

## ***The Employment Impacts of Cuts to Federal Spending: Not All Cuts Are Created Equal***

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### ***Introduction***

In 2025 the federal government is making large cuts in personnel and spending in various programs that Americans value – including education, healthcare, environmental programs, public parks and lands, and many others. At the same time, the Trump administration is increasing the size of the federal budget by devoting more spending and resources to the military and homeland security, further exacerbating a disproportional federal budget and workforce.

Changes in federal spending have different effects on employment, and this paper will present the employment impacts of cutting or maintaining various areas of federal spending, including military, health, education, infrastructure, and clean energy. The paper will also present data on the size of the federal workforce, particularly the dominance of military and militarized departments. Federal spending on the Department of Defense accounts for half of all discretionary spending and 60% of federal employment as of the end of fiscal year 2024. If we add together funding for the Departments of Homeland Security and Veterans Affairs in addition to DoD, these militarized departments make up 61% of the federal discretionary budget and 78% of the federal workforce (including both civilians and active-duty military). This is a seven percent increase in the militarized workforce since our previous report based on fiscal year 2022 data.<sup>1</sup>

The paper will show that the U.S. federal government devotes massive resources – in terms of both personnel and spending – to the military and related programs, while other types of federal employment are being cut. Yet, the paper also shows that military spending is worse for job creation than various other types of federal spending. That is, if the U.S. government were to invest the same amount in programs other than military-related programs, this investment would create far more jobs per dollar spent.

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<sup>1</sup> Peltier, H. (2023, June 8). *We Get What We Pay For: The Cycle of Military Spending, Industry Power, and Economic Dependence*. Costs of War, Watson Institute, Brown University.  
<https://watson.brown.edu/costsofwar/files/cow/imce/papers/2023/H%20Peltier%202023%20-%20We%20Get%20What%20We%20Pay%20For%20-%20FINAL.pdf>

The analysis presented here shows that military spending (including both federal defense spending and various private military industries) produces an average of five jobs per \$1 million spending, including both direct jobs and jobs in the supply chain. By contrast, education spending results in over 13 jobs per \$1 million spending – nearly three times as much employment for the same amount of dollars spent. Healthcare spending creates 84% more jobs than military spending, while infrastructure and clean energy create from 24% to 64% more. In other words, spending in all these alternative areas creates more jobs, dollar for dollar, than spending on the military.

The analysis below presents the jobs that are sustained by various military industries – not only federal defense spending that directly supports the Pentagon, but also various commercial military industries, such as the manufacture of missiles, tanks, and other weaponry. The paper then compares the job-producing capacity of these military industries versus various other types of federal spending, including general spending on non-defense programs, as well as federal and private spending on education, healthcare, new infrastructure, infrastructure repair, energy efficiency, and wind and solar energy.

Even though military spending is a worse job-creator than other programs, the federal workforce is dominated by military or military-related positions since so many resources are devoted to militarized sectors (military, homeland security, nuclear programs, and more). This paper presents data on the federal workforce and the outsized role played by the military: about two-thirds of federal civilian employment is military or military-related. When including both civilian and active-duty employees, a full three-quarters of federal employees work in military or military-related departments as of 2024, including in the Department of Defense, Department of Veterans Affairs, and Department of Homeland Security.

It may not at first be intuitive – that military spending is a poor job creator, and meanwhile federal employment is dominated by military personnel. And yet these facts are entirely consistent. It is precisely *because* military spending is so exorbitant that so many jobs have been created in the federal government as a result. A shift in funding from military to non-military programs would result in an increase in employment (since other programs are better job creators than the military) without an increase in the budget. Or, military funding could be cut by *more* than a corresponding increase in funding for other programs, and the topline budget would decline, even while maintaining or increasing employment overall.<sup>2</sup>

If the federal government changed its spending patterns such that military budgets decreased and funds were allocated to other purposes, this could prevent cuts in other

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<sup>2</sup> For example, a \$1 billion shift from military to education would create a net increase of about 8,000 jobs while keeping the budget the same (an increase of 13,000 jobs in education and a decrease of 5,000 military jobs). OR, military spending could decrease by \$1 billion while education spending increases by \$500 million, and that would still have a net positive effect of 1,500 jobs while lowering the budget (6,500 jobs in education minus 5,000 military jobs, while the budget is reduced by \$500 million).

federal programs. Alternatively, it could free up funds for employment in the private sector as a result of federal spending on infrastructure (creating engineering and construction jobs), clean energy (manufacturing and construction jobs, especially), as well as an array of jobs in healthcare and education.

The data presented in this paper show that the U.S. economy would have greater employment, as well as creating other potential benefits such as a healthier or more educated population, if the federal government reduced military spending rather than reducing spending in other sectors.

