



***United States Spending on Israel's Military Operations and
Related U.S. Operations in the Region,
October 7, 2023 – September 30, 2024***

Linda J. Bilmes, William D. Hartung, and Stephen Semler¹

October 7, 2024

Summary

This report covers the major economic costs of U.S. support for Israel's military operations and U.S. regional presence since October 7, 2023. *Costs of War* is a research project focused on U.S. military spending, as well as direct and indirect deaths associated with U.S. wars and militarism. It has been difficult for the U.S. public, journalists and members of Congress to get an accurate understanding of the amount of military equipment and financial assistance that the U.S. government has provided to Israel's military during the past year of war. There is likewise little U.S. public awareness of the costs of the United States military's own, related, operations in the region, particularly in and around Yemen.

In just one year, the U.S. has spent at least \$22.76 billion on military aid to Israel and related U.S. operations in the region (through September 30).² This was true, even before the U.S. expanded its presence in the region in late September/ early October 2024 in events too recent to be included in this report.

¹ Authors listed in alphabetical order. Linda J. Bilmes, Daniel Patrick Moynihan Senior Lecturer in Public Policy, Harvard Kennedy School (linda_bilmes@hks.harvard.edu); William D. Hartung, senior research fellow, Quincy Institute for Responsible Statecraft (hartung@quincyst.org); Stephen Semler, cofounder, Security Policy Reform Institute (SPRI) (sensemle@gmail.com); Edited by Stephanie Savell, Director of Costs of War and Senior Fellow at Brown University's Watson Institute (stephanie_savell@brown.edu). Many thanks to Mimi Healy for copy editing and to Neta C. Crawford, Catherine Lutz, and Darcey Rakestraw for editorial comments.

² The \$22.76 billion figure comes from adding \$17.9 billion in U.S. security assistance to Israel (footnote 3) and \$4.86 billion in U.S. military operations in the region, including against Houthis in and around Yemen (footnote 5).

This estimate is conservative because, although it includes approved security assistance funding since October 7, 2023, supplemental funding for regional operations, and an estimated additional cost of operations, it does not include any other economic costs. For instance, it does not include commitments to future spending that were made this year. Each part of the report that follows provides a detailed explanation of what is *not* included in the \$22.76 billion, as well as what is.

Furthermore, there are other broad categories of spending that are not included, such as increased U.S. security assistance to Egypt, Saudi Arabia or any other countries, and costs to the commercial airline industry and to U.S. consumers. This report is focused entirely on United States military spending – it does not include other countries’ spending on military operations.

Part I of the report focuses on United States military aid to Israel. It is difficult to pinpoint an exact dollar figure for this aid, for reasons explained below. The U.S. government has approved at least \$17.9 billion in security assistance since October 7, 2023, but this is only a partial amount of the financial support provided during and for this war.³ For instance, the Biden administration has made at least 100 arms deals with Israel since October 2023 that fell below the value that would have triggered the requirement to notify Congress of the details. The U.S. has been Israel’s main supplier of weapons for the past five decades; weapons deliveries since October 7 include 57,000 artillery shells; 36,000 rounds of cannon ammunition; 20,000 M4A1 rifles; 13,981 anti-tank missiles; and 8,700 Mk 82,500 pound bombs. On August 13, 2024, the Biden administration announced \$20.3 billion in additional arms agreements with Israel to be carried out in future years (although this is currently being debated in Congress).

Part II provides a snapshot of this military aid in historical context. Altogether, Israel is the largest cumulative recipient of U.S. aid since World War II. Even so, the amount of military assistance approved during this past year -- \$17.9 billion – is substantially more than in any other year since the U.S. began granting military aid, specifically, to Israel in 1959.⁴

Part III provides further information on broader U.S. war-related spending, highlighting how, since October 7, the U.S. Navy has significantly scaled up its defensive and offensive operations in the region, primarily defending maritime shipping against attacks by Houthi militants in Yemen. This part of the war, which the Houthis claim is related to Israel’s war in Gaza and is underreported in the U.S. media, has cost the U.S. government \$4.86 billion and counting – bringing the total minimum known U.S. spending on one year of war (with the \$17.9 mentioned above) to \$22.76 billion.⁵

³ The figure of \$17.9 billion was calculated by the author William D. Hartung. See page 4.

⁴ In the years following the establishment of Israel in 1948, the U.S. provided solely economic assistance, through a combination of grants and loans. The U.S. granted Israel the first military loan in 1959, after which military aid grew rapidly.

⁵ The figure of \$4.855 billion was calculated by the author Linda J. Bilmes. It is rounded to \$4.86 billion. Dr. Bilmes also calculated the cost to the maritime trade. See page 18.

Conflict with the Houthis has also cost an additional \$2.1 billion in lost maritime trade, because shippers have been forced to divert vessels or pay exorbitant insurance fees.⁶ U.S. consumers may experience paying higher prices for goods as a result.

In the context of over \$22.76 billion the U.S. government has spent on one year of war, it is essential to look at who benefits financially from weapons sales. Part IV of the report touches on the relationship between U.S. weapons manufacturers such as Boeing, RTX, Lockheed Martin, and General Dynamics and the Israeli government, who maintain longstanding commercial relations. The U.S. government has cited these commercial ties as one of the reasons why the U.S. should continue to supply foreign militaries, including the Israeli military, with weapons and equipment.

This report is a compilation authored by various experts, listed in alphabetical order, Linda J. Bilmes, William D. Hartung, and Stephen Semler.

Table of Contents

Part I: U.S. Support for Israel’s Military Operations Since October 7, 2023 <i>William D. Hartung</i>	4
Part II: A Snapshot of U.S. Military Aid to Israel in Historical Context <i>Stephen Semler</i>	11
Part III: Broader Economic Costs of U.S. Engagement in the Region Since Oct. 7 <i>Linda J. Bilmes</i>	15
Part IV: The Weapons Companies Who Benefit from U.S. Spending on Israel’s Military Operations <i>Linda J. Bilmes</i>	21

⁶ See p. 20.

Part I:

U.S. Support for Israel's Military Operations Since October 7, 2023

William Hartung

The United States government has approved at least \$17.9 billion in security assistance for Israeli military operations in Gaza and elsewhere from October 7, 2023 through September 2024, but this figure represents only a partial picture of total U.S. support for the Israeli Defense Forces over that time period.

There are multiple channels involved in providing weapons to Israel, including aid under the Foreign Military Financing (FMF) program, drawdowns of equipment from existing U.S. stocks, the transfer of used equipment through the Excess Defense Articles (EDA) program, and arms deals approved as part of the Foreign Military Sales (FMS) program. Some of these transfers involve immediate payment, while others will involve reimbursements and aid flows that occur over a number of years⁷. In addition, some of the equipment transferred to Israel in support of its war since October 7 was based on sales agreements made in past years. All of this means that the figure of \$17.9 billion in U.S. security assistance to Israel from October 2023 to September 2024 is a fraction of the full value of U.S. support for this war, which will only be determined over time.

Figure 1: U.S. Military Aid to Israel from October 7, 2023 to September 2024 (in millions of dollars)⁸

Foreign Military Financing	\$6,800 ⁹
Missile Defense	\$4,500
Missile Defense (Iron Beam)	\$1,200
Enhancing Artillery Production	\$1,000
Replenishing Arms Delivered to Israel from U.S. Stocks	\$4,400
TOTAL	\$17.9 billion

⁷ A summary and description of major U.S. military aid and arms transfer channels is available on the web site of the Pentagon's Defense Security Cooperation Agency: <https://www.dsca.mil/programs> The Security Assistance Monitor at the Center for International Policy also has a summary of the main U.S. government data sources in this area: <https://www.dsca.mil/programs> And the Stimson Center's Conventional Arms Project has done a series of papers on the weaknesses of current data sources and the need for greater transparency: <https://www.stimson.org/program/conventional-defense/>

⁸ Congressional Research Service. (2023, March 1). *U.S. Foreign Aid to Israel*. P. 1, 8. <https://sgp.fas.org/crs/mideast/RL33222.pdf>; House Appropriations Committee Republicans. (2024, April). *The Israel Security Supplemental Appropriations Act 2024*,¹ press release. <https://appropriations.house.gov/news/press-releases/house-passes-series-security-supplemental-bills>

⁹ Includes \$3.8 billion for Israel's usual annual aid allotment from the U.S., an amount which is part of a ten-year, \$38 billion agreement which expires in 2026; plus \$3 billion in emergency FMF approved by Congress and signed into law in April 2024.

