US Budgetary Costs of Wars through 2016: $4.79 Trillion and Counting

Summary of Costs of the US Wars in Iraq, Syria, Afghanistan and Pakistan and Homeland Security

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Summary

Wars cost money before, during and after they occur — as governments prepare for, wage, and recover from them by replacing equipment, caring for the wounded and repairing the infrastructure destroyed in the fighting. Although it is rare to have a precise accounting of the costs of war — especially of long wars — one can get a sense of the rough scale of the costs by surveying the major categories of spending.

As of August 2016, the US has already appropriated, spent, or taken on obligations to spend more than $3.6 trillion in current dollars on the wars in Iraq, Afghanistan, Pakistan and Syria and on Homeland Security (2001 through fiscal year 2016). To this total should be added the approximately $65 billion in dedicated war spending the Department of Defense and State Department have requested for the next fiscal year, 2017, along with an additional nearly $32 billion requested for the Department of Homeland Security in 2017, and estimated spending on veterans in future years. When those are included, the total US budgetary cost of the wars reaches $4.79 trillion.

But of course, a full accounting of any war's burdens cannot be placed in columns on a ledger. From the civilians harmed or displaced by violence, to the soldiers killed and wounded, to the children who play years later on roads and fields sown with improvised explosive devices and cluster bombs, no set of numbers can convey the human toll of the wars in Iraq and Afghanistan, or how they have spilled into the neighboring states of Syria and Pakistan, and come home to the US and its allies in the form of wounded veterans and

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2 Neta C. Crawford is Professor of Political Science at Boston University and Co-Director of the Costs of War project. Crawford thanks contributors to the Costs of War Project, especially Linda J. Bilmes and Catherine Lutz.
contractors. Yet, the expenditures noted on government ledgers are necessary to apprehend, even as they are so large as to be almost incomprehensible.³

The United States government’s definitions of the threat and the scope of the wars, the size of US commitments to these wars in terms of numbers of troops and equipment, and what counts officially as war-related expenditures have shifted over time. Congress and the Executive Branch describe the wars in Afghanistan, Pakistan, Iraq, and Syria as Overseas Contingency Operations (OCO). The scope of the wars has widened into Syria, and the US has slowed the pace of its withdrawal from Afghanistan. These are the major OCO discussed below. (Smaller operations are underway in Africa, Central America and Europe.) The Budget Control Act of 2011 and sequestration (automatic across-the-board spending cuts) has made it difficult to track how money is actually spent.⁴

War spending has occurred in several categories. A large portion of the costs of these wars are Congressional appropriations for the State Department and Department of Defense (DOD). If one simply highlights these budgetary allocations so far in the major war zones and for defense of US airspace and bases, the US has spent more than $1.7 trillion for combat and reconstruction. (See Tables 1 and 2, which include the spending requests for FY2017).⁵ There is other global war on terror-related spending — including additions to the Pentagon base budget and spending in the Department of Veterans Affairs. Further, Homeland Security spending has increased by more than $500 billion for missions related to preventing and responding to potential terrorist attacks.

In addition, any reasonable estimate of the costs of the wars includes the fact that each war entails essentially signing rather large promissory notes to fulfill the US obligations for medical care and support for wounded veterans. These future obligations will total approximately an additional $1 trillion in medical and disability payments and additional administrative burden through 2053. Table 1 summarizes the categories and amount of spending and obligations undertaken from September 2001 to the present fiscal year, rounded to the nearest billion dollars.⁶

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⁵ All calculations are made and reported in current dollars. The figures are rounded to the nearest billion dollars.

⁶ These are conservative estimates. There is considerable fuzziness in Pentagon spending, and especially with regard to spending for Pakistan in the DOD budget. Moreover, the official Pakistan war spending does not include weapons and other military equipment that the US donates to Pakistani military forces. There is potential for some double counting of Pakistan-related spending.
Table 1. Summary of War-Related Spending in Current Dollars\(^7\)

<table>
<thead>
<tr>
<th>Category</th>
<th>$ Billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOD and State (Overseas Contingency Operations or OCO) FY2001-2016</td>
<td>1,742</td>
</tr>
<tr>
<td>Other War-Related: estimated additional DOD base budget ($733 B) and</td>
<td></td>
</tr>
<tr>
<td>Veterans ($213 B) spending, FY2001 - FY2016</td>
<td>946</td>
</tr>
<tr>
<td>Homeland Security spending for prevention and response to terrorism,</td>
<td></td>
</tr>
<tr>
<td>FY2001- FY2016</td>
<td>548</td>
</tr>
<tr>
<td>Interest on borrowing for wars, FY2001-FY2016</td>
<td>453</td>
</tr>
<tr>
<td><strong>Total War Appropriations and War-Related Spending through 2016</strong></td>
<td><strong>3,689</strong></td>
</tr>
<tr>
<td>Estimated Future Obligations for Veterans Medical and Disability 2017 -</td>
<td>1,000</td>
</tr>
<tr>
<td>2053(^8)</td>
<td></td>
</tr>
<tr>
<td>FY2017 Request for DOD and State OCO, incl. Afghanistan, Iraq/Syria</td>
<td>66</td>
</tr>
<tr>
<td>FY2017 Request for Homeland Security for prevention and response to</td>
<td>37</td>
</tr>
<tr>
<td>terrorism</td>
<td></td>
</tr>
<tr>
<td><strong>Total Spending and Future Obligations through 2053</strong></td>
<td><strong>4,792</strong></td>
</tr>
</tbody>
</table>