### ***The Employment Impacts of Federal Spending***

As the levels and trends of federal spending differ by program or department, so too do the employment impacts. One million or one billion dollars spent in one department does not produce the same types of employment impacts as one million or billion spent elsewhere, neither in terms of job numbers nor in terms of job types. Here we focus in particular on job numbers.

The number of jobs produced by a certain amount of spending is largely determined by three factors: (1) How labor-intensive the spending is; (2) What the domestic content of the spending is; and (3) What the average pay for those jobs is. An industry that is more labor-intensive will see a greater share of its spending going to hire labor, as opposed to a capital-intensive industry where the majority of the spending is channeled toward equipment and other capital goods. Education, for example, is a labor-intensive industry, whereas oil drilling is a capital-intensive industry. Thus \$1 million spent in education will produce more jobs than the same amount spent on oil drilling.

Secondly, if the spending stays within the local or domestic economy, it will produce more jobs than spending that “leaks” to non-local or international areas. Construction work is highly local (it has a high “domestic content”) whereas military spending can be either domestic or overseas (for wars, bases, overseas supplies) and therefore construction spending produces more jobs in the U.S. than military spending, dollar for dollar, since more of the spending stays in the local or domestic economy. And finally, an industry that offers a higher pay will be able to hire fewer workers for the same amount of spending than an industry with lower pay. Again, oil drilling and education are good examples – higher pay in oil drilling, in comparison to lower average pay in education – is an additional reason that oil drilling would produce fewer jobs than education, for the same amount of spending.

With all these factors in mind, we can compare the employment impacts of military spending and other types of federal spending. We use here an input-output (I-O) model, which uses real-world data on economic transactions between individuals, businesses, and governments. As goods and services are bought and sold throughout the economy, the I-O model captures the various linkages and enables users to estimate economic impacts – including employment impacts – of increases or decreases in private or public spending.

We use IMPLAN<sup>3</sup>, an economic impact analysis tool, with U.S. national data from 2023<sup>4</sup> to estimate the domestic impacts of spending in various industries – including federal military spending and other types of military industries such as arms, ammunition, tanks, and more; and we compare that to non-military spending in areas such as healthcare, education, infrastructure, energy efficiency, and renewable energy.

Figure 1 below presents the employment impacts for each \$1 million of spending in various industries. The two categories of military spending shown in the lower-most bars in Figure 1 include federal spending on defense as well as spending in commercial military industries that produce arms, ammunition, tanks, missiles, and other weapons systems used by the military.

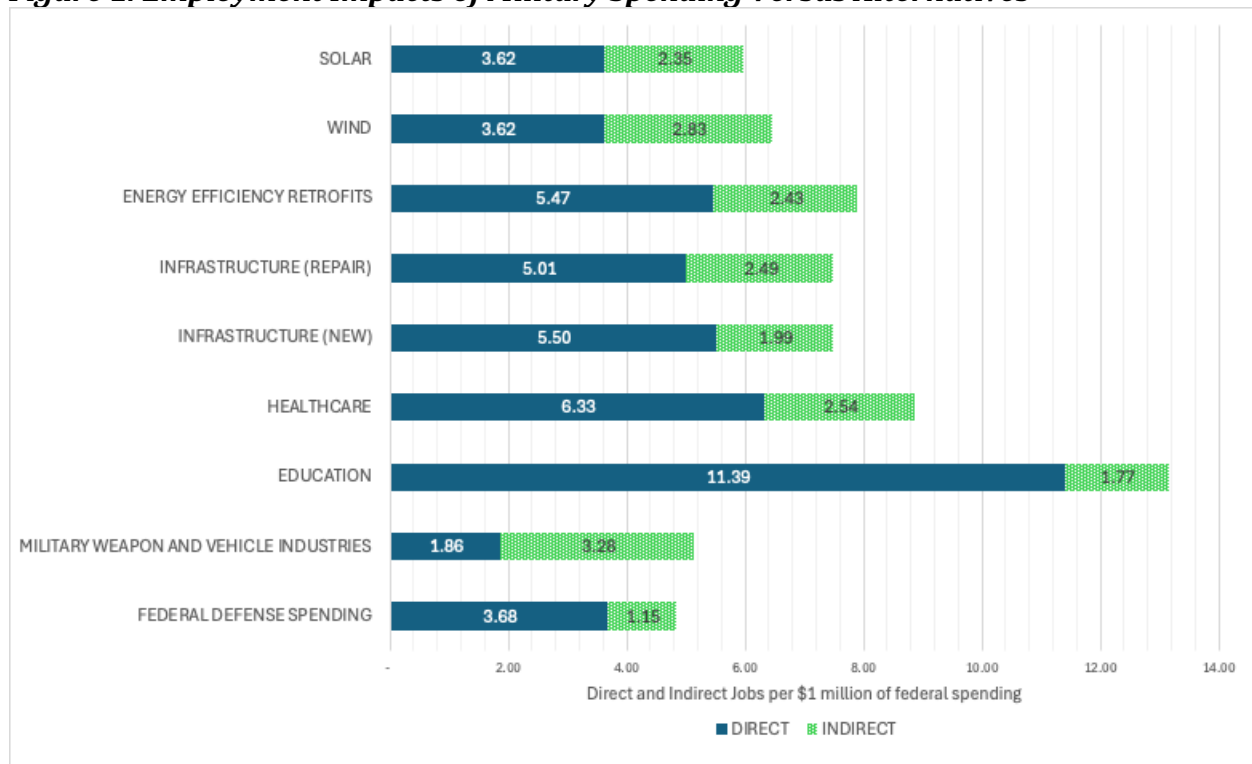
The left-side portions of all the bars, in the solid color, are the “direct” effects of the spending. This is the number of people directly employed in these military or other industries. The right side of the bars, in green and texture, are the “indirect” effects of the spending, which are the jobs that are created through the supply chain. For example, as the industry producing military weaponry buys steel and hardware as inputs, jobs are created in the steel and hardware industries. Thus, the bars in Figure 1 show the total employment impact – both direct and indirect – of \$1 million of spending in each of the categories. Table 1, below the figure, shows the total jobs in each spending category and compares each category to federal military spending.