On August 13, 2024, the Biden administration announced \$20.3 billion in new arms agreements with Israel to be carried out via the Foreign Military Sales program, which involves deals approved by the State Department and brokered and executed by the Pentagon. These systems, which will be delivered over several years, include 50 Boeing F-15 combat aircraft at a cost of \$18.8 billion.¹⁰ On September 25, Sen. Bernie Sanders (I-VT) introduced a resolution of disapproval that could block the deal if it garners a large enough vote in both houses of Congress — either a simple majority or a two-thirds vote depending on whether the administration decides to veto a resolution that passes by a majority vote.¹¹

One major challenge to estimating full U.S. military support since October 2023 was revealed in a March 2024 article in *The Washington Post*, which reported that the Biden administration had made at least 100 arms deals with Israel since October 2023 that fell below the value that would have triggered the requirement to notify Congress of the details — \$14 million for major defense equipment and \$50 million for defense articles and services, ranging from weapons systems (defense articles) to equipment maintenance and military training (services).¹² This lack of transparency further complicates any effort to quantify the level of U.S. support for Israel since the start of the Gaza war.

U.S. Military Support for Israel Goes Back Decades

In order to understand U.S. provision of arms to Israel since October 7, 2023, it is necessary to look at the historic role of U.S. funding in outfitting Israel's military and subsidizing the development of Israel's arms industry. This unique relationship has made it easier for the U.S. to provide large amounts of equipment to Israel on short notice.

The U.S. has been Israel's top arms supplier for over five decades. Israel is the largest cumulative recipient of U.S. aid in the world since World War II, and it is in the midst of a ten-year, \$38 billion military aid agreement which was negotiated under the Obama administration, covering the fiscal years 2019 to 2028. This agreement includes \$3.3 billion in military aid per year that can be spent on any military equipment, plus \$500 million earmarked to fund various Israeli missile defense systems.¹³

The U.S. also has a weapons stockpile in Israel that can be tapped to provide weapons to Israel with U.S. government approval. The stockpile, called War Reserve Stocks

¹⁰ Singh, K. and Stone, M. (2024, August 13). U.S. Approves Sale to Israel of \$20 Billion Weapons Package. *Reuters*. <https://www.reuters.com/world/middle-east/blinken-approves-sale-israel-military-equipment-worth-over-20-bln-2024-08-13/>

¹¹ Bernie Sanders. (2024, September 25). *U.S. Senator. News: Sanders and Colleagues Move to Block Arms Sales to Israel*. <https://www.sanders.senate.gov/press-releases/news-sanders-and-colleagues-move-to-block-arms-sales-to-israel/>

¹² Hudson, J. (2024, March 6). U.S. Floods Arms Into Israel Despite Mounting Alarm Over War's Conduct. *The Washington Post*. <https://www.washingtonpost.com/national-security/2024/03/06/us-weapons-israel-gaza/> ; Forum on the Arms Trade. *U.S. Arms Exports Under Congressional Notification Thresholds*. <https://www.forumarmstrade.org/underthreshold.html>

¹³ Congressional Research Service. (2023, March 1). U.S. Foreign Aid to Israel. P. 1, 8. <https://sgp.fas.org/crs/mideast/RL33222.pdf>

Allies – Israel (WRSA-I), may have contained up to \$4.4 billion worth of weaponry, including precision-guided munitions, before it was tapped to supply systems to Israel for use in its war since October 7.¹⁴

The U.S. is also committed to helping Israel maintain a “Qualitative Military Edge” (QME) over other nations in the Middle East. In service of that goal, for example, Israel is the only nation in the region that possesses and operates the newest U.S. combat aircraft, the F-35. In cases of a major deal to another state in the region, there is generally an offsetting deal that provides Israel with additional equipment designed to help it maintain the “edge.”

Israel receives favorable financing arrangements related to U.S. military aid. For example, U.S. aid is provided on a “cash flow” basis, which means that Israel is able to finance multi-year purchases from the U.S. based on future commitments, before the funds have been officially appropriated by Congress. This method has been employed in the purchase of U.S. combat aircraft, allowing Israel to defer payments that would normally occur as items are delivered into future years, according to an agreed upon payment schedule. No other nation has such an arrangement for the use of U.S. military aid. Israel also receives its military aid from the U.S. as a lump sum at the beginning of the fiscal year, which allows it to earn interest on U.S. assistance.¹⁵

In addition, unlike any other country in the world, Israel is allowed to spend 25% of its routine annual military aid from the United States on its own arms industry. For the current fiscal year, that’s potentially one-quarter of non-emergency military aid – \$95 million – that can help Israel develop significant arms production capabilities of its own. The 25% provision is being phased out, moving to lower percentages from 2024 on and ending entirely in 2028.

Finally, under its status as a “major non-NATO ally,” Israel is eligible to receive used U.S. military equipment under the Excess Defense Articles (EDA) program. For example, Israel received \$385 million worth of equipment under the program between 2010 and 2020.

Some elements of Israel’s arsenal are composed primarily of U.S.-supplied equipment. For example, the Israeli Air Force’s holdings of 334 combat aircraft are composed entirely of U.S.-supplied F-15s, F-16s, and F-35s. Israel also has over 40 U.S.-origin Apache attack helicopters. Israel’s stocks of tactical missiles include Sidewinder air-to-ground systems and Advanced Medium Air-to-Air Missiles (AMRAAMs). Israel also has U.S.-supplied bombs – GBU-31s, Joint Direct Attack Munitions, GBU-39s, and Small Diameter bombs – in unspecified quantities. And all of Israel’s missile defense systems,

¹⁴ Congressional Research Service. (2023, March 1).; Mauldin, L.; Abou Elias, J.; Women for Weapons Trade Transparency. (2023, December 4). How Israel Got an Endless Supply of U.S.-Made Smart Bombs. *In These Times*. <https://inthesetimes.com/article/united-states-israel-precision-guided-munitions-stockpile>

¹⁵ Congressional Research Service. (2023, March 1). *U.S. Foreign Aid to Israel*. <https://sgp.fas.org/crs/mideast/RL33222.pdf#page=15>

including Iron Dome, Arrow, and David's Sling, have been developed with substantial financing supplied by the U.S. as well as co-production in both the U.S. and Israel.¹⁶

The extensive holdings of U.S. weapons in Israel's arsenal means that much of the U.S. equipment used by Israeli forces was already in the possession of the IDF prior to October 2023.

U.S. Security Assistance and Arms Transfers to Israel from October 2023 – September 2024

The U.S. has delivered billions of dollars' worth of weapons to Israel since October 7, 2023, much of which has consisted of munitions, from artillery shells to 2,000 pound bombs to precision-guided munitions. Washington has also approved billions more in major weapons platforms that will be delivered in the future, in some cases years from now.

As noted above, the weapons have come through a variety of channels, including existing U.S. stocks, including the multi-billion dollar WRSA-I stocks located in Israel (explained above), commercial sales approved by the State Department, Foreign Military Sales (FMS) approved by State and negotiated and brokered by the Pentagon, Foreign Military Financing (FMF), which provides grants for the purchase of U.S. defense articles and services, and the Excess Defense Articles (EDA) program, which provides used systems no longer needed by U.S. forces for free or at a steep discount.

There are different degrees of public information available on each of these arms channels, and there have also been efforts to hide the full amounts of aid and types of systems through bureaucratic maneuvering. The most egregious example of this was the move, cited above, to make 100 separate arms deals with Israel between October 2023 and March 2024 that were below the dollar threshold that would have required reporting them to Congress (cited above). The patchwork government reporting on U.S. military aid to Israel contrasts sharply with the treatment of military aid to Ukraine, where dollar amounts, channels of delivery, and specific systems supplied (including how many) are routinely reported in government-supplied fact sheets on a regular basis.¹⁷

Given the lack of full transparency about U.S. military aid and arms transfers to Israel, what can be reliably said about the value of U.S. assistance since October 2023? One definite tranche of U.S. military aid to Israel was the \$14.1 billion in emergency military aid passed by Congress and signed by President Biden in April of 2024. The \$14.1 billion included the following:

¹⁶ International Institute for Strategic Studies. *The Military Balance 2024*. (London: 2024).

