

***Blood and Treasure:
United States Budgetary Costs and Human Costs of 20 Years of War in Iraq and Syria,
2003-2023***

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Summary

The United States' war in Iraq, Operation Iraqi Freedom, ostensibly undertaken to rid Iraq of its weapons of mass destruction, began with a phase of what television commentators called "shock and awe" bombing on March 19, 2003. Most U.S. and allied forces left Iraq in 2011, but the U.S. returned to significant military operations in Iraq and Syria in late 2014 with Operation Inherent Resolve, fighting that was undertaken to remove the Islamic State ("ISIS" or "ISIL") from territory it had seized in those two countries. U.S. government operations in Iraq and Syria are ongoing.

Treasure: The budgetary costs of United States wars consist of the "OCO" costs of direct military spending for operations by the Department of Defense and State Department, but they also comprise additional costs, including increases to the support or "base" Pentagon budget and funding for veterans' medical and disability care. The estimate provided here is for costs between 2003 and early 2023 and for the likely future costs in medical care of U.S. Iraq war veterans. Total U.S. costs to date are estimated at about \$1.79 trillion, not including funds requested for FY2024. If the costs of future U.S. veterans medical and disability care are included, these costs will reach about \$2.89 trillion by 2050.

The figure reported here for U.S. spending on the war *does not* include costs of war, foreign assistance and reconstruction born by U.S. allies, notably Iraq, the U.K., Italy, Australia, South Korea, and Poland, and non-U.S. multilateral assistance which sums to an additional approximately \$174 billion.

Blood: A full reckoning of the costs of the last 20 years of war in Iraq includes human deaths and misery. Thousands of local and international fighters — from the armed forces and police of Iraq to the United States' and other allied fighters — have been killed and injured. All told, the direct deaths of civilians and combatants in the two war zones, Iraq

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(since the U.S. invasion in 2003) and Syria (since the beginning of Operation Inherent Resolve in 2014) total about 550,000-580,000 people. But there is a larger toll, known as indirect death. Although it is difficult to know the exact number, perhaps as many as twice or three or four times that number may have died due to indirect causes such as displacement, poor access to safe drinking water, healthcare, and preventable diseases. On the other hand, some indicators of health have improved in Iraq, including child and infant mortality.

More than 7 million people from Iraq and Syria are currently refugees and nearly 8 million people are internally displaced in the two countries. The devastation to local infrastructure and the environmental consequences, including war-related greenhouse gas emissions and harm to local and regional ecosystems, will endure long beyond the major fighting.

Indeed, the final total costs of the U.S. war in Iraq and Syria cannot yet be tallied. U.S. forces continue to strike ISIS from the air and the ground. In 2022, U.S. forces conducted 313 missions against ISIS — 122 in Syria and 191 in Iraq.² The harm to combatants and non-combatants also continues. Four U.S. troops were reported injured in a raid against an ISIS leader in Syria on February 16, 2023.³ The Syrian Network for Human Rights says that 81 civilians were killed by war-related violence in Syria just last month, in February 2023.⁴ And even after the fighting ends, physical, psychological damage, and reconstruction and repair, will continue.

Context and Early Estimates of Iraq War Costs

In early 2002, in the wake of the 9/11 attacks, President George W. Bush announced a preemptive war doctrine to meet the “imminent” threats posed by terrorists and “rogue” states.⁵ This was elaborated in the September 2002 *National Security Strategy*. “Traditional concepts of deterrence will not work against a terrorist enemy whose avowed tactics are wanton destruction and the targeting of innocents; whose so-called soldiers seek martyrdom in death and whose most potent protection is statelessness. The overlap between states that sponsor terror and those that pursue WMD compels us to action.”⁶ Preemption, the

² Keller, Jared. (2023, February 2). *The U.S. Military is Ramping Up Operations Against ISIS in Iraq and Syria*. Task and Purpose. <https://taskandpurpose.com/news/us-military-operations-isis-iraq-syria-january-2023/>.

Schogol, Jeff. (2022, December 29). *U.S. Troops Conducted 313 Missions and Killed 686 ISIS Fighters in 2022*. Task and Purpose. <https://taskandpurpose.com/news/us-military-isis-iraq-syria/>.

³ Tritten, Travis. (2023, February 17). *4 US Troops Wounded During a Raid that Killed ISIS Leader in Syria*. Military Times. <https://www.military.com/daily-news/2023/02/17/4-us-troops-wounded-during-raid-killed-isis-leader-syria.html>.

⁴ Syrian Network for Human Rights. (2023, March 1). *81 Civilians, Including Eight Children, Four Women, and Four Victims Who Died due to Torture, Were Documented Killed in Syria, in February 2023*. <https://snhr.org/blog/2023/03/01/81-civilians-including-eight-children-four-women-and-four-victims-who-died-due-to-torture-were-documented-killed-in-syria-in-february-2023/>.

⁵ Bush, George W. (2002, June 1). Transcript. *President Bush Delivers Graduation Speech at West Point*. <https://georgewbush-whitehouse.archives.gov/news/releases/2002/06/20020601-3.html>.

⁶ Bush, George W. (2002, September). *The National Security Strategy of the United States of America*. p.15. <https://nssarchive.us/wp-content/uploads/2020/04/2002.pdf>.

argument went, would save lives. “The greater the threat, the greater is the risk of inaction — and the more compelling the case for taking anticipatory action to defend ourselves, even if uncertainty remains as to the time and place of the enemy’s attack.”⁷ In late 2002, U.S. President Bush gave more specific arguments for a preemptive war against Iraq, saying that while other countries may have or would be developing weapons of mass destruction (WMD), Iraq was “unique” in several respects. Iraq was led by a “murderous tyrant” who had already used chemical weapons. Further, Bush argued that Iraq was building and stockpiling WMD and conventional weapons in defiance of UN sanctions and Iraq had harbored terrorists and might one day pass nuclear weapons to terrorists. “America must not ignore the threat gathering against us. Facing clear evidence of peril, we cannot wait for the final proof — the smoking gun — that could come in the form of a mushroom cloud.”⁸

In November 2002, prior to the invasion, the U.S Central Intelligence Agency prepared a report which evaluated the state of Iraq’s medical infrastructure. It was in a parlous and precarious condition due to the consequences of the 1991 Gulf War and Iraq’s long war with Iran in the 1980s. “Two decades of war and repression in Iraq have debilitated a once relatively robust medical system.” The planned U.S. war would further harm the Iraqi health care system. However, this would allow the U.S. to then repair the medical infrastructure and even “advance” the public perception of the U.S. “Assuming minimal wartime damage to the health system infrastructure and no post-war stoppage of imports, CIA estimates that a 12- to 24-month effort to supplement the system with additional medical expertise and funding in the range of \$100-300 million could significantly advance the image of the United States in the region.”⁹

The twenty years of the U.S. post-9/11 war in Iraq had several phases not counting the pre-war phase. In the years before the war, 1990 to 2003, the U.S. and other countries maintained United Nations sanctions against Iraq that were imposed during the 1990-1991 Gulf War. After the war, the U.S. conducted airstrikes in the Southern and Northern No-Fly zones in Iraq that were essentially a continuation of the 1991 war. In 2002, the number of airstrikes in the No-Fly Zones increased, in part in response to Iraqi Air Defense Force operations, and in part to prepare the way for the 2003 War.¹⁰

In late 2002 early official and unofficial estimates for the total costs of the U.S. war in Iraq ranged from \$50 billion to \$200 billion. In mid-September 2002 President Bush's chief economic adviser, Lawrence Lindsey, estimated that the “upper bound” costs of war against Iraq would be \$100 to \$200 billion. Moreover, he said that “The successful prosecution of the

⁷ Bush, George W. (2002, September). *The National Security Strategy of the United States of America*. p.15. <https://nssarchive.us/wp-content/uploads/2020/04/2002.pdf>.

⁸ Bush, George W. (2002, December 8). Transcript. *Bush: Don't wait for a mushroom cloud*. CNN. <https://edition.cnn.com/2002/ALLPOLITICS/10/07/bush.transcript/>.

⁹ U.S. Central Intelligence Agency. (2002, November 15). *Iraq: Poor Medical Infrastructure Offers Post-War Opportunity for the US to Improve its Image in the Region*. Secret, Intelligence Report. <https://www.proquest.com/government-official-publications/iraq-poor-medical-infrastructure-offers-post-war/docview/1910232949/se-2?accountid=13042>.

¹⁰ Smith, Michael. (2005, May 30). *The War Before the War*. The New Statesman. <https://www.newstatesman.com/long-reads/2005/05/the-war-before-the-war>.

war would be good for the economy.”¹¹ On December 31, 2002, Mitch Daniels, the then director of the Office of Management and Budget estimated that the costs of war with Iraq would be \$50-60 billion.¹² In September 2002, U.S. House of Representatives Democratic Budget Committee staff estimated costs of a war against Iraq to be \$48-93 billion if ten year costs were included.¹³ An exception to the low estimates in late 2002 was Yale economist William Nordhaus who suggested that a long war could cost \$140 billion in direct military spending and another \$615 billion in spending for occupation, peacekeeping, reconstruction and nation-building, and humanitarian assistance.¹⁴

Of course, it *has* been a long war. The initial invasion and occupation begun in March 2003 was known as Operation Iraqi Freedom (OIF). President Bush declared mission accomplished on May 1, 2003, an assessment that even at the time was considered perhaps premature. As Iraqis resisted the occupation and sectarian violence erupted, the U.S. deployed a “surge” in U.S. military forces in 2007, when the number of U.S. forces in Iraq peaked at 170,300. In March 2008, Lindsey said that, “My hypothetical estimate got the annual cost about right. But I misjudged an important factor: how long we would be involved.”¹⁵

During Operation New Dawn (OND), from September 2010 through December 2011, the U.S. and its allies withdrew most of their forces and Iraq was, although unstable internally, not the object of large-scale international military action. Some U.S. forces remained, however, and in June 2014, there were about 300 U.S. military troops in Iraq. In mid and late 2014, after ISIS began to take significant swathes of territory in Iraq, the U.S. and its allies returned to major fighting, this time fighting mostly from the air in strikes against ISIS locations in both Iraq and Syria in Operation Inherent Resolve (OIR). After the U.S. retook the area controlled by ISIS in 2017, the U.S. forces remained at about 5,000 through the Trump Administration. In late 2022, the U.S. had about 900 troops and hundreds of contractors in Syria. An additional 2,500 U.S. troops are located in Iraq.¹⁶ During a March

¹¹ Lindsey, quoted in David, Bob. (2002, 16 September). *Bush Economic Aide Says the Cost of Iraq War May Top \$100 Billion*. Wall Street Journal. <https://www.wsj.com/articles/SB1032128134218066355>

¹² Bumiller, Elizabeth. (2002, December 31). *Threats and Responses: The Cost; White House Cuts Estimates of Cost of War with Iraq*. The New York Times. <https://www.nytimes.com/2002/12/31/us/threats-responses-cost-white-house-cuts-estimate-cost-war-with-iraq.html>.

¹³ Democratic Caucus of the House Budget Committee. (2002, September 23). *Assessing the Costs of Military Action Against Iraq: Using Desert Shield/Desert Storm as a Basis for Estimates: An Analysis by the House Budget Committee Democratic Staff*. <https://usiraq.procon.org/sourcefiles/DHBC.pdf>

¹⁴ Nordhaus suggested that the main component of costs could be higher oil prices if the war in Iraq were to be protracted and difficult. Nordhaus, William D. (2002). *The Economic Consequences of a War with Iraq* in American Academy of Arts and Sciences, *War with Iraq, Costs, Consequences, and Alternatives*. Cambridge: American Academy of Arts and Sciences. p.51-86.

¹⁵ Herszenhorn, David M. (2008, March 19). *Estimates of Iraq War Costs Were Not Close to Ballpark*. The New York Times. <https://www.nytimes.com/2008/03/19/washington/19cost.html>.

¹⁶ Lamothe, Tim; Lovelock, Louisa. (2022, December 6). *U.S. Troops to Expand Patrols in Syria Despite Tension with Turkey*. The Washington Post. <https://www.washingtonpost.com/national-security/2022/12/06/turkey-kurds-syria-us-troops/>.