The Obama administration has requested money to support a continued military presence and war in Afghanistan and Iraq and plans operations for several more years. After announcing a withdrawal of US forces in Afghanistan for 2017, the Obama administration announced in mid-2016 that a planned reduction of US troops would go more slowly than previously announced.\(^9\) The Obama administration requested more than $44 billion for FY2017 for the Afghanistan war, a number that will likely increase as the US military presence is sustained. In addition, the Obama administration has requested additional OCO funds for missions around the globe — including $13.8 billion funds for FY2017 to continue the war against ISIS in Iraq and Syria (Operation Inherent Resolve) and to shore up the Iraqi regime.\(^10\) The Obama administration requested about $35 billion for the Department of Homeland Security related to preventing, disrupting, and responding to terrorist attacks.\(^11\)

Some observers argue that the Pentagon's estimates for future war spending are conservative. For example, the Congressional Budget Office projects that that costs of executing the Pentagon’s plans in future years will be higher than the Pentagon has suggested in its own projections.\(^12\) Further, reporting for previous spending is not always accurate. For instance, in June 2016, the Inspector General of the Department of Defense published a report showing that the Air Force has underreported the costs of its air war in Syria. A few years

\(^7\) Rounded to the nearest $billion. See Table 5 for a breakdown of these costs by Federal Department.


earlier, the Inspector General reported that the Marine Corp had produced unreliable data that included inaccuracies totaling more than $1 billion in FY2008.\textsuperscript{13}

But even if the US stopped spending on war at the end of this fiscal year, interest costs alone on borrowing to pay for the wars will continue to grow apace. **Interest costs for overseas contingency operations spending alone are projected to add more than $1 trillion dollars to the national debt by 2023. By 2053, interest costs will be at least $7.9 trillion unless the US changes the way it pays for the wars.**

*What Counts as a Cost of War?*

There are many costs of war that could be quantified and many ways to count those costs. Much less comprehensive accounts of US war spending are available from the US Department of Defense.\textsuperscript{14} One could say that the only relevant costs are those associated with Pentagon and State Department spending, in which case, the total costs of the Overseas Contingency Operations including the wars in Afghanistan and Iraq would be about $1.7 trillion.

While such focused accounts are useful for some purposes, they underestimate the wider budgetary impact of the wars and their long term implications for US federal and state government spending. The most recent Congressional Research Service (CRS) report on the costs of the main wars and other related expenses (December 2014) by Amy Belasco, CRS specialist in Defense Policy and Budget, takes a more comprehensive view of the costs of the wars.\textsuperscript{15} Belasco includes, for instance, some of the costs of veterans’ care. Belasco is admittedly


\textsuperscript{14} For example, an unclassified Pentagon accounting of *Costs of War through November 30, 2012* reports different figures from the Belasco CRS report of 2011 — in some years lower, perhaps due to rounding, and in some years higher for reasons that are only sometimes explained. Further, this DOD report does not include related State Department spending, and omits "non-DOD classified programs." The DOD report puts "total costs" of war at $1,206.6 billion from 9/11/2001 through 30 November 2012.Source: Office of the Assistant Secretary of Defense for Public Affairs. (2013, January 2). *Costs of War Update as of November 30, 2012.* Washington, DC: Department of Defense.

circumscribed by the accounting practices in the Pentagon — which she diplomatically notes others describe as entailing "limited transparency." 16 Despite these and other difficulties, Belasco’s outstanding work remains an authoritative accounting of major expenses and I have relied on her reporting of DOD and State Department/USAID spending through Fiscal Year 2014.

Yet Belasco’s report does not include everything that is relevant to an accounting of the cost of the post-9/11 US wars. For instance, it does not include the Homeland Security budget related to terrorism. Further, while Belasco does count appropriations for VA medical expenses, she does not consider the costs of future obligations to veterans nor estimate the costs of interests on borrowing to pay for the wars. Belasco notes that, "Other observers and analysts define war costs more broadly than congressional appropriations and include estimates of the life-time costs of caring for OEF/OIF/OND veterans, imputed interest costs on the deficit, or increases in DOD’s base budget deemed to be a consequence of support for the war. Such costs are difficult to compute, subject to extensive caveats, and often based on methodologies that may not be appropriate." 17

Belasco is correct. The approach taken by the Costs of War project based at Brown University, and by Bilmes and Stiglitz, is more comprehensive, and some of the estimates, especially of likely increases to the Pentagon base budget and future costs, are subject to important caveats, discussed below. 18 Indeed, there are many ways to think about the costs of the US war depending on one’s assumptions about the scope of the wars, how emergency costs differ from and are related to the costs that have been institutionalized in the Pentagon’s base budget, and how to estimate the future obligations for the care of veterans as a cost of the on-going wars. Further, Congress has not funded these wars as it has funded past wars, by enacting a war tax or selling large numbers of war bonds, which would make these "pay as you go" wars. 19 Hence DOD and State Department OCO spending are considered here as borrowed. We include the costs of borrowing as an expense, just as individuals would include the costs of borrowing on a home or a car when they calculate their expenses.

Further, the United States Congress has used a definition of emergency funding for the wars as spending that is "unanticipated" — "sudden," "urgent," unforeseen" and "temporary." 20 But some costs of the wars do not fall into the category of emergency spending; these expenses have been institutionalized, for example, into the spending of the Departments of Veterans Affairs, Defense, and Homeland Security.

Other costs can be anticipated and estimated because they are future obligations —

19 The Treasury Department did sell a small number of Patriot Savings bonds from December 2001 to December 2011. See Treasury Direct. (2013). The Patriot Savings Bond
namely the costs of veteran’s future medical care and disability payments. It is important to keep the future costs of veterans’ care in mind precisely because these obligations will be enormously costly. The VA has struggled to care for the influx of the veterans of the post-9/11 wars even as the total number of veterans has declined from 26 million to 21.6 million in this period in part because it had not anticipated the number nor the complexity of the new veterans’ medical needs.

But there are areas of uncertainty. For instance, the Costs of War project estimates of future costs of interest on the debt associated with war could be high if the US chooses to change the way it pays for the wars — for instance by increasing taxes or selling war bonds. Or these projections could be low if the US continues its wars over many more years. And as these wars, the longest in US history, have been institutionalized, it is hard to disentangle the parts of the base Pentagon budget that are actually war-related costs, and what parts of the special OCO appropriations are better considered to be base budget costs.