<https://www.iiss.org/publications/the-military-balance/>

¹⁷ Yousif, E. (2023, August 18). Ukraine Aid Shows that Military Aid Transparency is Possible. *Just Security*.

<https://www.justsecurity.org/87655/ukraine-shows-that-military-aid-transparency-is-possible/>

- \$4 billion to replenish Iron Dome and David’s Sling missile defense systems.
- \$1.2 billion for the Iron Beam defense system, which is being developed to counter short-range rockets and mortar threats.
- \$3.5 billion for the procurement of advanced weapons systems, defense articles, and defense services through the Foreign Military Financing Program.
- \$1 billion to enhance the production and development of artillery and critical munitions.
- \$4.4 billion to replenish defense articles and defense services provided to Israel from U.S. stocks.

In addition to the \$14.1 billion in emergency military aid, Israel has received its usual annual military aid installment of \$3.8 billion, bringing the total appropriated assistance since October 7 to \$17.9 billion.¹⁸

As suggested above, there is only partial knowledge about the quantities and types of military equipment delivered to Israel since October 7, but some details have been reported by the U.S. government and major news outlets. *The Washington Post* has reported that deals not notified to Congress amounted – at least – “to thousands of precision-guided munitions, small-diameter bombs, bunker busters, small arms and other lethal aid.”¹⁹ In parallel to the *Post*’s piece, *The Wall Street Journal* reported that there “are currently 600 active cases of potential military transfer or sales worth more than \$23 billion between the U.S. and Israel.”²⁰ Some of the cases cited by *The Journal* are due to deals made in past years, and without additional details it is impossible to know how many of them will result in arms deliveries that might come soon enough to be used by the Israeli military.

There have been other press accounts of arms deliveries to Israel since October 7, including reports in November of 2023 that 36,000 rounds of 30mm cannon ammunition, 1,800 of 3,000 requested M141 bunker-buster munitions, at least 3,500 of 5,000 night-vision devices, some Hellfire missiles and other weapons had been delivered from the U.S. and European Union.²¹ And in October of 2023 *Bloomberg* reported that Israel had received

¹⁸ Sources listed after Table I, above.

¹⁹ Hudson, J. (2024, March 6). U.S. Floods Arms Into Israel Despite Mounting Alarm Over War’s Conduct. *The Washington Post*. <https://www.washingtonpost.com/national-security/2024/03/06/us-weapons-israel-gaza/>

²⁰ Malsin, J. and Yousef, N. (2024, March 6). How the U.S. Arms Pipeline to Israel Avoids Public Disclosure. *The Wall Street Journal*. <https://www.wsj.com/world/how-the-u-s-arms-pipeline-to-israel-avoids-public-disclosure-e238de75>

²¹ Pamuk, H. and Stone, M. (2024, June 29). U.S. Has Sent Israel Thousands of 2,000-pound Bombs Since October 7th. *Reuters*. <https://www.reuters.com/world/us-has-sent-israel-thousands-2000-pound-bombs-since-oct-7-2024-06-28/#:~:text=Between%20the%20war's%20start%20last,other%20munitions%2C%20according%20to%20the>

1,000 250-meter small diameter bombs that were expended under a pre-existing contract.²²

A *Reuters* piece published on June 29, 2024 underscores the importance of U.S.-supplied munitions to the Israeli war effort. The article noted that as of that date, experts had determined that the contents of U.S. shipments from October 2023 and June 2024 “appear consistent with what Israel would need to replenish supplies used in its eight-month intense military campaign in Gaza.”²³

The U.S. is also making agreements to provide systems to Israel that will bolster its military for years to come. On August 13 of this year, the Biden administration announced \$20.3 billion in new arms sales agreements with Israel to be carried out via the Foreign Military Sales program, which involves deals approved by the State Department and brokered and supported by the Pentagon. FMS deals are normally paid for by the recipient government, but it is possible that Israel could decide to use some of its Foreign Military Financing aid to cover part of the cost. The package, included 50 Boeing F-15 combat aircraft (\$18.8 billion), over 32,000 120mm tank cartridges (\$774 million), an unspecified number of tactical vehicles (\$583 million), 30 Advanced Medium-Range Air-to-Air Missiles (AMRAAMs) (\$102 million), and 50,000 high explosive mortar cartridges (\$61 million). The Pentagon has said that the delivery dates for the systems range from 2026 (mortar rounds) to 2029 (F-15s). Earlier in August, the Pentagon announced a deal to provide 6,500 Joint Direct Attack Munitions (JDAM) guided bombs.²⁴

In sum, Figure 2, below, displays a list of U.S. arms deliveries to Israel, October 7, 2023 to September 2024. Note: This list is incomplete, drawn from news reports. Neither the Pentagon nor the State Department have provided comprehensive lists of items delivered, as they have done with respect to arms transfers to Ukraine.

²² Capaccio, A. (2023, November 14). U.S. Is Quietly Sending More Ammunition, Missiles. *Bloomberg*. <https://www.bloomberg.com/news/articles/2023-11-14/pentagon-is-quietly-sending-israel-ammunition-laser-guided-missiles?embedded-checkout=true> ;

²³ Pamuk, H. and Stone, M. (2024, June 29). U.S. Has Sent Israel Thousands of 2,000-pound Bombs Since October 7th. *Reuters*. <https://www.reuters.com/world/us-has-sent-israel-thousands-2000-pound-bombs-since-oct-7-2024-06-28/#:~:text=Between%20the%20war's%20start%20last,other%20munitions%2C%20according%20to%20the>

²⁴ With a \$20 Billion Weapons Deal, the United States Aims to Help Israel and Deter Iran. (2024, August 23). *The New York Times*. <https://www.nytimes.com/live/2024/08/23/world/israel-hamas-gaza-war?smid=nytcore-ios-share&referringSource=articleShare>

Figure 2: U.S. Arms Deliveries to Israel, October 7, 2023 to September 2024²⁵

4,127,000 kilograms JP-8 jet fuel
57,000 155mm artillery shells
36,000 rounds of 30mm cannon ammunition
20,000 M4A1 rifles
13,981 anti-tank missiles
8,700 (Mk82) 500-pound bombs
3,500 night vision devices
3,000 Joint Direct Attack Munitions
14,100 (Mk84) 2,000 pound unguided bombs
3,000 laser-guided Hellfire missiles
1,800 (M141) bunker buster bombs
2,600 250-pound small diameter bombs
200 Switch Blade (Series 600) drones
More than 100 Skydio X series drones
75 Joint Light Tactical Vehicles (JLTV)

²⁵ Sources for Figure 2: Capaccio, A. (2023, November 14). U.S. Is Quietly Sending More Ammunition, Missiles. *Bloomberg*. <https://www.reuters.com/world/us-has-sent-israel-thousands-2000-pound-bombs-since-oct-7-2024-06-28/#:~:text=Between%20the%20war's%20start%20last,other%20munitions%2C%20according%20to%20the>
 With a \$20 Billion Weapons Deal, the United States Aims to Help Israel and Deter Iran. (2024, August 23). *The New York Times*. <https://www.nytimes.com/live/2024/08/23/world/israel-hamas-gaza-war?smid=nytcore-ios-share&referringSource=articleShare>