2023 visit to Syria, General Mark Milley said the U.S. would stay: “[I]f you completely ignore and turn your back, then you’re setting the conditions for a resurgence.”¹⁷

Discussion of Cost Estimates and Long-Term Trends

Table 1 summarizes the estimated U.S. costs of military operations in Iraq and Syria.

Table 1. Estimated U.S. Costs of War in Iraq and Syria, FY2003-FY2023, in Billions of Current Dollars (Rounded to the Nearest Billion)¹⁸

Department of Defense (DOD) “Emergency” or “OCO” Appropriations ¹⁹	\$ 862
Estimated Increase in DOD Base Spending Due to Iraq War (FY2002-FY2022) ²⁰	\$ 406
Department of State, incl. OCO and Foreign Operations Budget ²¹	\$ 62
Estimated Interest on OCO Spending through FY2021 ²²	\$ 230
Estimated Veterans’ Medical and Disability Care through FY2021 ²³	\$ 233
Costs of Iraq War not including Future Veterans’ Care	\$ 1,793
<i>Estimated Obligation for Future Veterans’ Medical and Disability, FY2022-2050</i> ²⁴	<i>\$ 1,100</i>
TOTAL Including Future Obligations for Veterans’ Care	\$ 2,893

¹⁷ Cooper, Helene. (2023, March 5). *In Syria, Milley Says U.S. Troops Are Still Needed to Counter ISIS*. The New York Times. <https://www.nytimes.com/2023/03/04/us/politics/syria-milley-isis-kurds-troops.html>.

¹⁸ Totals may not add due to rounding.

¹⁹ DOD spending includes all DOD operations in OIF, OND, and OIR OCO funds and Counter ISIS Train and Equip Funds through FY2023. Source: Annual DOD Comptroller Reports. Comptroller of the Department of Defense, various years. <https://comptroller.defense.gov/Budget-Materials/>. Total includes and explicitly denoted estimate of the portion of In-Theater Support and other OCO categories that can be attributed to for Iraq and Syria and Operations/Force Protection.

²⁰ An estimate of the increase to the DOD base budget from FY2002 to FY2022 due to the Iraq war. FY2002 is included because, although the Iraq war had not yet begun, planning for it and aerial operations in the NF Zones began in FY2002. Increases to the base calculated at a rate of 50% of OCO from FY 2002-FY2011; 40% from FY 2012-2018 and 20% from FY2020-2022. Of this, Iraq spending was about 46% of total DOD OCO spending from FY2001-FY2022.

²¹ Some State Department funding for Iraq was budgeted as emergency or OCO funding and other funds were in the regular Foreign Operations budget. For an overview, see McCabe, Emily M.; Gill, Cory R. (2023). *Department of State, Foreign Operations, and Related Programs: FY2023 Budget and Appropriations*. Congressional Research Service, R47070. <https://crsreports.congress.gov/product/pdf/R/R47070>. *Congressional Budget Justification*. Department of State, Foreign Operations and Related Programs, Foreign Operations, Appendix 2. <https://www.state.gov/wp-content/uploads/2022/05/FY-2023-Congressional-Budget-Justification-Appendix-2-final-508comp.pdf>.

²² Calculated as a share of the total of interest on borrowing for DOD and State Department OCO. Bilmes, Linda J. (2017, November 8). *The Credit Card Wars: Post-9/11 War Funding Policy in Historical Perspective*. Costs of War, Watson Institute, Brown University. <https://watson.brown.edu/costsofwar/files/cow/imce/papers/2017/Linda%20%20Bilmes%20%20Credit%20Card%20Wars%20FINAL.pdf>.

²³ Bilmes, Linda. (2021, August 18). *The Long-Term Costs of Caring for Veterans of the Iraq and Afghanistan Wars*. Costs of War, Watson Institute, Brown University. <https://watson.brown.edu/costsofwar/files/cow/imce/papers/2021/Costs%20of%20War%20Bilmes%20Long-Term%20Costs%20of%20Care%20for%20Vets%20Aug%202021.pdf>.

²⁴ Ibid.

These U.S. costs are considered here in terms of Department of Defense and State Department direct spending on the “global war on terror” (GWOT) or “overseas contingency operations” (OCO); interest on OCO spending; the increased spending in the base budget that is due to war and operations in Iraq; spending on veterans’ care; and future costs of veterans’ care. The categories of U.S. spending described here are intended to be comprehensive. However, this calculation of the costs of the Iraq war does not include increases to Homeland Security spending that might be attributed to the fact of the long U.S. wars in Iraq, Afghanistan, and elsewhere. Nor does this include the spending, discussed below, that was undertaken by other governments and organizations.

The Pentagon has the largest share of U.S. federal spending directly related to the Iraq war. Since DOD war funding can be hard to follow, it helps to keep in mind that Congress intended supplemental emergency (OCO) military spending for the Global War on Terror to be separate from “base” military spending. In practice, the two categories blurred. Attentive readers of the DOD’s spending reports on the Iraq war will note that Pentagon accounting has varied over the years in terms of the budgetary categories in which spending is reported and in the names of the categories. It must also be said that the transparency of the DOD’s war and war-related spending, as discussed below, has varied.²⁵

This report estimates the DOD spending that is related to the Iraq war in two lines: funding specifically or directly designated emergency or OCO for Iraq and Syria operations and the increase to the Pentagon’s budget that can be attributed to the war in Iraq and Syria, such as incremental increases in spending for military compensation, equipment repair and replacement (reset), and so on. This report discusses OCO spending first, and then discusses the estimated increase in base military spending. The U.S. did not raise taxes for the post-9/11 wars, and thus must pay interest on borrowing for this spending.

Emergency War/OCO Spending: The DOD has varied in its categorization and reporting of operational costs in its budget for the OCO. In most years, the DOD delineated war spending by named operation, distinguishing between costs for the Afghanistan (now called Operation Freedom’s Sentinel) and the Iraq/Syria war zones, which the Pentagon refers to as Operation Inherent Resolve.

In the Budget Control Act of 2011, Congress imposed caps through FY2021 on federal discretionary spending and cuts in spending known as “sequestration” which included caps on the base military budget, but did not apply to emergency OCO war spending. In the

²⁵ Reports made by Congressional Budget Office, Congressional Research Service, and Government Accountability Office, as well as the detailed analysis by the Special Inspector General for Iraq Reconstruction, have over the years, documented the intricacies and lack of clarity in war and reconstruction related spending. Congressional Research Service analyst Amy Belasco argued consistently for greater clarity in her 2011 and 2014 reports on the cost of the Afghanistan and Iraq wars. See Belasco, Amy. (2011, March 29). *The Cost of Iraq, Afghanistan, and Other Global War on Terror Operations Since 9/11*. Congressional Research Service; Belasco, Amy. (2014, December 8). *The Cost of Iraq, Afghanistan, and Other Global War on Terror Operations Since 9/11*. Congressional Research Service.

“sequestration” years, the OCO budget supplemented some of the base budget.²⁶ As noted in previous Costs of War Reports, the changes to DOD accounting were specifically and explicitly intended to circumvent congressionally imposed limits on the base defense budget. For example, the Department of Defense FY2020 budget request explicitly stated: “These base budget requirements are funded in the OCO budget due to limits on budget defense caps enacted in the Budget Control Act of 2011. As base budget funding at the Budget Control Act level is insufficient to execute the National Defense Strategy, additional resources are being requested in the OCO budget.”²⁷ The FY2020 OCO for base requirements request also, according to the Comptroller’s report “include ground, air, and ship operations, base support, maintenance, weapons system sustainment, munitions, and other readiness activities, which are needed to prepare warfighters for their next deployment. This OCO request for base requirements includes additional resources for non-DoD activities, which are described in detail under separate (classified) cover.”²⁸ The FY2021 DOD budget enacted \$16.5 billion in “OCO for Base Requirements.”

During the sequestration years, budgeting practices became more opaque. For example, the FY2020 budget request included \$97.5 billion in OCO funding for base budget requirements and \$35.3 billion for “Enduring Theater Requirements and Related Missions” conflating the spending for Iraq and Afghanistan war zones. In the FY2020 request, the DOD Comptroller also applied some of these new categories retroactively to previous OCO funding—respectively \$2, \$8, \$18, and \$17 billion for Fiscal Years 2015 to 2019.²⁹

With the end of sequestration, categories and labels changed again. The distinction between OCO and the base budget were eliminated in the FY2022 DOD budget request by the Biden administration.³⁰ As the Congressional Budget Office notes, “Starting in fiscal year 2022, DoD began requesting funding for the anticipated costs of enduring overseas operations as part of its regular appropriations.”³¹ The FY2022 DOD budget request sought money for what the DOD described as “enduring theater requirements” that “reflects enduring in-theater and Continental United States (CONUS) costs that will remain after

²⁶ See Congressional Budget Office. (2018, October). *Funding for Overseas Contingency Operations and Its Impact on Defense Spending*. www.cbo.gov/publication/54219.

²⁷ Office of the Undersecretary of Defense (Comptroller). (2019). *Defense Budget Overview: United States Department of Defense Fiscal Year 2020 Budget Request*, p.6-8.

²⁸ Office of the Undersecretary of Defense. (Comptroller). (2019). *Defense Budget Overview: United States Department of Defense Fiscal Year 2020 Budget Request*, p.6-8.

²⁹ Office of the Undersecretary of Defense. (Comptroller). (2019). *Defense Budget Overview: United States Department of Defense Fiscal Year 2020 Budget Request*, p.6-4.

³⁰ “To comply with the Office of Management and Budget direction in the Summary of the President’s Discretionary Funding Request, dated April 9, 2021, the Department of Defense (DoD) is shifting funds that had previously been designated as OCO to the base budget. The discretionary request also discontinues requests for OCO as a separate funding category, instead funding direct war costs and enduring operations in the DoD base budget, a significant budgetary reform.” Office of the Undersecretary of Defense (Comptroller). (2021). *Defense Budget Overview: United States Department of Defense Fiscal Year 2020 Budget Request*, p.7-2. https://comptroller.defense.gov/Portals/45/Documents/defbudget/FY2022/FY2022_Budget_Request_Overview_Book.pdf.

³¹ U.S. Congressional Budget Office. (2023, January) *Long Term Implications of the 2023 Future Years Defense Program*. Congressional Budget Office, p.2

combat operations end.”³² The DOD again introduced new categories in the FY2023 budget, such as “Other Theater Requirements and Missions.”

The DOD’s accounting of its OCO spending also seems to vary across reports. For example, the DOD Comptroller’s report, “Estimated Cost to Each Taxpayer of Each of the Wars in Afghanistan, Iraq, and Syria” — also known as the “Section 1090 Reports” — states that DOD spending on the Iraq war totaled \$787,456 from FY 2003-FY2021.³³ In Fiscal Year 2021, it states that the Iraq and Syria war that year cost \$7.38 billion.³⁴ However, the more detailed reports in the budgetary documents produced by the Department of Defense Comptroller includes additional DOD budget line items associated with the war. For example, the Operation Inherent Resolve (OIR) line item is \$7.38 billion in FY2021, but the DOD also reports an additional \$ 700 million for the Counter ISIS Train and Equip Fund. Similarly, in FY2023 the DOD requested \$5.5 billion in the nominal OIR budget, but also requested \$500 million for the Counter ISIS Train and Equip Fund and \$16.9 billion for in Theater Support for Iraq and Syria.