While the Costs of War project estimate is more comprehensive than many accounts, it still does not include all the budgetary and economic costs for the US associated with the wars in Iraq and Syria and Afghanistan and Pakistan and the larger war on terror. For instance, I have not included here state and local government expenses related to medical care of veterans and homeland security. Nor do I calculate the macro-economic costs of war for the US economy. Costs that are not included in this accounting are discussed below.

Description and Discussion of Direct and War-Related Spending Through 2016

War-related spending occurs in several areas of the US Federal budget. The special appropriations for war, described as emergency or "overseas contingency operations" (OCO), are direct war appropriations to the Department of Defense and State Department/US Agency for International Development (USAID). This spending is over and above the general and continuing funding for the DOD, the "base budget," and appropriations for other war-related activities in the budgets of the State Department and the Department of Veterans Affairs as discussed below.

Direct War Appropriations

Congress has appropriated approximately $1.74 trillion for overseas contingency operations to the Department of Defense and the US State Department since late 2001 (Table 2). In 2014 Congress began to appropriate money for Operation Inherent Resolve, in Syria, with total appropriations for Syria of over $5 billion each year from 2014-2016. In addition, other overseas contingency operations (OCO) spending is designated for the war on terror. These operations are in Europe, Africa (in Uganda, Trans-Sahara and the Horn of Africa), the Caribbean and Central America. The two largest categories of expenses have been for the wars in Iraq and Afghanistan; spending for these wars peaked, respectively, in 2008 and 2011. The US started bombing ISIS in Syria in August 2014 and began to appropriate money specifically for that war in FY 2014.
Table 2: Cumulative Direct War Appropriations for DOD and State Department/USAID for "Emergency" or "Overseas Contingency Operations"\textsuperscript{21}

<table>
<thead>
<tr>
<th>War Zone/Operation</th>
<th>Cumulative Total FY2001-FY2016, Billions of Current Dollars</th>
<th>Request for FY 2017, Billions of Current Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iraq</td>
<td>$805</td>
<td>2.2</td>
</tr>
<tr>
<td>Syria</td>
<td>12</td>
<td>9.4</td>
</tr>
<tr>
<td>Afghanistan\textsuperscript{22}</td>
<td>783</td>
<td>43.7</td>
</tr>
<tr>
<td>Pakistan\textsuperscript{23}</td>
<td>8</td>
<td>.3</td>
</tr>
<tr>
<td>Operation Noble Eagle\textsuperscript{24}</td>
<td>28</td>
<td>.1</td>
</tr>
<tr>
<td>Other OCO incl. Bipartisan Budget Act</td>
<td>107</td>
<td>9.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,742 billion</strong></td>
<td><strong>$65.3 billion</strong></td>
</tr>
</tbody>
</table>

In Figure 1 below, I consolidate the expenses for closely related war zones, specifically Afghanistan and Pakistan, and Iraq and Syria.


\textsuperscript{22} Includes Coalition Support Funds for Pakistan.

\textsuperscript{23} This figure includes only US security-related funding that is not for Coalition Support Funds (CSF). Coalition Support Funds for Pakistan are part of the OCO spending for operations in Afghanistan. Both the DOD and State Department receive other OCO funding for Pakistan. For accounting purposes, I have counted these appropriations under the State Department although this is not entirely accurate. For example, the largest single element of the $8 billion is Foreign Military Financing (FMF), a State Department appropriation for Foreign Operations that is managed by the Department of Defense. The next largest element of spending is the Pakistan Counterinsurgency Fund and the Pakistan Counterinsurgency Capability Fund; the former is overseen by the Pentagon, and the latter by the State Department. And smaller funds for Counternarcotics are Pentagon appropriations. For a complete breakdown and explanation, see Kronstadt, K. A., & Epstein, S. B. (2016, February 24). Direct Overt US Aid Appropriations for and Military Reimbursements to Pakistan, FY 2002-FY2017. Washington, DC: Congressional Research Service.

\textsuperscript{24} Operation Noble Eagle, begun on 9/11, includes enhanced security for military bases and US airspace provided by the US military in the DOD budget.
The OCO budget for the Departments of Defense and the State Department contain many programs and projects all over the world. The most significant of these is in Pakistan, regarded as part of the area of operations for Afghanistan Operation Enduring Freedom and its successor, Operation Freedom’s Sentinel.

There are three ways the US operates in Pakistan: Since 2001, the US has used Pakistan as an overland route for supplies to Afghanistan. The United States reimburses and compensates Pakistan for the use of its ports and overland transportation of food, fuel and military equipment through Pakistan en route to Afghanistan with Coalition Support Funds, which are included in the budget for OCO in Afghanistan. Since the start of the war in Afghanistan, the US provided about $15 billion in Coalition Support Funds to Pakistan. The Department of Defense describes the role of Coalition Support Funds as reimbursement for "expenses Pakistan incurs to conduct operations against al Qaeda and Taliban forces include providing logistical support for its forces, manning observation posts along the Afghanistan border, and conducting maritime interdiction operations and combat air patrols."26


Pakistan is a zone of US military operations, including drone strikes and cross-border attacks, against Al Qaeda, the Taliban and other militants. The money spent on US drone strikes in Pakistan is included in the US DOD budget for Afghanistan.

The US is also a direct supplier of military assistance, equipment and training for Pakistan’s military forces in their operations against militants. The US has provided an additional $8 billion in security-related funding through the Departments of Defense and State to Pakistan since 2001 for border security, counter-narcotics and counterinsurgency activities.