Part II: A Snapshot of U.S. Military Aid to Israel in Historical Context

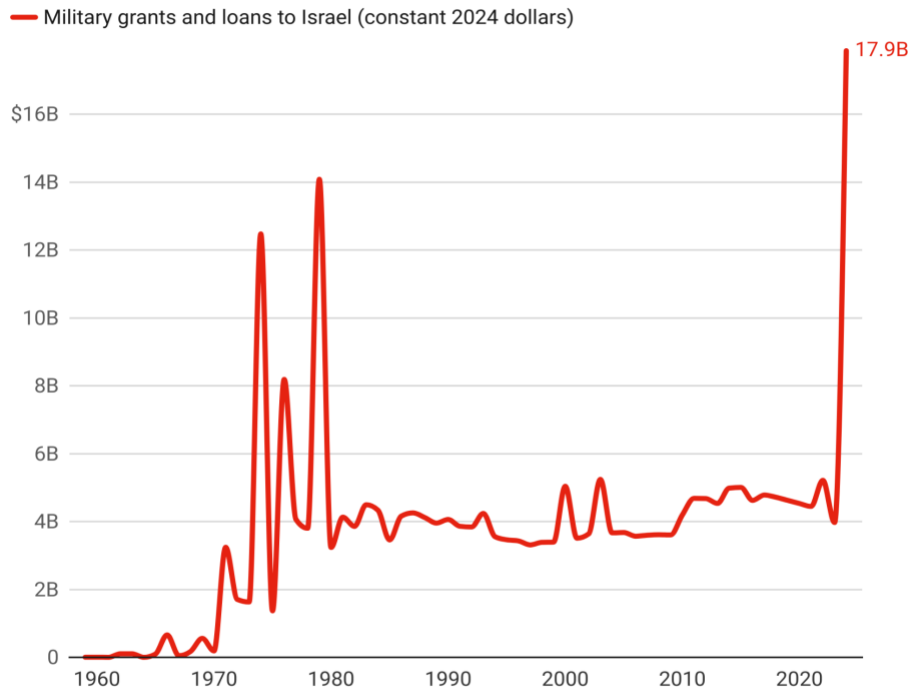
Stephen Semler

How does U.S. military aid to Israel in fiscal year 2024 (Oct. 1, 2023 – Sept. 30, 2024) compare to past annual totals? This section puts FY2024’s military aid figures into context and provides some historical background.

Adjusted for inflation, total U.S. military aid to Israel stands at \$251.2 billion across 66 years (1959–2024).²⁶ (Note: As explained below, this is part of a larger total amount of military and non-military aid.²⁷ There has also been support not included in official aid figures.) Figure 3 shows that the most military assistance approved in any one year was in 2024, when the Biden administration approved \$17.9 billion in military assistance for Israel. This sum exceeds the historic amounts of military aid approved for Israel following the Camp David Accords in 1978 and, before that, the start of the October War of 1973.

Figure 3. U.S. Military Aid to Israel, 1959–2024

U.S. military aid to Israel, 1959–2024



Data: USAID Overseas Loans and Grants, Congressional Research Service, P.L. 118-47, P.L. 118-50. Figures adjusted using GDP deflator. Years are fiscal years. More: watson.brown.edu/costsofwar
Chart: Stephen Semler (@stephensemeler) • Created with Datawrapper

²⁶ Figures are adjusted for inflation using the Gross Domestic Product Implicit Price Deflator, indexed to 2024. Federal Reserve Bank of St. Louis. <https://fred.stlouisfed.org/>

²⁷ Officially, from 1951 to 2022, the U.S. provided Israel with an estimated total \$317 billion in assistance. See P. 13.

The amounts in this analysis refer to military-specific unclassified grant obligations and loan authorizations except for FY2024, which refer to military aid appropriations.²⁸ All figures are expressed in constant FY2024 dollars, and all years refer to fiscal years.

To repeat, the appropriations, grants, and loans that constitute military aid to Israel are only part of the total cost of U.S. military support for Israel. For example, in the foreign aid bill President Joe Biden proposed²⁹ in October 2023 and Congress passed in April 2024, there is \$2.4 billion earmarked for “U.S. operations, force protection, deterrence, and the replacement of combat expenditures in the United States Central Command region.”³⁰ This \$2.4 billion is covered in more depth in Part III, below. The U.S. government does not classify this expenditure as military aid despite it being a cost stemming from Israel’s attacks on Gaza and expended on Israel’s behalf.³¹

Historically, the type of U.S. military assistance to Israel has varied, as has the structure. The country began receiving non-military loans in 1949 and grants in 1951.³² It received its first military loans from the U.S. in 1959. The annual value of these loans increased dramatically in 1971, the year in which the U.S. Congress began designating specific amounts of aid for Israel in legislation.³³ Between 1959 and 1970, the average annual military loan to Israel was \$162 million, but the loan obligated in 1971 was \$3.2 billion.

Israel first received U.S. military grants in 1974. This was also the year the U.S. began waiving repayment on military loans to Israel. After the start of the October War, President Richard Nixon asked Congress to authorize for Israel emergency military assistance, including loans for which repayment would be waived. These and other military loans after 1974 functioned as grants and were loans in name only. Military aid to the country became entirely grant-based in 1985.³⁴

Israel leveraged its preferential status with the U.S. to help pay off its pre-1974

²⁸ These appropriations represent the estimated value of cash and in-kind grants ultimately obligated for military aid to Israel using these funds. Semler, S. (2024, July 24). *How much military aid is the US giving Israel?* Polygraph. <https://www.stephensemeler.com/p/how-much-military-aid-is-the-us-giving>

²⁹ Semler, S. (2024, March 1). *Biden Is Bankrolling Israel’s War Amid Growing Financial Hardship at Home.* The Intercept. <https://theintercept.com/2024/03/01/biden-israel-gaza-weapons-child-care/>

³⁰ House of Representatives. (2024, April 17). *HR 8034.* 118th Congress, 2nd Session. <https://www.congress.gov/118/bills/hr8034/BILLS-118hr8034ih.pdf>

³¹ Semler, Stephen. (2024, January 26). *Biden bombs Yemen so Israel can bomb Gaza.* Polygraph. <https://www.stephensemeler.com/p/biden-bombs-yemen-so-israel-can-bomb>

³² Congressional Research Service. (2008, January 2.) *CRS Report for Congress. U.S. Foreign Aid to Israel.* P. 17. https://www.everycrsreport.com/files/20080102_RL33222_ccba3778cd7b80bf36f0a6f852b90e110c8c11b6.pdf#page=17

³³ Congressional Research Service. (2008, January 2). P.18. https://www.everycrsreport.com/files/20080102_RL33222_ccba3778cd7b80bf36f0a6f852b90e110c8c11b6.pdf#page=18

³⁴ Congressional Research Service. (2008, January 2). P.4. https://www.everycrsreport.com/files/20021218_IB85066_24fcdbbca25303eb1724c2aeed9ad104adb28ddf.pdf#page=4

loans, which make up 3.5% of all military aid it received from 1959–2024. Beginning with Public Law 101-513 in fiscal year 1991, Congress has mandated that Israel receive its Foreign Military Financing (FMF) aid as a lump sum in the first month of the fiscal year.³⁵ (Most other countries receive FMF funding in quarterly installments.³⁶) This lump sum is transferred to an interest-bearing account with the U.S. Federal Reserve. Israel has used the interest it collects off these military grants to pay down past military loans.³⁷

The data used for the chart above draw from the following sources: U.S. Agency for International Development (USAID), U.S. Overseas Loans and Grants: Obligations and Loan Authorizations (July 1, 1945 – September 30, 2019)³⁸; Congressional Research Service, IB85066 (18 December 2002)³⁹ and RL33222 (March 1, 2023)⁴⁰; Public Laws 118-47 (March 3, 2024)⁴¹ and 118-50 (24 April 24, 2024).⁴²

Context of Military Assistance: Historical Interdependence of Israel and the U.S.