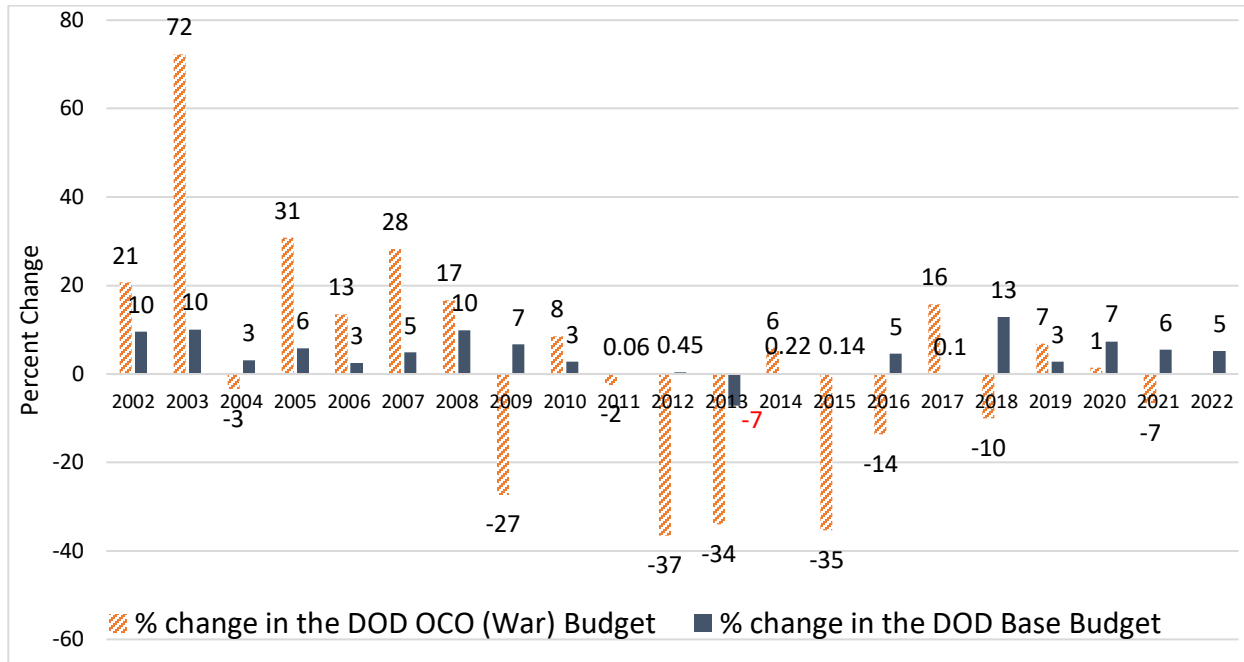
“Base”-Related Spending: The Pentagon’s “base” budget is intended to fund enduring (non-war) costs of the Department of Defense and the armed services that would be incurred if the US were not at war, specifically costs of personnel, including health care, and the costs of research and development, procurement, operations, military construction and housing, and equipment maintenance. But, overall, the long mobilization for both the Iraq and Afghanistan wars contributed to increased spending in the base budget. Indeed, base military spending has almost invariably increased since 2001. Overall, the base military budget has more than doubled between Fiscal Year 2001 and 2023. Even when spending on the post-9/11 wars and other military operations has declined, Department of Defense base budget spending has trended upward. There is only one year, FY2013, when OCO spending declined by 34% over the previous year, and base military spending declined 7 %. See Figures 1 and 2.

³² Office of the Undersecretary of Defense (Comptroller). (2021). *Defense Budget Overview: United States Department of Defense Fiscal Year 2020 Budget Request*, p.7-2.

³³ Office of the Undersecretary of Defense (Comptroller). <https://comptroller.defense.gov/Home/Section1090Reports/>.

³⁴ Department of Defense. (2022, June). *Estimated Cost to Each Taxpayer of Each of the Wars in Afghanistan, Iraq, and Syria*. https://comptroller.defense.gov/Portals/45/documents/Section1090Reports/Estimated_Cost_to_Each_U.S._Taxpayer_of_Each_of_the_Wars_in_Afghanistan,_Iraq_and_Syria_dated_June_2022.pdf.

Figure 1. Percent Changes in U.S. DOD Base and OCO Funding (in Current Dollars) Over the Previous Year³⁵



In other words, although Congress intended supplemental war spending to be separate from base military spending, war spending has affected base military spending even as base military spending has also increased for reasons unrelated to war.

As noted in previous Costs of War reports, part of the war-related increase in base military spending is perhaps driven by the rally around the flag effect — where members of Congress during the Bush, Obama, Trump and Biden administrations wanted to be seen to be supporting U.S. troops. For instance, President Obama requested \$663.8 billion for the Pentagon in FY2010. Congress then appropriated \$691 billion.³⁶ The practice of Congress awarding more money to the Pentagon than requested by Defense Department continued through the Trump Administration. In March 2018, for example, Congress appropriated \$61 billion more than the DOD requested.³⁷ In 2021 and 2022, the Congress appropriated more money than the Biden administration requested, \$22.5 billion and \$45 billion respectively for FY2022 and 2023.³⁸

³⁵ Source: Analysis of the author using DOD Comptroller data.

³⁶ Congressional Research Service. (2009, December 23). *Defense: FY2010 Authorization and Appropriations*. CRS, R40567.

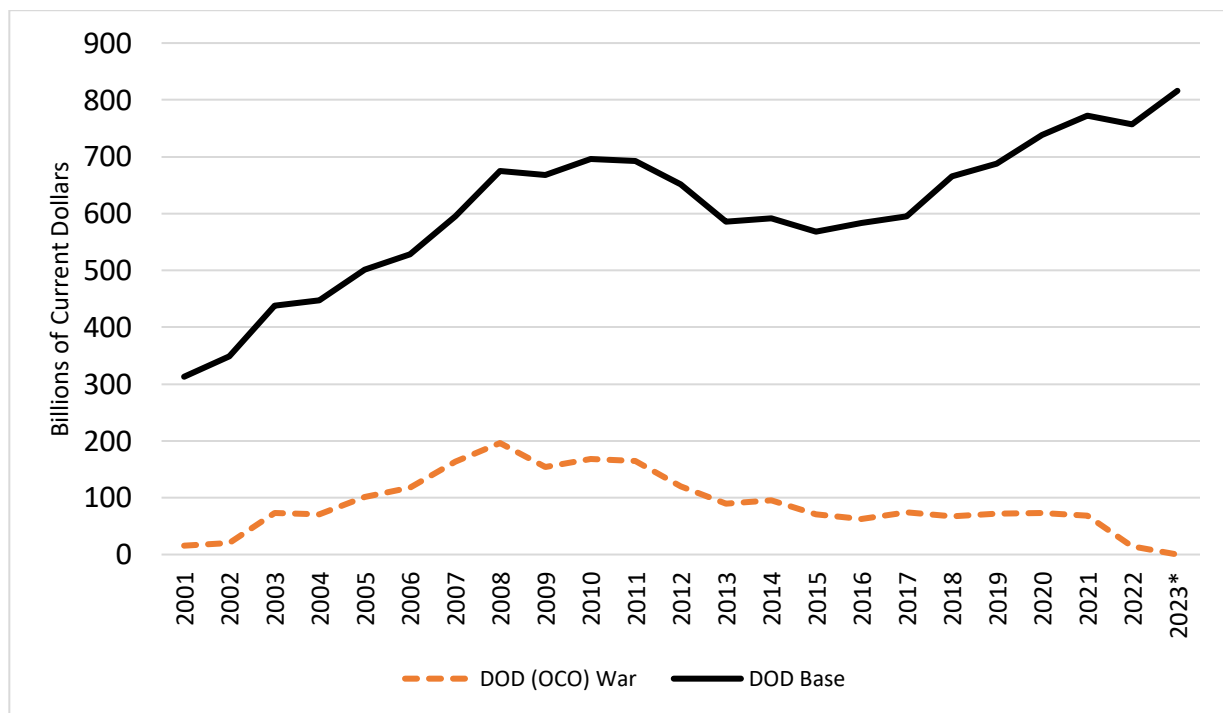
https://www.everycrsreport.com/files/20091223_R40567_9861202e3d375ffb07ed5f7d6877e9828335aa51.pdf

³⁷ Myre, Greg. (2018, March 26) *How the Pentagon Plans to Spend that Extra \$61 billion*. National Public Radio. <https://www.npr.org/sections/parallels/2018/03/26/596129462/how-the-pentagon-plans-to-spend-that-extra-61-billion>.

³⁸ Donnelly, John M.. (2021, July 23,). *Democratic Hawks Want to Go Bigger than Biden on Defense Spending*. Roll Call. <https://www.rollcall.com/2021/07/23/democratic-hawks-want-to-go-bigger-than-biden-on-defense-spending/>. Shane, Leo. (2021, July 23). *Plan to Boost Biden’s Defense Budget Could See Bipartisan*

Additions to the base military budget have occurred — even as war spending has decreased — for four additional reasons that are indirectly and directly related to the post-9/11 wars. First, the military has devoted an increasingly large share of military spending to purchasing the services of contractors who provide goods and services such as equipment maintenance, transportation, security, and food services. As Heidi Peltier shows, the costs of using contractors has more than doubled during the post-9/11 wars.³⁹ While contractors make up an increasingly large part of the U.S. presence in the major war zones, they have also become a staple of operations within the continental United States and at other overseas bases. Indeed, spending on contracting has increased, even as direct war-related spending has declined.

Figure 2. U.S. Military Base and War (OCO) Spending, FY2001-FY2023 Requests⁴⁰



Support. Military Times. <https://www.militarytimes.com/news/pentagon-congress/2021/07/21/plan-to-boost-bidens-defense-budget-could-see-bipartisan-support/>. O’Brian, Connor; Hudson, Lee. (2022, November 30). *House, Senate Negotiators Agree to add \$45B to Biden’s Defense Budget*. Politico. <https://www.politico.com/news/2022/11/30/house-senate-negotiators-45b-biden-defense-budget-00071367>. Garamone, Jim, (2022, December 23). *Biden Signs National Defense Authorization Act into Law*. Defense News. <https://www.defense.gov/News/News-Stories/Article/Article/3252968/biden-signs-national-defense-authorization-act-into-law/>.

³⁹ Peltier, Heidi. (2020, June 30). *The Growth of the ‘Camo Economy’ and the Commercialization of the Post-9/11 Wars*. Costs of War, Watson Institute, Brown University. <https://watson.brown.edu/costsofwar/files/cow/imce/papers/2020/Peltier%202020%20-%20Growth%20of%20Camo%20Economy%20-%20June%2030%202020%20-%20FINAL.pdf>.

⁴⁰ Source: DOD Comptroller, various years.

Second, the U.S. has continued to “modernize” its military forces, procuring new technology, weapons, and weapons platforms to meet what it considers existing or potential threats. Further, some of the equipment that was destroyed, damaged, or used up during the wars has been repaired or replaced, sometimes with more expensive equipment in a process known as “reset.”

Third, while the United States was at war so long, personnel costs in the base budget grew. For instance, military pay increased 6.9% in 2002, the largest percentage increase since the early 1980s.⁴¹ Overall, between 2002 and 2018, regular military compensation (cash, allowances for food and housing, and tax advantages) grew by 20 percent for the active duty force.⁴² In FY2021, members of the military received a 3% pay increase, in FY2022, a 2.7% pay increase and in late 2022 Congress enacted a 4.6 % pay increase for the military for Fiscal Year 2023, the largest since 2009. In addition, the Basic Allowance for Subsistence rates have increased.⁴³ Further, when casualties during the Afghanistan and Iraq wars were high, enlistment rates were affected, and the use of bonuses for enlistment and retention substantially increased.⁴⁴

Fourth, the costs of healthcare for service members and retirees grew. In fact, the Defense Health Program (DHP) budget more than doubled during this period: in current dollars DHP in FY 2001 was \$13.5 billion; by FY2022, it was \$37.3 billion.⁴⁵ The OCO budget paid for some of the healthcare costs of active duty personnel wounded in the war zones.⁴⁶ But, as Figure 3 illustrates, while the Defense Health Program was supplemented by OCO money, most of the increase in DHP spending occurred in the DHP base budget.

⁴¹ See *United States Military Basic Pay History*. <https://www.navycs.com/charts/>. Also see Absher, Jim. (2021, January 28). *Historical Military Pay Tables*. Military.Com. <https://www.military.com/benefits/military-pay/charts/historical-military-pay-rates.html>.

⁴² Congressional Budget Office. (2020, January). *Approaches to Changing Military Compensation*. <https://www.cbo.gov/system/files/2020-01/55648-CBO-military-compensation.pdf>.

