BURDEN SHARING

Benefits and Costs Associated with the U.S. Military Presence in Japan and South Korea
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What GAO Found

GAO identified six benefits to U.S. national and regional security derived from the U.S. military presence in Japan and South Korea (see fig. 1). U.S. officials and strategy documents cited them, and non-governmental experts generally agreed.

<table>
<thead>
<tr>
<th>Identified Benefits to U.S. National Security Derived by the American Military Presence in Japan and South Korea</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regional Stability and Security</strong></td>
</tr>
<tr>
<td>Helps maintain regional stability and security by deterring aggression and ensuring a favorable balance of power.</td>
</tr>
<tr>
<td><strong>Denuclearization and Nonproliferation</strong></td>
</tr>
<tr>
<td>Supports efforts to achieve North Korean denuclearization and more generally promote nonproliferation.</td>
</tr>
<tr>
<td><strong>Defense Capability and Interoperability</strong></td>
</tr>
<tr>
<td>Enhances Japan’s and South Korea’s defense capabilities and their interoperability with U.S. forces and weapon systems.</td>
</tr>
<tr>
<td><strong>Strong Alliances</strong></td>
</tr>
<tr>
<td>Strengthens the U.S. bilateral relationships with Japan and South Korea.</td>
</tr>
<tr>
<td><strong>Contingency Response</strong></td>
</tr>
<tr>
<td>Enables prompt response to military and non-military contingencies (e.g., natural disasters) throughout the region.</td>
</tr>
<tr>
<td><strong>Free and Open Indo-Pacific</strong></td>
</tr>
<tr>
<td>Promotes a free and open Indo-Pacific, a broad strategic vision that includes good governance and economic prosperity.</td>
</tr>
</tbody>
</table>

The Department of Defense (DOD) obligated $20.9 billion for its presence in Japan and $13.4 billion for its presence in South Korea from 2016 through 2019 from funds available to the Army, Navy, Air Force, and Marine Corps (see fig. 2). The military services obligated these funds from five categories, in order of size: military personnel, operation and maintenance, family housing operation and maintenance, family housing construction, and military construction.

<table>
<thead>
<tr>
<th>Department of Defense Obligations to Support the Military Presence in Japan and South Korea, 2016—2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Calendar year</strong></td>
</tr>
<tr>
<td><strong>2016</strong></td>
</tr>
<tr>
<td>$3,122 million</td>
</tr>
<tr>
<td><strong>2017</strong></td>
</tr>
<tr>
<td>$3,342 million</td>
</tr>
<tr>
<td><strong>2018</strong></td>
</tr>
<tr>
<td>$3,530 million</td>
</tr>
<tr>
<td><strong>2019</strong></td>
</tr>
<tr>
<td>$3,375 million</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dollars in millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
</tr>
<tr>
<td>South Korea</td>
</tr>
</tbody>
</table>

According to data obtained from DOD, Japan provided $12.6 billion and South Korea provided $5.8 billion from 2016 through 2019 in cash payments and in-kind financial support. This direct financial support paid for certain costs, such as labor, construction, and utilities. In addition to direct financial support, Japan and South Korea provided indirect support, such as forgone rents on land and facilities used by U.S. forces, as well as waived taxes, according to DOD officials.
U.S. Military Presence in Japan and South Korea Enhances U.S. National Security by Maintaining Regional Stability, Among Other Benefits Identified from Relevant Sources

DOD Obligated $20.9 Billion in Japan and $13.4 Billion in South Korea for Its Permanent Military Presence in 2016 through 2019

Japan and South Korea Provided Direct and Indirect Financial Support for the U.S. Military Presence from Calendar Years 2016 through 2019

Agency Comments

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Appendix II DOD Obligations to Support Its Presence in Japan and South Korea, in Dollars (2016—2019)


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<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEAMS</td>
<td>Defense Enterprise Accounting and Management System</td>
</tr>
<tr>
<td>DOD</td>
<td>Department of Defense</td>
</tr>
<tr>
<td>SABRS</td>
<td>Standard Accounting, Budgeting, and Reporting System</td>
</tr>
<tr>
<td>SMA</td>
<td>Special Measures Agreement</td>
</tr>
<tr>
<td>State</td>
<td>Department of State</td>
</tr>
</tbody>
</table>

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March 17, 2021

Congressional Committees

Both the Department of State (State) and Department of Defense (DOD) state that cooperation between the United States and its allies Japan and South Korea is essential for confronting regional and global challenges, and the decades-long forward presence of the U.S. military in Japan and South Korea has undergirded these security alliances. According to State, the U.S. relationship with Japan is a cornerstone of peace in East Asia, and Japan works with the United States to pursue common approaches to regional and global challenges. State also says that the U.S. relationship with South Korea is a linchpin of peace and security on the Korean peninsula, reduces the threat posed by North Korea, and works to achieve North Korean denuclearization. According to officials at State and DOD, the U.S. military presence in those countries is key to maintaining peace in the region and protecting U.S. national security.

The U.S. military has had a presence in Japan and South Korea for decades, and it currently has about 55,000 troops in Japan—the largest forward-deployed force in the world—and about 28,500 troops in South Korea. The dollar costs associated with this presence are in the billions annually, and they cover DOD activities and dozens of facilities that range in size from tens of thousands of acres for training sites to single antenna outposts.

This presence is governed by a series of treaties and agreements under which the governments of Japan and South Korea provide both direct and indirect financial support for the U.S. military stationed in those countries. The United States signed mutual defense and cooperation treaties with South Korea in 1953 and with Japan in 1960. Subsequently, the United States complemented its mutual defense and cooperation treaties with both countries by completing Status of Forces Agreements with Japan in 1960 and South Korea in 1966.1 Since then, the United States has also agreed to a series of Special Measures Agreements (SMA) with Japan.

1The respective Status of Forces Agreements generally govern the status of U.S. defense personnel stationed in each country, as well as the facilities and areas to which they have access. The Status of Forces Agreement between the United States and Japan is associated with the Treaty of Mutual Cooperation and Security. The Status of Forces Agreement between the United States and South Korea is associated with the Mutual Defense Treaty between the two nations.
and South Korea. The SMAs generally cover multi-year terms and describe costs to which the host nations have agreed in order to support the presence of U.S. troops. According to State officials, Japan and South Korea have also agreed to pay for some one-time costs outside of the SMAs, such as those associated with the relocation and realignment of U.S. forces at the request of the host nation, which can sometimes be substantial.

The National Defense Authorization Act for Fiscal Year 2020 included a provision for us to report on matters related to the security benefits derived from the forward presence of the U.S. military in Japan and South Korea and the costs associated with that presence for calendar years 2016 through 2019.² This report describes (1) the identified benefits to U.S. national and regional security derived from the U.S. military presence in Japan and South Korea; (2) the funds obligated by the U.S. military for its presence in Japan and South Korea for calendar years 2016 through 2019; and (3) direct and indirect burden sharing contributions made by Japan and South Korea for calendar years 2016 through 2019.³

To identify the benefits of the U.S. military presence in Japan and South Korea, we identified and conducted a review of selected national security and defense strategy documentation from the U.S. and host nation governments.⁴ We also reviewed 20 selected expert studies that discuss the U.S. military presence in Japan and South Korea. We identified these studies through a literature search and selected them for their relevance and recent publication, among other criteria. In addition to our review of these strategy documents and studies, we conducted interviews with officials from DOD and State, as well as with non-governmental experts from various think tanks and universities. From our examination of strategy documents, expert studies, and interviews, we identified six broad categories of benefits to U.S. national security derived from the U.S. military presence in Japan and South Korea. We then selected and conducted semi-structured interviews with nine non-governmental experts.

²See Pub. L. No. 116-92, § 1255 (2019). Unless otherwise specified, years in this report are calendar years, not fiscal years. Numbers are not adjusted for inflation.

³For a summary of this report in Japanese, see GAO-21-425. For a summary of this report in Korean, see GAO-21-424.

⁴Some of these documents were global in scope. For example, see, White House, 2017 National Security Strategy (Dec. 18, 2017). Other documents were specific to the region or host nations. For example, see, Department of Defense, Indo-Pacific Strategy Report: Preparedness, Partnerships, and Promoting a Networked Region (June 1, 2019).
based on their relevant expertise and institutional and geographic 
diversity. We asked these experts to rank the six identified benefits on a 
scale reflecting the range of strongly disagree, disagree, neither agree or 
disagree, agree, and strongly agree, with regard to the extent to which 
those benefits are derived from the U.S. military presence in Japan and 
South Korea. We also asked these experts for their perspectives on any 
potential challenges or drawbacks associated with the U.S. military 
presence in Japan and South Korea.

To identify funds obligated by the U.S. military, we obtained and analyzed 
obligations data from the Army, Navy, Marine Corps, and Air Force for 
calendar years 2016 through 2019, in the following five appropriation 
accounts: military personnel, operation and maintenance, military 
construction, family housing operation and maintenance, and family 
housing construction.\(^5\) We also reviewed DOD guidance, such as relevant 
financial management regulations, to identify the methodology and 
accounting procedures used to track these costs.

To identify host nation financial support for the U.S. military presence, we 
analyzed the SMAs and other host nation support agreements and 
arrangements with Japan and South Korea. Additionally, we interviewed 
DOD officials regarding various forms of Japan’s and South Korea’s host 
nation support. We also obtained and analyzed data from U.S. Forces 
Japan and U.S. Forces Korea on the direct financial support provided by 
Japan and South Korea within, and outside of, SMAs for calendar years 
2016 through 2019.

To assess the reliability of the data sources used to conduct our 
analyses, we conducted interviews with officials from the four relevant 
military services—Army, Navy, Marine Corps, and Air Force—as well as 
with officials at the headquarters of U.S. Forces Japan and U.S. Forces 
Korea, to determine their data quality assurance procedures. We also 
reviewed their written responses to a data reliability questionnaire 
focused on the controls used to ensure that the data they provided were 
reliable. We found the data we used to be sufficiently reliable for the 
purposes of our reporting objectives. See appendix I for more information 
on our objectives, scope, and methodology.

We conducted this performance audit from January 2020 to March 2021 
in accordance with generally accepted government auditing standards.

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\(^5\)These were the most recent calendar years available during our review.
Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

### Background

<table>
<thead>
<tr>
<th>U.S. Military Presence in Japan and South Korea</th>
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<tbody>
<tr>
<td>The U.S.-Japan alliance is a cornerstone of peace and prosperity in the Indo-Pacific, and U.S. forces in Japan are an essential component of the military’s posture there, according to DOD. As of 2019, the United States had about 55,000 military personnel in Japan. The majority of the U.S. presence is concentrated on the island of Okinawa, Japan’s southernmost prefecture and, according to a senior State official, a strategically valuable location for the United States. According to DOD and State officials, the Japanese public are broadly supportive of the U.S. military presence in their country, but this presence is a more contentious issue in Okinawa, in part because of the history of U.S. occupation of the island at the end of World War II.</td>
</tr>
</tbody>
</table>

To reduce the footprint of the U.S. military presence in Japan, the United States and Japan are implementing the 2012 revision to a 2006 roadmap that would relocate some U.S. forces in Japan, especially within Okinawa and would move other forces off of Okinawa entirely. Specifically, 9,000 Marines will relocate to Guam, Hawaii, the continental United States, and Australia (on a rotational basis), according to DOD officials. These initiatives have sometimes encountered significant delays, such as the construction of the replacement facility for U.S. Marine Corps Air Station Futenma. That project has encountered local opposition as well as complications arising from environmental analyses, according to DOD and Japanese officials.