Linda J. Bilmes

The United States' longstanding support for Israel is part of a close relationship that includes economic, military, diplomatic, intelligence, commercial, and cultural connections. Since the second World War, Israel has received more U.S. aid than any other country. From 1951 to 2022, the U.S. provided Israel with an estimated \$317 billion (inflation-adjusted) in assistance, including \$225 billion in direct military aid.⁴³ (As noted above, the figure for total military assistance is \$251.2 billion when it is calculated to the present,

³⁵ 101st Congress (1980-1990). *H.R. 5114 – Foreign Operations, Export Financing, and Related Programs Appropriations Act, 1991*. <https://www.congress.gov/bill/101st-congress/house-bill/5114/text>

³⁶ Ruebner, J.; Booker, S.; Hassan, Z. (2021, May 12). *Bringing Assistance to Israel in Line With Rights and U.S. Laws*. Carnegie Endowment for International Peace. <https://carnegieendowment.org/research/2021/05/bringing-assistance-to-israel-in-line-with-rights-and-us-laws?lang=en>

³⁷ Congressional Research Service. (2023, March 1). *U.S. Foreign Aid to Israel*. P. 15. <https://sgp.fas.org/crs/mideast/RL33222.pdf#page=15>

³⁸ U.S. Agency for International Development (USAID). (Updated 2024, September 26). *U.S. Overseas Loans and Grants: Obligations and Loan Authorizations, July 1, 1945–September 30, 2020*. ForeignAssistance.gov. [https://www.foreignassistance.gov/reports#tab-u.s.-overseas-loans-and-grants-\(greenbook\)](https://www.foreignassistance.gov/reports#tab-u.s.-overseas-loans-and-grants-(greenbook))

³⁹ Mark, Clyde R. (2002, December 18). *Issue Brief for Congress. Israel: U.S. Foreign Assistance*. Congressional Research Service. https://www.everycrsreport.com/files/20021218_IB85066_24fcdbbca25303eb1724c2aead9ad104adb28ddf.pdf

⁴⁰ Congressional Research Service. (2023, March 1). *U.S. Foreign Aid to Israel*. <https://sgp.fas.org/crs/mideast/RL33222.pdf>

⁴¹ 118th Congress (2023-2024). *H.R. 2882 – Further Consolidated Appropriations Act, 2024*. Congress.gov. <https://www.congress.gov/bill/118th-congress/house-bill/2882/summary/59>

⁴² 118th Congress (2023-2024). *H.R. 815 – Making emergency supplemental appropriations for the fiscal year ending September 30, 2024, and for other purposes*. Congress.gov. <https://www.congress.gov/bill/118th-congress/house-bill/815>

⁴³ USA Facts (source: USAID). (Updated 2023, October 12). *How much aid does the US give to Israel?* <https://usafacts.org/articles/how-much-military-aid-does-the-us-give-to-israel/>. The Council on Foreign Relations estimates the inflation-adjusted total amount is \$310. Masters, J. and Merrow, W. (2024, May 31). *U.S. Aid to Israel in Four Charts*. Council on Foreign Relations. <https://www.cfr.org/article/us-aid-israel-four-charts>

including 2023 and 2024.) However, these amounts do not fully capture the economic relationship that has emerged between the two countries.

In the years following the establishment of Israel in 1948, the U.S. provided solely economic assistance, through a combination of grants and loans⁴⁴. Military aid began flowing in the 1960s, during the Kennedy administration. The volume of military assistance grew significantly during the Cold War, as the U.S. increasingly viewed Israel as a strategic asset in its effort to contain communism. This view was reinforced in the 1967 war, when Israel successfully defeated a Soviet-backed coalition. The U.S. ramped up grant-based military aid after the Camp David accords were signed in 1978. Since then, U.S. military support has continued to grow steadily, while economic aid has largely been phased out⁴⁵. The terms of this aid have been laid out in a consecutive series of “Memorandum of Understandings” (MOUs), which do not require Senate ratification.

⁴⁴ Masters, J. and Merrow, W. (2024, May 31). *U.S. Aid to Israel in Four Charts*. <https://www.cfr.org/article/us-aid-israel-four-charts>

⁴⁵ USA Facts (source: USAID). (Updated 2023, October 12). *How much aid does the US give to Israel?* <https://usafacts.org/articles/how-much-military-aid-does-the-us-give-to-israel/>

Part III:

Broader Economic Costs of U.S. Engagement in the Region Since Oct. 7

Linda J. Bilmes

United States spending to support Israel should be considered in the context of America's economy and its wider involvement in the Middle East. Since September 11, 2001, the U.S. has been at war in the region continuously, spending trillions of dollars on wars in Afghanistan, Iraq, Syria, and neighboring areas. To date, this spending has not yielded satisfactory results for U.S. interests in many important ways. In Afghanistan, the Taliban has returned to power and imposed draconian restrictions of women and girls. In Iraq, the government has passed a law that prohibits Jews from serving in the military or the public sector and imposes the death penalty for anyone who promotes normalizing relations with Israel⁴⁶. Meanwhile, the fracturing of Iraq was one of the factors that contributed to wider conflict, including displacing millions of people in Syria, and to the chaos in which ISIS emerged and destabilized the entire region⁴⁷. Given this sequence of events over the past two decades, it is reasonable to assess U.S. military activities in the region over the past year, in terms of U.S. military support for Israel and other allies in the region and actions that stem from the situation in Israel/Gaza and Lebanon.

When estimating the full extent of U.S. foreign aid to Israel, there are direct expenditures as well as broader categories of military and economic support that help to protect U.S. interests in the region. The U.S. maintains thousands of forces in the area across 19 sites, including bases in Bahrain, Egypt, Iraq, Israel, Jordan, Kuwait, Qatar, Saudi Arabia, Syria, and the United Arab Emirates, Türkiye, and Djibouti.⁴⁸

In particular, this section examines U.S. military activity in the Red Sea and Gulf of Aden, where the U.S. Navy has been actively involved in defensive and offensive operations against the Houthis in Yemen. Over the past year, the Navy has defensively shot down numerous missiles, UAVs, and USVs over the Red Sea and Gulf of Aden and has offensively targeted Houthi rebel missile sites inside Houthi-controlled territory in Yemen⁴⁹. With very few reporters present in that geography, the conflict between the U.S. and the Houthis, which the Houthis claim is related to Israel's war in Gaza since October 2023, is under-reported and deserves more attention and evaluation. According to *The Military Times*,

⁴⁶ U.S. Department of State. *2022 Report on International Religious Freedom: Iraq*.

<https://www.state.gov/reports/2022-report-on-international-religious-freedom/iraq/>

⁴⁷ Wilson Center. (2019, October 28). *Timeline: the Rise, Spread, and Fall of the Islamic State*.

<https://www.wilsoncenter.org/article/timeline-the-rise-spread-and-fall-the-islamic-state>

⁴⁸ Masters, J. and Merrow, W. (2024, August 6). *Mapping the Growing US Military Presence in the Middle East*. Council of Foreign Relations. <https://www.cfr.org/article/mapping-growing-us-military-presence-middle-east>

⁴⁹ Overview – FY 2025 Defense Budget, Chapter 5 P. 10. *U.S. Department of Defense. comptroller.defense.gov FY2025 Budget Request Overview Book*

which has been tracking publicly confirmed incidents announced by CENTCOM, there have been at least 217 incidents involving U.S. forces since October 2023.⁵⁰

Since October 7, 2023, the U.S. has expanded its presence in the region, and has stepped up its activity significantly. This has included sending two Navy aircraft carrier strike groups⁵¹ and an amphibious ready group (the Gerald R. Ford and the Dwight D. Eisenhower) and doubling the number of Air Force fighter squadrons and adding air defense batteries⁵². As of August 2024, the U.S. Navy maintained both an aircraft carrier strike group and an amphibious assault group in the region⁵³ to protect merchant shipping routes in the Red Sea and Gulf of Aden, where, in the past (though not after November 2023), some 15% of global trade passed.⁵⁴

There are an estimated 40,000 American personnel stationed in the region, (including personnel on ships, aircraft, and bases) (compared with 34,000 prior to October 7, 2023).⁵⁵ This number rose to 50,000 in early August 2024,⁵⁶ when Secretary Austin ordered a second carrier strike group⁵⁷ to the area after Israel assassinated Hamas leader Ismail Haniyeh in Tehran⁵⁸.

