

Figure 1: Operational Costs of Operation Epic Fury Through Day 120



• **Equipment losses and damages:** \$1.8–\$3.5 billion. The analysis used DOD press releases and public reports to estimate equipment losses — mostly aircraft — from the war. Base equipment losses are included under “base damage”. The Congressional Research Service identified 42 lost or damaged aircraft. Table 4 includes several tilt-rotor aircraft and a mobile Terminal High-Altitude Aerial Defense (THAAD) radar in addition to the CRS list. Note that most lost aircraft are uncrewed drones. The United States is much more willing to risk uncrewed aircraft than crewed aircraft.

numbered in the thousands. Despite this, there is little evidence that Iranian attacks materially restricted US operations during this campaign. The New York Times, Wall Street Journal, and Washington Post have all analyzed satellite imagery showing the damage. CSIS has its own set of overhead photographs and made damage estimates from those. CSIS analysis produced a range of \$2.2–\$5.1 billion for the 122 structures examined — and \$4–\$9.4 billion, accounting for the greater number of buildings damage identified by the Washington Post. The actual cost to repair all damages will be greater, as restricted ac-

where available, and visual recognition. Permanent structures were differentiated from temporary structures. The estimated repair costs were derived from the DOD construction handbooks detailing the “cost to design and construct a notional facility to current standards to replace an existing facility on the same site”. The estimate accounts for differences in facility type, as well as design and planning costs, overhead, and location-specific construction cost factors.

The DOD has not included the cost of repairing bases in its calculations because it is reviewing its posture in the Middle East and may not continue to use all the bases or use them in the same way. This would reduce costs. On the other hand, moving activities to new locations entails its own costs. The estimate captured three uncertainties with base damage: The major uncertainty is the number of buildings struck. The most comprehensive base damage assessment so far, conducted by the Washington Post, identified 228 structures in a more comprehensive database that includes similar categories of facilities as the CSIS one. Assuming the additional 106 structures identified by the Washington Post have the same composition as those in the CSIS database, the range would then be \$3.2–\$9.2 billion.

Another uncertainty is determining the cost of what was inside the buildings. For some, such as barracks and gyms, the material contents were not particularly costly. For warehouses, however, the contents could be as valuable as the building itself. CSIS used standard warehouse factors to estimate lost inventories. Commercial counterparts were used for other building types, such as hangers, dining facilities, and living quarters.

Damages were assessed only if visible in images. There is likely much more damage that is not visible, and many structures may have become unusable because of nearby explosions. Reported DOD estimates suggest that the CSIS analysis — or those by media outlets — may not reflect the full extent of the regional base damage. The embargo on satellite imagery prevents efforts to get greater fidelity on US base damage.

• **Other DOD costs:** \$1.5 billion. The previous categories picked up nearly all costs, but a few need to be treated separately:

Table 5: Cost to Repair Damage to Bases and Fixed Infrastructure

Base	Costs
Al Dhafra Air Base	\$143.4–\$576.9 M
Al Sader Air Base	\$11.2–\$54.5 M
Al Udeid Air Base	\$171.9–\$465.8 M
Ali Al Salem Air Base	\$316.6 –\$788.8 M
Camp Arifjan	\$382.8–\$1,001.3 M
Camp Buehring	\$519.8–\$856.6 M
Camp Victory	\$92.2–\$154.2 M
Harir Air Base	\$97.3–\$179.8 M
Muwaffaq Salti Air Base	\$21.7–\$56.8 M
Naval Support Activity Bahrain	\$252.8–\$551.8 M
Prince Sultan Air Base	\$131.9–\$345.5 M
Shuaiba Port	\$17.7–\$45.0 M
Total	\$2,159.3–\$5,074.8 M