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<sup>3</sup> IMPLAN is an economic impact analysis tool that is based on an input-output model. For more information, see [www.implan.com](http://www.implan.com)

<sup>4</sup> When the analysis for this paper was conducted, 2023 was the most recent year of complete data in IMPLAN. Upon publication of the paper there may be a newer data release.

**Figure 1. Employment Impacts of Military Spending Versus Alternatives<sup>5</sup>**



Note “Education” is a weighted average of primary, secondary, higher ed, and other educational services, as explained in the appendix. “Military weapon and vehicle industries” are private military companies producing goods for the military, as distinct from “federal defense spending” which includes personnel and various types of public spending on the military. See appendix for additional details.

<sup>5</sup> Calculated using IMPLAN with 2023 U.S. National data. Weights and averaged explained in appendix.

**Table 1: Comparison of Total Jobs Per \$1 Million, Military and Non-Military Spending<sup>6</sup>**

	<b>Direct plus indirect jobs per \$1 million</b>	<b>Compared to federal military spending</b>
<b>FEDERAL DEFENSE SPENDING</b>	4.83	0%
<b>MILITARY WEAPON AND VEHICLE INDUSTRIES</b>	5.15	+7%
<b>EDUCATION (WEIGHTED AVG PRIMARY, SECONDARY, TERTIARY, OTHER)</b>	13.16	+172%
<b>Elementary and secondary schools</b>	17.62	+265%
<b>Junior colleges, colleges, universities, and professional schools</b>	11.58	+140%
<b>HEALTHCARE</b>	8.87	+84%
<b>INFRASTRUCTURE (NEW)</b>	7.49	+55%
<b>INFRASTRUCTURE (REPAIR)</b>	7.49	+55%
<b>ENERGY EFFICIENCY RETROFITS</b>	7.90	+64%
<b>WIND</b>	6.45	+34%
<b>SOLAR</b>	5.97	+24%

The total effects of military spending are roughly 5 jobs per \$1 million expenditures: Federal military spending (on both soldiers and civilians) totals 4.83 jobs/\$1million, including both direct (3.68) and indirect (1.15) employment, while spending specifically on military weapon and vehicle manufacturing totals 5.15 jobs per \$1 million. In comparison, education (elementary, secondary, and higher ed) creates almost three times as many jobs for the same amount of spending: 13.16 jobs/\$1 million (11.39 direct jobs, 1.77 indirect jobs). Healthcare creates 84% more jobs than military spending, totaling 8.87 jobs/\$1 million. New infrastructure and repair infrastructure, as well as energy efficiency retrofits of homes and non-residential buildings create 55-64% more jobs than the military (about 7.5-7.9 direct plus indirect jobs), and solar and wind create 24-34% more jobs (about 6-6.5 total jobs per \$1 million spending).