Background on the U.S.-Houthi Conflict

The primary U.S. military actions in support of Israel's military operations in Gaza and elsewhere over the past year have been engaging in direct conflict with the Houthis. As Sir Lawrence Freedman writes, the Houthis, a Zaydi Shi'ite rebel tribe based in Yemen, "are not Iranian puppets – they make their own decisions – but their interests are aligned, and

⁵⁰ Lehrfeld, Jonathan, Diana Stancy and Geoff Ziezulewicz. (2024, Feb. 12, updated Oct. 1, 2024). *All the Houthi-U.S. Navy incidents in the Middle East (that we know of)*.<https://www.militarytimes.com/news/your-military/2024/02/12/all-the-houthi-us-navy-incidents-in-the-middle-east-that-we-know-of/>

⁵¹ An aircraft carrier strike group is a significant operation, including 1 aircraft carrier, 1 cruiser, 4-6 destroyer ships, 1 attack submarine, 1 replenishment ship, 75 aircraft (including 44 strike fighters) and 7,500 sailors and marines. An amphibious ready group includes 1 amphibious assault ship, 1 dock-landing ship, 1 amphibious transport dock, 30 aircraft (including 10 ground-assault planes and helicopters) and 5,000 sailors and marines.

⁵² Robertson, N. (September 25, 2024). What will the surge of US forces to the Middle East cost the military? *Defense News*. <https://www.defensenews.com/pentagon/2024/09/25/what-will-the-surge-of-us-forces-to-the-middle-east-cost-the-military/>

⁵³ Masters, J. and Merrow, W. (2024, August 6). This does not include 20,591 U.S. contractors located in Iraq, Syria, and the CENTCOM area, an increase of about 4% from the previous year. Department of Defense. ODASD. (2023, April). *Contractor Support of U.S. Operations in the CENTCOM Area of Responsibility*.

⁵⁴ Kamali, P.; Koepke, R.; Sozzi, A.; Verschuur, J. (2024, March 7). *Red Sea Attacks Disrupt Global Trade*. International Monetary Fund. <https://www.imf.org/en/Blogs/Articles/2024/03/07/Red-Sea-Attacks-Disrupt-Global-Trade>

⁵⁵ Robertson, N. (September 25, 2024).

⁵⁶ Robertson, N. (September 25, 2024).

⁵⁷ Baldor, L. The Associated Press, Copp, T. (2024, August 2). US to boost military presence in Middle East amid growing tensions. *Military Times*. <https://www.militarytimes.com/breaking-news/2024/08/02/us-to-boost-military-presence-in-middle-east-amid-growing-tensions/>

⁵⁸ The second carrier group has since departed.

their capabilities have been built up with substantial Iranian support. Though they are part of the ‘axis of resistance,’ they have their own distinctive characteristics and interests”⁵⁹.

Prior to October 7, the long-running military conflict involving the Houthis (including civil war in Yemen with U.S. involvement in support of Saudi Arabia) had tapered off. On taking office in 2021, President Biden pledged to de-escalate tensions in Yemen and attacks in the area and helped to enact a 6-month UN-brokered ceasefire⁶⁰. Although the formal ceasefire lapsed in October 2022, peace talks between Saudi and Houthi officials restarted in April 2023, and there were no attacks or major threats to commercial and naval ships and hostilities were low⁶¹.

After October 7, the Houthi movement blockaded Israel in the Red Sea and began attacking commercial ships traveling through the Red Sea, which had previously transported 15% of global trade. The Houthis announced that the purpose of these attacks was to prevent ships from traveling to Israel, in order to halt the bombing in Gaza and to force Israel to allow in more humanitarian aid⁶². The Houthis have launched hundreds of attack drones and missiles at a variety of international ships and warships in the Red Sea, having nothing to do with Gaza, and have disrupted international trade. Most shipping companies are re-routing instead of risking become targets, at great expense.

Since November 2023, when the Houthis shot down a U.S. drone, the U.S. Navy has been intercepting Houthi drones and missiles on a near-daily basis.⁶³ On January 10, 2024, the United Nations adopted resolution 2722 condemning Houthi attacks. However, hostilities have escalated to become the most sustained military campaign by American forces since the 2016-2019 air war against ISIS in Iraq and Syria.

In December 2023, Secretary Austin formally announced, “Operation Prosperity Guardian,” a U.S.-led multinational operation to respond to Houthi-led attacks in the area⁶⁴. The U.S. deployed the Ford Carrier Strike Group and Ballistic Missile Defense (BMD)-capable ships to the eastern Mediterranean. The U.S. then added the Bataan Amphibious Ready Group, additional BMD ships and the Eisenhower Carrier Strike Group. Over the year, the Navy has shifted some carrier strike groups but has always maintained one and often two.

⁵⁹ Freedman, L. (2023, January 13). *Houthi Attacks: What Happens Next?* Comment is Freed.

<https://samf.substack.com/p/houthi-attacks-what-happens-next>

⁶⁰ Congressional Research Service. (updated 2024, September 6). *Houthi Attacks in the Red Sea: Issues for Congress*. <https://crsreports.congress.gov/product/pdf/IN/IN12301>

⁶¹ Center for Preventative Action. (updated March 5, 2024). *War in Yemen*. Council on Foreign Relations, Global Conflict Tracker. <https://www.cfr.org/global-conflict-tracker/conflict/war-yemen>

⁶² Robertson, N. (September 25, 2024). What will the surge of US forces to the Middle East cost the military? *Defense News*. <https://www.defensenews.com/pentagon/2024/09/25/what-will-the-surge-of-us-forces-to-the-middle-east-cost-the-military/>

⁶³ Lehrfeld, Jonathan, Diana Stancy and Geoff Ziezulewicz. (2024, Feb. 12, updated Oct. 1, 2024). *All the Houthi-U.S. Navy incidents in the Middle East (that we know of)*. <https://www.militarytimes.com/news/your-military/2024/02/12/all-the-houthi-us-navy-incident-in-the-middle-east-that-we-know-of/>

⁶⁴ According to the U.S. Department of Defense, the coalition has 25 members of which ten are anonymous.

This has been an unexpectedly complicated and asymmetrically expensive challenge. The U.S. lost two service members in January 2024 during an operation in which it seized Iran-made missiles on a ship bound for Yemen⁶⁵.

The U.S. has deployed multiple aircraft carriers, destroyers, cruisers and expensive multi-million-dollar missiles against cheap Iranian-made Houthi drone that cost \$2000⁶⁶. However, there is no evidence that the conflict is diminishing. The Houthis launched a drone attack on Tel Aviv in July 2024, sparking an Israeli retaliation against Houthi-held positions in Yemen. Houthi drones attacked Tel Aviv and Ashkelon on September 25, which triggered sirens and missile responses from Israel. Simultaneously, Houthis also launched 23 ballistic and winged missiles and drone attacks at three U.S. destroyers in the Red Sea. The Houthi spokesman stated in a televised speech that the militants would continue such operations, “for the sake of our brothers’ blood in Palestine and Lebanon”⁶⁷. The Houthis continue to maintain a steady supply of weapons from Iran.

Costs to United States Government

The Houthi conflict is imposing high costs both to the U.S. government and to the private commercial sector (the latter addressed in the next section).

Figure 4: Summary of United States Expenditures in Region since Oct. 7

2024 Supplemental Bill	\$ 2,400,000,000 (2.4 billion)
Operating additional Aircraft Carrier Strike Groups and additional actions against Houthis	\$ 2,400,000,000 (2.4 billion)
Additional Combat Pay	\$ 55,000,000-70,000,000 (50-70 million)
TOTAL	\$ 4,855,000,000 – 4,870,000,000 (4.855 – 4.870 billion)
Total (Rounded)	At least \$4.86 billion

The 2024 Israel supplemental enacted in April appropriated \$2.4 billion for U.S. military operations in the broader region to respond to attacks over the next year. (This amount is not included in Part 1, the calculation of U.S. military aid to the Israeli government). However, this money has already been spent much faster than expected, particularly because of the scale and intensity of activity in response to the Houthis. The Navy estimates that between it had fired \$1 billion worth of munitions in the Red Sea by

⁶⁵ Congressional Research Service. (updated 2024, September 6). *Houthi Attacks in the Red Sea: Issues for Congress*. <https://crsreports.congress.gov/product/pdf/IN/IN12301>

⁶⁶ Dress, B. (2024, March 2). Houthi fight extracts heavy cost from Pentagon. *The Hill*. <https://thehill.com/policy/defense/4501958-houthi-fight-pentagon-cost/>

⁶⁷ *Yemen’s Houthis say they attacked Israel, US destroyers*. (2024, September 27). Reuters. <https://www.reuters.com/world/middle-east/yemens-houthis-say-they-attacked-israels-tel-aviv-ashkelon-2024-09-27/>

June⁶⁸. At this rate, it is likely that the Pentagon will need at least another \$1.5-\$2 billion in emergency funding over the next few months.