• **DOD FACILITIES PRICING GUIDE/CSIS**

a) Fuel: \$1.4 billion. The DOD is a major consumer of fuel, so the entire department, not just deployed forces, is affected by price increases. A rough calculation compares what the DOD budgeted for jet fuel (\$3.67/gallon) for FY 2026 with current prices, which rose to about \$4.46/gallon — \$0.79 above what the DOD budgeted. In 2026, the DOD was projected to use 3.05 billion gallons of fuel. The higher fuel cost during four months of war therefore totaled \$800 million. If it takes six more months for prices to return to prewar levels, then the DOD’s additional cost during this period will be \$600 million, bringing the total to \$1.4 billion.

b) Security and overtime: \$100 million. The DOD has enhanced physical security on its bases and may have surged some equipment maintenance and production. These costs will appear mostly as overtime for government employees and contractors.

Costs for the federal government outside the DOD

Although the DOD incurred the bulk of costs associated with the war, other government agencies had smaller roles that nevertheless required additional resources.

- **Homeland and diplomatic security:** \$300 million. The Federal Bureau of Investigation and the National Coordinator for Critical Infrastructure Security and Resilience have issued warnings about Iranian attacks on the US homeland, and agencies have increased physical security. The amount shown here funds cyber defense, antiterrorism activities, and government-wide law enforcement. For the State Department, it funds embassy security and consular services for evacuees. The categories and amounts are based on analogs to US activities in the Ukraine-Russia war.
- **Future veterans’ costs:** \$400 million annually. Service members who participated in the conflict will have medical and disability claims above the usual veterans’ benefits. The DOD has said that about 400 service members have been injured, though most returned to duty. These injuries will need immediate care. However, the major cost will arise over time as veterans age and conditions such as post-traumatic stress disorder, depression, hearing loss, joint pain, and tinnitus appear. The cost estimate here assumes that veterans of this conflict receive disability benefits at the same level of severity (\$16,100 average per year) as veterans of the conflicts in Iraq and Afghanistan, but at a lower rate (35 percent versus about 50 percent) because the tour of duty has been shorter.

The images make clear the Iranian strikes were precise. There are no random craters indicating misses or wasted assets. Most struck facilities were unusable afterward. Iran has had decades to prepare its target lists. It likely developed most of its own targeting information, using its proximity to the targets and its many agents on the ground. However, it may have received intelligence help from Russia or China in identifying mobile or fleeting targets.

Table 4: Cost to Replace Lost and Damaged U.S. Equipment

Lost/Damaged Date	Location	System	Number Lost/Damaged	Cost
Lost Equipment				
March 2	Over Kuwait, friendly fire	F-15E	3	\$0.3 B
March 2	Jordan	AN/TPY-2	At least 1	\$0.4 B
March 12	Over Iraq, friendly airspace	KC-135	1	\$0/\$0.1 B
March 27	Prince Sultan Air Base	E-3	1	\$0/\$0.7 B
April 2	Over Iran	F-15E	1	\$0.1 B
April 5	Temporary airstrip in Iran	MC-130J	2	\$0.2 B
April 5	Temporary air strip in Iran	MH-6	4	\$0.06 B
April 6	Strait of Hormuz	A-10	1	\$0/\$0.1 B
April 9	Unspecified	MQ-4C	1	\$0/\$0.1 B
June 9	Strait of Hormuz	AH-64	1	\$0.025B
Various	Various	MQ-9	25	\$0/\$0.4 B
Damaged Equipment				
March 12	Over Iraq, friendly airspace	KC-135	1	\$0–\$0.1 B
March 14	Prince Sultan Air Base	KC-135	5	\$0.1–\$0.6 B
March 19	Over Iran	F-35	1	\$0.08 B
April 5	Over Iran	HH-60W	1	\$0.006–\$0.02 B
Total				\$1.8–\$3.5 B

• **CENTCOM/CSIS**

Table 4 shows a high and low to capture the different approaches to calculating replacement costs. The high-end cost is a one-for-one replacement with the most comparable aircraft currently in production. Thus, an F-15EX would replace a lost F-15E and an F-35A would replace a lost A-10. The low-end cost excludes aircraft such as the A-10 and E-3 that are planned for retirement. The theory here is that replacements are already in the budget. The cost to repair damaged aircraft is assumed to be 25 to 75 percent of the replacement cost, captured in the range of the estimate.