Figure 2. Trends in Percent of Pakistan’s Military Budget from US Military Aid and Reimbursement, 2001-2015

Since 2002, the United States has provided Pakistan with additional economic and humanitarian assistance, totaling more than $11 billion that are neither specifically security related, nor part of the OCO budget that is used for Pakistan. While it is arguable that some of that US economic and humanitarian aid is used for security purposes, or is used to deal with the refugees and food insecurity caused by fighting in the border region, I do not count this assistance as part of the war effort and report here only the CRS numbers for security assistance. It is also plausible that most of that money — beyond that used for disaster

assistance — would not have gone to Pakistan absent a war since the US was giving little or no aid to Pakistan prior to the 9/11 attacks. All told, Pakistan has received about $33 billion in economic and security assistance, including Coalition Support Funds as part of the Afghanistan operational budget, since 2002.

Croatia, Georgia, Hungary, Jordan, Poland and Romania also receive Coalition Support Funds, as reimbursements for their work in US wars from the OCO budget. As the Department of Defense argues, "Reimbursing partner nation efforts is critical to enabling forces from eligible foreign countries to remain in theater and support US military operations. Without financial support, many of these nations would not be able to participate in US military operations."  

There are other military assistance programs and coalition members who receive funding from the US as part of the OCO budget and outside it. Uzbekistan is not defined as inside the zone of overseas contingency operations. Yet since the 9/11 attacks, Uzbekistan, which shares a border with Afghanistan, has supported the US war in Afghanistan and has been considered an important partner to the US. For example, Uzbekistan allowed US military vehicles the use of Uzbekistan Khanabad airbase as part of its transportation network into northern Afghanistan until November 2005 when the US ceased operations at the base after the US criticized the Uzbek government. Beginning in 2009, some rail and air transit and overflight permissions were negotiated between the US, NATO and Uzbekistan. Overland transit to Afghanistan through Uzbekistan became more important when the US killed two-dozen Pakistani soldiers in late November 2011 and Pakistan halted US transit to Afghanistan for about 7 months. Military aid to Uzbekistan, which is meant to secure military transportation access to roads into Afghanistan (and for a number of years, access to the military base in Karshi-Khanabad) peaked in 2002, and totaled more than $200 million through FY2013. In early 2015, the US announced that it would send Uzbekistan military equipment valued at hundreds of millions of dollars — 308 Mine-Resistant Ambush Protected Vehicles and 20 Armored Recovery Vehicles. Uzbekistan is an authoritarian state that has raised flags as a notorious human rights violator. Yet, military and foreign assistance to Uzbekistan is comparatively small, less than $1 billion since 2001, when compared to other spending for the wars, and we have not included it in this accounting of the costs of war.

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34 See Dancs, A. (2011, June). International Assistance Spending Due to War on Terror. Costs of War; and Department of State, Foreign Operations, and Related Programs. (2000-2016). Congressional Budget
Some of the DOD and State Department appropriations include funding intended to facilitate the physical and political reconstruction of Afghanistan and Iraq, in part based on the view that a functioning civil society and government will be less hospitable to militant organizations. Special Inspector General reports on Afghanistan and Iraq have found that reconstruction in both Afghanistan and Iraq have had some successes but are also sites of corruption and incomplete or shoddy work.\textsuperscript{35} As Catherine Lutz shows, the reconstruction of Iraq is far from complete.\textsuperscript{36}

**Additional War-Related Spending**

The Department of Defense "base" or non-emergency budget includes spending for the procurement of new weapons, military construction, the health care and pay of active duty soldiers, operations, and maintenance. The base budget is much larger than the emergency or OCO budget. The Congress makes special appropriations for the Afghanistan and Iraq wars and funds the "base" budget in separate appropriations. Items in the base budget include personnel pay and benefits, weapons procurement, and funding for military bases.

Overall military spending grew after 9/11.\textsuperscript{37} In Fiscal Year (FY) 2001 the entire US military budget was about $316 billion. In FY 2016, the military budget including the OCO spending is about $580 billion, down from its peak in FY2010 of $691 billion.\textsuperscript{38}

Winslow Wheeler has argued that, prior to the 9/11 attacks, the Pentagon’s base military budget was not expected to significantly increase, yet after the war it did grow significantly. Military spending might well have increased after 2001 even if the 9/11 attacks had not happened, but we should ask: How much of the unanticipated increase in the base budget is due to the wars in Iraq and Afghanistan and the larger war on terror? And is it possible to disaggregate the effects of each of the wars on the base budget?

In separate analyses, Linda J. Bilmes and Winslow Wheeler have estimated tens of billions of dollars in extra spending in the Pentagon’s base budget due to the wars in Afghanistan and Iraq. Wheeler attributes much of the increase to the war climate, namely the desire of the administration and members of Congress to show support for the troops in the form of higher pay and modernization of military equipment. Bilmes suggests that increases to the Pentagon base budget are in part due to military pay increases used to bolster military

\textsuperscript{35} See for instance Special Inspector General Afghanistan Reconstruction (SIGAR). \textit{All Reports}; Special Inspector General Iraq Reconstruction. \textit{Publications}.


\textsuperscript{38} See Department of Defense. (2016). \textit{FY2017 Budget Proposal}. 
recruitment when it was lagging during the Iraq War, which she argues are unlikely to be reduced after the wars’ end. Bilmes argues that medical expenses of active duty personnel have grown due to the increasing utilization rates by active duty troops and their families, the expansion of the TRICARE program, and the more complicated medical needs of active duty soldiers injured during their deployments. Similarly, short term health care expenses directly related to combat are part of the OCO budget, but longer term needs and the infrastructure to provide for health care of soldiers who have deployed to the war zones are not in the OCO budget. In FY2001, Appropriations for Military Personnel and the Defense Health program totaled $91 billion; in FY 2015, those programs were budgeted to cost $160 billion.

In addition, while the size of the federal government fluctuates, the number of civilians employed by the Pentagon is larger than in the past — and has tended to grow even as spending on the wars declines. In 2014, the Department of Defense had about 723,400 employees; this year, the Department of Defense will employ about 738,000. The number of DOD full time employees will begin to fall only in 2017.