South Korea is considered one of the United States’ most important strategic and economic allies in Asia and is a linchpin of peace and security on the Korean Peninsula and the region. The United States has maintained some degree of military presence in South Korea since the end of World War II. As of 2020, the United States had about 28,500 military personnel in South Korea. The Army has the most significant presence, and the majority of its soldiers there are based at Camp Humphreys—the largest U.S. overseas military base in the world. In addition to the protection afforded by the forward presence of U.S. forces, South Korea, like Japan, benefits from the extended deterrence derived...
from the U.S. armed forces, including the U.S. nuclear umbrella. Figure 1 below depicts the location of selected U.S. military installations in Japan and South Korea.

Figure 1: Selected U.S. Military Installations in Japan and South Korea

Source: GAO analysis of Department of Defense documents; Map Resources. | GAO-21-270
The U.S. military primarily obligates funds associated with five appropriation accounts to support its forward presence in Japan and South Korea, as detailed in table 1 below.\(^6\)

<table>
<thead>
<tr>
<th>Appropriation account</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military personnel</td>
<td>Pay, allowances, individual clothing, subsistence, interest on deposits, gratuities, permanent change of station travel, and expenses of temporary duty travel between permanent duty stations for active duty military personnel</td>
</tr>
<tr>
<td>Operation and maintenance</td>
<td>Includes expenses associated with the current operations of the force and maintenance of equipment and vehicles, as well as civilian salaries; also, certain minor military construction, facilities repair, and purchases of items below a threshold</td>
</tr>
<tr>
<td>Family housing operation and maintenance</td>
<td>Operation and maintenance expenses associated with family housing, including debt payment, leasing, minor construction, principal and interest charges, and insurance premiums</td>
</tr>
<tr>
<td>Family housing construction</td>
<td>Construction—including acquisition, replacement, addition, expansion, extension, and alteration—of family housing units</td>
</tr>
<tr>
<td>Military construction</td>
<td>Acquisition, construction, installation, and equipment of temporary or permanent public works, military installations, facilities, and real property</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Department of Defense documents and relevant statutes. | GAO-21-270

\(^6\)According to DOD officials, DOD also incurs costs related to rotational forces that rotate into Japan and South Korea. These costs can include transportation, training, and sustainment costs for equipment maintained in Japan and South Korea. These costs are outside the scope of this report.
From our examination of U.S. and host nation strategy documents and expert studies, as well as interviews with officials at DOD and State and with non-governmental experts, we identified six important benefits derived from the U.S. presence in Japan and South Korea, as shown in figure 2. The nine non-governmental experts we interviewed largely agreed that these benefits derive from the U.S. military presence in Japan and South Korea.
Figure 2: Benefits of the U.S. Military Presence in Japan and South Korea Identified from Strategy Documents, Expert Studies, and Interviews with Officials and Non-Governmental Experts

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Stability and Security</td>
<td>The U.S. military presence provides a credible deterrent to an increasingly assertive China and a nuclear-armed North Korea.</td>
</tr>
<tr>
<td>Defense Capability and Interoperability</td>
<td>Japan is remodeling its fleet of helicopter carriers to be interoperable with U.S. F-35B fighter jets.</td>
</tr>
<tr>
<td>Contingency Response</td>
<td>U.S. Forces Japan provided disaster relief assistance following Japan’s 2011 earthquake and tsunami.</td>
</tr>
<tr>
<td>Denuclearization and Nonproliferation</td>
<td>The U.S. military presence in Japan and South Korea supports surveillance and interdiction activities that seek to prevent the proliferation of dangerous weapons and technology.</td>
</tr>
<tr>
<td>Strong Alliances</td>
<td>The U.S. willingness to commit to the presence of troops in Japan and South Korea reassures allies by demonstrating U.S. commitment to regional security.</td>
</tr>
<tr>
<td>Free and Open Indo-Pacific</td>
<td>The U.S. military presence protects trade routes and supply lines, which are important to economic prosperity for the region and the United States.</td>
</tr>
</tbody>
</table>

Source: GAO analysis of U.S. and host nation strategy documents, expert studies, and interviews with Department of Defense and State officials and nine non-governmental experts. | GAO-21-270

Note: This list is not necessarily exhaustive of all identified benefits of the U.S. military presence in Japan and South Korea, and the order in which the six benefits are presented is not intended to signify ranking.

Several experts noted that, collectively, all six benefits contribute to U.S. national security in addition to the regional security of the Indo-Pacific. Additionally, one expert and several DOD and State officials noted that these six benefits overlap and are mutually reinforcing. For example, DOD and State officials said that the U.S. military presence in Japan and South Korea helps to maintain regional stability and security and to strengthen alliances. In turn, both of these benefits promote a free and open Indo-Pacific. While experts broadly agreed that these six benefits derive from the U.S. military presence in Japan and South Korea, some experts noted that certain benefits are more relevant for a particular host
nation, and that there are sometimes challenges associated with the U.S. military presence. Below we examine and provide details about each of the six benefits in greater depth.

**Regional Stability and Security.** Various national strategy documents we reviewed, as well as DOD and State officials and experts we interviewed, identified regional stability and security as a benefit deriving from the U.S. military presence in Japan and South Korea. For example, DOD's 2019 *Indo-Pacific Strategy Report* indicates that the forward posture of the U.S. military has been a robust deterrent to aggression and contributes to regional stability and security.\(^7\) Officials at Embassies Tokyo and Seoul said that the U.S. military presence has enabled the United States to project power throughout the region and to deter adversaries such as China, Russia, and North Korea. DOD officials added that this military presence has also preserved a favorable balance of power in the region.

All nine experts we interviewed agreed—and eight of them strongly agreed—that the U.S. military presence in Japan and South Korea helps maintain regional stability and security. Additionally, seven of the nine experts identified regional stability and security as the most important of the six identified benefits. One expert reported that the U.S. military presence has deterred not only adversaries, but also allies, from taking destabilizing actions. This expert said that, for example, the U.S. military presence in South Korea gave the United States leverage to dissuade South Korea from retaliating against North Korea’s sinking of a South Korean naval ship in 2010.

Although they agreed that the U.S. military presence in Japan and South Korea helps maintain regional stability and security, several experts said that there are nonetheless some challenges associated with having U.S. troops stationed overseas. Specifically, two experts said that forward-deployed troops are at increased vulnerability to a potential first strike from an adversary, such as China or North Korea. One expert added, however, that ultimately the United States is nevertheless committed to having troops in the region, a commitment that deters U.S. adversaries and reassures U.S. allies.

\(^7\)DOD, *Indo-Pacific Strategy Report* (June 1, 2019).
Defense Capability and Interoperability. DOD's 2019 *Indo-Pacific Strategy Report* indicates that the forward presence of the U.S. military enables the United States to undertake joint and combined training with Japan and South Korea and to enhance those countries' defense capabilities and interoperability (i.e., the ability to act together to achieve objectives). DOD and State officials agreed, with officials at Embassy Tokyo noting that the U.S. presence facilitates foreign military sales to Japan because Japan sees firsthand the effectiveness of U.S. equipment. For example, Japan has procured F-35 and Osprey aircraft to mirror U.S. capabilities and ensure interoperability with U.S. forces. Similarly, officials at Embassy Seoul said that the combined command structure between U.S. Forces Korea and the South Korean military has resulted in strong interoperability.

All nine experts agreed—and eight of them strongly agreed—that improving U.S. allies' defense capabilities and interoperability is a benefit deriving from the U.S. presence in Japan and South Korea. For example, the United States and Japan participate in joint exercises (such as Keen Sword) that involve tens of thousands of participants from both countries and are designed to increase the combat readiness and interoperability of the Japanese Self Defense Forces and the U.S. military. According to three experts we interviewed, the forward presence of the U.S. military makes such exercises possible, and these exercises serve to build the defense capabilities of the host nations and their interoperability with the United States. Several experts also noted that the U.S. military presence facilitates intelligence sharing between the United States and Japan and between the United States and South Korea.

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8DOD, *Indo-Pacific Strategy Report* (June 1, 2019).

9Keen Sword is a joint biennial exercise involving U.S. and Japanese forces. In 2020, approximately 9,000 U.S. forces and 37,000 Japanese forces participated in Keen Sword.
Contingency Response. The White House’s 2017 National Security Strategy indicates that the forward posture of the U.S. military is necessary to respond to and shape events quickly.10 DOD and State officials we spoke with reiterated this point, with one official noting that the forward deployment of troops and resources shortens U.S. supply lines by thousands of miles, thus enabling the U.S. forces to respond more quickly to evolving threats and contingencies. Another official said that the U.S. forward presence in Japan has been valuable in responding to non-military contingencies, citing examples of humanitarian crises and natural disasters throughout the region. These examples include the December 2004 earthquake in Indonesia, the March 2011 Tōhoku earthquake and tsunami disaster in Japan, and the November 2013 Typhoon Hainan in the Philippines.

All nine experts agreed—and seven of them strongly agreed—that the U.S. military presence in Japan and South Korea enables prompt response to military and non-military contingencies. One expert said that U.S. Forces Korea’s motto, “Fight Tonight,” reflects the importance of military readiness to respond to contingencies. With respect to non-military contingencies, two experts said that U.S. forces in Japan are well positioned to respond to contingencies throughout the region. For example, several experts noted that the U.S. forces in Japan were integral in quickly assisting with disaster relief efforts following the 2011 earthquake and tsunami. Another expert said that absent the forward presence of the U.S. military in Japan and South Korea, China might fill this vacuum and respond more quickly than the United States to regional contingencies. Two experts said that, in addition to enabling a more prompt response, the U.S. forward presence makes it more cost-effective to respond to contingencies.

While all nine experts agreed that prompt contingency response is a benefit of the U.S. military presence in Japan and South Korea generally, two experts said that the U.S. presence in South Korea specifically is less able to respond to regional non-military contingencies. They noted that because U.S. forces in South Korea serve primarily to deter North Korea, those forces are less flexible to respond to non-military contingencies elsewhere, as doing so could risk diminishing their deterrent effect.

Denuclearization and Nonproliferation. The White House’s 2017 National Security Strategy and DOD’s 2019 Indo-Pacific Strategy Report identify the final and fully verifiable denuclearization of North Korea and the promotion of nonproliferation more generally as goals. DOD and State officials we spoke with said that the U.S. military presence in Japan and South Korea helps support these strategy goals.

Six of the nine experts agreed—with four strongly agreeing—that the U.S. military presence in Japan and South Korea helps support U.S. efforts to achieve denuclearization (i.e., removal of nuclear weapons) and nonproliferation (i.e., reduction in the increase or spread of nuclear weapons). With respect to denuclearization, two experts said that the U.S. forward presence along with the U.S. nuclear umbrella makes our allies in the region less likely to pursue development of their own nuclear weapons. Two experts said that the U.S. presence is helpful in nonproliferation efforts with respect to North Korea.

However, three of the nine experts neither agreed nor disagreed that denuclearization and nonproliferation constituted a benefit derived from the U.S. military presence in Japan and South Korea. Two of these experts said that the U.S. military presence may assist with nonproliferation efforts, but they were more skeptical as to whether the U.S. military presence helps achieve denuclearization—at least with respect to North Korea. One expert said that North Korea is unlikely to denuclearize, as the regime views its nuclear weapons as a deterrent in the face of the U.S. military presence on the Korean peninsula.