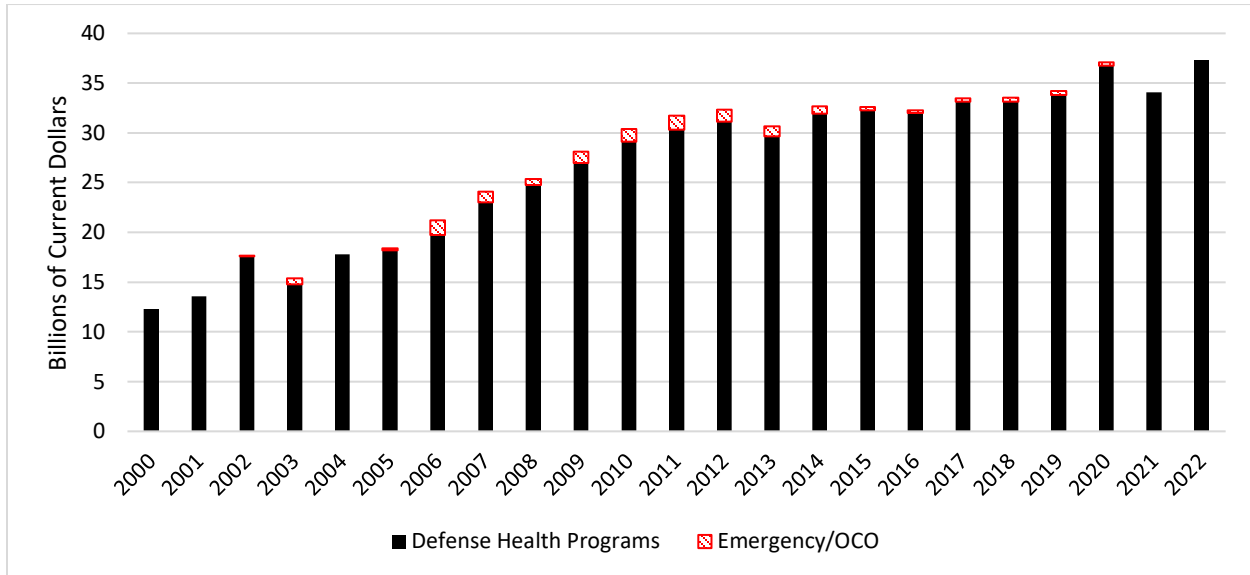
⁴³ *Military Pay Raises – 2004 to 2023*. <https://www.federalpay.org/military/raises>. Basic Allowance for Subsistence is the allotment for active duty troops who live outside the barracks.

⁴⁴ See Asch, Beth, et al. (2010, January 1). *Cash Incentives and Military Enlistment, Attrition, and Reenlistment*. Santa Monica: RAND Corporation. <https://apps.dtic.mil/sti/citations/ADA522744>.

⁴⁵ See Department of Defense, Defense Comptroller data, various years. <https://comptroller.defense.gov/Budget-Materials/>.

⁴⁶ Congressional Budget Office. (2014, January). *Approaches to Reducing Federal Spending on Military Health Care*. <https://www.cbo.gov/sites/default/files/113th-congress-2013-2014/reports/44993-militaryhealthcare.pdf>. Congressional Research Service. (2021, June 15). *FY2022 Budget Request for the Military Health System*. https://www.everycrsreport.com/files/2021-06-15_IF11856_2ee5b10639ee71e551b4d72f00dedab932dd2397.pdf.

Figure 3. Defense Health Programs Spending, FY 2000-FY2022⁴⁷



Additional Military and Reconstruction Spending for Iraq

The U.S. was joined in its 2003 war by a coalition of dozens of nations, known as Multi-National Forces – Iraq, and of these, the forces of 22 countries had military fatalities. The United States’ closest ally in the Iraq war from 2003, supplying about 46,000 troops, was Great Britain, until they withdrew in May 2011. In January 2015, the U.K. Ministry of Defence totaled their incremental net expenses for Iraq (known as Operation Telic) from 2003 as £8.1642 billion. The UK returned to make airstrikes in Iraq and Syria against ISIS in late 2014; the additional costs associated with those operations, through 2021-2022 sums to £2 billion.⁴⁸ Converted to current dollars, the UK military budget for the war from 2003 to mid 2022 was about \$12.16 billion.

A Costs of War report by Jason W. Davidson totals the Iraq war budgets of Italy, Australia, South Korea and Poland through 2018 at a total of \$5.76 billion.⁴⁹ Thus, the major U.S. allies military spending on the wars about totaled about \$17.9 billion. Davidson calculated these allies’ contributions through foreign assistance to be a total of \$6.07 billion from 2003-2018. While this is not the entire sum of the contributions of the coalition members that fought in

⁴⁷ Source: Department of Defense Comptroller, data FY2000-FY2023.

⁴⁸ UK Ministry of Defense (2015, January).

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/494526/FOI2015-08279-Cost_of_the_wars_in_Iraq_and_Afghanistan.pdf. Note that the document said expenses for Afghanistan from 2001 were £21.3157 billion. Also see, *Defence departmental resources: index*. Gov.UK.

<https://www.gov.uk/government/collections/defence-departmental-resources-index>.

⁴⁹ Davidson, Jason W. (2021, May 12). *The Costs of War to United States Allies Since 9/11*. Costs of War, Watson Institute, Brown University.

https://watson.brown.edu/costsofwar/files/cow/imce/papers/2021/Davidson_AlliesCostsofWar_Final.pdf.

the Iraq and Syria conflicts and contributed toward the reconstruction of Iraq, the United States' major allies spent at least \$24 billion.

According to the U.S. Special Inspector General for Iraq Reconstruction (SIGIR), the government of Iraq spent more than \$145 billion for its own reconstruction between 2003 and late 2012 and multilateral assistance from other non-US sources amounted to \$4.31 billion. All this spending for the war zone totals to about \$174 billion.⁵⁰ This is only a partial tally since it does not include spending by multilateral donors on Iraq's reconstruction after 2012, specifically, the United Nations Funding Facility for Stabilization which has since 2015 raised an additional \$1.55 billion from 30 donors (including the Iraqi government).⁵¹ It also does not include the costs that some countries who received Iraq and Syrian war refugees may have incurred. This spending by other governments and multilateral institutions is not included in this report's spending figures, which only total the amount the U.S. has spent.

The Human Toll

As with most wars, we may never know the full extent of the loss of life and injuries that are a direct and indirect consequence of the wars in Iraq. The direct effects include the hundreds of thousands of people who have been killed and injured due to the fighting — killed by bombs, bullets, and fire. That is the focus of this report's totals. The categories of people killed in the wars range from civilian children, to combatants, to aid workers and journalists. Who kills who is often in dispute. This report does not ascribe responsibility for all these war deaths to a single party: many sides have contributed to the killing and creating the conditions for indirect death.

Specifically, ISIS and the Syrian government, among others, have deliberately targeted civilians. And civilians have often been killed inadvertently, as when they are victims of land mines or improvised explosive devices. Russia and the United States have harmed civilians in airstrikes in Syria.⁵² This discussion focuses first on the aggregate numbers of people killed. It then turns to ways soldiers and civilians have been injured in the conflicts including their visible and invisible wounds.

⁵⁰ Special Inspector General for Iraq Reconstruction. (2013, March). *Learning From Iraq: A Final Report from the Special Inspector General for Iraq Reconstruction*.

<https://cybercemetery.unt.edu/archive/sigir/20131001080029/http://www.sigir.mil/files/learningfromiraq/Report - March 2013.pdf>

⁵¹ UNDP. *Funding Facility for Stabilization*. <https://www.undp.org/iraq/projects/funding-facility-stabilization#:~:text=UNDP's%20Funding%20Facility%20for%20Stabilization.resurgence%20of%20violence%20and%20extremism>.

⁵² See Airwars, <https://airwars.org/>.

Table 2. Estimated Deaths in Iraq War (March 2003- March 2023) and Syria War (September 2014-2022)

	Iraq	Syria/ISIS	Total
US Military	4,599		4,599
US DOD Civilian	15		15
US Contractors	3,650	19	3,669
National Military and Police	<i>48,337- 52,337</i>	<i>51,483</i>	<i>99,820-103,820</i>
Other Allied Troops	<i>324</i>	<i>11,000</i>	<i>11,324</i>
Civilians	<i>186,694-210,038</i>	<i>138,947</i>	<i>325,641-348,985</i>
Opposition Fighters	<i>36,806-43,881</i>	<i>67,065</i>	<i>103,871-110,946</i>
Journalists and Media Workers	282	75	357
NGO humanitarian workers	64	227	291
TOTAL	<i>280,771-315,190</i>	<i>268,816</i>	<i>549,587-584,006</i>

Numbers in italics are very uncertain; sources discussed are discussed at the end of this report in the Appendix.

Table 2 is an aggregate of various estimates of civilians and others who have been killed in the Iraq war from March 2003 and in the war in Syria since 2014 when direct U.S. military involvement in the war began. There are precise numbers for most international combatants, specifically for U.S. military and DOD civilians, but there are less precise numbers for all other categories. The difficulty in determining the total number of civilian deaths is related to whether those deaths have been documented, and sometimes whether a person is classed as a civilian/non-combatant, or if their status is uncertain. Further, the number of non-international combatants killed on all sides is uncertain: adversaries have incentives to deflate their own casualties and inflate the other sides' casualties.

The U.S. military planned to avoid civilian casualties in Iraq. As the U.S. Commander Tommy Franks said, just after the war began, "This will be a campaign unlike any other in history, a campaign characterized by shock, by surprise, by flexibility, by the employment of precise munitions on a scale never before seen, and by the application of overwhelming force."⁵³ However, during the first year of the war in Iraq, in 2003, about 7,500 people were killed by the U.S. led coalition by all methods, including air strikes. As Table 3 shows, most of those people were killed in the first month of the war.⁵⁴

The data below (Table 3) shows that more than two thousand civilians were killed by U.S. Coalition air strikes in the first month of the Iraq war. Air strikes were consistently identified as an area where the U.S. military took great care to avoid harming civilians. Nevertheless,

⁵³ Franks quoted in Correll, John T. (2003, November). *What Happened to Shock and Awe?* Air Force Magazine, p. 52-57.

⁵⁴ Iraq Body Count, <https://www.iraqbodycount.org/database/>.

independent reporting and investigation by *The New York Times* and *Air Wars* has shown that the U.S. military has often undercounted the number of civilians killed and injured in its airstrikes and failed to adequately investigate cases where U.S. or allied strikes may have harmed civilians.⁵⁵

Table 3. Iraqi Civilians Killed from 19 March - 19 April 2003 by U.S. Coalition⁵⁶

Week Beginning	Killed by Air Attack	Killed by Other Means	Killed by All Means	Percent Killed by Air Attack
Sunday, March 16, 2003	389	603	992	39.2%
Sunday, March 23, 2003	905	1,413	2,318	39.0%
Sunday, March 30, 2003	828	1,467	2,295	36.1%
Sunday, April 6, 2003	189	1,029	1,218	15.5%
Sunday, April 13, 2003	12	208	220	5.5%
Total	2,323	4,720	7,043	33.0%

There are also people who have been indirectly harmed in the region during the wars — by the lack of food, medical infrastructure, sanitation, and the stresses of displacement which may have exacerbated pre-existing medical conditions. These are called excess deaths — since they likely would not have occurred in the absence of the war and requires a prediction of the number of people who would have died had there been no war. In the case of Iraq and Syria, estimating indirect deaths is complicated by the fact that there was missing or unreliable public health data before the wars, and both countries were at war prior to the conflicts discussed here.⁵⁷ Although it is difficult to estimate with precision, indirect deaths tend to outnumber direct deaths in war and may even be a multiple of the deaths from direct causes.⁵⁸ “An account of war deaths must record all people killed in battle as well as all those whose deaths were the result of the changed social conditions caused by the war.”⁵⁹ The trouble is that research has yielded an extremely crude rule of thumb for estimating indirect and excess death: “between three and 15 times as many people die indirectly for every person who dies violently.”⁶⁰ On the other hand, those who use survey research and

⁵⁵ For example, see: Khan, Azmat, et al. (2021, December 18.). *The Civilian Casualty Files*. The New York Times. <http://www.nytimes.com/interactive/2021/us/civilian-casualty-files.html>; Airwars, <https://airwars.org/>.