In summary, some costs of the post-9/11 wars have become institutionalized in the base budget in the form of increased weapons procurement, health care, and active duty pay. There is little willingness in Congress to cut military spending, even on very expensive items that the Pentagon has said it does not want or need, since the 9/11 attacks.

Figures 3 and 4, below, illustrate the institutionalization of higher base budget spending and the failure of the base budget to decline at the same rate as emergency OCO funding, which peaked in 2008. When war spending declines, one would expect base budget spending to decline at about the same rate. However, while this does occur in some years, notably in 2004, 2010 2011, and 2017, in many instances, the two budgets are out of sync: even when war spending declines, annual base budget spending remains around $500 billion.

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42 Because the Iraq and Afghanistan wars have been, for most of their duration, fought simultaneously, and soldiers have frequently served — very often more than once — in both major war zones, it is not possible to disaggregate these additional costs to the base budget by war zone.
Figure 3. Trends in the US Department of Defense (DOD) Authorizations for Overseas Contingency Operations (OCO) and the Base Budget, Fiscal Years 2002-2017 in Billions of Current Dollars

Figure 4. Percent Change in Overseas Contingency Operations (OCO) and the Base Budget, over the Previous Year's Budget


Calculated using the numbers in the previous table.
The Pentagon has made efforts to cut some costs. For instance, the DOD has proposed changes to the TRICARE medical program including increasing co-pay amounts but the spending for health care of active duty soldiers and their dependents will likely remain significant unless the system is completely overhauled. The Department of Defense and the President have also requested that Congress allow it to close some military bases that it does not need in a new Base Realignment and Closure process. Pentagon officials estimated that they had 22 percent excess infrastructure capacity, and that closing excess bases would save more than $2 billion in annual recurring savings. Congress has not acted on this request.

Smaller expenditures are more difficult to trace and may or may not be included in the military base budget, or in other State Department accounts of military spending on Iraq and Afghanistan. For instance, the United States acquired the support of troops from other countries, or in some cases access to air space, land-lines of communication, or military bases from the smaller contributors to the "coalitions of the willing" for the wars in Iraq and Afghanistan. Indeed, more than 40 countries contributed to the war in Iraq and some received compensation for their role. The United States is also now spending more money to support counterterrorism in Europe and Africa, as mentioned above. Some of the security and economic assistance to European, African and Central American countries that is not charged to the OCO budget, appears instead in the base budgets of the Departments of Defense (and State) but are arguably in service of shoring up the potential of some states to detect threats and combat violent extremism.

Congressional appropriations to the Pentagon from FY2001-2016 have totaled more than $8.5 trillion in current dollars; about 6.8 trillion of that was in non-emergency, base budget appropriations. Assuming that some of the increase in the base budget due to the wars in Afghanistan, Iraq, and the larger war on terror have been institutionalized, I calculate that the portion of the increase to Pentagon base budget from 2001-2016 that can be attributed to the wars is about $733 billion.

The largest ongoing war-related costs that occur outside the Defense and State Department Overseas Contingency Operations budgets are associated with Homeland Security spending dedicated to diminishing the risks and potential effects of terrorism and the more than 1.9 million living US veterans of what the Department of Veterans Affairs calls the Global War on Terror (GWOT). Created in 2002, the Department of Homeland Security has a number of responsibilities that are directly and indirectly war related, including preventing and disrupting terrorist attacks, protecting critical infrastructure, and responding and recovering from terrorist incidents. Since 2002, the Department of Homeland Security has

47 This estimate assumes that additions to the Pentagon base budget that are in proportion to OCO spending. I calculated additions to the Pentagon base from 2001-2003 as 30 percent of OCO spending; at 40% of OCO spending from 2004 to 2008; and at 50% of OCO spending from 2009-2015.
received about $548 billion for these roles. The Obama administration requested an additional $36.8 billion for those missions for Fiscal Year 2017.49

About 2 million of the more than 2.75 million people who served deployments in the war zones have left the military and entered into the VA system.50 Spending for the veterans of recent US wars includes care for the more than 52,000 US soldiers who were officially wounded in action in Afghanistan and Iraq, and many who were evacuated from the war zones for disease or non-hostile injuries require ongoing medical care either by the Department of Veterans Affairs (or the Department of Defense if they remain in service).

The Department of Veterans Affairs has been under-capacity to deal with the influx of new veterans who are eligible for services and it has had to grow its staffing levels very quickly — nearly doubling in size since 2001, to 350,000 workers — to manage these veterans’ care and to reduce a large backlog in processing claims for disability. The backlog has declined, but the number of VA staff is projected to grow over the next several years.

It is difficult to estimate the future costs of veteran’s care and disability benefits based on past wars: GWOT veterans have been making more claims for injury and illness than earlier veterans because they have higher rates of service connected disability than the veterans of previous US wars.51 Specifically, more than 1,600 soldiers who fought in the post-9/11 wars have had battle-injury major limb amputations as of late 2015.52 And of course, not all injuries are immediately diagnosed. The veterans of these wars suffer from skeletal injury, PTSD and Traumatic Brain Injury at rates higher than the veterans of other wars. More than 327,000 GWOT veterans have been diagnosed with Traumatic Brain Injury.53 Of those veterans of the GWOT whose disability claims had been processed in 2014, the most recent year for which there are figures, about 700,000 were classified as 30 percent or more disabled.54


Table 3. Estimated Veterans Spending, FY 2001-2016\textsuperscript{55}

<table>
<thead>
<tr>
<th>Additional War-Related Spending</th>
<th>Cumulative Total $Billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>VA Medical\textsuperscript{56}</td>
<td>37.4</td>
</tr>
<tr>
<td>Social Security Disability\textsuperscript{57}</td>
<td>6.5</td>
</tr>
<tr>
<td>VA Disability</td>
<td>53.7</td>
</tr>
<tr>
<td>VA Other Costs Related to Afghanistan and Iraq\textsuperscript{58}</td>
<td>115</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>212.6</strong></td>
</tr>
</tbody>
</table>

Further, as the US continues to remain in Afghanistan and returns to war in Iraq, US deployments have been extended beyond what was projected. This will increase the numbers of veterans with service in those wars who are eligible for VA services. Thus, nearly all estimates for the current Department of Defense future costs of health care for soldiers (TRICARE) and future costs of caring for veterans are probably low.