Why is it that the military produces so many fewer jobs than these alternative areas? A primary reason is that for industries such as education, healthcare, and infrastructure, most of the spending stays in the local or domestic economy, creating jobs for workers where the money is spent. On the other hand, military spending has a greater “leakage,” or has more spending outside the domestic economy. Some military spending is used to purchase goods from international suppliers, which would produce jobs in other countries but not in the U.S. Additionally, some military spending is channeled to maintaining bases and overseas presence, so the supply chain for those expenditures (food,

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<sup>6</sup> Calculated using IMPLAN with 2023 national U.S. data. Methods explained in appendix and in footnote and text for Figure 1.

housing, etc.) is provided by overseas suppliers, again producing jobs elsewhere but not in the U.S. A further reason that military spending supports fewer U.S. jobs than education, healthcare, infrastructure, or clean energy, is that military spending is very capital intensive, much more so than these alternative spending areas. This means that more of the overall spending goes to equipment (weapons systems, vehicles, fuel) and less to personnel.

Readers who are interested in the employment impacts of more specific industries within each of the above categories – including private military industries in weapons and vehicle manufacturing - can refer to the appendix.

### ***Federal Manpower and the Militarized Workforce***

The majority of federal discretionary spending is allocated to militarized departments, including the Department of Defense (DoD), Department of Homeland Security (DHS), and the Department of Veterans Affairs (VA). This is indicative of a budget that prioritizes militarized departments and thus militarized solutions.

Between FY2001-FY2025, military employment in the U.S. has averaged roughly 1.4 million employees per year, and DoD civilian employment has been roughly 700,000-800,000 employees annually, for a DoD total of approximately 2.1-2.2 million full-time equivalent positions annually over this 25-year period.<sup>7</sup> One striking aspect of military employment since 2001 is that the level of manpower – particularly the active duty military members – alters very little during times of war, even during the “surges” in wartime activities in Iraq (2007) and Afghanistan (2009-2011). The high point of military end strength, including civilians and active-duty, totaled 2,308,000 in FY 2011, only 7% higher than the pre-surge levels of 2,155,000 in FY 2006.<sup>8</sup>

The DoD is the federal department with the greatest number of personnel: 824,000 civilian employees as of September 2024.<sup>9</sup> After DoD, the next biggest federal department in terms of manpower is the Department of Veterans Affairs, with 425,511 employees. This is followed by the Department of Homeland Security, with 227,566 employees. The Department of Justice had 117,129 employees as of September 2024, while the Department of the Treasury had 113,992. The Department of Education had a small fraction of the manpower of DoD: only 4,209 employees, while the Department of State had 14,593 employees.<sup>10</sup>

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<sup>7</sup> Source: DoD Green Book, FY2025, Table 7-5

<sup>8</sup> *ibid*

<sup>9</sup> *ibid*

<sup>10</sup> Data derived from [Fedscope.opm.gov](https://www.fedscope.opm.gov) for most recent month available as of the time of writing, which is September 2024. Department data is from “Cabinet Level Departments” and total federal manpower includes Cabinet Level as well as medium and small departments and independent agencies.

<https://www.fedscope.opm.gov/> “Employment Data Cube,” “Current Month”. Accessed April 30, 2025.

Table 2a and 2b, below, presents employment totals for DoD, militarized departments such as Homeland Security and Veterans Affairs. For the sake of comparison, it shows personnel levels in a few other cabinet-level departments, including Justice, Treasury, Education, and State.

**Table 2a: Federal Workforce Employment Breakdown, 2024**

<b>Federal Department</b>	<b>Civilians Employed</b>	<b>Active-Duty Military</b>	<b>Total Federal Employment (Civilian + Active-Duty)</b>
<b>Dept of Defense</b>	824,000	1,369,000	2,193,000
<b>Dept of Veterans Affairs</b>	425,511	—	425,511
<b>Dept of Homeland Security</b>	227,566	—	227,566
Total Military-Related	<b>1,477,077</b>	<b>1,369,000</b>	<b>2,846,077</b>
<b>Dept of Justice</b>	117,129	—	117,129
<b>Dept of the Treasury</b>	113,992	—	113,992
<b>Dept of Education</b>	4,209	—	4,209
<b>Dept of State</b>	14,593	—	14,593
<b>Additional Federal Departments</b>	573,000	—	573,000
Total Federal Workforce	<b>2,300,000</b>	<b>1,369,000</b>	<b>3,669,000</b>

**Table 2b: Summary Percentages of Federal Workforce**

<b>Category</b>	<b>Percentage of Total Federal Workforce</b>
<b>% Civilian Federal Workforce in Dept of Defense (DoD) Jobs</b>	36%
<b>% Civilian Federal Workforce in Military-Related Jobs (DoD, VA, DHS)</b>	64%
<b>% of Total Federal Workforce in DoD (including civilian and active-duty military)</b>	60%
<b>% of Total Federal Workforce in Military-Related Positions (including civilian and active-duty military)</b>	78%

*Calculated by author based on Table 2a*

These statistics are presented so the reader can appreciate the extent of the resources that the federal government allocates to the military – both in terms of expenditures and in terms of manpower. It is because the military budget is so disproportionately high that so many militarized jobs have been created in the federal government as a result. If the federal budget had a more balanced allocation of resources,



more balanced percentages in the workforce would result, with an increase in employment in non-military programs.