⁵⁶ Author Calculations based on Iraq Body Count database. <https://www.iraqbodycount.org/database/>.

⁵⁷ Daponte, Beth Osborne. (1993). *A Case Study in Estimating Casualties from War and Its Aftermath: The 1991 Persian Gulf War*. *Physicians for Social Responsibility Quarterly*, 3, p.57-66. Archived at *Medicine and Global Survival*, <http://ippnw.org/Resources/MGS/PSQV3N2Daponte.html>

⁵⁸ Wise, Paul. (2017). *The Epidemiological Challenge to the Conduct of Just War: Confronting Indirect Civilian Casualties of War*. *Deadalus*. <https://direct.mit.edu/daed/article/146/1/139/27137/The-Epidemiologic-Challenge-to-the-Conduct-of-Just>; Geneva Declaration Secretariat. (2008). *Global Burden of Armed Conflict*. Geneva: Geneva Declaration Secretariat.

⁵⁹ Lacina, Bethany; Gleditsch, Nils Petter, (2005, June). *Monitoring Trends in Global Combat: A New Dataset of Battle Deaths*. *European Journal of Population*, 21:2/3, p.145-166. <https://link.springer.com/article/10.1007/s10680-005-6851-6>

⁶⁰ Geneva Declaration Secretariat (2008). *Global Burden of Armed Conflict*. Geneva: Geneva Declaration Secretariat, p. 4, 32.

demographic models have been criticized after they made high estimates of those who were killed as a consequence of the Iraq War.⁶¹

More than 32,000 U.S. service members were injured in the Iraq War. Due to advances in trauma care, the post-9/11 wars have seen a nearly 45 percent increase in the number of soldiers who are surviving wounds that, in the past would, have killed them.⁶² Among the visible and invisible wounds of the survivors are burns, traumatic limb amputations, and traumatic brain injuries. It is difficult to get complete and up to date statistics on deployment related limb amputations for U.S. service members.⁶³ One study, published in 2018 in the *Medical Surveillance Monthly Report* of the Defense Health Agency, found that a total of 1,496 service members (all wars) sustained a total of 1,914 lower limb amputations and 284 service members sustained a total of 302 upper limb amputations from January 2001 through October 2017, with the implication that several hundred service members had more than one limb amputated.⁶⁴ See Figure 4.

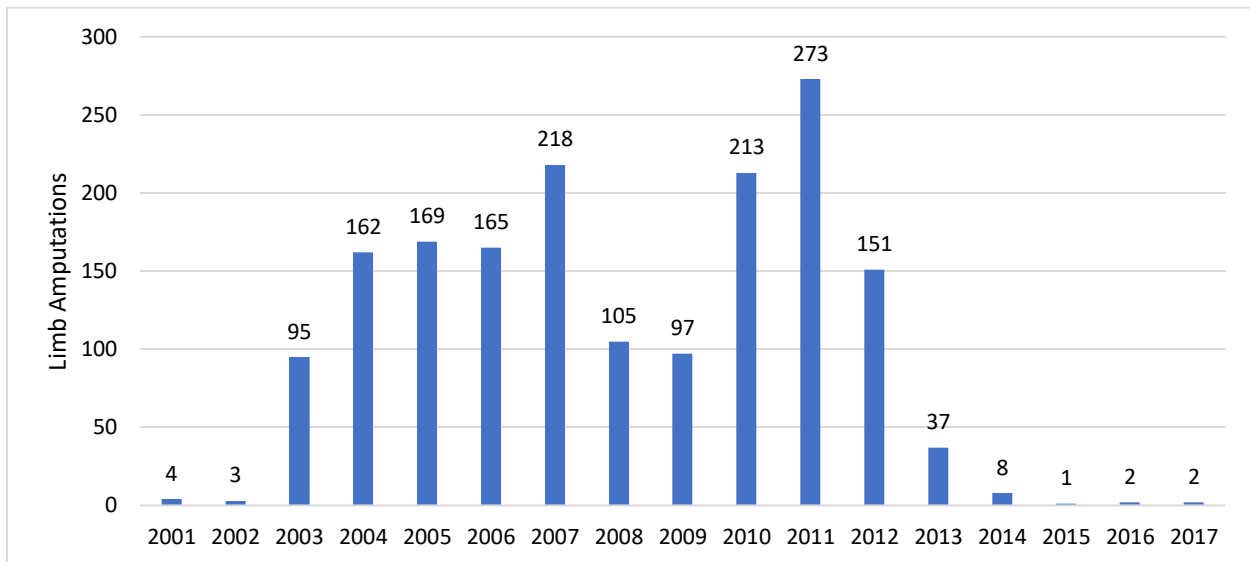
⁶¹ The studies that faced the most criticism include Roberts, Les, et al. (2004). *Mortality before and after the 2003 invasion of Iraq: cluster sample survey*. The Lancet. 364 (9448): 1857–1864; Burnham, Gilbert, et al. (2006). *Mortality after the 2003 invasion of Iraq: a cross-sectional cluster sample survey*. The Lancet. 368 (9545): 1421–1428; Iraq Family Health Survey Study Group. (2008, January). *Violence Related Mortality in Iraq from 2002 to 2006*. New England Journal of Medicine. 358, 484-493; Burnham G.M. (2008, July). *Violence-related mortality in Iraq, 2002–2006*. New England Journal of Medicine. 359 (4): 431–432.

⁶² See Fazal, Tanisha M. (2014). *Dead Wrong?: Battle Deaths, Military Medicine, and Exaggerated Reports of War's Demise*. International Security. 39:1, p.95-125; Howard, Jeffrey T.; Kotwal, Russ S.; Stern, Caryn A. (2019, March 27). *Use of Combat Casualty Care Data to Assess the US Military Trauma System During the Afghanistan and Iraq Conflicts, 2001-2017*. JAMA Surgery. <https://jamanetwork.com/journals/jamasurgery/article-abstract/2729451>.

⁶³ Among U.K. service members, there were 34 whose injuries included traumatic or surgical amputation because of injuries sustained in Iraq. UK Government Ministry of Defense. *Official Statistics: Afghanistan and Iraq Amputation Statistics: 1 April 2015 to 31 March 2020*. <https://www.gov.uk/government/statistics/uk-service-personnel-amputations-financial-year-20192020/afghanistan-and-iraq-amputation-statistics-1-april-2015-to-31-march-2020>.

⁶⁴ Farrokhi, Shawn, et al. (2018, July). *Major Deployment-related Amputations of Lower and Upper Limbs, Active and Reserve Components, U.S. Armed Forces, 2001–2017*. Medical Surveillance Monthly Report, 25(7).

Figure 4. Total U.S. Deployment-Related Limb Amputations, January 2001-October 2017⁶⁵



There is less precision around the number of Iraqis who have lost limbs due to the fighting. In mid-2022, the International Committee of the Red Cross (ICRC) estimated that six million people, or about 15 percent, of all Iraqis are disabled. Of those, about 600,000 needed physical rehabilitation services and 200,000 required an orthotic or prosthetic limb.⁶⁶ The data from a few centers suggests the scale of conflict related amputations. In 2017 around 60 percent of the amputation cases received by the ICRC Physical Rehabilitation Center in Mosul were war-related, and of those 36 percent are caused by mines.⁶⁷ In the first three months of 2017, that facility treated 148 people in Mosul who had lost limbs.⁶⁸ The Mosul Center had 3,491 files for people with amputations in 2018.⁶⁹ At a rehabilitation center in Erbil, run by the ICRC, between 1996 and 2021, the center treated 2,750 mine victims and 2,100 who were amputated because of other conflict causes.⁷⁰ The needs are currently outpaced by the capacity of the health care system.

⁶⁵ Data from Farrokhi, Shawn, et. al. (2018, July). *Major Deployment-related Amputations of Lower and Upper Limbs, Active and Reserve Components, U.S. Armed Forces, 2001–2017*. Medical Surveillance Monthly Report.

⁶⁶ Salem, Amr. (2022, May 4). *Red Cross: 15 Percent of Iraqi Population Disabled*. Iraqi News.

<https://www.iraqinews.com/iraq/red-cross-15-percent-of-iraqi-population-disabled/>

⁶⁷ Boskovitch, Angela. (2017, December 20). *A Struggle to Care for Iraq's Disabled*, Carnegie. Endowment for International Peace. <https://admin.carnegieendowment.org/sada/?fa=75078>.

⁶⁸ Williams, Melton. (2017, May 11). *In Iraq's Mosul, Many Survivors Face Future as Amputees*. Loop.

<https://tt.loopnews.com/content/iraqs-mosul-many-survivors-face-future-amputees-5>.

⁶⁹ Barth, Cornelia Ann, et al., (2021, December 1). *Retrospective Observational Study of Characteristics of Persons With Amputations Accessing International Committee of the Red Cross (ICRC) Rehabilitation Centres in Five Conflict and Postconflict Countries*. BMJ Open, p.11. <https://pubmed.ncbi.nlm.nih.gov/34853101/>

⁷⁰ ICRC. (2022, March 16). *Erbil: New Glimpse of Hope, ICRC Opens Largest Physical Rehabilitation Centre in Iraq*. National Tribune. <https://www.nationaltribune.com.au/erbil-new-glimpse-of-hope-icrc-opens-largest-physical-rehabilitation-centre-in-iraq/>.

Limb loss due to conflict is ongoing. Citizens in both countries face not only ongoing violence, but the unexploded remnants of war — including mines, cluster munitions, and improvised explosive devices (IEDs) — which failed to explode. The presence of mines and cluster munitions also impedes agricultural production in both countries and impedes access to healthcare. According to a 2021 report by Humanity & Inclusion (also known as Handicap International), 3,225 km² were contaminated by explosive ordnance from the 2003 war, but also the earlier wars between Iraq and Iran (1980-1988) and the 1991 Gulf War, making Iraq the fourth most explosive ordnance contaminated country in the world.⁷¹ Although improving since 2020, the rate of explosive ordnance clearance is quite slow in comparison to the scale of the contamination: 13.8 km² were cleared of cluster munitions and 11.6 km² were cleared of anti-personnel mines in 2021. The level of unexploded ordnance contamination in Syria is high, but in 2021, there was an estimated 100,000-300,000 ordnance that had failed to detonate in Syria.⁷² About a third of the populated areas of the country are contaminated by cluster munitions, and very little land has been cleared of cluster munitions and mines during the on-going war. In addition, mines have been deployed along the Turkish borders with both Iraq and Syria.⁷³

Iraqis and Syrians also face serious mental health challenges. There is one psychiatric hospital in Iraq, a country of more than 35 million people. A survey of 1,000 Iraqi women in 2020 found that more than 91% had experienced war related trauma since 2003, and that “anxiety symptoms were reported by 39.7% of the women, depressive symptoms by 34.2% and suicidal thoughts/attempts by 35.8%.”⁷⁴

The wars in Iraq and Syria from 2003 to 2023 have caused significant internal displacement and prompted large refugee flows. One can think of waves of displacement as having two phases in Iraq — from the initial invasion in 2003 to 2011, and from the large-scale fighting brought on by ISIS attacks from 2014 to 2017. The latter war was particularly devastating to the infrastructure of Iraq.⁷⁵ When the U.S. invaded in 2003, several million Iraqis were internally displaced. According to the Office of the UN High Commissioner on Refugees, during the war with ISIS, 3 million Iraqis were internally displaced; more than 1.1 million Iraqis remain displaced and more than 345,000 Iraqis are currently international

⁷¹ Humanity & Inclusion. (2021). *No Safe Recovery: The Impact of Explosive Ordnance Contamination on Affected Populations in Iraq*. https://www.hi.org/sn/uploads/document/Report2021_EO-Contamination-Iraq-EN-final.pdf.

⁷² Mine Action Syria Response. (2022). *Explosive Ordnance in Syria: Impact and Action Required*. <https://www.hi-us.org/syria>.