• **Damage to bases and fixed infrastructure:** \$4.0–\$9.4 billion. Throughout the conflict, Iran has attacked US bases with missiles and drones. The coalition allegedly intercepted up to 90 percent of those attackers. However, 10 percent leakage still caused much damage when attackers

access to satellite imagery limits analysis using available open-source information.

The images make clear the Iranian strikes were precise. There are no random craters indicating misses or wasted assets. Most struck facilities were unusable afterward. Iran has had decades to prepare its target lists. It likely developed most of its own targeting information, using its proximity to the targets and its many agents on the ground. However, it may have received intelligence help from Russia or China in identifying mobile or fleeting targets.

Iran attacked not just warfighting facilities but barracks, gyms, and dining facilities, indicating an intent to cause US casualties. This was largely unsuccessful because the United States had evacuated many personnel and put others under cover.

This analysis identified the damaged buildings using base maps,

Table 6: Federal Government Costs Outside the DOD

Cost Types	Cost	Comments
Homeland security	\$0.3 B	Additional security
Future Veterans Affairs costs	\$0.4 B	Per year for wounded care and delayed conditions
Fuel, nuclear, and other	\$0.3 B	
Total	\$1.0 B	

• **CSIS**

million annually. Service members who participated in the conflict will have medical and disability claims above the usual veterans’ benefits. The DOD has said that about 400 service members have been injured, though most returned to duty. These injuries will need immediate care. However, the major cost will arise over time as veterans age and conditions such as post-traumatic stress disorder, depression, hearing loss, joint pain, and tinnitus appear. The cost estimate here assumes that veterans of this conflict receive disability benefits at the same level of severity (\$16,100 average per year) as veterans of the conflicts in Iraq and Afghanistan, but at a lower rate (35 percent versus about 50 percent) because the tour of duty has been shorter.

The total cost over 30 years (\$12 billion) is large but much less than that for veterans of the Iraq and Afghanistan wars because fewer service members were involved (70,000, including support outside the theater, versus 2,000,000) and the duration was shorter (four months versus 20 years). Because the federal government has no accrual system for veterans’ benefits, this is not a current cost that can go into today’s budget but a future cost. Table 6 includes the first year.

• **Fuel, nuclear, and other costs:** \$265 million. Although the DOD accounts for 90 percent of the federal government’s fuel usage, other agencies also have increased costs. This amounts to \$165 million using the same methodology as for the DOD’s fuel cost. The National Nuclear Security Administration, the part of the Department of Energy that deals with nuclear weapons, likely had additional costs relating to nuclear monitoring and preparation for disposal of Iran’s nuclear materials (\$50 million, based on similar activities related to the war in Ukraine). Other agencies likely had incidental additional costs, such as the Department of the Treasury regarding sanctions enforcement (\$50 million, also based on experience during the Ukraine war).

Economic and human costs

These are not part of the federal budget but are nonetheless real and should be recognized. The first is the cost to the US economy. The Cost of War project estimated \$40 billion in additional fuel costs for the American public: This estimate appears accurate using our fuel pricing methodology. Other costs are hard to measure. Moody’s estimated that the war will cost Americans \$132 billion. Economic performance statistics for this period might show some effect when they are published. A stable and successful peace might produce some long-term economic benefits.

Like the US economy, the world economy has also sustained damage, though national energy inventories have mitigated that damage.

Finally, there is a human cost. The 13 US casualties, while individually tragic, have been few by the standards of warfare. Israel suffered around 40 fatalities, civilian and military. At least 30, mostly civilians, have been killed in the Persian Gulf States. Iran is reported to have suffered 1,700 civilian fatalities, and Lebanon has likely suffered many civilian casualties as well.

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