The original appropriation of \$2.4 billion does not fully account for the expense of deploying 1-2 aircraft carriers and crew in combat readiness and activity for the period, or for the level of U.S. military response in the Red Sea. The carriers require continual maintenance, and are normally in port, undergoing maintenance for two-thirds of their useful lives. As reported in Defense News,

“The Navy calibrates their time at sea and their time for maintenance, allowing for some margin, but not much. Since Oct. 7, the U.S. has rotated four carrier strike groups into the Middle East. Most of them have also been deployed longer than their scheduled seven months at sea. If we delay a carrier from going back into port and going back into a maintenance period by a month, it causes an even longer period of disruption”⁶⁹.

The fully-loaded cost per day of operating a carrier strike group has been estimated at \$8.7 million (in inflation-adjusted dollars), which is equal to \$2.7 billion per year.⁷⁰

Given all these factors, it is reasonable to estimate that the U.S. is on pace to spend at least double the \$2.4 billion already appropriated for regional defense. This is a conservative estimate, based on the year-long deployment of the first carrier, the frequent presence of a second carrier, the almost daily military engagement with the Houthis (which as noted above has already cost over \$1 billion), and other defensive activities by US forces in the region.

Additionally, military personnel receive combat pay and tax exclusion benefits (CZTE) for every month or part of month if they are deployed to hostile areas. Taking into account the range of pay grades among enlisted and officers, and the number of incremental U.S. personnel deployed to the relevant areas since October 7, this will cost an additional \$55-\$70 million.⁷¹

The anti-Houthi operations are also imposing costs across other areas of government. The U.S. Treasury’s Office of Foreign Assets Control (OFAC) is imposing sanctions on multiple shipping and financial operators around the world, including vessel

⁶⁸ McLeary, P.; Gould, J.; O’Brien, C. (2023, August 7). Costs rising for US as it fights off Houthi drones. *Politico*. <https://www.politico.com/news/2024/08/07/houthi-yemen-defense-iran-airstrikes-00173096>

⁶⁹ Robertson, N. (September 25, 2024). What will the surge of US forces to the Middle East cost the military? *Defense News*. <https://www.defensenews.com/pentagon/2024/09/25/what-will-the-surge-of-us-forces-to-the-middle-east-cost-the-military/>

⁷⁰ Hendrix, H. J. (2013, March). *At What Cost a Carrier?* Center for a New American Security (CNAS). <https://apps.dtic.mil/sti/tr/pdf/ADA575866.pdf>

⁷¹ Pleeter, S.; et al. *Risk and Combat Compensation, Chapter 9*. The Eleventh Quadrennial Review of Military Compensation. https://militarypay.defense.gov/Portals/3/Documents/Reports/SR12_Chapter_9.pdf ; Combat Zone Tax Exclusion (CZTE). *Benefit Fact Sheet*. MyArmyBenefits. [https://myarmybenefits.us.army.mil/Benefit-Library/Federal-Benefits/Combat-Zone-Tax-Exclusion-\(CZTE\)-?serv=122](https://myarmybenefits.us.army.mil/Benefit-Library/Federal-Benefits/Combat-Zone-Tax-Exclusion-(CZTE)-?serv=122)

managers, owners and companies involved in forging documents and engaging in illicit transport of oil and other commodities that assist the Houthis directly or indirectly. This unit has requested additional manpower for FY 2025 to assist with this and other activities (in Ukraine, Iran, and elsewhere).

Thus in total, U.S. activities in the region have already cost at least approximately \$4.86 billion and are likely to rise steeply unless the wider conflict with the Houthis and other regional actors is resolved.

Costs to Commercial Shipping

One of the direct consequences of the war in Gaza has been to drive up shipping costs in the region by diverting maritime commerce from the Suez Canal and Gulf of Aden region. Commercial shipping through this area includes container ships, dry bulkers, fuel tankers, and other vessels, carrying cargo (crude oil, liquefied natural gas (LNG), petroleum products, and other goods) between Europe to the Gulf and Asia.

Estimates vary, but at least 60% of vessels navigating through the Suez and Gulf of Aden have diverted to the Cape of Good Hope since October/November 2023, adding roughly 10 days to the journey and an average of \$300,000 in fuel costs (depending on size and weight of the vessel)⁷². Alternatively, some vessels are proceeding through the passage, but paying exorbitant insurance which is estimated at over \$1 million per vessel⁷³.

Prior to the Gaza conflict, an estimated 200-300 vessels passed through this route each week⁷⁴. By December, this number had dropped to as low as 40 - 75 per week. Conservatively estimating the extra fuel costs for the vessels that have re-routed, and additional insurance premiums, the cost to shipping firms is at least \$2.1 billion since the beginning of the war.

This does not include the cost to consumers who will ultimately absorb the cost of additional freight and security expenses⁷⁵. Additionally, the Suez provides significant revenues to Egypt, representing some 2% of GDP. It is likely that the U.S. will be asked to step in to provide additional aid to Egypt to offset some of these losses.

In sum, there is a cost of at least \$2.1 billion to the maritime trade, which is likely to rise in the coming months if there is no resolution.

⁷² Red Sea crisis rerouting adding up to \$300,00 in fuel costs. (2024, March 19). SeaTrade Maritime News. <https://www.seatrade-maritime.com/bunkering/red-sea-crisis-rerouting-adding-up-to-300-000-in-fuel-costs>

⁷³ Schulze, A. (2024, January 22). *Global Ocean Carriers Halt Red Sea Transits – What to Expect*. Flexport. <https://www.flexport.com/blog/global-ocean-carriers-halt-red-sea-transits-what-to-expect/>

⁷⁴ Nearly 300 Less Ships Per Week Through Suez Canal Due to Red Sea Crisis. (2024, February 21). *AXS Data*. <https://public.axsmarine.com/blog/nearly-300-less-ships-through-suez-canal-through-red-sea-crisis>

⁷⁵ Nan, Z. (2023, December 20). Red Sea Concerns hit shipping trade. *ChinaDaily.com.cn*. <https://www.chinadaily.com.cn/a/202312/20/WS65824002a31040ac301a896e.html>

Part IV: **The Weapons Companies Who Benefit from U.S. Spending on Israeli Military Operations**

Linda J. Bilmes

As specified in the most recent MOU agreement signed during the Obama administration, Israel receives \$3.8 billion in annual military aid (included in Part I's total U.S. military aid to Israel since October 7, 2023). The Israeli government is required to spend the majority of this amount on purchases from U.S. weapons companies. It is one of the few U.S. allies permitted to purchase arms directly from U.S. companies with minimal oversight. The large arms manufacturers supplying Israel include Boeing, General Dynamics, Lockheed Martin, Northrop Grumman, RTX (formerly Raytheon), as well as other equipment producers such as Caterpillar⁷⁶.

Israel is an important customer for these companies. For example, Boeing, the world's 4th largest weapons manufacturer, has faced major difficulties over the past two years in its commercial division following problems with its flagship 737 and 737Max aircraft. The company has shifted its focus to its Defense, Space & Security (BDSS) division, which produces multiple models of bombers, helicopters, electronic surveillance equipment, drones, and other weaponry, and supplies. It has even moved its headquarters from Seattle, WA to Arlington, VA, in 2022, to be located adjacent to the Pentagon⁷⁷.

The BDSS division reported "strong performance" in the 4th quarter of 2023, booking \$8 billion in orders which comprised 36% of annual revenues⁷⁸. The division manufactures F-15 fighter jets and Apache AH-64 attack helicopters (which the Israeli Air Force has used extensively in Gaza and Lebanon), as well as the Joint Direct Attack Munition (JDAM) kits, (which convert unguided bombs of the MK-80 series, made by General Dynamics, into guided munitions), and the 250-pound GBU-39 guided small diameter bomb (SDB), which is used by the Israeli Air Force⁷⁹.