### ***Problems with Overdependence on Military Spending***

If creating a militarized and military-dependent society is the goal of taxpayers and federal policy makers, then this use of resources is justified. One consequence of federal spending and manpower being dominated by the military and related departments, however, is that the military becomes the only solution to a host of problems. The old adage is that “when all you have is a hammer, everything looks like a nail.” The military has increasingly taken on functions previously undertaken by USAID or the Department of State, supplanting diplomacy with the war machine.<sup>11</sup>

High levels of military spending and personnel have resulted in more militarized police forces, greater use of DHS (including for domestic surveillance and deportations), and a system in which a militarized government becomes an agent against its people, rather than in defense of them.<sup>12</sup> Oversized military budgets and bureaucracy distorts the regime and distorts interior domestic culture, weakening democracy. It also leads to an increased reliance on militarized international responses over diplomacy, as well as a global arms race. The domestic economy, the domestic democratic culture, and the international political order are all less stable as a result.

The founding fathers were generally opposed to having a large standing army. They believed it could become a tool of authoritarian rule and an instrument of domestic tyranny. James Madison, for example, said that, “The means of defense against foreign danger have been always the instruments of tyranny at home.”<sup>13</sup> An oversized military, they believed, was a threat to liberty.

Furthermore, an oversized military budget leads to distortions in domestic politics and economic power, particularly as spending allocated to the Department of Defense has increasingly been channeled to contractors. Over 50% of the DoD budget, as shown previously by this author as well as others,<sup>14</sup> has been paid to military contractors, which

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<sup>11</sup> For more on this, see this author’s 2023 paper, “We Get What We Pay For,” or the Rosa Brooks book, *How Everything Became War and the Military Became Everything*

<sup>12</sup> See, for example, Jessica Katzenstein (2020) “The Wars Are Here”

<https://watson.brown.edu/costsofwar/papers/2020/wars-are-here-how-united-states-post-911-wars-helped-militarize-us-police>

<sup>13</sup> <https://teachinghistory.org/history-content/ask-a-historian/24671#:~:text=Quote%20from%20Madison%3A%20%22The%20means,%2C%20have%20enslaved%20the%20people.%22>

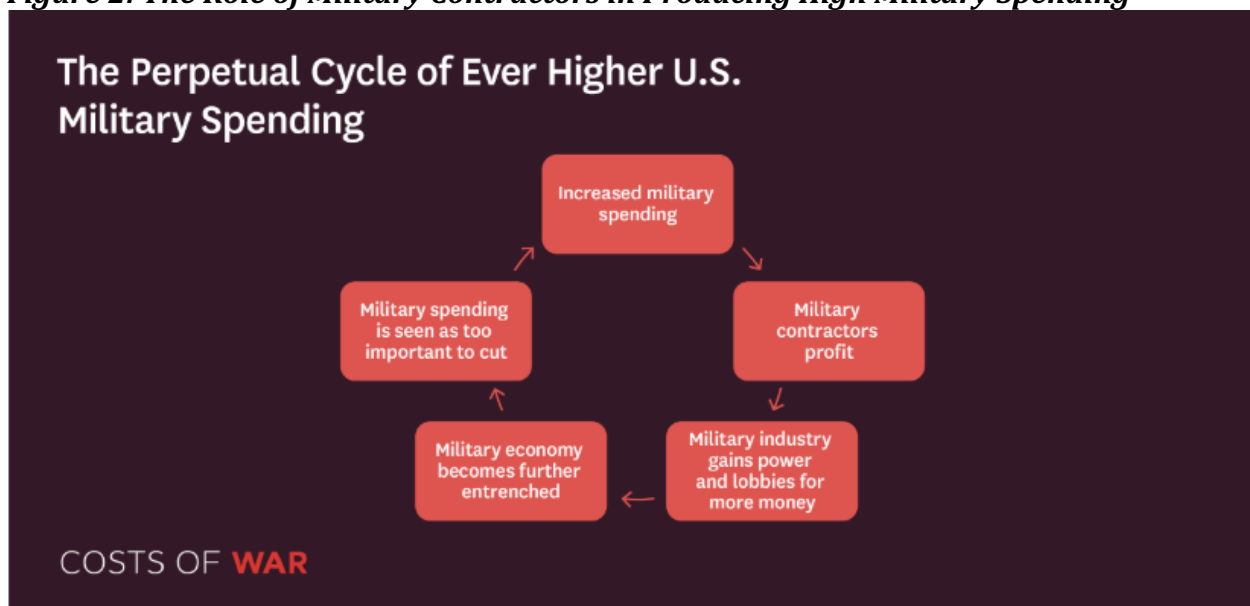
<sup>14</sup> See Peltier (2020) “The Growth of the Camo Economy”