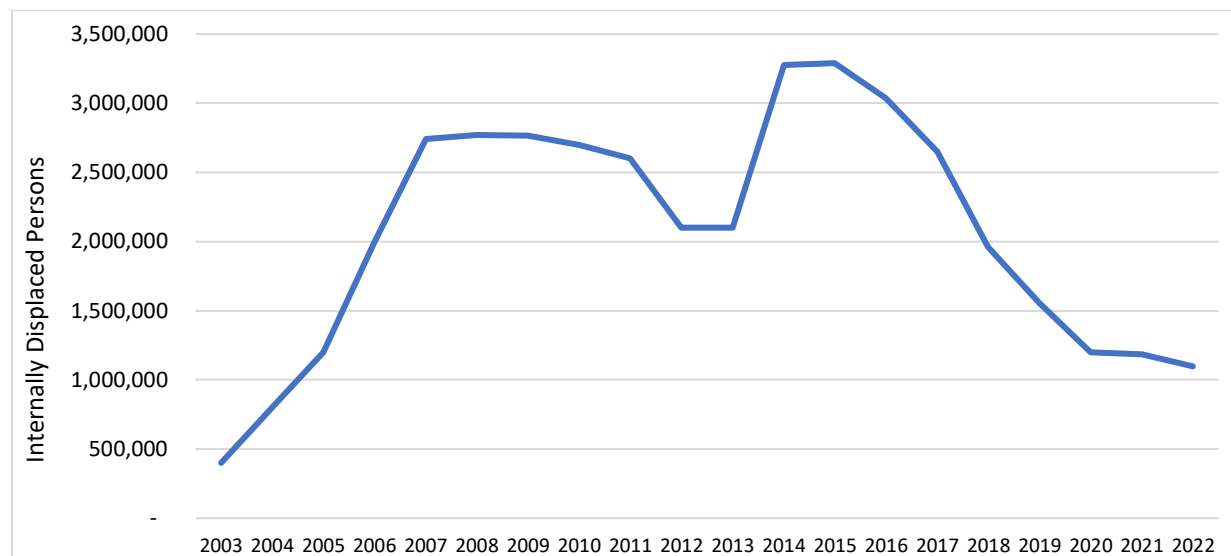
⁷³ Mine Action Review. (2022). *Clearing Cluster Munition Remnants*. https://www.mineactionreview.org/assets/downloads/NPA_Cluster_Munitions_2022_WEB.pdf. Mine Action Review. (2022). *Clearing the Mines*. https://www.mineactionreview.org/assets/downloads/5268_NPA_Clearing_the_Mines_2022_Web_ART_LV.pdf.

⁷⁴ Lafta, Riyadh K.; Merza, Auhood K. (2021, June 28). *Women’s Mental Health in Iraq Post-Conflict*. *Medicine, Conflict and Survival*, 37. <https://www.tandfonline.com/doi/abs/10.1080/13623699.2021.1946903>

⁷⁵ World Bank. (2018, January). *Iraq – Reconstruction and Investment. Damage and Needs Assessment of Affected Governorates (Part 2)*. <https://documents1.worldbank.org/curated/en/600181520000498420/pdf/123631-REVISED-Iraq-Reconstruction-and-Investment-Part-2-Damage-and-Needs-Assessment-of-Affected-Governorates.pdf>.

refugees. Iraq also currently hosts about 287,000 refugees from the region, including Syrian refugees.⁷⁶

Figure 5. Iraq's Internally Displaced Persons, 2003-2022⁷⁷



The civil war in Syria created a much more dire situation in terms of displacement. According to the UNHCR, in mid 2022 there were about 6.7 million internally displaced people in Syria in addition to 6.8 million Syrian refugees. Indeed, in 2022 Syria produced the highest number of refugees in the world.⁷⁸ The earthquake of early 2023 in Syria increased the number of Syrians who were internally displaced.

Further, refugees of the Iraq and Syria wars may make long transits to countries where they then reside in refugee camps or attempt to join the general population. The experience of transit itself is often traumatic, including for most, hunger, sexual violence and other life-threatening conditions, and in some cases, refugee status is denied.⁷⁹ A study of Syrians living in Iraqi Kurdistan in refugee camps found a high prevalence of post-traumatic stress disorder (PTSD) and depression (more than 30%) in refugees and that even with the passage of about a year and a half, they were still traumatized and depressed about the same rate. “Despite of their flight from war and conflict zones, they were still vulnerable to exposure to

⁷⁶ Cohen, Roberta. (2008, December 31). *Iraq's Displaced: Where to Turn?* Brookings Institution. <https://www.brookings.edu/articles/iraqs-displaced-where-to-turn/>; UNHCR, *Operational Data Portal*. <https://data.unhcr.org/en/country/irq>.

⁷⁷ Brookings Institution. (2020, August). *Iraq Index*. https://www.brookings.edu/wp-content/uploads/2020/08/FP_20200825_iraq_index.pdf; Internal Displacement Monitoring Center. *Iraq Country Profile*. <https://www.internal-displacement.org/countries/iraq>; UNHCR. *Operational Data Portal*. <https://data.unhcr.org/en/country/irq>.

⁷⁸ UNHCR. *Refugee Data Finder*. <https://www.unhcr.org/refugee-statistics/download/?url=2bxU2f>.

⁷⁹ Masa, Markovic, et. al., (2023). *The Effects of Traumatic Experiences During Transit and Pushback on the Mental Health of Refugees, Asylum Seekers, and Migrants*. *European Journal of Psychotraumatology*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9873274/>

several types of traumatic events after their migration. These findings suggest that time alone is insufficient to resolve refugees' mental illness without effective long-term mental health care. In addition, the results suggest that living conditions after migration may determine the trajectories of mental disorders over time. Without appropriate support and intervention, living in such camp conditions cannot provide Syrian refugees a positive quality of life that can enable them to thrive."⁸⁰ Moreover, a paper that analyzed data from 15 studies of Syrian refugee mental health in 10 countries found, on average, high rates of PTSD and depression (around 40%). As with the study of Syrian refugees in Iraq, it appears that the trauma *after* displacement is contributing to PTSD and other disorders.⁸¹

Invisible wounds also have a profound effect on the lives of U.S. veterans and active duty service members. Veterans and military personnel suffer from PTSD at higher rates than the civilian population in the U.S. and tend to seek treatment at lower rates.⁸² Research for the Costs of War Project by Thomas Suitt has shown that there are very high suicide rates among U.S. service members and veterans of the Iraq and Afghanistan wars — higher than the number killed in the war zones.⁸³ Suicide has been related to PTSD and traumatic brain injury (TBI), which has been called the “signature” injury of the post-9/11 Wars. While not confined to the Iraq war zone, the DOD has tracked hundreds of thousands of traumatic brain injuries in the past two decades.⁸⁴ TBI's have occurred among 14-23% of service members deployed in Iraq and Afghanistan. Even mild traumatic brain injuries (concussions) are associated with posttraumatic stress and other medical conditions.⁸⁵ The consequences of TBI, including headaches, dizziness, loss of balance, poor coordination, difficulty thinking, depression, anxiety and stress have been shown to persist for some veterans for months and up to eight years after the initial injury during a deployment.⁸⁶

⁸⁰ Mahmood, HN. et al. (2022, November 12). *Does Time Heal Trauma? 18 Month Follow-Up Study of Syrian Refugees' Mental Health in Iraq's Kurdistan Region*. International Journal of Environmental Research and Public Health, 19(22):14910. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9690495/>

⁸¹ Peconga, Emma K.; Thøgersen, Marie Høgh. (2020, November). *Post-traumatic Stress Disorder, Depression, and Anxiety in Adult Syrian Refugees: What Do We Know?* Scandinavian Journal of Public Health, 48, p. 677–687. <https://pubmed.ncbi.nlm.nih.gov/31814514/>

⁸² Berge, Erik, et. al. (2020, April 6). *PTSD Relapse in Veterans of Iraq and Afghanistan: A Systematic Review*. Military Psychology, p.32. <https://www.tandfonline.com/doi/full/10.1080/08995605.2020.1754123>

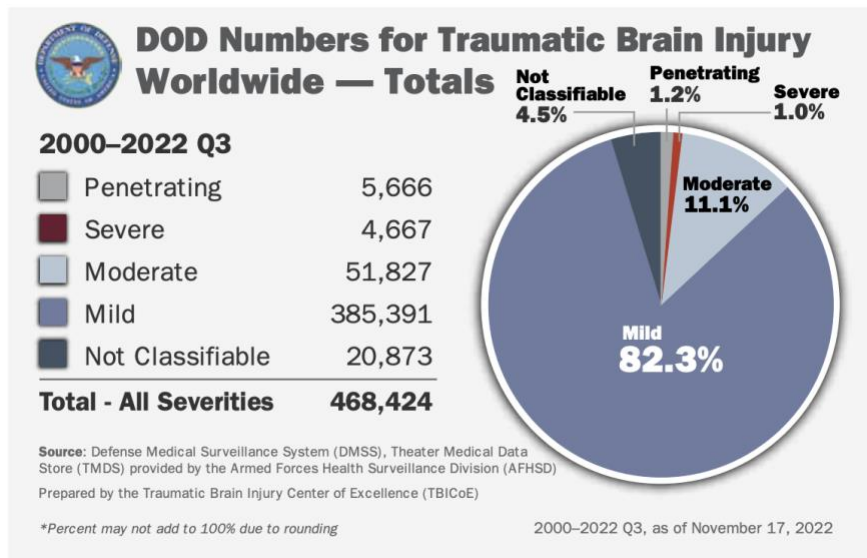
⁸³ Suitt, Thomas Howard. (2021, June 21). *High Suicide Rates among United States Service Members and Veterans of the Post-9/11 Wars*. Costs of War, Watson Institute, Brown University. https://watson.brown.edu/costsofwar/files/cow/imce/papers/2021/Suitt_Suicides_Costs%20of%20War_June%2021%202021.pdf

⁸⁴ Kieran, David. (2019). *Signature Wounds: The Untold Story of the Military's Mental Health Crisis*. New York University Press.

⁸⁵ Hoge, Charles W. et al., (2008, January 31). *Mild Traumatic Brain Injury in U.S. Soldiers Returning from Iraq*. The New England Journal of Medicine. <https://pubmed.ncbi.nlm.nih.gov/18234750/>

⁸⁶ Couch, James R.; Stewart, Kenneth E. (2022) *Persistence of Headache and its Relation to Other Major Sequelae Following Traumatic Brain Injury At 2–8 Years After Deployment-Related Traumatic Brain Injury in Veterans Of Afghanistan And Iraq Wars*. Headache. <https://pubmed.ncbi.nlm.nih.gov/35546654/>; Vasterling, Jennifer J., et al. (2020, April 17). *Long-term Negative Emotional Outcomes of Warzone TBI*. The Clinical Neuropsychologist. <https://www.tandfonline.com/doi/abs/10.1080/13854046.2020.1749935>

Figure 6. DOD Traumatic Brain Injury Profile⁸⁷



The wars have hurt the local and global environments. The survivors of the wars — both combatants and non-combatants — are faced with long-term medical conditions caused by the environmental conditions created by war — dust, toxic burn pits, smoke from the burning of oil fields, and other chemical exposures.⁸⁸ Further, the wars have also contributed to greenhouse gas emissions and climate change — through direct military emissions by participants, the burning of cities and infrastructure, and the loss of sequestration as swamps and forests were damaged. An estimated 98 to 122 million metric tons of carbon dioxide equivalents (MMTCO_{2e}) were emitted from U.S. military operations between 2003 and 2021 in the war zone. This does not include any emissions associated with Central Command installations.⁸⁹

Reconstruction and Democracy

From 2003 through 2012, the U.S. spent over \$60 billion for Iraq’s relief and reconstruction, with spending averaging \$15 million per day over that period. These expenditures were largely controlled by the DOD and about a third of that money was used to increase and support Iraqi Security Forces. By contrast, relatively little was used for infrastructure. See Figure 7.