Over the past year, Boeing is one of the U.S. weapons manufacturers that has delivered expedited U.S. military materiel to Israel as well as to other allies in the Middle East and to Ukraine. For example, after October 7, Boeing expedited delivery of 1,000 small diameter bombs and 1,800 Joint Direct Attack Munition (JDAM) kits to Israel⁸⁰. These deliveries provide a steady stream of income for the company.

⁷⁶ American Friends Service Committee. (2024, May 28). *Companies Profiting from the Gaza Genocide*. <https://afsc.org/gaza-genocide-companies>

⁷⁷ Wikipedia. *Boeing Defense, Space & Security*. https://en.wikipedia.org/wiki/Boeing_Defense_Space_%26_Security

⁷⁸ Ghigini, E. (2024, February 1). *Earnings call: Boeing addresses 737 MAX concerns, posts \$22B revenue*. Investing.com. <https://www.investing.com/news/stock-market-news/earnings-call-boeing-addresses-737-max-concerns-posts-22b-revenue-93CH-3289957>

⁷⁹ American Friends Service Committee. (2024, May 28).

⁸⁰ Capaccio, T. (2023, October 10). *Boeing Sped 1,000 Smart Bombs to Israel after Hamas Attacks*. *Bloomberg*. <https://www.bloomberg.com/news/articles/2023-10-10/boeing-sped-1-000-smart-bombs-to-israel-after-the-hamas-attacks>; Capaccio, A. (2023, October 19). *Boeing Accelerates Delivery of Up to 1,800 GPS-Guidance*

U.S. firms have benefitted from U.S. military aid to Israel for decades. RTX (which has also recently moved its headquarters to Arlington, VA), is the world's largest producer of guided missiles. Israel buys air-to-surface missiles for its F-16 fighter jets, and F-15 and F-16 fighter jets engines from RTX and its subsidiaries. RTX also runs a joint venture called Rafael with an Israeli weapons company to produce interceptors for Israel's Iron Dome air defense system. U.S. Secretary of Defense Lloyd Austin is a former board member of Raytheon and has a depth of experience with this relationship⁸¹.

General Dynamics, which originally developed the F-16 fighter jet (now manufactured by Lockheed Martin), produces the metal bodies for the MK-80 bomb series, one of the primary aerial munitions used to bomb Gaza. The Israeli Air Force uses 500-pound MK-82/BLU-111 bombs, 1,000-pound MK-83/BLU-110 bomb, and 2,000-lbs MK-84/BLU-109 bombs, which have been employed controversially during the past year.

In addition, many U.S. companies manufacture equipment and vehicles for the Israeli military. For example, Caterpillar supplies the D9 armored bulldozer, which has been used to demolish Palestinian homes and infrastructure in the occupied West Bank and in Israel's ground invasion of the Gaza Strip⁸².

These longstanding commercial relationships between Israel and U.S. weapons manufacturers also involve a chain of suppliers, investors (financial institutions, etc.) and other companies.

It is difficult to estimate the true economic multiplier of U.S. foreign military assistance that is used to purchase weapons manufactured domestically. Although most academic literature suggests that military spending is a weaker stimulus than many other types of spending, (such as infrastructure and education), the volume of military spending in the U.S. is significant. Certainly the conditioning of foreign military aid on domestic manufacturing is crucial for maintaining political support. Not only does U.S. military support for Israel provide a steady flow of income for U.S. weapons firms, but production facilities are located throughout the country, supplying stable manufacturing jobs in many small and midsize communities across the country.

The Biden administration has openly justified its foreign aid spending for Israel (as well as for Ukraine) on the basis of creating jobs for Americans to replenish U.S. domestic stockpiles that have been shipped to Israel and Ukraine, depleting U.S. inventories. For example, in its FY 2025 budget roll-out, the White House justified its \$92 billion emergency supplemental request for urgent "national security needs" including Ukraine, Israel, and other priorities, on the basis that it would make "significant and much needed investments

Bomb Kits to Israel. *Bloomberg*. <https://www.bloomberg.com/news/articles/2023-10-18/boeing-accelerates-delivery-of-up-to-1-800-gps-guidance-bomb-kits-to-israel?embedded-checkout=true>

⁸¹ Guyer, J. (2023, November 18). Most of Israel's weapons imports come from the US. Now Biden is rushing even more arms. *Vox*. <https://www.vox.com/world-politics/2023/11/18/23966137/us-weapons-israel-biden-package-explained>

⁸² American Friends Service Committee. (2024, May 28).

in the American defense industrial base, benefitting U.S. military readiness and helping to create and sustain jobs in dozens of states across America”⁸³.

This sentiment was echoed by the manufacturers. For example the CEO of Lockheed Martin (which manufactures Hellfire missiles, F-35 stealth aircraft, heavy artillery, and other items in use in Gaza), Jim Taiclet, stated that the FY 2025 “presidential budget and additive supplemental funding will provide a strong underpinning for future growth over the next several years for our company”⁸⁴.

According to an analysis by *The Washington Post*, nearly 60% of the supplemental aid package signed in April 2024 went directly to U.S. weapons manufacturers to replenish stocks and expand production capacity⁸⁵. It is difficult to estimate exactly how much of the \$14 billion designated for Israel is going directly to U.S. firms, but \$1.6 billion was provided to build additional missile defense systems for Israel, another \$1.6 billion to replenish U.S. military stocks (such as artillery shells and missiles) located in Israel, and \$3.5 billion for Israel’s portion of Foreign Military Financing program (through which Israel buys U.S.-made weapons).

According to a recent forecast prepared for *The Financial Times* (FT), the world’s top 15 defense contractors will be logging \$52 billion in free cash flow in 2026 (almost double the amount in 2021), of which \$26 billion will accrue to five U.S. defense companies. A significant proportion of this windfall is due to the rise in military spending related to Ukraine, Israel, and Taiwan. *The FT* points out that based on previous behavior, these defense companies are likely to use some of this cash for share buybacks, dividends, and acquisitions -- effectively using taxpayers funds to subsidize wealthy shareholders⁸⁶.

Tablet magazine refers to U.S. aid to Israel as a “lucrative backdoor subsidy to U.S. arms makers.”⁸⁷ The war in Gaza is only one of the factors contributing to it. However, U.S. support for Israel has turbo-charged these commercial relationships over the past year, as per Defense Secretary Austin, the U.S. is “sending security assistance to Israel at the speed of war.”⁸⁸

⁸³ The White House. (2024, March 11). *FACT SHEET: The President’s Budget for Fiscal Year 2025*. <https://www.whitehouse.gov/omb/briefing-room/2024/03/11/fact-sheet-the-presidents-budget-for-fiscal-year-2025/>

⁸⁴ Stone, M. (2024, April 25). Ukraine, Israel bill to bolster Lockheed, RTX profits. *Reuters*. P. 4. <https://www.reuters.com/business/aerospace-defense/ukraine-israel-bill-bolster-lockheed-rtx-profits-2024-04-25/>

⁸⁵ Kessler, G. (2024, April 25). Eighty percent of Ukraine-Israel bill will be spent in U.S. or by U.S. military. *The Washington Post*. <https://www.washingtonpost.com/politics/2024/04/25/eighty-percent-ukraine-israel-bill-will-be-spent-us-or-by-us-military/>

⁸⁶ Pfeifer, S.; Mathurin, P.; Nilsson, P. (2024, August 27). Top defence contractors poised for \$52bn cash bonanza as orders soar. *The Financial Times*. P.1. <https://ft.pressreader.com/1389/20240827/281479281756362>

⁸⁷ Siegel, J. and Liebovitz, L. (2023, July 16). Ending U.S. Aid to Israel. *Tablet Magazine*. <https://www.tabletmag.com/collections/end-us-aid-israel>

⁸⁸ Remarks by Secretary of Defense Lloyd J. Austin III at a Joint Press Conference in Israel (As Prepared Oct. 13, 2023).