I have not counted the costs of other VA benefits for which Global War on Terror veterans are eligible. For instance, Global War on Terror veterans are eligible for significant educational and mortgage benefits. The VA’s Home Loan Guarantee Program has already served more than 600,000 veterans at a cost of more than $206 billion as of late 2014.\textsuperscript{59} More than 815,000 GWOT veterans have so far received educational benefits under programs that were already in place or which have been created specifically for Post-9/11 veterans.\textsuperscript{60}

**Future Military and Veterans-Related Spending**

There are two major categories of future war-related spending — costs for the care of veterans and continuing appropriations for overseas contingency operations. Total costs for the veterans of these wars will increase over time. Peak spending on veterans’ disability and medical care, for every war, occurs decades after the service of those veterans’ ends.\textsuperscript{61}

\begin{footnotesize}
\begin{itemize}
\item This conservative estimate assumes that reductions spending under the Budget Control Act and increases in demand will yield expenditures that are about the same between FY2013 and FY2016.
\item Bilmes, L. J. (2013, March). The Financial Legacy of Iraq and Afghanistan: How Wartime Spending Decisions Will Cancel Out the Peace Dividend. Costs of War. Other VA costs directly related to Iraq/Afghanistan, including investments in: Claims processing for new claims; Mental health/PTSD; IT investment related to claims; Prosthetics; Readjustment Counseling for new veterans.
\item This figure is not included in this paper’s calculations of costs because it is comprised of loans that will in theory be repaid.
\item Institute *rants, Service Members, and their Families*, p. 3. Washington, DC: The National Academies Press.
\end{itemize}
\end{footnotesize}
costs for WWI veterans peaked in 1969, for World War II veterans in 1986. Cost for the care of Vietnam War veterans has not yet peaked.\textsuperscript{62}

The costs for veterans of the post-9/11 wars will be comparatively greater than for past wars. Specifically, the veterans of the wars in Iraq and Afghanistan often return with multiple traumas, as well as respiratory and cardiac trouble which may take some years after deployment to emerge.\textsuperscript{63} Further, as each veteran ages, their health care needs will become more complex and expensive.

Of those who have been discharged, Bilmes estimated in 2013 that their care over the next forty years would cost approximately $836 billion through 2053. Table 4 details Bilmes’ 2013 estimate of future costs.

**Table 4. Future Obligations for Veterans’ Care FY2014-2053\textsuperscript{64}**

<table>
<thead>
<tr>
<th>Categories of Veterans' Care</th>
<th>Present Value 2014-2053</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Veterans Affairs Medical</td>
<td>287.6</td>
</tr>
<tr>
<td>Social Security Disability</td>
<td>42.3</td>
</tr>
<tr>
<td>Department of Veterans Affairs Disability</td>
<td>419.7</td>
</tr>
<tr>
<td>VA Related</td>
<td>86.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>836.2</strong></td>
</tr>
</tbody>
</table>

Since Bilmes made the estimates in Table 4, the number of service members in the VA system has grown to nearly 2 million people. This is thus a conservative estimate of costs for veteran’s care — if only because, unfortunately, the war in Afghanistan will continue to produce more people with complex wounds and conditions who will enter into the VA system. In June 2014, Bilmes updated her estimate of future spending on veterans’ care. Bilmes projects that through 2053, Net Present Value costs for veterans disability, medical, and associated costs of administration for care of veterans will be more than $1 trillion, because the rate and complexity of medical and disability claims has been higher than Bilmes originally predicted.\textsuperscript{65} “In addition, a significant number of veteran’s claims are now being appealed, adding to the cost of the process and in most cases, resulting in higher awards for veterans.”\textsuperscript{66}


\textsuperscript{66} L. J. Bilmes, personal communication, 17 August 2016.
As Bilmes reminds us, even though the Department of Veterans Affairs has "the fastest-growing budget in the federal government," the department "still lacks sufficient funding to fill thousands of vacancies for doctors and nurses and to finance badly needed repairs to its hospitals and clinics." Long wait times for services have been a persistent barrier for veterans’ access to health care, and ultimately may increase the costs of care.

The Costs of War estimate takes into account the greater number of veterans in the system, and is still likely an underestimate of the final cost because more Iraq and Afghan soldiers will enter the VA system over the next several years and the costs of administration and services for the veterans of the wars in Afghanistan and Iraq will grow accordingly. This paper uses Bilmes’ estimate of $1 trillion for future veterans-related spending through 2053.

Macroeconomic, Non-Budgetary and Externalized Costs

Earlier Costs of War project analysis by Heidi Garrett-Peltier, James Heintz, and Ryan Edwards showed that the wars likely costs tens of thousands of jobs, affected the ability of the US to invest in infrastructure and probably led to increased interest costs on borrowing, not to mention greater overall federal indebtedness. The post-9/11 wars have been funded primarily by borrowing. No additional taxes were raised for these wars; indeed, taxes were cut in many categories for most of the war years, and they recently rose only for households with incomes over $400,000.