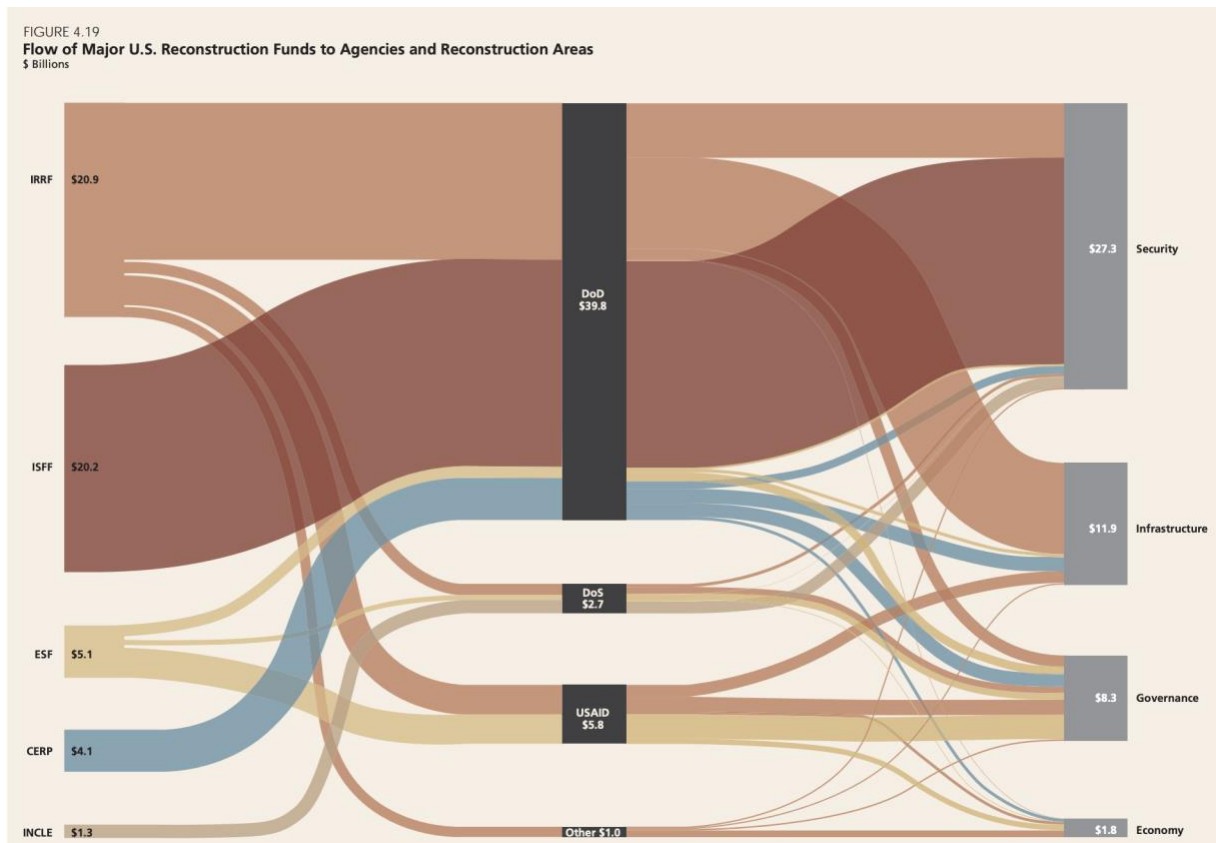
⁸⁷ Health.mil. (2022). *DOD TBI Worldwide Numbers*. <https://www.health.mil/Military-Health-Topics/Centers-of-Excellence/Traumatic-Brain-Injury-Center-of-Excellence/DOD-TBI-Worldwide-Numbers>.

⁸⁸ See, for instance, Pax for Peace. (2017, December 5). *Living Under a Black Sky: Conflict, Pollution and Environmental Health Concerns in Iraq*. <https://paxforpeace.nl/what-we-do/publications/living-under-a-black-sky#:~:text='Living%20under%20a%20black%20sky.of%20hazardous%20artisanal%20oil%20refining>.

⁸⁹ Calculated as 12 to 15 percent of the DOD’s total operational greenhouse gas emissions. See Crawford, Neta C. (2022). *The Pentagon, Climate Change, and War: Charting the Rise and Fall of U.S. Military Emissions*. MIT Press.

The U.S. Special Inspector General for Iraq Reconstruction found examples of waste, fraud and abuse in the construction projects overseen by the U.S. military and U.S. contractors. Ultimately, as described in their final report, the SIGIR found \$8 billion of this money was wasted and a large portion of the money could not be accounted for.

Figure 7. SIGIR Reconstruction of the Flow of Major U.S. Reconstruction Funds, 2003-2012⁹⁰



As noted above, Iraq itself spent funds, \$145.8 billion for its own reconstruction. Further, non-U.S. international support for reconstruction came to \$13.75 billion, of which \$4.31 billion was in the form of multilateral assistance during 2003-2012.⁹¹ However, a good deal of the infrastructure was destroyed or damaged during the war against ISIS from 2014 through 2017.⁹²

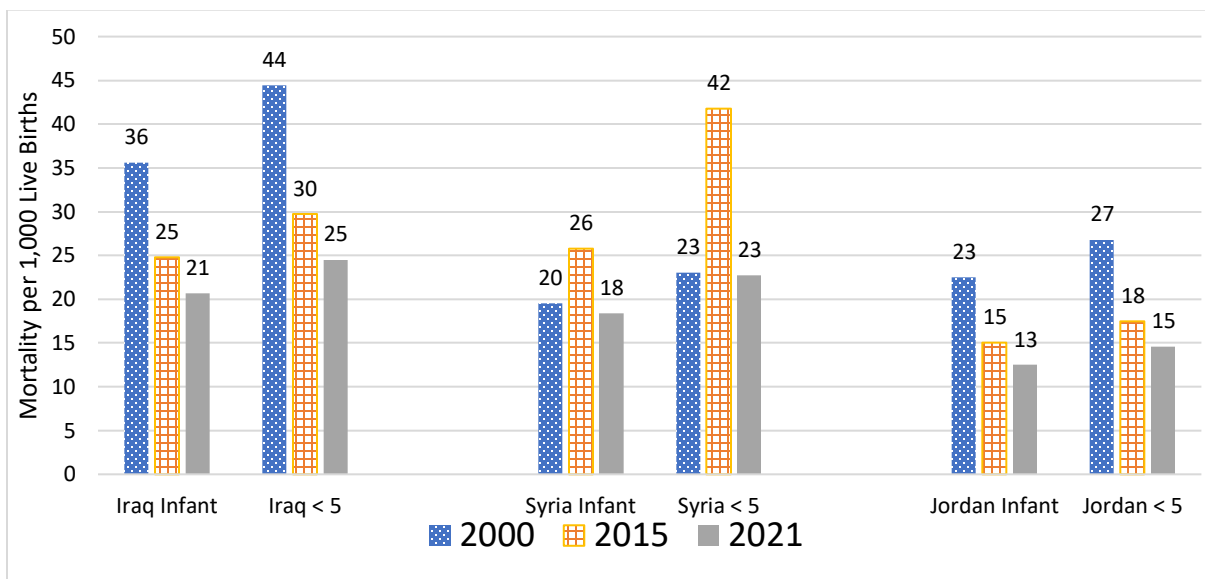
⁹⁰ Special Inspector General for Iraq Reconstruction. (2013, March 1). *Learning From Iraq: A Final Report from the Special Inspector General for Iraq Reconstruction*. <https://apps.dtic.mil/sti/citations/ADA587236>

⁹¹ See table 4.1. Special Inspector General for Iraq Reconstruction. (2013, March). *Learning From Iraq: A Final Report from the Special Inspector General for Iraq Reconstruction*. <https://cybercemetery.unt.edu/archive/sigir/20131001080029/http://www.sigir.mil/files/learningfromiraq/Report - March 2013.pdf>.

⁹² World Bank. (2018, January). *Iraq – Reconstruction and Investment. Damage and Needs Assessment of Affected Governorates (Part 2)*.

Reconstruction was intended to benefit the health of the Iraqi people, economy, and government. Indicators of health and well-being among the populations of Iraq and Syria show a mixed picture. Overall, in Iraq, the major indicators of health for children have improved since 2003 though healthcare outcomes depend on one’s status, with low income and internally displaced persons experiencing poorer access to healthcare. Figure 8 documents infant mortality in Iraq and Syria for pre-war and war years, with Jordan’s statistics for those same years as an illustrative comparison.

Figure 8. Infant and Child Mortality/1000 Live Births, Iraq, Syria, and Jordan in 2000, 2015, and 2021⁹³



On the other hand, according to the United Nations, 2.5 million people continue to need humanitarian assistance in Iraq; these include 1.1 million children. Of the total who required humanitarian assistance, in Iraq in 2021, “Approximately 960,000 people (422,400 children) are considered to be in acute humanitarian need.”⁹⁴

Finally, the state of democracy and human rights situation in Iraq and Syria remains unsatisfactory. The U.S. aimed to create a participatory democracy in Iraq. In August 2021, the United Nations Assistance Mission in Iraq reported that torture was a continuing practice

<https://documents1.worldbank.org/curated/en/600181520000498420/pdf/123631-REVISED-Iraq-Reconstruction-and-Investment-Part-2-Damage-and-Needs-Assessment-of-Affected-Governorates.pdf>

⁹³ UN Inter-Agency Group for Child Mortality Estimation. <https://childmortality.org/>.

⁹⁴ UNICEF. (2022, December). *Iraq Humanitarian Situation Report No. 2*. <https://iraq.un.org/en/211519-unicef-iraq-humanitarian-situation-report-no-2>.

in the Iraqi justice system.⁹⁵ In Syria, Human Rights Watch found that all sides in the civil war have “committed heinous law of war violations.”⁹⁶ These include the deliberate targeting of civilians. In Iraq’s most recent parliamentary elections in 2021, about 36 percent of the general public participated in the voting. However, Freedom House continues to define Iraq as “not free” with a score of 29 out of 100. Syria is also rated the designation “not free” with a score of 1 out of 100.⁹⁷

Conclusion

Nearly every war begins with an ostensibly clear cause, high aims, and optimistic assessments about its outcome, duration, and costs. So it was with the Iraq war begun in 2003, which the United States launched under the ultimately proven false assertion that there were weapons of mass destruction being produced and stockpiled by the Iraqi government. The Bush administration was convinced and assured the American people and the world that the war would have few casualties of all kinds — civilian and military — and would lead to quick victory followed by reconstruction, convert Iraq to a democratic government, and leave Iraq with a better infrastructure. As the Costs of War project has documented consistently, these optimistic assumptions are confronted by a record of death, high and ongoing costs, and regional devastation.

And, although al Qaeda had a minimal presence in the country before 2003, the war was also promised to rid Iraq of any terrorists and to make it difficult for terrorists to find a foothold there. As some have argued, the growth of ISIS may, at least in part, be attributable to the devastation that the Iraq war wrought. As President Obama said during an interview in 2015, “ISIL is a direct outgrowth of Al-Qaeda in Iraq, that came out of our invasion, which is an example of unintended consequences, which is why we should generally aim before we shoot.”⁹⁸

This report began by noting that 20 years does not actually mark the end of the U.S. war in Iraq and Syria: the fighting continues, albeit at a slower pace; in March 2023 the Biden Administration requested nearly \$400 million for Counter-Islamic State funds for FY2024.⁹⁹ And so also continue the death, destruction, displacement, injury, and reconstruction.

⁹⁵ Human Rights Office of the United Nations Assistance Mission for Iraq (UNAMI). (2021). *Human Rights in the Administration of Justice in Iraq: legal conditions and procedural safeguards to prevent torture and ill-treatment*. United Nations. <https://iraq.un.org/sites/default/files/2021-08/IRAQ%20-%20Legal%20conditions%20and%20procedural%20safeguards%20to%20prevent%20torture%20and%20ill-treatment%20Update%20EN.pdf>.

⁹⁶ Human Rights Watch. (2022). *Human Rights Watch World Report, 2022, Syria: Events of 2021*. <https://www.hrw.org/world-report/2022/country-chapters/syria>.

⁹⁷ Freedom House. *Report for Iraq*. <https://freedomhouse.org/country/iraq/freedom-world/2022>. Freedom House. *Report for Syria*. <https://freedomhouse.org/country/syria/freedom-world/2022>. By comparison with other countries rated not free, Russia scored 19 and China scored 9 out of 100.

⁹⁸ Obama quoted in Thrall, Trevor; Glaser, John. (2016, June 6). *Was the Rise of ISIS Inevitable?* CATO at Liberty. <https://www.cato.org/blog/was-rise-isis-inevitable>.