**Strong Alliances.** State’s 2019 *A Free and Open Indo-Pacific* states that the enduring commitment of the United States to the Indo-Pacific is demonstrated by the forward presence of the U.S. military in the region, and DOD and State officials we spoke with said that the U.S. military presence strengthens U.S. bilateral relationships with Japan and South Korea.¹²

All nine experts we spoke with agreed—with eight strongly agreeing—that the U.S. military presence in Japan and South Korea strengthens the United States’ bilateral alliance with both host nations. One expert said the willingness of the United States to place its troops in harm’s way reassures allies. In addition to strengthening the U.S. bilateral relationships with Japan and South Korea, two experts said that the U.S. military presence has helped normalize and stabilize the historically fraught relationship between Japan and South Korea.

However, six experts said that local opposition to and complaints about the U.S. military presence among some residents who live in the vicinity of bases present a challenge for alliance management. Several experts said that, given the extent of opposition in localities such as Okinawa, the U.S. military presence in those places might not be politically sustainable. More generally, one expert said that while the U.S. military presence is a necessary component of our strong alliances with Japan and South Korea, it is not uniquely responsible for those alliances—that is, other political and economic factors also contribute to these relationships.

Free and Open Indo-Pacific. State’s 2019 *A Free and Open Indo-Pacific* outlines a strategic vision that includes the promotion of good governance and economic prosperity.\(^\text{13}\) The 2019 *Indo-Pacific Strategy Report* specifically identifies the U.S. forward posture in the region as important to upholding a free and open Indo-Pacific.\(^\text{14}\) DOD and State officials we spoke with similarly identified this as a benefit, with one official stating that the U.S. military presence specifically facilitates free commerce and upholds the rules-based order.

All nine experts agreed—with six strongly agreeing—that the forward presence of the U.S. military in Japan and South Korea helps promote a free and open Indo-Pacific. For example, one expert said that the U.S. military presence in Japan and South Korea is important to protecting supply lines and trade routes that facilitate economic prosperity.

While all nine experts agreed that the U.S. military presence promotes a free and open Indo-Pacific, two experts said that this benefit is not necessarily or exclusively a function of the military. For example, one of these experts said that the alliance more generally promotes a free and open Indo-Pacific. Two experts noted that South Korea is less aligned with the United States on the concept of a free and open Indo-Pacific than is Japan. They explained that South Korea is more reliant on China economically and is therefore more reticent to antagonize China by aligning itself too closely with the strategic vision of the United States for the region.

DOD obligated a total of $20.9 billion for its permanent military presence in Japan and a total of $13.4 billion for its permanent military presence in South Korea in 2016 through 2019, from funds available to the Army.

\(^{13}\)State, *A Free and Open Indo-Pacific* (Nov. 4, 2019).

\(^{14}\)DOD, *Indo-Pacific Strategy Report* (June 1, 2019).
Navy, Marine Corps, and Air Force. The military services obligated these funds from the following five appropriation accounts: (1) military personnel, (2) operation and maintenance, (3) family housing operation and maintenance, (4) family housing construction, and (5) military construction. For detailed information on DOD’s obligations by service and by appropriation account, see appendix II.

According to DOD data, DOD obligated a total of $20.9 billion for the U.S. military presence in Japan in calendar years 2016 through 2019. Annual obligations remained relatively consistent during this time, peaking in 2018. DOD obligated about $5.0 billion in 2016, $5.0 billion in 2017, $5.5 billion in 2018, and $5.3 billion in 2019. Figure 3 displays the funds obligated by military service and year.

Figure 3: Funds Obligated for the U.S. Military Presence in Japan, by Military Service, Calendar Years 2016—2019

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15An agency incurs an obligation when, for example, it places an order, signs a contract, awards a grant, purchases a service, or takes other actions that require the government to make payments to the public or from one government account to another. Obligated amounts were identified by the Army, Navy, Marine Corps, and Air Force. DOD also obligates from funds available to the Defense Commissary Agency and Defense Logistics Agency, among others, to support its military presence in Japan and South Korea. Those agencies were outside the scope of this report, and those funds are not included in the total herein presented. DOD obligations for its military presence in Japan and South Korea in this section may not add due to rounding.
Collectively, from 2016 through 2019, the Air Force obligated $7.0 billion to support its forces in Japan—the largest of the four U.S. military services' obligations there. The Marine Corps has a significant presence in Okinawa and obligated $6.8 billion in that time period. The Navy obligated $5.5 billion to support about 20,000 Navy personnel in Japan. The Army obligated $1.6 billion, the smallest of the services' obligations.

In total, from 2016 through 2019, DOD obligated about 92 percent ($19.3 billion) of these funds in Japan for military personnel and operation and maintenance. Specifically, from 2016 through 2019, DOD obligated $11.5 billion in Japan for military personnel and $7.7 billion for operation and maintenance. During that time DOD also obligated $1.4 billion for family housing operation and maintenance, $173.0 million for family housing construction, and $29.8 million for military construction. Figure 4 displays the funds obligated by appropriation account and year.
According to DOD data, DOD obligated a total of $13.4 billion for the U.S. military presence in South Korea in 2016 through 2019. DOD obligations in South Korea remained relatively constant during this time, peaking in 2018. Specifically, DOD obligated $3.1 billion in 2016, $3.3 billion in 2017, $3.5 billion in 2018, and $3.4 billion in 2019. Figure 5 displays the funds obligated by service and year.

### DOD Obligations for the U.S. Military Presence in South Korea

<table>
<thead>
<tr>
<th>Calendar year</th>
<th>Military Personnel</th>
<th>Operation and Maintenance</th>
<th>Family Housing, Operation and Maintenance</th>
<th>Family Housing, Construction</th>
<th>Military Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>$339,119</td>
<td>$1,904,987</td>
<td>$2,769,868</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>$298,888</td>
<td>$1,815,273</td>
<td>$2,797,968</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>$364,166</td>
<td>$2,228,488</td>
<td>$2,865,842</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>$428,056</td>
<td>$1,802,367</td>
<td>$3,102,168</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dollars in millions

Source: GAO analysis of Department of Defense data. | GAO-21-270

Note: Obligated amounts were identified by the Army, Navy, Marine Corps, and Air Force.
DOD obligated about 98 percent of these funds from amounts available to the Army and the Air Force. The Army obligated $9.2 billion in South Korea from 2016 through 2019—the largest of the four military services’ obligations there. The majority of U.S. servicemembers in South Korea are Army personnel and are based at Camp Humphreys. During this time period, the Air Force obligated $3.9 billion, supporting its presence at two air bases in South Korea: Osan Air Base and Kunsan Air Base. The Navy and Marine Corps have a significantly smaller presence in South Korea. The Navy obligated $208.7 million in South Korea from 2016 through 2019. The Marine Corps obligated $82.8 million, the smallest of the services’ obligations. According to DOD officials, the Marine Corps presence in South Korea consists of approximately 280 Marines primarily located at Camp Humphreys and Camp Mujuk.

In total, from 2016 through 2019, military personnel and operation and maintenance obligations accounted for the majority of DOD’s obligations in South Korea. Figure 6 displays the funds obligated by appropriation account and year.
Figure 6: Funds Obligated for the U.S. Military Presence in South Korea, by Appropriation Account, Calendar Years 2016—2019

Note: Obligated amounts were identified by the Army, Navy, Marine Corps, and Air Force. According to Army officials, in 2017 the Army awarded a family housing construction project at Camp Walker to a contractor. The officials stated, however, that in 2018 the project was terminated and funds de-obligated after the contractor defaulted, resulting in the data showing a negative obligation of $23 million for family housing construction in 2018. Army officials stated that the project was re-awarded and funds were re-obligated in 2019.
For calendar years 2016 through 2019, Japan provided $12.6 billion (¥1.6 trillion) and South Korea provided $5.8 billion (₩6.6 trillion) in direct financial support for the U.S. military presence in those countries. Direct financial support includes (1) cash payments provided by the governments of Japan and South Korea and (2) in-kind financial support. The governments of Japan and South Korea provided these cash payments and in-kind financial support to pay for expenses such as facilities construction, labor, and services to support the U.S. military presence. Additionally, some DOD officials noted several forms of potential indirect financial support provided by Japan and South Korea, to include forgone revenues and rents on lands and facilities used by U.S. forces, as well as various taxes, tolls, and duties waived by the host nation governments. See appendix III for a detailed breakdown of Japan and South Korea’s direct financial support.

As outlined in the 2011 and 2016 SMAs with Japan, Japan agreed to provide both cash and in-kind financial support for the following three cost categories: labor, utilities, and training relocation. Across these categories, Japan provided cash and in-kind financial support totaling $5.3 billion (¥609.1 billion) in calendar years 2016 through 2019. In addition to assistance provided under the SMAs, Japan also provided $7.3 billion (¥953.9 billion) of direct financial support for the Defense Policy Review Initiative, the Facilities Improvement Program, non-SMA labor, and the Special Action Committee on Okinawa initiatives, as

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16 For the purposes of this report, in-kind financial support refers to the provision of goods or services instead of money. For example, Japan provides in-kind financial support for labor by directly paying Japanese nationals to work on U.S. military installations in support of the U.S. presence there.

17 According to DOD officials, DOD does not formally track or estimate the value of Japan’s and South Korea’s indirect financial support, and that support is not reflected in the total amount of direct financial support provided by host nation governments.


19 This total primarily reflects Japan’s direct financial support under the current SMA, which is effective from April 1, 2016, through March 31, 2021; but it also includes direct financial support from the final quarter of the previous SMA, which was in effect from April 1, 2011 through March 31, 2016.
discussed below. Figure 7 displays all direct cash and in-kind financial support provided by Japan for calendar years 2016 through 2019.

**Figure 7: Direct Cash and In-Kind Financial Support by Japan for the U.S. Military Presence, Calendar Years 2016—2019**

Calendar year

<table>
<thead>
<tr>
<th>Year</th>
<th>Provided under Special Measures Agreements</th>
<th>Other initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>3,451 Labor, 1,102 Utilities, 1,105 Training relocation</td>
<td>3,163 Defense Policy Review Initiative, 3,163 Facilities Improvement Program, 3,163 Labor (other), 3,163 Special Action Committee on Okinawa</td>
</tr>
<tr>
<td>2019</td>
<td>3,163 Labor, 1,102 Utilities, 1,105 Training relocation</td>
<td>3,163 Defense Policy Review Initiative, 3,163 Facilities Improvement Program, 3,163 Labor (other), 3,163 Special Action Committee on Okinawa</td>
</tr>
</tbody>
</table>

Source: GAO analysis of data provided by U.S. Forces Japan. | GAO-21-270

Notes: GAO converted the data from Japanese fiscal years to calendar years. The Japanese fiscal year begins on April 1 and ends on March 31; for example, Japanese fiscal year 2016 began on April 1, 2016, and ended on March 31, 2017. We also converted Yen to U.S. Dollars. This figure does not include certain training relocation costs in Japanese fiscal year 2019 because the data were not available at the time of our review.