<https://watson.brown.edu/costsofwar/files/cow/imce/papers/2020/Peltier%202020%20-%20Growth%20of%20Camo%20Economy%20-%20June%2030%202020%20-%20FINAL.pdf> and Hartung (2025) “Profits of War”

[https://watson.brown.edu/costsofwar/files/cow/imce/papers/2025/Profits%20of%20War\\_Hartung%20and%20Semler\\_Costs%20of%20War%3AQuincy%20FINAL.pdf](https://watson.brown.edu/costsofwar/files/cow/imce/papers/2025/Profits%20of%20War_Hartung%20and%20Semler_Costs%20of%20War%3AQuincy%20FINAL.pdf)

has enabled them to gain outsized political power, resulting in the following cycle: military contractors get more and larger contracts, which increases their profits and increases the sense that they are not only necessary but vital to the economy and to defense; contractors fund policymakers and lobby for more military spending; contractors receive more and larger contracts and become further entrenched in the economy and gain more political power as a result.

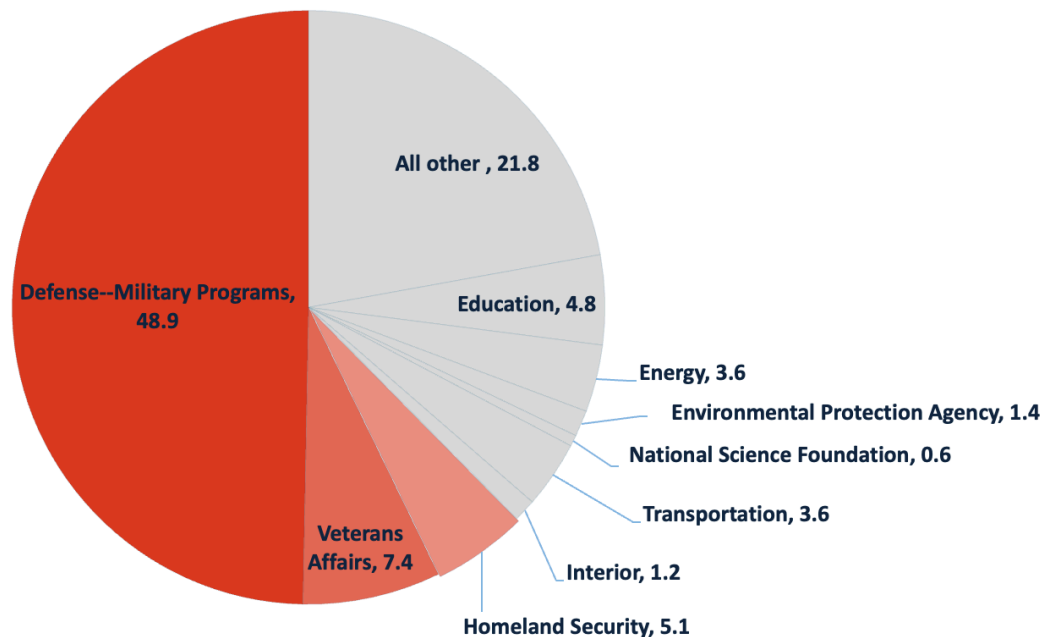
**Figure 2: The Role of Military Contractors in Producing High Military Spending**



Defense-related activities receive over half of the federal discretionary budget. According to the Congressional Budget Office, enacted levels of funding for FY2024 included \$954 billion for defense (base plus emergency) and \$904 billion for non-defense. Thus, defense accounted for over 51% of the discretionary budget. The militarized portion of the budget is even higher, once we include homeland security and veterans affairs.

Data from the Office of Management and Budget, a separate government agency, shows a similar effect. Office of Management and Budget data is presented in Figure 3, below. As Figure 3 shows, about 49% of federal discretionary spending is allocated to military programs in the DoD (according to this Office, total DoD funding is slightly higher but some portion of the DoD budget is categorized as non-military). If one adds the 49% of DoD-military, 5% Department of Homeland Security (DHS), and 7% Department of Veterans Affairs (VA), this totals 61% – almost two-thirds – of the budget being allocated to militarized sectors.