⁹⁹ Department of Defense Comptroller, Operations and Maintenance Programs (O-1) (2023, March). https://comptroller.defense.gov/Portals/45/Documents/defbudget/FY2024/FY2024_o1_ooc.pdf.

Appendix

Annotated Table 2. Estimated Deaths in Iraq March 2003- March 2023 and Syria War September 2014-2022.

	Iraq	Syria/ISIS	Total
US Military ¹⁰⁰	4,599		4,599
US DOD Civilian ¹⁰¹	15		15
US Contractors ¹⁰²	3,650 ¹⁰³	19 ¹⁰⁴	3,669
National Military and Police ¹⁰⁵	48,337- 52,337 ¹⁰⁶	51,483 ¹⁰⁷	99,820-103,820
Other Allied Troops ¹⁰⁸	324	11,000 ¹⁰⁹	11,324
Civilians	186,694-210,038 ¹¹⁰	138,941 ¹¹¹	325,641-348,985
Opposition Fighters	36,806- 43,881 ¹¹²	67,065 ¹¹³	103,871-110,946
Journalists and Media Workers ¹¹⁴	282	75	357
NGO humanitarian workers ¹¹⁵	64	227	291
TOTAL	280,771-315,190	268,826	549,587-584,006

^[100] Department of Defense Casualty Report, <https://dod.defense.gov/news/Casualty-Status/>. Through February 27, 2023. U.S. military deaths in Operation Iraqi Freedom include casualties that occurred between March 19, 2003 and August 31, 2010 in the Arabian Sea, Bahrain, Gulf of Aden, Gulf of Oman, Iraq, Kuwait, Oman, Persian Gulf, Qatar, Red Sea, Saudi Arabia and the United Arab Emirates. Operation New Dawn includes casualties that occurred between September 1, 2010 and December 31, 2011, in the Arabian Sea, Bahrain, Gulf of Aden, Gulf of Oman, Iraq, Kuwait, Oman, Persian Gulf, Qatar, Red Sea, Saudi Arabia and the United Arab Emirates. Operation Inherent Resolve includes deaths that occurred in Bahrain, Cyprus, Egypt, Iraq, Israel, Jordan, Kuwait, Lebanon, Qatar, Saudi Arabia, Syria, Turkey, the United Arab Emirates, the Mediterranean Sea east of 25° longitude, the Persian Gulf and the Red Sea. Operations after August 2014 (in Operation Inherent Resolve) include deaths in Syria.

^[101] Department of Defense Casualty Report, <https://dod.defense.gov/news/Casualty-Status/>. Through February 27, 2023.

^[102] Estimate based on United States Department of Labor (DOL) (2023). *Defense Base Act Case Summary by Nation*. Retrieved from: <https://www.dol.gov/owcp/dlhwc/dbaallnation.htm> (data through March 31, 2021). DOL notes that “These reports do not constitute the complete or official casualty statistics of civilian contractor injuries and deaths.” The estimate here of total U.S. contractor deaths includes a multiplier for an additional number of unreported foreign contractor deaths. The multiplier reflecting this disparity is 2.15 times the DOL number. An additional 112 contractors were killed in Kuwait after September 2001.

^[103] DOL data for contractor deaths: Iraq, 1,698. An additional 29,236 contractors lost time at work due to injury.

^[104] DOL data for contractor deaths: Syria, 9. An additional 73 contractors lost time at work. This does not include the estimated 150-200 Russian security contractors killed between October 2015 and December 2017. Nor does it include the approximately 100 Russian military contractors killed in Deir al-Zor in February 2018. See Nemtsova, Anna (2018, January 2). *A Russian Blackwater? Putin’s Secret Soldiers in Ukraine and Syria*. The Daily Beast. Tsvetkova, Maria; Zverev, Anton, (2019, February 5). *After Deadly Syrian Battle, Evidence of Russian Losses Was Obscured*. Reuters.

^[105] Includes National Military Forces and National and Local Police Forces.

^[106] Data on Iraqi military and police killed since 2003 has been imprecise since the war began. See Fischer, Hanna. (2011). *Iraq Casualties: U.S. Military Force and Iraqi Civilians, Police, and Security Forces*. Congressional

Research Service, retrieved from <https://www.hsd.org/?view&did=718381>. The UN Assistance Mission in Iraq halted its own reporting on military casualties in December 2016. See United Nations. (2016, December 3). *UNAMI Statement in Response to Criticism on Reporting Military Casualties*. Retrieved from http://www.uniraq.org/index.php?option=com_k2&view=item&id=6457:unami-statement-in-response-to-criticism-on-reporting-military-casualties&Itemid=605&lang=en. This estimate is based on the Project on Defense Alternatives estimate of 11,000-15,000 Iraqi military fatalities in the initial fighting in 2003; the Brookings Institution Estimate of 10,521 Iraqi Military and Police fatalities from June 2003 to 2011; and the Iraqi Interior Ministry statement in December 2017 that more than 26,000 Iraqi soldiers and military personnel were killed in the war against ISIS. See Conetta, Carl. (2003, October). *The Wages of War: Iraqi Combatant and Noncombatant Fatalities in the 2003 Conflict*. Project on Defense Alternatives. Retrieved from <http://www.comw.org/pda/fulltext/0310rm8.pdf>. See also O'Hanlon, M.; I.S. Livingston. (2013), *Iraq Index: Tracking Variables of Reconstruction and Insecurity in Iraq*. Brookings Institution Reports. Retrieved from: <https://www.brookings.edu/wp-content/uploads/2016/07/index20130726.pdf>. Aboufadel, Leith. (2017, December 13). *Over 26,000 Iraqi Soldiers Killed in 4 Year War with ISIS*. Almasdar News. Retrieved from <https://www.almasdarnews.com/article/26000-iraqi-soldiers-killed-4-year-war-isis/>. From March 2003 through mid 2021, "at least" 14,000 Iraqi police were killed." Jalil, Ahmed. (2021, May 14). *Iraq: Thousands of Police Officers Have Died in the Line of Duty*. The Conversation. <https://theconversation.com/iraq-thousands-of-police-officers-have-died-in-the-line-of-duty-160881>.

[107] From Reports by the Syrian Observatory for Human Rights, <http://www.syriaahr.com/en/>. Also see <https://www.iraqbodycount.org/analysis/beyond/residual-war/>.

[108] Retrieved from iCasualties, <http://icasualties.org/>. Data through 2020 for the U.K. (182) and Other (142).

[109] Troops from about 20 different state and non-state actors have been involved. About 11,000 Kurdish allies of the U.S. were killed since 2015. 175 Russian soldiers died in Syria from September 2015 through 2018 according to BBC Russia. (2019, January 9). *Russia Covered up Soldier's Death in Syria, Media Reports*. The Moscow Times.

[110] Iraq Body Count (IBC) tally through January 2023. IBC has verified their count through January 2017 and has provisionally verified their count through September 2019. IBC says that a complete analysis of Wikileaks data may add as many as 10,000 deaths. Source: Iraq Body Count, <https://www.iraqbodycount.org/>.

[111] An additional more than 80,000 civilians were killed from March 2011 to the end of 2014. The Civil war began in March 2011, U.S. intervention there in late 2014; the number of civilians estimated killed prior to the U.S. intervention is thus not estimated here. Further, the estimate of civilian deaths in the Syrian civil war is conservative. The Syrian Network for Human Rights (SNHR) documented 5,499 civilian deaths caused by all parties from September 2014-December 2014. <https://snhr.org/>. The SNHR data does not count people as civilians who cannot be identified as such. For the period January 2015 through December 2021 UN data on documented civilian deaths was used. Specifically, the United Nations, A/HRC/50/68: *Civilian Deaths in the Syrian Arab Republic - Report of the United Nations High Commissioner for Human Rights*, June 28, 2022. <https://www.ohchr.org/en/documents/reports/ahrc5068-civilian-deaths-syrian-arab-republic-report-united-nations-high>. The UN attempted to document all deaths in the Syrian Civil War from its onset in 2011 through 2021. Of the 350,209 total deaths the UN was able to document in Syria between 2011 and 2021, about 40.9%, or 143,350 people, were documented as civilian deaths. Although U.S. Air strikes in Syria began on September 23, 2014, data on documented deaths in Syria by month is unavailable from the United Nations. Using the nearest year, prior to January 2015 there were a total of 176,103 documented deaths in the Syrian civil war. There were an additional 174,106 documented deaths between 2015 and 2021. The UN also says that for the 2011-2021 period, "an additional estimated 163,537 civilian deaths occurred that have not been documented." The UN estimate is thus a range: "For the undocumented civilians deaths, the credibility interval is between 138,093, and 194,621." From 2015, the UN reports a total of 61,538 documented civilian deaths. Assuming the same ratio of documented to undocumented civilian deaths (1:1.14) that the UN uses for the entire period to estimate civilian deaths from 2015 to 2021, it is possible that there were an additional 70,153 civilian deaths, giving an estimated total of 131,691 people killed from 2015-2021. The Syrian Network for Human Rights documented 1,057 civilians killed in the civil war during 2022. Relief Web. (2023, January 1). *1,057 Civilians, Including 251 Children, 94 Women, and 133 Victims Who Died due to Torture, Were Documented Killed in Syria, in 2022*. Relief Web. <https://reliefweb.int/report/syrian-arab-republic/1057-civilians-including-251-children-94-women-and-133-victims-who-died-due-torture-were-documented-killed-syria-2022>. Full report <https://snhr.org/>. The Syrian Observatory for Human Rights documented 1,627 civilian deaths in 2022. Syrian Observer. (2023,

January 2). *Syria 2022*. <https://syrianobserver.com/news/81024/syria-2022-lowest-death-toll-in-12-years.html>. In addition, the Syrian Observatory for Human Rights document 130 civilian deaths in January 2023. The total is thus: 5,499 from Sept -December 2014; 131,691 for 2015-2021; 1,627 for 2022 and 130 for January 2023.

^[112] Estimating that about 9,200 Iraqi soldiers (plus or minus 1,600) were killed in 2003 resisting the U.S. invasion and initial occupation and that about 19,000 militants were killed from 2003 to September 2007, Iraq Body Count found 20,499 “enemy” deaths in Iraq War Logs, from January 2004 through December 2009. See Conetta, Carl. (2003, October 20). *The Wages of War: Iraqi Combatant and Noncombatant Fatalities in the 2003 Conflict*. Project on Defense Alternatives Research Monograph, 8; and Michaels, Jim. (2007, September 27). *Thousands of Enemy Fighters Reported Killed*. USA TODAY. retrieved from http://www.usatoday.com/news/world/iraq/2007-09-26-insurgents_N.htm#. Iraq Body Count. (2010, October 23). *Iraq War Log Analysis: What the numbers reveal*. Retrieved from <https://www.iraqbodycount.org/analysis/numbers/warlogs/>. Agence France Press cites Iraqi sources as saying 14,239 militants were killed from January 2006 through January 2015. See https://docs.google.com/spreadsheets/d/1qx5xfGQVNNcJosG_EN8m3D2RRkJNpRbLsVKWdYAxKvA/edit#gid=4. To this add an estimated average of 500-1000 militants killed each year from January 2015 through 2022. For instance, in 2022, Iraq Body Count recorded the deaths of 1,027 ISIS and PKK fighters. Dardagan, Hamit; Hmoiurtziadou, Lily; Sloboda, John. (2023, January 1). *Iraq's Residual War*. <https://www.iraqbodycount.org/analysis/beyond/residual-war/>.

^[113] From Reports by the Syrian Observatory for Human Rights, <http://www.syriaahr.com/en/>, not including the estimated 11,000 Kurds killed fighting alliance with the U.S.

^[114] Journalist and media worker deaths motives confirmed and unconfirmed for war years through January 2023. See Committee to Protect Journalists. Retrieved from <https://cpi.org/data/>. For Iraq, from March 2003; for Syria, from September 2014.

^[115] Aid Worker Security Database, National and international aid workers killed through November 2022. For Iraq: <https://aidworkersecurity.org/incidents/search?detail=1&country=IQ>. For Syria: <https://aidworkersecurity.org/incidents/search?detail=1&country=SY>