Using a standard macroeconomic model of the US economy, Ryan Edwards estimates that as of 2014, the US has already incurred an additional approximately $453 billion in interest on borrowing to pay for the wars. Over the next several decades, assuming no more military spending on these wars, but also no additional tax increases or spending cuts, cumulated interest costs on borrowing to pay for the wars will ultimately rise to dwarf the $1.5 trillion of direct military spending from 2001-2013, adding more than $7.9 trillion to the national debt. Thus, although military spending may not continue to rise over the next 40 years, interest costs will surpass total war costs unless Congress devises another plan to pay for the wars.

The severity of the burden of war-related interest payments will depend on many factors, not least, the overall future health of the US economy, interest rates, government fiscal policy, and national saving. But unfinanced war spending has played a significant role in

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71 Edward’s calculation is based on only the direct war appropriations noted in Table 2 for DoD and State Department.
raising the US national debt, and it has few of the benefits associated with other measures that have raised the debt, such as reductions in taxes and increases in spending, which were policies intended to combat the recession.

Some of the costs of the wars in Iraq and Afghanistan have been externalized and therefore do not appear in this accounting, focused on US federal outlays and obligations. Specifically, as Zoe Wool’s research shows, the externalized costs include the social costs of care for disabled veterans borne by their families.\textsuperscript{72} The costs to US military families of uncompensated expenses of caring for injured family members may be as much as $300-400 billion over the next several decades.\textsuperscript{73} Further, state and local governments assume some of the costs of veteran’s care and benefits.\textsuperscript{74} Finally, each one of the nearly 7,000 US soldiers killed by wars in Iraq and Afghanistan could be assigned a statistical value of human life — a dollar value to their deaths. The \textit{Costs of War} project has not estimated the economic impact on the United States economy — the loss of economic productivity — of the deaths and injuries of US soldiers due to the wars.

\textit{The economic costs of the war for other countries are also not included in this accounting.} The costs incurred outside the US by its allies and by the people and governments of Afghanistan, Pakistan, and Iraq total in the many billions of dollars. For example, the disruption caused by war to Iraq’s health care and economic infrastructure has led to continued adverse health effects and a continuing economic burden for the people of Iraq and the region. Much the same can be said of the wars in Afghanistan and Pakistan. There are millions of refugees for whom the burden of care has fallen to international humanitarian organizations and host countries. The UK spent about $14 billion in Iraq from 2003-2011 and was projected to spend about $30 billion in Afghanistan by the time of the complete withdrawal of the UK.\textsuperscript{75} By one estimate published in 2011, the budgetary costs of German military involvement in Afghanistan is more than $15 billion (12 billion Euros), at the low end, and this number does not include medical costs or the costs of financing the German participation in the war.\textsuperscript{76}

While the US has given assistance to the governments of Afghanistan, Pakistan, and Iraq, there are still hundreds of billions of dollars’ worth of reconstruction and military costs borne by those governments. Further, there is also increased military spending in Pakistan (beyond what the US has given in military aid) and a burden of refugee flows in these


countries. While the US does provide some money to the victims of war in Pakistan through USAID Civilian Victim Support Program grants, local governments in Pakistan — in Balochistan and Khyber Paktunkhwa — provide assistance to civilian victims of conflict and terrorism.\textsuperscript{77}

In addition, there is a budgetary burden to international institutions involved in humanitarian assistance in the war zones, which is shared broadly by many of the world’s governments. This burden includes the costs of work by UN agencies, non-governmental organizations, humanitarian organizations such as the International Committee for the Red Cross and Handicap International, and regional governments that care for refugees and displaced people in the war zones.

**Conclusion: Pre-War Optimism about Costs and the $4.79 Trillion-Plus Reality**

By my conservative estimate, the wars in Iraq and Afghanistan have cost and will cost more than $4.79 trillion, including future veterans’ care and the President’s request for FY2017 Overseas Contingency Operations, but not including all future interest on debt associated with the wars. This will likely be many trillions of dollars. And as explained earlier, this paper’s estimate does not include all the costs of the war for which it is difficult to come to a reasonable estimate or which are smaller and scattered in various federal and state budgets. For example, as noted above, I have not included the various costs of veterans’ care that have fallen to state and local governments or other costs externalized to military families and Americans more generally. Nor have I estimated the macro-economic consequences of the wars.

In the previous version of this paper, I assumed 65 percent of the costs of veterans’ care and disability expenses could be attributed to the Iraq war.\textsuperscript{78} The long duration of these wars, and the fact that they occurred simultaneously, involving many of the same personnel and equipment, has meant that their expenses and future costs related to personnel are increasingly difficult to disaggregate. In addition, Overseas Contingency Operations are essentially global in scope — occurring in Africa, the Americas, Europe and Asian and the Pacific. While more soldiers served in Iraq, many soldiers have served multiple deployments in both war zones. Further, the trauma and injury soldiers experience is cumulative and the VA does not track injuries by war zone, but by time of service.\textsuperscript{79} Similarly, equipment was


\textsuperscript{78} The peak number of troops deployed in Iraq was 170,000 soldiers in 2007 and about 32,000 have been reported as wounded in action in Iraq. US troop levels in Afghanistan peaked at about 101,000 in 2011 and so far more than 19,000 have been wounded in action as of January 2014. In the past two years, the severity of the injuries of troops returning from Afghanistan has grown. See Lutz, C. (2013, February 21). US and Coalition Casualties in Iraq and Afghanistan. *Costs of War*; and Fischer, H. (2015, August 7). *A Guide to US Military Casualty Statistics: Operations Freedom’s Sentinel, Operation Inherent Resolve, Operation New Dawn, Operation Iraqi Freedom, and Operation Enduring Freedom*, p. 1. Washington, DC: Congressional Research Service.

\textsuperscript{79} Linda Bilmes also argues that there is no "reasonable way to divide costs." Personal communication, June 20, 2014.
often used in both major war zones, so the costs to repair and replace equipment may not be separable by war zone at the aggregate level. Further, soldier’s pay, death gratuity benefits and health care costs rose for the entire military, regardless of whether they were deployed to a war zone.\textsuperscript{80} Nonetheless, an estimate of the proportion of total costs that could be attributed to each war zone, based on the proportion OCO spending through FY2016, attributes less than 1% of total costs to the war in Syria, about 45% to the war in Afghanistan/Pakistan, and 46% to the Iraq war. Spending on other OCO accounts for about 7% of the total spending.