**Figure 3: Percentages of Discretionary Funding by Federal Department, FY2024**



Source: OMB Historical Tables, Table 5.5, "Percentage Distribution of Discretionary Budget Authority by Agency: 1976-2028"<sup>15</sup>

In comparison to the 61% of funds going to militarized departments, the Department of Education receives only 5%, the Department of Energy 4%, and the National Science Foundation and Environmental Protection Agency only 1% each. The Departments of Transportation and the Interior receive a combined 5% of the budget authority – these are the agencies tasked with building and maintaining highways, bridges, and aviation infrastructure, as well as water systems, national parks and other wildlife resources. The DoD receives 25 *times* as much funding as the Department of State, which is the department responsible for foreign affairs and diplomacy.

Devoting greater amounts of resources to something doesn't necessarily make it greater. In the case of military spending, it has routinely been shown that roughly 30-40% of spending results in waste, fraud, and abuse.<sup>16</sup> Outdated weapons systems are maintained, bases that should be closed are kept operating, contractors overcharge on basic items or earn excessive profits through monopolistic contracts. Overspending on the

<sup>15</sup> Budget of the United States Government. (2023, March 13). *Budget FY 2024 – Table 5.5 – Percentage Distribution of Discretionary Budget Authority by Agency: 1976-2028*. <https://www.govinfo.gov/app/details/BUDGET-2024-TAB/BUDGET-2024-TAB-6-5>

<sup>16</sup> Various lawsuits, Inspector General reports, congressional committee, and other reports have shown that waste, fraud, and abuse occur through contractor overcharging, various inefficiencies and incomplete work, bribery and theft, lack of oversight, and other means.

military, rather than creating more security, leads to both an over-reliance on militarized solutions and a waste of taxpayer dollars.

Furthermore, war spending since 2001 has been financed through debt, rather than through war bonds or increased taxes. This has the effect of raising the overall level of public debt and the concomitant interest payments. Higher interest costs result in wasted government spending (as the federal government pays more on interest it is less able to spend funds in other areas) and/or higher future taxes.

A budget and workforce that is skewed toward the military creates a problem of “path-dependence.” Since military departments have more personnel and bigger budgets, they are often relied upon to resolve problems that otherwise could have been handled by departments such as State, USAID, or others. And then as they take on these expanded duties (such as reconstruction work post-war), they become increasingly relied upon to do that work and their budgets and personnel stay high or grow. Meanwhile, payments to contractors increase, which increases their political and economic power and increases the military’s reliance upon them. Thus, there is a perpetual cycle in which military spending, military-related personnel, and military contractors continue to gain resources and power.

## ***Conclusion***

This paper has shown that the U.S. federal budget and federal workforce are disproportionately skewed toward the military and militarized departments. Federal spending on the Department of Defense accounts for half of all discretionary spending; and the DoD alone accounts for well over half of federal employment. If we add together funding for the Departments of Homeland Security and Veterans Affairs in addition to DoD, these militarized departments make up 61% of the federal discretionary budget and 78% of the federal workforce (including both civilians and active-duty military).

Yet, the analysis presented here shows that military spending, despite its current outsized role in the budget, is an inefficient job creator. Dollar for dollar, military spending produces fewer jobs than many other areas of federal spending. Clean energy produces 24-64% more jobs than the military, infrastructure produces 55% more, healthcare produces 84% more, and education produces 172% more (almost three times as many jobs for the same amount of spending).

For each \$1 million of federal spending, the paper shows that the direct plus indirect (supply-chain) employment of various sectors is as follows:

- Military: ~5 jobs
- Education: ~13 jobs
- Healthcare: ~8.9 jobs
- Infrastructure & clean energy: ~6-8 jobs

These differences are primarily due to military spending being more capital-intensive than the other sectors shown here, as well as having lower domestic content (greater spending overseas rather than in the domestic economy).

If we examine the outsized role of the military budget and workforce in combination with the fact that it is an inefficient job creator, there are significant policy implications: a shift from military spending to other federal programs would result in a greater number of jobs economy-wide as well as a more balanced federal workforce and budget. Military spending could be reduced by a more significant amount than other spending increases, which would reduce the budget deficit while maintaining or even increasing employment.

Over-reliance on the military is detrimental to domestic liberty, as it results in more weaponized policing, greater surveillance, and a more militarized approach to domestic issues. It is also detrimental to international issues, as the military has increasingly become the tool of choice, displacing diplomacy and conflict resolution and entrenching a system where the military is the default solution, regardless of appropriateness. Furthermore, increased spending on the military results in more political and economic power for military contractors, as they gain lucrative contracts and affect campaign finance and public opinion in ways that reinforce the cycle of military power and funding.