Under the SMAs for calendar years 2016 through 2019, Japan provided the following:

- **Labor:** Japan provided salaries and benefits for Japanese nationals working on U.S. bases as in-kind financial support. For 2016 through 2019, Japan’s in-kind labor financial support totaled $4.3 billion. As of 2020, Japan was responsible under the SMA for paying for no more than 23,178 Japanese employees. This cap is determined in
arrangements implementing the SMA, and it varies from year to year.\textsuperscript{20}

- **Utilities**: Japan pays for a portion of utilities consumed at U.S. facilities, including electricity, gas, and water supply.\textsuperscript{21} Japan provided $819.8 million as a direct cash payment to the United States to offset utility costs from 2016 through 2019.

- **Training relocation**: Japan provided the United States $184.1 million in direct cash payments to relocate U.S. training exercises, such as live-fire artillery training, away from populated areas.

\textsuperscript{20}According to DOD officials, the United States is responsible for paying for any additional Japanese employees, known as “overhires.” The officials stated that the United States is currently paying for approximately 3,000 overhires.

\textsuperscript{21}Under the current implementing arrangement, Japan calculates its initial draft budget request for each fiscal year by multiplying the average of expenditures during the prior 3 fiscal years by 61 percent. The arrangement also includes an annual cap (¥24.9 billion) on the total utility expenditures Japan will bear.
In addition to the direct financial support Japan provides under the SMA, Japan provided $7.3 billion (¥953.9 billion) in 2016 through 2019 in support of other initiatives, including those focused on relocating and realigning forces within and from Japan (see sidebar). This was composed of $5.4 billion (¥738.6 billion) to support the Defense Policy Review Initiative, $710.7 million (¥82.4 billion) for the Facilities Improvement Program, $922.4 million (¥106.9 billion) for certain labor costs not covered by the SMA, and $230.5 million (¥26 billion) on initiatives related to the Special Action Committee on Okinawa.

Japan provided direct financial support totaling $5.4 billion (¥738.6 billion) to offset U.S. costs associated with the Defense Policy Review Initiative, a series of 19 realignment initiatives through which the United States and

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**Initiatives to Relocate and Realign U.S. Forces within and from Japan**

Aerial view of the coast of Okinawa.

In 1995 the United States and Japan established the Special Action Committee on Okinawa, under which they developed initiatives to reduce the impact of the U.S. military presence on Okinawa, such as returning land used by U.S. forces to Okinawa. The two nations outlined additional initiatives in the 2006 U.S.-Japan Roadmap for Realignment Implementation, in which the United States planned to move roughly 8,000 Marines from Okinawa to Guam. These more recent initiatives are known collectively as the Defense Policy Review Initiative.

One component of the realignment from Okinawa is to replace Marine Corps Air Station Futenma with the construction of a new base in a less congested area of Okinawa. The plan was initially to be completed by 2014, but local opposition as well as environmental analyses have contributed to significant delays.

Other initiatives include the relocation of tanker aircraft and a Navy carrier wing to Marine Corps Air Station Iwakuni and the consolidation of U.S. facilities on Okinawa.

Japan seek to reduce the U.S. footprint in Okinawa, among other goals.\textsuperscript{22} Japan's most significant costs associated with the Defense Policy Review Initiative from 2016 through 2019 included in-kind construction projects at the Futenma Replacement Facility in Okinawa ($2.1 billion), the relocation of carrier fixed-wing aircraft from Naval Air Facility Atsugi to Marine Corps Air Station Iwakuni ($1.6 billion), and direct cash financial support to support the realignment of Marines from Okinawa to Guam ($1 billion).

Japan also provided $710.7 million in in-kind financial support to the Facilities Improvement Program, a voluntary program that funds U.S. infrastructure and facilities in Japan. According to DOD officials, the Facilities Improvement Program had 104 ongoing projects throughout Japan as of July 2020. Under the program, U.S. Forces Japan submits a priority list of projects each year for Japan to consider, and Japan has discretion as to which projects to fund. DOD officials said that one such priority project that Japan selected to fund was runway repairs at Misawa Air Base. They added that these repairs also benefit Japan, as the runways are jointly used by U.S. and Japanese forces and they support commercial flights that service the local community. According to DOD officials, U.S. Forces Japan has submitted construction of a new hangar at Kadena Air Base as another priority project, but Japan has declined to fund it, citing local concerns about noise pollution.

In addition to Japan's in-kind financial support for labor costs under the SMA ($4.3 billion) that was previously discussed, Japan provided in-kind financial support totaling $922.4 million for certain labor costs not covered under the SMA. Specifically, these non-SMA labor costs include health checks, immunizations, uniforms, social insurances, and other costs associated with Japanese nationals working on U.S. bases in Japan. According to a State official, Japanese law requires these costs.

Japan also provided $230.5 million to several realignment initiatives related to the Special Action Committee on Okinawa, a U.S.-Japan bilateral process established in 1995. Similar to the Defense Policy Review Initiative, these initiatives aim to reduce the U.S. footprint in

Okinawa. These initiatives include the return of land used by U.S. forces to Okinawa and projects to reduce the noise pollution resulting from the U.S. military presence.

<table>
<thead>
<tr>
<th>South Korea Provided $5.8 Billion in Direct Financial Support from 2016 to 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 2016 through 2019, South Korea provided $3.3 billion (₩3.8 trillion) in both cash and in-kind financial support under two SMAs—one covering the years 2014 through 2018, and the other covering 2019 only. In both SMAs, South Korea agreed to provide direct cash and in-kind financial support for the following three cost categories: construction, logistics, and labor. In addition to direct financial support provided via the SMAs, South Korea provided $2.5 billion (₩2.9 trillion) in facilities to the United States associated with the Yongsan Relocation Plan. Figure 8 displays all the direct financial support provided by South Korea for calendar years 2016 through 2019.</td>
</tr>
</tbody>
</table>

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24 According to DOD officials, as part of the Yongsan Relocation Plan requested by South Korea, South Korea provided facilities for U.S. use. South Korea did not provide some unique facilities such as Sensitive Compartmented Information Facilities.
Under the SMAs for calendar years 2016 through 2019, South Korea provided the following:

- **Labor**: South Korea provided a direct cash payment for some salaries and benefits of Korean nationals working for U.S. Forces Korea, totaling $1.4 billion from 2016 through 2019.

- **Logistics**: South Korea’s in-kind financial support for logistics totaled $507.5 million from 2016 through 2019. Through contracts with South Korean firms, South Korea provided a variety of equipment, supplies, and services to support the U.S. forward presence, including the storage, transportation, and maintenance of ammunition; distribution and storage of fuels; and facility sustainment services.
South Korea’s Support as Part of the Yongsan Relocation Plan

- **Construction:** South Korea provided $1.4 billion from 2016 through 2019 in construction costs under the SMA, most of which was provided as in-kind financial support.\(^{25}\)

Separate from the SMAs, from 2016 through 2019 South Korea provided $2.5 billion in facilities to the United States associated with the Yongsan Relocation Plan, one of two relocation initiatives that DOD officials identified within South Korea during this time—the other being the Land Partnership Plan (see sidebar).\(^{26}\)

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\(^{25}\)While South Korea provides most of its direct financial support for SMA construction costs in-kind, South Korea provides a smaller portion (12 percent) of the total construction project costs as cash payments for design and construction oversight costs.

South Korea requested and funded the Yongsan Relocation Plan to relocate U.S. forces from Yongsan Garrison in Seoul primarily to Camp Humphreys, approximately 40 miles south of Seoul, thereby returning real estate to South Korea. To this end, South Korea provided $2.5 billion in in-kind support from 2016 through 2019. The estimated lifetime cost of the Yongsan Relocation Plan is $7.4 billion.

Conversely, the Land Partnership Plan is a U.S.-driven initiative that consolidated U.S. installations north of Seoul and relocated those forces to Camp Humphreys, among other locations. DOD officials said that, because it is a U.S. initiative, South Korea did not provide financial support for this relocation from 2016 through 2019. However, according to DOD officials, U.S. Forces Korea used residual funds provided under prior SMAs to offset U.S. costs associated with the Land Partnership Plan. The estimated lifetime cost of the Land Partnership Plan is $3.3 billion.

Japan and South Korea Have Provided Some Indirect Financial Support for the U.S. Military Presence in Those Countries

DOD officials we spoke with noted that Japan and South Korea provide various forms of indirect financial support for the U.S. military presence, such as forgone rents and revenues on land and facilities used by U.S. forces that the host nations could otherwise lease and develop. Japan and South Korea also waive various taxes and fees for U.S. forces stationed in their countries. See figure 9 for additional examples of what may be considered as these countries’ indirect financial support. DOD officials said that tax waivers and other potential examples of indirect support are covered by the Status of Forces Agreements with both countries, as distinct from host nation support. As such, one DOD official said that they should not count toward these host nations’ burden sharing totals.28

Figure 9: Examples of Potential Indirect Financial Support by Japan and South Korea

<table>
<thead>
<tr>
<th>Japan</th>
<th>South Korea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsidies to base-hosting communities*</td>
<td>Korean Augmentation to the U.S. Armyb</td>
</tr>
<tr>
<td>Base-surrounding area improvements (e.g., road construction and area development)</td>
<td></td>
</tr>
<tr>
<td>Forgone rents and revenues on land used by U.S. forces</td>
<td></td>
</tr>
<tr>
<td>Waived taxes and fees (e.g., customs duties, port and landing fees, and tolls)</td>
<td></td>
</tr>
</tbody>
</table>

Source: GAO analysis of Department of Defense (DOD), Department of State, and host nation documents. | GAO-21-270

Note: This list is not exhaustive of all potential or claimed indirect financial support by Japan and South Korea. Additionally, DOD officials said that the United States does not consider several of the above examples to be indirect financial support for the purpose of burden sharing negotiations. For example, officials said that tax and fee waivers are covered by the Status of Forces Agreements the United States has with Japan and South Korea, as well as, generally, any nation in which the U.S. military has a presence.

*According to data obtained from U.S. Forces Japan, Japan provided $947 million in subsidies to its base-hosting communities from 2016 through 2019. DOD and State officials said that Japan has claimed that the subsidies increase domestic political support for the alliance, but officials noted that these costs to Japan are self-imposed.

bThe Korean Augmentation to the U.S. Army is a branch of the Republic of Korea Army that augments the Eighth United States Army by having Korean personnel serve alongside their U.S. counterparts. According to the Eighth Army, the Korean Augmentation to the U.S. Army Soldier Program offsets U.S. military personnel costs and reflects U.S.-South Korean cooperation and friendship.

28Status of Forces Agreements are bilateral or multilateral agreements that, among other things, establish the framework under which U.S. military personnel operate in a foreign country.
According to DOD officials, the indirect financial support these countries provide is more difficult to quantify than is direct cash financial support. Officials explained that the United States lacks insight into the host nations’ methodologies and accounting procedures for accurately tracking these indirect costs. For example, one official said that the United States cannot track how often U.S. military personnel access a toll road, and that the host nation governments—to the extent that they track such costs—do not proactively share this information with the United States.

Agency Comments

We provided a draft of this report to DOD and State for review and comment. DOD and State provided technical comments, which we incorporated as appropriate.

We are sending copies of this report to the appropriate congressional committees, the Secretaries of Defense and State, and other interested parties. In addition, the report is available at no charge on the GAO website at https://www.gao.gov.

If you or your staff have any questions about this report, please contact us at (202) 512-9627 or maurerd@gao.gov or (202) 512-6881 or bairj@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made significant contributions to this report are listed in appendix IV.