This paper’s estimate of current and future costs of war \textit{greatly} exceeds pre-war and early estimates. Indeed, optimistic assumptions and a tendency to underestimate and undercount war costs have, from the beginning, been characteristic of the estimates of the budgetary costs and the fiscal consequences of these wars.

Nowhere is this clearer than estimates of the budgetary costs of the Iraq war. In mid-September 2002 Lawrence Lindsey, then President Bush’s chief economic adviser, estimated that the "upper bound" costs of war against Iraq would be $100 to $200 billion. Overall, Lindsey suggested however that, "The successful prosecution of the war would be good for the economy."\textsuperscript{81} On 31 December 2002, Mitch Daniels, then the director of the Office of Management and Budget estimated that the costs of war with Iraq would be $50 to 60 billion.\textsuperscript{82} Daniels suggested that Lindsay’s estimates were much too high, although neither official provided details for the basis of their estimates. There were other pre-war estimates for the costs of war in Iraq. For instance, in September 2002, US House of Representatives Budget Committee Democratic staff estimated costs of $48 to 60 billion, assuming 30 to 60 days of combat and a 2½ month occupation.\textsuperscript{83} The headline in \textit{The Wall Street Journal} covering the Congressional estimate read, "Lindsey Overestimated Costs of Iraq War, Democrats Say."\textsuperscript{84} Later in 2002, Yale economist William Nordhaus suggested a nearly $2 trillion cost for the Iraq war if the war were to be protracted and difficult. He argued while the main component of costs could be higher oil prices ($778 billion), a long war could cost $140 billion in direct military spending and another $615 billion to pay for occupation, peacekeeping, reconstruction and nation-building, and humanitarian assistance.\textsuperscript{85} To this, Nordhaus added an estimated $391 billion in negative macroeconomic consequences. The most comprehensive estimate of the long-term budgetary costs of both wars — including direct and indirect

\textsuperscript{80} For instance, Congress increased the Death Gratuity from $12,000 to 100,000 for all active duty military personnel in 2005, effective starting in FY2006. See Department of Defense. (2008). \textit{Death Gratuity}. Death gratuities that occur as a result of specific operations are charged to that OCO account.

\textsuperscript{81} Lindsey, quoted in Davis, B. (2002, September 16). Bush Economic Aid Says the Cost of Iraq War May Top $100 Billion. \textit{The Wall Street Journal}.


\textsuperscript{83} House Budget Committee. (2002, September 23). \textit{Assessing the Costs of Military Action Against Iraq: Using Desert Shield/Desert Storm as Basis for Estimates}.


spending and other economic effects — is *The Three Trillion Dollar War* by Joseph E. Stiglitz and Linda J. Bilmes.\(^{86}\) The Stiglitz-Bilmes estimate was conservative in many respects. Not including the increased burden to our national debt, the costs of war have exceeded even their cautious estimates.

Table 5 summarizes the information in this paper. It is a more detailed version of Table 1, including a breakdown of categories of costs that make the post-9/11 wars so expensive, at more than $4.79 trillion current dollars.

**Table 5. Detailed Summary Estimate of Costs to Date and Future Costs of Wars\(^ {87}\)**

<table>
<thead>
<tr>
<th>Appropriations and Expenditures FY2001-FY2016 Costs</th>
<th>$Billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Department of Defense, all OCO</td>
<td>1,630</td>
</tr>
<tr>
<td>Total State Department and US/AID, all OCO</td>
<td>112</td>
</tr>
<tr>
<td>Estimated additions to the Pentagon &quot;base&quot; budget</td>
<td>733</td>
</tr>
<tr>
<td>Veterans’ total medical and disability care</td>
<td>213</td>
</tr>
<tr>
<td>Additions to Homeland Security</td>
<td>548</td>
</tr>
<tr>
<td>Interest on Pentagon War Appropriations(^ {88})</td>
<td>453</td>
</tr>
<tr>
<td><strong>Subtotal FY2001-FY2016 Costs</strong></td>
<td>3,689</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Estimates of Future Spending</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Defense, all OCO, request for FY2017(^ {89})</td>
<td>60</td>
</tr>
<tr>
<td>State Department/USAID, all OCO, request for FY2017</td>
<td>6</td>
</tr>
<tr>
<td>Homeland Security spending for prevention and response to terrorism, request for FY2017</td>
<td>37</td>
</tr>
<tr>
<td>Future Veterans’ costs for medical and disability, FY2016-2053</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>Subtotal Future War-Related Spending</strong> (not including future increases to Pentagon base budget)</td>
<td>1,101</td>
</tr>
</tbody>
</table>

| Total Costs to Date and Estimated Future Federal Budget Costs | 4,792 |

<table>
<thead>
<tr>
<th>Plus additional</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative Interest through 2053 on war appropriations through FY2013(^ {90})</td>
<td>&gt;7,900</td>
</tr>
</tbody>
</table>

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87 Using current dollar budget figures, rounded to the nearest $billion.


89 The President’s requested OCO budget for FY2017. Congress has on occasion appropriated more than requested for OCOs.

90 As estimated by Ryan Edwards, and rounded to the nearest $100 billion. See Edwards, R. D. (2011, June). *Post-9/11 War Spending, Debt, and the Macroeconomy*. Costs of War. As noted above, war appropriations for Iraq and Afghanistan were not funded with new taxes, but by borrowing. This adds interest costs to war spending, specifically, the interest costs already paid, and future interest costs. The severity of the burden of war-related interest payments will depend on many factors, not least the overall future health of the US economy, interest rates, government fiscal policy, and national saving.