A fundamental shift in U.S. federal spending priorities is both necessary and possible, reducing military allocations and instead investing in sectors that offer greater economic returns, democratic stability, and public welfare. Without such changes, the U.S. will continue to deepen militarization while missing opportunities for broad-based prosperity and human security.

## Appendix: Detailed Employment Impact Numbers

Table A, below, lists the direct and indirect employment impacts of \$1 million of spending in each industry. The categories that aggregate multiple industries, such as “military weapon and vehicle industries,” or “education,” also list average impacts for the aggregated category. These averages are weighted averages of the constituent industries, where the weights are based on the total output of each industry within its category. So, for example, in the category of education spending, in the data year used here (2023), 18.5% of U.S. education spending was for elementary and secondary schools, 50.1% for higher education, and 31.4% for other educational services. Applying these weights to each of the education industries in Table A yields a weighted average of 11.39 direct jobs, 1.77 indirect jobs, and 13.16 total jobs per \$1 million spending on education.

**Table A: Employment Impacts, Detailed<sup>17</sup>**

SPENDING CATEGORY		JOBS PER \$1 MILLION SPENDING		
		DIRECT	INDIRECT	TOTAL
<b>FEDERAL DEFENSE SPENDING</b>		<b>3.68</b>	<b>1.15</b>	<b>4.83</b>
<b>MILITARY WEAPON AND VEHICLE INDUSTRIES</b>		<b>1.86</b>	<b>3.28</b>	<b>5.15</b>
	Small arms ammunition manufacturing	1.96	3.01	4.97
	Ammunition, except for small arms, manufacturing	3.49	1.92	5.41
	Small arms, ordnance, and accessories manufacturing	1.75	4.02	5.77
	Guided missile and space vehicle manufacturing	1.59	3.09	4.68
	Propulsion units and parts for space vehicles and guided missiles manufacturing	2.56	4.54	7.1
	Military armored vehicle, tank, and tank component manufacturing	1.57	2.32	3.89
<b>EDUCATION</b>		<b>11.39</b>	<b>1.77</b>	<b>13.16</b>
	Elementary and secondary schools	16.7	0.92	17.62

	Junior colleges, colleges, universities, and professional schools	10.07	1.51	11.58
	Other educational services	10.38	2.68	13.06
<b>HEALTHCARE</b>		<b>6.33</b>	<b>2.54</b>	<b>8.87</b>
	Offices of physicians	5.86	2.29	8.15
	Offices of other health practitioners	8.36	1.17	9.53
	Outpatient care centers	5.77	2.66	8.43
	Home health care services	13.86	1.55	15.41
	Other ambulatory health care services	8.3	2.32	10.62
	Hospitals	4.43	2.88	7.31
	Nursing and community care facilities	9.87	2.96	12.83
	Residential mental health, substance abuse, and other residential care facilities	10.96	2.25	13.21
<b>INFRASTRUCTURE - NEW</b>		<b>5.50</b>	<b>1.99</b>	<b>7.49</b>
	Water, sewage and other systems	3.53	1.95	5.48
	Construction of new power and communication structures	5.93	1.6	7.53
	Construction of new highways and streets	5.17	2.2	7.37
	Construction of other new nonresidential structures	5.72	2.12	7.84
<b>INFRASTRUCTURE - REPAIR</b>		<b>5.01</b>	<b>2.49</b>	<b>7.49</b>
	Maintenance and repair construction of nonresidential structures	4.53	2.56	7.09
	Maintenance and repair construction of residential structures	6.4	2.3	8.7
	Maintenance and repair construction of highways, streets, bridges, and tunnels	4.53	2.48	7.01

<b>ENERGY EFFICIENCY RETROFITS (50% EACH RES AND NON-RES)</b>		<b>5.47</b>	<b>2.43</b>	<b>7.90</b>
	Maintenance and repair construction of nonresidential structures	4.53	2.56	7.09
	Maintenance and repair construction of residential structures	6.4	2.3	8.7
<b>WIND</b>		<b>3.62</b>	<b>2.83</b>	<b>6.45</b>
<b>SOLAR</b>		<b>3.62</b>	<b>2.35</b>	<b>5.97</b>

<sup>17</sup> The employment impacts for each industry are calculated using IMPLAN with 2023 U.S. national data. The weights for all industries besides energy efficiency, wind, and solar, are derived from the output of each of these industries within the IMPLAN data set. Energy efficiency is 50% non-residential repair construction, 50% residential repair construction. Wind and solar weights are taken from Table 1 in Garrett-Peltier, H. (2017). Green versus brown: Comparing the employment impacts of energy efficiency, renewable energy, and fossil fuels using an input-output model. *Economic Modelling* 61, 439-437.