Diana Maurer,
Director, Defense Capabilities and Management

Jason Bair,
Director, International Affairs and Trade
List of Committees

The Honorable Jack Reed
Chairman
The Honorable James M. Inhofe
Ranking Member
Committee on Armed Services
United States Senate

The Honorable Robert Menendez
Chairman
The Honorable James E. Risch
Ranking Member
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United States Senate

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The Honorable Richard Shelby
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Chair
The Honorable John Boozman
Ranking Member
Subcommittee on Military Construction, Veterans Affairs, and Related Agencies
Committee on Appropriations
United States Senate

The Honorable Adam Smith
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The Honorable Ken Calvert
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Committee on Appropriations
House of Representatives

The Honorable Debbie Wasserman-Shultz
Chairwoman
The Honorable John Carter
Ranking Member
Subcommittee on Military Construction, Veterans Affairs, and Related Agencies
Committee on Appropriations
House of Representatives
# Appendix I: Objectives, Scope, and Methodology

The National Defense Authorization Act for Fiscal Year 2020 included a provision for us to report on matters related to the security benefits derived from the forward presence of the U.S. military in Japan and South Korea and the costs associated with that presence for calendar years 2016 through 2019.¹ This report describes (1) the identified benefits to U.S. national and regional security derived from the U.S. military presence in Japan and South Korea; (2) the funds obligated by the U.S. military for its presence in Japan and South Korea for calendar years 2016 through 2019; and (3) direct and indirect burden sharing financial support that Japan and South Korea have made for calendar years 2016 through 2019.

## Identifying Benefits to U.S. National Security Derived from the U.S. Presence in Japan and South Korea

To identify the benefits of the U.S. military presence in Japan and South Korea, we reviewed relevant expert studies and national security and defense strategy documentation from the U.S. and host nation governments. We conducted a literature search to identify relevant expert studies to review, such as white papers published by foreign policy experts that provided narrative discussions of potential impacts of the U.S. military presence in Japan and South Korea. The parameters of the literature search included journal articles, dissertations, working papers, and think tank documents from 2010 through May 2020, when we conducted the literature search. The literature search identified 88 studies from various countries, experts, and institutions. We then reviewed the abstracts and other information (e.g., title, author, and publication year) of all 88 studies and eliminated those we determined were less relevant, such as U.S. public opinion research about the U.S. military’s overseas presence. Of these 88 studies, we selected 20 for additional review based on their relevance to the U.S. military presence in Japan and/or South Korea and on their having been published within the past 10 years, as well as on having variation in institutions, to include think tanks and universities.

With respect to the strategy documents we reviewed, some were global in scope (e.g., the 2017 *National Security Strategy*), while others were specific to the region or host nations (e.g., the 2019 *Indo-Pacific Strategy*).

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To identify any benefits stated in the expert studies or strategy documents, two analysts separately read the expert studies and strategy documents and highlighted text that referred to benefits derived from the U.S. military presence in Japan and South Korea. We then grouped individual expert studies and strategy documents based on the benefits each identified to determine which benefits of the U.S. military presence in Japan and South Korea were cited frequently across both expert studies and strategy documents. In addition to our review of these studies and strategy documents, we interviewed officials from the Departments of Defense (DOD) and State (State), as well as non-governmental experts from various think tanks and universities. From these interviews and our review of the expert studies and strategy documentation, we identified six broad benefits.

To provide further context about the extent to which these identified benefits apply to Japan, South Korea, and the larger Indo-Pacific region, we also obtained diverse expert perspectives about these identified benefits. We conducted targeted web searches and a literature search to identify relevant experts to interview. We developed criteria such as relevant expertise and geographic and institutional diversity to select a non-generalizable sample of 11 non-governmental experts in this field. Two experts declined to participate, so we interviewed nine experts. These experts included senior fellows and political scientists affiliated with think tanks, universities, and research institutes in the United States and in Asia. While our findings from these interviews are not generalizable, the sample of experts nonetheless reflected our selection criteria and interest in obtaining diverse perspectives.

These expert interviews were semi-structured. We asked experts to indicate the extent to which the identified benefits were a consequence of the U.S. military presence in Japan and South Korea. The experts used a five-point scale in their responses that ranged from “strongly agree” to “strongly disagree.”

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3The following Likert scale responses were available to experts: “strongly disagree,” “disagree,” “neither agree nor disagree,” “agree,” and “strongly agree.”
examples of how the identified benefits applied in the region or to the specific host nations. We also asked these experts for their perspectives on any potential challenges or drawbacks associated with the U.S. military presence in Japan and South Korea. In addition to these expert interviews, we interviewed officials from DOD and State about the identified benefits, though we did not prompt officials to respond using this scale. Specifically, we spoke with officials from the Office of the Secretary of Defense, the Japan and South Korea desks at State, U.S. Embassy Tokyo, U.S. Embassy Seoul, and the U.S. Consulate General to Naha, Okinawa.

Identifying DOD Obligations in Japan and South Korea

To identify funds obligated for the U.S. military’s presence in Japan and South Korea, we obtained and analyzed obligated funding data from the Army, Navy, Marine Corps, and Air Force for calendar years 2016 through 2019. Specifically, we sent a request for obligated funding data to the Army, Navy, Marine Corps, and Air Force for their military presence in Japan and South Korea associated with the following five appropriation accounts: (1) military personnel, (2) operation and maintenance, (3) family housing operation and maintenance, (4) family housing construction, and (5) military construction. Each service submits obligations data for these five appropriation accounts to the Office of the Under Secretary of Defense Comptroller for each country in which the service has a permanent presence that costs greater than $5 million to maintain per year. Then, the Office of the Under Secretary of Defense Comptroller combines the data from each service and prepares the Overseas Cost Report, which includes the OP-53 budget exhibit, which displays total obligations for each of the five appropriation accounts in each country, by fiscal year, where the U.S. military has a permanent presence.

To examine relocation and realignment costs associated with the U.S. presence in Japan and South Korea, we requested obligated funding data for the Futenma Relocation Plan, realignment of Marine Corps personnel

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4These were the most recent calendar years available during our review. Numbers are not adjusted for inflation.
In response, the services identified and provided obligations data that corresponded to either Japan or South Korea and one of the five appropriation accounts. We then organized the data to reflect whether the funds were obligated for the U.S. military in Japan or South Korea, the military service that obligated the funds, and the appropriation account from which the funds were obligated.

Accordingly, we identified obligated funding data for the U.S. military presence in Japan and South Korea. An obligation is a definite commitment that creates a legal liability of the government for the payment of goods and services ordered or received, or a legal duty on the part of the United States that could mature into a legal liability by virtue of actions on the part of the other party, beyond the control of the United States. Payment may be made immediately or in the future. An agency incurs an obligation, for example, when it places an order, signs a contract, awards a grant, purchases a service, or takes other actions that require the government to make payments to the public or from one government account to another. Congress appropriates funds to each military service, and the services obligate, and ultimately expend, their appropriations.

We collected, analyzed, and reported obligations data rather than expenditure data because the military services already track and report obligations data to the Office of the Under Secretary of Defense Comptroller, but in some cases they did not report expenditure data. Therefore, we concluded that we would use obligated funding data that are tracked and reported to the Office of the Under Secretary of Defense Comptroller for the amounts presented by the military services for their presence in Japan and South Korea.

5The Futenma Relocation Plan is a component of the broader realignment of Marines from Okinawa to Guam. The plan entails replacing Marine Corps Air Station Futenma with a new base constructed in a less congested area of Okinawa. The United States and South Korea signed the Land Partnership Plan, a U.S. initiative to consolidate and relocate U.S. forces from various camps north of Seoul to two principal hubs, in Pyeongtaek and in Daegu. The Yongsan Relocation Plan is a South Korean initiative to relocate U.S. Forces from the Yongsan Garrison and the Seoul metropolitan area to Camp Humphreys, approximately 40 miles south of Seoul.

To report data by calendar year, we requested obligated data from the military services for fiscal years 2016 through 2019, and for the first quarter of fiscal year 2020. The services were able to provide the data by calendar year or by quarter, for each appropriation account, with three exceptions. The Air Force was able to provide military personnel obligations by fiscal year only, and the Marine Corps was able to provide operation and maintenance and family housing operation and maintenance obligations by fiscal year only.\textsuperscript{7}

To convert these obligations from fiscal years to calendar years, we first converted the fiscal year data into quarterly data by dividing each fiscal year total by four. We then converted all quarterly data into calendar years by, for example, adding the second, third, and fourth quarters of fiscal year 2016 to the first quarter of fiscal year 2017, to equal calendar year 2016. We coordinated with the Air Force and Marine Corps to ensure that our conversion would produce accurate calendar year obligations data. Air Force and Marine Corps officials confirmed that our conversion was appropriate because military personnel obligations include salaries and benefits for active duty personnel, and operation and maintenance obligations include civilian salaries and utilities, which are consistent throughout the fiscal year.

After converting all of the obligated data into calendar years, we totaled the obligated funds for the U.S. military presence in Japan and South Korea for 2016 through 2019. Specifically, we totaled obligations for the Army, Navy, Marine Corps, and Air Force by adding the obligations from each of the five appropriation accounts for each service, in each country. For example, to calculate the Army’s obligations in Japan for 2016, we added the Army’s obligations in the five appropriation accounts to calculate the Army’s yearly total. We also totaled obligations for each appropriation account by adding the obligations for each of the five appropriation accounts, for each service. For example, to calculate military personnel obligations in South Korea for 2016, we added military personnel obligations from the Army, Navy, Marine Corps, and Air Force, to arrive at an overall yearly total. As a result, we identified the amount obligated by each military service for their presence in Japan and, separately, their presence in South Korea. Additionally, we identified the

\textsuperscript{7}The Marine Corps was able to provide only family housing operation and maintenance obligations by fiscal year for 2016 through 2019. However, The Marine Corps was able to provide quarterly family housing operation and maintenance obligations data for the first quarter of fiscal year 2020.
amount obligated for each appropriation account, by each service, in Japan and in South Korea.

It is possible that obligations for the U.S. presence in Japan and South Korea would exist even if those U.S. servicemembers were based elsewhere. That is, if the United States were to reduce its military presence in Japan or South Korea, total obligations might not meaningfully change, because those servicemembers and resources would be relocated and would still require similar obligations. For example, if the United States realigned servicemembers from Japan or South Korea, those servicemembers might be stationed elsewhere, either abroad or in the United States, rather than removed from the military entirely. If so, military personnel costs might not dramatically change, because those servicemembers would still be on active duty and would require similar resources, though not based in Japan or South Korea. Alternatively, however, those servicemembers might be stationed elsewhere and the personnel costs for them would vary according to their location. Thus, accounting for the various possibilities that could result from a drawdown of servicemembers in Japan or South Korea was beyond the scope of this analysis.

To assess the reliability of the obligations data provided by the military services, we examined the data provided by each service to check for inconsistencies and anomalies. When we identified inconsistencies or anomalies, we returned to that service for clarification, and if necessary we obtained corrected data from the service or reconciled the differences identified. Additionally, we interviewed officials from the services and DOD to determine their method for tracking and organizing obligated data for the military’s presence in Japan and South Korea. We reviewed DOD Financial Management Regulation, volume 2B, chapter 15, which provides guidance with regard to information that the military services are required to provide to the Office of the Under Secretary of Defense Comptroller for the Overseas Cost Report, which consists of the OP-53 Exhibit. 8 We also obtained written and verbal responses to questions regarding the reliability of the data they provided. We determined that the data were sufficiently reliable for the purposes of our reporting objective.

