedly killed by one in mid-January. None of the reported strikes has appeared to target America’s most wanted terrorist, Osama bin Laden. Nor, apparently, has his top deputy, Ayman al-Zawahiri, been targeted since he narrowly escaped being killed in a drone strike four years ago.

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Despite the sharp rise in drone strikes over the past year and a half, Afghanistan and Pakistan still face extraordinary levels of terrorist violence. In 2009, there were a record 87 suicide attacks in Pakistan, which killed around 1,300 people, 1,155 of them civilians. This was up from 63 suicide bombings the previous year (and only nine in 2006). Pakistani Taliban militants mounted a fierce campaign of attacks against military, government, and civilian targets throughout the fall after Pakistani ground operations in South Waziristan began in mid-October.

Across the border, nearly 6,000 Afghan civilians were killed or injured in attacks in 2009, according to the United Nations; it was the highest number of such casualties recorded since the fall of the Taliban regime in late 2001. More than 1,600 of the civilian deaths—two-thirds of the total—were caused by the Taliban and other anti-government forces, a 41 percent increase from 2008.

The fact that both Pakistan and Afghanistan have seen record levels of Taliban and other militant violence in 2009 raises a large question about the drone program: How effective is it? The campaign is killing significant numbers of militant leaders and foot soldiers, but these losses are clearly being absorbed.

Nor has the expanded drone program stopped al Qaeda and its allies from continuing to train Western recruits. Onetime Wall Street coffee vendor Najibullah Zazi, an Afghan-American, traveled in late August 2008 to Pakistan, where by his own admission he received explosives training from al Qaeda members along the Afghan border. After Zazi’s arrest, the FBI found pages of handwritten notes on his laptop computer about making explosives, detonators, and fusing systems. He had picked up this technical knowledge in training camps in Pakistan’s Federally Administered Tribal Areas (FATA) during the fall of 2008, when the drone program was going into full swing. In September 2009 Zazi was allegedly planning to launch what could have been the deadliest terrorist attack on U.S. soil since 9/11, with explosives similar to those used in the 2005 London transit system bombings.

European militants have also been active in the FATA since the drone program was ramped up there in the summer of 2008; several Belgian jihadists, having trained in the tribal regions, returned to Belgium in December 2008 and were arrested on suspicion of “national security threats.” A Tunisian militant also from Belgium, Moez Garsallaoui, arrived in the FATA in late 2007 and is believed to be still operating around the tribal areas; he claims to have killed five Americans in Afghanistan and encouraged attacks in Europe in the fall of 2008 via a jihadist Web site. Four Swedes were arrested in August 2009 en route to North Waziristan.
At least 30 Germans traveled from Europe to Pakistan to train with Taliban militants in 2009. And according to IntelCenter, a government contractor that tracks jihadist materials, during 2008 and 2009 a total of 10 German citizens appeared in more than a dozen propaganda videos made by al Qaeda and its allied militant groups based in Pakistan’s tribal regions. In total, between 100 and 150 Westerners are believed to have traveled to the FATA in 2009. So far, however, none of these militants has been able to carry out an attack in the West.

Of course, the drone program has created real problems for the Taliban and its allies in Pakistan’s tribal regions. Several European militants captured in late 2008 described an atmosphere of fear and distrust among members of al Qaeda in Pakistan, and the Tunisian-Belgian militant Garsallaoui told his wife via e-mail that he narrowly missed being hit by a drone strike. David Rohde, the New York Times reporter who was held by the Taliban-allied Haqqani network for seven months, called the drones “a terrifying presence” in South Waziristan, and key militant figures reportedly sleep outside under trees to avoid being targeted. Taliban militants regularly execute suspected “spies” in Waziristan accused of providing information to the United States, suggesting they also fear betrayal from within.

But the U.S. drone strikes don’t seem to have had any great effect on the Taliban’s ability to mount operations in Pakistan or Afghanistan or to deter potential Western recruits, and they no longer have the element of surprise. After around 18 months of sustained drone strikes, many of Pakistan’s militants have likely moved out of their once safe haven in the FATA and into less dangerous parts of the country, potentially further destabilizing the already rickety state. And although drone strikes have killed hundreds of lower-level militants, they also have destroyed the “pocket litter”—documents, cell phones, and the like—that could have provided valuable leads to investigators. Also lost was information that could have been gleaned from interrogating militants if they had been captured rather than killed.

Three broader strategic concerns also come into play when assessing the efficacy of the drone strikes. The first is that they might be on shaky legal ground, according to Columbia Law School professor Matthew Waxman: “The principle of proportionality says that a military target may not be attacked if doing so is likely to cause incidental civilian casualties or damage that would be excessive in relation to the expected military advantage of the attack.... But there is no consensus on how to calculate these values.... Nor is there consensus on what imbalance is ‘excessive.’”

Second, drone strikes in Pakistan are not a strategy, but a tactic. Bruce Hoffman, a Georgetown University authority on terrorism, has observed that the 2006 airstrike that killed Abu Musab al-Zarqawi, the leader of al Qaeda in Iraq, hardly forced the group to shut its doors: Violence in Iraq accelerated following his death.

Third, although the drone strikes have disrupted militant operations, their unpopularity with the Pakistani public and their value as a recruiting tool for extremist groups may have ultimately increased the appeal of the Taliban and al Qaeda, undermining the Pakistani state. This is more disturbing than almost anything that could happen in Afghanistan, given that Pakistan has dozens of nuclear weapons and about six times the population.
An American ground incursion into Pakistan’s tribal areas is out of the question, given intense Pakistani official and popular opposition to the prospect. When the United States sent Special Forces soldiers across the Afghan border in September 2008, the powerful chief of the Pakistani Army, Gen. Ashfaq Kayani, issued an unusual direct rebuke to the United States, saying that Pakistan’s sovereignty would be protected “at all costs.”

Similarly, despite some discussion of the issue in the press, the United States is quite unlikely to use drone strikes in Baluchistan to target the leadership of the Afghan Taliban at its headquarters in and around the provincial capital, Quetta. Baluchistan is part and parcel of the Pakistani state, unlike the northwestern tribal areas, which have their own legal and social codes and have largely been seen as outside of Pakistan proper.

Despite the controversy, drone strikes are likely to remain a critical tool for the United States to disrupt al Qaeda and Taliban operations and leadership structures.

Despite the controversy, drone strikes are likely to remain a critical tool for the United States to disrupt al Qaeda and Taliban operations and leadership structures. Though these strikes consistently kill Pakistani civilians, which angers the population, and prompt revenge attacks from the militants, Pakistani and U.S. strategic interests have never been more closely aligned against the militants than they are today. Both countries seem to be increasingly cognizant of this as American drones kill leaders of the Pakistani Taliban and al-Qaeda, and Pakistani soldiers mount serious operations against the militants, from Swat to South Waziristan.

The drone attacks in the tribal regions seem to remain the only viable option for the United States to take on the militants based there who threaten the lives of Afghans, Pakistanis, and Westerners alike.

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10 http://maps.google.com/maps/ms?ie=UTF8&hl=en&msa=0&msid=116128375431549610.0004768c8c15d322006e7&ll=33.008888,70.125732&spn=0.409404,0.617294&z=11.
18 Ibid.
23 Ibid.


32 Ibid.


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