Appendix I: Objectives, Scope, and Methodology

Identifying Host Nation Financial Support for the U.S. Military Presence in Japan and South Korea

To identify host nation financial support for the U.S. military presence in Japan and South Korea, we reviewed the Special Measure Agreements (SMA) and other host nation support agreements and arrangements with Japan and South Korea. Additionally, we interviewed DOD officials and reviewed a 2018 U.S. Indo-Pacific Command theater posture plan that listed various forms of Japan’s and South Korea’s host nation support. We also obtained and analyzed data from U.S. Forces Japan and U.S. Forces Korea on the host nation financial support provided by Japan and South Korea.

Specifically, we requested that U.S. Forces Japan and U.S. Forces Korea provide obligation and expenditure data for Japan’s and South Korea’s direct cash and in-kind financial support, as well as any indirect financial support, for calendar years 2016 through 2019. We also requested data on Japan’s and South Korea’s financial support for the relocation and realignment of U.S. forces within and from these host nations (e.g., the realignment of Marines from Okinawa to Guam) over this same period. Our goal was to obtain all relevant host nation financial support for the U.S. military presence in Japan and South Korea, not just financial support provided under the SMAs with both countries. In addition to requesting data, we met with U.S. Forces Japan and U.S. Forces Korea to gain an understanding of how they track these various forms of host nation financial support (see appendix III for more information on DOD’s methodologies for U.S. and host nation costs).

U.S. Forces Japan and U.S. Forces Korea provided some of the data we requested in Japanese Yen and South Korean Won. To convert host nation data from Yen and Won into U.S. Dollars, we identified the relevant

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9These additional host nation support agreements and arrangements include the Status of Forces Agreements with Japan and South Korea, the 1995 Special Action Committee on Okinawa, the 2002 Land Partnership Plan, the 2004 Yongshan Relocation Plan, and the 2006 U.S.-Japan Roadmap for Realignment Implementation. We also identified several agreements and arrangements with South Korea that did not entail direct financial support from 2016 through 2019: U.S. Forces Korea Wartime Host Nation Support, Host Nation Support for Noncombatant Evacuation Operations, the Mutual Airlift Support Agreement, the Korean Flagged Shipping Agreement, the Mutual Logistics Support Agreement, and the Wartime Movements Program. Several other agreements or arrangements with South Korea did entail direct financial support, but the amounts are reflected in the SMA totals. For example, amounts provided under the Single Ammunition Logistics System-Korea and the Munitions Storage Activities Gained by Negotiations Memorandum of Understanding are captured in South Korea’s direct financial support for SMA logistics costs, and amounts provided as part of the Korean Service Corps are captured in South Korea’s direct financial support for SMA labor costs.
monthly exchange rates as reported by the Under Secretary of Defense Comptroller and then averaged them to produce an annual average exchange rate.\textsuperscript{10} We used an annual average exchange rate to convert host nation data into U.S. Dollars because DOD provides exchange rates for each month, and some host nation data that we received were in Japanese fiscal years and not available by calendar year, quarter, or month.\textsuperscript{11} As a result, we were unable to match some host nation data to a particular monthly exchange rate. Therefore, we used annual average exchange rates to convert host nation data to U.S. Dollars.

In addition to providing data in Yen, some of the data provided by U.S. Forces Japan were expressed according to Japanese fiscal years (April 1 through March 30).\textsuperscript{12} To convert Japanese fiscal years to calendar years, we assumed—and confirmed with U.S. Forces Japan—that the amount of Japanese direct financial support was roughly equal throughout the year. That assumption enabled us to divide the amount for a given Japanese fiscal year into four quarters. Because Japanese fiscal years begin on April 1, a Japanese fiscal year includes three quarters of one calendar year and one quarter of the next calendar year.

We reported expenditure data instead of SMA allocation amounts or budget estimates for the direct cash and in-kind financial support provided by Japan and South Korea for calendar years 2016 through 2019. However, where expenditure data were not available, such as for certain in-kind financial support, we reported host nation budget estimates provided by U.S. Forces Japan and U.S. Forces Korea.

In contrast to Japan’s and South Korea’s direct financial support, we discussed their indirect financial support qualitatively, because such support is difficult to quantify. According to DOD officials, the United States lacks insight into Japan’s and South Korea’s accounting

\textsuperscript{10}We used the following annual average exchange rates for Japanese Yen to U.S. Dollars: 121.99 (2016), 119.67 (2017), 111.4 (2018), and 111.48 (2019). We used the following annual average exchange rates for Korean Won to U.S. Dollars: 1160.14 (2016), 1152.67 (2017), 1149.12 (2018), and 1124.16 (2019).

\textsuperscript{11}The U.S. fiscal year runs from October 1 to September 30. The Japanese fiscal year runs from April 1 to March 31. We also received some data by Korean fiscal year. However, the Korean fiscal year runs concurrent to the calendar year (January 1 to December 31).

\textsuperscript{12}U.S. Forces Korea provided some host nation data in calendar years because the Korean fiscal year is equivalent to the calendar year (January 1 to December 31).
methodologies and procedures and is therefore unable to validate any figures for indirect financial support provided by the host nation governments. Officials further explained that the United States and the host nations do not always agree on what constitutes indirect financial support. For example, South Korea considers the tax and toll exemptions it grants U.S. military personnel as a form of indirect financial support, but U.S. officials consider such exemptions to be covered under the Status of Forces Agreements the United States has with South Korea and other host nations.\footnote{Status of Forces Agreements are bilateral or multilateral agreements that, among other things, establish the framework under which U.S. military personnel operate in a foreign country.}

We assessed the reliability of the data by checking the obtained data extracts for missing information and inconsistencies, and by asking DOD officials—in both interviews and a detailed questionnaire—about their data reliability procedures. We also compared the data with information reported by the governments of Japan and South Korea, as well as with other publicly available estimates of the host nations’ financial support for the U.S. military presence.\footnote{For example, while U.S. Forces Japan did not provide the specific source(s) for its Defense Policy Review Initiative data, the data are broadly comparable to publicly available budget estimates reported by the Government of Japan.} We determined that the data were sufficiently reliable for the purposes of our reporting objectives.

We conducted this performance audit from January 2020 to March 2021 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.
Appendix II: DOD Obligations to Support Its Presence in Japan and South Korea, in Dollars (2016—2019)

According to Department of Defense (DOD) data, DOD obligated a total of $20.9 billion for its military presence in Japan and $13.4 billion for its military presence in South Korea from 2016 through 2019, through the Army, Navy, Marine Corps, and Air Force. The military services obligated these funds from the following five appropriation accounts: (1) military personnel, (2) operation and maintenance, (3) family housing operation and maintenance, (4) family housing construction, (5) and military construction. See tables 2 and 3 for detailed information on DOD’s obligations by service and by appropriation account in both Japan and South Korea.

Table 2: Department of Defense Obligations to Support Its Presence in Japan, 2016—2019

<table>
<thead>
<tr>
<th>Year</th>
<th>Service</th>
<th>Military Personnel</th>
<th>Operation and Maintenance</th>
<th>Family Housing, Operation and Maintenance</th>
<th>Family Housing, Construction</th>
<th>Military Construction</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>Army</td>
<td>174,766,000</td>
<td>179,350,181</td>
<td>11,354,000</td>
<td>-</td>
<td>-</td>
<td>365,470,181</td>
</tr>
<tr>
<td></td>
<td>Navy</td>
<td>604,075,000</td>
<td>655,016,000</td>
<td>77,764,000</td>
<td>-</td>
<td>-</td>
<td>1,336,855,000</td>
</tr>
<tr>
<td></td>
<td>Marine Corps</td>
<td>1,065,000,000</td>
<td>548,181,023</td>
<td>14,250,000</td>
<td>10,769,000</td>
<td>9,176,000</td>
<td>1,647,376,023</td>
</tr>
<tr>
<td></td>
<td>Air Force</td>
<td>924,734,000</td>
<td>521,373,661</td>
<td>235,469,845</td>
<td>-</td>
<td>-</td>
<td>1,681,577,506</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>2,768,575,000</td>
<td>1,903,920,865</td>
<td>338,837,845</td>
<td>10,769,000</td>
<td>9,176,000</td>
<td>5,031,278,710</td>
</tr>
<tr>
<td>2017</td>
<td>Army</td>
<td>196,930,000</td>
<td>191,130,589</td>
<td>4,555,000</td>
<td>-</td>
<td>-</td>
<td>392,615,589</td>
</tr>
<tr>
<td></td>
<td>Navy</td>
<td>591,103,000</td>
<td>663,254,569</td>
<td>75,104,000</td>
<td>-</td>
<td>-</td>
<td>1,329,461,569</td>
</tr>
<tr>
<td></td>
<td>Marine Corps</td>
<td>1,075,000,000</td>
<td>530,417,879</td>
<td>19,250,000</td>
<td>13,000</td>
<td>-</td>
<td>1,624,680,879</td>
</tr>
<tr>
<td></td>
<td>Air Force</td>
<td>934,967,250</td>
<td>430,692,275</td>
<td>199,413,577</td>
<td>87,767,595</td>
<td>10,285,569</td>
<td>1,663,126,267</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>2,798,000,250</td>
<td>2,215,495,312</td>
<td>328,322,577</td>
<td>87,780,595</td>
<td>10,285,569</td>
<td>5,009,884,304</td>
</tr>
<tr>
<td>2018</td>
<td>Army</td>
<td>208,718,000</td>
<td>200,676,536</td>
<td>6,053,000</td>
<td>-</td>
<td>8,972,000</td>
<td>424,419,536</td>
</tr>
<tr>
<td></td>
<td>Navy</td>
<td>529,422,000</td>
<td>739,749,810</td>
<td>100,160,000</td>
<td>-</td>
<td>661,000</td>
<td>1,369,992,810</td>
</tr>
<tr>
<td></td>
<td>Marine Corps</td>
<td>1,143,000,000</td>
<td>588,001,854</td>
<td>27,750,000</td>
<td>184,000</td>
<td>-</td>
<td>1,758,935,854</td>
</tr>
<tr>
<td></td>
<td>Air Force</td>
<td>985,342,250</td>
<td>699,357,543</td>
<td>230,456,903</td>
<td>66,245,134</td>
<td>211,507</td>
<td>1,981,613,337</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>2,866,482,250</td>
<td>2,227,785,742</td>
<td>364,419,903</td>
<td>66,429,134</td>
<td>9,844,507</td>
<td>5,534,961,536</td>
</tr>
</tbody>
</table>

1An agency incurs an obligation when it places an order, signs a contract, awards a grant, purchases a service, or takes other actions that require the government to make payments to the public or from one government account to another. Obligated amounts were identified by the Army, Navy, Marine Corps, and Air Force. DOD also obligates from funds available to the Defense Commissary Agency and Defense Logistics Agency, among others, to support its military presence in Japan and South Korea. Those agencies were outside the scope of this report, and those funds are not included in the total.
## Appendix II: DOD Obligations to Support Its Presence in Japan and South Korea, in Dollars (2016—2019)

### Table 3: DOD Obligations to Support Its Presence in South Korea, 2016—2019

<table>
<thead>
<tr>
<th>Year</th>
<th>Service</th>
<th>Military Personnel</th>
<th>Operation and Maintenance</th>
<th>Family Housing, Operation and Maintenance</th>
<th>Family Housing, Construction</th>
<th>Military Construction</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>Army</td>
<td>227,096,000</td>
<td>181,736,043</td>
<td>11,255,000</td>
<td>-</td>
<td>-</td>
<td>420,087,043</td>
</tr>
<tr>
<td></td>
<td>Navy</td>
<td>658,255,000</td>
<td>712,320,162</td>
<td>75,592,000</td>
<td>-</td>
<td>-</td>
<td>1,446,167,162</td>
</tr>
<tr>
<td></td>
<td>Marine Corps</td>
<td>1,188,000,000</td>
<td>552,228,957</td>
<td>11,242,197</td>
<td>7,510,000</td>
<td>233,000</td>
<td>1,759,214,154</td>
</tr>
<tr>
<td></td>
<td>Air Force</td>
<td>1,029,556,750</td>
<td>355,417,861</td>
<td>327,475,662</td>
<td>608,326</td>
<td>256,301</td>
<td>1,713,314,900</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3,102,907,750</td>
<td>1,801,703,023</td>
<td>425,564,859</td>
<td>8,118,326</td>
<td>489,301</td>
<td>5,338,783,260</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Army, Navy, Marine Corps, and Air Force obligations data. | GAO-21-270
Appendix II: DOD Obligations to Support Its Presence in Japan and South Korea, in Dollars (2016—2019)

<table>
<thead>
<tr>
<th>Year</th>
<th>Service</th>
<th>Military Personnel</th>
<th>Operation and Maintenance</th>
<th>Family Housing, Construction</th>
<th>Family Housing, Operation and Maintenance</th>
<th>Military Construction</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2,043,182,500</td>
<td>1,079,655,059</td>
<td>52,623,119</td>
<td>198,872,000</td>
<td>1,112,661</td>
<td>3,375,445,339</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Army, Navy, Marine Corps, and Air Force obligations data. | GAO-21-270

According to DOD, the Army awarded a family housing construction project at Camp Walker to a contractor in 2017, but the project was terminated and funds de-obligated after the contractor defaulted in 2018. DOD indicated that the project was re-awarded and funds re-obligated in 2019.

The Army, Navy, Marine Corps, and Air Force use differing methodologies and accounting procedures to track U.S. obligations in Japan and South Korea. Specific procedures for each service are outlined below.

**Army:** According to Army officials, the Army Headquarters Deputy Chief of Staff for Personnel collects personnel data, and the Army Budget Office manages military personnel costs. Military personnel costs are calculated based on composite rates, rather than on country. Officials stated that budget analysts in the Army Budget Office hold monthly meetings to review the Army's military personnel data. Further, Army payroll offices collect civilian personnel costs, which are part of operation and maintenance costs. Then, budget and personnel analysts enter the data into the appropriate financial management system. Additionally, the Army tracks family housing (operations and construction) and military construction obligations using the Army’s Resource Formulation System and expenditures in the Army’s General Fund Enterprise Business System.

**Navy:** The Navy has used three financial management systems: the Standard Accounting and Reporting System (STARS), Navy Enterprise Resource Planning (Navy ERP), and, according to Navy officials, the Standard Accounting, Budgeting, and Reporting System (SABRS), an existing Marine Corps system. However, as of December 2020, the Navy had migrated its accounting systems to SABRS, with the exception of Navy ERP. Officials at the Navy’s 19 Budget Submitting Offices track obligations for military personnel, operation and maintenance, family housing, and military construction. According to Navy officials, the Operations Division of the Navy’s Financial Management and Comptroller Office (Navy FMB1) aggregates and reports data from the Budget...
Appendix II: DOD Obligations to Support Its Presence in Japan and South Korea, in Dollars (2016—2019)

Submitting Offices and performs quality control. Navy FMB1 officials double check the data they receive from the Budget Submitting Offices against previous submissions to determine whether there are any major anomalies. If any are discovered, officials will contact the applicable Budget Submitting Office for clarification.

Air Force: According to Air Force officials, the Air Force uses a composite rate to track military personnel obligations in Japan and South Korea. To determine the composite rate, the Air Force applies manpower reports from Air Force Manpower, Personnel, and Services that identify the number of servicemembers stationed in each country in which the Air Force has a presence, as well as the rank and service time for each servicemember. Then, the Air Force applies base pay, retirement pay accrual, overseas housing allowance, and certain incentive pay data to the manpower data to determine military personnel obligations.

Air Force officials stated that Air Force personnel at installations in Japan and South Korea input operation and maintenance and family housing operation and maintenance obligations data into the Air Force’s financial management system, Defense Enterprise Accounting and Management System (DEAMS). Officials stated that for quality control, Air Force personnel who input these data cross-reference them with obligations data from previous years to ensure that the data are entered consistently according to Air Force policies, and that installation personnel are responsible for correcting any data issues they identify.

Further, Air Force officials stated that the Air Force uses a variety of systems to track military construction and family housing construction obligations and expenditures. First, according to Air Force officials, the Assistant Secretary of the Air Force, Financial Management and Comptroller, uses a Funding Authorization Document to issue funding through the Air Force’s Automated Funds Management system to agents who will execute the funds, such as the Air Force, United States Army Corps of Engineers, or Naval Facilities Engineering Command, each of whom uses a different financial management system. Then, the agents load the Funding Authorization Document into their respective financial management systems to track the funding from obligation to expenditure. The Air Force uses DEAMS to track funding. Officials stated that

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2According to Air Force officials, the Air Force’s Automated Funds Management system is used to track the amount of funding appropriated by law, the amount released to agents, and the amount available for each Air Force project.
personnel from each of the agents collect and enter military construction and family housing construction data and are responsible for its accuracy.

**Marine Corps**: Marine Corps officials stated that the Marine Corps uses the Marine Corps Total Force System to track military personnel obligations, and uses SABRS to track operation and maintenance and family housing construction obligations. Further, SABRS collects obligations data from feeder systems that support various business processes. However, some data are entered into SABRS manually by the Comptrollers at Marine Corps Air Station, Iwakuni; Marine Corps Base, Hawaii; and Marine Corps Air Station, Hawaii. According to officials, the Defense Finance and Accounting System owns and supports system maintenance for SABRS. Additionally, the SABRS system performs initial quality control checks on the data. Then, if necessary, Marine Corps Headquarters, the Defense Finance and Accounting Service, or command personnel conduct additional research and make corrections.

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According to Marine Corps officials, the Technology Services Organization is the chief manager of SABRS, and RFA Systems Integration Data Integrity also supports SABRS maintenance.

For calendar years 2016 through 2019, Japan provided $12.6 billion and South Korea provided $5.8 billion in direct financial support for the U.S. military presence in those countries. This direct financial support pays for certain costs related to labor, construction, utilities, and training relocation.

Japan

Japan agreed to provide both cash and in-kind financial support for the following three cost categories: labor, utilities, and training relocation. Across these categories, Japan provided a total of $5.3 billion in calendar years 2016 through 2019. In addition to assistance provided under the SMAs, Japan also provided $7.3 billion for the Defense Policy Review Initiative, the Facilities Improvement Program, non-SMA labor, and the Special Action Committee on Okinawa initiatives as part of other agreements or arrangements. See tables 4, 5, 6, and 7 for specific details on all direct cash and in-kind financial support made by Japan for calendar years 2016 through 2019.

Table 4: Japan’s Direct Financial Support for the U.S. Military Presence under the Special Measures Agreement, 2016—2019

<table>
<thead>
<tr>
<th>Year</th>
<th>Labor</th>
<th>Utilities</th>
<th>Training Relocation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>972,664,135</td>
<td>203,531,134</td>
<td>46,009,986</td>
<td>1,222,205,255</td>
</tr>
<tr>
<td>2017</td>
<td>1,017,735,505</td>
<td>206,263,022</td>
<td>47,535,765</td>
<td>1,271,534,293</td>
</tr>
<tr>
<td>2018</td>
<td>1,121,958,040</td>
<td>211,049,155</td>
<td>62,050,259</td>
<td>1,395,057,454</td>
</tr>
<tr>
<td>2019</td>
<td>1,139,536,564</td>
<td>198,979,494</td>
<td>28,459,266</td>
<td>1,366,975,324</td>
</tr>
<tr>
<td>Total</td>
<td>4,251,894,244</td>
<td>819,822,805</td>
<td>184,055,276</td>
<td>5,255,772,325</td>
</tr>
</tbody>
</table>

Source: GAO analysis of United States Forces Japan host nation data. | GAO-21-270


2This total primarily reflects Japan’s direct financial support under the current SMA, which is effective from April 1, 2016, through March 31, 2021, but it also includes direct financial support from the final quarter of the previous SMA (January 1 through March 31, 2016).
### Table 5: Japan's Direct Financial Support for the U.S. Military Presence from Other Initiatives, in Dollars, 2016—2019

<table>
<thead>
<tr>
<th>Year</th>
<th>Facilities Improvement Program</th>
<th>Defense Policy Review Initiative</th>
<th>Labor</th>
<th>Special Action Committee on Okinawa</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>168,872,565</td>
<td>1,164,277,960</td>
<td>216,009,324</td>
<td>16,805,279</td>
<td>1,565,965,128</td>
</tr>
<tr>
<td>2017</td>
<td>172,135,665</td>
<td>1,488,012,548</td>
<td>222,481,168</td>
<td>12,743,053</td>
<td>1,895,372,433</td>
</tr>
<tr>
<td>2018</td>
<td>184,917,841</td>
<td>1,600,302,332</td>
<td>241,694,799</td>
<td>28,949,516</td>
<td>2,055,864,488</td>
</tr>
<tr>
<td>2019</td>
<td>184,780,044</td>
<td>1,196,809,584</td>
<td>242,187,437</td>
<td>171,997,930</td>
<td>1,795,774,995</td>
</tr>
<tr>
<td>Total</td>
<td>710,706,114</td>
<td>5,449,402,424</td>
<td>922,372,728</td>
<td>230,495,778</td>
<td>7,312,977,045</td>
</tr>
</tbody>
</table>

Source: GAO analysis of United States Forces Japan data. | GAO-21-270

### Table 6: Japan's Direct Financial Support for the Defense Policy Review Initiative, in Dollars, 2016—2019

<table>
<thead>
<tr>
<th>Activity</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relocate Marine Corps Air Station Futenma (Futenma Replacement Facility)</td>
<td>415,828,196</td>
<td>460,212,220</td>
<td>669,653,928</td>
<td>594,031,963</td>
<td>2,139,726,307</td>
</tr>
<tr>
<td>Okinawa Consolidation</td>
<td>64,146,981</td>
<td>81,889,782</td>
<td>64,631,478</td>
<td>191,731,721</td>
<td>402,399,963</td>
</tr>
<tr>
<td>Kanagawa (Transform Army)</td>
<td>204,942</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>204,942</td>
</tr>
<tr>
<td>Iwakuni (Relocation of Carrier Air Wing) 5</td>
<td>540,228,253</td>
<td>684,364,608</td>
<td>333,031,645</td>
<td>43,504,040</td>
<td>1,601,128,546</td>
</tr>
<tr>
<td>U.S. Field Carrier Landing Practice</td>
<td>614,827</td>
<td>208,903</td>
<td>1,346,489</td>
<td>5,157,695</td>
<td>7,327,914</td>
</tr>
<tr>
<td>Kanoya (KC130 rotation)</td>
<td>6,763,100</td>
<td>8,565,003</td>
<td>2,244,149</td>
<td>-</td>
<td>17,572,252</td>
</tr>
<tr>
<td>Training Relocation (Aviation)</td>
<td>46,931,817</td>
<td>57,448,189</td>
<td>72,710,413</td>
<td>82,747,374</td>
<td>259,837,793</td>
</tr>
<tr>
<td>Guam</td>
<td>89,559,843</td>
<td>195,323,843</td>
<td>456,684,230</td>
<td>279,636,791</td>
<td>1,021,204,707</td>
</tr>
<tr>
<td>Total</td>
<td>1,164,277,960</td>
<td>1,488,012,548</td>
<td>1,600,302,332</td>
<td>1,196,809,584</td>
<td>5,449,402,424</td>
</tr>
</tbody>
</table>

Source: GAO analysis of United States Forces Japan host nation data. | GAO-21-270
Table 7: Japan’s Direct Financial Support for the Special Action Committee on Okinawa, in Dollars, 2016—2019

<table>
<thead>
<tr>
<th>Activity</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects for Land Returns</td>
<td>5,328,503</td>
<td>5,849,270</td>
<td>19,075,263</td>
<td>87,232,327</td>
<td>117,485,363</td>
</tr>
<tr>
<td>Projects for Training Improvement</td>
<td>1,024,712</td>
<td>1,462,318</td>
<td>3,141,808</td>
<td>10,988,134</td>
<td>16,616,971</td>
</tr>
<tr>
<td>Projects for Noise Reduction</td>
<td>5,533,446</td>
<td>4,804,758</td>
<td>6,508,031</td>
<td>1,995,804</td>
<td>18,842,038</td>
</tr>
<tr>
<td>Project for Facilitating the Special Action Committee on Okinawa</td>
<td>5,123,561</td>
<td>-</td>
<td>-</td>
<td>71,983,488</td>
<td>77,107,049</td>
</tr>
<tr>
<td>Total</td>
<td>16,805,279</td>
<td>12,743,053</td>
<td>28,949,516</td>
<td>171,997,930</td>
<td>230,495,778</td>
</tr>
</tbody>
</table>

Source: GAO analysis of United States Forces Japan host nation data. | GAO-21-270

South Korea

From 2016 through 2019, South Korea provided $3.3 billion under two SMAs—one covering the years 2014 through 2018, and the other covering 2019 only. In both, South Korea agreed to provide direct cash and in-kind financial support for the following three cost categories: construction, logistics, and labor. This financial support was mostly consistent year-to-year, with a gradual annual increase in direct financial support for labor. In addition to direct financial support provided via the SMAs, South Korea provided $2.5 billion in facilities to the United States associated with the Yongsan Relocation Plan, which was requested by the South Korean government. See tables 8 and 9 for specific details on all direct cash and in-kind financial support made by South Korea for calendar years 2016 through 2019.

Table 8: South Korea's Direct Financial Support for the U.S. Military Presence, in Dollars, 2016—2019

<table>
<thead>
<tr>
<th>Year</th>
<th>South Korea Direct Financial Support from the Special Measures Agreement</th>
<th>South Korea Direct Financial Support from Other Initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Labor</td>
<td>Logistics</td>
</tr>
<tr>
<td>2016</td>
<td>312,888,584</td>
<td>128,486,156</td>
</tr>
<tr>
<td>2017</td>
<td>317,123,722</td>
<td>114,745,039</td>
</tr>
<tr>
<td>2018</td>
<td>322,856,263</td>
<td>124,907,203</td>
</tr>
<tr>
<td>2019</td>
<td>445,223,301</td>
<td>138,369,353</td>
</tr>
<tr>
<td>Total</td>
<td>1,398,091,871</td>
<td>507,507,751</td>
</tr>
</tbody>
</table>

Source: GAO analysis of United States Forces Korea host nation data. | GAO-21-270

Table 9: South Korea’s Direct Financial Support for the Yongsan Relocation Plan, in Dollars, 2016—2019

<table>
<thead>
<tr>
<th>Activity</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design and Construction</td>
<td>252,100,000</td>
<td>962,380,000</td>
<td>483,340,000</td>
<td>522,140,000</td>
<td>2,219,960,000</td>
</tr>
<tr>
<td>Command, Control, Computers, Communications, and Intelligence</td>
<td>11,410,000</td>
<td>33,250,000</td>
<td>21,110,000</td>
<td>4,800,000</td>
<td>70,570,000</td>
</tr>
<tr>
<td>Furniture Fixtures and Equipment</td>
<td>15,230,000</td>
<td>18,620,000</td>
<td>3,740,000</td>
<td>3,600,000</td>
<td>41,190,000</td>
</tr>
<tr>
<td>Moving Services</td>
<td>640,000</td>
<td>15,130,000</td>
<td>14,810,000</td>
<td>12,390,000</td>
<td>42,970,000</td>
</tr>
<tr>
<td>Program Management Consortium &amp; Korea Program Relocation Office</td>
<td>34,220,000</td>
<td>33,840,000</td>
<td>30,460,000</td>
<td>23,530,000</td>
<td>122,050,000</td>
</tr>
<tr>
<td>Total</td>
<td>313,600,000</td>
<td>1,063,220,000</td>
<td>553,460,000</td>
<td>566,460,000</td>
<td>2,496,740,000</td>
</tr>
</tbody>
</table>

Source: GAO analysis of United States Forces Korea host nation data. | GAO-21-270

Methodology and Accounting Procedures for U.S. Forces Japan and U.S. Forces Korea

U.S. Forces Japan and U.S. Forces Korea use differing methodology and accounting procedures to track Japan’s and South Korea’s direct financial support for the U.S. military presence in the two countries. Officials from U.S. Forces Japan and U.S. Forces Korea said that they are able to clearly track cash payments from Japan and South Korea, but that they have more limited insight into these host nations’ in-kind financial support. Additionally, DOD does not track the indirect financial support provided by
host nations, including Japan and South Korea. DOD officials explained that Japan and South Korea may independently report figures for indirect financial support, but that the United States lacks insight into the host nations’ methodologies and accounting procedures for accurately tracking such support.

**U.S. Forces Japan:** Japanese nationals working with U.S. Forces Japan track data on Japan’s direct cash payments for U.S. utility costs. The Japanese nationals collect Japan’s payment vouchers for utilities from the Defense Finance Accounting Service and input the data into the appropriate database. Then, Utilities Cost Sharing Program Managers from the services along with their counterparts in the Government of Japan review and verify data monthly to ensure that they were entered accurately.

U.S. Forces Japan also tracks the Government of Japan’s cash payments to relocate U.S. training exercises away from populated areas. The 374th Comptroller Squadron at U.S. Forces Japan Headquarters collects data on these cash payments, enters them into the Defense Enterprise and Accounting System, and performs regular quality checks to ensure that they were entered accurately.

Officials from U.S. Forces Japan said that, beyond these two cash payments, they have limited insight into data on Japan’s various types of in-kind financial support—those provided within and those provided outside the Special Measures Agreements. For example, Japan pays the Japanese nationals working on U.S. bases in Japan and provides their labor to the United States as in-kind financial support. The number of employees funded by the Government of Japan is based on a cap established in arrangements implementing the SMAs. However, U.S. Forces Japan does not have insight into the accounting systems and procedures by which the Government of Japan funds these employees.

U.S. Forces Japan also has limited insight into Japan’s in-kind financial support for construction costs under the Facilities Improvement Program, the Defense Policy Review Initiative, and the Special Action Committee on Okinawa. For example, Japan provides U.S. Forces Japan Engineers with drafts of annual spending plans for the Facilities Improvement Program, but U.S. Forces Japan does not have access to Japan’s actual

4According to DOD officials, the last time DOD aggregated and reported data on both direct and (estimated) indirect financial support provided by host nations was in 2004, with the publication of the *Allied Contributions to the Common Defense* report.
Appendix III: Japan and South Korea’s Direct
Financial Support for the U.S. Military

execution data. Additionally, U.S. Forces Japan engineers have access to Japan’s budget estimates for construction spending related to realignment and relocation initiatives only in two areas: the Defense Policy Review Initiative and the Special Action Committee on Okinawa.

**U.S. Forces Korea:** U.S. Forces Korea Comptroller tracks South Korea’s cash payments to fund the salaries of the roughly 9,000 Korean nationals working on U.S. bases in South Korea. U.S. Forces Korea coordinates with the military services to determine the amount to be received based on their personnel needs, and South Korea’s Ministry of National Defense provides the labor funding accordingly. Then, each service’s comptroller manages the allocation and execution of these funds using that service’s respective accounting system.

U.S. Forces Korea also tracks South Korea’s two types of in-kind financial support under the Special Measures Agreements: logistics and Republic of Korea-funded construction. U.S. Forces Korea Multinational Logistics Division’s Logistics Cost Share Program Manager tracks South Korea’s in-kind financial support for logistics using the Logistics Cost Share Database stored on U.S. Forces Korea servers. Program managers enter transactions into the database when they receive logistics-related invoices from contracting officer’s representatives and their counterparts in the services. Once they validate the invoices, U.S. Forces Korea program managers send them to South Korea’s Ministry of Defense for payment.

U.S. Forces Korea Engineers tracks South Korea’s direct financial support for construction costs under the Special Measures Agreements. South Korea provides the bulk of this direct financial support in-kind. However, South Korea provides a smaller portion (12 percent) of the SMA allocation for construction as a cash payment for design and oversight costs. U.S. Forces Korea uses different systems and processes to track the cash and in-kind portions. For the cash portion, U.S. Forces Korea Engineers submits requests to U.S. Forces Korea Comptroller and U.S. Army Corps of Engineers Far East District to obligate the cash from South Korea toward the design and oversight of certain construction projects.5

The U.S. Forces Korea Engineers chief of construction and the construction program managers then enter the obligated amounts into the

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5DOD does not use financial support related to construction under the SMAs to fund the construction of any military morale, welfare, or recreations facilities, childcare centers, Sensitive Compartmented Information Facilities, and some other facilities.
database MERLIN to monitor for the various construction projects. However, U.S. Forces Korea Engineers does not have insight into the actual expenditures of the construction projects that South Korea funds as in-kind financial support. The actual construction costs incurred by South Korea enter South Korea’s contracting and accounting systems, and there is no system of record on the U.S. side that tracks these costs.

Officials from U.S. Forces Korea said they also have limited insight into the in-kind support South Korea provides outside of the SMAs for the Yongsan Relocation Plan. As part of this initiative, South Korea agreed to provide facilities that meet U.S. requirements as opposed to a certain monetary amount, as is the case with some SMA categories. Officials provided estimates for South Korea’s in-kind financial support for the Yongsan Relocation Plan, largely based on DD Form 1354, a DOD document that records the value of facilities provided by South Korea at the time of transfer. Officials could not provide detailed execution data for construction related to the Yongsan Relocation Plan because construction contracts and costs are processed by South Korea using its accounting systems.
Appendix IV: GAO Contact and Staff

Acknowledgments

GAO Contacts

Diana Maurer at (202) 512-9627 or maurerd@gao.gov, or Jason Bair at (202) 512-6881 or bairj@gao.gov.

Staff

In addition to the contacts named above, the following staff made key contributions to this report: Jodie Sandel and Judy McCloskey (Assistant Directors), Brian Hackney (Analyst in Charge), Jonathan Adams, Pedro Almoguera, Breanne Cave, Christopher Gezon, Matt Kienzle, Michael Shaughnessy, Ryan Vaughan, and Cheryl Weissman.